Development of Options for the West Midlands RSS in Response to the NHPAU Report

Government Office for the West Midlands

Volume 1:
Main Report

7th October, 2008

Nathaniel Lichfield and Partners

Contents

Figures

Tables

1.0 Executive Summary

Introduction

1.1 This study considers how the housing supply range for the West Midlands identified by the National Housing and Planning Advice Unit Report (NHPAU) could be delivered in the West Midlands. It considers a range of options and presents three potential growth scenarios proposing between 417,100 and 445,600 housing units up to 2026. These represent housing allocations which build on and are between 51,500 and 80,000 higher than the draft West Midlands Phase 2 Regional Spatial Strategy Revision.

1.2 The study has involved:

i) The development of nine initial options;

ii) Testing these nine options in terms of their physical impacts, delivery risks and performance against RSS, PPS3, and the Housing Green Paper;

iii) A Sustainability Appraisal (SA) and appropriate assessment in line with the Habitats Regulations;

iv) Engagement with stakeholders through meetings with local authority representatives, other agencies, developers and infrastructure providers; and

v) Formulation of three potential scenarios derived from analysis and feedback in relation to the nine options.

1.3 The status of this report and associated assessments and appendices is the output of independent consultants working to a brief set by Government Office for the West Midlands (GOWM). The report does not represent the formal position of Government, which will put forward its own evidence in due course, taking account of the material within this document, and other material considerations.

1.4 This Executive Summary is presented under the following headings:

- Key Findings and Potential Scenarios;
- Background and Approach;
- Generating Options;
- Appraisal of Options.

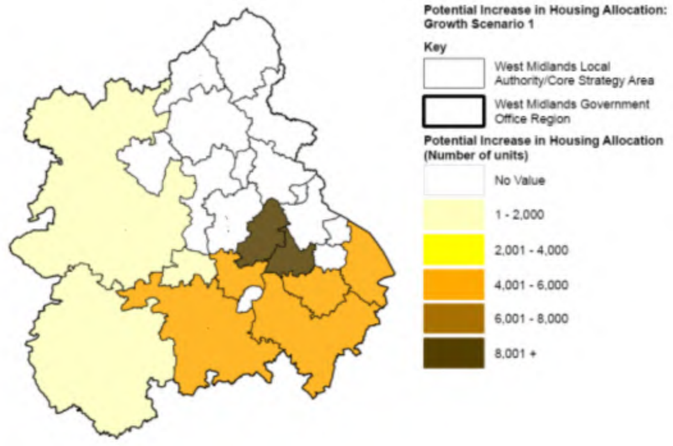
Key Findings and Potential Scenarios

i.	There is scope to identify additional land for housing in the region;
ii.	Additional housing need not harm achievement of Urban Renaissance;
iii.	There is no evidence that increased housing supply outside the Major Urban Areas (MUAs) will reduce housing supply within them;
iv.	There is no evidence that increasing housing supply outside the MUAs increases out-migration;
v.	There may be limits on how far it is possible to increase housing supply with the MUAs;
vi	In some locations there are increased risks that additional supply could harm fragile markets and undermine housing market renewal, but could be overcome by careful phasing;
vii	Additional housing can support economic growth;
viii.	Birmingham needs more good quality housing in the City and its immediate hinterland to support its global role;
ix.	Additional housing growth can help address genuine affordability problems and meet housing needs;
x.	Additional housing growth can support rural renaissance and support RSS objectives through regeneration;
xi.	Additional housing growth is likely to require the review of Green Belt but this is consistent with RSS objectives if it results in sustainable development and regeneration. There are also opportunities to increase coverage of Green Belt;
xii.	New settlements are a potential form of development that could meet requirements in the right locations and if the delivery capability is put in place;
xiii.	Transport issues are not a fundamental barrier to delivering more housing although investment in public transport alongside highway improvements will be needed in some locations;
xiv.	Although there are localised hydrology and other issues to resolve there is no evidence that these cannot be addressed through investment in additional capacity or consideration of specific locations in Core Strategies;
xv.	The market downturn means the currently envisaged trajectory of housing will change but there is no fundamental market barrier to increasing supply provided there is sufficient suitable and available land;
xvi.	The phased release of land needs to focus on managing the risks for fragile markets, whilst also ensuring that supply increases as quickly as possible out of the downturn.

1.5 The report evidences these key findings and outlines how the evidence and analysis pointed to the three potential growth scenarios outlined below. The scenarios emerged from considering the potential for each local authority/core strategy area to accommodate additional housing growth, within the broader context of how additional growth sits within the objectives of RSS and need to minimise risks of non-delivery.

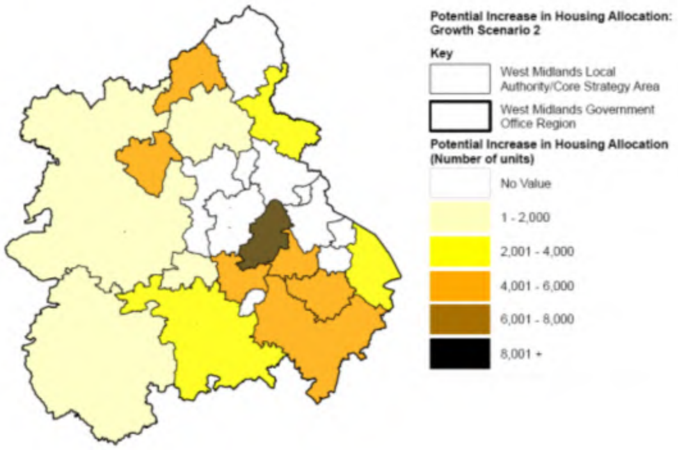
1.6 These scenarios are presented as potential scenarios, none should be considered as the 'preferred' option for the Region or as the optimum outcome. This will depend on the choices made on a wide range of issues. However, they do represent NLP's view on choices that could be a good fit with existing policy, aligned to reducing the risks of non-deliverability.

Scenario 1: South East Focus



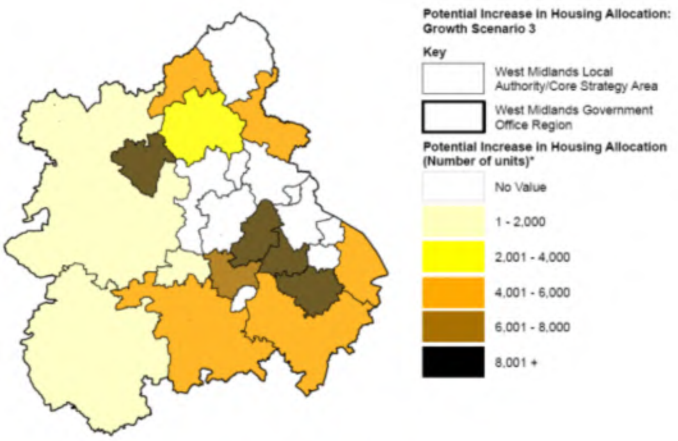
- Additional growth focused in the south east of the region and in the rural west
- 51,500 additional units
- 417,100 net additional dwellings up to 2026
- New settlement in Solihull District
- Links housing growth to economic growth

Scenario 2: Spreading Growth



- 54,000 additional units
- 419,600 net additional dwellings up to 2026
- South East focus but also capitalising on capacity for growth in North Staffordshire (which sits in a separate sub-regional market) and Telford and in the rural west
- Links housing growth to economic growth and areas of additional capacity and regeneration, with a spread across housing market areas.

Scenario 3: Maximising Growth



- 80,000 additional units
- 445,600 net additional dwellings up to 2026
- Additional growth across a range of locations including around the Metropolitan MUA, Staffordshire, Telford and in the rural west to address affordability issues.
- Focuses growth in areas of economic growth, affordability, capacity and regeneration, across a range of housing market areas.

1.7 The main body of the report provides further detail on how these scenarios were arrived at, alongside the testing of the nine options and analysis of some of the key issues and scenarios. Table 1.1 below shows how the three potential scenarios compare in terms of housing numbers.

Local Authority / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Scenario 1: South East Focus		Scenario 2: Spreading Growth		Scenario 3: Maximising Growth	
		Potential Increase	Total Housing Allocation for RSS	Potential Increase	Total Housing Allocation for RSS	Potential Increase	Total Housing Allocation for RSS
Birmingham	50,600	10,000	60,600	10,000	60,600	10,000	60,600
Coventry	33,500	0	33,500	0	33,500	0	33,500
Black Country	61,200	0	61,200	0	61,200	0	61,200
Solihull	7,600	13,000	20,600	5,000	12,600	10,000	17,600
Metropolitan Area Total	**152,900**	**23,000**	**175,900**	**15,000**	**167,900**	**20,000**	**172,900**
Shropshire	**25,700**	**1,900**	**27,600**	**1,900**	**27,600**	**1,900**	**27,600**
Telford and Wrekin	26,500	0	26,500	5,000	31,500	10,000	36,500
Staffordshire (excl. North Staffs)	**49,200**	**0**	**49,200**	**4,000**	**53,200**	**8,000**	**57,200**
Cannock Chase	5,800	0	5,800	0	5,800	0	5,800
East Staffordshire	12,900	0	12,900	2,500	15,400	5,000	17,900
Lichfield	8,000	0	8,000	0	8,000	0	8,000
North Staffordshire	17,100	0	17,100	6,000	23,100	6,000	23,100
South Staffordshire	3,500	0	3,500	0	3,500	0	3,500
Stafford	10,100	0	10,100	1,500	11,600	3,000	13,100
Staffordshire Moorlands	6,000	0	6,000	0	6,000	0	6,000
Tamworth	2,900	0	2,900	0	2,900	0	2,900
Warwickshire	**41,000**	**14,500**	**55,500**	**12,500**	**53,500**	**19,500**	**60,500**
North Warwickshire	3,000	0	3,000	0	3,000	0	3,000
Nuneaton and Bedworth	10,800	0	10,800	0	10,800	0	10,800
Rugby	10,800	5,000	15,800	3,000	13,800	5,000	15,800
Stratford-on-Avon	5,600	4,500	10,100	4,500	10,100	4,500	10,100
Warwick	10,800	5,000	15,800	5,000	15,800	10,000	20,800
Worcestershire	**36,600**	**10,900**	**47,500**	**8,400**	**45,000**	**13,400**	**50,000**
Bromsgrove	2,100	5,000	7,100	5,000	7,100	7,500	9,600
Redditch	6,600	0	6,600	0	6,600	0	6,600
South Worcestershire	24,500	5,500	30,000	3,000	27,500	5,500	30,000
Wyre Forest	3,400	400	3,800	400	3,800	400	3,800
Herefordshire	16,600	1,200	17,800	1,200	17,800	1,200	17,800
MUAs	**169,100**[1]	**23,000**	**193,000**	**21,000**	**191,000**	**26,000**	**196,000**
Non-MUAs	**196,500**	**28,500**	**224,100**	**33,000**	**228,600**	**54,000**	**249,600**
HMAs							
North	46,100	0	46,100	10,000	56,100	14,000	60,100
South	53,000	20,400	73,400	17,900	70,900	27,900	80,900
Central C1	69,100	23,000	92,100	15,000	84,100	20,000	89,100
Central C2	58,100	5,000	63,100	3,000	61,100	5,000	63,100
Central C3	97,000	0	97,000	5,000	102,000	10,000	107,000
West	42,300	3,100	45,400	3,100	45,400	3,100	45,400
West Midlands Region	**365,600**	**51,500**	**417,100**	**54,000**	**419,600**	**80,000**	**445,600**

Table 1.1: Potential Scenarios – Housing Distribution

Source: WMRA / NLP

[1] Figures for MUAs total differ between RSS Preferred Option and scenarios due to definition of Newcastle under Lyme urban area figure within district and North Staffordshire totals.

Background and Approach

1.8 The study flows from the need to meet housing needs and manage the impacts of new development in the West Midlands region. The West Midlands Regional Assembly (WMRA), in arriving at the Preferred Option for delivering 365,600 net additional homes by 2026, concluded that this level of provision struck the right balance between housing need and the overall objectives of the RSS, notably the need to achieve urban renaissance. Baroness Andrews, in her letter (7 January 2008), expressed concern that the RSS Phase 2 Revision was not making provision for sufficient housing, because of the challenge set down in the Housing Green Paper and the level of housing indicated for the region in the initial advice from the NHPAU.

1.9 The NHPAU Supply Range, published on 26 June 2008, provides the parameters for housing need to be tested through the study – it indicates the potential need for between circa 377,000 and 447,000 new dwellings in the RSS period (with some uncertainty due to the base date of RSS and the NHPAU being different). On this basis, the options tested as part of the Study look at how it might be possible to deliver between circa 12,300 to 80,700 more dwellings than are proposed by the RSS Phase 2 Revision Preferred Option.

1.10 The purpose of the Study is therefore to develop and then test the options to explore the potential for increasing the supply of housing in the West Midlands, and what kinds of impacts, risks, and policy implications are associated with this.

1.11 This study does not set out to establish the level of housing need and demand in the region or to test the appropriateness of the NHPAU's supply range as a measure of the housing requirement for the region. Rather, it seeks to explore whether it is possible to increase housing provision over the Preferred Option in light of the NHPAU supply range.

Generating the Options

1.12 Nine options were generated, combining a mixture of spatial options (ie where new development might be located) and levels of housing growth (ie how much more housing). The starting point for generating these options was:

1. The RSS Preferred Option, which flowed from an initial identification of physical capacity for 340,000 units, meaning any additional growth would need to be either greenfield or through a fundamental shift in land use emphasis within urban areas;
2. The analysis of how the housing requirement for each local authority in the RSS Preferred Option compared with CLG 2004-based local Household Projections and past build rates;
3. The NHPAU Supply Range, which indicates the need for between circa 12,300 - 80,700 additional dwellings;
4. The overall strategy of the RSS with its identification of Major Urban Areas (MUAs) and Settlements of Significant Development (SSD) and other policy priorities;
5. The recognition, for example in the Eco Towns Prospectus, that major developments of circa 5,000 units represent sustainable building blocks for investment in infrastructure; and
6. The shortlisted Eco Town locations at Middle Quinton and Curborough.

1.13 The options, which took the RSS Preferred Option as a starting point, looked at how *additional* growth could be distributed across the region in the form of:

- Additional urban-based growth within the Major Urban Areas (MUAs);
- Urban extensions;
- New settlements; and
- Additional rural housing provision.

1.14 The nine options comprised a mix of:

- Two options at the bottom end of the NHPAU Supply Range (circa 12,300 additional units on top of the RSS Phase 2 Revision Preferred Option);
- Five options at a mid point of the NHPAU Supply Range (circa 46,500 additional units on top of the RSS Phase 2 Revision Preferred Option) ranging from focusing growth principally as urban extensions in the south east of the Region (Option 3), New Settlements (Option 4), growth on urban sites in the MUAs (Option 5), principally as urban extensions in the north of the Region (Option 6), and as smaller urban extensions distributed across the Region (Option 7);
- Two options at the upper end of the NHPAU Supply Range (circa 80,700 additional units on top of the RSS Phase 2 Revision Preferred Option) with a mix of urban extensions and New Settlements (Option 8) and through urban extensions and rural housing provision (Option 9).

1.15 The purpose of the nine options was to test a series of high level strategic approaches to delivering the additional levels of development. They are deliberately focused around key settlements and in some cases span administrative boundaries, resulting in allocations which are sometimes split across local authorities.

Appraisal of Options

1.16 In order to arrive at a series of potential ways forward for the region, the nine options were appraised against a range of factors:

- Impacts
  - Transport
  - Community and Social Infrastructure
  - Hydrology
  - Landscape
  - Housing Market
  - Economy
- Delivery Risks
  - Infrastructure Provision
  - Transport Infrastructure
  - Market Delivery
  - Planning
  - Public Sector Delivery

1.17 The Options were also considered against the RSS Policy Objectives and Government policy for housing in PPS3 and the Housing Green Paper. Alongside this, the options were appraised in terms of the Sustainability Appraisal (SA) (taking as its starting point the SA for the RSS Preferred Option), and a Habitats Regulations Assessment.

1.18 The focus of the study, in terms of assessing impacts and risks was to identify the potential ‘showstoppers’ or fundamental barriers that might prevent development from being able to proceed, rather than identifying every impact or risk. It is clearly recognised that additional development gives rise to localised impacts and that whilst these can often be avoided or mitigated through appropriate local planning, it is not always possible to eradicate all impacts. In this context, if higher levels of housing growth are pursued to address affordability or support economic growth, mitigation will need to be addressed.

1.19 The appraisal considered the nine options in the context of the various broad locations for additional growth. The appraisal considered a wide range of issues, and in all options there are potential barriers to additional growth in some broad locations, whether these relate to infrastructure, market capacity, environmental or other impacts. These impacts should be capable of being mitigated and therefore not pose a fundamental constraint on additional growth. However the phasing of growth of some options and locations may depend on the timing of mitigation action.

1.20 The SA of Housing Options follows the relevant Government guidance in PPS11 and the ODPM guidance on “Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents” (Office of the Deputy Prime Minister (November 2005). The SA considers each of the options for additional housing growth, using the SA of Policy CF3 carried out for the RSS Preferred Option as the starting point. It identifies to what extent the cumulative effects of each Option and the Preferred Option would differ to the effects of the Preferred Option in isolation and whether this would lead to a different conclusion being reached by the SA and accordingly the need for further or different recommendations.

1.21 In this regard, the SA work for this study takes forward the logic applied by the WMRA’s consultants in considering policy CF3. In a small number of cases this logic is not consistent with the conclusions that NLP has reached in other aspects of the appraisal (and this is generally highlighted in the SA), but it has been considered important for the SA to have consistency with the previous work. The SA provides information to support the study and to enable easy comparison with the preferred option. If any of the options or scenarios are taken forward through the RSS revision, these would be subject to further SA at the proposed changes stage. A similar principle applies to the Habitats Regulations Assessment (HRA).

1.22 The options were assessed in the context of being net additions to the housing provision proposed by the RSS Phase 2 Revision Preferred Option, which then impact on the Objectives as a whole. There was no explicit RSS policy objective directly relating to the requirement for housing provision to match ‘regional’ housing needs, and the options were therefore assessed against Government policy in PPS3 and the Housing Green Paper.

Implications for Local Authority / Core Strategy Areas

1.23 Table 1.2 below provides a summary of how the appraisal relates to each of the Local Authority/Core Strategy areas, and shaped the emergence of the three scenarios.

1.24 The process of filtering nine options down to three scenarios takes account of:

1. What NLP considers to be the de-minimis nature of the additional c.12,300 units to reach the bottom of the supply range – there are a number of alternative approaches to delivering this (including Birmingham’s own proposals in its Core Strategy Issues and Options report, the Eco Town locations, making additional rural provision) – about which there is little real doubt over its impacts or deliverability at a regional level;
2. The limitations of New Settlements as a means of delivering a significant proportion of the additional units for the NHPAU supply range, which means the potential for Options 4 and 8 to make a substantial contribution in this RSS period are limited;
3. The constraints of certain locations (e.g. Cannock and Redditch) to accommodate additional growth (over RSS Preferred Option) given particular restrictions and impacts;
4. The finite capacity of the market to bring forward major urban-based growth to accommodate the middle or upper end of the NHPAU supply range, and, in particular the challenge of securing additional growth in the Black Country, where build rates have been significantly lower even than the RSS Preferred Option;
5. The differing perceptions on the scale of growth that can be accommodated in different broad locations. The evidence does not point to the existence of precise ‘tipping points’ above which additional growth is not possible – it is a matter of judgement, taking account of the scale, impact and deliverability in different broad locations. Analysis and feedback suggests that, with the exception of the areas identified for rural provision:
    i. additional growth, if it was deemed appropriate, would be in the form of major urban extensions, which if possible and deliverable within the market, should be of sufficient scale and critical mass to form a sustainable urban extension supporting its own infrastructure provision (Warwick, Solihull and Telford provide good examples of this principle);

ii. some additional levels of growth could be accommodated on urban sites, meaning the capacity of 340,000 originally identified in RSS is an under-estimate (Birmingham and North Staffordshire are good examples of this);

iii. in the case of Solihull, one of the scenarios takes forward the concept of a new settlement, recognising that this form of development should be tested through the RSS process.

1.25 This summary is not intended to be a comprehensive review of every factor of relevance to taking forward development in any of the broad locations identified. And it is of course open for stakeholders to adopt different views on what and how particular localised issues and impacts might influence the approach of the RSS. However, if there is a policy focus on increasing housing supply, and if the appropriate choices or trade-offs are made, the conclusions of this study are that the locations identified could in principle accommodate growth above the Preferred Options level.

Local Authority / Core Strategy Area	Key Issues, Impacts and infrastructure Issues	Included in Scenarios?	Approach adopted in Scenarios
Locations Tested within Nine Options			
Birmingham	Scenarios that increased the rate of growth within Birmingham will address the underlying need expressed by projections and the growth ambitions of the City, expressed most recently in the Core Strategy Issues and Options Report. The infrastructure issues of this growth can be addressed, but there are undoubtedly risks in terms of market build rates and securing appropriate sites for new development in the short term. Annual SHLAA work will need to ensure that appropriate and available sites are brought forward to ensure the overall number of units can be delivered. At the level of 10,000 additional growth, the Council's Core Strategy Issues and Options report indicates that this can be achieved without necessitating Green Belt amendments. However, this is dependent on suitable and available sites being capable of achieving the necessary rates of development. If this is not the case, there could be a requirement to review the Green Belt at this level of provision.	Yes	10,000 additional units are identified in each Scenario. The Council's Issues and Options Report might suggest that this increase is feasible but must be regarded as carrying some delivery risk.
Solihull	RSS under-provides against both past build rates and CLG Projections, so net additional growth could address underlying need. There is also an underlying ability to deliver in market terms. Additional growth would necessitate Green Belt review. There are landscape issues in some locations but these can be avoided through appropriate site selection and masterplanning. There is good accessibility but increasing rail and road capacity may be required on some rail routes into Birmingham and in relation to M42 J4 and J6 depending on the location of development – there is no reason to assume it cannot be delivered. There are clearly delivery and market capacity risks for a new settlement option but in principle they can be overcome.	Yes	The Scenarios range from major urban extensions or linked new settlements of circa 5,000-10,000 units (Scenarios 1 and 3) to a potential free-standing New Settlement accommodating 13,000 new units in the period to 2026, with development potentially continuing beyond the RSS period.
Shropshire	The appraisal process indicates that there is widespread scope for increasing the level of housing provision in the rural parts of Shropshire, without giving rise to major issues.	Yes	Growth of circa 1,900 additional units across all three potential scenarios

Local Authority / Core Strategy Area	Key Issues, Impacts and infrastructure Issues	Included in Scenarios?	Approach adopted in Scenarios
Telford and Wrekin	Although the RSS allocates Telford significantly more housing than envisaged by the CLG projections and past build rates, there is underlying potential for additional development both within the settlement boundary and on land owned by English Partnerships. Further growth could support further investment in the town's retail and other services and benefit regeneration. Not all additional growth is likely to require greenfield extension. Increased rail and road capacity is likely to be required to address localised congestion. Some water supply and treatment investment is required. There is no evidence that additional growth would harm the urban renaissance agenda. There are no infrastructure barriers to delivery of housing. There are potential land and market capacity issues (particularly for a 10,000 unit increase) which would need to be overcome by coordinated HCA/new asset based vehicle interventions. There is a need to control phased release of sites for housing to maximise output with delivery plan coordinating investment in infrastructure. As in other locations phasing of development may need to await market recovery to fund infrastructure.	Yes	Growth ranging from nil (Scenario 1) through to an additional 5,000 (Scenario 2) allocation and 10,000 units (Scenario 3). The upper end should be regarded as ambitious given the scale of development uplift required. Phasing will need to have regard to land release, infrastructure and supporting regeneration.
East Staffordshire	Additional physical capacity is identified in Burton-upon-Trent SSD and growth associated with supporting regeneration and economic development activity aligned to the Growth Point. Potential flood risk issues need to be managed but there is no indication that this is a fundamental barrier for further development. There are localised congestion issues, and need to improve public transport accessibility into both East and West Midlands regions. Higher rates of growth (e.g. in Scenario 3) may trigger market capacity issues, but ultimately phasing allows for the additional growth to be delivered later in the plan period.	Yes	Growth from nil (Scenario 1) through to 5,000 additional units, phased later in the RSS period.
North Staffordshire	There is identified additional capacity, and scope to increase growth to reflect underlying demand and potential link to economic development objectives, particularly in Newcastle under Lyme, focused around the Keele University. Further growth could also be aligned to wider regeneration across the MUA, with appropriate phasing to ensure additional supply does not undermine fragile markets. There is a need for some infrastructure investment, including investment in bus services, and water supply/treatment measures. However, there are no major risks to delivery.	Yes	Nil growth in Scenario 1. Growth up to 6,000 units in Scenarios 2 and 3. Phasing will be important in terms of providing the time/'breathing space' for regeneration to create the platform for further growth.
Stafford	Some scope to increase growth in SSD, although location would need to focus more towards the south given need to minimise risk of any impact on North Staffordshire market. Some local transport impacts could require mitigation, including scope to lengthen trains to enhance public transport capacity. Hydrology investment will be required. Although infrastructure investment will be required, no major delivery risks identified.	Yes	Nil growth in Scenario 1. Increasing to 1,500 in Scenario 2 and 3,000 in Scenario 3.

Local Authority / Core Strategy Area	Key Issues, Impacts and infrastructure Issues	Included in Scenarios?	Approach adopted in Scenarios
Rugby	Capable of accommodating additional growth and identified as SSD. Potential highway and public transport capacity infrastructure works/investment required. May require significant hydrology investment but not identified as a fundamental barrier to development. No evidence that infrastructure required cannot be delivered, although rates of delivery will require market capacity increase at the 5,000 level of increase. Although it is not likely that a Green Belt review would be needed to accommodate growth, it might be that extension of the Green Belt to establish the boundaries of Rugby could be considered.	Yes	Growth of 5,000 units identified in Scenarios 1 and 3. Lower growth (3,000 units) in Scenario 2.
Stratford-upon-Avon	Stratford-upon-Avon is a district with significant affordability issues, and where the RSS Preferred Option 'under-supplies' against CLG Projections. The market has also delivered more than the RSS Preferred Option over the past five years indicating market capacity to increase supply beyond the RSS Preferred Option. The Middle Quinton Eco Town was shortlisted in May 2008. High level analysis indicates the scheme may have major transport issues to resolve, but if these are capable of being resolved either through the Eco Town or some other form of development, it will address the underlying need and scope for additional development in Stratford-upon-Avon to address affordability. Development will require range of infrastructure, but key is transport mitigation (guided rail/bus link) and alternatives to Eco Town might present alternatives more capable of being served if Eco Town bid not taken forward. Social infrastructure may present timing issues as with any new settlement. Water supply may be an issue but no reason to assume it cannot be overcome. Growth might provide the opportunity to review the Green Belt and consider its extension, including around Stratford-upon-Avon.	Yes	Growth identified in all three Scenarios (plus 1,500 in Wychavon– South Worcestershire Core Strategy Area)
Warwick	Additional development to address significant affordability issues, under-provision against CLG Projections, and market ability to deliver more than RSS (evidenced by build rates) with provision of infrastructure funded by development in one of the more successful market locations in the region. Transport issues differ between locations in and around Warwick. Transport infrastructure improvements associated with rail, alongside bus service improvements, are likely to be required. Social infrastructure investment required. Water supply and flood risk issues but not identified as insurmountable barrier to further growth. Delivery risks flow from the necessary costs of infrastructure works, which will depend on location of development. Almost doubling the RSS requirement might have market capacity issues, but the underlying strength of the market and positive feedback from the development industry gives confidence on delivery. Additional growth would necessitate a review of the Green Belt to include consideration of how it might be extended to allocate Green Belt around all of Warwick.	Yes	Growth of 5,000 units (equivalent to one sustainable urban extension) identified in Scenarios 1 and 2. Higher levels of growth (10,000) identified in Scenario 3 (equivalent to two sustainable urban extensions). Phasing measures would be needed to address this.

Local Authority / Core Strategy Area	Key Issues, Impacts and infrastructure Issues	Included in Scenarios?	Approach adopted in Scenarios
Bromsgrove	Combination of proposals in Options for Birmingham South and Redditch, alongside underlying under-provision of RSS Phase 2 against CLG Projections, past build rates, and major affordability threshold indicate potential for further development in Bromsgrove. It will be for LDF to identify most appropriate location for accommodating growth. A review of the Green Belt would be necessary. Both Redditch and urban extensions to the Metropolitan area provide opportunities for using existing public transport infrastructure, alongside potential investment to upgrade. Investment in water supply/treatment will be needed, depending on location of development. Some developer concern at market capacity for development related to Redditch. Investment in infrastructure needed, and risk of non-delivery could hinder development but not considered a major issue, although market delivery could be an issue for higher output. Phasing would need to be dictated by timescales for transportation (e.g. train lengthening) and water supply/treatment improvements where necessary to support development, this might mean phasing to 2012+	Yes	Identified for 5,000 units (Scenarios 1 and 2) or 7,500 (Scenario 3) through significant additional growth as extensions to either or both Redditch and Birmingham.
South Worcestershire	Joint Core Strategy across three districts provides mechanisms for identifying how additional rural housing provision and growth focused around city of Worcester can be accommodated. In addition, Wychavon would accommodate c.1,500 units of the 6,000 unit eco town proposal at Middle Quinton, if it proceeded. Analysis of options reveals that there are no reasons why growth cannot be accommodated beyond hydrology (water extraction) issues associated with the Wye Valley which equally apply to the RSS Phase 2 Preferred Option and should be capable of being resolved. Equally, although Worcester is a strong market, some suggestion from developers that the local market might be able to accommodate just 2,500 units around the city itself. The scope to extend the Green Belt around Worcester could be considered in tandem with other reviews necessary to accommodate additional growth.	Yes	Growth of 5,500 and 3,000 identified based on 1,500 of rural housing provision, 1,500 for the Middle Quinton eco town location, and up to 2,500 (in terms of Scenarios 1 and 3) for growth to Worcester.
Wyre Forest	The appraisal process indicates that there is widespread scope for increasing the level of housing provision associated with rural areas (to improve rural affordability), without giving rise to major issues.	Yes	400 units for additional rural provision identified in all scenarios.
Herefordshire	Additional Rural Provision – to improve rural affordability. There could be localised hydrology infrastructure requirements but there is no reason why these could not be accommodated. No major delivery risks identified.	Yes	Additional growth of 1,200 units identified in all three scenarios.

Table 1.2: Key Issues, Impacts and Infrastructure Issues for Local Authority/Core Strategy Areas

Source: NLP Analysis

1.26 This is an independent report prepared as evidence to inform GOWM's response to the RSS Phase 2 Preferred Option. It also provides a resource for other stakeholders and sits as just one input among a range of other pieces of evidence that will need to be considered in the remainder of the RSS process.

2.0 Introduction

2.1 This report presents the findings of the study undertaken by Nathaniel Lichfield and Partners (NLP) for Government Office for the West Midlands (GOWM) in respect of West Midlands Regional Spatial Strategy (RSS). The purpose of the study is to identify options for accommodating higher housing numbers in the draft West Midlands Phase 2 Regional Spatial Strategy Revision in response to the National Housing and Planning Advice Unit (NHPAU). The report uses the appraisal of these options to produce three growth scenarios which show how the Region might increase housing provision. These scenarios are the independent product of analysis conducted by NLP and do not represent the position of Government.

Background

2.2 The West Midlands RSS was published as Regional Planning Guidance (RPG) in June 2004, and is being revised in three phases. The first, covering the Black Country, has been finalised and was issued on 15 January 2008. The second, covering housing, employment, waste and some transport issues was submitted by the WMRA on 21 December 2007. The third, covering environmental issues, gypsies and travellers, and rural services is currently being prepared.

2.3 The Phase 2 revision, which updated the housing allocations, identified provision of 365,600 new homes in the period to 2026. The context for this study flows from the letter of 7 January 2008 from Baroness Andrews, Parliamentary Under Secretary of State, to WMRA, expressing concern that the Phase 2 Revision was not making provision for sufficient housing. In light of the challenge set down in the Housing Green Paper and the level of housing indicated for the region in the initial advice from the NHPAU. Baroness Andrews indicated that GOWM would commission work looking at options for delivering higher housing numbers, whilst maintaining as many of the principles of the RSS as possible. This study will form part of the evidence base for the Government's response to the RSS Phase 2 revision.

2.4 The Study was managed by GOWM and has involved engagement with officials from the WMRA, local authorities, and other interested stakeholders. Ultimately, however, the content of this report is the independent work of NLP and is intended to provide a transparent and objective analysis of a series options for delivering additional housing. GOWM will draw upon this study in framing its own response to the Phase 2 RSS, but is not committed to adopting any of the options or growth scenarios identified by NLP as the best way forward for the region.

The Study

2.5 The study, undertaken to a methodology prepared in response to the GOWM Brief of February 2008, comprises five elements:

- Reviewing the background evidence relating to housing provision, including that underpinning the allocation of housing numbers within the Phase 2 submission;
- Generating a series of housing options which define the broad locations for accommodating additional housing development across the region to cover the range identified by the NHPAU in its Report of 26 June 2008 (this superseded the NHPAU Report of October 2007);
- An appraisal of the Options in terms of deliverability, infrastructure and implementation issues and risks and implications for phasing of development in RSS;
- A sustainability appraisal (SA) of the options, taking account the requirements of the Habitats Directive and building on the SA already completed for the Phase 2 Submission;

- Explicit consideration of the potential impact of each of the housing options on the RSS key principles and objectives and on meeting the Government's objectives for housing as set out in PPS3 and the Housing Green Paper.

2.6 It is important to recognise that the Study (and the options within it), does not undermine nor pre-empt the existing statutory process for preparing and agreeing RSS or any Local Development Frameworks (LDFs). The options set out in this document are not formal policy or proposals of government, but are intended to inform the evidence that will be put to the public examination where it will be tested by an independent Panel. No decisions about the overall level and distribution of new housing for the West Midlands Region have been made in this study.

2.7 The outputs of the Study, in particular, are a set of three growth scenarios, which are drawn from the output of the appraisal of options, and provide a set of alternative choices for how the region might deliver additional housing growth.

Reports and Structure

2.8 This report forms part of a suite of documents prepared as part of the Study. These are:

- Volume 1: Main Report — This contains the outputs of the work identifying potential options and assessing them in terms of impacts, delivery risks, and against RSS objectives and Housing policy. It sets out the three potential growth scenarios;
- Volume 2: Appendices — This sets out background analysis to the Main Report, including summary of stakeholder engagement;
- Volume 3: Background Review — This provides a summary of the background evidence base undertaken at the commencement of the Study;
- Volume 4: Sustainability Appraisal: Non Technical Summary — This provides a summary of the Sustainability Appraisal;
- Volume 5: Sustainability Appraisal: Main Report — This sets out the results of the Sustainability Appraisal of the Options, drawing on the analysis and approach taken by the Sustainability Appraisal of the Preferred Option undertaken for WMRA;
- Volume 6: HRA Screening Report — Initial screening of the options in line with the Habitats Directive;
- Volume 7: HRA Assessment Report — An assessment of the options in line with the Habitats Directive;

2.9 The remainder of this document (Volume 1: Main Report) is set under the following headings:

- Methodology (Chapter 3) — Describing how the Study was carried out, including timescales and approach to engagement and analysis;
- Background Evidence and RSS (Chapter 4) — Summarising the evidence relating to housing provision and the principles underlying RSS;
- Housing in Phase 2 RSS (Chapter 5) — Provides a summary of the principles underlying the allocation of housing numbers within the Phase RSS submission;
- Housing Options (Chapter 6) — Sets out the approach to developing the Options and the context in which they should be considered, before outlining each of the options in turn;

• Appraisal of Options (Chapter 7)	Identifies the key impacts and delivery risks and outputs of the Sustainability Appraisal (SA), HRA and policy appraisal, associated with the options and broad locations;
• Appraisal against Policy and Discussion of Key Issues (Chapter 8)	Identifies the impact each option would have on the RSS key principles and objectives and on meeting the Government's objectives for housing set out in PPS3 and the Housing Green Paper;
• Conclusions (Chapter 9)	Draws conclusions and sets out three potential growth scenarios for additional housing growth including housing numbers for local authority/core strategy areas.

3.0 Methodology

Approach

3.1 The overall methodology for undertaking the study is set out within a series of elements or phases, as illustrated on Figure 3.1 below.

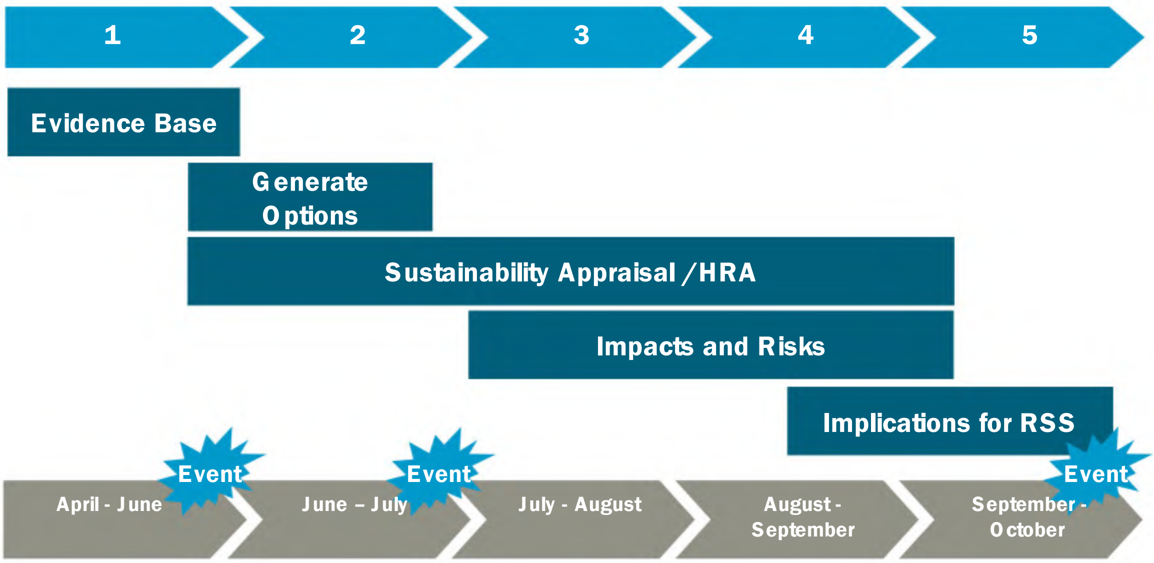


Figure 3.1: Study Programme
Source: NLP

3.2 The work outlined above began on 20 April 2008 and was completed with publication of this document on 7 October 2008.

3.3 At the heart of the Study is an option generation and appraisal process, which has been prepared taking account of national planning policy and more specific guidance on carrying out option appraisals in an ex-ante context, such as that in HMT's Green Book[2] and the 'Three Rs guidance'[3]. Although this work in not intended to be a 'Green Book appraisal', being carried out for different purposes, it does seek to reflect some of the key principles, with some examples set out in Table 3.1 below:

Example Principles	What it means for this Study
The need for the range of options to be framed by parameters derived from objectives (i.e. it is not necessary to test every possible alternative if those alternatives do not reflect the objectives of the study)	This study tests options for how the NHPAU housing supply range to 2026 could be delivered, as net additions to the housing allocations in Phase 2 RSS. It does not need to consider all other options (i.e. levels of provision below Phase 2 RSS, or changing the period for delivery of numbers)

[2] The Green Book: Appraisal and Evaluation in Central Government; Her Majesty's Treasury
[3] Assessing the Impacts of Spatial Interventions: Regeneration, Renewal and Regional Development 'The 3Rs Guidance'; May 2004, ODPM

Example Principles	What it means for this Study
The need for options to be defined sufficiently broadly to give a clear picture of the 'trade-offs' involved in making policy choices (ie it is important to test a range of different approaches even if some may seem more obvious than others).	The options extend across a range of different thematic approaches to providing additional housing that are not always closely aligned to elements of existing RSS policy or are, in themselves, not necessarily the only way in which the region could proceed. The aim is to help make the policy choices for the region more transparent.
The future is inherently uncertain so it essential to consider how future uncertainties can affect the choice between options. Sensitivity should be used to test the vulnerability of options to unavoidable future uncertainties. Spurious accuracy should be avoided, and it is essential to consider how conclusions may alter, given the likely range of values that key variables may take.	A base scenario around household growth and economic and market stability is adopted and described later in the report. However, the impacts and delivery risks are considered against a number of sensitivities to explore what would happen if household growth was either more or less than the base scenario, or if the economy was weaker in the long term.
The need for the results of the appraisal process to be interpreted flexibly – the highest performing option should not necessarily be taken forward by rote. It may be possible to incorporate the best bits of all the options to arrive at the optimum approach.	No single option from this Study will be put forward by Government in its evidence. Rather, the implications of the different options and the resulting three potential scenarios set out in this report will help inform a synthesised view from Government as to the best way forward for the region, which will then form the basis for its response to RSS.

Table 3.1: Appraisal Methodology Issues
Source: NLP

3.4 The study, in seeking to explore and test options for additional housing provision, focuses upon identifying the potential impacts and delivery risks that represent fundamental barriers to their implementation. This does not include all cases where there might be potential adverse impacts. The latter can be balanced against other competing factors and choices made for or against. The former, by definition, is something that cannot be overcome and would act as a barrier to additional housing provision.

3.5 The study aims to provide useful evidence to input to the RSS process, on the subject of housing provision. However, this Study does not:

- Provide an exhaustive review of all implications of making provision for additional housing in line with the NHPAU supply range through RSS;
- Question the existing housing provision of RSS Phase 2 Preferred Option;
- Set out to identify the 'optimal' strategy for the region either in respect of housing provision or otherwise; or
- provide advice to the region and its stakeholders on the approach that RSS should take on a wide range of planning, economic or other matters.

3.6 The inputs to and role of the options, and the different components of the appraisal within the Study is illustrated below in Figure 3.2.

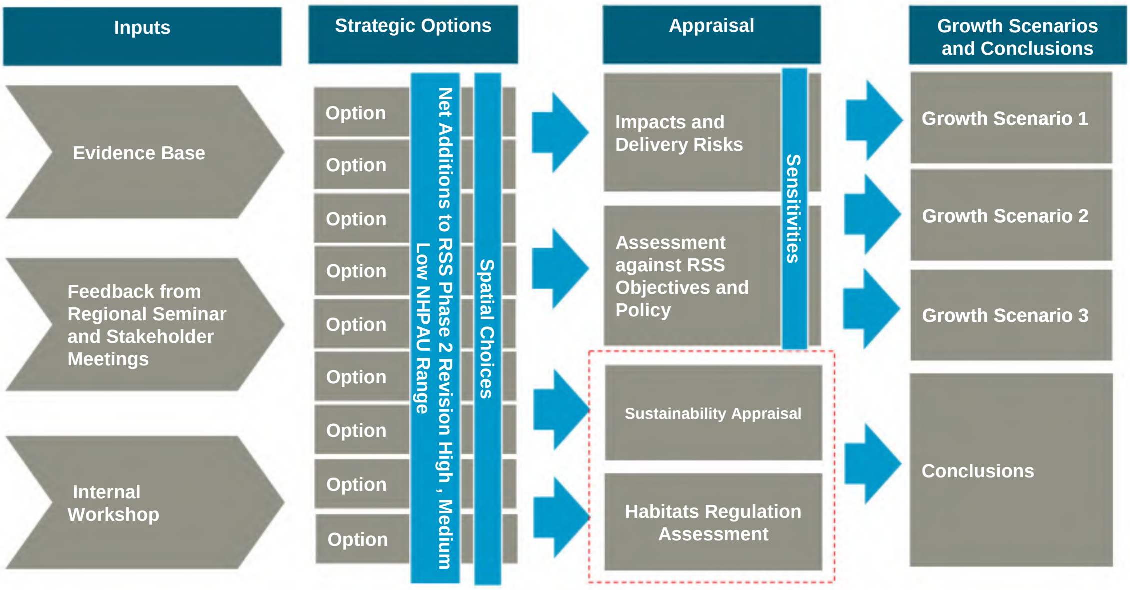


Figure 3.2: Approach to Options and Appraisal
Source: NLP

3.7 How these components are delivered through the methodology is described below.

Element 1: Evidence Base

3.8 As part of this, NLP reviewed a number of documents setting out the evidence base underpinning the allocation of housing in the RSS (See Volume 3).

3.9 NLP also attended meetings or undertook telephone interviews with a number of local authorities, statutory agencies, and other stakeholders. A list of stakeholders engaged as part of the study is included at Appendix 1, alongside a high level summary of the key issues discussed.

3.10 The results of the evidence base were presented at an event (Regional Seminar 1) held on 20 May 2008. The event was attended by a number of stakeholder organisations. Following a presentation from NLP, six discussion groups were held, focusing on: economic change; market affordability and mix; spatial strategy, regeneration and land supply; and infrastructure and sustainability. Following this, a short question and answer session was held. The output from the discussion groups and the feedback received was incorporated into the evidence base to help frame the generation of options.

3.11 A write up of the summary review of the evidence base is included in Volume 3.

Element 2: Generation of Options

3.12 As described in Figure 3.2, the options were generated taking account of the following factors:

- Outputs of the evidence base;
- Insight from the Stakeholder meetings and Regional Seminar 1;
- An internal consultant team workshop.

3.13 This produced nine options, framed by:

- Testing at the upper and lower end of the NHPAU supply range, along with a mid-range figure;

- Starting with the housing distribution proposed by the RSS Phase 2 Revision Preferred Option;
- Testing a series of spatial choices for how the net additional numbers might be met, identifying a broad range of locations, and expressed as types and amounts of development to give a flavour for what it could mean on the ground, as the basis for testing.

3.14 This meant that each option was essentially an aggregation of an indicative allocation of *additional* housing numbers to a broad location (generally a particular settlement or MUA, but in some cases a shire county area). Some broad locations feature in more than one option, and with different levels of additional growth. In all cases, these are indicative and wholly used for the purposes of testing.

3.15 These options, in the form of a series of schematic plans and schedules of additional housing numbers, were presented at a second event (Regional Seminar 2) and are included at Appendix 2. Ten discussion groups provided the opportunity for attendees to provide initial thoughts on the issues that would require particular attention as part of the option appraisal; and insight on specific factors to consider through the appraisal process.

Element 3: Sustainability Appraisal

3.16 As explained above, this Study is not a Plan which requires a Sustainability Appraisal (SA) under the European Directive 2001/42/EC on the “Assessment of the Effects of Certain Plans and Programmes on the Environment” and Habitat Regulations Assessment (HRA) under regulation 85 of the Habitat Regulations (The Conservation (Natural Habitats &c.)) 1994 (as amended). However, to ensure that the Study provides robust and meaningful evidence on which the Examination in Public (EiP) Panel can make an informed decision, it has been subject to similar SA and HRA processes applied to the Phase 2 Preferred Options.

3.17 Because the SA and HRA comprises additional evidence, and does not form part of either the SA (2007) or HRA (2007), it is not subject and does not form part of the statutory consultation process as part of the Phase 2 Preferred Option. However, to ensure that the SA robustly reflects the requirements of the SEA Directive, additional consultation with statutory consultees has taken place to allow input into the SA process.

3.18 In addition, the SA and HRA’s status as additional evidence means that it will not be subject to formal consultation but will be published alongside this Report. Further consultation would be required in the event that modifications to the Phase 2 Preferred Option are brought forward following the Examination in Public and additional SA and HRA will be required at this time as an addendum to the SA (2007) and HRA (2007).

3.19 In addition to meetings with statutory consultees at the inception of the SA and HRA of the housing options (May 2008), to review the scope of the methodologies (July 2008) and to review the initial findings (August/September 2008), issues in respect of the SA and HRA were raised as part of wider regional seminars forming part of the Options Appraisal process. Evidence from the seminars which took place in May 2008 and July 2008 with a range of regional stakeholders, statutory consultees and interested parties has also been used to inform the SA and HRA processes.

3.20 The SA of the Housing Options (Volume 5) has been an ongoing assessment from the inception of the Study, carried out to assess the extent to which the Housing Options promote the principles of sustainable development (see Figure 3.3). Where effects have been identified, and where appropriate, an iterative process of option development has taken place with the NLP team involved in option generation to ensure that sustainable principles are taken into account.

3.21 Notwithstanding the iterative nature of the process, the SA of the options identified has been carried out by a separate team within NLP to that involved in the generation of options. This team has been working independently to provide an objective and discrete analysis of how far the options and growth scenarios promote the principles of sustainable development.

3.22 The HRA process, carried out by Baker Shepherd Gillespie (BSG) is summarised in Figure 3.3. Data collected in respect of the HRA of the Phase 2 Preferred Option was up to date in 2007 and no revisions to boundaries of European Sites have been made since that time. Natural England and Countryside Council for Wales (CCW) provided some more recent conservation objective data which has been collected and reviewed with the 2007 data. Each option has been assessed to ascertain if it is likely to have significant effects upon the European sites, with a precautionary approach employed. Where significant effects are likely, or the effects are uncertain, then the remaining options which have not already been dismissed have been subject to Appropriate Assessment. Options which affect the integrity of a Site, or where impacts are uncertain are clearly identified.

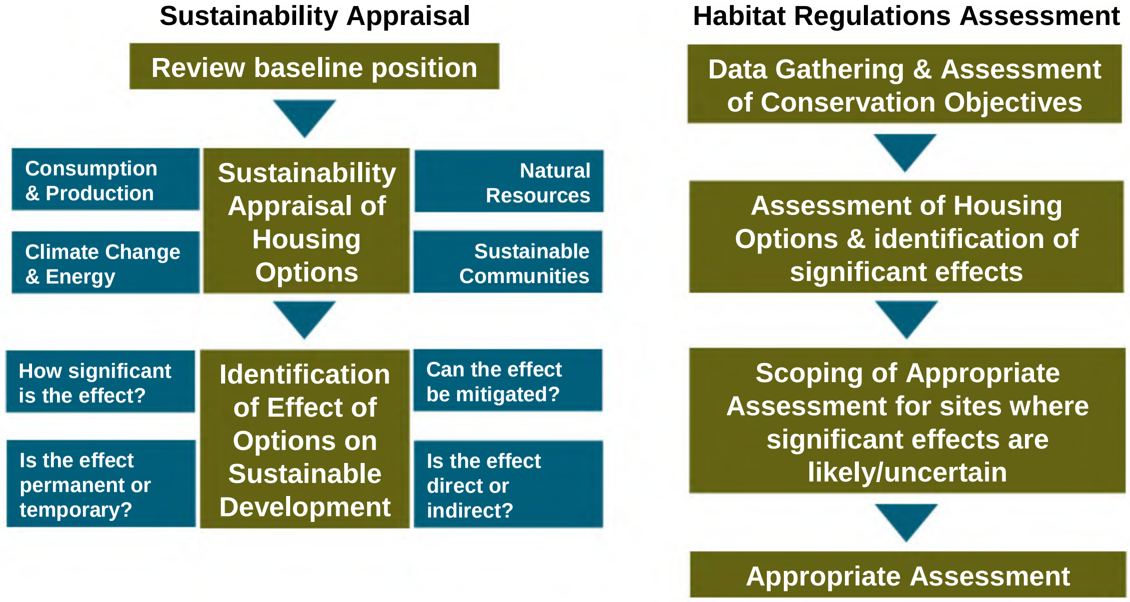


Figure 3.3: Approach to Sustainability Appraisal and HRA
Source: NLP

Element 4: Impacts and Risks

3.23 The process for assessing the impacts and risks of each of the options drew upon the identification of a series of criteria:

- Impacts
  - Transport
  - Community and Social Infrastructure
  - Hydrology
  - Landscape
  - Housing Market
  - Economy
- Delivery Risks
  - Infrastructure Provision
  - Transport Infrastructure
  - Market Delivery
  - Planning
  - Public Sector Delivery

3.24 Each of the options was assessed in terms of its individual component parts, and in aggregate, against the impact and risk criteria. The outputs from this are set out in Sections 7.0 and 8.0 and in the Appendices.

3.25 Reflecting the points made in paragraph 3.4, the focus was on identifying and assessing potential 'showstoppers' rather than providing a detailed appraisal of every option and from this, to highlight the potential policy choices for consideration through the remainder of the RSS's process.

3.26 The information used to inform the appraisal arose from a number of inputs:

- The stakeholder meetings provided useful insight on the types of impact that needed specific consideration for certain options in specific locations;
- NLP was able to draw upon the emerging analysis of work being undertaken by the Regional Development Agency (RDA), Advantage West Midlands (AWM) and the Highways Agency (HA) in respect of the RSS Phase 2 Preferred Option and its impacts on economic development and sustainable transport objectives, respectively;
- On transport issues specifically, consultants acting for the HA were able to run two of the nine options through its PRISM model;
- Technical and planning appraisals undertaken by NLP.

Element 5: Impacts on RSS and Policy

3.27 In line with the brief, the options were tested against the key principles and objectives of the RSS, as defined by NLP based on a review of the RSS documentation. In tandem, each option was assessed against a set of policy criteria based on PPS3 and the Housing Green Paper. The outputs from this are at Section 7.0 and 8.0 and in the Appendices.

3.28 The results of this and the writing up of the analysis up were synthesised into a Final Report (this document) and other documentation and published on 7 October 2008. A Regional Seminar was held on 9 October 2008.

3.29 The final report takes the outputs from the appraisal of each of the nine options and uses this to derive a series of three growth scenarios. The proposals in each of these scenarios are set out in the form of numerical additions to housing distribution for each Core Strategy area.

4.0 Background Evidence

Structuring the Review of Evidence

4.1 This section of the Report provides a brief summary of the key issues that flowed from the review of the evidence base, as identified in Figure 4.1 below.

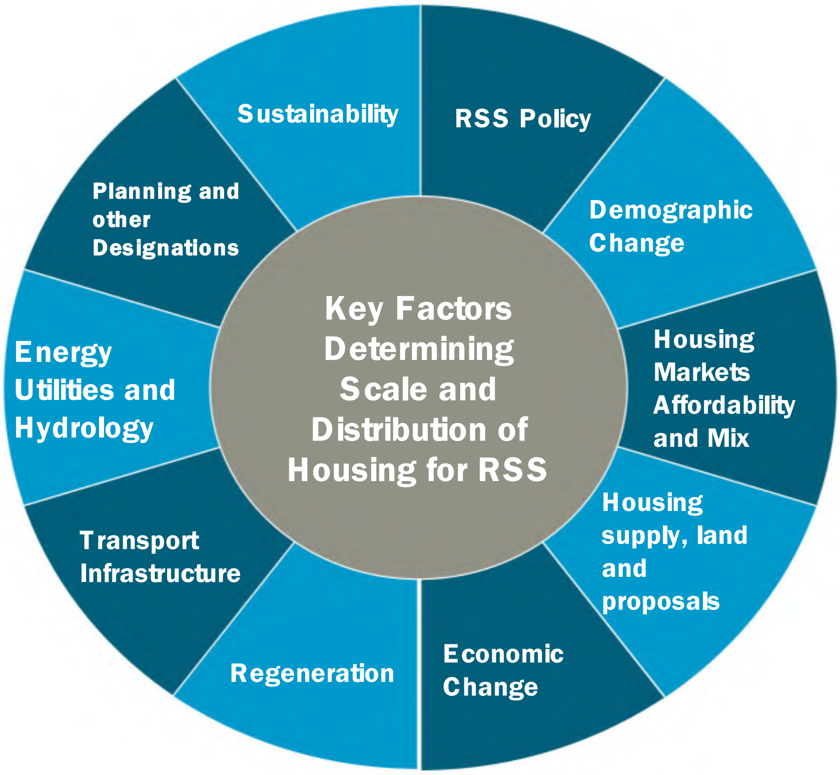


Figure 4.1: Evidence Base
Source: NLP

4.2 The purpose of the evidence base review was not to revisit or provide a new evidence base for RSS. Rather, it was to provide a summary of the background information to underpin the identification and appraisal of each of the options, taking a *regional* perspective.

4.3 The key components of the evidence base review are summarised below, and set out in more detail in Volume 3.

RSS Policy

4.4 The letter of 7 January 2008 from Baroness Andrews, Parliamentary under Secretary of State, to WMRA expressed concern that the Phase 2 Revision was not making provision for sufficient housing, but emphasised the importance of looking at options for delivering higher housing numbers, *whilst maintaining as many of the principles of the RSS as possible*. This study will form part of the evidence base for the Government's response to the Regional Spatial Strategy Phase 2.

4.5 The key themes of WMRSS spatial strategic objectives focus on Urban and Rural Renaissance, the Green Belt, Polycentric Development, Economic Development, Transport and Environmental

Policies. The vision of the WMRSS incorporates sustainability as a key theme and integrates the principles of this approach to development. The review is also being informed by the Regional Sustainable Development Framework, “A Sustainable Future for the West Midlands” (2006)

4.6 A series of objectives are identified, but the creation of sustainable urban communities in which people choose to live work and invest is fundamental to the WMRSS interpretation of ‘urban renaissance’. No objective in the RSS explicitly focuses upon meeting housing needs or tackling affordability, although tandem objectives relate to rural regeneration and for towns and cities to meet their own development needs, and national policy covers the need for sufficient housing provision to be made.

4.7 The implications of the Regional Sustainable Development Framework for the WMRSS focus on important guiding principals for the WMRSS such as the regional economic decline, reversing movement from MUAs, transport congestion, and a more balanced and sustainable pattern of development where the need for integrated policy responses is emphasised.

Implications for Housing Options

4.8 Alongside the general policy implications of RSS in terms of the type and form of development and the principles to be adhered to, the implications for the development and appraising of options include the clear focus on the MUAs, where the emphasis is for development to be the vehicle for ‘urban renaissance’ with associated restrictions outside the MUAs. This is one of the key potential choices or ‘trade-offs’ to be tested by the options.

Demographic Change

4.9 This study does not establish or test the level of housing need or demand that the Region should be using to form its housing strategy. Ultimately, the NHPAU supply range (June 2008) is the basis for establishing options, and for the purposes of testing options in this Study, a need/demand at the mid point of the Supply Range has been assumed. More information on the NHPAU Supply Range is included in Section 6.0. However, this Study is essentially looking at whether and at what level the Region should adopt the NHPAU Supply Range as the basis for the region’s housing need or consider other levels.

4.10 In terms of the Study’s consideration of how demographic drivers influence the appropriate *distribution* of additional housing growth, the Background Review considers a range of issues, notably flowing from the 2004-based household projections, and 2006-based population projections.

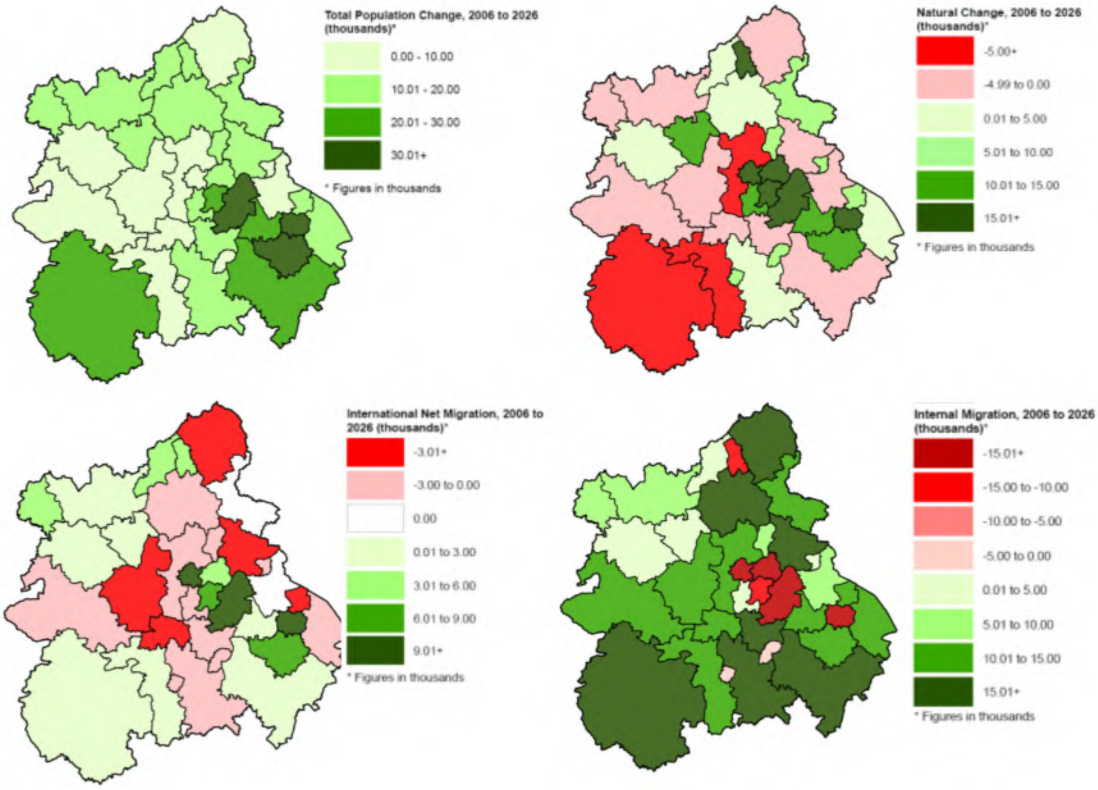


Figure 4.2a (top left) Demographic Growth
Figure 4.2b (top right) Natural Population Change
Figure 4.2c (bottom left) Net International Migration
Figure 4.2d (bottom right) Net Domestic Migration
Source: ONS / NLP Analysis

4.11 None of the authorities within the region are forecast to experience an overall decline in population over the period 2006-26. Based on the ONS 2006-based projections the largest population increases over the period 2006-26 are projected to occur in; Birmingham (141,600), Coventry (37,100), Warwick (34,900), Sandwell (28,500), and Solihull (26,400).

4.12 2006–based projections indicate that the key drivers of projected population change flow from natural change/indigenous growth, international migration; and internal or domestic migration:

1. Indigenous growth is expected to be primarily focused within the Birmingham conurbation, whereas decline is projected in a large number of local authorities outside the region's main towns and cities (with examples such as Malvern Hills (-7,500));
2. The projections indicate that the overwhelming majority of net international migration is focused within Birmingham, followed by the Black Country, reflecting past patterns. Conversely, the Region's rural and suburban areas are projected to experience low levels of growth or a net loss of international migrants – for example, Nuneaton and Bedworth (-4,000);
3. Internal migration flows within the Birmingham conurbation are typically focused between Local Authorities within the conurbation or those in the immediate surrounding Shire Counties and have significant areas of Green Belt;
4. Projected household growth is set to increase across the region over the period 2006-26. Birmingham will experience the greatest increase in the number of households from 409,000 to 479,000 over this period;

6. There are further aspirations to increase Birmingham's population by 100,000 to 2026 indicating that the RSS Revision Phase 2 Preferred Option figure for Birmingham represents a shortfall of 21,400 units against anticipated housing growth and a shortfall of 49,000 against the aspirations target.

4.13 Comparing the RSS Revision Phase 2 Preferred Option over the period 2006-26 with the February 2008 revisions to CLG 2004-based Household Projections the largest 'shortfalls' are to be expected in: Birmingham (-21,400) and Warwick (-7,200), alongside a number of the authorities in the South East quadrant of the region (shown in green in Figure 4.3 below), and some rural areas. The Black Country, Telford, and Coventry's RSS Phase 2 Preferred Option housing numbers are significantly greater than Projections (shown in red below), indicating a significant shift will need to take place if that growth is to be matched by demographic change. This maybe supply side (e.g release of additional land or new delivery models) or demand side (e.g a stronger market).

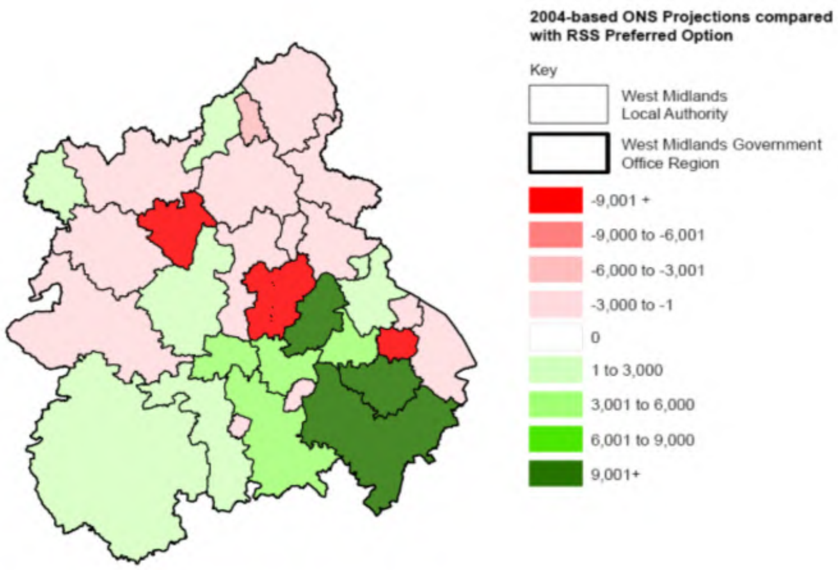


Figure 4.3: 2004-based projections compared with RSS Phase 2 Preferred Option
Source: WMRA / CLG / NLP Analysis

Implications for Housing Options

4.14 There are a number of implications for testing and appraising the Options for housing:

1. The RSS Phase 2 Revision Preferred Option appears to 'under-provide' housing units relative to household projections in a number of Local Authorities, particularly Birmingham, Warwick, Stratford-on-Avon and Solihull. Just as there is a policy led argument to use housing development to focus movement to the MUAs, there is also an argument that additional housing is needed in these areas, simply to match the forecast growth in households, without which problems of affordability could worsen. The options test higher numbers to bridge this gap;
2. In adopting a position on the NHPAU supply range, it will be important to understand whether the projected levels of international migration assumed within the projections will be sustained over the RSS period. In this regard, it is understood that the NHPAU supply range (as set out in the June 2008 report) does not assume that in-migration from the accession states of the past five years will continue unabated, which means the demographic based approach of the NHPAU to the supply range is less likely to be extrapolating unrealistically or over-estimates of future levels of migration;
3. If there is to be a strong response to planning for internal migration trends, then this would indicate a need for more housing in those Local Authorities forecast to receive the highest levels of net internal migration. This would need to be focussed upon the Shire Counties

and in particular the Local Authorities of Herefordshire, Wychavon, Stratford-on-Avon, Bromsgrove and Lichfield. The options explore additional provision in these locations;

4. Conversely, if domestic migration is argued to be housing-driven (and capable of being reversed by shifting the emphasis of housing supply), then this points to the need for more low density, mid-upper range family housing (alongside other 'quality of life' measures) in the North Staffordshire and the West Midlands conurbations to reverse trends. However, this raises the question of how this is accommodated without significant urban extensions, given the lack of suitable and available sites within the urban area.

Housing Markets, Affordability and Mix

4.15 In shaping the options for housing distribution in the West Midlands it is important to understand the housing stock and the balance of different dwelling types and tenures. In addition the affordability of housing across the region must be considered to test the effect of higher proposed housing range on affordability challenges.

4.16 There are four sub-regional Strategic Housing Market Areas (HMAs) in the West Midlands Regions as summarised in table 4.1 below, indicating the progress on the Strategic Housing Market Assessments for each HMA at the time the baseline review was completed:

HMA	Local Authorities	Progress
North	East Staffordshire Newcastle Under Lyme Stafford Staffordshire Moorlands Stoke on Trent	Complete (April 2008)
South	Bromsgrove Malvern Hills Redditch Worcester City Wychavon Wyre Forest Stratford-on-Avon Warwick	Complete (April 2007)
Central (C1)	Birmingham Lichfield Solihull Tamworth	Report not complete at the time of Background Review
Central (C2)	Coventry North Warwickshire Rugby Nuneaton and Bedworth BC	Complete (April 2008)
Central (C3)	Black Country: ▪ Dudley ▪ Sandwell ▪ Walsall ▪ Wolverhampton Cannock South Staffordshire Telford and Wrekin	Complete (July 2008)
West	Bridgnorth Herefordshire North Shropshire Oswestry South Shropshire Shrewsbury & Atcham	June 2008 draft being finalised - not signed-off at the time of Background Review.

Table 4.1: HMAs and Local Authorities
Source: WMRA

4.17 These are mapped below in Figure 4.4.

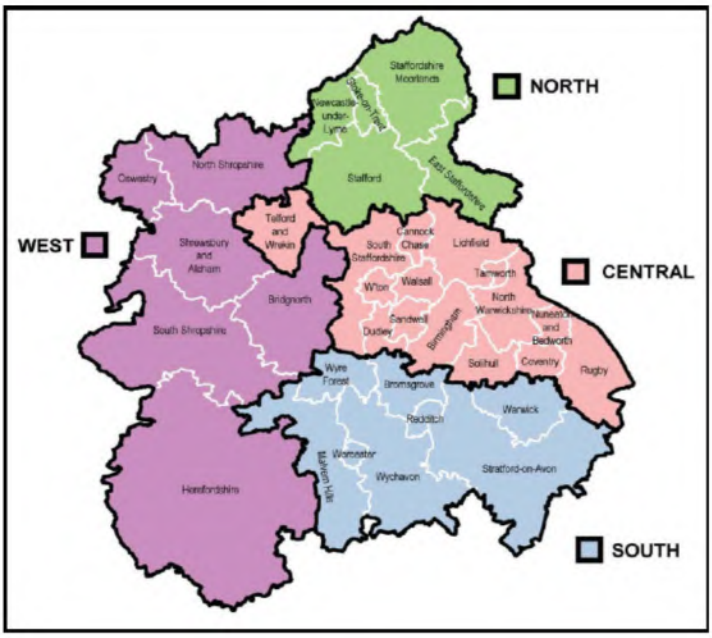


Figure 4.4: Strategic HMAs
Source: Strategic Housing Market Assessment (West Housing Market Area) (June 2008)

4.18 Where HMA work was not completed at the time of the Background Review, information was gathered from meetings with officers representing each of the HMAs and from analysis of available housing market data.

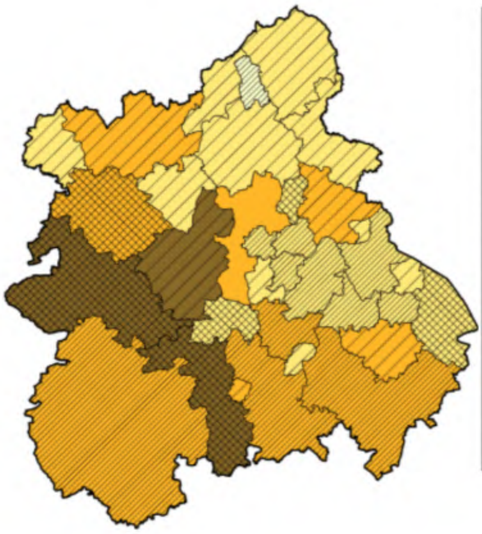
4.19 The key findings from the Strategic Housing Market Assessments are summarised below:

1. Within the North Housing Market Area affordable housing shortfalls exist in all five districts. Where almost two out of five households live in semi-detached housing. The predominant type of housing in Staffordshire Moorlands and Stafford is detached. Stoke on Trent has a high proportion of terraced housing;
2. Within the South Housing Market Area there is a peculiar effect of a particular shortage of affordable accommodation reducing the apparent need for it by means of displacement of need to another district. The displacement effect of households in need will be quite significant for the districts of Bromsgrove and Stratford on Avon and Warwick;
3. C1 SHMA was not available at the time of the evidence base and therefore not available to review. Other information as indicated in the Background Review was used as a substitute.
4. The predominant dwelling type in three districts that make up Central 2 Housing Market Area is semi-detached housing. Where the highest percentage of flats is in Coventry. The affordability pressures are highest in Rugby;
7. C3 Central HMA contains the most contrasting range of urban, sub-urban and rural areas. Where house prices and affordability pressures are highest in South Staffordshire Local Housing Market Areas which cater for the top segment of the sub-regional market along with parts of Telford and Wrekin;
8. There is a shortfall of affordable housing in all six districts of the West HMA; the implied level of need across the whole West HMA is higher than the other HMA areas;
9. In contrast Western Housing Market Areas has the highest proportion of outright owners in the West Midlands where the predominant housing type is detached. Consequently there is an under supply of all house types except detached homes.

4.20 In keeping with national trends, average house prices in West Midlands have increased significantly in recent years. Data from the Land Registry House Price Index illustrates there is an increase of 104.3% average house prices in the region. This has resulted in increasing problems of housing affordability, although the extent of the problem varies between Local Authorities.

4.21 Affordability constraints undermine people's housing aspirations, hinder the creation of mixed income communities and inhibit labour market mobility. The gap is widening between those who can afford to buy and accrue wealth through investment in the housing market and those who cannot. Although recent trends flowing from the 'credit crunch' and the economic downturn are seeing rapid reductions in prices, this is not resulting in housing becoming more affordable, being accompanied by a tightening of lending criteria, increased rates of interest on mortgage products, and other inflationary impacts on household budgets.

4.22 Figure 4.5 below clearly shows that affordability problems are most acute within the southern and western Shire Counties of Herefordshire, Shropshire, Warwickshire and Worcestershire; and that Housing Corporation Grants for affordable housing are very generally most concentrated within these areas.



		Affordability Ratio	Housing Corporation Grant (£'s per household)
1	Birmingham	6.45	£65
2	Bridgnorth	10.19	£24
3	Bromsgrove	9.70	£105
4	Cannock Chase	6.97	£163
5	Coventry	6.33	£72
6	Dudley	7.06	£13
7	East Staffordshire	6.49	£12
8	Herefordshire, County of	9.40	£82
9	Lichfield	8.96	£12
10	Malvern Hills	11.01	£138
11	Newcastle-under-Lyme	6.46	£49
12	North Shropshire	8.92	£5
13	North Warwickshire	6.88	£60
14	Nuneaton and Bedworth	6.68	£23
15	Oswestry	7.67	£47
16	Redditch	7.64	£53
17	Rugby	7.09	£126
18	Sandwell	6.28	£60
19	Shrewsbury and Atcham	8.63	£160
20	Solihull	7.95	£103
21	South Shropshire	10.24	£302
22	South Staffordshire	9.28	
23	Stafford	7.56	£34
24	Staffordshire Moorlands	7.74	£9
25	Stoke-on-Trent	4.60	£104
26	Stratford-on-Avon	9.01	£77
27	Tamworth	7.07	£34
28	Telford and Wrekin	6.41	£40
29	Walsall	6.50	£75
30	Warwick	8.59	£30
31	Wolverhampton	6.18	£65
32	Worcester	8.64	£49
33	Wychavon	9.38	£93
34	Wyre Forest	7.75	£144

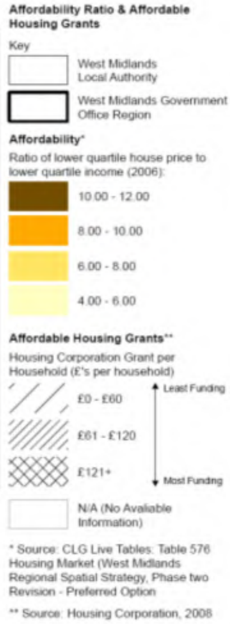


Figure 4.5: Housing Affordability and Housing Corporation Grants
Source: CLG / Housing Corporation / NLP Analysis

4.23 At the Local Authority level, affordability challenges are greatest in Bridgnorth and Malvern Hills, where lower quartile house prices are 11.26 times higher than lower quartile incomes.

4.24 Affordability problems are less pronounced in the metropolitan conurbation and in the North of the Region particularly in the MUAs. The most affordable Local Authority areas in the West Midlands are Stoke on Trent and Wolverhampton.

4.25 Whilst the affordability ratio analysis indicates that the greatest need for additional housing to ameliorate problems of affordability is in areas such as Malvern Hills, there is a considerable number of households on local authority waiting lists – where an assessment of the number of households in 'need' of affordable housing – demonstrates a different pattern. The ability to deliver against these needs will flow in part from increased provision of affordable accommodation.

4.26 Although aggregate current need, and projected demand, is largely concentrated in the Major Urban Areas, in many cases affordability constraints and proportionate housing need are most acute in rural and semi-rural areas. This suggests that in addition to increasing the housing offer in the MUAs there is a pressing need for additional housing in rural and semi-rural areas. The 2008 Taylor Review (Living Working Countryside: The Taylor Review) found that the high cost of homes coupled with the low wages of rural workers are creating unsustainable affordability pressures that threaten the future of rural communities. The Review recommends expanding housing supply in rural areas to relieve affordability pressures. The Taylor review highlights how even relatively small-scale rural developments can help sustain settlements and their services.

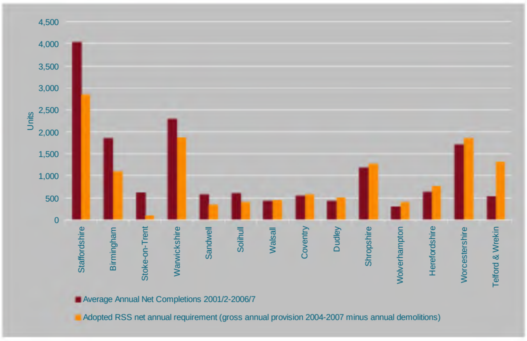
Implications for Housing Options

- Relative housing affordability problems are more evident in rural areas than in the Major Urban Areas. The options test additional provision in some of these rural locations;
- The Major Urban Areas have the highest absolute levels of housing need. However, looking at the proportion of people in housing need, many of the more rural or suburban authorities face more acute problems;
- If higher housing numbers are to be used to address stock profile imbalances, does this point to a need for greater mix of house types in the conurbation, having regard to domestic migration patterns? How likely is it that this mix can be achieved? This is a wider issue for discussion as part of RSS and is considered as part of Section 8.0;
- Given that the construction of flats has represented a very high proportion of new supply in the conurbations in recent years, is there a need to ensure that future housing sites can deliver a greater mix of housing types? What does this mean for where additional housing might be located? This is an issue considered in Section 8.0.

Housing Supply, land and proposals

4.27 NLP analysis of CLG completions data indicates that the build rate has steadily declined from 16,700 annual completions in 1990/91 to 13,520 annual completions in 2007/08. Annual completions over the last five years (2003/04 to 2007/08) are currently on average around 3,800 dwellings less than the Preferred Option RSS net requirement for the region.

4.28 The chart in Figure 4.6a below utilises West Midlands Regional Assembly and Local Authorities' Annual Monitoring data to present net average annual completions (2001-2007) for each local authority in the region (red) against *adopted* RSS requirements.



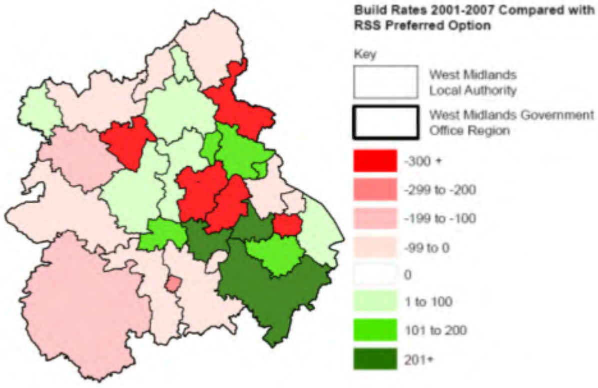


Figure 4.6a (left): Net Completions against Adopted RSS
Figure 4.6b (right) Net Completions against RSS Phase 2 Revision Preferred Option
Source: WMRA / NLP Analysis

4.29 Birmingham and the Black Country have by far the highest annual build rates in excess of 1,500 per annum, and Birmingham, Sandwell, Solihull have all exceeded the rates set by RSS (in Birmingham's case substantially so). This reflects a period in which the supply of flats has formed a significant portion of new development. It is unclear how far this significant shift in housing mix has helped reverse or increase the rate of 'housing driven' internal out-migration from the MUAs. There is a marked 'underperformance' from Telford and Wrekin, which, it has been suggested, is driven in part by the release of English Partnerships land.

4.30 Figure 4.6b above compares net completions with the Preferred Option RSS net annual housing requirement (2006-2026) to indicate how authorities' past performance compares to potential future requirements. Coventry, Birmingham, Black Country, Telford and Wrekin, are all notable in having delivered rates of new housing that are significantly below the RSS Preferred Option, despite the emphasis of PPG3 and the market strength in apartments. Conversely, a number of authorities have delivered higher output in the past than RSS indicates for the future, notably immediately surrounding the metropolitan conurbation and in the South East quadrant of the region.

4.31 The key question is how can authorities that have no track record of delivering such a scale of development deliver such an uplift and what are the risks of under-provision against the region-wide target in RSS Preferred Option. Although such challenges are outside of the parameters of this study further investigation may be required to identify the causes and scenarios to the low build rates, (including the impact of policy) particularly given the different shape of the future market.

4.32 In terms of future land supply, evidence is patchy, with variable progress on Strategic Housing Land Availability Assessments (SHLAAs) and some developers concerns about the differences in the methodologies being adopted and how key tests of suitability and availability will be applied. In general terms, WMRA's Housing Background Paper assumed that there was land with sufficient capacity for 340,000 units. Overall Birmingham has by far the largest identified land supply (20,000) followed by Telford and Wrekin (9,800), Sandwell (8,700) Coventry (8,350) where the majority of the identified supply to 2026 consists of extant planning permissions. Subsequently, during the process of agreeing the Preferred Option, additional opportunities for development were identified in Coventry, Birmingham, and Stoke, Oswestry and Cannock Chase[4]. The Regional Housing Land Potential Study headline capacity figures indicate further supply potential where Birmingham has the highest followed by Dudley, Sandwell and Coventry.

4.33 SHLAAS have replaced traditional assessments of urban housing land and assess the deliverability and developability of identified supply sources. Six authorities (South Staffordshire, Tamworth, Stratford-Upon-Avon, Malvern Hills, Worcester and Wychavon) have completed their SHLAA. However until there is a comprehensive picture from across the region it is not possible to assess

[4] WMRA Housing Background Paper (Amended) January 2008, para 11.7)

how the supply compares on aggregate with identified supply in Urban Capacity Studies. This aspect needs further analysis upon completion of SHLAAs.

4.34 In general terms, engagement as part of the study has identified a number of authorities where it appears additional land capacity has and could be identified which could be suitable and available for development, although this does not mean it is necessarily viable.

Implications for Housing Options

4.35 The implications of supply issues for shaping and testing the housing options, and considered further in Sections 7.0 and 8.0, include:

- How far should the region's strategy for housing supply take into account past performance against the adopted RSS housing requirement as a measure of ability to increase provision?;
- How far should identified land 'capacity' drive the scale and distribution of development given wider household growth and economic drivers of growth? This is considered in Section 8.0;
- What measures will be in place to achieve the significant increases in build rates required in a number of the MUAs given that recent rates have been sustained by a housing market 'boom' and upsurge in construction of flats– two factors that are not likely to continue, at least in the first half of the RSS period?;
- A high proportion of the identified housing land supply sources identified through the RHLPS are urban/previously developed – is there a market appetite for increased development on urban sites given the future downturn in apartments and what is the likelihood that the development of this land source be sustained in the longer term?

Economic Change

4.36 Through this study NLP has identified areas of economic growth and key indicators within the region which may point towards areas where it would be appropriate to consider further housing growth. This study is not a detailed economic study of how housing and the economy inter-relate. In this regard, the NLP study is aware of the initial work being undertaken by Advantage West Midlands, (AWM) and has engaged with consultants undertaking the second stage of analysis, but has not had access to the full results of the second stage of analysis commissioned by the Regional Development Agency (RDA). It is understood that the latter will provide more granularity and 'colour' to the analysis of how far the RSS Preferred Option aligns with the Regional Economic Strategy and current pressures in the economy, which includes how some economic sectors are facing challenges to recruitment due to housing market pressures.

4.37 In general terms, the West Midlands economy currently underperforms relative to other UK regions. It depends generally on the manufacturing sector, with a lower proportion of high value added sectors and lower than average performance on factors such as unemployment, new business formation, GVA and productivity per employee, innovation and skills levels.

4.38 The Regional Economic Strategy (RES) aims to deliver sustainable economic development and growth by focusing on three primary areas of spatial intervention which are designated Regeneration Zones for areas with concentrations of deprivation and market failure, High Technology Corridors and Birmingham as a major economic driver. Over the period 1998-2006, districts such as Malvern Hills, and South Staffordshire had the greatest growth of jobs. This is within a general pattern of growth focused in the South East corner of the region, through Birmingham, the north of the Black Country, to South Staffordshire, and around the Metropolitan conurbation.

4.39 High levels of unemployment can indicate areas of poorer economic performance and lower incomes where housing demand may be weaker. Areas with the highest unemployment compared with the West Midlands average include Birmingham and Wolverhampton. Lower wage levels amongst residents in the MUAs may reflect the fact that those on higher incomes are unable to find the type of housing and quality of life they wish to obtain and therefore seek greater choice outside.

4.40 Areas with high levels of in-commuting are likely to be stronger economic locations in terms of employment growth and potentially with greater scope to provide more local housing to encourage commuters to relocate closer to work if the housing and quality of life offer is right. Although Birmingham is regarded as the major economic and employment centre in the region, there are other important functional linkages such as the Coventry-Warwick-Stratford corridor and the area around Stoke-on-Trent, revealed by Figure 4.7a showing employment growth and Figure 4.7b showing commuting flows.

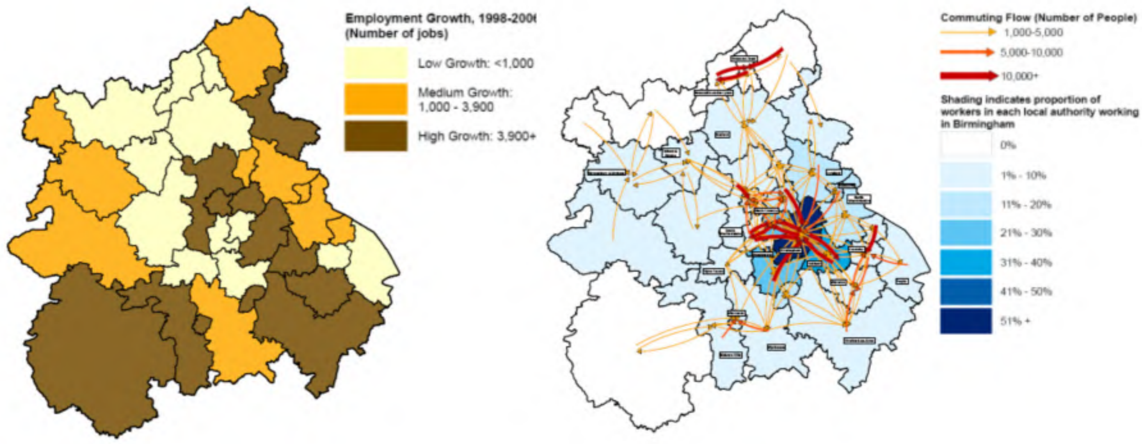


Figure 4.7a (left) Employment Growth
Figure 4.7b (right) Commuting Flows
Source: ONS/Nomis / NLP Analysis

4.41 Consideration of location and scale of the major employment developments within the region can also help identify areas where more housing growth could be linked to growth opportunities. Major economic developments are likely to be concentrated in five main areas Birmingham, Solihull, Coventry/Rugby, Wolverhampton and Stoke-on-Trent.

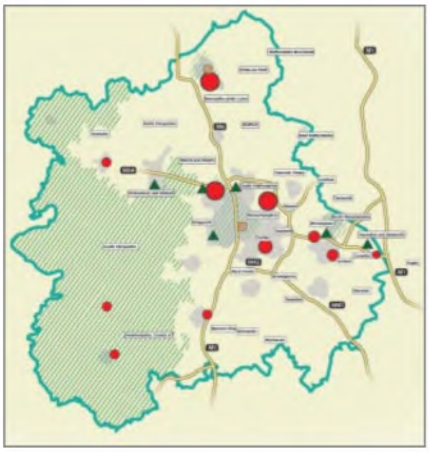
Implications for Housing Options

4.42 The key implications flowing from the economic development context, considered further in Sections 7.0 and 8.0, is how far the options for growth and the RSS overall should or can:

- Focus new housing growth on areas of recent high employment growth?;
- Locate new housing development to either reflect or help counter existing high commuting flows?; and
- Use housing growth to support economic growth in other economic hotspots and rural areas?

Regeneration

4.43 There has been significant amount of regeneration investment over the past decade. Although there continue to be major regeneration initiatives in place across the breadth of the West Midlands Region (see Figure 4.8a) there are significant challenges. Figure 4.8b shows the pattern of deprivation. The acute deprivation (within the most top 10% wards nationally) is concentrated within the MUAs and evidence show that this is persistent.



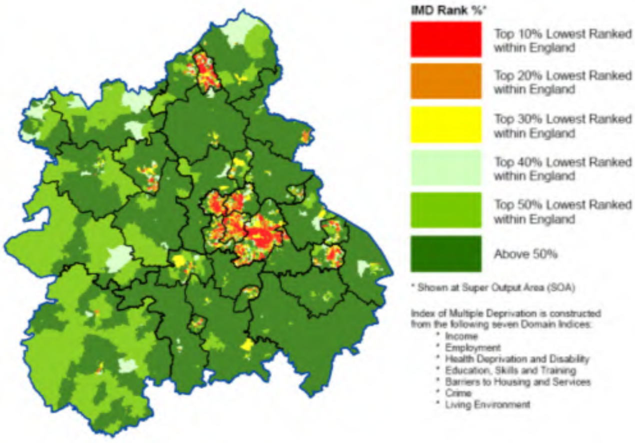


Figure 4.8a: Regeneration Priorities
Figure 4.8b: IMD
Source: RES / RSS / ONS / NLP Analysis

4.44 The five urban regeneration zones designated within the 20% most deprived in the Country and cover most of the Region's weakest housing markets:

- East Birmingham and North Solihull;
- North Black Country and South Staffs (Future Foundations);
- North Staffordshire;
- Coventry and Nuneaton;
- South Black Country and West Birmingham (Arc of Opportunity).

4.45 The RSS states that within the Regeneration Zones in the MUAs, particular emphasis should be given to the provision of high quality employment sites, the regeneration of town centres and other opportunity areas. In appropriate circumstances, compulsory purchase powers will be used to assemble sites and to create regeneration opportunities.

4.46 There are a number of Housing Renewal Areas identified in the RSS. Action to renew and redevelop neighbourhoods in such areas is required to address the risk of problems of decline spreading to adjoining housing areas, particularly in parts of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton. These areas include the Pathfinders but also other areas / Urban Living. The two Pathfinder Housing Market Renewal Areas within the West Midlands Region are Birmingham/Sandwell (£53m) and Renew North Staffordshire (£114m) with secured government funding for the next three years. The latter in particular continues to be afflicted by market weaknesses.

Implications for Housing Options

4.47 The implications of regeneration for developing and testing the options, considered further in Sections 7.0 and 8.0, include identifying how the options or RSS should:

- Reflect the need for new development locations to be sensitive to areas of housing market fragility – some might offer scope for additional housing growth but impacts must be fully assessed;
- Will regeneration initiatives fundamentally change the pattern of economic opportunity and housing demand across the region?

Transport Infrastructure

4.48 One of the key issues for the region's transport network in accommodating additional housing growth is the need to maintain the network's role as a national hub for both road and rail – something that brings economic advantages but also disadvantages in terms of congestion.

4.49 There are implications of decentralisation and a declining rural economy for transport with major employment growth focussed in the conurbation and the dominant patterns of commuting being into Birmingham.

4.50 The most accessible (and therefore sustainable) locations in the region are also the most congested both in terms of road and rail networks. Many routes, especially into and around Birmingham are at or approaching capacity.

4.51 In general terms, the transport modelling for the RSS Phase 2 Preferred Option undertaken on behalf of the Highways Agency assumes that overall car use and trips are not driven by development of housing – although clearly the distribution of housing will have an impact. For example, there is little change between the base scenario (TEMPRO) and the RSS Phase 2 Preferred Option in terms of many key indicators including journey miles and delays on a number of key routes. The base case assumes a degree of regional growth in car journeys (and on other modes) that is constant irrespective of the scale of housing development.

4.52 The region has seen significant increases in investment in transport infrastructure and there are a number of significant schemes recently completed, under construction or planned that will go towards meeting the capacity constraints on the transport network and mitigate the impacts of housing growth. These are set out in Section 8.0.

4.53 Additional growth will require investment in public transport and highway improvements and that investment may be significant in some locations. The transport impacts and actions required to mitigate those impacts will need to assessed at the local level through Core Strategies and require alignment of the local allocation of sites with any necessary transport solutions..

Implications for Housing Options

4.54 Key considerations informing the development of options for growth, and considered further in Sections 7.0 and 8.0, include:

- The need to make best use of the existing transport network whilst maintaining the national and international hub role of the region. There is limited scope to increase capacity through significant interventions;
- Growth needs to be located in areas that are already accessible by public transport that have, will or could have capacity, noting that new stations can be difficult to integrate on existing lines with high levels of utilisation. Phasing of additional growth needs to recognise committed schemes, the length of time required to secure funding for new infrastructure and the construction timescales;
- Opportunities to access public transport networks are generally best in the conurbations and proposed settlements of significant development. The most efficient use of the rail network is made for journeys of over 5 miles;
- The location of employment and patterns of commuting needs to be considered in relation to the location of housing development.

Energy Utilities and Hydrology

Key Issues

4.55 From the evidence gathered by the Study water supply for additional housing growth is a potential issue and delivering the necessary additional supply will need to be planned in a timely manner to ensure that there are no water shortages. Testing of the RSS Preferred Option indicated that the Severn Water Resource Zone (WRZ) risks water shortages in a “dry year” and the South Staffordshire WRZ has issues of supply at peak demand times. The broad level of growth in RSS Phase 2 of growth being planned for in the current round of Water Resource Management and Asset Management Plans.

4.56 The main issue in terms of water treatment and quality is the need to maintain the water quality of rivers in urban areas which are generally at the top of catchments and so have limited capacity to receive increased flows. It has been explained to NLP that the number of large sewerage treatment works in urban areas may need some form of additional capacity, but is not a significant issue.

4.57 Flooding and flood risk needs to be considered in terms of the location of development, with high levels of growth avoiding existing high flood risk areas. The Environment Agency has highlighted that surface water flooding is also a particular issue across the region, and on which climate change will increase the impact. It is an issue that will need to be dealt with through Sustainable Urban Drainage System and other mitigation measures. There is no available data on areas across the region at particular risk of surface water flooding.

4.58 Analysis and engagement with energy utilities indicates that although there will be practical challenges such as local capacity to confront in servicing developments, these do not present issues that will or should fundamentally dictate the approach of the region to housing provision.

Implications for Housing Options

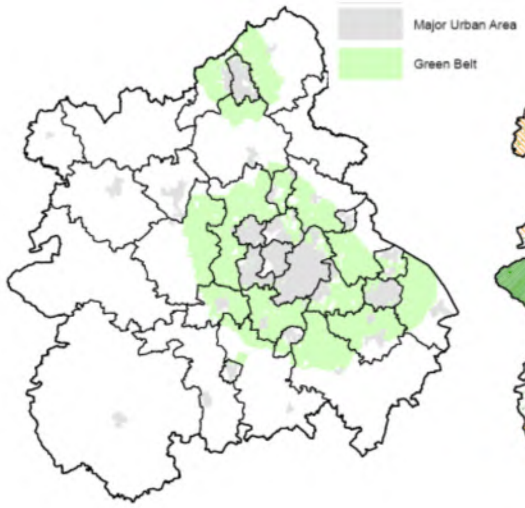
4.59 Key considerations informing the development of options for growth, and considered further in Sections 7.0 and 8.0, include:

- The phasing and location of development at LDF/Core Strategies stage will need to have regard to the known issues impacting on capacity in the existing water supply and treatment network, although spatial information is at present either limited or at a very general water resource zone level;
- The Severn Water Resource Zone appears to face particular issues in relation to water supply. Whilst this has not been identified as a fundamental barrier to further development by Severn Trent, additional investment has been highlighted as being necessary to support levels of housing growth in the middle and upper ranges;
- There is a need for an understanding of those areas where water supply could most likely be affected by a need to reduce abstraction from rivers and groundwater for environmental reasons through consultation with the Environment Agency;
- Flood risk issues need to be considered in a range of locations across the region in the allocation of housing growth. Development would need to be distributed to avoid Flood zones 2 and 3 and include SUDS as identified in the RSS;
- Large sewerage treatment works in a range of location across the region will require investment to ensure that development can be accommodated and water quality standards met. This applies equally to the RSS Preferred Option as well as any additional housing growth.

Landscape, Ecology and other Planning Designations

4.60 A significant number of Heritage designations have been identified within the region, including the World Heritage Site at Iron Bridge and several highly valued parks and gardens, for example Warwick Castle. These designations are widely spread across the region and whilst the potential impact on the setting of these designations has been considered, the potential impact will need to be assessed, along with impact to listed buildings and Scheduled Ancient Monuments, through site allocations during the Local Development Framework process.

4.61 Figure 4.9a and b below show the Green Belt and Landscape and Ecological designations.



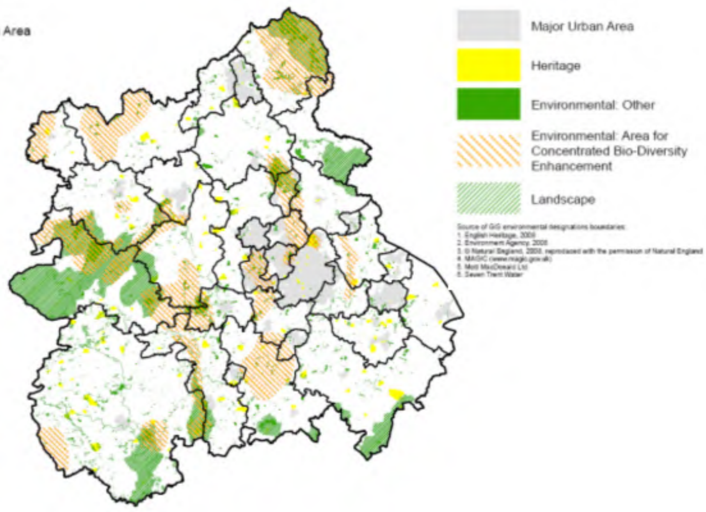


Figure 4.9a (left) Green Belt Designations
Figure 4.9b (right) Landscape and Ecological Designations
Source: WMRA / NLP Analysis

4.62 European and local environmental designations and their spatial distribution have been used to assess potential levels of impact on locations with sensitive biodiversity. The majority of environmental designations, including high quality agricultural land, are to the rural west of the region however many other sites, for example Cannock Chase Site Specific Scientific Interest, are near existing urban areas and are identified as being particularly sensitive to additional urban growth.

4.63 Landscape designations have been given the same weight and considered using the same methodology of spatial distribution as used for the Environmental Designations. However, whilst the impact on the setting of large designations of Area of Outstanding Natural Beauty and on the Peak District National Park can be gauged at this scale of mapping, the impact on smaller woodland areas in and around existing settlements will need to be considered in more detail through allocating of sites through the Local Development Framework process.

Implications for Housing Options

- Environmental designations of national and international value which are covered by the Habitats Regulations may present a significant constraint on the location of additional housing development in some areas, but can generally be addressed through Core Strategies/LDFs. The HRA considers these in more details;
- Locations within landscape designations of national and regional importance have limited potential for accommodating additional housing growth;
- Heritage designations are widespread including within existing urban areas. Of these, the greatest constraints on the location of housing growth are World Heritage Sites;

- Consideration should to be given to the extent to which Green Belt designations are a constraint in reviewing the distribution of additional housing growth. In particular, it will be important to balance the impact of Green Belt alterations (in terms of the PPG2 tests and the objectives in the RSS) and the need to deliver housing growth.

Sustainability

Key Issues

4.64 Sustainable development is at the heart of the planning system. The purpose of the SA is to ensure that the housing options in the West Midlands promote sustainable development and that relevant social, environmental and economic considerations are taken into account in the process of option generation. A Sustainability Appraisal was carried out in respect of the RSS Phase 2 Preferred Option and in line with the SEA directive (SA (2007)). It identifies a number of areas where housing growth required mitigation but not all of these were taken forward into the Preferred Option.

4.65 Key issues identified (which relate to all policies in the Phase 2 Preferred Option) include housing affordability, out migration from urban areas, the likely significant impact on environmental and historic assets, and the need to narrow the gap between the best and worst performing parts of the region, protect the rural environment, ensure that new development does not detrimentally affect existing settlements, consider flood prevention and management issues, particularly in the Severn and Avon valleys, respect water resources and environmental constrains, and acknowledge the decline in the regions plants and animals.

4.66 With regard to housing, the SA (2007) found that housing policy CF3 will not result in an increased concentration of housing in the MUAs (and concluded that the process of urban renaissance will be weakened by the proposed housing figures), and that housing is not provided in the right districts to meet new housing need where it arises. It was also noted that policies on distribution and phasing will not concentrate housing development in the MUAs, stem out migration and support urban renaissance. The SA (2007) found that "…many of the Settlements of Significant Development appear to have major development constraints (e.g. transport, green belt, water infrastructure, and possibly flood risk) and it will be necessary to deliver that infrastructure before, or at the latest alongside the housing for these towns…" (SA (2007) pp. A208-209). Accordingly, it identifies a number of areas where housing growth required mitigation but not all of these were taken forward into the Preferred Option.

4.67 The West Midlands Regional Sustainable Development Framework (RSDF) identifies four key regional sustainability objectives: Sustainable consumption and production; Climate change and energy; Natural resource protection and environmental enhancement; Sustainable communities. The SA (2007) and the SA of the Housing Options are assessed against these objectives.

5.0 Housing in RSS Phase 2 Revision

Introduction

5.1 This section briefly summarises the RSS Phase 2 Revision Preferred Option in terms of scale and distribution of housing provision, summarises the process by which these proposals were arrived at, and sets them alongside a number of key indicators, drawn from demographic projections, build rates, and policy provisions of RSS and RES.

The Preferred Option

5.2 In arriving at the Preferred Option, a number of options were considered. These options, expressed as gross requirements (including replacement of demolished units) for the period 2001-2026, were:

- Option 1: Providing for circa 15,256 dwellings per annum, based on continuation of the then current WMRSS to 2026;
- Option 2: Providing circa 19,648 dwellings per annum, extending the distribution in Option 1 to take account of responses from Section 4.4 authorities and with a wider spread of development;
- Option 3: Providing circa 23,000 dwellings per annum, building on Option 2 with additional numbers distributed based on a the 'gap' between Option 2's distribution and demand as defined by the 2003-based projections.

5.3 Based on the analysis of these options and consultation responses, a number of amendments were made to the overall figure for provision, notably:

- the time period for the revision was amended to 2006-2026, with no provision made for any under or over provision in relation to the period 2001-2005;
- the numbers were converted to 'net' figures, meaning a 1:1 replacement of demolished stock on top of the net figure;
- a new estimate of demand, based on the 2004-based household projections giving a net figure of 382,000 (19,100 per annum).

5.4 The starting point for moving to the Preferred Option was the identification by local authorities that there was capacity on sites for circa 340,000 net additional dwellings. Subsequent discussions tested this figure in terms of how far it reflected the City Region growth aspirations, and additional capacity was identified in Birmingham (10,000 dwellings), 15,400 in Coventry, and 3,000 in Stoke on Trent, with smaller additions in Oswestry and Cannock Chase districts. This produced the distribution set out in the Preferred Option, identified below in Table 5.1.

5.5 The Background Paper indicates that the output of the process has:

> *"…acknowledged that in order to tackle affordable housing issues and to adequately plan for future households' demand, an increased in the requirement above the current RSS is necessary. However, it also believes that a significant increase in provision will undermine the Urban and Rural Renaissance principles, which lie at the heart of RSS. For this reason the Preferred Option for Housing has been based upon the finding from considerable technical work and the advice from a number of Regional Stakeholders. It is therefore the view of the Regional Planning Body that this level of provision will help the Region to achieve its housing needs, whilst ensuring a more sustainable way forward for the Region."*

5.6 In taking forward and testing the Options for additional housing growth, this Study seeks to understand and apply the alternative policy choices and 'trade-offs' inherent in the above conclusions. In particular, in assessing the Preferred Option through the remainder of the RSS process, there are a number of questions that will need to be considered:

- Is urban (or indeed rural) renaissance dependent on a particular scale and distribution of housing provision, and if it is, at what point does the balance tip, and why? This issue is explored in Section 8.0;
- What is the precise *causal* relationship between housing distribution and urban and rural renaissance and does this relationship differ between areas? Is it possible to identify the *scale and nature* of the adverse impacts caused by additional housing provision on urban and rural renaissance? The causal relationship is considered in Section 8.0;
- The Background Paper intonates an acknowledgement that the RSS Preferred Option provides less housing than if the strategy was purely focused on tackling affordability and meeting future households' demand. What are the impacts of this 'under-provision' in terms of housing affordability and other factors, such as economic development? This is a matter for the NHPAU to address in its work, alongside other stakeholders;
- And how do the impacts of meeting needs balance against the impacts of additional provision in arriving at the RSS outcome? This is a matter for the RSS process to judge.

Benchmarking the Phase 2 Housing Proposals

5.7 As part of the process to inform the development of options for testing, the RSS Preferred Option housing distribution was benchmarked by NLP against a range of factors, as set out in Table 5.1, which shows this distribution and sets it alongside a number of factors :

- The 2004-based CLG Household Projections;
- Past build rates since 2001/2 – 2006/7;
- The ratio of affordability as at 2007;
- The status of the local authority/broad location in the RSS;
- The status of the local authority/broad location in the RES.

5.8 This provides the basis for a snapshot assessment of how the RSS housing strategy sits alongside other factors.

5.9 In the first two columns, the colour red indicates there is potential evidence that the RSS Preferred Option is 'under-providing' against either Projections or a proxy measure of the market's ability to deliver higher rates (in many cases, despite a restrictive policy approach such as moratoria). Green shows where RSS Preferred Option is providing more than either Projections or past build rates (recognising that this does not necessarily mean rates cannot increase within a positive policy framework). In the third column, red indicates a particularly acute affordability pressure.

5.10 Locations with one or more proxy indicators scoring red *might* be regarded as having potential for consideration for more housing within the options, although this does not mean that this would be carried forward by rote.

	Proposed Total (Net 2006-2026)	RSS Phase 2 Preferred Option Compared with 2004-based Household Projections to 2026 (CLG)	RSS Phase 2 Preferred Option Compared with Past Build Rates (2001/2 – 2006/7)	Affordability Ratio	Status in RSS	Status in RES
Birmingham (g)	50,600	-21,400	676	6.45	MUA	RZ/HTC(KN)
Coventry d)	33,500	+19,500	1,130	6.33	MUA	RZ/HTC(KN)
Black Country	61,200	+10,200	1,328	6.51	MUA	RZ/HTC(KN)
Solihull	7,600	-5,400	-212	7.95	MUA	RZ/HTC
Metropolitan Area Total	152,900	+2,900	2,922	6.53		
Shropshire	25,700	-1,300	128	8.97		
Bridgnorth	2,500	-500	-21	10.19		RZ/HTC
North Shropshire	6,100	+100	19	8.92		RZ
Oswestry	4,000	-100	-29	7.67		RZ
Shrewsbury and Atcham	8,200	+1,200	150	8.63		RZ
of which Shrewsbury	6,200				SSD	
South Shropshire	4,900	-100	9	10.24		RZ
Telford and Wrekin	26,500	+9,500	787	6.41	SSD/SC/LRZX	HTC(KN)
of which Telford	25,00					
Staffordshire	54,900	-2,100	-20	7.21		
Cannock Chase	5,800	-2,200	-133	6.97	LRZ X/SC	
East Staffordshire	12,900	+900	333	6.49		
of which Burton-upon-Trent	11,000				SSD/SC/LRZX	
Lichfield	8,000	+1,000	-145	8.96	SC/OLS	
Newcastle-under-Lyme	5,700	-1,300	87	6.46	MUA SC	RZ
of which Newcastle urban area	4,800				MUA	
South Staffordshire	3,500	-1,500	-67	9.28		RZ/HTC
Stafford	10,100	+2,100	-5	7.56	SSD/LRZX	
of which Stafford town (f)	7,000					
Staffordshire Moorlands	6,000	0	29	7.74		
Tamworth	2,900	-2,100	-120	7.07	OLS/LRZX	
Stoke on Trent	11,400	+3,400	-53	4.60	MUA	RZ
Warwickshire	41,000	-10,000	-426	7.19		
North Warwickshire	3,000	-1,000	22	6.88		
Nuneaton and Bedworth	10,800	+2,800	81	6.68	SSD/SC	RZ
Rugby	10,800	+2,800	34	7.09	SSD/LRZX/SC	

	Proposed Total (Net 2006-2026)	RSS Phase 2 Preferred Option Compared with 2004-based Household Projections to 2026 (CLG)	RSS Phase 2 Preferred Option Compared with Past Build Rates (2001/2 – 2006/7)	Affordability Ratio	Status in RSS	Status in RES
of which Rugby town	9,800					
Stratford-on-Avon (b)	5,600	-6,400	-294	9.01	SC/OLS	
Warwick	10,800	-7,200	-200	8.59	SSD/SC	HTC(KN)
Worcestershire	**36,600**	**-5,400**	**-151**	**8.44**		
Bromsgrove (b)	2,100	-5,900	-329	9.70	OLS	HTC(KN)
Redditch (b)	6,600	+1,600	7	7.64	SSD/SC/LRZX	
Malvern Hills (c)	4,900	-1,100	44	11.01		RZ/HTC(KN)
Worcester City (c)	10,500	+4,500	245	8.64	SSD/SC/LRZX	HTC(KN)
Wychavon (c)	9,100	-1,900	63	9.38		HTC(KN)
**of which development in and around Worcester City*	10,500					
Wyre Forest	3,400	-2,600	-181	7.75		RZ
Herefordshire	**16,600**	**-400**	**196**	**9.40**		**RZ**
of which Hereford City	8,300				SSD/SC	
Shire and Unitary Authorities Total	**212,700**	**-6,300**	**461**			
Major Urban Areas (a)	169,100	+5,000	2,956			
Other Areas	196,500		427			
West Midlands Region	**365,600**	**-2,400**	**3,383**	**6.88**		

Key:

- Proxy indicator of strong 'need' for additional housing
- Proxy indicator of average 'need' for additional housing
- Proxy indicator of lower 'need' for additional housing.

MUA	Major Urban Area
SSD	Settlement of Significant Development
OLS	Other Large Developments
SC	Strategic Centre
LRZX	Local Area Outside Regeneration Zone
RC	Regional Centre
RZRES	Regeneration Zone in RES
HTC(KN)	High Technology Corridor (Key Node)

Table 5.1: RSS Phase 2 Revision Preferred Option

Source: WMRA / NLP Analysis

6.0 Housing Options

About this Section

6.1 This section describes the approach to the development of the Options for testing, and then provides a summary description of each of the Options

6.2 It is recognised that, during the process of the study, the precise role of the options was not always sufficiently well understood by some stakeholders, so this section of the Report also provides clarity on a number of key points to assist in the interpretation of the study and its results.

Defining and Developing the Options

6.3 The Options were prepared independently, by NLP, as the basis for discussion and debate and to test within the Study. The role of the Options is to reflect, and where necessary, test:

- The impacts on underlying objectives of RSS and Government Policy
- Key constraints on development
- The range of policy choices, their impacts, and 'trade-offs'
- Deliverability

6.4 The Options are not, in themselves, the basis for informing the GOWM evidence to RSS. The GOWM evidence will be drawn from the outputs of the appraisal of the options, the three resulting growth scenarios, and the lessons this might provide. In this regard, the Options provide a 'menu' of potential ways in which growth could be delivered, that can then be interpreted, tested, and ultimately translated into a form appropriate for RSS, subsequently, to be developed in detail in the LDF's.

6.5 The Options are capable of being stretched or contracted, and disaggregated into their component parts if the levels of growth changed; or if a 'hybrid' preferred option emerged. In other words, the Options are not fixed or intended to translate direct into RSS.

6.6 RSS will ultimately set the provision for housing in the format that is appropriate and in line with PPS11. In other words, RSS will not identify or allocate sites. However, in order to test options and understand the types and scale of impact that additional housing provision might have, the Options set out a number of different ways in which housing provision *might* be delivered on the ground, presented as broad locations and 'areas of search'. This helps stakeholders understand what additional housing provision might mean in practice and better inform their input to the appraisal process, and to inform transport modelling on behalf of the Highways Agency.

The Options: The Parameters

The Options are not:

1. Exhaustive or intended to be exhaustive – there are clearly other choices for the region not included in any of the options and this Study does not imply these can not be considered;
2. Mutually exclusive – it is possible to 'pick and mix' elements from each of the options (or indeed not at all) in considering the RSS process;
3. Intended to be *perfect* solutions to the challenge of meeting housing growth or to be without impacts or risks;
4. Proposals of government that carry any kind of weight in the planning process. Equally, nor do the assessments represent the Government position on any options or issue – it is entirely open for Government to take a different position or draw a different conclusion from the analysis set out in this Study;
5. Intended to be taken forward by rote into RSS, and are not presented in such a way;
6. Site specific or intended to cut across any Core Strategy or LDF process. LDFs will be prepared in the usual way;
7. Formally associated with any other tandem appraisal processes for proposals of any sort. Conclusions on options reached in this study should not be read as conclusions that can be reached on individual proposals where more detailed work may have been undertaken. In particular, although the Eco Town initiative is considered within a number of the Options, the analysis in this study is deliberately strategic in its nature and does not focus upon the individual bids and proposals. It is wholly conceivable that this Study and the Eco Towns appraisal process could reach different conclusions due to the different levels of detail and scope of assessment.

How the Options were Prepared

6.7 The options for additional housing provision are essentially framed by two choices: a) how much additional housing should be provided?; and b) where should it be located? The approach to defining options around these two choices is set out below.

How much additional housing could be provided? Using the NHPAU Supply Range

6.8 The NHPAU figures for 2008-2026 establishes a lower and an upper end range of additional housing provision for testing. These provide the parameters for the scale of additional housing growth to be tested through the options. The options consider some different ways in which the NHPAU supply range could be delivered, as net additions to the current approach in RSS.

6.9 The NHPAU will provide evidence on its supply range to the RSS process. For the purposes of this Study, the focus has been on identifying the supply range to be tested and understanding the broad methodology underpinning it. As stated in Section 2.0, this study does not set out to either justify or challenge the NHPAU supply range, but to set out what delivering within it might mean.

6.10 The NHPAU has adopted three principal methodologies for identifying the supply range in English regions:

- A rate based on what is needed to meet the Government target for new homes;
- A rate based on an assessment of demographic requirements; and
- A rate based on the CLG affordability model which assesses how much housing is required to stabilise the house price to earnings ratio.

6.11 The approach in the West Midlands is defined in Figure 6.1 below. The CLG affordability model does not define the approach in the West Midlands.

Government Target Based	Demographic Based
• What is needed to meet Government's target of 240,000 annual net additions, to deliver 2m by 2016, and 3m by 2020, with the rate constant thereafter • Distribution between regions based on 2004-based projections	• 2004-based Projections used to inform growth in number of households • Recent international migration assumptions from accession states not assumed to continue beyond 2007. 2006-based projections extended to 2012/13 • + Existing Constrained Demand (e.g. overcrowding and sharing) • + Second Homes • + Vacancies in New Supply
Bottom of the Proposed Housing Supply Range	**Upper End of the Proposed Housing Supply Range**

Figure 6.1: NHPAU Figures
Source: NHPAU / NLP analysis

6.12 Table 6.1 provides a summary of how the NHPAU supply range has been used to define the scale of housing supply that needs to be tested within the options, as net additions to the current RSS Phase 2 Preferred Option. In simple terms, this means calculating the net difference between the total housing supply to 2026 defined in the NHPAU supply range and that in the RSS Phase 2 Preferred Option. The slightly complicating factor is that the NHPAU has a base date of 2008, whereas RSS begins the preceding year. There is no guidance on what figure should be assumed for 2007, and there are differences in the estimates of completions for that year between NHPAU and WMRA which mean there is some uncertainty on the total number to be used for the whole period to 2026. This is de minimis for the purposes of the ongoing analysis, and to provide a starting point, NLP has adopted a figure sitting at a point between the two.

	Bottom of the proposed housing supply range	Upper end of the proposed housing supply range
NHPAU Average Annual Net Additions to 2026	19,000	22,600
RSS Phase 2 Preferred Option (Overall Rate 2006-2026)	18,280	18,280
Completions 2007 (NHPAU)	16,300	16,300
Completions 2007 (WMRA)	16,108	16,108
Total (High - based on NHPAU plus RSS Phase 2 Rate)	379,280	447,680
Total (Low - based on WMRA estimate of Completions)	377,108	445,508
Total RSS Phase 2	365,600	365,600
Potential Range of 'gap' depending on assumptions for 2007 (completions or RSS)	13,680	82,080
	11,508	79,908
Figure Adopted for Purpose of Shaping Options	12,300	80,700

Table 6.1: NHPAU Supply Range and Net Additions to RSS Phase 2 Preferred Option

Source: NHPAU / WMRA / NLP Analysis

6.13 This provides the ‘bookends’ for the scale of housing supply to be tested by the options, but the gap between the upper and the lower figure is greater than that set out in the Housing Green Paper which formed the basis for the original brief for this Study, and indeed the lower end of the supply range, whilst greater than the RSS Phase 2 Preferred Option is not significantly so. To this end, a number of options focused around the mid-point of the supply range were adopted, equating to circa 45,000 net additional units.

Where in the region could additional housing be developed?

6.14 In terms of the spatial options for housing growth, There are a number of different approaches that could be adopted, including:

- A capacity-based approach, which identified growth based on where there are potential sites, proposals, or locations not identified in the original WMRA work;
- A simple approach that applied high level percentage increases to the existing RSS distribution (e.g. an option that distributes the NHPAU supply range as a proportion of the current distribution in the Preferred Option);
- An econometric approach which distributed additional growth based on, for example, job growth, economic modelling outputs, demographic projections or build rates.

6.15 The Study is designed to recognise that:

- The starting point is the WMRA position which indicated that there is no further capacity for housing growth without involving additional (and, it is asserted by WMRA, unacceptable) housing on greenfield sites;

- Econometric approaches to allocating housing numbers, whilst superficially attractive, do not reflect the qualitative land-supply or infrastructure information that was made available through initial stakeholder meetings during the first part of the study, and produce spurious accuracy in their numerical outputs;
- Stakeholders engaged during the first part of the study were clear that it was important for the study to be cognisant of the land supply position as well as demand-side, or market, factors.

6.16 For this reason, the Study process was focused on identifying broad locations across a range of potential options to make the policy choices for the region more transparent, involving the following:

- Local authorities where either comparison of the RSS Preferred Option against projections or past build rates (albeit recognising that they are a reflection in part of past policy constraints) or affordability indicators, indicates potential for increased supply;
- The need to recognise (whilst also testing) the existing policy focus on urban renaissance and the growth in and around the MUAs;
- Where stakeholders identified the potential for increasing housing development given the presence of potential land or delivery options that were not made clear to the RSS process earlier; and
- The types of spatial choices that the region's stakeholders believe it would consider if RSS required them to deliver higher rates of housing provision (e.g., urban extensions).

6.17 This produced options that focused on allocating broad 'blocks' of additional growth to local authority areas, with broad locations associated with MUAs or other settlements to give 'colour' to what additional growth might mean on the ground. Material presented at the Regional Seminar on 8th July stated that:

i) The Strategic Options are not site specific;

ii) The locations on plans are indicative and not to scale;

iii) The locations shown for additional growth under each option are strategic 'areas of search' to inform discussion and in many cases span local authority boundaries;

iv) The number of units associated with each location is indicative, to test the general scale of growth in different parts of the region and need not be delivered within a single development or site;

v) The plans/options are not how any future RSS would represent its proposals, which would be a matter considered by the Panel and Government;

vi) As currently, it would be for LDFs to determine the most appropriate location and way to deliver the housing requirements set by RSS.

6.18 One of the options considered as part of the study is that of New Settlements. This is a challenging issue given the wider sensitivity that such forms of development generate in any planning process. However, many stakeholders from local authorities agreed that it was an option that should be considered. The box below sets out the basis for this option:

New Settlements

As a form of development, new settlements are an option that in principle should be considered. In order to test it, this Study puts forward a number of hypothetical new settlements (drawing on the shortlisted Eco Town and other locations identified through a high-level desktop analysis). These broad locations were identified and have been tested at a high level in order to assess whether new settlements are a form of development that, in principle, could be taken forward into the RSS process. These broad locations are illustrative. They are not exhaustive, exclusive, or definitive.

The Options

6.19 The range of different locations across the Region in which additional housing growth *might* be able to be considered were synthesised with the need to test the NHPAU supply range to create nine options:

Strategic Option	Spatial Choice	NHPAU Target
1	• Increased Major Urban Area Supply	• Low
2	• Eco Town Locations	• Low
3	• South and Eastern Urban Focus with Rural Provision	• Medium
4	• New Settlements	• Medium
5	• Major Urban Area Supply Focus	• Medium
6	• Northern Urban Focus with Rural Provision	• Medium
7	• Distributed Urban Growth	• Medium
8	• Major Urban Growth and New Settlements	• High
9	• Major Urban Extensions and Rural Provision	• High

Figure 6.2: Options
Source: NLP

6.20 The Options were generated comprising a number of key 'building blocks' of growth:

- Urban extensions of various scales, recognising the guidance in the Eco Towns prospectus that developments of c.5,000 units are more able to develop a critical mass and support infrastructure investment;
- New settlements (including smaller 'linked' new settlements and larger freestanding new settlements);
- Urban-based growth (e.g. on land within the existing urban area);
- Rural housing provision (in villages and market towns).

6.21 These were plotted onto maps, which are shown at Appendix 2.

6.22 Recognising that a number of broad locations span a number of local authority boundaries, and could have implications for a number of areas, Table 6.3 shows how the different options apply to local authority/core strategy areas.

Local Authority		RSS P2	Option								
			1	2	3	4	5	6	7	8	9
Solihull		7,600									
Birmingham		50,600	5000		20000		18500	3750		15000	
Bromsgrove		2,100							16600		25000
Redditch		6,600			5000						
Stratford on Avon		5,600		4,500						9000	
Coventry		33,500									
Black Country		61,200	5500				22000	14750	10360	5000	5000
South Staffordshire		3,500									
Shropshire		25,700			1900			1900			1900
Telford & Wrekin		26,500						10000	3000	5000	10000
Cannock Chase		5,800						5000	2000	5000	5000
East Staffordshire		12,900						5000		5000	5000
Lichfield		8,000		5,000						9000	
North Staffordshire		17,100	1750				6000	6250	4200	5000	5000
Stafford		10,100							3000		
Staffordshire Moorlands		6,000									
Tamworth		2,900									
North Warwickshire		3,000									
Nuneaton & Bedworth		10,800									
Rugby		10,800			5000				3000		5000
Warwick		10,800			10000				2500	5000	10000
South Worcestershire	*Worcester City*	10,500			5000				2000		5000
	Malvern Hills	4,900			1900			1900			1900
	Wychavon	9,100		1,500							
Wyre Forest		3,400									
Herefordshire		16,600			1200			1200			1200
New Settlements (not assigned to LAs)						**45000**				18000	
WEST MIDLANDS REGION		**365,600**	**Bottom of the range circa 12,300**		**Middle of the range circa 46,500**					**Upper end of the range circa 80,700**	

Table 6.2: Options as they translate to Local Authority and Core Strategy Areas

Source: NLP Analysis

Note: Figures do not add due to rounding and the the 'allocated' numbers for locations are illustrative and indicative.

7.0 Appraisal of the Options

Approach

7.1 Analysis of the options within the study drew from a number of sources to ensure that the appraisal of options considered a broad range of inputs that NLP could rely upon as sound evidence base. This was made up of:

- Stakeholder meetings which provided insight on the specific types of impacts that needed consideration for certain options within broad locations;
- Drawing on emerging analysis from respective studies undertaken by AWM and the Highways Agency in respect of the RSS Phase 2 where its impacts on economic development and sustainable transport objectives have been considered;
- Technical and planning appraisals undertaken by NLP, drawing on published information and data.

7.2 In general terms, the appraisal draws upon this information and this is used to make a series of judgements. Reiterating points made earlier in this document, the emphasis of this Study is to identify the key impacts and risks that might represent fundamental barriers to delivery of further housing growth that could not be mitigated, assuming that the RSS set a housing allocation for a local authority and the local planning authority acted in a reasonable way and applied the appropriate planning principles in line with RSS and Government Planning Policy guidance.

7.3 It is not the purpose of this study to provide a detailed analysis of every impact or risk associated with housing growth in broad locations. The omission of a specific impact or risk associated with development in a particular local authority area does not mean that an impact or risk might not exist – rather, it indicates that the evidence was not available to demonstrate that it is a fundamental barrier to additional development.

7.4 In this section, the headline outputs from the appraisal are described, subject to the parameters described above.

Impacts

7.5 Types of issues covered by the appraisal included:

- Transport – does the option cause major transport impacts that could not be reasonably mitigated which mean it would not be possible to accommodate the additional growth?
- Community and Social Infrastructure – are there problems with the capacity or provision of community and social infrastructure on such a scale that additional growth could not be accommodated?
- Hydrology – are there water supply and treatment impacts or problems with flooding that mean no further development could be accommodated?
- Landscape and Ecology– would additional growth have landscape impacts (e.g. on landscape quality, coalescence, or ecological sites) that mean further development could not be achieved?
- Housing Market – would additional growth have detrimental impacts on the housing market?
- Economy – would additional growth help or hinder the achievement of economic growth in the location?

7.6 The outputs of this appraisal for each of the Broad Locations is set out in Appendix 3.

Delivery Risks

7.7 Types of risk issues (which were assessed in terms of risk impact and probability) covered by the appraisal include:

- Infrastructure Provision – are there significant barriers to deliver of necessary infrastructure that mean it would not be possible to mitigate impacts and accommodate further growth?
- Transport Infrastructure – are there likely reasons for considering that any necessary transport improvements could or would not be delivered?
- Market Delivery – is there a significant risk that the market would not be able to deliver additional housing numbers if the land was made available?
- Planning – are there specific planning reasons that would act as a major barrier to delivery of housing, assuming the RSS made provision for housing numbers in that area?
- Public Sector Delivery – are there actions for the public sector to undertake in order to support delivery (through funding or intervention) which are at risk?

7.8 The outputs of this appraisal for each of the Broad Locations is set out in Appendix 3.

Sustainability Appraisal

7.9 The Sustainability Appraisal considers the Options against the range of questions identified in the original SA of the RSS Preferred Option Policy CF3. These questions are applied to the Options as net additions, on the basis that this Study is to identify whether the original conclusion of the SA would change as a result of the additional housing provision. The results of the SA are summarised below but addressed in more detail in Volumes 4 and 5.

7.10 The Appropriate Assessment in terms of the Habitat Regulations adopts an approach consistent with the HRA for the original RSS Preferred Option, albeit recognising that it has a different status - informing Government Office evidence to RSS - rather than supporting the Secretary of State's role as planning authority. The outputs of this are included in Volumes 6 and 7

Policy Appraisal

7.11 The appraisal against policy focuses on the RSS Objectives (reflected in the Phase 2 Revision alongside those in Phase 1 Revision relating to the Black Country), coupled with Government Objectives for housing set out in PPS3 and the Green Paper. The issues associated with the appraisal against policy, particularly the RSS Objectives are considered in more detail in Section 8.0.

Approach to Assessment

7.12 Applying the objectives to the analysis of housing options and identification of potential approaches to providing additional housing raises various methodological issues which provide the context in which the results should be interpreted.

7.13 First, assessing the impact(s) that the options for net additional housing will have on the RSS objectives and principles, over and above the impacts of the Preferred Option, is made in isolation from any equivalent exercise undertaken for the Preferred Option itself, but does draw on the background evidence. NLP is not aware of an existing appraisal for the Preferred Option itself to use as a benchmark for this exercise.

7.14 Secondly, the Options need to be assessed in the context of being net additions to the existing housing provision in RSS Phase 2 Revision Preferred Option. In this context, although some of the options are clearly significant, the scale of increase in housing numbers based on the NHPAU supply range would be between +3 and +22%. Even the Option with all additional growth outside the MUAs would shift the ratio of MUA: non-MUA housing growth by just 5 percentage points.

7.15 Thirdly, a number of the objectives could potentially be considered as competing and there is no weight attributed to each objective, which means it is not possible to measure the overall scale of impact of each option on the RSS 'basket' of Objectives as a whole.

Outputs of the Appraisal

7.16 The results are summarised at a very high level in Table 7.1. The summary of the SA process is in line with the appraisal approach in that document:

++	Strongly positive implications	-	Overall likely to be negative
+	Overall likely to be positive	--	Strongly negative implications
Ø	No effect, neutral, mixed	O	Not relevant
?	Unclear or not known		

7.17 The summary of the HRA process in line with the appraisal approach in that document.

Options	Impacts and Risks: Impacts	Impacts and Risks: Delivery Risks	Sustainability Appraisal[5]		HRA		Policy Appraisal: RSS	Policy Appraisal: Housing Policy
1: Increased MUA Supply	Limited material impacts	Key risk is around deliverability of increased build rates in some MUAs	Sustainable Production & Consumption	-	Humber Estuary cSAC/ RAMSAR River Dee and Bala Lake SAC Humber Flats, Marshes and Coast (Phase 2) SPA Severn Estuary SPA		Would largely align with the existing Objectives of RSS except little if any benefit for rural renaissance and in some areas housing supply would arguably not meet needs. Lack of housing could undermine economic modernisation objectives.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option at a point approximately mid way in the NHPAU supply range) then this option may not be considered positively as it would under-provide and have a limited additional impact on affordability.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	Ø(+)	Fens pool SAC Severn Estuary SAC West Midlands Mosses SAC			
			Sustainable Communities	Ø(+)				
2: Eco Town Locations	Series of localised impacts of the Eco Town locations, although not identified as fundamental barriers (does not imply no impacts)	Risks around public transport provision to serve developments satisfactorily.	Sustainable Production & Consumption	-	Humber Estuary cSAC / RAMSAR River Dee and Bala Lake SAC River Mease SAC Humber Flats, Marshes and Coast (Phase 2) SPA Severn Estuary SPA		Although the 'eco towns' are opposed by many, they are arguably de-minimis in terms of their impact on the overall RSS objectives.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option at a point approximately mid way in the NHPAU supply range) then this option may not be considered positively as it would underprovide and have a limited additional impact on affordability.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	-?				
			Sustainable Communities	+				

[5] The SA of the nine initial options appraises the cumulative effects of those options, and the numbers set out in policy CF3 of the WMRSS preferred option, on the Sustainable Development Objectives of the West Midlands (as set out in the West Midlands RSDF (WMRSDF) January 2008). The objectives relate to the four areas identified in *"Securing Our Future: UK Sustainable Development Strategy"* (March 2005, Defra).

<table>
<tr><th rowspan="2">Options</th><th colspan="2">Impacts and Risks</th><th colspan="2" rowspan="2">Sustainability Appraisal</th><th colspan="2" rowspan="2">HRA</th><th colspan="2">Policy Appraisal</th></tr>
<tr><th>Impacts</th><th>Delivery Risks</th><th>RSS</th><th>Housing Policy</th></tr>
<tr><td rowspan="4">3: South and Eastern Focus with Rural Provision</td><td rowspan="4">A number of potential localised impacts, including on hydrology and transport issues. Aligns more strongly on supporting economic growth.</td><td rowspan="4">Public transport and other infrastructure investment will be a risk in a number of locations.</td><td>Sustainable Production & Consumption</td><td>-</td><td rowspan="2">Brown Moss SAC
Downton Gorge SAC
Humber Estuary cSAC / RAMSAR
River Clunn SAC
River Usk SAC
The Stiperstones and the Hollies SAC
Wye Valley and Forest of Dean Bats sites SAC
Wye Valley Woodlands SAC
Humber Flats, Marshes and Coast (Phase 2) SPA
Severn Estuary SPA
Fens and Wixhall SAC</td><td rowspan="2"></td><td rowspan="4">Some would argue that it departs from the MUA focus, but the overall change in split between MUA:non-MUA is small. Would support objectives for economic diversification and modernising economy.</td><td rowspan="4">In general terms, if additional housing was assumed to be required to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground.

The benefits to housing policy relate to overall supply and impact on affordability.</td></tr>
<tr><td>Climate Change & Energy</td><td>--?</td></tr>
<tr><td>Natural Resource Protection and Environmental Enhancement</td><td>-?</td><td rowspan="2">River Dee and Bala Lake SAC
River Wye SAC
Severn Estuary SAC
West Midlands Mosses SAC</td><td rowspan="2"></td></tr>
<tr><td>Sustainable Communities</td><td>+</td></tr>
</table>

Options	Impacts and Risks		Sustainability Appraisal		HRA		Policy Appraisal	
	Impacts	Delivery Risks					RSS	Housing Policy
4: New Settlements	New Settlements will have a number of, in some cases, significant impacts for specific localities which may or may not be capable of mitigation but may allow focussed delivery of infrastructure.	Market delivery is a major challenge for significant new settlements. Private sector unlikely to have capacity to deliver without major public sector support. Also, scale of development may result in construction beyond 2026 (this may be a benefit).	Sustainable Production & Consumption	-	Humber Estuary cSAC / RAMSAR Humber Flats, Marshes and Coast (Phase 2) SPA Severn Estuary SPA River Mease SAC		Arguably departs from the spirit of the RSS by introducing the concept of new settlements. But precise impacts on individual objectives are more difficult to ascertain.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground. The benefits to housing policy relate to overall supply and impact on affordability.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	-	Severn Estuary SAC West Midlands Mosses SAC Fens Pool SAC			
			Sustainable Communities	+				

Options	Impacts and Risks		Sustainability Appraisal		HRA		Policy Appraisal	
	Impacts	**Delivery Risks**					**RSS**	**Housing Policy**
5: MUA Supply Focus	Impacts focused around those associated with urban area development, including adding to congestion in already congested areas.	Key challenge is how far it will be possible to increase build rates in some of the MUAs even further. Considered a major risk.	Sustainable Production & Consumption	-	Humber Estuary cSAC RAMSAR River Dee and Bala Lake SAC Humber Flats, Marshes and Coast (Phase 2) SPA Peak District Moors (South Pennine Moors Phase I) SPA Severn Estuary SPA South Pennine Moors Phase 2 SPA		Additional growth within the MUAs would largely align with the RSS objectives, although there are question marks on its deliverability and hence impact. There are question marks over how well this option would support the objective of economic modernisation or allowing towns and cities to meet their development needs.	In general terms, if additional housing was assumed to be required to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground. The benefits to housing policy relate to overall supply and impact on affordability, albeit the significant delivery risks mean this option might not meet need.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	Ø(+)	Severn Estuary SAC South Pennine Moors SAC West Midlands Mosses SAC Fens Pool SAC Pasturefields Salt Marsh SAC Peak District Dales SAC			
			Sustainable Communities	+				

Options	Impacts and Risks: Impacts	Impacts and Risks: Delivery Risks	Sustainability Appraisal		HRA		Policy Appraisal: RSS	Policy Appraisal: Housing Policy
6. Northern Urban Focus with Rural Revision	There are a number of generic impacts (e.g. on transport and hydrology) that have local manifestations. The key potential impact is the risk of impact on market fragility (in North Staffordshire) and if phasing and mix of release of additional sites is not properly controlled.	The delivery risks associated with this option flow from the greater emphasis of growth in less vibrant locations (economically and in market terms).	Sustainable Production & Consumption	-	Cannock Chase SAC Cannock Extension Canal SAC Fens Pool SAC Pasturefields Salt Marsh SAC West Midlands Mosses SAC River Dee and Bala Lake SAC Peak District Dales SAC Peak District Moors (South Pennine Moors Phase I) SPA South Pennine Moors Phase 2 SPA		This option may not align with objectives in that not all additional development is in Settlements of Significant Development or the MUAs and may not support economic diversification and modernisation in terms of the south east of the region, where the high technology corridor is identified as a key motor of growth.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground. The benefits to housing policy relate to overall supply and impact on affordability albeit this is not focussed in areas of most acute need.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	-				
			Sustainable Communities	+	Humber Estuary cSAC RAMSAR River Usk SAC South Pennine Moors SAC The Stiperstones and the Hollies SAC Humber Flats, Marshes and Coast (Phase 2) SPA Severn Estuary SPA Midlands Meres and Mosses Phase I and 2 Ramsar Fens and Wixhall SAC			

Options	Impacts and Risks		Sustainability Appraisal		HRA		Policy Appraisal	
	Impacts	Delivery Risks					RSS	Housing Policy
7. Distributed Urban Growth	As with Option 6 there are a number of generic impacts, but none appear to be incapable of being mitigated. In particular traffic modelling of this option shows limited material impact from the RSS Preferred Option in terms of overall trips and journey lengths.	There are some specific water resource, transport, market and other risks linked to individual locations, but none are not capable of being mitigated. This option spreads the market delivery risks.	Sustainable Production & Consumption	-	Pasturefields Salt Marsh SAC Severn Estuary SAC South Pennine Moors SAC West Midlands Mosses SAC Cannock Chase SAC Cannock Chase extension canal SAC Fens Pool SAC Peak District Dales SAC		The more distributed form of development may support the objective of helping towns and cities meeting their own development needs.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground. The benefits to housing policy relate to overall supply and impact on affordability.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	-	Humber Estuary cSAC RAMSAR River Dee and Bala Lake SAC Humber Flats, Marshes and Coast (Phase 2) SPA Peak District Moors (South Pennine Moors Phase I) SPA Severn Estuary SPA South Pennine Moors Phase 2 SPA Midlands Meres and Mosses Phase I Ramsar			
			Sustainable Communities	+				

Options	Impacts and Risks: Impacts	Impacts and Risks: Delivery Risks	Sustainability Appraisal		HRA	Policy Appraisal: RSS	Policy Appraisal: Housing Policy
8. Major Urban Growth and New Settlements	With an increased scale of development, the generic impacts (e.g. for landscape, hydrology, transport, market) are increased but except in some locations are not identified as major fundamental barriers to growth that cannot be mitigated appropriately. The New settlement component of this option might have unacceptable impacts if situated in a particular way.	The delivery risks for this option flow from the need in many cases for new and enhanced infrastructure provision and the priority attached to funding this. However , the key risks are around deliverability, with doubts on the prospects for such rates of growth in some locations and the capacity of the private sector to deliver the New Settlement without major public sector investment.	Sustainable Production & Consumption Climate Change & Energy	- --?	Cannock Chase SAC Cannock Chase extension canal SAC Fens Pool SAC Pasturefields Salt Marsh SAC Peak District Dales SAC Peak District Moors (South Pennine Moors Phase I) SPA South Pennine Moors Phase 2 SPA Severn Estuary SAC Severn Estuary SPA South Pennine Moors SAC West Midlands Mosses SAC	The new settlement element of this option does not sit within the objectives of RSS but may not, subject to location, actually harm the outcomes being targeted. Additional growth in and away from the MUAs could be argued to achieve a balance of growth and allow towns and cities to meet their own development needs and support economic modernisation. If the need for housing is assumed to be less than the levels assumed in this option could pose a risk of 'over-supply' and impacts on fragile markets.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground. Arguably, provision at the top of the range could result in over-provision if need was only at the mid-point.
			Natural Resource Protection and Environmental Enhancement	--?	Humber Estuary cSAC RAMSAR River Mease SAC Humber Flats, Marshes and Coast (Phase 2) SPA Midlands Meres and Mosses Phase I and 2 Ramsar		
			Sustainable Communities	++?			

Options	Impacts and Risks		Sustainability Appraisal		HRA		Policy Appraisal	
	Impacts	Delivery Risks					RSS	Housing Policy
9. Major Urban Extensions and Rural Provision	The impacts of this option are similar to Option 8. This option has been run through the HA transport model and it demonstrates limited change in overall trip levels and journey lengths from the RSS Preferred Option, although clearly there are potential local impacts that would need to be investigated further and appropriate mitigation identified.	Key delivery risks flow from market capacity issues and the challenges of funding for some individual infrastructure items.	Sustainable Production & Consumption	--	Brown Moss SAC Downton Gorge SAC Peak District Dales SAC Fens and Wixhall SAC Humber Estuary cSAC RAMSAR Humber Flats, Marshes and Coast (Phase 2) SPA River Clunn SAC River Usk SAC The Stiperstones and the Hollies SAC Wye Valley and Forest of Dean Bats sites SAC Wye Valley Woodlands SAC Midlands Meres and Mosses Phase I and 2 Ramsar		This option which considers growth in a range of different locations gives rise to impacts in a number of locations but the evidence for a major clash with RSS objectives is limited, unless the need for housing is assumed to be less than the levels assumed in this option, with the risk of 'over-supply' and impacts on fragile markets.	In general terms, if additional housing was assumed to be needed to meet needs (ie if need was greater than planned for by RSS Preferred Option and at the mid-point of the NHPAU Supply Range) then the options would be assessed positively against Housing Policy on the basis that provision could be made to translate additional numbers to sustainable developments on the ground. Arguably, provision at the top of the range could result in over-provision.
			Climate Change & Energy	--?				
			Natural Resource Protection and Environmental Enhancement	--?	Cannock Chase SAC Cannock Extension Canal SAC Fens Pool SAC Pasturefields Salt Marsh SAC			

Options	Impacts and Risks		Sustainability Appraisal		HRA		Policy Appraisal	
	Impacts	Delivery Risks					RSS	Housing Policy
			Sustainable Communities	++?	River Dee and Bala Lake SAC River Wye SAC Peak District Moors (South Pennine Moors Phase I) SPA South Pennine Moors Phase 2 SPA SPA Severn Estuary SAC South Pennine Moors SAC Severn Estuary SPA West Midlands Mosses SAC			

Table 7.1: Summary of Appraisals

Source: NLP

7.18 In using the outputs of the option appraisal to translate these overall impacts and conclusions to potential ways forward for the region, it is necessary to look at what the options mean for the local authorities and core strategy areas that will ultimately be the basis for allocating housing requirements in RSS.

7.19 Table 7.2 below summarises the outputs of the appraisal in terms of each of the options and how they translate across to the local authority/core strategy areas. For the purposes of the assessment, the allocation of numbers across from the broad locations (with numbers as identified above and in Appendix 3) is indicative and assumes the maximum distribution of a broad location into a particular area where a broad location straddles local authority boundaries. Hence the ‘double counting’ of numbers for each option set out below will add up to more than the total for the option.

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Birmingham	50,600	1	5,000	Birmingham is a location with significant levels of household growth which the RSS Preferred Option does not fully meet, although it does stretch the level of housing provision beyond what the City has achieved even during the 'apartment boom' The City has ambitions for further growth, and the Core Strategy Issues and Options report actively considers the potential for increasing supply by up to 15,000 units, including potentially with urban extension(s) that might necessitate amendment to the Green Belt. There is a possibility that growth up to 10,000 could necessitate a review of the Green Belt if suitable and available sites cannot be identified to meet the housing trajectory necessary. There are a number of complex transport issues but these do not represent fundamental barriers to growth, particularly at the low-middle levels of increase, and the urban area is an accessible and sustainable location. Existing highways have significant congestion issues with some programmed works to mitigate. There is also limited peak capacity on cross Birmingham rail lines in particular from south into New Street. The modelling of transport impacts confirms that there is no significantly greater impact than RSS Phase 2 Revision Preferred Option, or present situation for scenarios involving growth in Options 7 and 9. Impacts will depend on local distribution of growth and changes in commuting flows into Birmingham. Large additional housing sites close to the SRN may give rise to significant localised issues. As with RSS Phase 2 Preferred Option, there are potentially significant risks from surface water flooding but these can be mitigated. Improvements in waste water infrastructure will similarly be required. The highest growth levels may give rise to a need for further water supply to meet peak demand.	There are a number of infrastructure challenges, but these do not appear to be fundamental barriers to additional housing growth. These include: Delivering necessary public transport capacity and maintaining bus services The need to consider rail capacity in combination with growth to the south west of Birmingham. The limited scope for mitigation by junction improvements on some parts of SRN. Delivering the necessary waste water infrastructure and ensuring increased water supply requirements arising from higher growth scenarios	Key delivery risks, particularly at the middle to upper end of the increases, include: The potential that some sites could give rise to significant localised issues on SRN which may be difficult to mitigate/ could not be fully funded by development, particularly in more marginal locations. Potentially high cost/technical limitations to provide waste water treatment that can achieve necessary capacity/ water quality in some locations. Possibility of issues arising with some options for increasing water supply to serve higher growth scenarios, although extent of risk/impact on delivering supply within timescales unknown. There are market risks that increased build rates (particularly in the middle-to-upper ranges) cannot be achieved given the degree to which past rates (which are well below those proposed by RSS Preferred Option) were reliant on the thriving apartments market. New delivery vehicles, funding, and the appropriate suitable and available sites would need to be identified, but even so, the level of increase at the upper end is likely to be incapable of being delivered. .	Location of housing sites would need to consider infrastructure availability, funding and delivery at LDF stage in conjunction with providers/regulators. Annual SHLAA work will need to ensure that appropriate and available sites are brought forward to ensure the overall number of units can be delivered. **Conclusion: Scenarios for future growth should consider up to 10,000 additional units on the basis that this will represent a delivery stretch for the market which it is unlikely to exceed.**
		3	Up to 20,000				
		5	18,500				
		6	3,750				
		7	Up to 14,100				
		8	Up to 15,000				
		9	Up to 20,000				

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Black Country	61,200	1	5,500	Although there are significant regeneration ambitions for the Black Country and potentially additional physical capacity for growth, there is not an underlying 'need' for further development in terms of underlying CLG Projections, past build rates, or affordability. The Black Country is a sustainable location in general terms, albeit subject to a number of transportation constraints outlined in more detail in the Appendices. There are risks from surface water flooding which will need to be mitigated. Alongside improvements in waste water infrastructure that will be required, although these are not considered insurmountable. There will also be a need to ensure sufficient green infrastructure. The HRA flags up the possibility that growth to the Black Country could potential have impacts on Cannock Chase The key impacts are potentially market ones, and the impact further growth could have on the focus of the land use strategy, and, potentially, on rejuvenation of fragile markets, although there is limited actual evidence.	Key challengesfor infrastructure would include delivery of integrated public transport within Black Country and maintaining bus services in the long term. In addition, delivering the necessary waste water infrastructure in context of required water quality standards/ consents and within the required timescales, although not considered a major barrier.. Ensuring sufficient water supply in Severn WRZ and at peak times in South Staffs WRZ is also an issue.	The major and potentially overwhelming delivery risk, which exist at almost every level of additional growth, is around the market deliverability of growth. The existing RSS already requires build rates to increase by over 1,100 per annum from the average of the past five years and for this to take place in a downturn and without the buoyant apartments market. On top of this, there are some delivery risks associated with transport, water,etc that may not be incapable of being overcome, albeit the development values needed to fund infrastructure may not be sufficient to address without public sector resources. .	Location of housing sites would need to consider infrastructure availability and impacts at LDF stage in conjunction with providers/regulators. Phasing of additional growth would need to address delivery risks/funding for regeneration. **Conclusion: The Black Country has major challenges in meeting the requirements of the RSS Preferred Option. Scenarios for future growth should not include additional provision as there is little if any prospect of that increase being delivered.**
		5	22,000				
		6	Up to 13,750				
		7	Up to 10,360				
		8	Up to 5,000				
		9	Up to 5,000				

<table>
<tr><th>Location

(Core Strategy Area)</th><th>Phase 2 Revision Preferred Option</th><th>Option</th><th>Nos. of Additional Units</th><th>Key Issues and Impacts</th><th>Key Infrastructure Challenges</th><th>Key Delivery Risks</th><th>Phasing and other Implementation Implications for additional growth

NLP Conclusions</th></tr>
<tr><td rowspan="5">Solihull</td><td rowspan="5">7,600</td><td>3</td><td>Up to 10,000</td>
<td rowspan="5">There are underlying needs for additional growth in this location based on CLG Projections, past build rates, and affordability (indeed, it is the highest affordability ratio of any of the MUA authorities). Development in this district could also support the growth agenda for the MUAs.

There are undoubted sensitivities associated with additional growth in terms of the need for Green Belt amendments to accommodate further development, likely under any scale of growth, and there are also major transport issues to resolve (becoming more locally significant at 5,000 units or more) but, equally, there are not considered to be impacts that are incapable of being mitigated, avoided or compensated through local planning.

Specific impacts could include:

Potential for significant traffic impacts on SRN (J4 and J6 of M42) depending on location of development. Congestion currently an issue but not significantly worsened in addition to RSS Phase 2 Revision Preferred Option. Good bus services into Birmingham. Issues with rail capacity on one route, but can be mitigated by train lengthening. Need for continued improvements to public transport to support additional growth.

In relation to a potential new settlement, there is a potentially substantial impact that could be a major issue if it impacted adversely on M42 j6 – a key regional gateway. Excellent public transport alternatives would be necessary to support a new settlement

At a local level there would be a need for consideration of landscape and ecological impacts and necessary mitigation. The risk from surface water flooding is a potentially significant but can be mitigated.</td>
<td rowspan="5">One of the key challenges would be how to deliver growth, at higher levels, that would not significantly impact on SRN. Mitigation would be needed and larger scale development might provide the basis for funding it.

The delivery of a suitable and frequent rail link to serve a new settlement that would mitigate the serious potential impact in a key gateway location on the SRN.

There would be a need to deliver the necessary waste water infrastructure in context of required water quality standards/ consents and within the required timescales. There are no reasons why this could not be delivered.</td>
<td rowspan="5">The prospect for a stronger market in Solihull and higher values than might be achieved in some MUAs means that there is greater prospect that market delivery risks and the necessary funding of infrastructure (such as around transport and water quality) can be delivered.

The principal risk is likely to be associated with that of a new settlement, which carries higher ‘place making’ requirements of developers., and would need to be overcome through appropriate public sector support and new delivery vehicles.</td>
<td rowspan="5">Location of housing sites would need to consider infrastructure availability, funding and delivery at LDF stage in conjunction with providers/regulators.

Need for new delivery vehicles if new settlement option pursued which would necessitate the right financing and governance solutions to be put in place. Phasing would also need to be considered.

Conclusion: Growth scenarios should consider potential for different levels of growth between 5,000 and 13,000, including a new settlement to reflect the choices available.</td></tr>
<tr><td>4</td><td>c15,000</td></tr>
<tr><td>7</td><td>Up to 2,500</td></tr>
<tr><td>8</td><td>Up to 5,000</td></tr>
<tr><td>9</td><td>Up to 10,000</td></tr>
</table>

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Shropshire	25,700	3, 6, 9	1,900	Additional growth in the rural areas of Shopshire would address the rural affordability issues previously identified, with the current RSS Phase 2 Revision Preferred Option making provision for less than CLG Projections indicate might be needed. There are not considered to be major barriers or impacts. There are unlikely to be significant traffic/ public transport issues although the need for local impacts and public transport accessibility would need to be considered through the LDF process. There is also the potential need for investment in waste water infrastructure for both RSS Phase 2 Revision Preferred Option and additional levels of growth. Additional development in parts of County in Severn WRZ may result in additional pressure on water supply as would be the case for the RSS Phase 2 Revision Preferred Option, which should be able to be mitigated. There are also flooding issues particularly significant in Shrewsbury and along Severn which will require development to be located so to avoid areas of high flood risk. This can be addressed at the local level.	There will be a challenge, not an overwhelming one, of delivering adequate public transport to serve additional growth in this area, including increased capacity on rail line to Birmingham and potentially a new Shrewsbury Parkway station There will also be a need to deliver waste water infrastructure in context of required water quality standards/ consents although this would depend on location.	There are no major delivery risks, and delivery of a new station (the most difficult piece of infrastructure) is unlikely to be a pre-requisite for development.	Location of housing sites would need to consider infrastructure availability, funding and delivery at LDF stage in conjunction with providers/regulators. **Conclusion: Scenarios for growth should include additional rural provision in line with levels set out in the options.**

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Telford and Wrekin	26,500	6, 9 7 8	10,000 3,000 5,000	Telford as one of the original New Towns has underlying potential for additional development within the settlement boundary and on land owned by EP. Further growth could support further investment in the town's retail and other services, and regeneration. Lower levels of growth could be accommodated without giving rise to major impacts. There are potential impacts, including those associated with transport for higher levels of growth. There is limited capacity on rail links to Birmingham/Black Country, and there are high levels of car use and lack of accessibility to some services by public transport. There is limited local congestion and a likely need for enhancement of local public transport infrastructure and capacity on rail line to Birmingham/Black Country to deter car based commuting increases in traffic on M54. There are no reasons to believe that these improvements cannot be delivered or that transport impacts represent a fundamental barrier to additional growth. There are specific issues around surface water flooding, water abstraction, and investment in waste water infrastructure (which apply to the RSS Phase 2 Revision Preferred Option as well as additional growth). None of these are fundamental barriers to growth provided appropriate investment is made.	There are timing/costs associated with increased capacity on rail line, although given phasing issues these are unlikely to represent a fundamental barrier. Equally, providing/ maintaining adequate water supply in a sustainable way that does not impact on protected habitats will be a requirement, but not one that cannot be delivered. Delivering waste water infrastructure in context of required water quality standards/ consents will need to be addressed although this would depend on location and can be addressed through the LDF.	There are potential land and market capacity issues (particularly towards the upper end of the scale of growth given the degree to which additional growth would be a step change from past years), but there are no in-principle barriers to delivery of additional housing growth, particularly if measures are put in place for new delivery vehicles, potentially harnessing the value of public sector assets. This is because there is likely to be land that is less constrained by lower values and higher costs compared with some other locations, and benefits from more significant public sector stake in its success through EP/HCA. Development of waste water treatment capacity (funding/consents) could be an issue that will require further consideration at LDF stage rather than act as a barrier to higher provision through the RSS. .	Location of housing sites would need to consider infrastructure availability, funding and delivery at LDF stage in conjunction with providers/ regulators. New delivery and funding vehicles could potential mitigate the infrastructure and market delivery risks. **Conclusion: the growth scenarios should include the choice of making significant additional growth in Telford up to the higher level tested in the options. Equally, one growth scenario should exclude it to recognise the potential market risks.**

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Cannock Chase	5,800	6, 8, 9	Up to 5,000	Although there is an underlying case for additional growth to address localised housing need issues, there is potential for unacceptable impacts on Cannock Chase, and significant impact on SRN south of Cannock, if increased traffic. Although good connections to Birmingham/Walsall there is currently limited capacity and high utilisation.	Ensuring that development does not impact on SRN in an unacceptable way.	The key delivery risk flows from the potential that local planning would be unable to identify a suitable site for additional growth, given unacceptable ecological impacts on Cannock Chase (a major barrier)	**Conclusion: Should be excluded from growth scenarios due to constraints identified.**
		7	Up to 2,5000				
East Staffordshire	12,900	6, 8, 9	5,000	Additional physical capacity is identified in Burton-upon-Trent SSD and additional growth could be associated with supporting regeneration and economic development activity aligned to the Growth Point. There are issues of congestion within the urban area, particularly on the A38 and there is a stronger relationship to the East Midlands than Birmingham in terms of commuting flows, capacity issues on which can be addressed through train lengthening. There is limited station parking capacity. These are issues that would need to be addressed but are unlikely to be incapable of being addressed. Indeed, additional growth may provide the opportunity to fund infrastructure. Large areas of Burton-upon-Trent are at high risk of fluvial flooding. Although defended, flood risk represents an issue that would need to be considered in the location of additional growth, and is not a fundamental barrier.	Key infrastructure challenges would include ensuring that development locations would not worsen flood risk. There is no reason to believe this cannot be achieved. Public transport provision needs to be sufficient to discourage car based commuting impacting on A38 – there are no reasons to believe that this cannot be addressed.	Higher rates of growth could trigger market capacity issues, although this may be capable of mitigation through identification of appropriate sites for development. Transport and flooding infrastructure issues will need to be overcome. Additional development may provide an opportunity to support funding of provision.	Not identified as one of the region's strongest market areas, so viability and phasing issues need to be carefully considered, particularly given higher rates of growth. **Conclusion: Should be included in some growth scenarios but not in all, and at different rates up to 5,000, given uncertainty on market provision.**

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Lichfield	8,000	2 4 8	6,000 c15,000 c9,000	There is an underlying market potential to increase build rates in Lichfield as evidenced by the developer-led support for the Curborough Eco Town bid, and a high affordability ratio, although this may not be matched by demand as evidenced in the CLG Projections. The Curborough Eco Town bid has been withdrawn, although the location remains one of the shortlisted areas and there are intentions for pushing forward a development in its location. The appraisal of options indicates some potential transportation issues that might make it inappropriate, including acute highway congestion/capacity issues on the A38. Although there may be solutions to overcome these transportation issues, there is insufficient evidence on how these might do so at the current time. Higher levels of growth (beyond 6,000) might support higher infrastructure provision, but this may not be sufficient to overcome barriers.	Very substantial investment would be needed to resolve highway capacity issues on A38 and to deliver effective public transport alternatives beyond existing services.	There is a significant risk that development, even at higher levels could not fund mitigation of transport issues. These may not carry through as a strategic fundamental barrier for any further growth in Lichfield if alternative approaches were adopted, although based on what was appraised under the nine options, the conclusion is that this barrier rules out additional provision.	Significant upfront transport infrastructure investment would be required **Conclusion: Additional growth should not be included in Growth Scenarios for reasons identified.**

<table>
<tr><th>Location

(Core Strategy Area)</th><th>Phase 2 Revision Preferred Option</th><th>Option</th><th>Nos. of Additional Units</th><th>Key Issues and Impacts</th><th>Key Infrastructure Challenges</th><th>Key Delivery Risks</th><th>Phasing and other Implementation Implications for additional growth

NLP Conclusions</th></tr>
<tr><td rowspan="5">North Staffordshire</td><td rowspan="5">17,100</td><td>1</td><td>1,750</td><td rowspan="5">There is identified additional capacity, and scope to increase growth to reflect underlying demand and the potential link to economic development objectives, particularly in Newcastle under Lyme (linked to Keele University), aligned to wider regeneration across the MUA. There are market risks associated with deliverability if the additional growth is assumed to be all on urban brownfield sites, and market displacement impacts in terms of fragile markets given the specific low demand issues identified for neighbourhoods in the HMR area (particularly if growth is too focused on greenfield sites). However, it appears likely that these can be addressed through phasing, site selection and ensuring the mix of new housing complements the offer in those locations as part of the wider regeneration of the MUA. The issue of low demand/fragile markets is considered further in Section 8.0

There are potential transport issues to overcome at all levels of growth but these are unlikely to be a major barrier to further growth. The principal commuting flows are between Stoke and Newcastle but there is no direct rail connection. Local accessibility is reliant on bus services, which are reasonable although services reflect polycentric nature of area. There is significant highway congestion on A500/A50 notwithstanding recent improvements although the HA modelling did not highlight significant additional issues flowing from further growth. There is the potential for significant localised impacts on SRN, particularly currently congested junctions, depending on the location of development. There are also improvements in waste water infrastructure required for both the RSS Phase 2 Revision Preferred Option and additional growth – there is no reason why these cannot be delivered.

There may be a requirement to review the Green Belt to accommodate an urban extension to Newcastle under Lyme, but this depends on site availability.</td><td rowspan="5">Infrastructure challenges include delivering good levels of public transport accessibility (albeit that rail is unlikely to play a major role) and limiting impacts on SRN. There is no reason to assume that these infrastructure challenges are either incapable of being overcome or fundamental barriers to delivery of additional housing.

There is also a requirement to deliver waste water infrastructure in context of required water quality standards/ consents. This is not identified as a major barrier.</td><td rowspan="5">There are market delivery risks, given the potential weakening in the market, and there will be a need for public sector investment to underpin regeneration-led development. However, other sites may be capable of coming forward and there is reasonable confidence that the scale of growth in all of the options is capable of delivery subject to suitable and available sites being identified through SHLAAs and with the right phasing.</td><td rowspan="5">There is a need for careful release of land with appropriate phasing to ensure additional supply does not undermine fragile markets.

Consideration of the potential impact on the SRN and potential for public transport accessibility would be needed in the allocation of sites through the LDF process.

Timely delivery of waste water treatment capacity may be necessary to support development.

Conclusion: indications that additional growth can be accommodated with the right phasing approach which means it should be included in all growth scenarios at the upper end of the options tested.</td></tr>
<tr><td>5</td><td>6,000</td></tr>
<tr><td>6</td><td>6,250</td></tr>
<tr><td>7</td><td>4,200</td></tr>
<tr><td>8, 9</td><td>5,000</td></tr>
</table>

<table>
<tr><th>Location

(Core Strategy Area)</th><th>Phase 2 Revision Preferred Option</th><th>Option</th><th>Nos. of Additional Units</th><th>Key Issues and Impacts</th><th>Key Infrastructure Challenges</th><th>Key Delivery Risks</th><th>Phasing and other Implementation Implications for additional growth

NLP Conclusions</th></tr>
<tr><td rowspan="3">South

Staffordshire</td><td rowspan="3">3,500</td><td>6</td><td>Up to 15,000</td><td rowspan="3">An underlying need for additional housing growth could be argued based on the CLG Projections and the higher affordability ratio, although the close link with the Black Country, with which it is contiguous, means much of this 'need' would arguably need to be absorbed to fulfil the higher housing numbers for the Black Country being proposed by the Phase 2 Preferred Option.

Options for South Staffordshire take account of both growth around Cannock and to the Black Country. Additional growth to Cannock is likely to be constrained for reasons given above in Cannock Chase's assessment.

In terms of extensions to the Black Country of any scale, there could be market fragility issues for local neighbourhoods if siting, phasing and mix was not properly considered. In theory, if it proved impossible to secure suitable and available sites (established through a market tested SHLAA process) within the Black Country to deliver the housing numbers in the RSS Preferred Option it might even necessitate growth in across the boundary in South Staffordshire. This might mean the urban extensions set out in Options 6-9 might be needed, albeit in order to deliver the RSS Phase 2 Revision, rather than any increase (although this is not something proposed in this Study). Urban extensions might require amendments to the Green Belt.

There is limited public transport infrastructure to the west although more provision including proposals to the north. There is potential for increased car based commuting into Black Country/ Birmingham.

Depending on location of development, a number of treatment works have been identified by EA as potentially requiring improvements to increase capacity. Investment in water treatment may be necessary for additional growth. This is unlikely to be a major barrier. Need for care in the location of development to avoid/limit ecological impacts, including Cannock Chase. The district is partly within the Severn WRZ where there is a need for additional water supply. Additional growth would place greater pressure on the need to bring forward additional supply.</td><td rowspan="3">Key infrastructure challenges include delivering adequate public transport to serve additional growth in this area, and ensuring/ planning for adequate water supply within Severn WRZ. These are not considered fundamental barriers however.</td><td rowspan="3">There are potential market delivery risks associated with the Black Country in some locations.</td><td rowspan="3">Need for careful phasing of additional growth to mitigate demand issues.

Timing of provision of additional supply in Severn WRZ is dependant on timescale and funding of measures to deliver.

Location of housing areas would need to consider infrastructure availability, funding and phasing of delivery at LDF stage in conjunction with providers/regulators

Conclusion: Lack of evidence in support of additional growth given wider issues of Black Country and of possible relationship with Cannock mean should not be included in future growth scenarios.</td></tr>
<tr><td>7</td><td>Up to 5,000</td></tr>
<tr><td>8, 9</td><td>Up to 10,000</td></tr>
</table>

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Stafford	10,100	7	3,000	As an SSD, there is potential scope for additional growth in Stafford, although it is already making provision for greater levels of household growth than CLG Projections (although it does have higher ratio of affordability). Release of further development could have a market impact on North Staffordshire if there was insufficient attention to local siting, phasing, market positioning and mix. In particular, development to the north of the town could pose increased risk, but these are issues that can be addressed through the LDF process. There is some potential for transport impacts on the SRN (M6 j13 & j14) depending on the location of development but these have the potential to be mitigated and there is reasonable public transport accessibility. There are issues around water supply in the Staffordshire and East Shropshire WRZ based mainly on abstraction and ecological issues may limit future abstraction although uncertain at present. These and other local impacts of development can be mitigated and addressed at the local level.	The key implementation challenge for infrastructure flows from securing sufficient development funding to mitigate highway impacts, and reduce the risk of too much reliance on car based commuting. Additional/ alternative water supply may be needed, but no evidence this is a fundamental barrier.	There are no major market delivery risks identified. Development funding of any transport infrastructure works will be necessary, but there is no evidence this will not be possible on the right sites..	No major issues identified. The phasing of development may need to await market recovery to fund infrastructure. Location of housing areas would need to consider infrastructure availability, funding and phasing of delivery at LDF stage in conjunction with providers/regulators. **Conclusion: growth of different scales up to 3,000 should be included in some Growth Scenarios to reflect broad policy spatial choices available.**

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Rugby	10,800	3, 9	5,000	Rugby is capable of accommodating additional growth and is identified as SSD. There are potential highway and public transport capacity infrastructure works/investment required, and traffic impacts could be significant if public transport alternatives are not provided. Flooding (a range of types) a potential issue within/around Rugby that could be exacerbated by additional development and will require mitigation.	Enhancement to public transport alternatives including rail will be required. Additional rail capacity can be provided but not an increase in frequency. Impact may depend on location of development. May require significant hydrology investment but not identified as a fundamental barrier to development.	No evidence that infrastructure required cannot be delivered although rates of delivery will require market capacity increase. The additional development, if of sufficient scale, may provide a mechanism for supporting further investments in transportation and hydrology infrastructure.	No identified phasing or implementation constraints, although phasing of development may need to await market recovery to fund infrastructure. Timing of provision of water supply in this WRZ may need to be considered in terms of the phasing/delivery of this additional growth. **Conclusion: Should be included in growth scenarios at both levels identified in the options to reflect choices and market capacity issues.**
		7	3,000				
Stratford-on-Avon	5,600	2	4,500	Stratford is an area with significant affordability issues (a ratio of 8.59), an 'under-provision' against projections. There is a strong market and ability to deliver. The Middle Quinton Eco Town was shortlisted in May 2008. High level analysis indicates that as a location it may have major transport issues to resolve, but if these are capable of being resolved either through the Eco Town or some other form of development, it could address the underlying need and scope for additional development to address affordability. Development will require range of infrastructure, but key is transport mitigation (guided rail/bus link) and alternatives to Eco Town might present alternatives more capable of being served if Eco Town bid not	Substantial investment in public transport infrastructure would be necessary to deliver a sustainable new settlement proposal. Current indications are that such a challenge may be capable of being met. There	The funding of the necessary infrastructure is the key identified risk. This is not considered to be a fundamental barrier, and may be capable of being overcome and/or mitigated through local planning.	Implementation challenges flow principally from transport infrastructure. Timing of delivery would need to reflect realistic timescales for implementation of this investment. Delivery of supply in Severn WRZ may have impact on timescales for
		3, 9	Up to 5,000 (Redditch)				
		4	c10,000				
		7	Up to 3,000 (Redditch)				

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
		8	6,000	taken forward. Similarly, a larger new settlement proposal might be capable of supporting more significant infrastructure investment. Larger social infrastructure may present timing issues as with any new settlement. Water supply may be an issue but no reason to assume it cannot be overcome. If the Eco Town option is not one that it is appropriate to pursue for site or scheme-specific reasons, there may be alternatives within the district capable of addressing the underlying need and there is no evidence of why such growth could not be delivered. Other options (3, 7, 9) include Stratford as an authority contiguous with growth focused on Redditch. The issues associated with this are included in Appendix 3. It is likely that growth around Redditch can be accommodated in Bromsgrove, although if there are local site-specific issues there may be no barrier to achieving some or all of this in Stratford. There could be scope to review the Green Belt and identify additional land to add to Green Belt to ensure the long term boundaries around Stratford.	may be other locations within the district where growth can be achieved with less of a challenge.		implementation of additional growth. **Conclusion: Eco Town proposal and underlying housing need mean it should be included in growth scenarios up to a level equivalent to the current shortlisted Eco Town bid.**
Warwick	10,800	3, 9 4 7	10,000 15,000 2,500	Warwick is an area with significant growth pressures, including affordability, an ‘under-provision’ against CLG projections, and with the RSS Phase 2 Preferred Option proposing 200 units per annum less than the market has delivered on average over the past five years. It is in a high technology corridor and identified as a key focal point for economic	Infrastructure challenges which are considered to be capable of being overcome include:	Almost doubling the RSS requirement (under Option 3) or even more (with a new settlement)	Phasing of development would need to realistically respond to market capacity and

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
		8	22,000	growth. The options consider a range of approaches, and Options 4 and 8 considered new settlements in the district. The options for urban extensions to the town considered between 2,500 and 10,000 additional units At the lowest level, the differential with RSS Preferred Option in terms of local impacts is likely to be minimal, although even at the 10,000 level, there is no evidence that there are either significant strategic transport impacts on the SRN (that would not already be the case for the RSS Phase 2 Preferred Option) or local impacts cannot be mitigated. Indeed, higher levels of additional growth may support further investment. Although traffic impacts could be significant if there was no enhancement to public transport alternatives including rail, it is considered that additional rail capacity can be provided but not an increase in frequency. The impact may depend on location of development. Flooding (range of types) an issue and could be exacerbated by additional development although it is assumed that SUDS/other mitigation could be adopted for all developments. There are issues with water treatment capacity and updated infrastructure may be required to accommodate future growth, and there is no reason to assume it cannot be. There could be a review of the Green Belt to amend boundaries to accommodate growth and consider the potential to extent it around Warwick to establish and protect its long term settlement boundaries in line with PPG2.	Ensuring sufficient water supply in Severn WRZ for RSS Phase 2 Preferred Option and additional growth. Delivering adequate public transport to serve additional growth and deter predominantly car-based commuting.	could have major market delivery risks. However, the underlying market in the region is likely to be at its strongest in Warwick, and this means the risks are less acute. There are, as with any location, infrastructure risks. However, increased levels of development and scope for larger urban extensions may provide the basis for enhanced infrastructure provision.	infrastructure planning. Timing of provision of water supply in this WRZ may need to be considered in terms of the phasing/delivery of this additional growth. **Conclusion: Level of need a strong market and potential to align with economic development mean should be included in Growth Scenarios with different scales to reflect choice of one or two major urban extensions.**

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Bromsgrove	2,100	3, 9	6,670	Combination of proposals in options for Birmingham South and Redditch, alongside underlying significant 'under-provision' of RSS Phase 2 against CLG Projections (-5,900), past build rates (-329 pa), and major affordability ratio (9.7) indicate potential and need for further development. A review of the Green Belt would be necessary.to accommodate growth. Both Redditch and urban extensions to the Metropolitan area provide opportunities for using existing public transport infrastructure, alongside potential investment to upgrade. Good radial rail routes into Birmingham, but these lines have high utilisation and limited capacity approaching central stations, albeit that improvements are programmed. A need to consider the combined effect on rail provision to the south west in conjunction with development in urban area of Birmingham has been identified. In terms of the highway network, congestion on routes into Birmingham is currently significant. Whilst modelling demonstrated that growth would not give rise to significantly different impacts in comparison with RSS Phase 2 Revision Preferred Option, there is the potential for significant localised impacts depending on the location of development within the area. It has been suggested that impacts on the SRN would be most severe if development outside motorway box with potential impacts on motorway junctions that are currently at or close to capacity. Although these are important issues, there are potential mitigation measures and are not considered fundamental barriers to further housing growth, particularly at the lower levels. Area partly within Severn WRZ where there are water supply issues that will need to be addressed. Potential need for additional water treatment capacity depending on specific location.	There is a need to consider with providers the potential for combined impacts in south-west rail corridor. Depending on location, development outside the motorway box could lead to significant traffic impacts on SRN that may require significant funding from development. There are challenges around ensuring sufficient water supply in Severn WRZ for both RSS Phase 2 Preferred Option and any additional growth.	Over-doubling the RSS requirement could present market capacity issues, and Redditch was not identified as strong market focus if growth was located in that part of the Borough. Investment in infrastructure needed, and risk of non-delivery could hinder development but not considered a major issue, although market delivery could be an issue for higher output.	Phasing would need to be dictated by timescales for transportation (e.g. train lengthening) and water supply/treatment improvements where necessary to support development, this might mean phasing to 2012+ Location of housing areas would need to consider infrastructure availability, funding and phasing of delivery at LDF stage in conjunction with providers/regulators **Conclusion: Should be included in Options to reflect potential and opportunities for growth to Metropolitan area (c. 5,000 units) and Redditch (2,500 units)**
		7	3,500				
		8	5,000				
		9	5,000				

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Redditch	6,600	3, 9	1,670	Redditch is an SSD, and additional housing growth could support this role and its centre. Assessing its scope for growth drawns on the impacts and issues identified in WYG Study. In general terms, cross boundary issues make it difficult to consider Redditch in isolation, and further peripheral growth to the town could stretch into contiguous districts (including Bromsgrove and Stratford), given land availability. Potential impacts of growth with a rail route into Birmingham, but high utilisation and limited capacity, although improvements are programmed. A need to consider the combined effect on rail provision to the south west in conjunction with development in urban area of Birmingham has been identified. Potential impacts on SRN particularly motorway junctions that are currently at or close to capacity. Area partly within Severn WRZ where there are water supply issues that will need to be addressed. Potential need for additional water treatment capacity depending on specific location.	Need to consider with rail providers the potential for combined impacts in south-west rail corridor. Depending on location, development could lead to significant traffic impacts on SRN that may require significant funding from development. Ensuring sufficient water supply in Severn WRZ for RSS Phase 2 Preferred Option and additional growth.	Not identified as a strong market area, relative to some other areas south of the metropolitan conurbation.	Location of housing areas would need to consider infrastructure availability, funding and phasing of delivery at LDF stage in conjunction with providers/regulators. Administrative boundary issues to resolve. Timing of provision of increased water supply to this WRZ may need to be considered in terms of the phasing/delivery of this additional growth. **Conclusion: Not included in Growth Scenarios – but growth may be accommodated over boundary in Bromsgrove.**
		7	1,000				

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
South Worcester-shire	24,500	2 3, 9 4 6 7 8	1.500 6,280 c.23,000 (NS) 640 3,000 c.12,000 (NS)	Affordability issues provide the basis for additional housing in the Joint Core Strategy across three districts, which provides mechanisms for identifying how additional rural housing provision and growth focused around city of Worcester can be accommodated as set out by the various options. In addition, Wychavon would accommodate c.1,500 units of the 6,000 unit eco town location at Middle Quinton (or more if it was larger, as in some options) if it proceeded. Analysis of options reveals that there are no reasons why growth cannot be accommodated beyond hydrology (water extraction) issues associated with the Wye Valley which equally apply to the RSS Phase 2 Preferred Option and should be capable of being resolved. Traffic impacts could be significant at higher end of growth options if no attractive rail alternative with good bus links, particularly in more rural areas. Current congestion issues within and to south of city centre (A4440). Issues for M5 (j6 & 7). Additional rail capacity from Worcester can be provided but not an increase in frequency. Impact would depend on location of development in terms of preference for rail/car trips for commuting. Flooding from the Severn, Avon and Teme potentially an issue and will require mitigation but no reason to assume this cannot be provided. Within Severn WRZ where water supply issues currently exist and further infrastructure/measures needed increase supply. Potential need for investment in water treatment depending on location, but this can be addressed, potentially through additional development. Potential for new settlement (in Options 4 and 8) to give rise to significant traffic impacts unless frequent public transport alternative could be provided. This would require improved local bus services and increased rail service and frequency. There may be particular concern in relation to M5 (J4) although this would be less for a smaller scale of development. Issues associated with the Eco Town location at Middle Quinton, considered as part of the assessment of Stratford on Avon. There may be an opportunity to review the Green Belt ot extend its boundaries around Worcester.	Larger scale of development in vicinity of station may support business case, but a risk that it will not go ahead. Cost of highway works in relation to scale of development may need to be considered in relation to location of development and its impact. Ensuring sufficient water supply in Severn WRZ for RSS Phase 2 Preferred Option and additional growth. No major barriers to rail delivery associated with new settlement providing that development funding of station improvements and timing of investment in capacity of railway.	Potential market capacity issues in Worcester itself for highest levels of additional provision (incl new settlement options), but for combination of rural provision, eco town component in Wychavon, and extension to Worcester (e.g. combining 2 and 3/9) is not identified as major challenge, given underlying levels of demand and developer confirmation that it is a strong market.	Phasing would need to respond to timescales for infrastructure provision where needed to support development. Timing of provision of increased water supply to this WRZ may need to be considered in terms of the phasing/delivery of this additional growth. Timescales/phasing/ costs relating to infrastructure delivery for new settlement **Conclusion: Should be included in Growth Scenarios at a level to reflect choice of level of growth to Worcester, (2,500) plus the Eco Town location, (1,500) and rural provision (1,500).**

Location (Core Strategy Area)	Phase 2 Revision Preferred Option	Option	Nos. of Additional Units	Key Issues and Impacts	Key Infrastructure Challenges	Key Delivery Risks	Phasing and other Implementation Implications for additional growth NLP Conclusions
Wyre Forest	3,400	3, 6, 9	640	Additional rural provision to address affordability. No major impacts of note arising from the assessment. Within Severn WRZ where water supply issues currently exist and further infrastructure/measures would be needed increase supply.	Ensuring sufficient water supply in Severn WRZ for RSS Phase 2 Preferred Option and additional growth.	No major market development risks	None of note **Conclusion: Scenarios for growth should include additional rural provision at the level shown in the options.**
Herefordshire	16,600	3, 6, 9	1,200	Additional rural provision to address affordability. Potential for local traffic impacts depending on location of development. Local issues with Hereford due to single river crossing point. Additional growth unlikely to give rise to significant issues provided that sites selected through LDF process to minimise impacts/ maximise public transport accessibility Currently no water supply issues, although Welsh water has indicated that although growth could be accommodated, distribution could have an impact depending on which WRZ and levels (small amounts can lead to tipping) this needs to be considered at LDF level. Ecological impacts could be an issue in vicinity of River Wye, but can be mitigated or avoided.	Consideration of local issues in conjunction with infrastructure providers/ key consultees through LDF process	No major market development risks	None of note. **Conclusion: Scenarios for growth should include additional rural provision at the level shown in the options.**

Table 7.2: Appraisal of Options/Broad Locations mapped to Local Authority / Core Strategy Areas

Source: NLP

7.20 The key issues of impact and risk that have arisen through the testing process are:

1. Whilst not a fundamental barriers, **flooding and flood** risk issues will need to be considered in the specific location of development;
2. Severn Trent has commented that there may be risks surrounding securing the necessary funding from OFWAT and delivery associated with bringing forward additional **water supply** in the AMP5 funding cycle. The Environment Agency has also identified the need for investment to balance water supply and demand, particularly in Severn Water Resources Zone;
3. **Landscape and ecology impacts** will potentially flow from additional development. The HRA identifies where there are potential impacts on European sites. In general terms, the types of impact are shared with the RSS Phase 2 Revision Preferred Option and are not new impacts. There is no reason to assume that that appropriate avoidance, mitigation or compensation cannot be put in place to address these impacts at the local planning stage. There is potential for **positive and negative impacts on the natural and built environment**, the character of the urban fringe and character of existing settlements. Any negative effects will need to be mitigated, through high quality design and other methods;
4. A number of options would necessitate **Green Belt** to be reviewed. The RSS Objectives and PPG2 provide a framework for these considerations, including the need to provide sustainable development opportunities, and any review of Green Belt will need to take account of both the need to release land and the opportunities to make additional provision;
5. In **transport** terms, there is a desire among policy makers to see sustainable growth patterns achieved through growth in the MUAs. However, this does not translate to a conclusion that it is not possible to provide transport solutions to development outside the MUAs. Transport modelling indicates that the total number and length of journeys differs little between the RSS Preferred Option and the Options generated through this Study. Additional growth will give rise to localised impacts and require action, including infrastructure improvements to mitigate those impacts. The transport implications of some growth options are potentially more significant and the phasing of planned growth in some locations may be dependent on the timing of infrastructure improvements;
6. Adverse effects on **air quality** are projected to increase as a result of the direct and indirect effects of additional medium to high level housing growth (and potentially as a result of lower level of growth). Applications of the AQMA management plans across the region along with policies to address air quality effects in locations such as Cannock Chase may be required to mitigate the effect of development in locations of particular sensitivity;
7. In the context of assessing the impact of additional housing growth on **community and social infrastructure,** whilst no evidence was presented to define the detail of the impact, further work would need to be undertaken at the local level to ascertain where there are likely to be key barriers to delivery and how to overcome them. At this stage, there is no evidence that this is not capable of being mitigated with the right funding platform;
8. The scale of development proposed in the MUAs, (and particularly Black Country and North Staffordshire) is likely to require **significant place-making investment** and remodelling of the urban area. It is unlikely that the private sector can be expected to deliver this above the current RSS Phase 2 Revision Preferred Option without public sector assistance;
9. In economic terms, where options seek to maximise housing growth in areas of strongest **economic** potential, for example in the South East, its overall impact is therefore strongly positive. For the rural areas, the more modest scale of housing will have economic effects;
10. The significant **market impacts and risks** flow from:
    - The identified risk, already present in the RSS Preferred Option, that it simply will not be possible to deliver the increased levels of new building within the MUAs without releasing greenfield sites, notwithstanding identified land capacity. This is not just a product of the economic downturn – it reflects a longer term market concern;

- The risk, in locations in and adjacent to areas with fragile markets (partly flowing from falling population and lower values) that additional supply could harm the vitality and have displacement impacts for both population and developers. At the current time, there appears limited evidence that this cannot be avoided or mitigated through careful control of phasing and mix of development, so that new development complements and adds value to the housing mix in those areas. There is limited evidence that market fragility impacts will exist in other locations which would not otherwise be managed;
- The limits that the private sector believes it has to deliver the major place shaping work involved in major regeneration and, in particular, major New Settlement proposals without significant public sector support. Without dedicated funding and delivery vehicle support, it is difficult to envisage it being possible to bring forward the larger new settlement proposals – although those of the scale indicated by the shortlisted Eco Town locations appear to be less of a risk in that regard;

11. There are **planning and public sector risks**, again focused on the New Settlement proposals, and more generally. In the case of the latter, these focus upon the ability of the public sector to adequately service the levels of growth being sought in terms of planning, coordination, and managing funding;
12. Making additional **rural provision** appears to be capable of being delivered, subject to a reasonable scale as indicated by the options or indeed slightly higher, without giving rise to major impacts or risk of non-delivery. Clearly there are specific planning challenges to address, but these are not fundamental barriers to growth;

7.21 The impacts identified above suggest that the types of impacts and risks that have been considered throughout the process in isolation and then in tandem with each other also need to be considered thematically in order to ascertain the overall picture emerging from the additional levels of growth, particularly as they relate to the RSS Objectives. The outputs from this are set out in Section 8.0.

8.0 RSS and Government Objectives for Housing: A Discussion of Key Issues

Introduction

8.1 The GOWM Brief for this Study required the potential impact of each housing option to be assessed against the RSS key principles and Government's objectives for housing, as set out in PPS3 and the Housing Green Paper.

8.2 This section first summaries the main objectives set out in RSS Phase 2 and the Government documents and refers to RSS Phase 1 objectives. Secondly, there is a summary of the range of opinions that have been aired during the course of this study about how additional housing provision may relate to the various objectives. Unsurprisingly, there is a variety of opinion about the relationship between policy objectives and an increase in housing provision. It is noted that a number of objectives do pull in different directions. In view of the varied opinion, this section discusses in more detail a number of the key issues, for example, whether MUAs can accommodate and deliver additional housing, the implication of urban extensions/green belt release and the ability of the infrastructure to accommodate additional housing. A commentary is set out on several issues, supported by evidence gathered and analysis undertaken during the course of the study. (The background review is summarised in Appendices 3 and 4 and in Volumes 2 - 6).

8.3 The discussion of the various issues identifies broad conclusions which then inform the potential approaches to providing additional housing in the West Midlands that could deliver the range of housing identified in the NHPAU report whilst maintaining key principles of the RSS (see Tender to Consultants, February 2008 contract 17/11/16/1). The potential approaches to providing additional housing are synthesis of various elements of the nine options described above (Section 6.0).

8.4 The impact of the nine housing options on the objectives of the RSS and Government Policy have been assessed and reported on in Appendix 4.

RSS Policy Objectives

8.5 The RSS sets out a number of spatial planning objectives for the Region, at paragraph 3.9 of the draft Phase 2 RSS Preferred Option.

RSS Objectives	
1.	To make MUAs of the West Midlands increasingly attractive places where people want to live, work and invest.(RSS Para. 3.9a. RSS Policies UR1, UR3, CF1, CF2, PA1);
2.	To secure the regeneration of the rural areas of the Region (RSS Para. 3.9b. RSS Policies RR1, RR3, RR2);
3.	To create joined-up multi-centred Regional structures where all areas/centres have distinct roles to play. (RSS Para. 3.9c);
4.	To retain the Green Belt but to allow an adjustment of boundaries, where exceptional circumstances can be demonstrated, either to support urban regeneration or to allow for the most sustainable form of development to deliver the specific housing proposals referred to within the sub-regional implications of the strategy. (RSS Para. 3.9d. RSS Policies CF4, CF5);
5.	To support the cities and towns of the Region to meet their local and sub-regional development needs. (RSS Para. 3.9e. RSS Policies UR3, SR2, UR4);
6.	To support the diversification and modernisation of the Region's economy while ensuring the opportunities for growth are linked to meeting needs and reducing social exclusion. (RSS Para. 3.9f. RSS Policies PA1, UR1);
7.	To ensure the quality of the environment is conserved and enhanced across all parts of the Region. (RSS Para. 3.9g. RSS Policies QE1, QE2, QE4, QE5, QE7);
8.	To improve significantly the Region's transport systems. (RSS Para. 3.9h. RSS Policies UR1, SR2, SR4, T1, T2, T5);
9.	To promote the development of a network of strategic centres across the Region. (RSS Para. 3.9i);
10.	To promote Birmingham as a global city. (RSS Para. 3.9j).

8.6 In addition to these objectives the RSS identifies a number of more specific objectives for Major Urban Areas (MUAs), non MUAs, and, for the Black Country (para 3.10-3.14 of the draft RSS Phase 2 Preferred Option). These objectives share many of the broader objectives set out above, but are included in the assessment for completeness. The full assessment is included at Appendix 4.

8.7 From RSS Phase 1 there are several objectives for the Black Country that focus on urban regeneration (renaissance) issues. The objectives are discussed in detail in the policy appraisal in Appendix 4. The objectives cover:

i) Reversing out migration by accommodating a household development from 2011 in that MUA;

ii) Meeting the housing provision of CF3;

iii) Increasing income levels;

iv) Creating a cohesive society (including improving the socio-economic mix);

v) Transforming the environment of the Black Country.

Government Objectives for Housing

Planning Policy Statement 3: Housing (2006)

8.8 Planning Policy Statement (PPS) 3 identifies (para. 10) the following five key housing policy objectives:

PPS 3 Objectives

a) High quality housing that is well-designed and built to a high standard;

b) A mix of housing, both market and affordable, particularly in terms of tenure and price, to support a wide variety of households in all areas, both urban and rural;

c) A sufficient quantity of housing taking into account need and demand and seeking to improve choice;

d) Housing developments in suitable locations, which offer a good range of community facilities and with good access to jobs, key services and infrastructure;

e) A flexible, responsive supply of land - managed in a way that makes efficient and effective use of land, including re-use of previously-developed land, where appropriate.

8.9 The housing policy objectives in PPS3 are to reflect various Government commitments related to housing:

a) its response to the Barker Review (March 2004) that requires a "step change" in housing delivery (para. 2);

b) its commitment to improving affordability and supply in all communities, including rural (para. 3) and that communities should be inclusive, mixed and sustainable (para. 9);

c) to provide a wide choice of homes including affordable and market housing (para. 9); and,

d) to improve affordability by increasing the supply of housing (para. 9).

'Homes for the future: more affordable, more sustainable - Housing Green Paper' (2007)

8.10 The Green Paper identifies three key challenges:

a) Provide more housing to meet demand - through growth points, eco towns and delivering houses where needed and making use of brownfield land;

b) Create better quality homes, that people want to live in - higher standards in terms of design, environmental impact, local facilities and mixed communities; and,

c) Making houses more affordable.

8.11 The objectives of PPS 3 and the Housing Green Paper reinforce one another. For the purposes of this study the 5 objectives set out in PPS3 have been used to inform the analysis of the options, in Appendix 4.

8.12 There is no consensus of opinion from the stakeholders with whom NLP have engaged on how additional housing aligns with RSS objectives. Table 8.1 below provides different examples (drawing on points made at the Regional Seminars and in sub-regional and other meetings) of how increased housing provision against the objectives can be subject to different (often mutually exclusive but sometimes mutually compatible) conclusions. These illustrate the challenges in arriving at consensus on how housing growth can impact on RSS Objectives. The NLP position on these issues is explored later in this section.

RSS Phase 2 Revision Objective	Examples of range of viewpoints on additional housing provision expressed by stakeholders during this study matched to RSS Objectives		
	Strongly Negative	Neutral	Strongly Positive
To make MUAs of the West Midlands increasingly attractive places where people want to live, work and invest	Additional housing outside the MUAs would increase out-migration of people and jobs.	There is no conclusive evidence that housing provision outside the MUAs causes out-migration or that this in itself would harm urban renaissance and increasing housing in the MUAs will help address this problem.	The focus of growth of the scale of development envisaged by RSS is within the MUAs. Regeneration of the MUAs will be harmed by the affordability problems that afflict housing markets across the region. Increased housing is needed to support regional economic growth which will in turn support urban renaissance.
To secure the regeneration of the rural areas of the Region	Provision of additional housing in rural areas is unsustainable. There is no evidence that rural regeneration will be supported by housing provision	Additional housing provision will have a marginal impact on rural areas.	The Taylor Review provides a strong agenda for additional housing provision in rural areas, and there are no barriers to accommodating it.
To create joined-up multi-centred Regional structures where all areas/centres have distinct roles to play.	Additional housing (particularly new Settlements) will unbalance the regional structure and could harm areas/centres	Additional housing will not impact on the regional structure because the net increase is modest.	Additional housing across a range of locations across and outside the MUAs will help support the vitality and roles of centres.
To retain the Green Belt but to allow an adjustment of boundaries, where exceptional circumstances can be demonstrated, either to support urban regeneration or to allow for the most sustainable form of development to deliver the specific housing proposals referred to within the sub-regional implications of the strategy.	Additional housing provision will have a major impact on the Green Belt and will conflict with sub-regional implications of the strategy, particularly relating to urban renaissance (see MUA above).	In allowing the adjustment of Green Belt boundaries in response to exceptional circumstances, this Objective allows for additional housing if demonstrated through the proper planning process.	The capacity to accommodate growth without requiring Green Belt amendments is greater than originally identified in RSS. The scale of Green Belt amendments will not be significant in a regional context and can be accommodated in the right locations, especially those that are sustainable.
To support the cities and towns of the Region to meet their local and sub-regional development needs.	Needs expressed through projections are a reflection of past policy. Additional housing in many locations cannot be accommodated without having local impacts some of which are considered to be unacceptable.	It is difficult to quantify the development needs of towns and cities.	Additional housing is essential to address the household growth in many towns that the RSS Preferred Option does not adequately provide for.
To support the diversification and modernisation of the Region's economy while ensuring the opportunities for growth are linked to meeting needs and reducing social exclusion	No additional housing is needed to support the region's economy and to provide outside the MUA would harm achievement of urban regeneration and tackling social exclusion in the MUAs.	The link between housing and the economy is unproven.	The RSS is not aligned with the RES. A lack of housing in the region is harming the key economic sectors that the region will need to secure its future in a global economy. This is accentuated in certain parts of the region, particularly the south east.

RSS Phase 2 Revision Objective	Examples of range of viewpoints on additional housing provision expressed by stakeholders during this study matched to RSS Objectives		
	Strongly Negative	Neutral	Strongly Positive
To ensure the quality of the environment is conserved and enhanced across all parts of the Region.	Additional housing will necessitate significant greenfield development and will harm the environment.	Although development in any location has an impact, there are sufficient locations in the region capable of accommodating further development without damaging the quality of environment.	Housing developments if designed and built to a high standard can make positive contributions to the environment of the region. Urban extensions and new settlements, properly planned, can set new standards for embedding environmental enhancement within living environments.
To improve significantly the Region's transport systems.	Additional growth will damage an already congested transport system.	Additional growth will give rise to limited net impacts - congested parts of the system will remain congested. Also, the additional housing is in part related to existing population forming more households. The impacts are not significant.	Additional growth can be a stimulus for increasing investment in the transport system, adding critical masses of activity to support the viability of new/improved services.
To promote Birmingham as a global city	Additional housing growth, particularly if outside the MUAs will promote out-migration and damage Birmingham.	Whatever approach the RSS takes to additional housing growth, it will have a limited impact on Birmingham's ability to be a global city	Birmingham and the Region's economy are fundamentally interlinked and are being held back by a lack of housing.

Table 8.1: Example Views on Options against RSS Objectives
Source: NLP Analysis of Stakeholder Meetings/Regional Seminars

8.13 Given the wide variations in views expressed by stakeholders about the impact of additional housing growth (especially at the middle and upper end of the NHPAU supply range), the evidence gathered as part of this study (in particular see Appendix 3 and 4) and the lack of an assessment framework in the RSS Phase 2, the remainder of this section discusses several key issues that may influence the decision about how to provide additional housing numbers, over and above the RSS Phase 2 preferred Options.

8.14 The themes draw on the objectives of the Phase 2 RSS and PPS3/Housing Green Paper that are particularly relevant to housing provision, namely:

i) The deliverability of a variety of housing in both affordable and market sectors, taking into account the current economic downturn and the impact on timescales for delivering additional houses;

ii) The implications for the MUAs and urban renaissance;

iii) New settlements;

iv) The impact on the Green Belt;

v) Affordable housing supply;

vi) The impact on transport and infrastructure;

vii) The impacts on economic growth; and

viii) The effect on rural renaissance.

1. Deliverability

Background: Government policy expects a step change in the delivery of houses. However, what are the implications of the current economic downturn and can the industry deliver increased build rates in the future? What are the implications for providing additional houses in the West Midlands?

8.15 The Calcutt Review[6] begins its report by stating that:

> *"England's house building industry is in shape to deliver the homes we need for future generations and is capable of delivering 240,000 homes a year by 2016. Our challenge is to deliver a supply of housing where it is needed, for those who need it, at a price which is affordable for the homebuyer, which is commercially viable and which contributes to our ambitious zero carbon targets"*

8.16 Clearly, since the Calcutt Report there have been significant changes that have affected the volume house building industry in particular. It is difficult to have the same degree of confidence now in the industry's ability to increase housing supply within this timeframe when output is falling and there is reduced capacity in terms of labour.

Impact on Trajectories

8.17 In this context, the trajectory in the Housing Background Paper to RSS is superseded by events and does not demonstrate the basis how the industry can deliver the Preferred Option. This Study illustrates below how the downturn impacts on build rates and the consequential need to increase rates thereafter to deliver the overall targets for the RSS Phase 2 Revision Preferred Option and the NHPAU supply range.

8.18 Table 8.2 sets out indicative build rates. The base scenario assumes the downturn results in build rates fall to 50% of the 2006/7 average (which is itself lower than the peak), before gradually increasing to 70% in 2010/11 and 90% in 2011/12. The broad scenario was discussed and agreed with a number of developers as a reasonable basis.

Year	Rate of Development (Net)	Market Downturn Assumptions
2006/7	16,300	Based on NHPAU
2007/8	14,670	90% of 2006/7 levels
2008/9	8,150	50% of 2006/7 levels
2009/10	8,150	50% of 2006/7 levels
2010/11	11,410	70% of 2006/7 levels
2011/12	14,670	90% of 2006/7 levels
2012/13	17,930	110% of 2006/7 levels

Table 8.2: Indicative Build Rates to 2012
Source: NHPAU for 2006-7 / NLP Analysis

8.19 These assumed rates result in significant shortfalls in delivering the RSS Phase Preferred Options new build requirements and NHPAU proposed supply range levels for 2007-2012. A potential trajectory for supply has been developed that deals with this 'backlog' of new build units. The overall net total to 2026 is still achieved.

[6] The Calcutt Review of Housebuilding Delivery (2007) An independent report commissioned by Government

8.20 The implications for the delivery of the RSS and the upper and lower NHPAU supply range is shown in Figure 8.1. The original RSS trajectory and the implied trajectory for the NHPAU June 2008 report are shown.

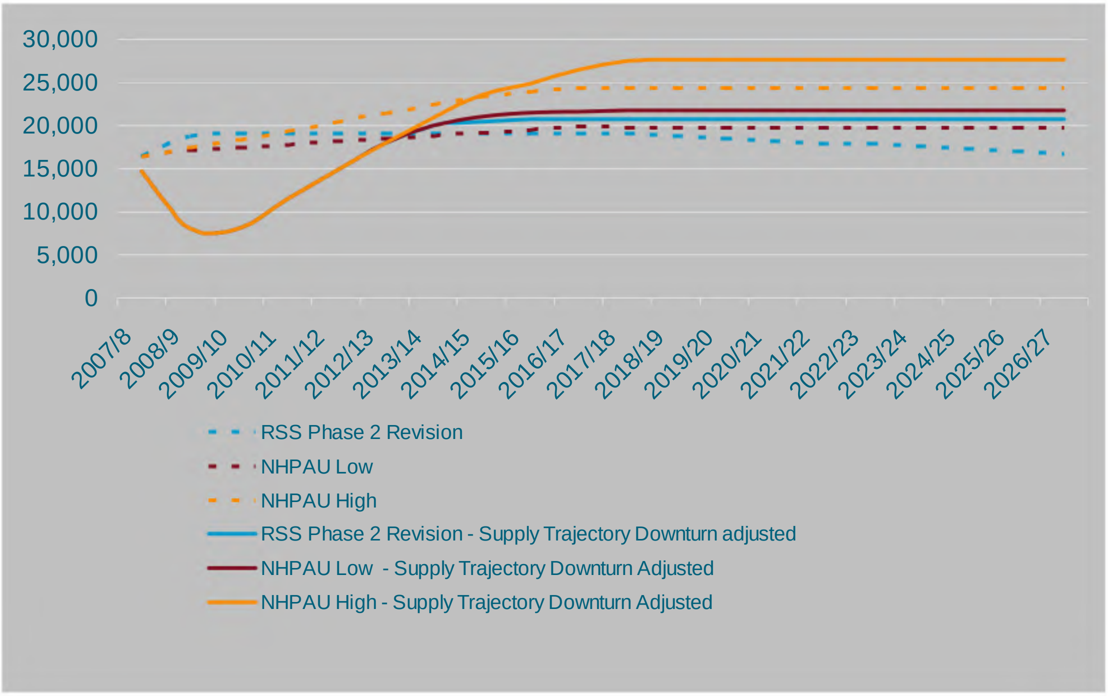


Figure 8.1: Supply Trajectories
Source: WMRA/NHPAU/NLP Analysis

8.21 The overall total RSS housing supply could be met with higher annual rates from 2014/15 (just under 21,000 instead of the previously envisaged reduction). To meet the NHPAU supply range would require increased rates post 2014, with the NHPAU ‘low’ supply range increasing to 21,800 units p.a. by 2017/18, and the upper end increasing to about 27,700 by 2018/19. Delivering units at the mid point of the NHPAU supply range would involve about 24,750 units p.a. from about 2016.

8.22 In looking at the rates required to achieve the RSS or NHPAU trajectories outlined above, it is necessary to consider:

i) Can the industry recover to deliver the required rate of new house building set out in RSS Phase 2 Preferred Option?

ii) What is the potential for the industry to exceed these rates and deliver within the NHPAU supply range?

(i) Can the industry deliver the required rate of new house building set out in RSS Phase 2 Preferred Option?

8.23 The industry view is that the rate of development can be increased to achieve the RSS Phase 2 Preferred Option, provided future economic recovery is matched by the release of suitable land, i.e. land capable of being developed.

8.24 To deliver this rate of increase there will be a marked step up in rates of output, in some years greater than that achieved over the past fifteen years. In considering the realism of this, it is important to distinguish between:

- Barriers to achieving an increase in rates, following the downturn, back to those being experienced in recent years; and,

- Barriers to achieving an increase beyond longstanding historic rates.

8.25 The constraints on current supply are essentially macro-economic and fiscal rather than structural. However, land release will need to reflect future reductions in output of apartments. Without the apartments' boom developers suggest that land release through the planning system would have constrained rates of development to below historic averages.

8.26 Assuming the downturn and market restrictions reverse in 2010/11, there is no fundamental reason why rates will not increase, at least to the long term average. Fluctuations since 1990 show the industry is capable of increasing rates rapidly (see Figure 8.2). Most regions have seen increased rates by 16-36% over a 2-3 year period. London achieved an increase of 73% (equating to over 10,000 units) over the three years to 2004/5. Clearly, the challenge would be to sustain these increases.

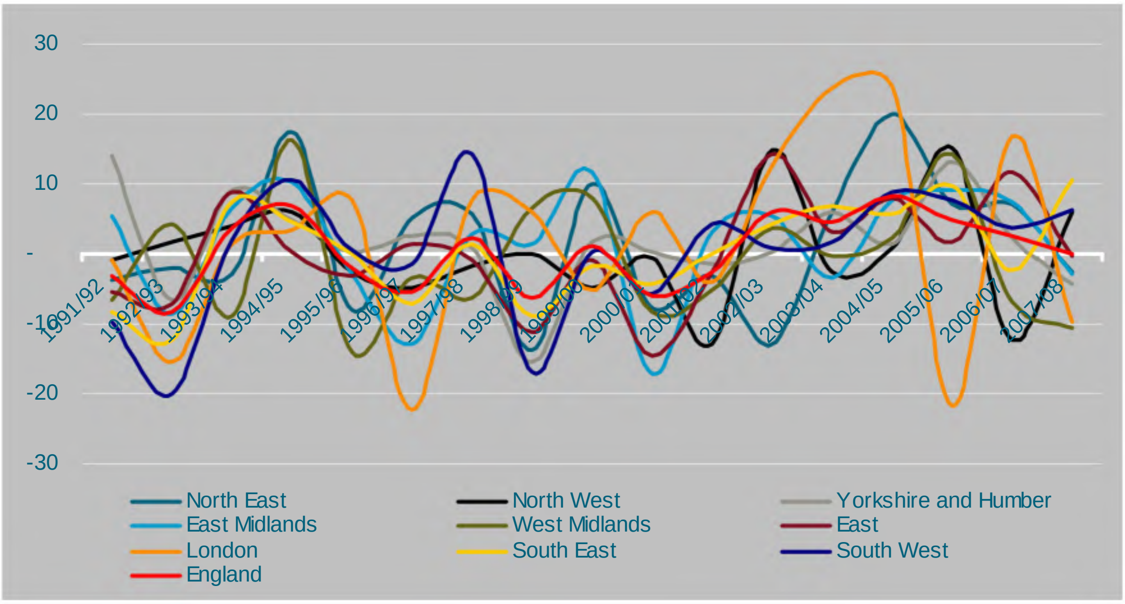


Figure 8.2: Annual Change in Build Rates by Region

Source: CLG/NLP

(ii) What is the potential for the industry to exceed these rates and deliver within the NHPAU supply range?

8.27 Assuming it is highly unlikely that rates will reach the NHPAU supply range over the next few years, could rates subsequently increase beyond the longstanding average to deliver the NHPAU supply range in aggregate terms by 2026?

8.28 The risk of non-delivery will increase the higher the rate of supply required and also be affected by:

a) The economic downturn continuing beyond 2010;

b) The industry capacity does not fully recover, particularly in terms of skills lost during the downturn;

c) Land release through Core Strategies and SHLAAs does not properly reflect key deliverability challenges;

d) Funding for social housing is not maintained;

e) The provision of supporting infrastructure is not forthcoming.

8.29 Furthermore, historic rates tend to suggest fluctuations and, for example, if 27,000 units p.a. are required in the latter half of RSS to deliver the upper end of the Supply range, an 'under provision' in one year (e.g. 24,000) will require rates of over 30,000 the next year. Fluctuations are not inconceivable and the upper levels would represent a level of output that has not been seen in the West Midlands during the modern era.

8.30 Discussions with stakeholders during the study identified a number of concerns that are considered by developers to influence delivery:

i) a need for at least a 5 year land supply to be released to enable development to proceed;

ii) A significant component of recent supply within the MUAs has been apartments; the market for this has collapsed and will not return within the lifetime of RSS;

iii) the land use strategy envisaged by the RSS Phase 2 Preferred Option is not deliverable, principally because of the concentration of supply in the MUAs alongside an assumption that policy will seek to focus this on brownfield sites. Sufficient land of the right type (and location) has to be released;

iv) land that is released needs to be genuinely capable of development taking account of sales values and the costs of development. If costs per unit are greater than sales values, development will not proceed without public sector funding;

v) there is a need to locate and phase the release of land in local markets in a way that increases the rate of development within the limits capable within each market area. There is a concern that SHLAAs are not always cognisant of this and other market factors in identifying and appraising development sites;

vi) a major barrier to delivery will be the failure to achieve the appropriate balance between the need to deliver development and the costs of meeting other policy targets for, say, reducing carbon footprints or affordable housing. For example, a lower percentage of affordable housing on a larger quantum of housing could deliver the same or more units than applying a higher rate to a lower level of supply;

vii) there is a market preference for greenfield rather than brownfield sites, and beyond this, that a larger number of small sites are more developable than a small number of large sites - this is a matter for SHLAAs to address. This reflects the findings of the OFT analysis which shows how different forms of development have different cash flow implications and hence different requirements for capital investment;

viii) developability challenges exist in a number of locations within the region, and areas with higher values present the best prospect for increasing the number of dwellings; and

ix) developers will engage in the types of partnership and delivery vehicles that Calcutt advocates, but these need to be structured, have a risk-reward balance, and be subject to governance arrangements that facilitate development.

8.31 Looking at the medium to long term, the conclusions of the Calcutt Review and the Office of Fair Trading (OFT) must be regarded as valid, especially that "land is the key to delivery". Even if the industry ultimately emerges from its current challenges in a different shape or form, including the collapse of some key players, the underlying commercial drivers of house building (in terms of demand and the need to translate any land banks into cash) are so high there must be a strong prospect of an industry re-emerging, potentially stronger and with new business models - the adequate supply of land is likely to make it more likely that small-medium builders will also emerge stronger. There is a key challenge around the provision of skills that may be lost during the downturn and this will need to be a focus of both Government and the industry.

8.32 There is no evidence that the housebuilding industry cannot increase delivery subject to the key points of:

- sufficient land being made available that is attractive to developers;
- the industry being able to adapt its business models for engaging with the public sector;

- mechanisms being in place for major infrastructure provision for larger schemes;
- skills gaps being filled as the industry recovers from the downturn.

8.33 However, the economic downturn means the trajectory for housing supply will be backloaded in the RSS period, and higher levels of provision will carry greater risk. There is no in-principal reason why it will not be possible to achieve increased supply within the NHPAU supply range. Given the market downturn, a rate towards the top of the NHPAU supply range will still be a significant challenge, whereas one at the mid-point might be considered a more realistic target.

2. Major Urban Areas and Urban Renaissance

Background: A major policy of the RSS Phase 2 concerns the focus on MUAs as the preferred location for development, including housing and the expectation that this will result in regeneration; an urban renaissance. In view of this can the MUAs provide increased housing supply and are there differences between the MUA's that indicate different approaches should be adopted?

8.34 The urban renaissance challenge is identified by RSS (paragraph 3.5) as *"… developing the MUAs in such a way that they can increasingly meet more of their own economic and social needs in order to counter the unsustainable outward movement of people and jobs facilitated by previous strategies"*. This challenge partly assumes that there is a causal or contributory link between previous strategies and the outward flows of people and jobs from the MUAs and that an alternative strategy will be able to counter this. This is widely acknowledged as a key driver of the RSS approach to housing.

8.35 Increasing housing land supply and urban renaissance are presented by a number of stakeholders in the region almost as competing forces, with greater importance being attached to the need for urban renaissance.

8.36 A separate issue - outside this study - concerns the precise definition of 'urban renaissance' and the need to understand how levels of housing growth, alongside economic, social, cultural, and other developments contribute to this within a wider regional framework.

8.37 No evidence has been provided that demonstrates the 46:54 ratio of MUA/non-MUA provision in the Preferred Option is 'optimum' for achieving urban renaissance objectives or that a ratio of, say, 43:57 is beyond a tipping point that would cause demonstrable harm. From a regional perspective the shift in terms of the focus on urban renaissance for most of the options discussed elsewhere in this report could be regarded as modest.

8.38 To examine some of the relationships between increased housing supply and the principle of urban renaissance, there are a number of questions:

(i) Will it be possible to deliver an increased housing supply by focusing additional growth principally within the MUAs?

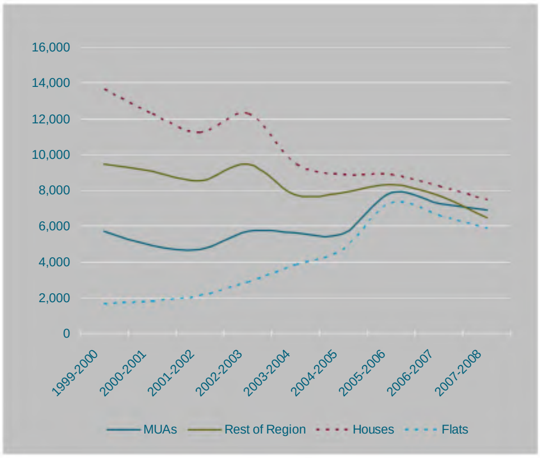
8.39 The increase in supply within the MUAs since 2000, both overall and as a proportion of the total supply in the region, has been in part attributed by stakeholders to:

- the impact of PPG3 in 2001 that emphasised the sequential approach, required increased density and restricted supply of greenfield housing is asserted to have forced developers to consider brownfield developments; and
- the recognition by the development sector of a market for higher density schemes, often involving apartments, in town and city centres, which was fuelled by a previously unmet demand for town and city-centre living and, arguably, by the investors/speculator market.

8.40 Evidence is not clear on the relationship between the factors. What does seem clear (as illustrated by Figure 8.3a which uses CLG data that is not consistent in terms of total completions with that collated by WMRA) is that the increase in development within the MUAs has been accompanied by:

- a reduction in the number of dwellings developed in the rest of the region (but only a correlation coefficient[7] value of -0.44);
- a significant increase in the number of flats/apartments (a coefficient value of 0.9); and
- a reduction in the number of houses built (a coefficient value of -0.62).

8.41 So, there is a much stronger statistical correlation between increased supply in the MUAs and the increased rate of apartments than with a reduction in supply outside the MUA.



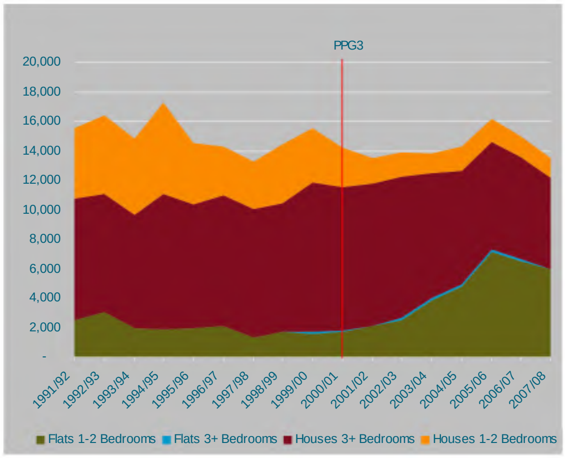


Figure 8.3a (left): Housing Supply by Type and Part of Region 1999 - 2007-2008
Figure 8.3b (right): Housing Supply by Type and Size 1991/92 - 2007/8
Source: CLG/NLP Analysis

8.42 Figure 8.3b shows that the new-build apartments are almost wholly 2 bedrooms or less, and the rate of completions for 3+ bedroom houses has decreased by almost 40% since 1999/00. The acceleration in the number of flats being developed commenced in 2002/03 (approximately one year after PPG3 was launched) and peaked in 2005/6. The data in Figure 8.4 shows the increase in supply of apartments across the region, equating to 44% of output over the past five years (up from its long term average back to 1990 of circa 13%). In urban authorities the rate has been even higher (well over 50%).

8.43 Analysis and stakeholder engagement indicates that there are major barriers to increasing housing supply within some of the MUAs:

1. A number of the local authorities indicated that the physical capacity of the urban areas had been reached in terms of suitable/viable sites, and the focus on regeneration (that can only be achieved by mixed development). To identify additional housing land would mean reaching different policy conclusions on the balance of land for, say, housing and employment, with consequences for regeneration projects. For example, the RSS Phase 1 looks to achieve housing and economic growth along with improvements to the environment;
2. Private sector representatives indicated that there are major constraints to increasing the rate of development within the MUAs even at the rate proposed by the RSS Phase 2 Preferred Option given the housing market, land values, and types of 'abnormal' costs involved in development in many parts of the MUA, pointing to the significant gap that already exists

[7] A correlation co-efficient measures the relationship between two sets of variables and the measurements or values are on a scale of +1 to -1. A correlation coefficient of +1 means a very strong/positive relationship whereas a figure of -1 indicates a strong negative relationship. A figure of 0 indicates no statistical relationship

between the rates of development achieved in the MUA authorities (excluding Stoke and Solihull) over recent years and the increase that will be need to achieve what is proposed in the Preferred Option. The decline in values at the current time accentuates this challenge; and

3. Developers indicate the recent increased supply of apartments was due to particular circumstances which will not return within the lifetime of RSS. The rate of apartment construction has been declining since 2005/6, and output in the near future is likely to be secured simply from completion of schemes currently under construction. Developers do not consider the level of MUA output previously achieved can be secured without apartments and that the current RSS rates for a number of the MUAs, particularly the Black Country, are not deliverable.

8.44 In North Staffordshire the main issue concerns the fragile housing market and phasing may be required to provide time for emerging regeneration. The credit crunch may impact upon the period of time required. For the North Staffordshire MUA, provisional independent analysis for the local authorities and preliminary SHLAA results, reveal significant physical capacity for development which, theoretically, could provide significantly more housing than indicated by RSS. A high level trajectory analysis indicates that there is scope to phase delivery to avoid prejudicing the regeneration 'breathing space' that is required. Land is available; the issues are whether it could be developed and with what impacts on the 'fragile' housing market. In this regard:

i) Stoke on Trent has recently delivered more housing than is currently proposed by RSS Phase 2. Past performance indicates there can be some confidence that over the long-term, it would be possible to increase rates of development in RSS;

ii) Newcastle under Lyme has physical capacity for additional growth beyond RSS Phase 2 allocation. Also CLG demographic projections indicate that household growth exceeds the RSS Phase 2 rate. Additional housing growth could support current economic development objectives;

iii) Adverse effects could arise from further growth in North Staffordshire on regeneration objectives and fragile markets. It is unlikely that additional growth in the MUA up to circa 6,000 units would have an impact, subject to:

   - Phasing being carefully managed, to fit with area-regeneration and economic development - avoiding supply that prejudices the delivery of viable regeneration projects;
   - Increasing supply in a way that is consistent with a cohesive land use strategy for the area, which is likely to mean a mix of brownfield and greenfield sites.

8.45 On the basis of this analysis, there is a risk that in increasing beyond RSS Phase 2 levels the required housing provision within the MUAs will not be achieved. Even achieving RSS Phase 2 may be a challenge. Accordingly, what is the implication of allocating development outside the MUAs? Either urban extensions or more remotely such as new settlements? This is discussed below.

3. Urban Expansion and impact on Urban Renaissance

Background: If the MUAs cannot accommodate some or all of the additional housing provision, what other approaches can be identified? Urban expansion and/or new settlements on the edge of/beyond the MUAs are options for providing additional housing but what are the implications for providing additional residential development in the form of urban expansion and/or new settlements adjacent/beyond the MUA's? Would increased housing supply outside the Metropolitan authorities/MUA harm the prospects for achieving (let alone exceeding) the RSS Phase 2's Preferred Option rate of development within the MUA?

8.46 A number of stakeholders – primarily private sector representatives - consulted indicate that the shortfall in deliverable sites within the urban areas and the downturn in supply of apartments meant that it would be necessary for greenfield release (urban extensions) even to deliver the RSS Preferred Option.

8.47 Comparing the RSS Phase 2 housing provision with area-based household projections and past build rates, shows the proposed housing distribution does reduce supply outside the MUAs and increase it within them (with due recognition of the role of other settlements, e.g. SSDs). The Objectives text within RSS confirm this approach. It is argued that increasing housing provision outside the MUAs would harm the urban renaissance.

8.48 A strategy of placing all development outside MUAs would harm urban renaissance. Equally, a converse strategy would result in significant underprovision against housing need and fail to address other objectives of the RSS, e.g. SSDs and rural areas. The question is about balance. The RSS Phase 2 Revision ratio between MUA and non-MUA is approximately 46:54. NLP is not aware of evidence that explicitly substantiates or quantifies the regional threshold or "tipping point" at which the balance between MUA/non-MUA allocations becomes incompatible with the achievement of urban renaissance.

8.49 In the absence of region-wide evidence based on thorough analysis there is a risk that this issue is assessed purely locally, and using evidence that can be micro rather than macro in its focus. This is particularly important in considering this issue in parts of the region where there may be specific localised factors, notably those in North Staffordshire where there is a demonstrable fragility in the market and economy, and evidence through the HMR Pathfinder programme (and indeed the Scotia Road decision) that gives it due weight.

8.50 There is some evidence, for example from studies on low housing demand areas, that where the level of housing supply exceeds overall levels of household growth, this can be harmful to the vitality of existing markets especially to a local market area experiencing fragile demand. However, evidence is not available as part of this study to allow this conclusion to be applied by rote across the region, or to confirm that the current level of provision in RSS is at the 'tipping point' or threshold beyond which this impact will occur. If evidence is available to confirm this, it should be presented to the RSS process.

Would increased housing supply outside the MUA increase outward movement of people and jobs?

8.51 Although population has moved from the Metropolitan authorities to the shires, there is limited firm evidence that past patterns of development outside the MUAs have a *causal* relationship with this trend or that a restriction of development outwith the MUAs will prevent this movement from continuing.

8.52 Indeed, a correlation coefficient analysis of data (2001/2, onwards) compares build rates - inside and outside the MUAs - with net-migration flows, into and out the MUAs. Figures 8.4a/b shows a stronger statistical relationship between increased net out-migration from the MUAs and increased build rates *within* the MUAs (a coefficient value of 0.9 in terms of both absolute figures and the change in both figures year to year) than the correlation with build rates *outside* the MUAs (a coefficient value of just 0.36).

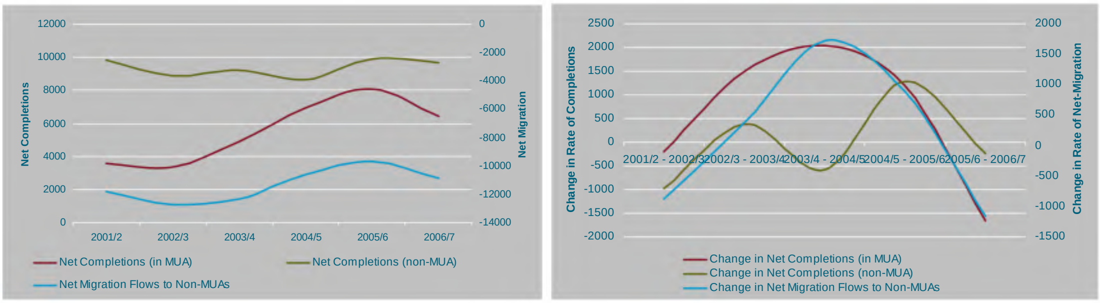


Figure 8.4a (left): Build Rates in and outside MUAs and Net Migration from MUAs to non-MUAs 2001 – 2007

Figure 8.4b (right) Annual Change in Build Rates in and outside MUAs and Net Migration from MUAs to non-MUAs 01-07

Source: WMRA/NHSCR

8.53 The RSS process may benefit from more analysis to further test this issue. Whilst a restriction in supply outside the MUAs will undoubtedly minimise the charge of ‘facilitating’ the outward movement, there is clearly a trade-off with the increased risk that such an approach will result in:

- Overall housing supply being below the level of household growth over the lifetime of the RSS;
- Housing not being delivered at the level set even by RSS due to increased market delivery risks in some parts of the MUAs; and
- There being an ‘undersupply’ of housing in local markets outside the MUA with consequential impacts on affordability and economic development.

8.54 The local dimension has to be considered. For example:

- the analysis undertaken by this Study shows clear migration and travel to work connections between Stoke and Newcastle under Lyme and contiguous authorities, but a very limited relationship with the Metropolitan MUAs and associated ‘catchment’. The wider North Staffordshire area is relatively contained and therefore it is difficult to argue that additional provision beyond this sub-regional market will adversely impact upon it;
- The Black Country was identified as more vulnerable than other parts of the Metropolitan MUA, and there was a perception that additional housing provision in say, Telford or on its periphery, could have an adverse impact by encouraging out-migration *if* the type of housing competed with provision that would otherwise be made in the Black Country MUA. The specific evidence for this is unclear but the risks of this can be minimised through appropriate phasing and controlling mix.

8.55 In general terms, the movement of population out from the MUA is at least as likely to be influenced by wider quality of life factors including education, environment, crime and anti-social behaviour, public services and amenities.

Will releasing additional land for housing result in cherry picking of the best sites by developers?

8.56 A view shared by many stakeholders is that increasing the supply of land, particularly in more attractive market areas, will simply allow housebuilders to ‘cherry pick’ the best sites, leaving the more difficult sites and harming urban renaissance and overall, not increasing housing supply (especially Greenfield).

8.57 Any response to this question will depend on the position with regard to the dynamic and relationship between:

- the perceived level of housing need in the region for the period to 2026;
- the approach to land supply; and
- the capability and future response of the house-building industry to different levels of land supply.

8.58 The increase in housing in the MUAs over the past several years is used as an example by both sides of the argument:

- some argue the increase in development within the MUAs was a function of the policy restriction of PPG3 which limited greenfield release through the sequential approach;
- others argue that the increase in development within the MUAs (principally of apartments) was a function of the market demand for apartments reaching the point where values made such developments viable (and also demonstrates the ability of the industry to respond to changing markets and with new products). The increase in values was partly a function of limited supply of houses overall and the trade-off for this increase was unmet housing need.

8.59 There are, in short, four basic scenarios that could play out, as illustrated in Figure 8.5 below.

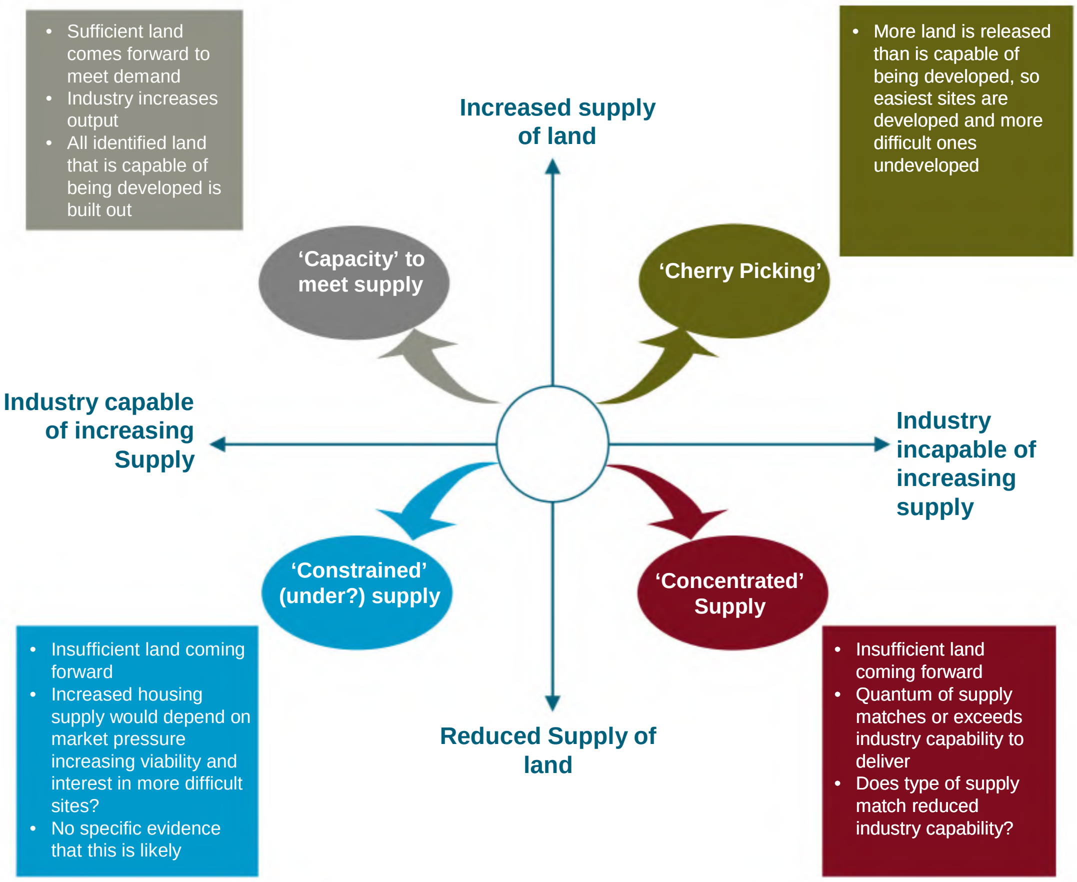


Figure 8.5: Different Land Supply/Industry Capacity Scenarios
Source: NLP Analysis

8.60 Of course, restricting supply outside the MUAs would limit the opportunity to 'facilitate' such a trend. Also, if housing land supply *exceeded* the amount of housing required and/or the capacity of the industry to deliver, then such cherry picking is more likely. But the evidence of this is limited. Developers indicate that, generally, 'difficult' sites do not get developed because they are not viable for development at that point in time and that restricting the supply of sites outwith the MUAs will not change the underlying cash flow assumptions for urban sites 20 or more miles away. The OFT report and Calcutt Review show how the economics of brownfield development differ from other sites. An increase in output would therefore be the result of end sales-values increasing (perhaps due to price rises flowing from limited supply). Developers indicate that that they do not cherry pick the best sites - they simply develop what is available and viable to develop.

4. New Settlements

Background: If consideration is to be given to housing development beyond the MUA, in the form of urban extensions, could new settlements have a role and are there further impacts on the MUA?

8.61 As a result of the housing growth agenda and spurred on by the Eco Towns initiative, new settlements have emerged as a form of development that should be considered. Stakeholder feedback and evidence in the WMRA background papers indicates that new settlements were not fully considered as part of the process of developing RSS Phase 2 Revision.

8.62 New settlements are not a homogenous concept. The 21 New Towns designated in the post-war period had a wide range of objectives (overspill, regeneration etc) and many different characteristics (expanded towns, wholly new settlements). In terms of size and broad form, it is possible to identify three broad types of new settlement, based on a review of what is being promoted through the planning system, the concepts flowing from the eco-town initiative, and historical precedents,

	'Linked'	'Freestanding'	'Sub-Regional'
Size	c. 5,000-10,000 homes	c. 15-25,000 homes	c. 40,000 + homes
Examples (proposals or existing settlements)	Northstowe/ Ebbsfleet Valley	Cramlington	Many of the post-war New Towns
Timescales	c15-20 years	20 + years	40 + years
Key Characteristics	Located within catchment of larger town or city Connected to existing larger settlement with excellent public transport (e.g. guided bus or frequent rail link) An alternative to urban extensions where such development would equate to 'sprawl' Self-sufficient in terms of 'local' social and community infrastructure (e.g. primary and secondary education and local retail) Provision of employment opportunities but focused on creating opportunities within wider network of linked settlements. Housing market likely to be linked to that of its larger neighbour.	Designed to be more self contained in terms of employment. Connected to sub-regional and regional centres by rail Self-sufficient in terms of principal social and community infrastructure (e.g. further education and retail). Has its own local housing market, but subject to broader sub-regional dynamics.	Performs a sub-regional and in some cases regional role in terms of employment. Self-sufficient for retail and social and community infrastructure Has its own sub-regional housing market.

Table 8.3: New Settlement Typologies
Source: NLP

8.63 In general terms, the options identified in this Study have considered 'Linked' and 'Freestanding' types of new settlement, principally because the options are driven by exploring options for increased housing supply within the period to 2026. However, given the prospects of growth beyond 2026[8] there may be potential for a new settlement(s) to continue to develop, but this is not a matter considered further in this study.

8.64 By testing a number of options (ranging from an Eco Town of 5,000 units through to a new settlement of 20,000 units) the assessment has identified that there are a number of locations in the region where, in principle, there could be potential for a new settlement. These broad locations include areas:

1. along rail corridors connecting to the main conurbation, focused around existing stations. Some of these rail lines might necessitate capacity improvements, but others might not;
2. where a new settlement development could take place without involving development of land that has any significant landscape or ecological designation;
3. where existing previously-developed land or existing small settlements that would be expanded;
4. within the Green Belt and areas beyond it;
5. close to existing MUAs and SSDs and areas more distant; and
6. within proximity of existing road network, although generally requiring significant new access works, subject to the scale of development.

8.65 Based on past trends - including the recent eco-town proposals - opposition is likely to any new settlement proposal. New settlements will have the potential for wide range of impacts, some of which will be regarded as adverse. These include impacts associated with landscape and traffic, and there may also be major economic development implications. Depending on location, they might also involve review of Green Belt. These impacts will need to be considered in light of the policy tests defined in Government guidance about deliverability and, importantly, against the alternatives which *might* be:

- Development in alternative locations more or less appropriate for new housing.
- Lower levels of development, either overall or in a particular part of the region, which may be regarded as failing to meet defined needs for additional housing.

8.66 As with any planning issue, there will be a requirement for 'trade-offs' between different factors. Based on the analysis of the different options, it is possible to draw a number of conclusions about new settlements as a form of development, and these are summarised in Table 8.4 below:

[8] Eurostat: Statistics in focus 72/2008 which identified the possible implications of projected potential population growth in the UK up to 2060.

	'Linked'	'Freestanding'
Potential advantages as an option for additional housing provision	1. Potential alternative to urban extensions where existing settlements have a 'natural' limit or finite capacity to extend. 2. Opportunity in some cases to redevelop existing 'brownfield' sites outside existing urban areas 3. Experience of eco towns and in other regions suggests can be private sector-led (although no major enthusiasm from developers consulted in West Midlands region), albeit with public sector investment if required. 4. Potential to build on existing local markets	1. Capacity to provide for region's housing and employment needs over medium to long term, where capacity of existing settlements and their hinterlands to accommodate further growth is limited. 2. Critical mass to provide for infrastructure and maximise self-containment (reducing need to travel) 3. Assuming a suitable location was identified, provides a basis for planning to meet long term housing need.
Potential Barriers to Growth	May not always have critical mass of development (and hence value) to fund level of infrastructure provision required particularly in highways and public transport and infrastructure. May not be suitable sites or locations within areas of search in some districts. Experience in other regions suggests local planning authorities (particularly smaller authorities) can find it difficult to make the case for and indeed resource the technical work required for this form of development.	Need for major upfront infrastructure, requiring significant capital investment, and public sector underwriting. Likely to require some form of new delivery vehicle and/or long term public sector commitment. Higher market capacity and displacement risks associated with creating new local markets for both housing and economic activity, particularly if close to existing settlements. Will take a longer period of time for a degree of 'self-sufficiency' to develop in terms of markets, services and employment which in the interim could impact on well being and services in nearby locations. Limited support for them from volume house builders as private-sector led ventures. This largely reflects the business models and financial structuring of many volume house builders, which militate against forms of development requiring major upfront capital investment. There are significant planning risks, including the extent to which it would be possible for Local Planning Authorities to deliver them. Likely to have a build period that extends beyond the RSS period in order to reach their potential.

Table 8.4: New Settlement Summary Appraisal

Source: NLP Analysis

8.67 Drawing on the above, it is possible to conclude that:

- So-called 'linked' new settlements could be regarded as an equally valid alternative to urban extensions in locations where development outside the existing urban area is required to meet housing requirements defined under Policy CF3 and it is for local planning authorities to define the precise location for these in their LDFs;
- 'Freestanding' new settlements could have a potential role in meeting housing needs in the region, but are likely have a greater impacts and be of more than local significance. They are also likely to have major delivery barriers that will only be capable of being overcome with major government support either directly or through new delivery vehicles.

5. Green Belt and Additional Housing Development

8.68 Green Belt is a long standing planning concept and has attracted much debate about its effect on towns and cities. This report does not review this broad (and interesting) debate but concentrates on the implications for the West Midlands and whether Green Belt release will have adverse effects.

8.69 The evidence about land availability is patchy especially due to the variable progress with SHLAAS. Until these are all undertaken - and they have subjected the potential sites to a thorough testing – it will not be possible to be definitive about the need for the release of greenfield sites. However, the stated position of the WMRA in the Housing Background Paper was that there was identified capacity for 340,000 new homes and that one of the key reasons for the approach adopted in the Preferred Option is to balance the need for growth against the implication that any growth beyond this figure would need to be met on green field sites, including outside the MUAs. This is the basis for the current 'brown:green' ratio identified in the SA of 73:27. Accordingly it is highly likely that Green Belt land will be required, especially if higher growth figures are adopted.

8.70 If urban extensions on the fringe of the West Midlands conurbation and/or some major towns are contemplated, there is likely to be an impact on the Green Belt, and the potential locations are flagged up in Table 7.2.

8.71 Whilst the RSS Phase 2 takes a position of promoting development within existing settlements it also recognises that release of Green Belt land may be necessary in some locations, subject to the presence of 'very special circumstances' where urban regeneration is supported or the most sustainable form of development is achieved (see 3.9d).

8.72 As defined in PPG2, Green Belt designation, has five purposes, including preventing urban sprawl and the coalescence of urban areas. Paragraph 1.6 of PPG2 sets out the positive role Green Belt plays including, inter alia, providing opportunities for access to open countryside, outdoor sport and recreation, and landscape retention and enhancement.

8.73 Factors to consider in terms of the impact of increased housing provision and indeed what this means for Green Belt, include:

- The extent to which deliverability of defined housing numbers is important vs the need to restrict greenfield release during the different phases of RSS. It may be that phasing will allow greenfield release at a time when the market is restricting supply of more challenging sites (due to low values) but that this can then increase as the market recovers;
- There may be scope for tandem release and controlled phasing mechanisms where the release of sites is dependent on progress with brownfield developments, potentially as part of wider delivery vehicles;
- The extent to which Green Belt releases as a means of delivering urban extensions (focusing growth adjacent to within the MUAs in line with the RSS principle) may be preferable to releasing additional land beyond the Green Belt, which may be 'easier' in planning terms, but less sustainable in terms of reducing the length of journeys or focusing development on the MUAs.

8.74 In deciding which of the options or elements thereof might have a role to play in the future shape of RSS, in the context of impact on Green Belt, particularly in relation to the MUAs (and particularly Birmingham and Solihull), the wider implications of constraining settlement growth inside and beyond the Green Belt needs to be considered. The following issues arise.

Would failure to release Green Belt land increase the likelihood either of under-supply of housing and/or result in movement of population to settlements beyond the Green Belt resulting in an unsustainable pattern of development?

8.75 Although data is limited it is a reasonable assumption, given the analysis set out above about MUAs, that Green Belt release will be required to deliver both the RSS Preferred Option and any additional provision. To not do so increases the risk that insufficient housing will be provided, whatever measure of demand within the NHPAU Supply Range is used.

8.76 Strategically releasing Green Belt land for sustainability reasons (see RSS 3.9d) to allow development to locate closer to existing jobs, reducing the number of people who commute from beyond the Green Belt, may assist in reducing commuting distances and congestion levels. The effectiveness of releasing Green Belt, as a method for reducing long distance commuting, needs to take account of several interrelated factors including the current level of commuting, the commuter's personal preference for living beyond the Green Belt boundary, and the implications for localised congestion from focusing development on the urban fringe. In addition, it is noted that alternative policies aimed at reducing levels of commuting could also be employed (e.g. demand management), the full success of which are still not fully understood and, in any event, may only be introduced in the medium term

8.77 As set out in PPG2, Green Belt boundaries need to take account of future growth and need to set realistic and clear boundaries to prevent future encroachment. This process of identifying new boundaries (and potentially new Green Belt areas as identified in Table 7.2) will need to be part of the RSS process. Whether this is required will be subject to Government Office evidence about the approach to additional housing development and the Panel's recommendations to Secretary of State. The detail will be developed through the LDF process of individual authorities.

8.78 Other important questions about Green Belt release includes:

Will the release of Green Belt result in unacceptable damage to the countryside and will nature, landscape or other designations be under additional risk if amendment of the Green Belt is permitted?

8.79 Any development on previously undeveloped land is likely to have an impact on the biodiversity and landscape value of the land. Any proposed review of Green Belt would need to include a thorough assessment regarding its potential landscape and visual impact on the countryside and also to any designated areas of biodiversity value. In some cases, release of Green belt land may offer the opportunity to repair the landscape and visual impact of previous unsympathetic development on the urban-rural fringe if a development of high environmental quality and design can be achieved.

Will releasing Green Belt result in a significant reduction in quality of life for people in existing settlements (for example reducing access to open countryside?)

8.80 Encouraging redevelopment of previously developed land within existing settlements offers opportunities to increase provision of greenspace in areas which may currently be experiencing a in deficit (The Black Country Urban Park project is an example of addressing strategic greenspace provision). The Birmingham/Black Country conurbation currently has a radius of approximately 10km; therefore any further expansion to the urban fringe may have the knock on effect of reducing accessibility to large areas of greenspace for existing and new residents. However, simply because land is 'open', it may not be publicly accessibility. Urban extensions may present opportunities to create useful and usable open land for new and existing residents.

6. Supply of Affordable Housing

8.81 Tackling the affordability problem in the region is a Government objective. This needs to be a combination of:

i) Achieving a sufficient supply of market housing to bring sales values down to an affordability ratio that is a better balance with the economy of the region;

ii) Increasing the supply of affordable housing - the RSS currently aims for 6,000 units per annum (circa 120,000 units over the lifetime of the RSS).

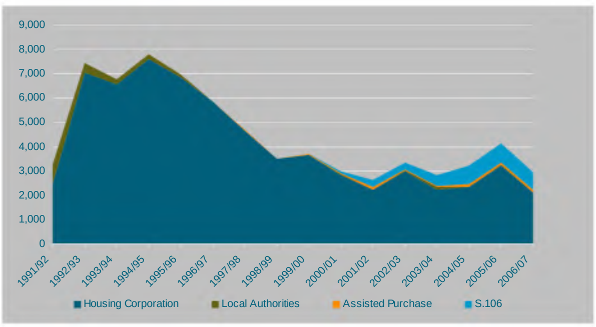
8.82 The issue of how far the level of supply will address i) above is a matter to be covered by NHPAU.

8.83 In terms of ii) there are two key drivers:

a) The amount of affordable housing that can be provided as a fixed percentage of any given level of housing provision overall; and

b) The extent to which different types of site or location are more or less likely to be able to make significant s.106 contributions.

8.84 In terms of the former, the current RSS target of 6,000 units p.a. represents circa 33% of the total supply in the Phase 2 Preferred Option. Clearly, a proportion will be funded by Housing Corporation (to be Homes and Communities Agency) grant through the National Affordable Housing Programme and through Registered Social Landlord investments. But a significant proportion will be s.106 funded. In this regard, the Housing Corporation Annual Investment programme for 2008-11 notes that s.106 has been lower in terms of its contribution to grant funded schemes and output has been lower overall, particularly in the West and South HMAs. Also over the past five years, s.106 has delivered just 18% of affordable housing output, with the total average output for all affordable housing being 3,300 pa (just over half the average output required and about 20% of the annual completions rate based on CLG figures). Over the past five years, s.106 funded affordable housing has been no more than 5% of annual output. Clearly, the issue is complicated by the role of affordable housing provision in meeting replacement needs in the context of demolition so the figures are difficult to equate to the net increases in RSS. The trends are shown below:



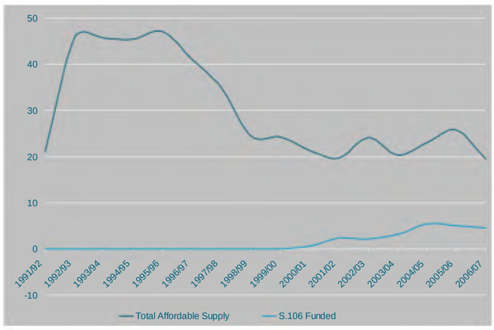


Figure 8.6a (left) Supply of Affordable Housing (Numbers) 1990s-2000s

Figure 8.6b (right) Supply of affordable housing and s.106 funded housing as % of total housing supply

8.85 The Government objective is to improve the provision of affordable housing. This will require making smarter use of both s.106 and funding resources, often in tandem. But it is also the case that, applying the average of the past five years, s.106 will deliver just 775 units pa of affordable housing if applied to the RSS Preferred Option *net* housing supply (it could be higher if applied to the gross). Applied to the NHPAU Supply Range, the same rate would deliver marginally more - 800-950 units pa).

8.86 More significantly, and turning to point b) above, there is a hypothesis that increasing the supply of housing beyond the RSS Preferred Option, by focusing additional growth more onto green field sites where costs can be lower and values higher than on urban sites, will provide greater opportunity to increase the rate of s.106 contributions for affordable housing (accepting that there will be other calls on the value of land to provide associated infrastructure). Clearly, as previous data shows, the past five years has been dominated by apartments in urban areas, which have generally delivered lower levels of affordable accommodation. Even if the balance of provision changes (towards houses) the density of units may be lower and there are potentially additional site costs in MUAs which, combined with a concern about deliverability in MUAs, suggests that affordability will not be tackled effectively without additional provision and allocating beyond the MUAs. It is also the case that provision within the MUAs will not always match where the affordable housing need is most acute, such as in the rural areas, which are considered further below.

7. Rural Renaissance

Background: In terms of absolute numbers, the RSS Phase 2 allocation to rural areas is small. However, what are the needs of rural areas and will increased allocation assist the objective of rural regeneration?

8.87 The RSS Phase 2 has an objective to achieve rural regeneration, responding to various pressures and problems especially of the “rural west”. In particular, the analysis demonstrates that although current housing need and projected demand is largely concentrated in the Major Urban Areas, in many cases affordability constraints and proportionate housing need are most acute in rural and semi-rural areas. Echoing these findings, the 2008 ‘Taylor Review’ (Living Working Countryside: The Taylor Review of Rural Economy and Affordable Housing) concludes that the high cost of homes coupled with the low wages of rural workers are creating unsustainable affordability pressures that threaten the future of rural communities across the country. Can additional housing be provided in the rural areas and what impacts will arise in terms of the aim of achieving rural renaissance?

8.88 A key theme of the Taylor review is that housing supply in many rural areas should be expanded to relieve affordability pressures and ensure the long-term survival of rural settlements and their services.

Living Working Countryside: The Taylor Review of Rural Economy and Affordable Housing - Summary of recommendations

- Planning policy (Planning Policy Statements and Planning Policy Guidance) should be reviewed to simplify and end conflicting messages over sustainable development to ensure economic, social and environmental factors are properly balanced;
- 'Tick box planning' based on a narrow range of sustainability criteria should be transformed into processes encouraging a long-term vision of what rural communities can and should be, to end the 'sustainability trap' in which villages deemed 'unsustainable' continue to decline;
- Planning policy should discourage unsustainable estate developments 'doughnutting' market towns. The Government should introduce new planning policy and an exemplar programme to encourage master planning the long term growth of market towns to create 'new neighbourhoods' and 'community extensions' which are attractive places to live, work and play, including local shops, workplaces, community facilities and open spaces;
- Encouragement for new development on brownfield (previously developed) land to protect the countryside is supported – but the review calls on the Government to examine unintended consequences such as 'urban cramming', inappropriate loss of gardens and other urban green space, and to encourage development to include more publicly accessible green space serving old and new communities as market towns grow;
- A new 'community led affordable housing' initiative, encouraging rural communities to develop small groups of affordable housing for local people to rent or buy where they meet criteria of local support, good design, and are affordable in perpetuity to meet local housing needs;
- New encouragement for landowners to offer land for affordable housing at affordable prices, including options for nominating a family member or employee for some of the property if that helps bring forward more affordable homes needed for the community;
- The review also examines the issue of second homes and concludes that they raise issues for a relatively small number of smaller communities where lack of full time residents puts schools and other services at risk. It suggests the Government should trial planning rules designed to control further conversion of full time homes to second homes/holiday letting in one or more of the national parks.

CLG 2008

8.89 Increasing development in rural and semi-rural areas often raises concerns around ecological, landscape and transport sustainability. However, the Taylor Review highlights the need to focus on social and economic sustainability as well as environmental concerns. The Barker Review of Land Use Planning and the Affordable Rural Housing Commission are cited as raising concerns that a narrow application of sustainability criteria fails to consider social and economic issues by placing undue emphasis on environmental criteria. This can be at the expense of beneficial housing and economic development.

8.90 The Taylor Review highlights how relatively small-scale rural developments can help sustain settlements and their services. However,

> *"…there was widespread concern among respondents to the Review's Call for Evidence that the principles and approach for achieving sustainable rural communities through the provision of new housing, as set out in PPS3: Housing, are still not being adequately reflected in emerging RSS or local development documents"* (page 147).

8.91 There is the outstanding issue of the Environment Agency's work on the hydrology issues (which also effect the RSS Phase 2 approach), but assuming this is capable of being resolved, there do not appear to be any major barriers to increasing the supply in the rural areas which could deliver additional provision, both market and affordable housing. The assessment concludes that there is a strong case for increasing the provision of housing in rural areas, and in regional terms the impacts on housing provision elsewhere are unlikely to be significant.

8. Transport and Infrastructure

Background: It has been asserted that additional housing cannot be accommodated due to constraints of infrastructure including transportation. Is this the situation and, if not, will investment in transport infrastructure/other services enable additional housing provision in the region during the RSS period?

8.92 To assess the situation in terms of transportation impacts, modelling was undertaken by the HA of Options 7 and 9 (effectively the two 'worst case' options in terms of either scale of distribution or scale of growth). This work has confirmed that there would be no significant increase in capacity issues on the highways network compared to either the RSS Phase 2 Preferred Option or the projected increase based on population projections. It also found that the variation of journey time between scenarios is quite small along the key corridors.

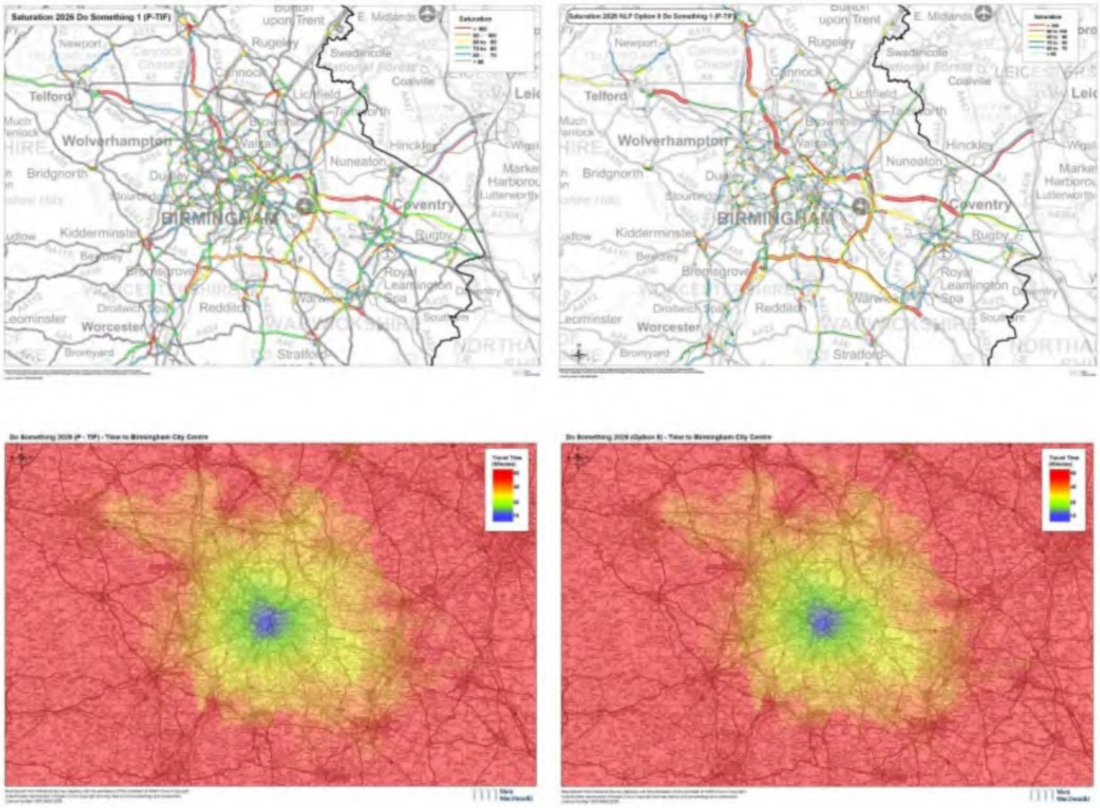


Figure 8.7a (top left) Road Saturation under RSS Phase 2 Preferred Option (Do Something Scenario)
Figure 8.7b (top right): Road Saturation under Option 9 (Do Something Scenario)
Figure 8.7c (bottom left) Journey Times to Birmingham Centre RSS Phase 2 Preferred (Do Something)
Figure 8.7d (bottom right) Journey Times to Birmingham Centre under Option 9 (Do Something)
Source: Mott MacDonald on behalf of Highways Agency

8.93 This indicates that there would be no region-wide, significant, or fundamental barrier to growth as a result of overall increased levels of traffic or the ability of the highway network to cope. In essence, the key increases in traffic, journey times, and delays will occur as a result of underlying growth and are reflected in the outputs of the Phase 2 Preferred Option. The different Options identified will have some localised implications, but the biggest differences in terms of the modelling of different scenarios is not the impact of different levels of housing growth, but of either "do something" or "do minimum" to respond to traffic growth trends. A highway based "do something" scenario (P-TIF) is increasing the journey times on routes, but is also reducing the congestion on the SRN and allowing more traffic.

8.94 The Highways Agency work has concluded there would be local impacts due to the housing and network interventions, which would need to be assessed in more detail at a local level. As identified in relation to the shortlisted eco town proposals at Middle Quinton and (formerly) Curbourough, there can be significant impacts associated with developments in locations without adequate public transport accessibility or in sensitive locations on the existing road network.

8.95 In general terms, the qualitative appraisal (not based on detailed modelling) of additional growth (drawing on the expertise of the HA and its appointed consultants, Centro, and DfT) has identified a range of potential local impacts. Key to mitigating these traffic impacts will be the provision (and use) of attractive viable public transport (and in particular, rail) alternatives on key movement corridors. A number of projects are in hand or planned that will mitigate the impact of housing growth by tackling congestion and improving accessibility. There are a number of significant regional and local schemes recently completed, under construction or planned that include:

1. Rail improvements including Birmingham New Street Gateway, the Government's Rail Rolling Stock Plan, improved freight infrastructure and the new Coleshill Parkway station;
2. Extension of the M42 Active Traffic Management trial;
3. Improvements to the M40 J15/A46 Interchange near Warwick;
4. Birmingham - Northfield Relief Road (completed 2007) and Selly Oak Relief Road, which will help regenerate the local centres, improving access to shops and services;
5. Road and public transport improvements to reduce congestion in the Black Country (Cradley Heath, Brierley Hill and Walsall Town Centre Packages);
6. Metropolitan-wide - Red Route Bus priority lane network to improve traffic flows and improvements to West Midlands Urban Traffic Control systems;
7. Measures to relieve traffic congestion in and around Rugby;
8. By pass schemes in Rugeley and Tunstall.

8.96 Key to delivering both the RSS Phase 2 Preferred Option and additional provision in line with any of the Options in this Study will be a more proactive approach to prioritising, funding and delivering the infrastructure improvements, and recognising that investment in public transport alongside highway improvements will be required to support and deliver the growth agenda at some locations. There may be opportunities for focusing distribution of growth either in RSS or at a local level in order to strengthen business cases for investment along key transport corridors and secure s.106 funding contributions.

8.97 In addition to the schemes and plans identified above, further infrastructure may be required to support delivery of the housing growth in some areas (depending on the location of development), in particular increased capacity on radial train services into Birmingham and capacity improvements on the M6

8.98 Infrastructure engagement with the Environment Agency and the water utility providers has provided a good understanding of the key risks associated with any additional growth through both the existing RSS Phase 2 Preferred Option and any further growth. Although there are some region-wide issues as well as specific localised challenges, there is no evidence that hydrology impacts cannot be mitigated or that feasible technical solutions cannot be found (including the way in which new development can be planned and delivered at the local level).

8.99 Flood risk is an issue that needs to be considered in terms of the location and scale of development at a local level, but can be mitigated even in locations identified as being at high risk and the application of policy can dictate the location of development through Core Strategies.

8.100 Surface water flooding is again an issue for the region to address in its overall approach, and there is possibly a need for policy requiring preparation of surface water management plans, but there is no evidence that this issue will act as a brake on growth.

8.101 Of the Water Resource Zones (WRZs) the Severn is currently under greatest stress. However, providing water supply capacity can be delivered in the relevant locations in a timely manner this should not restrict growth. It may have an impact on phasing - and would need to be planned for now in terms of WRMP/AMP5 which currently do not reflect higher levels of growth. The phasing of the housing supply trajectory (as indicated earlier) provides comfort that additional time is available to properly address this matter.

8.102 There are potentially a range of water quality issues in terms of the need for treatment but these exist to some extent in delivering the RSS Phase 2 Preferred Option. There is no evidence to suggest that this cannot be planned for though investment in additional capacity or consideration of specific locations.

9. Economic Development and Housing Growth

8.103 The RSS Phase 2 sets an objective to encourage economic growth and modernisation of the economy. The main focus is for growth in the MUA (achieving regeneration). The Phase 1 RSS concerning the Black Country authorities also seeks to achieve mixed-use regeneration. It is argued by some stakeholders that providing additional housing growth in other locations, outside the MUAs will draw employment to those locations and, conversely, further residential development in the MUAs will reduce the land available for job creation.

8.104 Work currently being undertaken by Ove Arup and Partners for AWM is examining the effects of a "policy-on" approach to the relationship between housing and the economy. It explores the impact on economic development of the housing levels being proposed through the RSS Phase 2 Revision process within the framework of urban and rural renaissance and the associated policy approaches. This is considered in the light of the capacity of settlements to absorb higher housing numbers and the actual pattern of distribution that the proposed Phase 2 Revision housing numbers would result in, given the policy directions outlined in the RSS. The report is anticipated to be signed off at the end of October 2008 and a draft executive summary (subject to change) has been shared with NLP

8.105 Although the Arups study does not relate in content or detail to this one, it does reflect on a number of issues that will have some resonance for this work, notably:

- Place of residence affects where people work and consume;
- The "quality of match" between the labour supply and job growth is important in helping to close the productivity gap;
- Housing distribution can have an impact on expanding workforce catchments and levels of participation in the employment market;
- Knowledge workers enjoy a greater degree of mobility in where they choose to live and work and will generally seek to locate in higher quality areas;
- Based on current trends, houses in the MUAs generate higher numbers of occupants but poorer levels of economic activity (this does not take into account the transformational change agenda started off in the Black Country Study work and being pursued in the draft RSS, which actively seeks to improve both environmental quality and economic opportunities in the MUAs);
- The role of SSDs is unclear in relation to their role as locations of additional growth; and
- Some locations outside the MUAs will see higher levels of job growth than housing supply, which could see out-commuting take place.

8.106 The Arup work will discuss mitigation measures, such as redistributing jobs to MUAs, and emphasises the importance of creating attractive and functioning communities and neighbourhoods as an integral part of stimulating economic regeneration and activity.

8.107 In considering the above, NLP's view is that the extent to which the policy response to the above trends either challenges or follows them needs to be cognisant of the impact this will have on the economic modernisation of the region. For example, how far will it be possible to redistribute jobs to MUAs in a competitive global economy, where possible alternative locations for mobile economic investment and mobile knowledge workers are as likely to lie outside the region as within it? How far will it be appropriate for people living in MUAs to commute to established economic centres given rising transport costs? And how rapid can be the necessary transformation of locations such as the Black Country to be sufficiently attractive for mobile knowledge-based workers and the businesses that seek to attract them? Will restricting growth outside the MUAs in advance of this transformation achieving critical mass (in say ten years time) have an adverse impact on the economy?

8.108 On this basis, there is considered to be a risk that a distribution or level of housing provision that focuses on the RSS Phase 2 Objective of concentrating housing in the MUA may not fully align with maximising the prospect for achieving another important objective, that of enhancing the regional economy.

8.109 It is also worth noting, in relation to the stated RSS objective for Birmingham to fulfil its role as a global city, that genuine global cities draw strength from thriving economic and residential hinterlands. Taking London as the closest example of a global city in a UK context, it has a housing market dynamic that involves international and inter-regional in-migration (as does Birmingham on a smaller scale) and housing-led out-migration to its South East and East of England hinterland (and beyond). This wider interaction and the economic and housing opportunities it provides, are part of London's success. The future prosperity of the West Midlands equivalent may be part of Birmingham's.

Conclusions

8.110 For reasons set out elsewhere it is difficult to draw firm conclusions about the impact of the different Options on the Objectives of RSS and Government policy for housing. The discussions above, concerning the various key objectives, seeks to arrive at a view of the effect of additional residential development on these objectives taking into account the various views expressed by stakeholders during the course of this study. The conclusions, set out below, represent NLP's opinion about the broad impact of additional housing development on the key matters. These have informed the advice about the potential scenarios that could deliver additional growth, above the RSS Phase 2.

1. **There is scope to identify additional land for housing in the region** - In considering the impacts and delivery risks of additional housing (beyond that identified in the RSS Phase Revision) the evidence suggests that:
   - additional land can be identified but its development will inevitably lead to localised impacts;
   - in appraising and balancing those impacts it will be important to consider the less visible impacts of failing to identify sufficient land to meet need and demand.
2. **Additional housing need not harm achievement of Urban Renaissance** - A key concern and contention of many consultees and stakeholders is that additional housing would necessarily mean more greenfield development outside the MUAs and that this would inevitably harm urban renaissance by causing developers to "cherry pick" sites outside MUAs and displacement of housing demand away from MUAs and leading to local housing-led out-migration from the MUAs. The study found no clear definition of urban renaissance, and no clear evidence to support the view that the level of non-MUA housing in the Phase 2 Revision represents a maximum level, beyond which harm to urban renaissance occurs;

3. **There is no evidence that increased housing supply outside the Major Urban Areas (MUAs) will reduce housing supply within them** - Housing output in the MUAs has increased since 2001 and this growth correlates strongly with the growth in the number of 1 and 2 bed urban apartments developed in that period. In contrast the MUA housing growth has a negligible correlation with a reduction of new housing outside the MUAs. Developer feedback supported the statistical findings. They considered that the apartment market had driven higher housing output in the MUAs but this market is now saturated. In their view restricting land supply outside the MUAs will not rekindle the urban apartment market nor trigger development on other MUA sites. Rather it will simply serve to restrict new housing starts overall;

4. **There is no evidence that increasing housing supply outside the MUA causes out-migration** - The study found that the spatial relationship between migration patterns and land supply in the region is complex. No clear evidence was found to support the assertion that additional non-MUA housing will inevitably increase out-migration from the MUA. Rather, the availability of new housing is one of a range of factors which influence household location decisions, the most important being employment location; environmental quality; transport accessibility; quality of life / place (services / facilities / amenities); quality of education;

5. **There may be limits on how far it is possible to increase housing supply within the MUAs -** There are major delivery risks in allocating further housing land in the MUAs. Those areas are already failing to deliver the rates of housing in the Phase 2 Revision - undershooting by 17,500 units in the period 2001/2 to 2006/7. Developer feedback indicated that the recent reduction in build rates caused by the credit crunch is impacting most in the MUA apartment sector of the market. The study concludes that a policy response to those reduced rates which involves **more** allocations in the MUAs carries very high levels of delivery risk;

6. **In some locations there are increased risks that additional supply in contiguous areas could harm fragile markets and undermine housing market renewal, but this may be able to be overcome by careful phasing** - The relationship between the amount and location of new housing and the effects on fragile housing markets in the region is complex. There is a need to distinguish between a) areas of **lower demand** due to economic weakness and lower household growth; and b) areas of **market dysfunction** where the housing mix and quality of place does not match housing aspirations. In the areas with lower demand, such as North Staffordshire, there is a need to phase additional housing carefully to avoid local displacement effects which might impact on regeneration initiatives. In Birmingham and the Black Country new housing could, subject to market capacity, play an important role in addressing market dysfunction by helping deliver positive place change and providing housing which better reflects demand. Distributing additional housing to support regeneration brings into focus a number of potential tensions and risks. Good quality new housing can be enormously influential in delivering positive place change. However if that additional housing is not successful in attracting additional households to the area it can cause market weakness or vacancies in adjacent areas of poorer quality housing. Whilst careful phasing and integration with wider investment can mitigate these risks, it is clear that options which propose significantly higher levels of housing into fragile market areas could potentially undermine current housing regeneration investment;

7. **The precise relationship between housing supply, economic growth and regeneration is not simple but additional housing supply could help relieve labour supply blockages in important growth sectors** - In parts of the region, notably some rural areas and the south-east quadrant, housing output is not keeping pace with job growth. There is also evidence of increasingly footloose patterns of economic and housing investment influenced by factors such as quality of life and place. Whilst the precise relationship between jobs and housing is complex the appraisal of options pointed clearly to additional housing in the south-east quadrant as a means of better matching employment and housing growth thereby better enabling new housing to support the growth of important economic growth sectors in that area;

8. **Birmingham needs more good quality housing in its hinterland to grow its global role -** Birmingham's role as the regional economic hub and as a global city is recognised. To

help it fulfil these roles it needs a close and linked relationship to vibrant housing markets in its hinterland. Restricting housing supply in locations which are outside the MUA but clearly fall within its housing market will serve to harm the ability of Birmingham to grow its global role;

9. **Additional housing growth can help address genuine affordability problems and meet housing needs** - The study has drawn a number of evidence-based findings in relation to improving accessibility to good quality affordable housing:

   – The NHPAU evidence is that increased supply will reduce prices and improve affordability;

   – the MUAs contain the greatest **number** of people in need, but the affordability gap is **most acute** in the shire counties and rural areas;

   – during the credit-crunch it will be increasingly difficult to secure affordable housing from developers. The challenge will be greatest in the MUAs.

10. There will be important affordability benefits flowing from increasing allocations in many of the shire counties and rural areas. There are these areas where needs are most acute and where there is the greatest prospect of developers being able to afford higher levels of affordable housing provision;

11. **Additional housing growth is likely to require the release of Green Belt but this is consistent with RSS objectives if it results in sustainable development and regeneration -** RSS already recognises the principle of Green Belt releases being necessary to meet housing needs. The scenarios for accommodating additional housing growth, as developed through this study, identify the broad locations where these green belt reviews may be required. It will be for Core Strategies to consider the specific boundary changes where such releases might be in the context of:

   – urban extensions (in and around the MUAs and SSDs) can provide more sustainable solutions than development “leapfrogging” the Green Belt;

   – mixed-use urban extensions or new settlements around Birmingham and in the South-East quadrant might offer major benefits in linking new housing to existing and future economic growth;

   – there may be scope for Green Belt extensions to provide better protection of openness around settlements such as Warwick and Stratford.

12. **New settlements are a potential form of development that could meet requirements, in the right locations and if the delivery capability is in place** - The scope for identifying and developing new settlements in the region should be considered. It is considered that the south-east of the region offers the best opportunity. The analysis concluded potential new settlements could be either:

   – smaller settlements (under 10,000 units) perhaps linked to existing settlements and private sector led; and/or

   – larger free standing settlements of circa 20,000 units or more which would require major public sector delivery capacity and leadership given their complexity and profile.

13. **Transportation issues are not a fundamental barrier to delivering more housing although investment will be needed** - In terms of journey times and delays none of the nine options incur impacts markedly different from the Phase 2 Revision. At a local level there will be a need to mitigate impacts caused by significant amounts of new housing. None of the nine options appear to result in mitigation requirements which are technically not possible. Any infrastructure improvement to facilitate housing growth, which is not already a funding commitment, carries delivery risks. A key task will be to align the phasing of additional housing with the funding and timing of new infrastructure. Developments of 5,000 units and above, in a particular location, may offer greatest prospect of securing private sector funding of major infrastructure improvements;

14. **Although there are localised hydrology issues to resolve, there is no evidence that these cannot be addressed through investment in additional capacity or**

consideration of specific locations in Core Strategies - There is no evidence that the hydrology impacts and mitigation associated with higher housing growth are markedly different than those required to deliver the Phase 2 Revision level of housing. There is no evidence that hydrology impacts cannot be mitigated or that feasible technical solutions cannot be found. Flood risk measures water supply improvements and water treatment works will require careful timing and advance planning to help manage risks;

15. The market downturn means **the currently envisaged trajectory of housing will change but there is no fundamental market barrier to increasing supply provided there is sufficient suitable and available land** - There was clear and consistent feedback that the current market downturn will reduce envisaged housing output to 2011. Much higher RSS requirements will therefore be required later to enable housing output to "catch-up" with pent-up household growth and affordability issues. The study concludes that:

    – Build rates in the second half of the RSS period may need to rise to around 25-28,000 per annum by 2018/9. This compares to recent rates of 13-16,000 per annum;

    – Both the study research and developer feedback indicates that this scale of increase should be feasible provided that:

        ▪ sufficient deliverable land is made available;

        ▪ the allocations are spread around the region rather than overloading particular markets; and

        ▪ wider issues such as skills are properly resolved.

    it is clear that the upper end of the NHPAU range, namely 442,000 additional houses by 2026, represents a considerable challenge.

16. **The phased release of land needs to focus on managing the risks for fragile markets, whilst also ensuring that supply increases as quickly as possible out of the downturn** - Housing delivery in the region will need to accelerate rapidly out of the downturn to catch up to the RSS Revision 2 levels, let alone the NHPAU ranges. Whilst there will be a need to ensure land is released to reflect the policy emphasis on brownfield land the delivery challenge will necessitate an ongoing supply of both brownfield and greenfield land sufficient to give confidence that higher rates of development can be achieved. In the more fragile market areas of the region there will be a need to ensure the phasing of new housing is aligned with supporting regeneration and infrastructure investment in order to minimise risks of displacement.

9.0 Conclusions

Introduction

9.1 This section of the document draws together the strands of the analysis, summarising and synthesising the different aspects of the appraisal. It explains three potential scenarios for delivering additional housing growth in the region.

9.2 The appraisal of the options has been explained in this report, and have a number of different elements, which are:

- The assessment of impacts and risks, (Section 7.0 and in more detail in Appendix 3) which seeks to test the hypothesis, widely touted, that it is not possible for the Region to accommodate additional housing without giving rise to impacts that would, by any measure, be simply unacceptable;
- The Sustainability Appraisal (set out in Volumes 4 and 5), which focuses upon appraising each of the options as a net addition to the RSS Preferred Option, benchmarked against the original SA of RSS Preferred Option Policy CF3. A review and update of the Baseline of the SA revealed that some of the original conclusions, in terms of Policy CF3, were not always supported by evidence or have been superseded by new evidence;
- The assessment against the Habitat Regulations in terms of European Sites (See Volumes 6 and 7) where additional housing in each of the Options have been assessed using the same approach as that for the original HRA;
- The assessment against the key policy principles of RSS and Government Policy for Housing, captured by the RSS Objectives and the provisions of PPS3 and the Housing Green Paper (principally discussed in Section 8.0 and in more detail in Appendix 4).

9.3 There are a number of very complex issues raised by the different aspects of the appraisal, and it has to be recognised that, in line with the original appraisal of spatial options earlier in the RSS process, this is a study assessing the implications of housing growth for the region, rather than a micro-assessment of individual local authorities. That said, the appraisal has been sufficiently fine grained to identify where local impacts are of such a scale that they have major influence on the ability of the Region to deliver each option.

Outputs of the Appraisal

9.4 This report has considered the range of options for additional housing growth, and the preceding sections of the report have considered the outputs of the appraisal: for each option; for each local authority / core strategy area; and thematically, including in terms of the key policy objectives. The following paragraphs flag up where key findings shape the emergence of the three scenarios.

Impacts and Policy

9.5 The assessment has identified that although there are number of localised impacts flowing from the options, these are, with some exceptions, impacts that are capable of being mitigated or avoided through reasonable planning at a more detailed level.

9.6 The appraisal against policy has identified that due to the absence of an agreed appraisal framework for measuring the performance of the Options, against each of the Objectives, any assessment against policy will be subject to interpretation. Of particular significance is the issue of impact on urban renaissance, in terms of market displacement, out-migration, or regeneration.

Although this was cited by some stakeholders, there is little evidence to substantiate these impacts, except in more fragile markets, such as North Staffordshire and, potentially, in parts of the Black Country. In these areas such impacts can probably be controlled through phasing and mix of development.

9.7 On the basis of the appraisal undertaken, the conclusion of this study is that there are no options which need represent a fundamental barrier to achieving the RSS objectives. Indeed, there is a case for saying that additional growth in some parts of the region could help achieve RSS objectives. On top of this, there is a clear issue that the RSS Objectives do not fully capture an explicit requirement for the region to meet its housing needs, albeit this is recognised in national policy.

Risks

9.8 The most significant risk is around the market's ability to deliver additional growth in areas where the RSS Preferred Option is already indicating significant increases from past rates (which are also often in areas where recent upsurges in output has been driven by the now rapidly declining and potentially deceased market for new-build apartments). From the developer perspective, there are real prospects that the current RSS Preferred Option will not be delivered in the MUAs, either in the short term (because of the downturn) but also in the medium to long term, due to the limited availability of land that is capable of being developed without funding.

9.9 Another risk is that the infrastructure to provide mitigation of impacts or to deliver appropriate transport solutions is not capable of being funded or delivered through land value and/or the public sector and this might mean growth in some locations being constrained.

SA

9.10 As with the SA (2007), the SA identifies a number of areas where, housing provision (options for housing growth and the growth scenarios identified later in this section would have a range of positive and negative impacts on the sustainable development objectives of the West Midlands Regional Sustainable Development Framework, January 2008).

9.11 The impacts on the "Sustainable Production and Consumption", and "Climate Change and Energy" objectives are broadly similar for all the scenarios (with policy CF3 of the Phase 2 Preferred Option) and the housing numbers in policy CF3 in isolation. Scenario 3 (highest growth scenario) could have a stronger negative impact on "Natural Resource Protection and Environmental Enhancement" objectives than Scenarios 2 and 3 and policy CF3, but Scenario 3 is likely to have a more positive impact on "Sustainable Communities" objectives that Scenarios 1 and 2 and policy CF3.

9.12 Particular issues include a generally elevated risk of flooding across the region, and some areas under particular threat (e.g. Warwick, Rugby, Worcester, Solihull). The level of risk cannot be quantified at this stage with accuracy but it is reasonable to assume that the requirements of Government guidance will ensure that sites identified for housing do not give rise to additional flood risk issues. It is anticipated that, generally, air quality issues would be worse with the higher growth scenario 3 than scenarios 1 and 2. It is not possible to predict exact levels and locations where effects will be the most significant. The identification of AQMAs in areas at risk should reduce significant adverse effects in affected areas.

9.13 Many of the areas identified in all of the scenarios are located within the Severn WRZ where the EA have identified that investment and additional infrastructure will be required to balance out water supply and demand. Investment in waste water treatment capacity is also likely to be required. Timing for requiring this investment is unknown and will need to be assessed.

9.14 All of the locations identified for growth have the potential to give rise to significant local traffic issues. This may require investment in new/additional public transport/improvements to capacity or improvement to the local highways network. A key issue will be whether sufficient critical mass of development is secured for the medium growth Scenarios 1 and 2 to secure the necessary investment and how much will be available from the public sector to supplement improvements if required.

9.15 The delivery of the additional growth could be expected to have a positive effect on the provision of affordable housing. Scenario 1 which focuses growth in the South East could make a strong contribution to supporting economic growth, but could also result in a widening of the gap between this area and the more poorly performing areas. Scenarios 2 and 3 may result in this gap being narrowed although the ability of the market and availability of funding to deliver growth in the more poorly performing areas and deprived communities would need to be addressed. Phasing is likely to be key in this regard. The application of measures to mitigate against the effects on the natural environment and the incorporation of the principles of good design will assist in minimising the effect on the environment.

9.16 Mitigation, based on that identified in the original SA is identified. Although some options do materially change the assessment in respect of some SA questions, looking at the basket of SA indicators as a whole, it is difficult to identify an overall message that further growth would be inappropriate or could not be mitigated.

HRA

9.17 The HRA has identified those sites where, along with the RSS Phase 2 Revision Preferred Option, housing growth could have an impact on the integrity of European Sites. In a number of cases all of the scenarios have the potential to an impact or the outcome is uncertain. In the majority of these cases there is potential for mitigation to be put in place, however, at the RSS level it is not possible to judge the efficacy of such mitigation and the evaluation of such measures will need to be made at the LDF or individual proposal level. In this report these potential impacts have been flagged so that they can be considered at a later stage. Because a precautionary approach is enshrined in the structure of the Habitats Regulations where an impact is uncertain it is not possible to assume that there will not be an impact upon the site. For the majority of cases the sites that have been identified as having possible impacts are the same sites that were indentified in the Phase 2 Preferred Options HRA. Some additional sites have been added (such as the Humber Estuary and the Severn Estuary) and impacts have been identified.

9.18 The HRA process has identified a range of impacts that may arise from the RSS and the potential growth scenarios. In most cases direct impacts can be easily avoided by ensuring that the location of developments does not conflict with the European designations. The indirect impacts however are less easily mitigated and the impacts can be realised considerable distances from the source. The major issues relate to air pollution, nutrient loading associated with sewage discharges, water pollution from surface runoff, impacts on water supply, increased impacts arising from tourism and recreation and loss of habitat Within the Phase 2 Preferred Option HRA many sites have been identified as receiving in excess of critical load for oxides of Nitrogen or acid deposition. In these cases it is clear that any developments that could add to such pollution have the potential to adversely affect the integrity of the site.

9.19 In many cases further information is required before a firm assessment can be made of the likely effects upon the integrity of the site. Of key importance for many European sites is the impact of increased demand for water resources. The Environment Agency is currently carrying out a review of consents under the Habitat Regulations to assess the impact of abstraction upon European sites. Most of the ROCs have yet to be completed and were not available to the HRA team. Once they are available the information should be used to inform any further HRA.

Appraising the Nine Options

9.20 The overarching messages emerging from the appraisal are that:

1. Options 1 and 2 with housing growth at the bottom end of the NHPAU Supply Range differ little from the RSS Preferred Option in terms of either scale or overall approach, although clearly Option two (the shortlisted Eco Town locations) would be locally significant for the two authorities in question. For Option one it is of note that in both Birmingham and North Staffordshire there is now every indication that higher levels of growth could be either sought or achieved through Core Strategies;
2. Option 3 (growth in the south east of the region), is most likely to support economic growth objectives, but may be regarded as having too much focus on one part of the region, and not balancing this in market or policy terms with growth in other parts of the region. There are a number of localised infrastructure issues that need to be overcome, but these are not necessarily fundamental with the appropriate mitigation. Provision is also proposed in the rural west of the region. The appraisal suggests there are limited barriers to this development and it could provide welcome, input to addressing the localised affordability issues that the Matthew Taylor report indicates are harming rural regeneration;
3. Option 4 considers delivering additional growth in the form of new settlements. There is every indication that larger freestanding new settlements do have some potential for the region, and that there are a number of locations, along transport corridors, where suitable development could be brought forward. But they also carry higher delivery risks and are unlikely on their own to be the most appropriate way of delivering *all* additional growth. A new settlement option, the development of which might extend beyond the RSS period, is likely to work best where it forms part of a suite of other approaches to new development, and is in a location that can foster sustainable forms of development and capable of accommodating the introduction and creation of a new local market for housing, services, and business;
4. Option 5 and elements of Options 6 and 7 assume additional housing growth being delivered within some of the MUAs, principally in the form of additional 'brownfield' housing development. The appraisal indicates that there is varying degree of local policy support for additional growth – Option two of Birmingham City's recently launched Issues and Options for the Core Strategy, for example, proposes up to 5,000-10,000 additional units above RSS Phase 2 within the urban area, with a third looking at a further 15,000 including potential Green Belt land. Looking at past rates of development, the Metropolitan MUAs have significantly under-delivered against what the RSS Preferred Option now sets out as being required, and there must therefore be a significant market risk attached to the prospect of additional growth solely within the urban areas;
5. Option 6, focuses growth within the north of the region, including major urban extension-based growth to Telford, Black Country, North Staffordshire, Stafford, Burton-upon-Trent and Cannock. Although there are a number of localised issues, not least the impacts in Cannock, the general issue with this Option is the degree to which it focuses growth in parts of the region that are weaker in market terms and would not address the Region's most acute affordability or the housing issues that are believed to be stymieing economic growth in the high technology corridor and other parts of the south east of the region;
6. Option 7, - a hybrid approach - spreads additional growth across a number of locations. The indications are that this could provide a spread of the opportunities for housing-led growth and regeneration across the region, making contributions to supply in areas of acute affordability and economic growth, as well as making use of additional land capacity and regeneration initiatives in some other parts of the region;
7. Options 8 and 9, at the upper end of the NHPAU supply range, are based on a mix of forms of development, including new settlements. In some locations, the indications are the level of growth required could exceed the local market's ability to deliver, and in regional terms, there could be market capacity limitations for this level of growth, especially given the current economic downturn.

9.21 Consistent themes appear:

- Additional rural housing provision sits with the RSS Objectives for rural regeneration, without incurring major impacts, and which the region appears to be capable of delivering without major problems;
- Some parts of the MUAs may be able to accommodate additional growth, and indeed Options 2 and 3 of Birmingham's Core Strategy Issues and Options indicate an increase in the target by 10-15,000, but there are market risks, particularly acute in the Black Country;
- The south east of the region can accommodate additional growth and this will help address economic development objectives of the RSS and RES in terms of supporting labour supply for key economic sectors that are important for the region's economic modernisation.

9.22 Equally, though, there are clearly choices:

- How far is it possible to increase growth in the south east of the region, given local infrastructure investment requirements and local market capacity?
- How far is it possible or indeed desirable to increase supply in the north of the region, where there may be land supply and regeneration benefits flowing from additional housing growth?
- How appropriate is it for there to be a new settlement form of development within the mix of housing scenarios and where might it be located?
- How much additional growth in total is the region able to deliver and accommodate?

Locational Issues

9.23 Looking at each of the broad locations for development and how these relate to each local authority and/or core strategy areas, it becomes clear that there are a number of location specific issues, including:

- The **market capacity** issues. In specific local authority areas, the RSS Phase 2 Preferred Option and/or some of the Options involve levels of housing development that exceed (by some margin) the rates of development that have been achieved in the past (examples including Coventry, the Black Country, Birmingham and Telford). In these locations additional housing growth could raise questions over market delivery. This does not mean it cannot be delivered, but it could mean limiting the scale of additional growth and/or securing evidence on why these delivery risks can be mitigated. In some cases, this mitigation includes funding and public sector support for delivery in the form of Growth Point or other mechanisms, including local asset based vehicles and Infrastructure Funds;
- **Transportation** impacts. In most broad locations, the appraisal indicates that additional housing growth options have localised effects. In some cases, new infrastructure, ranging from enhancements to bus services to extending rail capacity through lengthening of trains/frequency of services could be required. In many cases, these are improvements that are already envisaged. In some locations, highway works will be needed to provide satisfactory access. But generally, this is a matter for Local Development Frameworks to address by finding the most suitable locations for development and putting in place the right infrastructure solutions. In general terms, there are no identified barriers in principle to being able to deliver the necessary improvements;
- **Hydrology** impacts. In some locations floodrisk and water supply and treatment issues will need to be addressed. Some of these challenges, for example, relating to the Wye Valley, are issues to be addressed for the RSS Preferred Option as well as any further growth. There is no evidence to indicate that these issues cannot be addressed;
- **Ecological** issues. These are linked to the outputs of the HRA and relate to where additional growth could increase the risk of potential impact. The theme of the assessment is that mitigation measures can be put in place and that it will be for core strategy work to ensure that this is addressed. In this regard there are a number of ecological issues identified as

part of the HRA for the RSS Phase 2 Preferred Option that need to be addressed. A clear risk concerns additional development impacting on Cannock Chase and, for that reason, it does not appear likely that additional growth around Cannock or as further extensions to the north of the Black Country could be taken forward;

- **Landscape and Green Belt.** Landscape impacts arise from development, but there is no evidence that development in the form of urban extensions or new settlements would by necessity have to take place in locations with a landscape designation or give rise to unacceptable coalescence impacts. A number of broad locations would necessitate alterations to Green Belt boundaries, (as set out in Table 7.2) but the RSS Objectives provide the basis for these issues to be addressed. New Green Belt land could compensate for any alterations in other parts of the region;
- **Utilities and social infrastructure** provision. Whilst a matter that undoubtedly needs to be addressed at a local level (including appropriate provision), does not present issues on such a scale that they will dictate the region's approach to housing provision.

9.24 The options in this study are not exhaustive and during this study, observations have been made, by developers and by local authorities representatives, (often after the production of the nine options) suggesting alternative options, including (inter alia):

1. Increasing provision in Bromsgrove generally beyond that considered in the Options (which considered Bromsgrove in the context of Redditch and a southern extension to Birmingham);
2. Focusing additional growth in Kidderminster – a settlement not identified as an SSD;
3. Promoting growth in Hereford through a number of urban extensions;
4. Further growth in Coventry, which could, it is argued, sustain further greenfield release despite the high levels of additional growth already envisaged by RSS Preferred Option – although the RSS already makes significantly greater provision than either past rates or the CLG Projections of household growth;
5. Rural areas could accommodate additional growth than identified by the Options, including also some rural areas not identified in the Study.

9.25 NLP has not tested these, but it will undoubtedly be the case that there is merit in those putting forward the case for additional growth to set out the rationale in terms of impacts and risks in a way that is consistent with the approach of this study to allow a benchmarked comparison.

Regional Housing Need and Local Impacts

9.26 There is also a regional context for making these choices and whilst it is not within the ambit of this study to make judgements or choices about the weight to attach to various objectives/policy choices, releasing land for new development produces adverse impacts, particularly locally. However, failing to provide sufficient housing to meet need and demand also gives rise to adverse impacts, albeit ones that may not be as visible or locally-based.

9.27 Trade-offs – or balanced judgements – will be required. The decision-maker will need to clearly frame a judgement based on an assessment of the level of housing need and demand. This is because the argument for making provision for increased housing supply (with all its concomitant impacts) is weakened if there is limited evidence that to not do so would mean a shortage of housing. Equally, an argument against making additional provision would be unbalanced if it weighed the adverse impacts of more development, but failed to recognise the impact of supply on affordability pressures in the face of growing need. This is illustrated in very simple terms below:

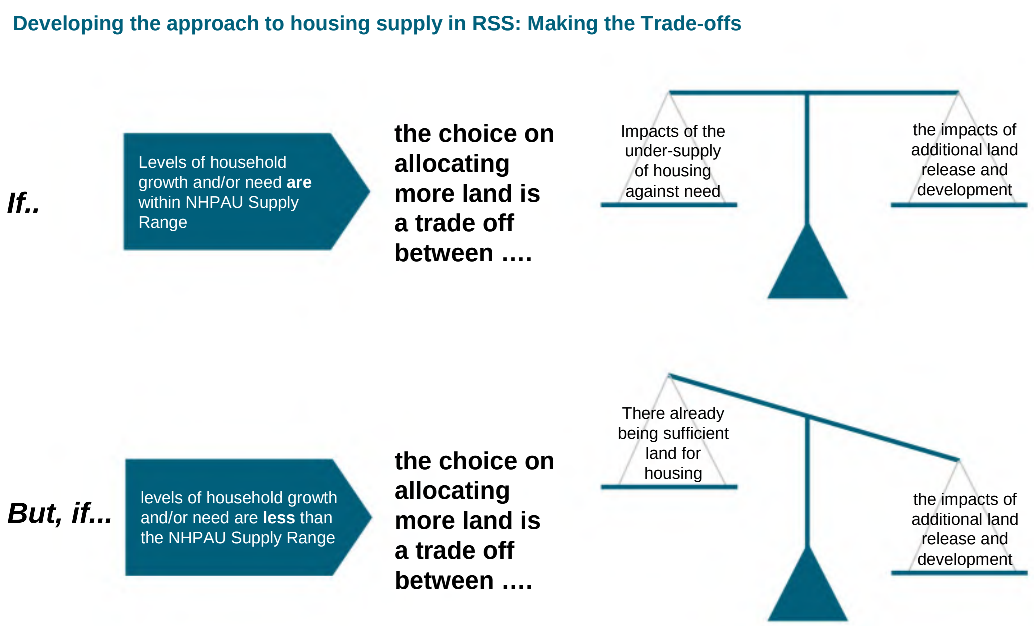


Figure 9.1: Weighing the Trade-offs
Source: NLP

The implications for RSS Housing Distribution

9.28 Drawing on the outputs from the appraisal of the Options, consideration of the local authority/core strategy area issues, and assessment of the broader policy and strategic context set out in Section 8.0, and recognising the status of the options as providing a 'menu' of potential opportunities to increase housing supply, it is possible to identify a series of 'hybrid' potential scenarios for how additional housing growth could be accommodated. These represent NLP's view on how the nine options might be synthesized to achieve a good fit with policy and to minimise delivery risks. That said, they are subject to limitations described elsewhere in this report. The scenarios provide the basis for evidence that Government Office and others may wish to put forward to the RSS process.

9.29 If all or some elements of any of these scenarios are carried through into RSS, it would be for local planning authorities to determine how housing numbers would be delivered through LDFs, and to plan for infrastructure and other mitigation to be delivered as appropriate.

9.30 Of the three potential scenarios for delivering additional housing growth, two are broadly at the middle of the NHPAU Supply Range. One is at the upper end. The analysis suggests that bottom end of the supply range is essentially de-minimis in terms of its impacts or policy choices - there are a number of alternative approaches to delivering an additional 12,300 units (including Birmingham's own proposals, the Eco Town locations, making additional rural provision) - about which there is little real doubt over its impacts or deliverability at a regional level. If household growth is assumed to be at a level towards the middle or upper end of the NHPAU supply range, provision at the bottom end would represent an under-supply against housing need.

9.31 The process of refining nine options down to three potential scenarios can be broadly captured below:

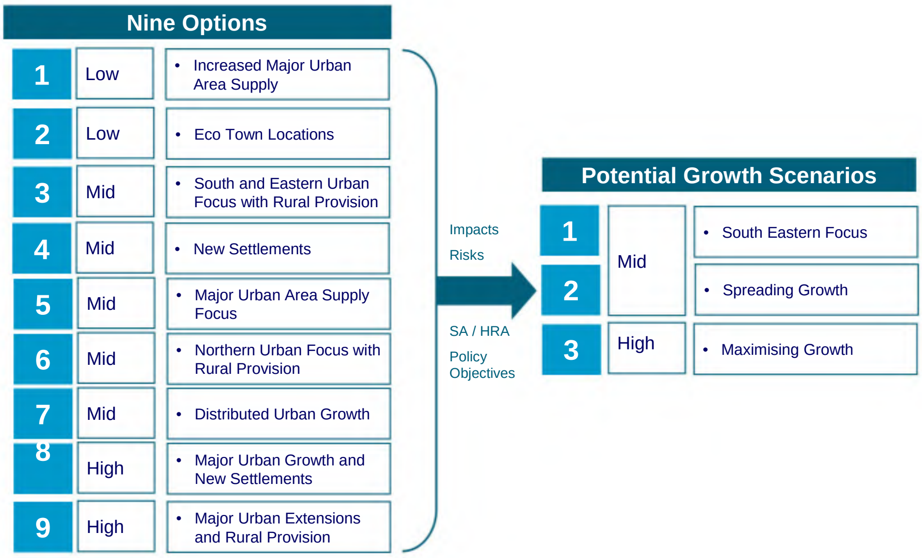


Figure 9.2: Arriving at Potential Scenarios for Housing Growth
Source: NLP

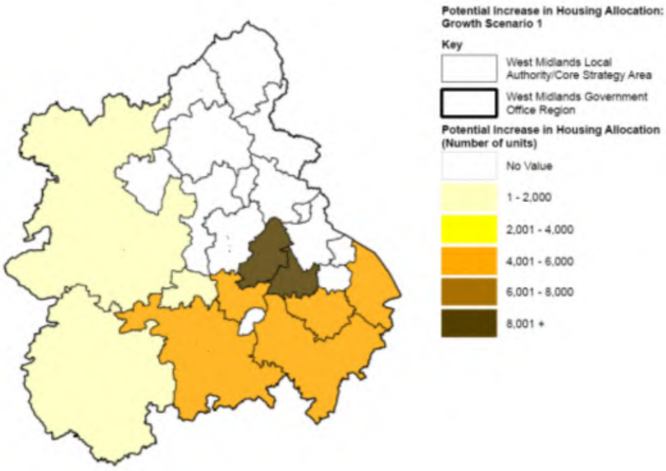
9.32 The influential factors that assist the identification of the three Potential Scenarios are:

1. A general acknowledgement that growth in rural areas can bring about benefits in terms of affordability and rural renaissance and does not have major barriers to delivery;
2. The strong case to be made for additional growth in the south east of the region, in locations where additional growth may be deliverable, to address both affordability and economic growth objectives;
3. Recognising the limitations of certain locations (e.g. Cannock or Redditch) to accommodate additional growth given particular constraints and/or impacts;
4. The limitations in the ability of the market to bring forward major urban-based growth to accommodate the middle or upper end of the NHPAU supply range and, in particular the limited prospect of securing additional growth in the Black Country, where build rates have been significantly lower even than the RSS Preferred Option. (This effectively ruled out Option 5.);
5. Recognising the limitations of New Settlements as a means of delivering the additional units for the NHPAU supply range, which means the potential for Options 4 and 8 to make a real contribution are limited;
6. The differing perceptions on the scale of growth that can be accommodated in different broad locations. The evidence does not point to there being precise ‘tipping points’ above which additional growth is not possible – it is a matter of judgement, taking account of the scale, impact and deliverability in different broad locations. Analysis and feedback suggests that, with the exception of the areas identified for rural provision:
   – additional growth, if it was deemed appropriate, would be in the form of a major urban extension, which if possible and deliverable within the market, should be of sufficient scale and critical mass to form a sustainable urban extension supporting its own infrastructure provision (Warwick, Solihull and Telford provide good examples of this principle);
   – some additional levels of growth could be accommodated on urban sites, meaning the capacity of 340,000 originally identified in RSS is an under-estimate (Birmingham and North Staffordshire are good examples of this);
   – in the case of Solihull, one of the Potential Scenarios takes forward the concept of a new settlement, recognising the delivery challenges associated with this form of development.

9.33 The sample distributions shown in Table 9.3 for the three Potential Scenarios provide an indication of what the RSS distribution might look like, based in the outputs of the appraisal, if the principal aim was to achieve the given level of supply. These are shown below in Figures 9.3-9.5 (in terms of the net increase on RSS Preferred Option) and described in more detail, including with indicative levels of increase, in Table 9.5. The infrastructure and delivery implications associated with these scenarios are also outlined.

9.34 However, in terms of the potential strategic choices for the region at the middle to upper end of the NHPAU supply range, this study puts forward three broad scenarios.

Focusing growth in the South East of the Region

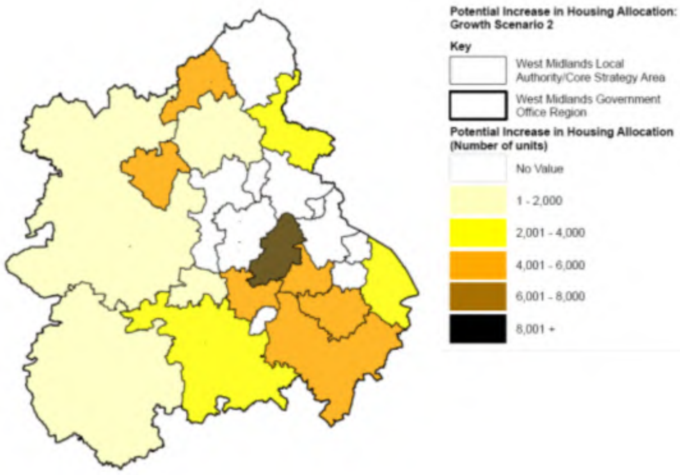


This scenario (similar to Option 3), focuses growth in the South East corner of the region, and with some provision in the rural west, identified scope for some 51,500 additional dwellings (an extra 2,575 per annum), providing a total of 417,100 dwellings by 2026. The ratio of provision between MUAs and non-MUAs as a whole would move from 46:54 to 47:53, with provision focused on parts of the region with some of the greatest levels of unmet need and affordability, with principal increases in the south and central C1 Housing Market Areas. This option would involve a new settlement in Solihull. This scenario would see growth arguably supporting parts of the region where economic growth is potentially being hampered by a lack of housing.

Figure 9.3: Potential Scenario for Achieving Further Housing Growth
Source: NLP

9.35 This potential scenario, would effectively concentrate the delivery risks and associated impacts into the south east of the region, and represents an approach that might be regarded as aligning most strongly to the economic pressures of the region.

Spreading growth

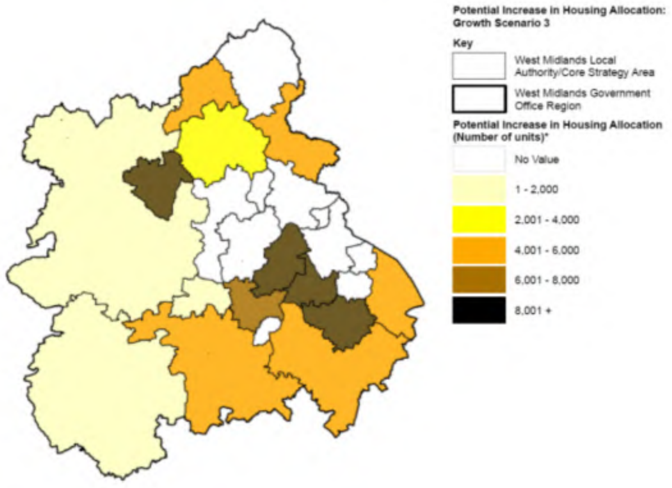


This scenario, delivering circa 54,000 additional dwellings (419,600 in total and an extra 2,700 pa) makes provision in the south east of the region where economic growth is strongest (although less than in the previous scenario), but also includes growth in North Staffordshire, Telford and Wrekin, and East Staffordshire where there is additional capacity for development, and with appropriate phasing, funding and delivery mechanisms (e.g. asset based vehicles) to support delivery. This spreads the development and market risk across a wider area. The ratio of MUA to non-MUA for housing distribution would be 47:53 with focus of growth in both the south east and in part of the north of the region with identified capacity and/or scope for additional growth, supporting affordability, economic and regeneration objectives.

Figure 9.4: Potential Scenario for Achieving Further Housing Growth
Source: NLP

9.36 This potential scenario would effectively spread the delivery risk across a wider range of locations and markets across the region, and support growth in locations outside the south east of the region where there is both capacity for additional housing and potential regenerative and economic benefits flowing from this provision.

Maximising Growth



This potential scenario, which delivers circa 80,000 additional dwellings (445,600 in total and 4,000 extra per annum) makes higher levels of provision across a range of locations in the region, including in and around the southern side of the Metropolitan MUA, in Telford and Wrekin, North Staffordshire, East Staffordshire, and Stafford, alongside rural housing provision in the west of the Region.

It is undoubtedly the case that this higher level of provision, whilst not necessarily unachievable provided sufficient available and developable land is released, would be a higher risk given the level of build rates required. The ratio of MUA to non-MUA for housing distribution would be 46:54, with significant levels of growth in the key locations identified in the preceding scenarios, focusing on affordability, economic, regeneration and additional capacity opportunities.

Figure 9.5: Potential Scenarios for Achieving Further Housing Growth

Source: NLP

9.37 This potential scenario shows what the distribution might look like with a higher level of provision at the top end of the supply range. Although it undoubtedly spreads this growth (and delivery risk) across the region outside the Black Country, it would represent a marked increase in output from the development industry and might be regarded as ambitious given current uncertainties.

9.38 Table 9.2 at the end of this section shows how the three potential Scenarios compare in terms of housing numbers for both the locations identified for additional growth and other local authorities/core strategy areas. Totals are also provided for MUAs/non-MUAs and the Strategic Housing Market Areas.

Delivering the Scenarios

9.39 In the event that one of the three scenarios identified is adopted for the purposes of RSS, its successful implementation is subject to the potential impacts of additional development in the locations identified in the preceding section being capable of mitigation, and the delivery risks overcome.

9.40 The bulk of these can be overcome by reasonable planning at a local level through Core Strategies, and it would be imprecise and inappropriate to identify specific local solutions in RSS when there are choices still to be worked through. In addition, the broader hydrology and utility issues identified in earlier sections of the report, including those applicable to the RSS Phase 2 Revision Preferred Option, are subject to ongoing work by utility providers and the Environment Agency and will continue to need to be progressed and the effects on phasing defined more accurately. Mitigation works that might be needed to address issues identified by the HRA cannot be identified until precise impacts are known.

9.41 In terms of transport, within the context that the HA modelling work indicates no material region-wide impacts of significance in terms of traffic, engagement with stakeholders and, where relevant, their advisors identified that localised transport impacts could in the bulk of cases be mitigated, through a combination of:

- Local transport improvements (including local access works, improvements to local bus services etc);
- Enhancements to the strategic road and rail network.

9.42 What improvements and enhancements might be and what the optimum transport solutions are will be the subject of detailed analysis and option appraisal. It will also depend on the local identification of potential development sites and forms of development, taking account of wider planning considerations.

9.43 Stakeholders did not always arrive at a consensus about the type of solution that might be required. This reinforces the need for caution in identifying transport solutions in advance of the specific locations of individual developments being resolved at Core Strategy stage and before full consideration is given to alternative options.

9.44 The other component in delivering growth, in addition to the right technical solutions to transportation, infrastructure, and other issues, and the necessary statutory planning framework (e.g. Core Strategies), is the right planning, funding and delivery toolkit. The components of this toolkit, which are not intended to be exhaustive, and will continue to evolve as the SNR and other developments take shape, are set out in Table 9.1 below: A key component of this will be the further strengthening of sub-regional working. The Regional Planning Body will also have an overseeing role.

Toolkit Component	Description	Intended Outcome	Responsibility
Planning and Local Evidence Base			
SHLAAs	SHLAAs, prepared on a robust basis and updated annually are the vehicle for ensuring that the right land is identified and brought forward to meet housing supply.	Identification and release of land suitable and available for development	Local Authorities with developer and other stakeholder input
Employment Land Reviews	ELRs should identify land and premises required to support economic growth. Properly aligned to the SHLAA process it could also identify employment sites more suitable for housing.	Identification of surplus land for employment or where mixed use including housing could support economic development objectives	Local Authorities with developer, business and other stakeholder input.
Environment and Infrastructure Capacity Studies	To translate the RSS to a local level, it will be important for many locations to identify the potential constraints on how their RSS allocation should be delivered and what infrastructure (from transport to culture) might be needed. This will be set out in core strategies.	Identification of potential spatial options for growth taking account of environmental and infrastructure capacity issues. Provides platform for infrastructure investment strategies and delivery plans	Local authorities
Housing Market Assessments	Prepared in line with guidance, to identify specific housing market considerations, including how phasing for new development and affordable housing provision, alongside integration with regeneration/sustainable communities agenda.	Identification of local housing need and market dynamics to inform judgement on location, mix and phasing of development, taking account of viability issues.	Local authorities and Housing stakeholders (e.g. developers, RSLs)
Sustainable Communities Strategies / LAA	Creates a long-term, sustainable vision in an area and sets the agenda for priorities in the local area agreement (LAA)	Clear vision and how it will be delivered, including role of wider partners.	Local authorities, LSPs

Toolkit Component	Description	Intended Outcome	Responsibility
Long Term Delivery Plans	Long term assessment of the infrastructure required to support housing growth alongside how it will be delivered and funded.	Certainty for planning, funding bids, and an investment prospectus for potential development partners	Local Authorities, utilities, infrastructure providers.
Local Transport Plan	Based on assessing transport infrastructure required to support growth. Scope to ensure LTPs are focused on genuine and necessary schemes.	Clear framework for funding and delivering transport investment.	Local authorities, PTE, Railtrack, DfT, GOWM
Funding			
s.106	It will be incumbent on local authorities to put in the right framework for s.106 that is cognisant of the requirements for infrastructure, but also smart to balancing these with viability and the genuine difficulties in making accurate assessments of development value, particularly for large developments, at the planning stage. The approach should be clearly set out.	Capture of development value to fund infrastructure.	Local authorities / developers
Community Infrastructure Levy	Addressing similar issue to s.106, the CIL framework provides a potential mechanism but needs to be carefully structured to respond to uncertainty and variations in residual land values.		
Growth Point Resources	Growth fund and CIF provides resources to deliver infrastructure and other requirements for housing growth	Resources to support development	Local authorities / Stakeholders
Regional Infrastructure Fund (RIF)	RIF initiative being developed by AWM provides the basis for using RDA Single Pot resources to fund infrastructure that supports growth.	Resources to support investment	AWM / Local Authorities
Homes and Commuties Agency Funding	Although the current spending review period is likely to be constrained by existing EP / HC / CLG funding splits, the period following this may provide greater opportunity to structure funding around the housing growth agenda as part of the 'single conversation' process.	Resources to support delivery of housing and provide the necessary environment for development.	Homes Communities Agency
Public Sector land and assets	In some locations, public sector land and other assets can provide the basis for delivery either through direct development and/or as collateral for investment in an asset-backed vehicle (ABV)	Land for development and resources to support growth	Local authorities / HCA / other
Private Sector	The investment by the private sector is the most important in terms of delivering additional housing growth. Local authorities and other bodies will need to be cognisant of the approaches that will need to be put in place to create the right kind of environment for investment.	Strong market for housing development and sales	Developers / Local authorities / other stakeholders
Delivery Vehicles			
Asset Based Vehicles	Mechanisms whereby local authority assets (e.g. land, property, cash) are invested into a vehicle and matched by private sector cash. Currently in place through the RDAs industrial/land portfolio, these are now being promoted for local areas (e.g. Croydon). Whilst having potential, there are complex financial, governance, and legal issues to address	Dedicated vehicle with resources flowing from land assets and a mechanism for long term private sector investment.	Local authorities / HCA / AWM / Private Sector

Toolkit Component	Description	Intended Outcome	Responsibility
Partnerships	Non-incorporate partnership bodies overseeing regeneration, housing development and integrating range of interests.	Coordination over strategy and delivery decisions.	Local authorities / developers / infrastructure providers / other stakeholder providers
UDCs and similar	Statutory bodies with planning and other powers to take forward major development schemes. Could be appropriate if a new settlement was considered appropriate.	Dedicated delivery vehicle with statutory powers	Government, local authorities, other stakeholders

Table 9.1: Delivery Toolkit
Source: NLP Analysis

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Birmingham	50,600	10,000	60,600	10,000	60,600	10,000	60,600	Addresses underlying need expressed by CLG projections, but results in significant gap to bridge on build rates. Core Strategy Issues and Options indicate additional growth is possible within or beyond the urban area. Transport and other issues to consider, but not major barriers to further growth.	No major infrastructure challenges identified.	Market build rates and securing appropriate sites for new development, particularly in the short term is a risk that must be considered significant.	Trajectory and market capacity issues means build rates likely towards end of the RSS. Need for careful phasing.
Coventry	33,500	0	33,500	0	33,500	0	33,500	Not identified in Options, due to significant increases above both past build rates and CLG Projections in RSS Phase 2 Preferred Option, although stakeholder feedback indicated urban extensions to Coventry considered preferable to development in adjacent areas.	N/A	N/A	N/A

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Black Country	61,200	0	61,200	0	61,200	0	61,200	May be physical capacity for additional housing growth and potential for urban extension, but market challenges mean unlikely that it will be possible to increase rates even further, and indeed some stakeholders suggested that greenfield release may be needed to meet existing RSS Phase 2 Preferred Option allocation on available sites.	N/A	N/A	N/A
Solihull	7,600	13,000	20,600	5,000	12,600	10,000	17,600	RSS under-provides against both past build rates and CLG Projections, so net additional growth could address underlying need and ability to deliver in market terms. Would necessitate Green Belt amendment. A strong market so good platform for market delivery if suitable sites identified. Some landscape issues but can be avoided through appropriate site selection.	Good accessibility but rail capacity issues in some locations that would need to be overcome, alongside highways measures.	No major delivery risks beyond those associated with transportation infrastructure, but these are not considered to be fundamental barriers to development. New settlement option could have clear market capacity and delivery risks although in principle they could be overcome.	If location for development necessitated further transport or investment, the phasing of build rates could be accommodated to reflect necessary lead-in times.
Metropolitan Area Total	**152,900**	**23,000**	**175,900**	**15,000**	**167,900**	**20,000**	**172,900**				
Shropshire CS	25,700	1,900	27,600	1,900	27,600	1,900	27,600	Additional Rural Provision – to reflect findings of the Taylor Review.	No major issues identified	No major issues identified	No major issues identified

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Telford and Wrekin	26,500	0	26,500	5,000	31,500	10,000	36,500	Although the RSS allocates Telford and Wrekin significantly more housing than envisaged by the CLG projections and past build rates, there is underlying potential for additional development both within the settlement and on land owned by EP (to be HCA). Further growth could support further investment in the town's retail and other services.	Need for increased capacity on rail links, and highway investment to address localised congestion. Some water supply and treatment investment required.	No principal infrastructure barriers to delivery of housing. Potential land and market capacity issues (particularly for a 10,000 unit increase) would need to be overcome by coordinated HCA/new asset based vehicle.	Need to control phased release of sites for housing to manage to maximise output with delivery plan. Phasing of development may need to await market recovery to fund infrastructure
Staffordshire (excl North Staffs)	**49,200**	**0**	**49,200**	**4,000**	**53,200**	**8,000**	**57,200**				
Cannock Chase	5,800	0	5,800	0	5,800	0	5,800	N/A	N/A	N/A	N/A
East Staffordshire	12,900	0	12,900	2,500	15,400	5,000	17,900	Additional capacity identified in Burton-upon-Trent SSD and growth associated with supporting regeneration and economic development activity aligned to Growth Point. Potential flood risk issues need to be managed but no indication that this is a fundamental barrier..	Localised congestion issues, and need to improve public transport accessibility into both East and West Midlands regions.	Higher rates of growth may trigger market capacity issues but ultimately phasing allows for additional growth to be delivered later in the plan period.	Not identified as one of region's strongest market areas, so viability issues need to be carefully considered, particularly given higher rates of growth. Phasing may need to await market recovery to fund infrastructure and reflect potential capacity constraints.

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Lichfield	8,000	0	8,000	0	8,000	0	8,000	N/A	N/A	N/A	N/A
North Staffordshire	17,100	0	17,100	6,000	23,100	6,000	23,100	Scope to increase growth to reflect underlying demand and potential link to economic development objectives, focused around the University of Keele. Further growth could also be aligned to wider regeneration of North Staffordshire conurbation. Identified capacity within MUA for additional housing and with appropriate phasing may support regeneration objectives	Localised congestion issues will require investment in bus services in tandem with appropriate location of additional growth. Need for some transportation infrastructure investment, and water supply/ treatment measures.	No identified delivery risks beyond potential market capacity.	Phasing will need to recognise risks of fragile markets, including to latter part of RSS period.
South Staffordshire	3,500	0	3,500	0	3,500	0	3,500	N/A	N/A	N/A	N/A
Stafford	10,100	0	10,100	1,500	11,600	3,000	13,100	Some scope to increase growth in SSD, although location would need to focus more towards south given to minimise any impact on North Staffordshire market.	Some local transport impacts could require mitigation, including scope to lengthen trains to enhance public transport capacity. Hydrology investment will be required.	Although infrastructure investment will be required, no major delivery risks identified.	No major issues identified. Phasing of development may need to await market recovery to fund infrastructure.

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Staffordshire Moorlands	6,000	0	6,000	0	6,000	0	6,000	N/A	N/A	N/A	N/A
Tamworth	2,900	0	2,900	0	2,900	0	2,900	N/A	N/A	N/A	N/A
Warwickshire	**41,000**	**14,500**	**55,500**	**12,500**	**53,500**	**19,500**	**60,500**				
North Warwickshire	3,000	0	3,000	0	3,000	0	3,000	N/A	N/A	N/A	N/A
Nuneaton and Bedworth	10,800	0	10,800	0	10,800	0	10,800	N/A	N/A	N/A	N/A
Rugby	10,800	5,000	15,800	3,000	13,800	5,000	15,800	Capable of accommodating additional growth and identified as SSD. Transport impacts but can be mitigated.	Potential highway and public transport capacity infrastructure works/ investment required. May require significant hydrology investment but not identified as ‘fundamental barrier’	Significant investment in infrastructure required. No evidence that this cannot be delivered, although rates of delivery will require market capacity increase at the 5,000 level.	No identified phasing or implementation constraints. Phasing of development may need to await market recovery to fund infrastructure

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Stratford-on-Avon	5,600	4,500	10,100	4,500	10,100	4,500	10,100	Eco Town shortlisted in May 2008. High level analysis indicates scheme may have major transport issues to resolve, but if these are capable of being resolved either through the Eco Town or some other form of development, there is a need and scope for additional development in Stratford to address affordability. (Part of Eco Town identified in Wychavon)	Will require range of infrastructure, but key is transport mitigation (guided rail/bus link). Social infrastructure may present timing issues. Water supply may be an issue but no reason to assume it cannot be overcome.	Key challenge is around ability to deliver necessary infrastructure, particularly transport. Alternatives to Eco Town might present alternatives more capable of being served if Eco Town bid not taken forward..	Implementation challenges flow principally from transport infrastructure. Timing of delivery would need to reflect realistic timescales for implementation of this investment.

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Warwick	10,800	5,000	15,800	5,000	15,800	10,000	20,800	Additional development to address affordability, under-provision against CLG Projections, and market ability to deliver more than RSS (evidenced by build rates). Transport issues differ between locations.	Transport infrastructure improvements associated with rail required, alongside bus service improvements. Social infrastructure investment required. Water supply and flood risk issues but not identified as insurmountable barrier to further growth.	Delivery risks flows from the necessary costs of infrastructure works, which will depend on location of development. Almost doubling the requirement might have market capacity issues but the underlying strength of the market (outside credit crunch conditions) and positive feedback from the development industry gives confidence on delivery.	Could be required to support further development once more detailed delivery plan in place.

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Worcestershire	**36,600**	**9,400**	**46,000**	**6,900**	**43,500**	**11,900**	**48,500**				
Bromsgrove	2,100	5,000	7,100	5,000	7,100	7,500	9,600	Combination of proposals in Options for Birmingham South and Redditch, alongside underlying under-provision of RSS Phase 2 against CLG Projections, past build rates, and major affordability threshold indicate potential for further development. It will be for LDF to identify most appropriate location for accommodating growth. Need for review of Green Belt in this location.	Both Redditch and extension to the Metropolitan area provide opportunities for using existing public transport infrastructure, alongside potential investment to upgrade. Investment in water supply/ treatment will be needed, depending on location of development.	Some developer concern at market capacity for development related to Redditch. Investment in infrastructure needed, and risk of non-delivery could hinder development but not considered a major issue. Market delivery could be an issue for higher output.	Phasing would need to be dictated by timescales for transportation (e.g. train lengthening) and water supply /treatment improvements where necessary to support development, this might mean phasing to 2012+
Redditch	6,600	0	6,600	0	6,600	0	6,600	N/A	N/A	N/A	N/A

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
South Worcestershire	24,500	5,500	30,000	3,000	27,500	5,500	30,000	South Worcestershire provides the basis for additional provision focused around Worcester, additional rural provision, and the Eco Town location at Middle Quinton (1,500 units). Potential scope to extend Green Belt.	Rail infrastructure capacity required to minimise potential traffic impacts around Worcester. Potential hydrology issues to resolve around water extraction from the Wye Valley, although these also apply to the RSS Phase 2 Revision Preferred Option and should be capable of being resolved.	Highway works costs could be significant, but no evidence that these could not be delivered in tandem with development in a reasonable market. No major delivery risks identified. A strong market was identified in Worcester although some suggestion from developers that the local market might be able to accommodate just 2,500 around Worcester itself.	Phasing of development may need to await market recovery to fund infrastructure. None identified
Wyre Forest	3,400	400	3,800	400	3,800	400	3,800	Additional Rural Provision – to reflect findings of the Taylor Review on rural economy and affordable housing.	None Identified	None Identified	None Identified

RSS Location / Core Strategy Area	RSS Phase 2 Revision Preferred Option (Net 2006-2026)	Potential Scenario 1		Potential Scenario 2		Potential Scenario 3		Key Issues and Impacts	Key Infrastructure associated with additional growth	Key Delivery Risks associated with additional growth	Phasing and other Implementation Implications associated with additional growth
		Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS	Potential Increase in Housing Allocation	Total Housing Allocation for RSS				
Herefordshire	16,600	1,200	17,800	1,200	17,800	1,200	17,800	Additional Rural Provision – to reflect findings of the Taylor Review on rural economy and affordable housing	Could be localised hydrology infrastructure requirements but can be accommodate d.	No major delivery risks identified.	None identified.
MUAs	**169,100**[9]	**23,000**	**193,000**	**21,000**	**191,000**	**26,0000**	**196,000**				
Non-MUAs	**196,500**	**28,500**	**224,100**	**33,000**	**228,600**	**54,000**	**249,600**				
HMAs											
North	**46,100**	**0**	**46,100**	**10,000**	**56,100**	**14,000**	**60,100**				
South	**53,000**	**20,400**	**73,400**	**17,900**	**70,900**	**27,900**	**80,900**				
Central C1	**69,100**	**23,000**	**92,100**	**15,000**	**84,100**	**20,000**	**89,100**				
Central C2	**58,100**	**5,000**	**63,100**	**3,000**	**61,100**	**5,000**	**63,100**				
Central C3	**97,000**	**0**	**97,000**	**5,000**	**102,000**	**10,000**	**107,000**				
West	**42,300**	**3,100**	**45,400**	**3,100**	**45,400**	**3,100**	**45,400**				
West Midlands Region	**365,600**	**51,500**	**417,100**	**54,000**	**419,600**	**80,000**	**445,600**				

Table 9.2: Summary of Implications for Housing Distribution

Source: WMRA / NLP Analysis

[9] Figures for MUAs differ between RSS and scenarios due to definition of Newcastle under Lyme urban figure within district total.

Overall Messages of this Study

1. There is scope to identify additional land for housing within the Region

9.45 There is potential to increase the supply of land for housing in the region beyond that identified in the RSS Phase 2 Preferred Option.. Releasing land for new development can produce adverse impacts, particularly locally. However failing to provide sufficient housing to meet need and demand also gives rise to adverse impacts, even if not so visible as locally-based ones. The region needs to consider these issues, taking account of the advice of the NHPAU which was not available when RSS Phase 2 Preferred Option was prepared.

2. Additional housing provision need not harm achievement of Urban Renaissance

9.46 Many stakeholders contend that for the region to make provision for additional housing supply would necessarily involve development outside the MUAs which, in turn, harms the RSS objective of urban renaissance. This is predicated on an assumption that achieving urban renaissance is a direct function of a particular split of housing supply inside and outside the MUAs, and that:

- Increasing supply of housing outside the MUAs will result in developers “cherry picking” and reducing supply of housing and development within the MUAs;
- Development outside the MUAs will increase out-migration from the MUAs;
- Development outside the MUAs (or indeed increased provision within some MUAs) might harm fragile markets, including housing market renewal areas;
- It is possible to meet the region’s housing needs both qualitatively and quantitatively through the approach of the RSS.

9.47 In the absence of ‘measurable’ ‘urban renaissance’, it appears to be used by some as a proxy for how development should be distributed in the region, without necessarily having a strong evidence base for why a pattern of development in the region that is different to the preferred option will automatically result in the challenge of ‘urban renaissance’ not being met. Having considered the options and these assertions, NLP has drawn the following conclusions.

(a) There is no evidence that increased supply outside the MUAs will reduce housing supply within them

9.48 There has been an increase in housing supply within the MUAs since 2001, although this peaked in 2005/6. However, there is no evidence that this increase has been as a result of restricting supply outside the MUAs. In fact based on data of the most recent five years, there is a stronger statistical positive correlation between the increase in supply within the MUAs and the increase in supply of flats/apartments (which was partly a function of PPG3 but also a market-driven trend) than there is with the reduction in the number of dwellings outside the MUAs. It is of note that new-build apartments are almost wholly 2 bedrooms or less, and the rate of completions for 3+ bedroom houses has decreased by almost 40% since 1999/00. An approach that restricted supply outside the MUAs could therefore limit the opportunities to broaden the range and choice of housing, or limit the potential to meet the need for family accommodation, which is needed in some locations.

9.49 In market terms, developers indicated that it is not scarcity of land supply outside the MUAs that drove increased supply within them. Nor is it more likely that supply will increase if they do not have sites outside the MUAs to develop. Developers assert that the market for apartments has now been saturated and will not return. In their view deliverability is a function of sales values and development costs for any site, and that only if values increase and costs fall within the MUA will rates of development increase beyond what has already been achieved through the apartments market. It is of note that even with the apartments market at its fullest extent over the past five years, the rates of development in the metropolitan MUAs were well below those envisaged by the RSS Preferred Option.

(b) There is no evidence that increasing housing supply outside the MUAs increases out-migration

9.50 In general terms, if the level of household growth within the region is at a level greater than that envisaged by the RSS Phase 2 Preferred Option, this will mean that increased supply up to the level of household growth is not creating a regional surplus of dwellings. The issue is then about balancing supply and demand in individual market areas, recognising the mobility of demand and drivers of housing decisions made by households.

9.51 Although restricting housing supply outside the MUAs would limit the potential *charge* of stimulating out-migration, there is no evidence that out-migration of population from the MUAs is a simple function of the level of housing supply outside the MUAs. In fact, analysis of data back to 2001/2 comparing build rates inside and outside the MUAs with net-migration flows into and out of the MUAs shows there is a not a strong statistical relationship between the rate of net out-migration from the MUAs and build rates outside the MUAs. The relationship between migration and housing supply is much more complex, and relates not only to the quantum of housing supply, but also to the trade-offs that every household makes in choosing where to live: the range and choice of housing, the location of employment, transport accessibility, and quality of life, including public services. For example, many out-migrants from the MUAs are likely to be making choices relating to quality of education in different locations, rather than quantum of housing.

(c) There may be limits on how far it is possible to increase housing supply within the MUAs

9.52 When presenting options for where additional housing could be delivered whilst minimising the impact upon the RSS Strategy, views tended to split between:

- Those directing the additional housing to the MUAs to protect urban renaissance; and
- Those asserting that additional locations outside the MUAs are required due to insufficient market or physical capacity to meet, let alone exceed, current RSS housing targets for the MUAs.

9.53 None of the evidence underpinning the study supported the prospect that additional allocations to the MUAs could achieve additional output in those areas, particularly in the Black Country. In particular:

- Housing output in the MUAs significantly undershoots the existing RSS Phase 2 Revision targets – over the period 2001/2 to 2006/7 that undersupply has totalled almost 17,500 units because the market has not been able to deliver this level of output;
- The credit crunch is already seeing a reduction in regional build rates overall, with developer feedback indicating the impacts are greatest in the MUA urban apartment market. At a national level CLG Data indicates that new housing starts fell by 24% in the first 3 months of 2008 compared to the same period in the previous year.

9.54 To illustrate the difficulties associated with higher build rates in the MUAs Table 9.3 presents a scenario outlining the possible impacts of the credit-crunch within the MUAs. The analysis is based on the assumption that current build rates will be reduced by 50% over the next 5 years.

Assumptions	
a. Build rates over the next 5 years may be 50% of those achieved in 2006, within the MUAs	3,223 p.a (16,113 units 2008-2013)
b. Current RSS requirements over the next 5 years in the MUAs	42,500 (8,500 p.a)
c. What could be the gap between 2008-2013 output and 2008-2013 requirement	26,388 (42,500-16,133)
d. If that gap was spread evenly over the RSS the 2013-2026 period what would be the annual RSS increase required in the MUAs	+2,030 p.a
e. What would the *total* annual requirement be over the period 2013-2026	10,530 (8,500+2,030)
f. What would be the %age increase in build rates (in the period 2013-2026) to close that gap	327% (10,530 vs 3,223)

Table 9.3: Build Rates in the MUAs

Source: NLP Analysis

9.55 Whilst the figures in the table are no more than an indicative scenario based on a 50% reduction in build rates they do highlight the very significant delivery challenges associated with the existing RSS housing requirements for the MUAs. Increasing the MUA requirements further could appear to incur unacceptable delivery risks, in locations where there is no confidence that measures are in place to bridge the delivery gap.

(d) In some locations there are increased risks that additional supply could harm fragile markets and undermine housing renewal, but could be overcome by careful phasing.

9.56 The problems of low demand resulting in Housing Market Renewal Pathfinders were, in some locations, associated with an increase in housing supply that was greater than the level of household growth, leading to the least popular stock (social housing and pre-1919 terraces) in the weakest neighbourhoods being increasingly bypassed by first time buyers and those economically active households able to exercise housing choice. This resulted in falling values, increased vacancies and turnover, and lack of investment. Over the past five years the combined effort of HMR investment and a stronger market has addressed some of the low demand symptoms: prices increased, vacancies and turnover fell, and new developments have emerged. There is a clear need, in those locations, to minimise the risk that future increases in housing supply to address an overall increase in households that is region-wide, does not impact on local fragile markets and create such displacement impacts for either household or developer demand.

9.57 There is clear evidence (drawn from the research base of the HMR initiative) that the approach to housing supply needs to distinguish between fragile markets where the issue is:

- **low demand** resulting from a weaker local economy and lower levels of household growth within the wider housing market area - this is arguably the case with North Staffordshire. In these circumstances, there is a need to be careful on how housing supply works in tandem with regeneration investment and avoids risk of displacement through phasing and control over the mix and type of housing developed. There is scope for some additional provision, provided it adds to the housing mix and offer that could not be delivered within HMR neighbourhoods, and contributes to the overall vitality of the wider housing market;

- **Housing market failure or dysfunction** in neighbourhoods where the housing mix and quality of life offer in those areas means they do not share in the benefits of economic and demographic growth that are driving the success of the wider housing market. This is arguably the case for the Birmingham Sandwell Pathfinder. Here, there is little evidence that it is housing development elsewhere in the region that is undermining the fragile market. Rather, the solution lies in spatial planning putting in place the diversified housing offer and mix, alongside the economic growth, education, services, and amenities within those neighbourhoods that make them more attractive and allow them to benefit from the proceeds of wider growth. This is ultimately what the plans of the HMR Pathfinder and wider regeneration strategies for both the Black Country and Birmingham represent.

9.58 Applying these principles, the appraisal of options suggests that there is scope to increase supply in North Staffordshire with appropriate care over phasing, whilst in Birmingham and the Black Country, there could be increases in output if the market is able to deliver.

9.59 New housing will support economic growth through regeneration – a fact recognised in the approach that is being taken as part of the Housing Market Renewal initiatives, and the strategies being adopted in Birmingham, the Black Country and North Staffordshire, alongside other locations such as Solihull and Telford and Wrekin. There is a balance to be struck between increased housing supply, and:

1. the risks that in some locations the market will not be able to deliver the build rates, given the sales values achievable;
2. the need for housing supply to match the level of household growth capable of being directed to that location, and for appropriate phasing, to minimise the risk of localised over-supply and displacement, leading to problems of low demand;
3. the importance in terms of wider regeneration of securing improvements to housing mix and the range and choice of housing, not all of which can be delivered within regeneration areas themselves; and
4. the delicate balance of land uses and need for focused and prioritised regeneration investment, which inherently places a limit on the amount of regeneration-based development that can be achieved within a given timeframe.

9.60 In this regard, options (such as 5) that focused very high levels of additional growth into the MUAs would arguably undermine some of these regeneration objectives.

3. Additional housing can assist economic growth

9.61 There is evidence to suggest that in certain economic sectors and economic geographies (notably the Coventry, Solihull and Warwickshire high technology corridor, but also rural areas) housing supply in the RSS Preferred Option is not keeping pace with the level required to deliver labour supply to match job growth. And footloose employment is tending to follow those sectors of the economically active population who are able to exercise most choice in the housing market – resulting in those locations with the highest quality of life also becoming increasingly important in economic terms, particularly for growth sectors. In a global economy, it will be important for the UK to support and enhance those key sectors, and the importance of the region in modernising its economy is recognised by the RSS Objectives. Whilst the precise relationship between housing supply, economic growth and regeneration is not simple, additional housing supply will help relieve labour supply blockages in important economic growth sectors

9.62 Of the different options those which increase supply in the South East of the region are most likely to support this objective. Although there is undoubtedly scope to recognise the potential for labour mobility (ie by having people live in the MUAs and working elsewhere and indeed to address quality of life and other measures in the MUAs to support economic growth) there are inherent limits to this (particularly as transport costs increase), and it is arguably less sustainable. Tilting the balance slightly to secure a better match of employment and housing may be a better fit against this RSS objective and the RES more broadly.

4. Birmingham needs more good quality housing in the city and its immediate hinterland to support its global role.

9.63 Birmingham's role as the economic hub of the region is recognised in the RSS that explicitly seeks to support its role as a *global* city. There is a strong case for arguing that the housing distribution of the RSS Preferred Option under-plays this role in housing supply terms – something acknowledged by the recent Core Strategy Issues and Options Report for Birmingham which increases the target for new housing as a component of the vision set out in the Big City Plan. Certainly, there is a strong case for increasing housing supply to reflect underlying need as represented by the CLG Household Projections, although there will be major delivery challenges (necessitating major increases in build rates above those previously achieved even in the apartments boom). Looking at how other global cities perform within their wider regions, it is clear they benefit from symbiotic relationships with successful and vibrant economic and housing locations outside the conurbation (e.g, London and the M4 corridor). If Birmingham is to perform as a genuine global city, it will act as a hub within a wider economic network that powers the economy of a successful and prosperous region. Restricting housing supply outside the MUAs in a way that undermines economic growth in the high technology corridor and in sectors that are important to the region's future could harm the ability of Birmingham to grow into its global role.

5. Additional housing growth can help address genuine affordability problems and meet housing needs

9.64 One role of RSS is to provide a spatial response to the Government's objective to widen the choice of high quality homes for those who cannot afford market housing, *"in particular those who are vulnerable and in need"*[10].

9.65 Drawing upon the findings of the NHPAU Affordability Model, the Matthew Taylor Report and housing needs and market assessment work in the region, as well as GIS analysis of housing prices against income levels and migration, the study has drawn a number of evidence based conclusions in relation to improving accessibility to affordable housing:

1. Increasing supply overall offers an opportunity to dampen down house prices and improve affordability;
2. Relative affordability problems are more acute in the Shire Counties than the MUAs – this is where those in need suffer the greatest affordability challenge;
3. Whilst the MUAs contain the greatest number of people in need, significant numbers are found in other areas such as Wychavon and Warwick;
4. During the credit crunch it may be difficult to secure increasing levels of affordable housing, via Section 106 agreements, as a proportion of new market-led housing. This challenge will be greatest in the MUAs where delivery will be most reliant on complex brownfield urban sites.

6. Additional housing growth can support rural renaissance and support RSS Objectives for regeneration

9.66 Relating the evidence back to the challenge of defining where additional housing in the region may best widen housing choice and improve affordability leads to the conclusion that there is scope to increase the supply of housing in the more suburban and rural areas. Additional allocations in these areas:

- Offer greatest prospect of identifying viable sites which can deliver a significant proportion of new affordable housing in the short-medium term; and

[10] PPS3 Paragraph 9, Strategic Housing Policy Objectives

- Will provide more affordable housing where those in need face the greatest challenges in gaining access to high quality homes.

9.67 The Matthew Taylor Review (Living Working Countryside: The Taylor Review) drew conclusions which mirrored the feedback provided to the study by those stakeholders representing rural interests, namely that:

- The high cost of rural homes compared with the low wages of rural employment opportunities is threatening the sustainability of many rural settlements. In Bridgnorth for instance average house prices in 2007 were in excess of £235,000 in comparison with a regional average of over £175,000. In contrast average annual salaries for employment in the area were, at £17,643, significantly below the regional average of £22,072;
- There is a flow of mid-lower income households away from rural settlements caused by the inability to secure appropriate housing – this is leading to urban to rural commuting patterns;
- In rural settlements even relatively small numbers of additional households can have dramatic local positive effects in terms of sustaining facilities such as shops, pubs, post offices, schools and surgeries; and
- Relatively small increases in rural housing with appropriate levels of affordable housing could have significant effects of sustaining settlements.

9.68 In the West Midlands it is the rural areas which, in general terms, are ‘over-performing’ in terms of their current RSS requirements. For example in Stratford upon Avon recent over-performance tends to suggest market demand and market capacity for additional housing. These are also the areas where affordability challenges are greatest. There appears to be scope to allocate more housing in these areas, with confidence that the market will be able to deliver a significant proportion of affordable housing which will help sustain settlements and improve access to housing.

7. Additional housing growth is likely to require the review of Green Belt, but this is consistent with the RSS Objective if it results in sustainable development and regeneration. There are also opportunities to increase coverage of Green Belt.

9.69 RSS Objectives already establish the principle for reviewing the Green Belt where this is necessary to meet the needs of sustainable development and regeneration. Implicit in the original work of WMRA that identified a capacity of 340,000 new homes was the possibility that Green Belt would need to be released.

9.70 The options which involve urban extensions indicate that this approach can be consistent with sustainability, in terms of meeting economic, social and environmental needs. Indeed, there is a strong case that, if there is a need for additional housing, that releasing land closer to the main centres of economic and other activity (in and around the MUAs and SSDs) can provide more sustainable transport solutions than development ‘leapfroging’ the Green Belt.

9.71 If proposals for additional growth were put forward, this could mean the need for review of Green Belt boundaries and RSS will need to establish the broad locations for these. It will be for Core Strategies to consider any detailed review of Green Belt in light of the housing and other development needs established through RSS. In tandem with this review, there are opportunities to increase Green Belt coverage and to establish boundaries that properly reflect the need to manage the long term development needs around the MUAs and other SSDs in the most sustainable way, taking account of PPG2 considerations, alongside other infrastructure planning requirements. For example, there could be extensions to the Green Belt to provide better protection of openness around the perimeters of Warwick, Stratford and other locations.

8. New Settlements are a potential form of development that could meet housing requirements, in the right locations, and if the delivery capability is put in place.

9.72 New Settlements were not identified in the preparation of the RSS Phase 2 Preferred Option. Options two (the Eco Town locations), four and eight considered whether and how this form of development could meet potential future needs. The analysis concluded that there is scope for this form of development, but that this should be divided into:

- Smaller new settlements (under 10,000 units) 'linked' to larger existing settlements, and connected by high quality public transport linkages. The current Eco town bid process indicates that, although there are infrastructure issues to be confronted (in terms of what is needed to meet the needs of those communities for primary and secondary education, day-to-day shopping needs and so on), there is no inherent reason why it cannot be an appropriate form of development, working with the private sector. Ultimately, it will be Core Strategies to determine whether this form of new settlement is an approach that could deliver against RSS housing requirements for that location, as an alternative to urban extensions;
- Larger, so-called 'freestanding' new settlements, of circa 20,000 units, that would have their own markets, economic development role, a place within the settlement hierarchy of the region, and would likely need to have a development trajectory that extended beyond the current RSS period. Options four and eight considered the potential for this form of development, and although they are undoubtedly controversial and would require major public sector delivery capacity from HCA and new delivery vehicles (perhaps UDCs) they are not something the private sector is capable of leading on), they could have a potential role if situated on transport corridors with capacity and in locations where the introduction of a *new* local market for housing and economic development could be accommodated without destabilising existing markets. It is considered that the south east of the region provides the best opportunity for this.

9. Transport issues are not a fundamental barrier to delivering more housing although investments in public transport alongside highway improvements will be needed in some locations

9.73 Additional growth will give rise to a range of localised transport impacts and will necessitate action at the national and local level to manage traffic demand, make best use of existing capacity and involve selective, and in some cases, significant investment in public transport alongside highway improvements, funded by development and Government. Modelling of the transport impacts of growth options shows the overall levels of road traffic – in terms of journey times and delays – to be not markedly different from those forecast in the RSS Phase 2 Preferred Option. There is already extensive investment in infrastructure committed within the region that will contribute to addressing congestion and accommodating growth. Key to mitigating these traffic impacts will be the provision (and use) of attractive viable public transport (and in particular, rail for the major commuting corridors) alternatives on key movement corridors. There should be no region-wide barrier to growth as a result of overall increased levels of traffic or the ability of the transport network to cope. Based on the information available to the study, the analysis has not identified any transport improvements that cannot be delivered and are therefore a barrier to further growth but equally, any improvements that are not currently funded commitments must be regarded as having some risk.

9.74 Key to delivering the RSS Phase 2 Preferred Option and additional provision in line with any of the Options in this Study will be a more proactive approach to prioritising, funding and delivering the infrastructure improvements. This will include aligning the local allocation and phasing of sites with transport solutions, identifying where the level of growth will trigger the need for supporting investment. There may be opportunities for focusing distribution of growth either in RSS or at a local level in order to strengthen business cases for investment along key transport corridors and secure s.106 funding contributions. In this regard, the 5,000 unit threshold for Eco Towns provides an illustrative guideline for the scale of development that can be more sustainable and capable of funding the necessary investment in infrastructure.

10. Although there are localised hydrology issues to resolve, there is no evidence to suggest that these cannot be addressed through investment in additional capacity or consideration of specific locations in Core Strategies.

9.75 Engagement with the Environment Agency and the water utility providers has provided a good understanding of the key risks associated with any additional growth through both the existing RSS Phase 2 Preferred Option and any further growth. Although there are some region-wide issues as well as specific localised challenges, there is no evidence that hydrology impacts cannot be mitigated or that feasible technical solutions can be found (including the way in which new development can be planned and delivered at the local level). The issue of water extraction from the Wye Valley is an issue that applies to the RSS Preferred Option as well as any additional housing growth and will need to be subject to mitigation.

9.76 Flood risk is an issue that needs to be considered in terms of the location and scale of development at a local level. At a regional level it is possible to recognise that additional housing growth can be accommodated, with flood risk capable of mitigation (obviously subject to agreement of the Environment Agency) even in locations identified as being at high risk through works to catchments, and with water attenuation, and with the application of policy to dictate the location of development through Core Strategies. Water supply and treatment also presents some localised issues, but these are issues of timing, and the likely trajectory of supply means that there is sufficient time to make the necessary provision.

11. The market downturn means the trajectory of housing delivery will change from that envisaged by the RSS Phase 2 Preferred Option, but there is no fundamental market barrier to increasing supply provided there is sufficient supply of suitable and available land for development

9.77 There are real issues associated with the market downturn, and it is undoubtedly the case that housing supply will be lower than previously envisaged at least in the period to 2011. In order to deliver the overall quantum identified in the NHPAU Supply Range by 2026, it will mean much increased rates in the latter half of the RSS period.

9.78 Ultimately, the Calcutt Review and the OFT report indicates there is no fundamental structural reason why it is not possible to increase supply significantly, and indeed, evidence across the regions shows that it is possible to ramp up supply of homes significantly year to year, although the increases required moving forward will be significant. What has not been achieved previously is the consistent supply of land across a wide range of market areas allowing a balanced approach that does not overload individual markets, and, for delivering the major place shaping investment required for housing led regeneration and, possibly, for new settlements, the right delivery vehicles and business models for the public and private sector to work together.

9.79 Clearly, this does not mean there is an infinite capability for increased supply, and the fluctuations in output year by year on top of the need to 'backfill' the undersupply during the downturn must mean that the upper end of the NHPAU supply range is a considerable challenge. In general terms, the OFT highlight the challenge of replacing skills lost during the downturn, and this will be something that needs to be addressed potentially as part of the regeneration/economic development agenda.

12. The phased release of land needs to focus on managing the risks for fragile markets, whilst also ensuring that supply increases as quickly as possible out of the downturn.

9.80 The trajectory analysis undertaken to explore the impact of the current economic downturn and its implications for housing construction, shows that levels of housing delivery will need to increase markedly out of the downturn, and accelerate to rates of development that have not been seen over the past thirty years. This applies to both the existing RSS Preferred Option and Options for delivering the NHPAU Supply Range.

9.81 There is a focus in policy terms from a number of stakeholders that any phased release of land should follow the broad approach set out in PPG3 (2001), namely for brownfield land to be prioritised over greenfield release. The appraisal of options also indicated that will be a number of locations where it would be inappropriate to release land in advance of there being the necessary investment in transport and other infrastructure, which may be programmed for delivery in the latter half of the RSS period.

9.82 Equally, in line with the guidance on Strategic Housing Land Availability Assessments (SHLAAs) there will be an important need to release land that is suitable and available for development in order to deliver a 5-year housing land supply, and to ensure that housing supply increases to meet recognised need. This will mean releasing sites that are viable and available at any given moment in time in advance of those that are not viable, and with long term certainty so that infrastructure providers can make long term investment decisions. This will mean greenfield sites in more attractive market locations being released before more difficult urban brownfield sites that will not be capable of being developed at that point in time. In many cases, as the market returns to an equilibrium, the phased tandem release of land will be appropriate.

9.83 The other phasing dimension is the need to protect fragile markets in the face of regeneration priorities. Again, in most cases, tandem release of greenfield and brownfield/regeneration sites should be possible.

9.84 On the basis of the above, the conclusions of this Study are that, if the region is to seek an increase in the levels of housing provision over and above that proposed in RSS Phase 2 Revision Preferred Option, there are a number of opportunities to do so. These do not raise fundamental barriers to delivery, although the overall scale of provision increases the degree of market risk as the level of requirement increases beyond the mid-point of the NHPAU Supply Range.

Nathaniel Lichfield and Partners
14 Regent's Wharf
All Saints Street
London N1 9RL
T: 020 7837 4477
E: london@nlpplanning.com
www.nlpplanning.com

Offices also in:
Cardiff, Manchester, Newcastle upon Tyne