# Environmental Appraisal of The Birmingham Plan

(UDP)

and Draft Alterations

Revised to reflect Proposed Modifications and updated September 2005

# Environmental Appraisal of The Birmingham Plan (1993) (Birmingham Unitary Development Plan), incorporating Draft Alterations and revised to reflect Proposed Modifications (Revised and Updated, September 2005)

#### Introduction

This report describes the environmental appraisal of The Birmingham Plan (UDP) adopted in 1993, the UDP Alterations approved for deposit purposes in 2001, and the Proposed Modifications published in 2005. It includes the methodology used and a summary of the findings. It deals with the impact of policy on environmental criteria only although it is recognised that environmental criteria need to be balanced against social and economic criteria to provide a full "sustainability appraisal."

This Environmental Appraisal was published with the UDP Alterations in 2000, and was subsequently revised for the Deposit Alterations in 2001. The impact of the Second Deposit Changes was assessed, but was not considered great enough to affect the Appraisal. However, the Appraisal has been revised to take account of the Proposed Modifications that were prepared in November 2004 and published for public consultation in April 2005.

#### **Context**

This Appraisal was carried out in accordance with the Government guidance that was current at the time that the UDP Alterations were prepared. The former Planning Policy Guidance Note 12 (issued in February 1992) underlined the need for development plans to incorporate an assessment of environmental implications. The preparation of the original Birmingham UDP predated this advice and did not therefore include an Environmental Appraisal. However, an exercise was undertaken in 1996 to appraise the adopted plan and to use the results to inform the scope and content of the emerging Alterations to the Plan.

Intervening years saw a growing awareness of the need for development to be sustainable. Planning Policy Guidance Note 1, revised in February 1997, emphasises the contribution of the planning system to achieving sustainable development, most commonly defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In practice this means that social and economic issues need to be balanced with environmental issues. Early in 2005 this was replaced with Planning Policy Statement 1 (PPS1): Delivering Sustainable Development, which firmly establishes sustainable development as the "core principle underpinning planning."

The adopted Birmingham Plan anticipated this approach to an extent, by identifying the twin objectives of economic revitalisation and urban regeneration, recognising that these are dependent on creating an attractive and safe environment both to benefit existing residents and businesses, and to ensure that new investment continues to be attracted. These themes are carried through and strengthened in the proposed Alterations where reference is specifically made to these themes being consistent with a more sustainable pattern of development.

#### **Methodology**

It is acknowledged that the new planning system, which came into effect on 28 September 2004, includes a requirement for a Sustainability Appraisal to be undertaken at the key stages in the preparation of plans, and that there is also now a requirement for new plans to be subject to a Strategic Environmental Assessment, in accordance with the Environmental Assessment of Plans and Programmes Regulations 2004. However, the UDP Alterations are not subject to these requirements, given that they are being progressed under the provisions of the previous Act and secondary legislation, in accordance with the transitional arrangements for development plan reviews in progress, and given that the "first formal preparatory act" occurred before 21 July 2004.

At the time that the UDP and UDP Alterations were prepared, there was no prescribed method for carrying out Environmental Appraisals although the Department of the Environment (prior to the establishment of the ODPM) had produced a Good Practice Guide, which offered various techniques. Of these, the most useful was considered to be the Policy Impact Matrix and this has therefore been used as the basis for this Appraisal. This method takes all the Part One UDP Policies and measures their impact on a set of environmental criteria ranging from the number of motorised trips to cultural heritage. These impacts are set out in the tables, which form the main part of this document.

The impacts are measured as: "beneficial" - eg reducing motorised trips; "detrimental" - e.g. encouraging more motorised trips; or as having no significant impact or beneficial and detrimental impacts balance each other. In a few instances where it has been impossible to predict the impact, then this has been registered as a query.

At the end of the document all these impacts are summarised on one table known as a "Policy Impact Matrix".

Although the result of using this technique can be an over-simplification of the very complex issues involved nevertheless, it is useful in checking that all possible impacts have been assessed, and has been used on this basis.

The UDP contains hundreds of policies and proposals. In order to make the exercise manageable, Core Policies from Part 1 were first identified. The 23 Core Policies are listed on Page EA7. These Core Policies were then assessed against the 15 environmental criteria listed on pages 9 and 10. In assessing the impact of any one policy against the criteria, it is assumed that all other UDP policies will be adhered to. For example, in assessing the impact of policies to maximise housing development in the built up area (HOU 3), it is assumed that policies regarding open space (ENV 4) will be adhered to, thus avoiding town cramming.

An initial appraisal of the adopted Plan was undertaken by members of the Strategic Planning Team of the former Department of Planning and Architecture. The views and comments of other specialist City Council officers from other divisions of the same Department and from the Economic Development Department and the Departments of Transportation, Leisure and Community Services, and Environmental Services were then sought and round table discussion took place where there were differences of opinion. At the end of this process there were still some areas where the impact on certain criteria was impossible to predict, either through lack of research or through uncertainty on whether policies would actually have the desired impact.

No attempt has been made to weight the relative importance of the various environmental criteria, or to weight the relative impacts on them. A straight summation of "beneficial" versus "detrimental" impacts may, therefore, give a misleading picture. However, the approach does give a manageable overview of the range of environmental impacts likely to result from the adopted plan and in particular it highlights areas where negative impacts are to be expected. Commentaries have been provided on each table to expand on the conclusions reached and highlight areas where it has been impossible to reach a conclusion.

A similar exercise was then carried out into the Draft Alterations. No change was made to the environmental criteria, but two new core policies were introduced, making a total of 25. This enabled the effect of the Alterations to be appraised and compared to the initial appraisal of the adopted UDP.

Following an extensive period of public consultation on the Draft Alterations in 2000, some changes to policy were made. These are summarised within the section on the Appraisal of Alterations but are not considered to be of sufficient magnitude to affect the policy impact matrix.

The findings of the Environmental Appraisal into both the adopted UDP and the draft Alterations are set out in table form on the following pages.

#### **Summary of Findings from Adopted UDP**

Before summarising the findings of the Appraisal it is important to recognise that the City of Birmingham is already home to nearly one million people, with the industrial, social and communication facilities associated with a major regional centre. Any UDP policy can only therefore result in small-scale changes to the impact that the existing City already has on the environment.

The promotion of Birmingham's distinctive central role within the West Midlands Region is important if decentralisation is to be slowed down. Such policies are consistent with a sustainable development approach regionally and with the approach set out in the Regional Spatial Strategy, although they will result in development pressures and some detrimental impacts at a more local level.

As previously stated, no attempt was made to weight the relative importance of the various environmental criteria. A straight summation of "beneficial" versus "detrimental" impacts will, therefore, give an over simplified picture of the impact of UDP core policies on the environment.

Although the UDP is essentially a land use plan, its policies are inextricably bound up with wider socio-economic considerations. There will inevitably be some policies which seem to favour social or economic objectives at the expense of environmental objectives, but overall a balance has been sought which will facilitate a sustained reversal of the economic decline which set in during the 1970's without prejudicing environmental considerations.

The Policy Impact Matrix illustrates this overall balance. The results of the appraisal of the adopted plan are shown on the initial unshaded columns of each table. They show that the overall strategy of the adopted Birmingham Plan, as evidenced in the Core Policies STRAT 1-4, have no negative impact on the environmental criteria with the one exception of the impact of maximising activity within the urban area on air quality.

It also shows that, as might be expected, core policies to build on greenfield sites (ECON2 and HOU4) provide new dwellings (HOU2) and enhance road, rail and air links (TRANS3) have the biggest detrimental impact on environmental criteria. However, the need to release some Green Belt land for housing and a Premium Industrial Site was specified in Strategic Planning Guidance and was balanced by a general presumption against development in the Green Belt, the encouragement of housing within the built up area and the use of brownfield sites for industry. Improving transport links inevitably had a detrimental effect on the environment but was considered essential to the objective of economic revitalisation. Those core policies which encouraged regeneration within the existing built up area (especially STRAT1, STRAT2, ECON1, HOU1, HOU3, SHOP2) had more beneficial impacts.

It is also acknowledged that while the effect of many policies can readily be assessed there are others where impacts could be beneficial or detrimental, depending on the way in which policies are implemented, for example with regard to the potential for re-use of building materials, and the use of renewable energy. Similarly, it is not known how amenable people will be to leaving their cars at home and using public transport or cycling, despite the policies put in place to encourage such changes. It should also be noted that an energy policy is being developed for the city, which will have a significant impact in giving encouragement to move into increasingly sustainable patterns of development.

It will be seen from the Matrix that certain environmental criteria, in particular air quality, noise pollution and wildlife habitats are especially vulnerable to any type of development, emphasising the need for particular attention to be paid to minimising any potential adverse effects on those criteria at the local level when detrimental proposals are considered. Overall it is interesting to note that only 12.5% of impacts were considered to be detrimental.

#### Appraisal of Alterations to The Birmingham Plan

The publication of Regional Planning Guidance (RPG) in September 1995, the Major Industrial Sites study in May 1996 and the publication of the West Midlands RPG Housing Review in October 1996 provided the trigger for reconsidering the adopted Birmingham Plan. The Birmingham Plan established a relatively timeless framework, sufficiently robust to accommodate change over time. Proposed Alterations have, therefore, been limited to those matters where change is necessary to allow the UDP to remain relevant and up to date and to be rolled forward from 2001 to 2011. They take into account RPG on housing and industrial land allocations, within the context of the findings of the initial environmental appraisal and recent guidance on sustainable development.

Alterations to Core Policies and their impact on environmental criteria are shown on the shaded part of each table. It can be seen that, with the exception of the proposed release of further greenfield land for a Major Investment Site (ECON2), and the subsequent redefinition of Green Belt boundaries to exclude an "Area of Development Restraint," the majority of Alterations resulted in either an improvement or no change to the environmental impact. This reflects the strengthening of policies to promote a sustainable approach to development including policies to alleviate some of the environmental impacts of development necessary for the economic and social benefit of Birmingham's citizens.

One of the most significant changes following the initial consultation in 2000 was the identification of a specific site for the Bassetts Pole Premium Employment site and its removal from the Green Belt. However, as the site lay within the area of search already identified in the 1993 adopted UDP, its environmental impact had previously been assessed under Policy ECON2 and this was not considered to have changed. A number of minor changes were also made in response to objections received in 2000. These were considered to have strengthened a number of environmental policies already assessed as part of the UDP and UDP Alterations Appraisal and no further changes to the impact matrix were considered necessary.

It was recognised that some of the policies would succeed only in slowing down the detrimental effects of development and that this would also be dependent on successfully changing behaviour patterns and expectations of what constitutes quality of life. Other policies, as mentioned above, were considered to have a detrimental local impact but were considered vital for the socio-economic health of the City and the region.

No significant changes were proposed at the Revised (Second) Deposit stage in January 2002, and it was not considered necessary to amend the Appraisal or the policy impact matrix to take account of this.

#### <u>Appraisal of Proposed Modifications to The Birmingham Plan</u>

Following the publication of the Inspector's Report in August 2003, the City Council considered the Recommendations made by the Inspector, and how it should respond to these. A considerable number of Modifications to the Plan were proposed as a consequence of this, and some of these did affect the Core Policies. The most significant impacts arose from the decision to delete the proposed Premium Employment Site at Bassetts Pole and the proposed Major Investment Site and Area of Development Restraint at Peddimore, in accordance with the Inspector's Recommendations. The impact of each Modification on the Core Policies has been assessed, and the Appraisal has been amended accordingly.

#### The Way Forward

It is essential that the Environmental Appraisal should not be an exercise undertaken by planners in isolation but should be integrated with other environmental initiatives and strategies, such as Local Agenda 21, wherever possible, although it is recognised that many aspects of environmental protection lie outside the remit of Development Plans. The methodology used has been as open and honest as possible. However, as already explained, it has not always been easy to predict the outcome of policies on the environment. The methodology and findings of the Environmental Appraisal formed part of the consultation process on the draft Alterations to the UDP.

Under the new planning system, from 2005, the City Council will be required to produce an Annual Monitoring Report, setting out how well its policies are performing. For the first few years of the new planning system, and until such time as it is replaced by new Development Plan Documents, the City Council will be assessing the performance of the Core Policies in the Altered UDP. The criteria and indicators used in the Appraisal will also be used as the basis for monitoring work.

#### USING THE TABLES AND THE POLICY MATRIX

- The tables are designed to show the impact of policies in both the adopted UDP and the UDP Alterations as proposed for Modification (at November 2004).
- It should be noted that there are two new Core Policies, ENV 5 and HOU 5, which do not appear in the original (2000) appraisal
- The impact of adopted UDP policies is shown in the clear boxes, and the impact of the policies in the UDP Alterations as proposed for Modification (at November 2004) is shown in the shaded boxes.
- The Core Policy from the adopted UDP to be assessed is set out at the top of the table. These core summaries form Part 1 of the adopted UDP and the relevant paragraphs are given for information.
- Changes to these Core Policies proposed in the Alterations are shown in the shaded box below the Core Policy.
- The environmental criteria are numbered 1-15 in the left hand column. A more detailed description of these criteria is given on Pages EA8 EA9.
- The assessed impact of the Core Policy on each criterion is shown by a symbol, see Page EA10.
- Each impact symbol is followed by a brief commentary, which explains the reasoning behind the symbol chosen.
- The first shaded column explains how the Alteration to the Core Policy (as proposed for Modification at November 2004) will affect the original impact.
- The second shaded column shows the revised impact as a symbol indicating a more beneficial (plus symbol) or a more detrimental (minus symbol).
- All the symbols from all the tables are placed in a matrix at the end of the document.
  The limitations of this methodology have been discussed in the first part of the
  document. However, it does give an overall indication of the impact of the adopted
  UDP and UDP Alterations on the environment.

#### **ABRIDGED CORE UDP POLICIES**

ST	<b>RAT</b>	<u>EG</u>	Y
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STRAT 1	Maximise Activity within the Urban Area	URBAN
STRAT 2	Maximise the Potential of the City Centre	CITY CENTRE
STRAT 3	Improve Environmental Quality and Attractiveness of the City	QUALITY
STRAT 4	Target Action on Priority Areas	PRIORITY AREAS

#### **ENVIRONMENT**

ENV 1	Enhancement of Built Environment	BUILT ENV
ENV 2	Maintenance of Green Belt	GREEN BELT
ENV 3	Protection of Nature Conservation Habitats	NATURE CONS
ENV 4	Protection of Open Space	OPEN SPACE
ENV 5	Waste Treatment and Management	WASTE

#### **ECONOMY**

ECON 1	Recycling of Industrial Land	RECYCLING
ECON 2	Peripheral Greenfield Development	PERIPHERAL
ECON 3	Office Development in Specified Locations	OFFICES
ECON 4	Encouragement of Tourism	TOURISM

#### **HOUSING**

HOU 1	Replacing/Improving/Existing Dwelling Stock	<b>EXISTING STOCK</b>
HOU 2	Provision of New Dwellings	NEW BUILD
HOU 3	Maximise Housing Development within the Built-up Area	BUILT UP AREA
HOU 4	Dwellings on Greenfield Land	GREENFIELD
HOU 5	Meeting Specific Housing Needs	SPECIFIC NEEDS

#### **TRANSPORT**

TRANS 1	Balanced Package: Designation and Improvements to SHN	SHN
TRANS 2	Balanced Package: Encouraging use of Public Transport	PUB TRANS
TRANS 3	Enhance wider Road, Rail and Air Links	LINKS
TRANS <u>5</u> <u>4</u>	Traffic Management Measures	MANAGEMENT

#### **SHOPPING**

SHOP 1	Existing Centres to be Focus for New Developments	CENTRES
SHOP 2	Enhancement of Shopping Centres	ENHANCEMENT
SHOP 3	Limited Out-of-Centre Development	OUT OF CENTRE

#### **GENERAL CRITERIA INDICATORS OF IMPACT Global Sustainability** Primarily concerned with atmosphere and climatic stability and with the conservation of bio diversity. 1. Transport Energy: Efficiency - Trips - reducing trip length - reducing the number of motorised trips 2. Transport Energy: Efficiency - Modes - increasing public transport share increased number of walking and cycling trips 3. Built Environment Energy - Efficiency - reducing heat loss from buildings - reducing capital energy requirements - increasing CHP potential 4. Renewable Energy Potential safeguarding wind potential - increasing direct solar gain 5. Wildlife Habitats / Ecology - safeguarding designated sites (SSSIs) safeguarding SINCs increasing general wildlife potential (e.g. corridors) protection of woodland increasing tree cover (rate of CO<sub>2</sub> fixing) **Natural Resources**

- husbanding of material resources concerned with appropriate use and, where necessary, appropriate protection of our resources of air, water, the land and its minerals.

6. Water Quality	<ul><li>maintaining ground water and river levels</li><li>safeguarding water supply purity</li></ul>
7. Land Quality	<ul> <li>safeguarding soil quality and soil retention</li> <li>reduction contamination/dereliction</li> <li>safeguarding quality agricultural land</li> </ul>
8. Minerals/Energy Conservation	<ul> <li>reduce consumption of fossil fuels and minerals</li> <li>increase reuse/recycling of materials</li> </ul>

#### **GENERAL CRITERIA**

#### **INDICATORS OF IMPACT**

#### **Local Environmental Quality**

- Conservation of local environment quality concerned with the protection and enhancement (and sometimes retrieval) of local environmental measures and systems ranging from landscape and open land to Cultural Heritage).

9.	Pollution: Noise	<ul><li>reducing noise pollution</li><li>improving aural environment</li></ul>
10.	Pollution: Air	- reducing levels of pollution (CO <sub>2</sub> , SO <sub>2</sub> etc)
11.	Landscape and Open Land	<ul><li>safeguarding green belt</li><li>retaining countryside/open land</li><li>enhancing general landscape quality</li></ul>
12.	Urban Environment "Liveability"	<ul> <li>enhancing "Liveability"</li> <li>increasing safety of sense of security</li> <li>reduction of olfactory pollution</li> <li>enhancing townscape quality</li> </ul>
13.	Cultural Heritage	<ul> <li>safeguarding listed buildings, conservation areas etc.</li> <li>safeguarding archaeological assets</li> <li>safeguarding assets of geology</li> </ul>
14.	Public Access and Open Space	<ul> <li>maintaining/increasing quality and availability of public access and open space</li> <li>retaining recreational land</li> </ul>
15.	Building Quality	<ul> <li>maintaining/improving the maintenance and continuous renewal of buildings.</li> </ul>

# ENVIRONMENTAL APPRAISAL OF THE BIRMINGHAM PLAN (UDP) AND DRAFT ALTERATIONS

**Policy Impact Matrix Key to Symbols** 1993 UDP Significant beneficial impact 0 No relationship, insignificant impact, or a balance of beneficial/detrimental ? Uncertain impact X Significant detrimental impact **UDP Alterations 2002 (incorporating Proposed Modifications 2005)** No change in impact as a result of draft Alterations More beneficial impact as a result of draft Alterations More detrimental impact as a result of draft Alterations Uncertain of impact ?

#### POLICY TO BE TESTED: STRAT 1: Maximise Activity within the Urban Area - Para 2.15

The policy is retained and strengthened, for example, higher annual house completion targets and encouragement of more intensive uses in locations well served by public transport.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	<b>✓</b>	Policy is intended to minimise both trip length and number of motorised trips	This impact should be strengthened.	+
Transport Energy: Efficiency -     Modes	✓	Concentration of activity could make the provision of public transport more attractive. Greater incentive for walking/cycling.	This impact should be strengthened.	+
Built Environment Energy -     Efficiency	<b>√</b>	Could increase CHP potential and minor beneficial impact on energy requirements due to concentration of activity. New build should be more energy efficient.	No significant change.	
4. Renewable Energy Potential	?	Uncertain of impact	No change.	
5. Wildlife Habitats/Ecology	О	Potential for limited detrimental impacts.	Potential for further local detrimental impact.	-
6. Water Quality	0	No significant impact on water quality. Potential for cleaning of canals.	No change. Will depend partly on use of sustainable urban drainage.	

7. Land Quality	✓	Maximising activity in the urban area would safeguard soil quality and retention, quality agricultural land and reduce the amount of contaminated/derelict land	Will strengthen beneficial impact.	+
8. Minerals/Energy Conservation	0	Increased activity/development could increase consumption of fossil fuels but reduce consumption of fuels used in transport. Potential to reuse/recycle buildings. New build should be more energy efficient.	No change. Will continue to depend on whether new or recycled materials are used.	
9. Pollution - Noise	0	Potential for marginal increase in noise pollution due to increased activity	Further noise likely to be generated.	-
10. Pollution - Air	X	Potential for increased levels of air pollution (mainly due to traffic).	No change.	
11. Landscape and Open Land	<b>√</b>	Policy should safeguard landscape, Green Belt and open land outside the urban area	Will strengthen beneficial impact.	
12. Urban Environment "Liveability"	0	Potential for both detrimental and beneficial impacts on urban environment liveability	No change.	
13. Cultural Heritage	✓	Opportunity for the reuse of potentially redundant listed buildings.	No change.	
14. Public Access and Open Space	0	No significant impact.	Could increase pressure on open space within urban area, although other policies should maintain protection.	
15. Building Quality	✓	Could encourage maintaining/improving the maintenance and continuous renewal of buildings	No change.	

#### POLICY TO BE TESTED: STRAT 2: Maximise the Potential of the City Centre - Paras 2.22 - 2.26

The policy is retained and strengthened, in particular to encourage new housing opportunities and mixed uses in the City Centre.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	0	Impact dependent on transport policies. However, maximising activity in the City Centre could increase trip length and also number of motorised trips.	Should have beneficial impact on trip length and number of trips because of proximity of more houses to jobs.	+
Transport Energy: Efficiency -     Modes	<b>√</b>	Concentration of activity in the City Centre is likely to make the provision of public transport more attractive. Limited impact on walking/cycling.	Should increase number of public transport, Walking and cycling trips.	+
Built Environment Energy -     Efficiency	<b>✓</b>	Could increase CHP potential and minor beneficial impact on energy requirements due to concentration of activity. New build should be more energy efficient.	No significant change.	
4. Renewable Energy Potential	0	No significant impact.	No change.	
5. Wildlife Habitats/Ecology	0	No significant impact.	No significant change. More pressure but policies for protection.	
6. Water Quality	0	Potential for improvement of water quality (e.g. cleaning of canals).	No change.	

7. Land Quality	✓	Maximising activity in the City Centre would safeguard soil quality and retention, quality agricultural land and reduce the amount of contaminated/derelict land.	Would further minimise loss of agricultural land to housing development.	-
8. Minerals/Energy Conservation	0	Increased activity/development could increase consumption of fossil fuels but reduce consumption of fuels used in transport. Potential to reuse/recycle buildings. New build should be more energy efficient.	No change.	
9. Pollution - Noise	0	Potential for marginal increase in noise pollution in the City Centre due to increased activity.	Potential for further increase in noise pollution in City Centre.	•
10. Pollution - Air	0	No significant increase in levels of air pollution.	No change.	
11. Landscape and Open Land	<b>√</b>	Policy should safeguard landscape, Green Belt and open land.	No change.	
12. Urban Environment "Liveability"	0	Potential for both detrimental and beneficial impacts on the City Centre environment.	No change.	
13. Cultural Heritage	0	Potential for detrimental impact (e.g. loss of listed buildings and archaeological assets).	No change.	
14. Public Access and Open Space	<b>√</b>	Should result in increased public access, and better quality open space.	No change.	
15. Building Quality	<b>√</b>	Could encourage maintaining/improving the maintenance and continuous renewal of buildings in the City Centre.	No change, provided quality of new build maintained.	

#### POLICY TO BE TESTED: STRAT 3: Improve Environmental Quality and Attractiveness of the City - Para 2.9

Policy remains unchanged.		

	NVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	0	No significant impact but could increase numbers of trips through improved development appeal.	No change.	
2.	Transport Energy: Efficiency - Modes	✓	Uncertain impact on public transport share. Increases number of walking and cycling trips.	No change.	
3.	Built Environment Energy - Efficiency	0	No significant impact.	No change.	
4.	Renewable Energy Potential	0	No significant impact.	No change.	
5.	Wildlife Habitats/Ecology	<b>√</b>	Maintaining, improving and increasing wildlife habitats will contribute to improving environmental quality and the attractiveness of the City.	No change.	
6.	Water Quality	✓	Improving environmental quality will lead to a beneficial impact on water quality (e.g. reclaiming derelict land and cleaning canals).	No change.	
7.	Land Quality	<b>√</b>	Improving environmental quality will lead to a positive impact on land quality.	No change.	

8. Minerals/Energy Conservation	0	No significant impacts.	No change.	
9. Pollution - Noise	0	Improvements in environmental quality could lead to the reduction of noise pollution due to increased activity would be marginal.	No change.	
10. Pollution - Air	<b>✓</b>	Improvements in environmental quality could lead to the reduction of air pollution if reducing industrial and traffic emission. However there could be a marginal increase due to increased activity.	No change.	
11. Landscape and Open Land	<b>✓</b>	Improvements in environmental quality and attractiveness should normally involve safeguarding landscape and open land.	No change.	
12. Urban Environment "Liveability"	<b>✓</b>	Improving environmental quality and attractiveness should lead to enhanced liveability.	No change.	
13. Cultural Heritage	<b>✓</b>	Improving environmental quality and attractiveness would normally involve safeguarding cultural heritage.	No change.	
14. Public Access and Open Space	<b>✓</b>	Improving environmental quality and attractiveness would normally involve safeguarding public access and open space.	No change.	
15. Building Quality	<b>✓</b>	Improving environmental quality and attractiveness would normally result in maintaining/improving building quality.	No change.	

#### POLICY TO BE TESTED: STRAT 4: Target Action on Priority Areas - Paras 2.12, 2.35 - 2.39

Policy continues to target action on priority areas. Policies to reduce social exclusion have been strengthened.

	IVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	?	Regeneration of priority areas (mostly in the Inner City) could lead to reduced trip length. Uncertain of impact on number of trips	No change, provided policies to reduce car use are successful.	
2.	Transport Energy: Efficiency - Modes	<b>√</b>	Targeting action on priority areas could make the provision of public transport more attractive. Likely increased number of walking/cycling trips in the priority areas	No change.	
3.	Built Environment Energy - Efficiency	<b>✓</b>	New investment in priority areas could lead to more energy efficient building	No change.	
4.	Renewable Energy Potential	0	No significant impact.	No change.	
5.	Wildlife Habitats/Ecology	0	No significant impact.	No change.	
6.	Water Quality	<b>√</b>	Potential for improvement of water quality (eg. clearing of canals).	No change.	
7.	Land Quality	✓	Targeting action on priority areas would reduce the amount of derelict/contaminated land.	No change.	

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8. Minerals/Energy Conservation	0	Increased activity/development could increase consumption of fossil fuels but could reduce consumption of fuels used in transport. Potential to re-use / recycle buildings. New build should be more energy efficient.	No change.
9. Pollution - Noise	0	Potential for marginal increase noise pollution due to increased activity.	No change.
10. Pollution - Air	0	Potential for increased air pollution due to increased activity in specific areas.	No change.
11. Landscape and Open Land	✓	Targeting action on priority areas should safeguard landscape, green belt and also open land outside of the priority areas.	No change.
12. Urban Environment "Liveability"	✓	Potential for beneficial impacts in the priority areas.	Policies designed to meet specific needs should improve liveability for these people.
13. Cultural Heritage	✓	Potential for beneficial impact (e.g. investment in and reuse of buildings and cultural heritage value).	No change.
14. Public Access and Open Space	✓	Potential for beneficial impact on open space.	No change.
15. Building Quality	<b>√</b>	Could encourage maintaining/improving the maintenance and continuous renewal of buildings.	No change.

#### **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: ENV 1: Enhancement of Built Environment - Paras 3.13 - 3.33, 3.71 - 3.79D

The Alterations strengthen the commitment to enhance the built environment by setting out design principles covering accessibility for all mixed uses, safety, trees and sustainable design to reduce the use of non-renewable materials and energy resources. New policies on Water and Drainage, Air Quality and Energy aim to minimise the effect of new development on the water table, encourage sustainable drainage options, minimise or reduce air pollution and minimise non-renewable energy consumption. Modifications to Energy policy (November 2004) support the development of renewable energy projects, in line with current Government guidance.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	0	Some beneficial and some detrimental impacts.	No change.	
Transport Energy: Efficiency - Modes	?	Uncertain of impact on public transport share. But could improve number of walking/cycling trips.	No change, but new policies on sustainable design and energy should promote more sustainable modes of transport.	
Built Environment Energy -     Efficiency	<b>✓</b>	Potential for increasing energy efficiency particularly due to new build.	Potential for further increase in energy efficiency.	+
4. Renewable Energy Potential	?	Uncertain of impact.	Potential for improvement through stronger support for the use of new technologies.	+
5. Wildlife Habitats/Ecology	0	No significant impact.	Water and Drainage policies should have a beneficial impact.	+
6. Water Quality	0	No significant impact.	Water and Drainage policies should have a beneficial impact.	+

7. Land Quality	<b>√</b>	Should result in reduction of contaminated/ derelict land. No impact on soil or agricultural land.	No change.	
8. Minerals/Energy Conservation	0	No significant impact.	Support for renewable energy should reduce use of fossil fuels. Potential for beneficial impact on re/use recycling of materials.	+
9. Pollution - Noise	0	No significant impact, although improved building design could reduce noise inside buildings.	No change.	
10. Pollution - Air	0	No significant impact.	Potential for improvement by reducing emissions of carbon dioxide.	+
11. Landscape and Open Land	0	No significant impact.	Some renewable energy technologies (e.g. wind turbines) may have significant detrimental impacts.	?
12. Urban Environment "Liveability"	✓	Beneficial impact on "liveability".	Potential for further beneficial impact on liveability.	+
13. Cultural Heritage	✓	An integral part of the enhancement of the built environment is safeguarding cultural heritage.	Potential for further enhancement of cultural heritage, although some renewable energy technologies (e.g. photovoltaic panels) can be detrimental.	+
14. Public Access and Open Space	<b>✓</b>	Enhancement of the built environment would normally involve protecting spaces around buildings.	Potential for further enhancement.	+
15. Building Quality	<b>✓</b>	Enhancement of built environment would normally include the maintenance/improvement of buildings.	No change.	

#### **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: ENV 2: Maintenance of Green Belt - Paras 3.41 - 3.46

No change to general policy within Green Belt boundary. However, it is proposed to revise the Green Belt boundary to remove an area of 37.5 hectares of brownfield land at Minworth Sewage Works for industrial development. No other Green Belt changes are proposed, given that the Modifications (November 2004) have deleted the proposals for the release of Green Belt land at Bassetts Pole and Peddimore and for the extension of the Green Belt at Quinton Meadows.

	IVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	0	Development within built up area would reduce trip length, development beyond Green Belt could increase trip length (i.e. car-borne commuting). Uncertain of impact on number of motorised trips.	Development at Minworth is unlikely to have a significant impact.	
2.	Transport Energy: Efficiency - Modes	0	No significant impact.	Development at Minworth is unlikely to have a significant impact.	
3.	Built Environment Energy - Efficiency	0	No significant impact.	No change.	
4.	Renewable Energy Potential	0	No significant impact.	No change.	
5.	Wildlife Habitats/Ecology	<b>√</b>	Maintenance of Green Belt would safeguard and enhance wildlife habitats.	No change. Potential to create and manage new wildlife habitats at Minworth through agreement with developers, so increase in quality despite loss of area.	
6.	Water Quality	0	No significant detrimental impact. However some farming practices may have a detrimental impact.	Bassetts Pole and Peddimore to remain in agricultural use. Development at Minworth unlikely to have significant impact.	

7. Land Quality	✓	Safeguard soil quality and quality agricultural land.	No change.
8. Minerals/Energy Conservation	0	No significant impact	No significant change.
9. Pollution - Noise	0	No significant impact.	No significant change.
10. Pollution - Air	O	No significant impact.	No significant change.
11. Landscape and Open Land	✓	Policy should directly safeguard Green Belt and retain countryside/open land.	No change.
12. Urban Environment "Liveability"	0	No significant impact.	No change.
13. Cultural Heritage	0	Policy may create difficulties for the reuse of historic buildings and thereby put at risk cultural heritage assets.	No change.
14. Public Access and Open Space	✓	Existing public access in the Green Belt maintained.	No change.
15. Building Quality	O	No significant impact.	No change.

#### POLICY TO BE TESTED: ENV 3: Conservation of Wildlife Habitats - Paras 3.37 - 3.40

Alterations make reference to Nature Conservation Strategy, which builds on existing policies. Modifications (November 2004) clarify the policy relating to designated sites, and significantly improve the effectiveness of the policy in protecting wildlife habitats generally. Boundaries of all Sites of Importance for Nature Conservation (SINCs) to be shown on the Proposals Map. New policies on Water and Drainage should also strengthen the conservation of wildlife habitats.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	0	No significant impact.	No change.	
Transport Energy: Efficiency -     Modes	0	No significant impact on public transport share. But could result in increase in walking activity.	No change.	
Built Environment Energy -     Efficiency	0	No impact.	No change.	
4. Renewable Energy Potential	0	No impact.	No change.	
5. Wildlife Habitats/Ecology	<b>√</b>	Beneficial impact.	Policies aim to increase beneficial impact by protecting/encouraging creation of new wildlife habitats.	+
6. Water Quality	<b>√</b>	Beneficial impact.	Policies aim to increase beneficial impact.	+

7. Land Quality	<b>✓</b>	Safeguard existing soil quality and retention. Protection of nature conservation habitats. May result in derelict land not being reclaimed and agricultural land not being used to its full potential.	No change.	
8. Minerals/Energy Conservation	0	No impact	No change.	
9. Pollution - Noise	0	No significant impact.	No change.	
10. Pollution - Air	0	No significant impact.	No change.	
11. Landscape and Open Land	✓	Beneficial impact.	Potential for increase in beneficial impact.	+
12. Urban Environment "Liveability"	✓	Enhances liveability and general amenity.	Potential for increase in beneficial impact.	+
13. Cultural Heritage	<b>✓</b>	Can enhance cultural heritage assets	No change.	
14. Public Access and Open Space	<b>√</b>	Beneficial impact.	No change.	
15. Building Quality	0	No significant impact.	No change.	

#### POLICY TO BE TESTED: ENV 4: Protection of Open Space - Paras 3.47 - 3.62, 5.20B - 5.20D

The Alterations strengthen existing commitment to protection of open space by clarifying definitions and existing policies. There is a new emphasis on "quality" in addition to "quantity" of open space, and guidance on provision of open space in new developments and the opportunity to redress the balance between open space provision in different Wards of the City. The only notable change in the Modifications (November 2004) is that it is no longer proposed to seek contributions towards open space in new housing developments of less than 20 dwellings. However, the impact of this part of the policy would have been negligible and does not result in any changes to the matrix.

l l	IVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	0	No significant impact.	No change.	
2.	Transport Energy: Efficiency - Modes	✓	No significant impact on public transport share. Likely increase in walking and cycling activity.	No change.	
3.	Built Environment Energy - Efficiency	0	No impact.	No change.	
4.	Renewable Energy Potential	0	No impact.	No change.	
5.	Wildlife Habitats/Ecology	✓	Likely beneficial impact.	No change.	
6.	Water Quality	✓	Beneficial impact.	No change.	
7.	Land Quality	✓	No detrimental impact on land quality. Could result in reduction of derelict / contaminated land.	No change.	

8. Minerals/energy Conservation	0	No impact	No change.	
9. Pollution - Noise	0	No significant impact.	No change.	
10. Pollution - Air	0	No significant impact.	No change.	
11. Landscape and Open Land	✓	Policy aims to safeguard landscape and open land.	Potential for further beneficial impact.	+
12. Urban Environment "Liveability"	✓	Enhances liveability and general amenity.	Potential for further beneficial impact.	+
13. Cultural Heritage	✓	Can enhance cultural heritage assets	No change.	
14. Public Access and Open Space	✓	Beneficial impact.	Potential for further beneficial impact	+
15. Building Quality	0	No significant impact.	No change.	

#### **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: NEW POLICY ENV 5: Waste Treatment and Management - Paras 3.65 - 3.67

The Alterations include new policies, which encourage the minimisation, reuse and recycling of waste, and encourage the rehabilitation of former landfill sites subject to adequate remedial measures and monitoring. Modifications (November 2004) have amended policy to provide clearer guidance on the type of locations considered suitable for the development of new waste facilities, and criteria that will be considered when assessing proposals. Policy also now covers impact of new development on waste.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips			Unlikely to be significant impact if "proximity principle" adhered to. However, some hazardous wastes may have to travel further for processing.	?
Transport Energy: Efficiency -     Modes			Unlikely to be significant impact. Transportation of materials by rail encouraged.	0
Built Environment Energy -     Efficiency			Potential for energy from waste.	✓
4. Renewable Energy Potential			No significant impact.	0
5. Wildlife Habitats/Ecology			Less landfill sites and less pollution from rubbish.	✓
6. Water Quality			Beneficial impact from reclaiming landfill sites.	✓

7. Land Quality	Beneficial impact.	✓
8. Minerals/Energy Conservation	Beneficial impact on recycling of materials provided that there is a market for them.	✓
9. Pollution - Noise	Increase in number of recycling facilities required to meet national targets – impact unclear.	?
10. Pollution - Air	Detrimental if energy from waste; beneficial if waste recycled.	0
11. Landscape and Open Land	Potential for beneficial impact due to rehabilitation of landfill sites.	0
12. Urban Environment "Liveability"	No significant impact – modified policy discourages waste facilities (other than recycling banks) in residential areas.	0
13. Cultural Heritage	No significant impact.	0
14. Public Access and Open Space	Potential for beneficial impact.	O
15. Building Quality	No impact.	O

POLICY TO BE TESTED: ECON 1: Recycling of Industrial Land – Paras 4.24, 4.31

The Alterations maintain the commitment to securing most of Birmingham's general industrial land from land formerly in industrial use (i.e. by recycling). A number of new industrial sites are included in the Alterations and Alteration 4/23 (paragraph 4.31) seeks to resist the loss of industrial land. No changes are proposed in the Modifications (November 2004), although they clarify the relationship between UDP policy and Regional Planning Guidance for the West Midlands (RPG11) – now the Regional Spatial Strategy.

	NVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	?	Potential for reduction in trip length. Reduction in number of trips uncertain.	No change.	
2.	Transport Energy: Efficiency - Modes	✓	Concentration of activity within the existing urban area could make provision of public transport walking / cycling more attractive.	No change.	
3.	Built Environment Energy - Efficiency	<b>√</b>	Recycling should lead to energy efficient building.	No change.	
4.	Renewable Energy Potential	0	No significant impact.	Potential for renewable energy on industrial sites but impact unknown.	
5.	Wildlife Habitats/Ecology	X	Potential for detrimental impact (e.g. loss of wildlife habitats) when recycling industrial land.	No change.	
6.	Water Quality	0	Reclaiming contaminated land will have a beneficial impact on water quality.	Potential for cleaner industrial practices, and reduction of leaching of contaminants into water table.	+

7. Land Quality	✓	Recycling of industrial land would reduce the amount of derelict/contaminated land and help safeguard agricultural land	No change.	
8. Minerals/energy Conservation	0	Recycling could increase or maintain the level of consumption of fuels used in transport. Possible beneficial impact on reuse/recycling of materials. New build should be more energy efficient.	No change.	
9. Pollution - Noise	0	Potential for marginal increase in noise pollution due to increased activity.	No significant change.	
10. Pollution - Air	Χ	Potential for increased air pollution due to increased activity.	No change.	
11. Landscape and Open Land	<b>√</b>	Recycling of industrial land should protect open land in urban areas. Improve landscaping/greening in new schemes.	No change.	
12. Urban Environment "Liveability"	✓	Potential for beneficial impacts.	No change.	
13. Cultural Heritage	0	Potential for detrimental impact (eg. Loss of archaeological assets).	No change.	
14. Public Access and Open Space	0	Improve landscaping/greening in some new schemes.	No change.	
15. Building Quality	✓	Better design quality of buildings.	No change.	

#### **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: ECON 2: Peripheral Greenfield Development - Paras 4.26 - 4.30

The UDP Alterations carry forward the proposal for peripheral greenfield development at Quinton Meadows from the adopted UDP although the site area has changed to 7.4 hectares. The Alterations also include peripheral employment proposals at Minworth Sewage Works (37.5 hectares of brownfield land) and Hatchford Brook (2.5 hectares of greenfield land). However, the Modifications (November 2004) have deleted the major peripheral greenfield proposals at Bassetts Pole and Peddimore, therefore, the amount of peripheral greenfield development proposed in the modified Alterations is much less than in the adopted UDP (only around 10 hectares in total).

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	X	Potential for significant detrimental impact particularly on trip length.	The amount of peripheral greenfield development proposed in the modified Alterations has been significantly reduced policy is unlikely to have a significant detrimental impact.	+
Transport Energy: Efficiency -     Modes	X	Potential for detrimental impact as public transport provision would be likely to be dispersed. Not conducive to walking and cycling.	The modified Alterations require appropriate transport improvements where developments take place in areas not well served by public transport, therefore potential to reduce detrimental impact.	+
Built Environment Energy -     Efficiency	✓	New investment should lead to energy efficient building and possibilities for CHP.	No change.	
4. Renewable Energy Potential	0	No significant impact.	No change.	

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5. Wildlife Habitats/Ecology	X	Possible detrimental impact on wildlife habitats/ ecology	The amount of peripheral greenfield development proposed in the modified Alterations has been significantly reduced policy is unlikely to have a significant detrimental impact, also potential to create new habitats through agreement with developers.	+
6. Water Quality	0	No significant impact on water quality.	No change.	
7. Land Quality	X	Detrimental impact on agricultural land	Impact on agricultural land negligible.	+
8. Minerals/Energy Conservation	X	Investment would increase consumption of fossil fuels. New build should be more energy efficient.	The amount of peripheral greenfield development proposed in the modified Alterations has been significantly reduced - policy is unlikely to have a significant detrimental impact.	+
9. Pollution - Noise	X	Potential for noise pollution due to new activity including traffic.	The amount of peripheral greenfield development proposed in the modified Alterations has been significantly reduced - policy is unlikely to have a significant impact in terms of noise pollution.	+
10. Pollution - Air	X	Potential for increased air pollution due to new activity including traffic.	The amount of peripheral greenfield development proposed in the modified Alterations has been significantly reduced - policy is unlikely to have a significant impact in terms of air pollution.	+
11. Landscape and Open Land	X	Likely loss of Green Belt land/ countryside and open land	Modified Alterations do not propose significant loss of Green Belt land/countryside and open land.	+

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12. Urban Environment "Liveability"	0	No significant detrimental impacts on urban environment liveability	No change.	
13. Cultural Heritage	0	Potential for detrimental impact (e.g. threat to settings of cultural heritage assets).	Proposals in the modified Alterations do not affect significant cultural heritage assets.	
14. Public Access and Open Space	0	Possible loss of local public access (eg. foot paths)	No change.	
15. Building Quality	0	No significant impact	No change.	

#### **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: ECON 3: Office Development in Specified Locations - Paras 4.33 - 4.45

The Alterations maintain the commitment in the adopted UDP to accommodating new office development in the City Centre and suburban locations, which are well served by public transport.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	?	Uncertain of effect on trip length. Concentration in specified locations may reduce the number of motorised trips by making provision of public transport more viable.	No Change	
Transport Energy: Efficiency - Modes	<b>√</b>	Concentration of activity in specified locations may make provision of public transport more attractive. Marginal impact on number of walking and cycling trips.	No change	
Built Environment Energy -     Efficiency	✓	Could increase CHP potential. Increase in capital energy requirements. New build should be more energy efficient.	No change	
4. Renewable Energy Potential	0	No impact	No change	
5. Wildlife Habitats/Ecology	0	Potential for detrimental impact on wildlife habitats/ecology.	No change	
6. Water Quality	0	No significant impact.	No change	
7. Land Quality	✓	Office development in specified locations could reduce the amount of derelict/contaminated land and help safeguard agricultural land	No change	

8. Minerals/energy Conservation	0	Office development in specified locations could increase or maintain the level of consumption of fossil fuels and minerals, but could reduce consumption of fuels used in transport. Potential to re-use (recycle buildings New build should be more energy efficient.	No change	
9. Pollution - Noise	0	Potential for marginal increase in noise pollution due to increased transport activity.	No change	
10. Pollution - Air	X	Potential for increased air pollution due to increased transport activity.	No change	
11. Landscape and Open Land	✓	Office development in specified locations should safeguard Green Belt and open land.	No change	
12. Urban Environment "Liveability"	0	Potential for both beneficial and detrimental impacts.	No change	
13. Cultural Heritage	0	Potential for detrimental impact (e.g. effect on listed buildings).	No change	
14. Public Access and Open Space	0	Potential for both beneficial and detrimental impacts.	No change	
15. Building Quality	✓	Potential for beneficial impact (eg. continuous renewal of buildings)	No change	

#### POLICY TO BE TESTED: ECON 4: Encouragement of Tourism - Paras 4.46 - 4.53

The Alterations maintain the commitment set out in the adopted UDP to encourage Tourism. The City's Tourism Strategy provides the framework for increasing the number of visitors to the City and provides the context for a quality visitor experience.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	X	Likely increase trip length and number of motorised trips due to increased activity.	No Change.	
Transport Energy: Efficiency -     Modes	<b>✓</b>	Uncertain of impact on public transport share. Potential for increased number of walking and cycling trips.	Increased potential for number of walking and cycling trips.	+
Built Environment Energy -     Efficiency	X	Increased activity could increase capital energy requirements. Limited potential for reduced heat loss or increased CHP potential. New build should be more energy efficient.	No change.	
4. Renewable Energy Potential	0	No impact.	No change.	
5. Wildlife Habitats/Ecology	0	Potential for both beneficial and detrimental impacts.	No change. Increased potential for both beneficial and detrimental impacts.	
6. Water Quality	0	No significant impact.	No change.	
7. Land Quality	✓	Potential for reducing the amount of derelict and contaminated land.	No change.	

8. Minerals/energy Conservation	0	No significant impact on reuse/recycling of materials.	No change.	
9. Pollution - Noise	Χ	Potential for increased noise pollution due to increased activity.	No change.	
10. Pollution - Air	X	Potential for increased air pollution due to increased activity.	No change.	
11. Landscape and Open Land	0	Impact on Green Belt/ countryside/ open land.	No change.	
12. Urban Environment "Liveability"	✓	Potential for both beneficial and detrimental impacts on urban environment liveability.	No change.	
13. Cultural Heritage	✓	Potential for beneficial impact on cultural heritage assets.	No change.	
14. Public Access and Open Space	✓	Potential for beneficial impact on public access and open space.	No change.	
15. Building Quality	<b>✓</b>	Could encourage maintaining/improving the maintenance and continuous renewal of buildings.	No change.	

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# **Figure - Policy Impact Matrix Commentary**

### POLICY TO BE TESTED: HOU 1: Replacing/Improving Existing Dwelling Stock - Paras 5.9 - 5.20

The Alterations maintain the commitment to maintain and improve existing housing stock. There is a new focus on: maximising the replacement capacity on cleared sites, new regeneration initiatives such as SRB, and a greater emphasis on the importance of good design in new residential development including the provision of new open space.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	O	No significant impact on trip length but could result in reduction of motorised trips (as overall replacement would be at lower densities).	Where replacement capacity is greater than 100% number of trips may increase. (N.B. increase in households does not necessarily mean increase in number of people).	?
Transport Energy: Efficiency -     Modes	0	No significant impact on public transport share but could include measures to increase number of walking and cycling trips.	No change	
Built Environment Energy -     Efficiency	<b>√</b>	Potential to reduce heat loss from buildings, capital energy requirement and to increase CHP potential. New build should be more energy efficient.	No change	
4. Renewable Energy Potential	0	Possibility for energy gains from solar sources.	No change	
5. Wildlife Habitats/Ecology	0	No significant impact.	No change	
6. Water Quality	0	No impact on water quality	No change	

7. Land Quality	0	No impact	No change	
8. Minerals/energy Conservation	<b>√</b>	Potential to reuse/recycle buildings. New build should be more energy efficient.	No change	
9. Pollution - Noise	0	No significant impact, although improved building design could reduce noise inside buildings.	Potential for increased pollution where capacity increased although new emphasis on good design, and increase in number of units does not necessarily mean increase in number of people.	?
10. Pollution - Air	0	No significant impact	Potential for increased pollution where capacity increased although increase in number of units does not necessarily mean increase in number of people.	?
11. Landscape and Open Land	0	No impact	No change.	
12. Urban Environment "Liveability"	✓	Potential for beneficial impact on Urban Environment Liveability	Increased emphasis on good design should improve potential for beneficial impact.	+
13. Cultural Heritage	0	No significant impacts. However, in some cases improving stock may be detrimental to cultural heritage assets (e.g. insensitive refurbishment).	No change	
14. Public Access and Open Space	0	Open space provision may be improved.	Will both gain and lose open space - no change on balance.	
15. Building Quality	✓	Beneficial impact on maintaining/improving the maintenance and continuous renewal of buildings.	No change.	

# POLICY TO BE TESTED: HOU 2: Provision of New Dwellings - Paras 5.20 - 5.34

Alterations increase the overall housing target in accordance with the requirements set out in RPG11.

	IVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	?	Uncertain of impact on trip length or number of motorised trips	More dwellings may result in increased number of trips although increase in number of households does not necessarily mean increase in number of people.	?
2.	Transport Energy: Efficiency - Modes	?	Uncertain of impact on public transport share and number of walking and cycling trips	No change	
3.	Built Environment Energy - Efficiency	✓	New buildings should be more energy efficient. Opportunities for combined heat and power (CHP)	No change	
4.	Renewable Energy Potential	0	Potential for gain from renewable energy sources (eg. solar sources)	No change	
5.	Wildlife Habitats/Ecology	0	Potential for detrimental impact (eg. loss of wildlife habitats).	No change	
6.	Water Quality	0	No significant impact on water quality	No change	
7.	Land Quality	0	Potential for new development on contaminated/derelict land. Potential detrimental impact on quality agricultural land.	No change	

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8. Minerals/energy Conservation	0	Provision of new dwellings likely to increase the consumption of fossil fuels, potential for reuse/recycling of materials. New build should be more energy efficient.	No change	
9. Pollution - Noise	X	Potential for increased noise pollution due to new activity including traffic.	More dwellings, although not necessarily more people, may increase impact. Emphasis on good design may balance impact.	-
10. Pollution - Air	X	Potential for increased air pollution due to new activity in particular from transport emissions.	More dwellings, although not necessarily more people, may increase impact. Emphasis on good design may balance impact.	-
11. Landscape and Open Land	X	Likely loss of Green Belt land/ countryside and open land.	No more green belt releases for housing.	+
12. Urban Environment "Liveability"	0	Both beneficial and detrimental effects on urban environment liveability	No change.	
13. Cultural Heritage	0	Potential for detrimental impacts (eg. loss of archaeological assets).	No change.	
14. Public Access and Open Space	X	Potential for loss of recreational land and open space.	No change.	
15. Building Quality	0	No significant impact.	Opportunity to improve but impact uncertain.	

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#### **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: HOU 3: Maximise Housing Development within the Built-up Area - Paras 5.23, 5.27, 5.32, 5.38 – 5.40

Alterations reinforce existing policy by including a target for development on brownfield land and by encouraging development in transport corridors, City Living, more flat conversions, higher density housing, the development of redundant industrial/commercial premises to housing and bringing empty properties back into residential use, i.e. maximise housing within City rather than beyond Green Belt in Shire areas. The Modifications (November 2004) clarify how the "sequential approach" towards housing development has been followed in Birmingham. Policies requiring a good standard of design in all housing developments are included.

	NVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency Trips	<b>√</b>	Policy is intended to minimise both trip length and number of motorised trips.	Will continue to minimise trip length. Higher densities may increase number of trips although increase in units does not necessarily mean increase in number of people.	
2.	Transport Energy: Efficiency Modes	✓	Concentration of activity could make the provision of public transport more attractive. Beneficial impact on walking and cycling.	City Living is likely to increase modal shift away from private car.	+
3.	Built Environment Energy - Efficiency	<b>√</b>	Could increase CHP potential and minor beneficial impact on energy requirements due to concentration of activity. New dwellings should be more energy efficient.	New policies likely to lead to even greater concentration of activity.	+
4.	Renewable Energy Potential	0	Limited potential.	No change.	
5.	Wildlife Habitats/Ecology	0	Potential for detrimental impact (eg. loss of wildlife habitats).	No change.	
6.	Water Quality	0	Improvement in water quality due to clearing of contaminated land.	No change.	

7. Land Quality	✓	Maximising housing development in the built-up area would safeguard agricultural land and reduce the amount of contaminated/derelict land.	Target for brownfield development and emphasis on recycling land and buildings should increase potential for beneficial impact.	+
8. Minerals/energy Conservation	0	Increased activity/development could increase consumption of fossil fuels but reduce consumption of fuels used in transport. Potential to reuse/recycle buildings. New build should be more energy efficient.	No change.	
9. Pollution - Noise	0	Potential for marginal increase in noise pollution due to increased activity.	Potential detrimental impact in local areas although increase in number of dwellings does not necessarily mean increase in number of people. Emphasis on good design may balance impact.	?
10. Pollution - Air	X	Potential for increased levels of air pollution due to increased activity (mainly due to traffic)	Potential detrimental impact in local areas although increase in number of dwellings does not necessarily mean increase in number of people. Emphasis on good design may balance impact.	+
11. Landscape and Open Land	✓	Would safeguard landscape, green belt and open land outside the built-up area	Increased emphasis on brownfield development, as opposed to development of greenfield land.	+
12. Urban Environment "Liveability"	0	Potential for both detrimental and beneficial impacts on urban environment liveability	Increased emphasis on good design should improve potential for beneficial impact.	+
13. Cultural Heritage	0	Potential for detrimental impact (eg. loss of archaeological assets).	No change.	
14. Public Access and Open Space	0	Potential for detrimental impact on open space and recreational land.	No change.	
15. Building Quality	✓	Potential for beneficial impact on maintaining/ improving the maintenance and continuous renewal of buildings including reuse of buildings.	More emphasis on good design and on conversion and re-use of empty properties.	+

#### POLICY TO BE TESTED: HOU 4: Dwellings on Greenfield Land - Para 5.26

The Alterations do not propose any new releases from the Green Belt for housing development. The target for brownfield development minimises the amount of development that can take place on other greenfield sites and these are no longer necessarily in peripheral locations. However, an area of white land has been identified in Sutton Coldfield to meet long-term development needs. The Modifications (November 2004) acknowledge that there has been an overall reduction in the amount of housing built on greenfield sites, from the 1,400 dwellings envisaged in the adopted UDP to 1,100. However, the reduction is not significant enough to change the overall impact of the policy.

	NVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	X	Potential for significant detrimental impact particularly on trip length.	Future greenfield development to be kept to a minimum (and indeed, has been reduced from 1,400 to 1,100 in the modified Alterations), and will not necessarily be in peripheral locations.	+
2.	Transport Energy: Efficiency - Modes	X	Potential for detrimental impact as public transport provision is likely to be dispersed.	Future greenfield development to be kept to a minimum (and indeed, has been reduced from 1,400 to 1,100 in the modified Alterations), and will not necessarily be in peripheral locations.	+
3.	Built Environment Energy - Efficiency	<b>✓</b>	New dwellings should be more energy efficient. Possibilities for CHP.	No change.	
4.	Renewable Energy Potential	0	Limited potential for use of renewable energy sources (eg. from solar gain).	No change.	
5.	Wildlife Habitats/Ecology	X	Possible detrimental impact on wildlife habitats/ecology.	No change.	

6. Water Quality	0	No impact on water quality.	No change.	
7. Land Quality	X	Detrimental impact on agricultural land.	No change.	
8. Minerals/Energy Conservation	X	Likely increase in use of fossil fuels particularly for transport. New build should be more energy efficient.	Future greenfield development not necessarily in peripheral locations.	
9. Pollution - Noise	X	Potential for noise pollution due to new activity including traffic.	No change.	
10. Pollution - Air	X	Potential for increased air pollution due to new activity particularly traffic.	No change.	
11. Landscape and Open Land	X	Likely loss of Green Belt land/countryside and open land.	No further Green Belt releases proposed.	+
12. Urban Environment "Liveability"	0	No significant detrimental effects on urban environment liveability.	No change.	
13. Cultural Heritage	0	Potential for detrimental impact (e.g. loss of archaeological assets).	No change.	
14. Public Access and Open Space	0	Possible loss of local public access (e.g. footpaths).	No change.	
15. Building Quality	0	No significant impact.	Opportunity for improvement but impact uncertain.	

#### POLICY TO BE TESTED: NEW POLICY HOU 5: Meeting Specific Housing Needs - Paras 5.35 - 5.41

The Alterations include new policies aimed at meeting specific housing needs. These include striking a balance between general market and affordable housing and the retention of larger family dwellings where required. Although the Modifications have deleted the policy towards Lifetime Homes, the general requirement for long-life, flexible buildings remains within the Design Principles for Sustainable Development. It is therefore unclear what impact the deletion of the Lifetime Homes policy will have upon the objective of meeting specific housing needs.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips			Uncertain of impact.	?
Transport Energy: Efficiency -     Modes			Uncertain of impact.	?
Built Environment Energy -     Efficiency			No impact.	0
4. Renewable Energy Potential			No impact.	0
5. Wildlife Habitats/Ecology			No impact.	0
6. Water Quality			No impact.	0
7. Land Quality			No impact.	0

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8. Minerals/energy Conservation	No impact.	0
9. Pollution - Noise	No impact.	0
10. Pollution - Air	No impact.	0
11. Landscape and Open Land	No impact.	0
12. Urban Environment "Liveability"	Policies are designed to meet specific needs and liveability should be improved for these people. The Modifications propose to delete the Lifetime Homes policy, although the requirement for long-life flexible buildings remains within the general design policies. It is therefore unclear what impact the deletion of this policy will have.	?
13. Cultural Heritage	No impact.	0
14. Public Access and Open Space	No impact.	0
15. Building Quality	Emphasis on good design for all housing.	<b>✓</b>

# POLICY TO BE TESTED: TRANS 1: Balanced Package: Designation and Improvements to SHN - Paras 6.38 - 6.41

The policy is retained but only selective investment will take place in order to maintain capacity.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	X	Likely increase in number of motorised trips due to improved accessibility. Minimal impact on trip length.	No change.	
Transport Energy: Efficiency - Modes	?	Uncertain of impact on public transport share. Possible increase in cycling if facilities provided.	Potential for management schemes to increase public transport and cycling trips.	+
Built Environment Energy -     Efficiency	0	No impact	No change.	
4. Renewable Energy Potential	0	No impact	No change.	
5. Wildlife Habitats/Ecology	X	Potential for detrimental impact (eg. effect of road widening/bypasses on wildlife habitats)	Fewer road improvement proposals so impact should be less.	+
6. Water Quality	0	No impact on water quality if environmental regulations are adhered to.	No change.	
7. Land Quality	0	Potential for minor negative impacts.	No change.	

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8. Minerals/energy Conservation	X	Increase in motorised trips will increase consumption of fossil fuels. Potential for some reuse of materials in road building.	No change.
9. Pollution - Noise	X	Increase in traffic likely to increase noise pollution	No change.
10. Pollution - Air	X	Likely increase in air pollution	No change.
11. Landscape and Open Land	0	Minimal impact on Green Belt and other open land	No change.
12. Urban Environment Liveability"	Χ	Likely detrimental affect on urban environment liveability in some local circumstances.	No change.
13. Cultural Heritage	Χ	Potential for detrimental impact (eg. effect of road widening on the setting of listed buildings)	No change.
14. Public Access and Open Space	0	Potential for limited detrimental effect on pubic access and open space.	No change.
15. Building Quality	0	No impact	No change.

#### POLICY TO BE TESTED: TRANS 2: Balanced Package Encouraging Use of Public Transport - Paras 6.21 - 6.36

The policy is retained and strengthened with increased emphasis on provision of quality public transport facilities, a new coach station, new railway stations and a car parking policy that includes progressive restriction to the number of parking spaces to be provided for new development Citywide. Although Metro Line 2 has been abandoned, extensions to Line 1 are proposed and additional corridors are being investigated. The Modifications (November 2004) set out the general requirements for transport in major new developments, and the approach that the City Council will adopt towards car parking provision, pending the adoption of specific car parking standards for Birmingham. However, the Modifications clarify the way that the policy will be applied, and do not alter the general approach or change the impact of the policy.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	<b>√</b>	Likely reduction in number of motorised trips. Uncertain of impact on trip length.	Intended to reduce the number of trips by encouraging greater use of public transport.	+
Transport Energy: Efficiency -     Modes	<b>✓</b>	Increase in public transport share. Uncertain of impact on walking and cycling	Intended to promote greater use of public transport, and to ensure that new developments in areas not well served by public transport address the need for access by a range of modes.	+
Built Environment Energy -     Efficiency	0	No impact	No change.	
4. Renewable Energy Potential	0	No impact	No change.	
5. Wildlife Habitats/Ecology	0	No direct impact	No change.	

6. Water Quality	0	No impact	No change.	
7. Land Quality	0	No impact	No change.	
8. Minerals/Energy Conservation	✓	Should result in the reduction of fossil fuels used in transport. No impact on reuse/recycling of materials	Should result in further reduction of fossil fuels used in transport.	+
9. Pollution - Noise	$\checkmark$	Reduction of motorised trips could reduce noise pollution	Marginal further improvement.	
10. Pollution - Air	✓	Reduction of motorised trips could reduce air pollution	Marginal further improvement.	
11. Landscape and Open Land	0	No direct impact	No change.	
12. Urban Environment "Liveability"	✓	Potential for benefits to urban environment liveability	Should bring further improvement to urban liveability.	+
13. Cultural Heritage	0	Potential for minor benefits for cultural heritage assets (eg. improving setting of listed buildings)	Potential for improvement due to less area required for car parking.	+
14. Public Access and Open Space	O	No direct impact	No change.	
15. Building Quality	0	No direct impact	No change.	

# EA5

# **Figure - Policy Impact Matrix Commentary**

#### POLICY TO BE TESTED: TRANS 3: Enhance Wider Road, Rail and Air Links - Paras 6.19, 6.52

The policy to enhance wider road rail and air links is retained. Although Metro Line 2 has been abandoned, other potential light rail corridors are being investigated.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	X	Improved accessibility (by road and air) will lead to increased trip length and number of motorised trips. However enhanced rail links - will reduce number of motorised trips for passengers and freight.	No change.	
Transport Energy: Efficiency - Modes	X	Enhanced rail links could lead to increased public transport share. Enhanced road links could reduce public transport share.	Generally more movements encouraged despite policies to promote public transport.	
Built Environment Energy -     Efficiency	0	No impact.	No change.	
4. Renewable Energy Potential	0	No impact.	No change.	
5. Wildlife Habitats/Ecology	Х	Enhanced links likely to have detrimental impact on wildlife habitats.	No change.	
6. Water Quality	0	Potential negative impact on water quality if environmental Regulations are not adhered to.	No change.	
7. Land Quality	X	Potential for loss of agricultural land due to enhanced road (orbital motorway) and airport infrastructure.	Western Orbital Route now abandoned, however M6Toll retained (and now built), therefore no change in impact.	

8. Minerals/Energy Conservation	Χ	Increase in use of fossil fuels for road, rail and air transport.	No change.
9. Pollution - Noise	X	Likely increase in noise pollution particularly near motorways and Airport.	No change.
10. Pollution - Air	X	Likely increase in air pollution due to increased activity particularly of road and air transport.	No change.
11. Landscape and Open Land	X	Potential for loss of green belt, and open land due to enhanced road and airport infrastructure.	No change.
12. Urban Environment "Liveability"	Χ	Potential for localised negative impacts.	No change.
13. Cultural Heritage	0	No significant impacts, although some local detrimental impacts (e.g. M6 Toll on listed buildings and historic field patterns).	No change.
14. Public Access and Open Space	0	No significant impacts except M6 Toll resulting in severing of local roads.	No change.
15. Building Quality	0	No impact.	No change.

# POLICY TO BE TESTED: TRANS 4: Traffic Management Measures - Paras 6.43 - 6.46

The policy is retained and strengthened to allow flexibility to give priorities to vulnerable users e.g. pedestrians and cyclists.

ENVIRONMENTAL IMPACT CRITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
Transport Energy: Efficiency -     Trips	0	Potential for both negative and positive impact on both trip length and number of motorised trips	No change.	
Transport Energy: Efficiency -     Modes	?	Uncertain of impact on public transport share. Likely increase in number of cycling and walking trips	Potential for greater priority to be given to public transport, cyclists and pedestrians, which could increase modal shift.	+
Built Environment Energy -     Efficiency	0	No impact	No change.	
4. Renewable Energy Potential	0	No impact	No change.	
5. Wildlife Habitats/Ecology	0	Minimal impact on wildlife habitats/ecology	No change.	
6. Water Quality	0	No impact	No change.	
7. Land Quality	0	No impact	No change.	

8. Minerals/energy Conservation	?	Uncertain of impact on overall consumption of fossil fuels used in transport. No impact on reuse/recycling of materials	No change.	
9. Pollution - Noise	0	Potential for both positive and negative impacts depending on local circumstances	No change.	
10. Pollution - Air	0	Potential for both positive and negative impacts depending on local circumstances	No change.	
11. Landscape and Open Land	0	No direct impact	No change.	
12. Urban Environment "Liveability"	<b>√</b>	Potential for benefits to urban environment liveability	Potential for further benefits to liveability.	+
13. Cultural Heritage	<b>√</b>	Potential for benefits for cultural heritage assets (e.g. improving setting of listed buildings)	No change.	
14. Public Access and Open Space	0	No direct impact	No change.	
15. Building Quality	0	No direct impact	No change.	

# POLICY TO BE TESTED: SHOP 1: Existing Centres to be Focus for New Development - Paras 7.13 - 7.26

The policy remains unchanged but now is also to apply to leisure and entertainment uses. The Modifications (November 2004) have revised the shopping policies so that they fully reflect current Government guidance towards Town Centres and Retail Development. However, as this is entirely consistent with the general approach of this Core Policy, these changes have not affected its overall impact.

	/IRONMENTAL IMPACT TERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
	Transport Energy: Efficiency - Trips	?	Uncertain of effect on trip length. Focus in existing centres may reduce the number of motorised trips by making provision of public transport more useable	Potential for less trips due to combined visits for retail and leisure purposes.	+
	Transport Energy: Efficiency - Modes	<b>✓</b>	Concentration of activity in centres may make the provision of public transport more attractive.  Possible increase in walking and cycling	No change.	
	Built Environment Energy - efficiency	0	Could increase CHP potential. Increase in capital energy requirements. New build should be more energy efficient.	No change.	
4. F	Renewable Energy Potential	0	Potential for limited detrimental impact.	No change.	
5. \	Wildlife Habitats/Ecology	0	Potential for limited detrimental impact.	No change.	
6. \	Water Quality	0	No significant impact.	No change.	

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7. Land Quality		Development in existing centres could reduce the	No change.
	<b>✓</b>	amount of derelict/contaminated land and help safeguard agricultural land.	
8. Minerals/energy Conservation	Ο	New Development in centres could increase or maintain the consumption of fossil fuels and minerals but could reduce the consumption of fuels used in transport. Potential to reuse/recycle buildings. New build should be more energy efficient.	No change.
9. Pollution - Noise	X	Potential for localised increased noise pollution due to new activity.	Potential for further increased noise pollution due to increased activity over longer hours.
10. Pollution - Air	O	Potential for increased air pollution due to increased activity. But reduce air pollution by improving public transport and walking and cycling.	No change.
11. Landscape and Open Land	$\checkmark$	Shopping development in existing centres should protect greenbelt/countryside/urban open space	No change.
12. Urban Environment Liveability"	0	Potential for detrimental and beneficial impacts.	Potential for beneficial impact due to activity over longer hours "24 hour city".
13. Cultural Heritage	0	Potential for detrimental impacts (eg. effect on listed buildings).	No change.
14. Public Access and Open pace	0	Potential for both beneficial and detrimental impacts (eg. loss of recreational land).	No change.
15. Building Quality	<b>√</b>	Potential for beneficial impact (eg. continuous renewal of buildings)	No change.

# POLICY TO BE TESTED: SHOP 2: Enhancement of Shopping Centres - Para 7.15

The policy remains unchanged. The Modifications (November 2004) clarify that further guidance will be prepared for centres under the new planning system.

	IVIRONMENTAL IMPACT RITERIA	IMPACT	COMMENTARY	IMPLICATIONS OF PROPOSED ALTERATIONS	REVISED IMPACT
1.	Transport Energy: Efficiency - Trips	?	Attractive local centres should result in reduction of trip length. Uncertain of impact on number of trips.	No change.	
2.	Transport Energy: Efficiency - Modes	?	Uncertain of impact on public transport share. Beneficial impact on walking/cycling.	No change.	
3.	Built Environment Energy - Efficiency	0	New build should result in more energy efficient buildings.	No change.	
4.	Renewable Energy Potential	0	No impact.	No change.	
5.	Wildlife Habitats/Ecology	0	No impact.	No change.	
6.	Water Quality	0	No impact.	No change.	
7.	Land Quality	0	No significant impact.	No change.	
8.	Minerals/Energy Conservation	0	No significant impact.	No change.	

9. Pollution - Noise	0	No significant impact.	No change.	
10. Pollution - Air	<b>√</b>	Enhancement of shopping centres could result in reduced localised air pollution (e.g. pedestrianisation).	No change.	
11. Landscape and Open Land	0	No significant impact.	No change.	
12. Urban Environment "Liveability"	<b>√</b>	Beneficial impact on urban environment liveability.	No change.	
13. Cultural Heritage	<b>√</b>	Safeguarding cultural heritage should be part of enhancing shopping centres.	No change.	
14. Public Access and Open Space	0	No significant impact.	No change.	
15. Building Quality	✓	Enhancement of shopping centres could include the maintenance/improvement of buildings.	No change.	

#### POLICY TO BE TESTED: SHOP 3: Limited Out-of-Centre Development - Paras 7.27 - 7.33

The Alterations make the policy more restrictive and now apply to leisure and entertainment uses as well as retail. The Modifications (November 2004) have revised the shopping policies so that they fully reflect current Government guidance towards Town Centres and Retail Development. The main changes are that the policy requires developers to demonstrate that there is a quantitative and qualitative need for out-of-centre or edge-of-centre proposals, and that the "sequential approach" has been followed, i.e. that they have first considered sites in centres, and then sites on the edge of centres, before opting for an out-of-centre location, and that they have adopted a flexible approach towards the format. However, as the general approach of the Core Policy remains the same, these changes have not affected its overall impact.

ENVIRONMENTAL IMPACT IMPACT CRITERIA			COMMENTARY		
1	. Transport Energy: Efficiency - Trips	X	Uncertain of impact on trip length. Likely increase in number of motorised trips.	No significant change.	
2	2. Transport Energy: Efficiency - Modes	X	Increase in public transport share is unlikely due to dispersal.	No significant change.	
3	B. Built Environment Energy - Efficiency	0	Could increase CHP potential but increase in capital energy requirements. New build should be more energy efficient.	No change.	
4	. Renewable Energy Potential	?	Uncertain of impact.	No change.	
5	5. Wildlife Habitats/Ecology	0	No significant impact.	No change.	
6	6. Water Quality	0	No significant impact.	No change.	

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7. Land Quality	0	Could reduce contamination/dereliction. Could have detrimental impact on agricultural land.	No change.
8. Minerals/energy Conservation	Ο	New development could increase or maintain the consumption of fossil fuels and minerals used in both construction and transport. Potential to reuse/recycle buildings. New build should be more energy efficient.	No change.
9. Pollution - Noise	X	Potential for increased noise pollution due to increased activity.	No significant change.
10. Pollution - Air	X	Potential for increased air pollution due to increased activity.	No significant change.
11. Landscape and Open Land	0	No significant impact. It is unlikely that proposals would be on Green Belt/countryside/open land.	No change.
12. Urban Environment "Liveability"	0	Potential for both beneficial and detrimental impacts on urban environment liveability.	No change.
13. Cultural Heritage	0	Potential for detrimental impacts (e.g. effect on setting of listed buildings).	No change.
14. Public Access and Open Space	0	Unlikely for proposals to be on recreational land and/or open space	No change.
15. Building Quality	0	No significant impact	No change.

# FIGURE: THE POLICY IMPACT MATRIX

	Glol Sus	oal tainal	bility			Natural Resources			Local Environmental Quality						
Criteria	Transport Energy: Efficiency - Trips	Transport Energy: Efficiency - Modes	Built Environment Energy - Efficiency	Renewable Energy Potential	Wildlife Habitats/Ecology	Water Quality	Land Quality	Minerals Conservation	Pollution - Noise	Pollution - Air	Landscape and open land	Urban Environment - "Liveability"	Cultural Heritage	Public Access and Open Space	Building Quality
Strat 1	<b>√</b> +	<b>√</b> +	✓	?	0 -	0	<b>√</b> +	0	0 -	Х	✓	0	✓	0	✓
Strat 2	0+	<b>√</b> +	✓	0	0	0	<b>√</b> +	0	0 -	0	✓	0	0	✓	✓
Strat 3	0	✓	0	0	✓	✓	✓	0	0	✓	✓	✓	✓	✓	✓
Strat 4	?	✓	✓	0	0	✓	✓	0	0	0	✓	✓	✓	✓	✓
Env 1	0	?	<b>√</b> +	?+	0+	O+	✓	O+	0	0+	0?	<b>√</b> +	<b>√</b> +	<b>√</b> +	✓
Env 2	0 -	0 -	0	0	✓	O+	<b>√</b> -	0	0	0	✓-	0	0	✓	0
Env 3	0	0	0	0	<b>√</b> +	<b>√</b> +	✓	0	0	0	<b>√</b> +	<b>√</b> +	✓	✓	0
Env 4	0	✓	0	0	✓	✓	✓	0	0	0	<b>√</b> +	<b>√</b> +	✓	<b>√</b> +	0
Env 5	0?	0	✓	0	✓	✓	✓	✓	0?	0	0	0	0	0	0
Econ 1	?	✓	✓	0	Х	0+	✓	0	0	Х	✓	✓	0	0	✓
Econ 2	X+	X+	✓	0	X+	O+	X+	X+	X+	X+	X+	0	0	0	0
Econ 3	?	✓	✓	0	0	0	✓	0	0	Х	✓	0	0	0	✓
Econ 4	Χ	<b>√</b> +	Х	0	0	0	✓	0	Х	Х	0	✓	✓	✓	✓
Hou 1	0?	0	✓	0	0	0	0	✓	0?	0?	0	<b>√</b> +	0	0	✓
Hou 2	??	?	✓	0	0	0	0	0	Х-	X-	X+	0	0	Χ	0
Hou 3	✓	√+	<b>√</b> +	0	0	0	<b>√</b> +	0	0?	X+	<b>√</b> +	O+	0	0	<b>√</b> +
Hou 4	X+	X+	✓	0	Х	0	Х	Χ	Х	Х	X+	0	0	0	0
Hou 5	?	?	0	0	0	0	0	0	0	0	0	√?	0	0	✓
Trans 1	Χ	?+	0	0	X+	0	0	Х	Х	Х	0	Х	Х	0	0
Trans 2	<b>√</b> +	<b>√</b> +	0	0	0	0	0	<b>√</b> +	✓	✓	0	<b>√</b> +	0+	0	0
Trans 3	Χ	Χ	0	0	Х	0	Х	Χ	Х	Х	Х	Χ	0	0	0
Trans 4	0	?+	0	0	0	0	0	?	0	0	0	<b>√</b> +	✓	0	0
Shop 1	? +	✓	0	0	0	0	✓	0	X-	0	✓	0	0	0	✓
Shop 2	?	?	0	0	0	0	0	0	0	✓	0	✓	✓	0	✓
Shop 3	Χ	Χ	0	?	0	0	0	0	Χ	Χ	0	0	0	0	0