

Land Use Change Statistics (England)

2007 - provisional estimates

Land Use Change Statistics (LUCS) are annual data. This release provides initial estimates for 2007 of changes on previously-developed land and the average density of new dwellings. For other topics (see below) 2007 data are not yet robust and so the latest year for which robust data are available is presented. Data are published quarterly, with three of the four releases each year containing updated data. This Statistical Release covers information on-

- Changes on previously-developed land.
- Density of new dwellings.
- Changes on the Green Belt.
- Changes within areas of high flood risk.
- Land Changing to residential use.
- Changes to developed uses.

- In 2007, on a provisional estimate, 75 per cent of dwellings were built on previously-developed land (including conversions). This compares to 76 per cent in 2006.
- In 2007, on a provisional estimate, new dwellings were built at an average density of 45 dwellings per hectare. This compares to 41 dwellings per hectare in 2006.
- In 2006 two per cent of dwellings were built within the 2007 Designated Green Belt. In 2006 five per cent of land changing to residential use (from any use including residential) was within the Green Belt. These figures are unchanged from 2005.
- In 2006 ten per cent of dwellings were built within areas of high flood risk. In 2006 seven per cent of land changing to residential use was within areas of high flood risk. This compares to nine and six per cent respectively in 2005.

May 2008



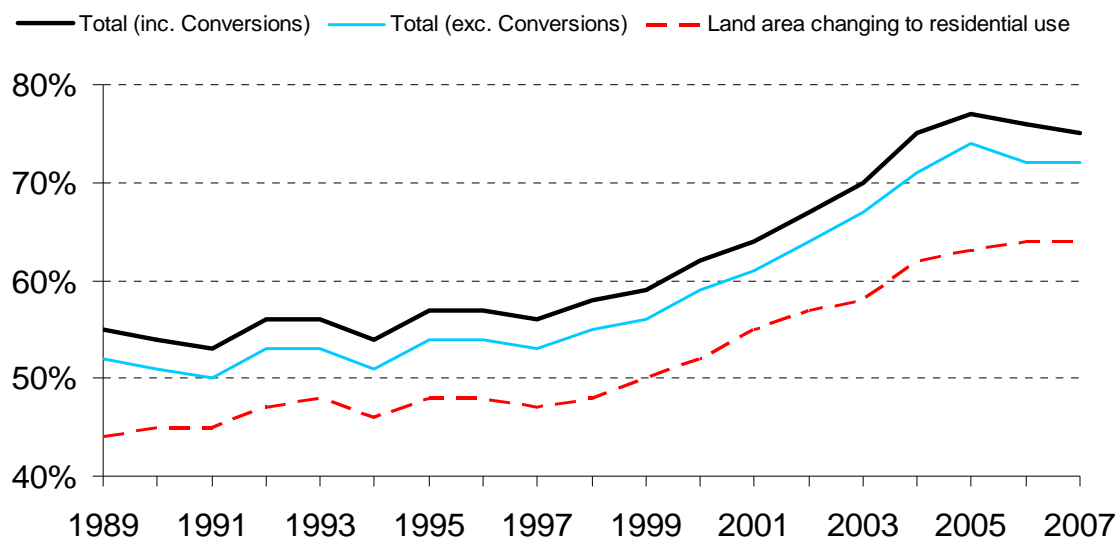
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Changes on previously-developed land

The latest national estimates for changes on previously-developed land are for 2007, while the latest regional estimates are for 2006². The land use categories defined as previously-developed are found in the background notes. PSA6 (from the 2004 Spending Review) stated that 60 per cent of new housing development should be built on previously-developed ('brownfield') land, or created through the conversion of a current building.

- In 2007, on a provisional estimate, 75 per cent of dwellings were built on previously-developed land (including conversions). This compares to 76 per cent in 2006. In May 2007 when the first provisional estimate for 2006 was published it was estimated at 74 per cent.
- Since 1997 the proportion of dwellings built on previously-developed land has increased by 19 percentage points. The figure has decreased by two percentage points since 2005 from 77 per cent to 75 per cent (see Figure 1).
- Since 1997 the proportion of land changing to residential use that had already been developed has increased by 17 percentage points from 47 per cent to 64 per cent. The figure has increased or remained unchanged in every year since 1997.

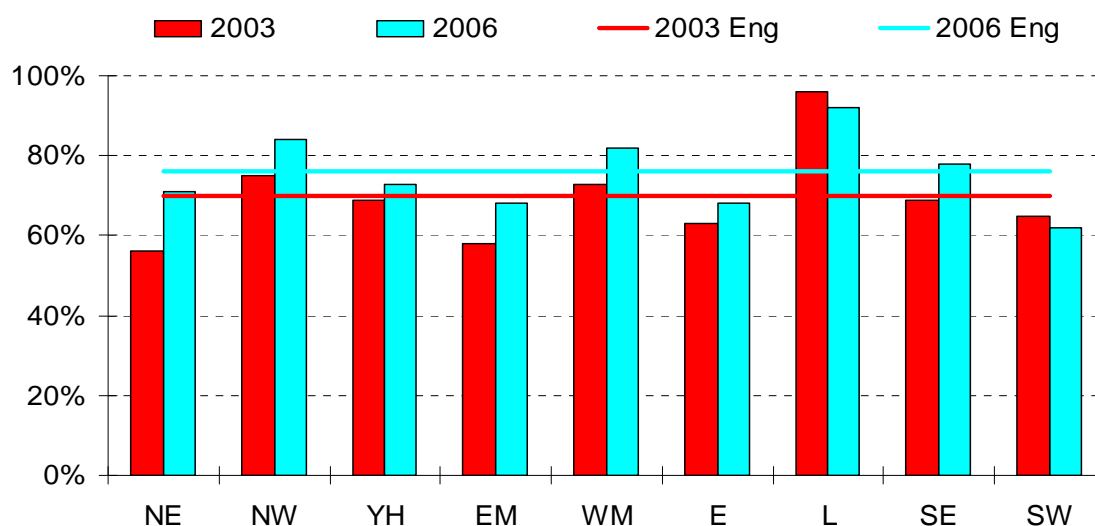
Figure 1: The proportion of new dwellings and residential land built on land that was previously-developed, 1989 to 2007



- Between 2003 and 2006 seven of the nine regions showed an increase in the proportion of dwellings (including conversions) built on previously-developed land (see Figure 2).
- The only regions to show a decrease in the proportion of dwellings (including conversions) built on previously-developed land over this time were London (96 per cent to 92) and the South West (65 to 62).
- London is the region with the greatest proportion of dwellings built on previously-developed

land (92 per cent in 2006), whereas the South West has the smallest proportion (62 per cent in 2006).

Figure 2: The proportion dwellings built on previously-developed land, by region, 2003 and 2006



Detailed statistics on changes on previously-developed land (including data at a local authority level) can be found on the Land Use Change Statistics Live Tables¹, numbers 211 to 213.

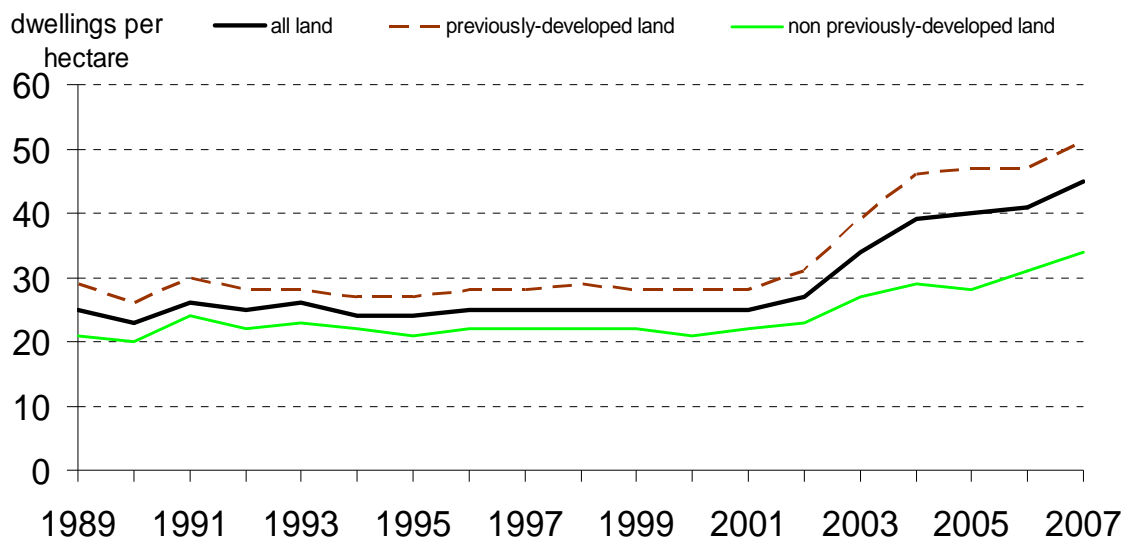
Density of new dwellings

The latest national estimates for the density of new dwellings are for 2007, while the latest regional estimates are for 2006². Density is measured in dwellings per hectare. PSA6 (from the 2004 Spending Review) stated that new housing development in each region should avoid developments of less than 30 dwellings per hectare and encourage those between 30 to 50 dwellings per hectare.

- In 2007, on a provisional estimate, new dwellings were built at an average density of 45 dwellings per hectare. This compares to 41 dwellings per hectare in 2006.
- The number of new dwellings per hectare increased by 80 per cent between 2001 and 2007 (see Figure 3). The figure was unchanged from 1996 to 2001, when it was 25 dwellings per hectare.
- In 2007, on a provisional estimate, new dwellings on previously-developed land were built at an average density of 51 dwellings per hectare. This compares to 47 dwellings per hectare in 2006 and 28 dwellings per hectare in 2000.
- In 2007, on a provisional estimate, new dwellings on **non** previously-developed land were

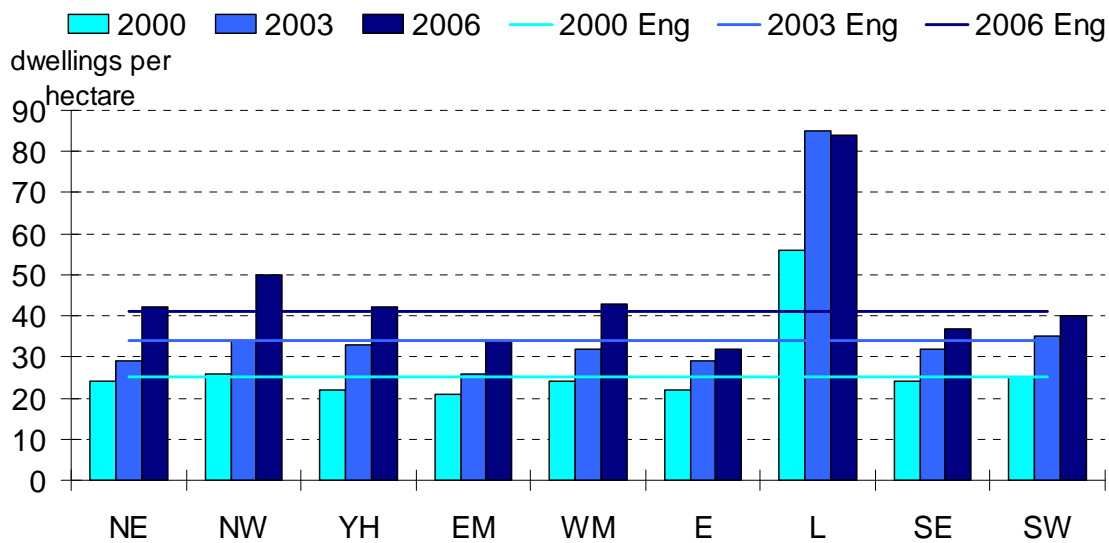
built at an average density of 34 dwellings per hectare. This compares to 31 dwellings per hectare in 2006 and 21 dwellings per hectare in 2000.

Figure 3: Density of new dwellings, by previous land type, 1989 to 2007



- Between 2000 and 2006 every region showed an increase in the density of new dwellings (see Figure 4).
- Yorkshire and the Humber and the North West showed the greatest percentage increases over this period. Density in the North West increased from 26 to 50 dwellings per hectare whereas in Yorkshire and the Humber it increased from 22 to 42.
- The East of England showed the smallest percentage increase in density over this period, increasing from 22 to 32 dwellings per hectare.

Figure 4: Density of new dwellings, by region, 2000, 2003 and 2006



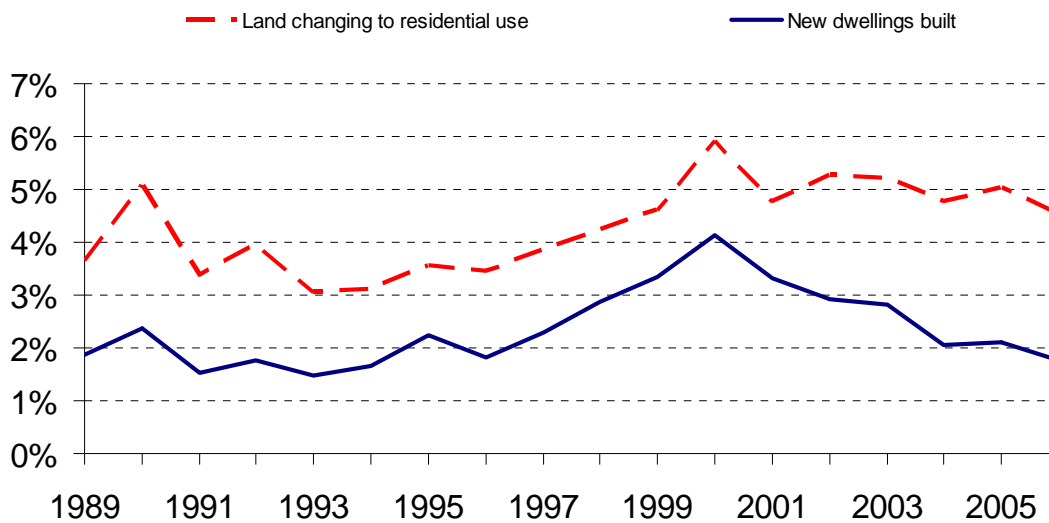
Detailed statistics on the average density of new dwellings (including data at a local authority level) can be found on the *Land Use Change Statistics Live Tables*¹, numbers 231 to 232.

Changes within the 2007 Designated Green Belt⁴

Most of the latest estimates for changes within the 2007 Designated Green Belt are for 2006, while some based on a smaller geography are for 2005².

- In 2006 two per cent of dwellings were built within the 2007 Designated Green Belt. This percentage has remained unchanged since 2004 (see Figure 5).
- In 2006 five per cent of land changing to residential use was within the 2007 Designated Green Belt. This percentage has remained unchanged since 2001 (see Figure 5).
- In 2006 79 per cent of dwellings built within the 2007 Designated Green Belt were built on previously-developed land. This compares to 68 per cent in 2005 and 76 per cent nationally in 2006.
- In 2005 51 per cent of land changing to a developed use within the 2007 Designated Green Belt was built on previously-developed land. This compares to 50 per cent in 2004.

Figure 5: The proportion of new dwellings built and land changing to residential use within the 2007 Designated Green Belt, 1989 to 2006



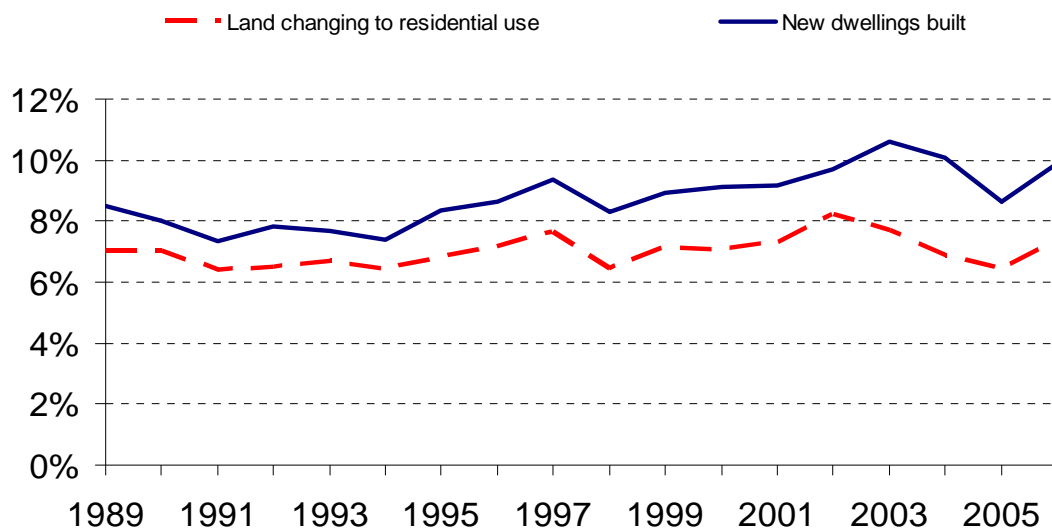
Detailed statistics on changes within the 2007 Designated Green Belt can be found on the Land Use Change Statistics Live Tables¹, numbers 241 to 246.

Changes within areas of high flood risk⁵

The latest estimates for changes within high flood risk areas are for 2006².

- In 2006 ten per cent of dwellings were built within areas of high flood risk⁴. This compares to nine per cent in 2005.
- In 2006 seven per cent of land changing to residential use was within areas of high flood risk⁴. This compares to six per cent in 2005.

Figure 6: The proportion of new dwellings and residential land built within areas of high flood risk⁴, 1989 to 2006



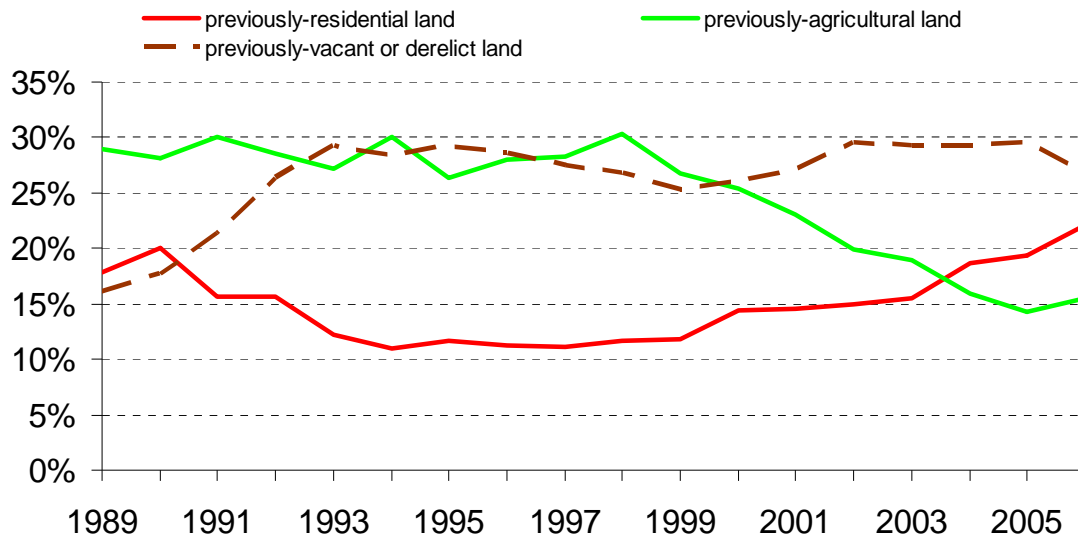
Detailed statistics on changes within areas of high flood risk can be found on the Land Use Change Statistics Live Tables¹, numbers 251 to 252.

Land changing to residential use

The latest figures for land changing to residential use are for 2006². There are 24 land use categories used in LUCS³, four of these categories ("vacant" and "derelict" are often combined) make up 64 per cent of the previous uses of dwellings in 2006. The remaining 36 per cent of dwellings were built on land previously on the remaining 20 categories.

- In 2006 22 per cent of dwellings were built on previously-residential land³. This compares to 19 per cent in 2005.
- In 2006 16 per cent of dwellings were built on previously-agricultural land³. This compares to 14 per cent in 2005.
- In 2006 27 per cent of dwellings were built on previously-vacant or derelict land³. This compares to 29 per cent in 2005.

Figure 7: The proportion of new dwellings built on previously-residential, agricultural and vacant or derelict land, 1989 to 2006.



Detailed statistics on land changing to residential use can be found on the Land Use Change Statistics Live Tables¹, numbers 221 to 226.

Changes to developed uses

The latest figures for developed uses are for the four year average 2002-2005².

- In 2002-2005 an average 59 per cent of land changing to developed use was previously-developed, while 31 per cent was previously agricultural land³ or agricultural buildings³. The remaining 10 per cent were built on land non previously-developed that is not agricultural land or buildings³.
- In 2002-2005 67 per cent of land changing to Industry and Commercial land³ was previously developed.

Detailed statistics on changes to developed uses can be found on the Land Use Change Statistics Live Tables¹, numbers 261 to 265.

Strengths and weaknesses of the data

These statistics are based on changes in land use recorded for Communities and Local Government by Ordnance Survey during their map revision work between 1985 and December 2007. They relate to the new use and previous use of the land. This means the data set is,

eventually, very comprehensive. However there is a time-lag between a land use change occurring and it being recorded. This means that some figures are liable to revision. Estimates for 2007 contained in this statistical release are provisional and will be revised in future releases.

Because of this time-lag some series take longer to become robust than others, and hence are not published as quickly. This is especially true of statistics showing area (in hectares) rather than percentages and regional figures, which are sometimes published later than the national total of the same series.

Local Authority data are only published as a four year average. This is because the statistics at this level are variable from year to year. At local authority level investigation has shown that annual figures are highly volatile and not robust.

For further information please see the LUCS Guidance, which is available at-
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/150313.pdf>

Background notes

1. Live Tables give further detail and regional breakdowns of the key results presented in this statistical release. They are available at-
<http://www.communities.gov.uk/planningandbuilding/planningbuilding/planningstatistics/livetable/andusechange/>
2. The time-lag in LUCS data (see strengths and weaknesses of the data, above) means that some regional data are published later than the national figure for that series. It also means that some series based on smaller geographies, such as Green Belt or areas of high flood risk, are published later than other series while Local Authority data are published as a four year average. Series measuring areas (in hectares) are also affected.
3. The land use categories used in compiling LUCS data are shown below in Table BN1. For full details on what are included in these groups and categories please refer to the LUCS Guidance, which is available at-
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/150313.pdf>

Table BN1: Land use categories, groups and divisions.

| Previously-developed Land | | | Non previously-developed land | | | |
|--|--|-----|--------------------------------------|---------------------------------|--|-----|
| Group | Category (codes) | | Group | Category (codes) | | |
| Residential | • Residential | (R) | Agriculture | • Agricultural land | (A) | |
| | • Institutional and communal accommodation | (Q) | | • Agricultural buildings | (B) | |
| Transport and utilities | • Highways and road transport | (H) | Forestry, open land and water | • Forestry and woodland | (F) | |
| | • Transport (other) | (T) | | • Rough grassland and bracken | (G) | |
| | • Utilities | (U) | | • Natural and semi-natural land | (N) | |
| Industry and commerce | • Industry | (I) | • Water | (W) | | |
| | • Offices | (J) | Outdoor recreation | • Outdoor recreation | (O) | |
| | • Retailing | (K) | | Vacant | • Urban land not previously developed ² | (X) |
| | • Storage and warehousing | (S) | | | | |
| Community services | • Community buildings | (C) | | | | |
| | • Leisure and recreational buildings | (L) | | | | |
| Vacant | • Vacant land previously developed | (V) | | | | |
| | • Derelict land | (Z) | | | | |
| Minerals and landfill³ | • Minerals ¹ | (M) | | | | |
| | • Landfill waste disposal ¹ | (Y) | | | | |
| Defence | • Defence ¹ | (D) | | | | |

Notes:

Unless otherwise stated, 'previously developed land' corresponds with 'urban land use' and 'non-previously developed land' with 'rural land use'.

1. Classified as 'rural' land use

2. Classified as 'urban' land use

3. Some mineral and landfill sites may be classed as non-previously developed land (see 4.4)

4. The 2007 designated Green Belt covers approximately 13 per cent of the land area of England. Change of land use, including to a developed use, does not mean the removal of the land from the Designated Green Belt. Land can only be removed from the Green Belt through the local planning process.

The latest data available for Green Belt published in this release are for 2006. There is no robust 2006 Designated Green Belt shapefile with which to do the analysis. The previously available Designated Green Belt shapefile was for 1997. The 2007 Designated Green Belt shapefile has been chosen as the most robust file for analysis in this release.

5. The areas of high flood risk used in LUCS cover approximately ten per cent of England. This flood risk analysis is based on annually updated data sets of digitised boundaries provided by the Environment Agency. They reflect the river and coastal floodplains and provide indicative flood risk areas. They are areas estimated to be at risk of at least a one in one hundred chance of flooding each year from river areas estimated to have at least a one in two hundred chance of flooding from

the sea. These are approximate boundaries and do not take into account any flood defences.

6. National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure they meet customer needs.

7. The next LUCS release, which will contain revised estimates for 2007, will be published on **Thursday 31 July 2008**. Further revised estimates for 2007 are expected to be published in October 2008 and January 2009.

Further information

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