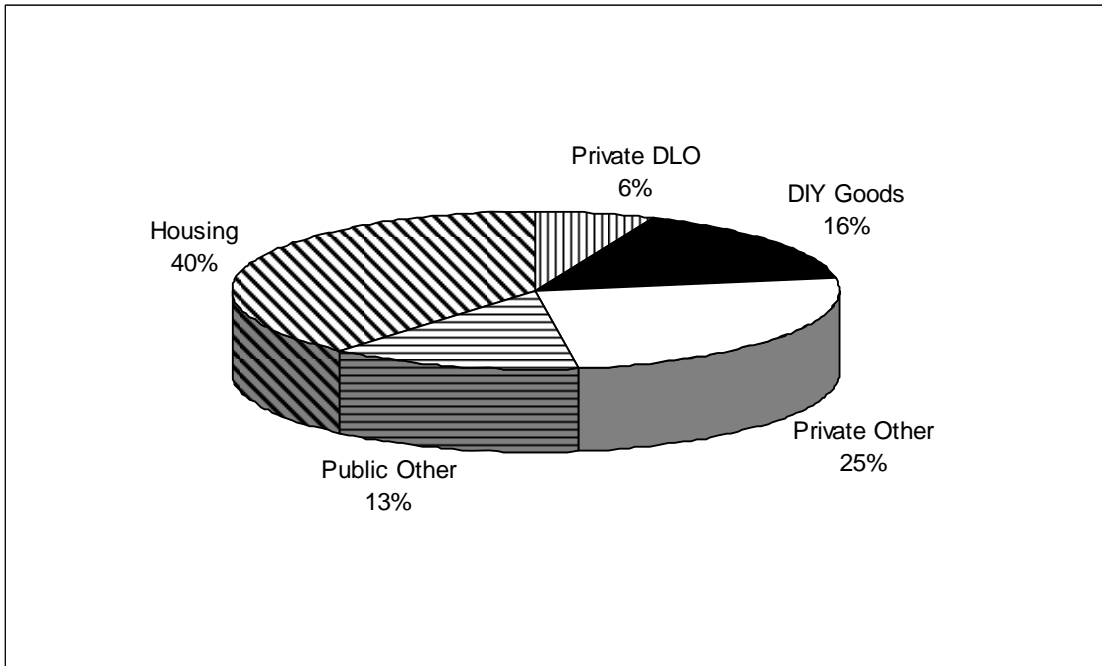

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

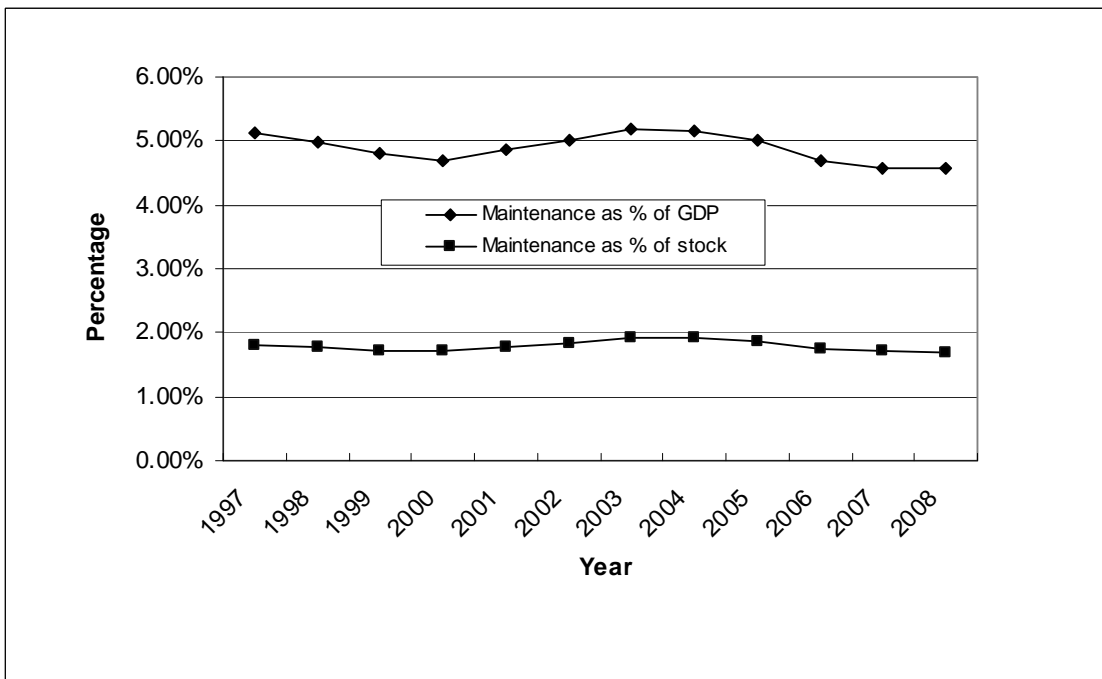
- Total expenditure on maintenance in 2008 in Great Britain is estimated at £71,021 million (Table 1), the first time in over 10 years that the actual expenditure at current prices has fallen.
- Maintenance expenditure at constant 2005 prices rose slightly in 2008 having fallen slightly in 2006. However, expenditure is still lower than in 2003 (Table 2).
- Maintenance expenditure represents 4.90% of Gross Domestic Product (GDP), a ratio which has stayed within a narrow band for over 10 years (Table 3).
- Spending on maintenance in 2008 represented 1.69% of the value, at replacement cost, of the stock of the building and works maintained. This is down slightly on last year, and the lowest for over 10 years (Table 5).
- Housing maintenance expenditure represents 1.74% of the replacement cost of the dwellings to be maintained. This is the fourth successive yearly fall. The figure includes the cost of DIY materials to house holders but excludes the cost of employing tradesmen to carry out work (Table 6).
- Non-housing maintenance represents 1.41% of the replacement value of the stock of buildings and works to be maintained. This is significantly lower than last year and the lowest ratio seen in over 10 years (Table 7).
- The value of the Gross Capital Stock of building and works, at 2005 prices, rose for the 18th successive year and is now valued at £3,554 billion (Table 8).
- Contractors' output for repair and maintenance represented 43.04% of total construction output in 2008, remaining well within the normal narrow band between 40% and 46% (Table 10).
- Spending on housing maintenance was 2.77% of total consumer expenditure, the lowest figure seen for over 10 years. This includes spending on DIY materials, contractors' charges and dwellings insurance (Table 13).
- In 2008, householders spent £9,770 million on DIY goods. This is the lowest figure since 2002 and at 2.67% is the lowest proportion of total consumer expenditure seen for over 10 years (Table 14).

EXECUTIVE SUMMARY

Total Maintenance Expenditure 2008 (at chained volume measures, reference year 2005)



Maintenance as a % of GDP and Stock



INTRODUCTION

The objective of this report is to estimate the annual national expenditure on maintenance work on a consistent basis and to compare the results with the value of the stock to be maintained and the general level of national expenditure. The report is an update of BMI Special Report 358 and follows as closely as possible the methodology used in the Department of Environment's report *Building Maintenance - The Report of the Committee*¹, published in 1972. Over the intervening years, the available statistics have changed but every effort has been made to produce a similar analysis. The figure of maintenance expenditure as a percentage of the stock to be maintained, quoted in the 1972 DOE report, has down the years been metamorphosed into a rule of thumb to estimate the maintenance expenditure on individual buildings and estates. However, both the original figure and those produced in this report are estimates of national expenditure and are therefore inappropriate for assessing the budget needs of specific properties. BCIS has always stressed that budgets for building maintenance must be prepared with regard to the condition of the buildings to be maintained, the standard to which they are required to be maintained and the use that is made of them.

The estimate of total maintenance spend is built up from government figures for contractors' repair and maintenance output, an estimate of output by private sector direct labour organisations and figures for householders' expenditure on DIY materials taken from the *UK National Accounts*².

CHANGES TO UK NATIONAL ACCOUNTS

National Statistics have revised the method of adjusting prices to allow for inflation. In previous editions of this publication costs and expenditures, in addition to being expressed at current prices, were taken to a constant price, which was re-based every five years. The re-basing now takes place annually with data described as 'in chained volume measures (reference year 2005)'. This should provide a clearer and more up to date indication of trends. Similarly, household expenditure on DIY products and services for the routine and general maintenance of a dwelling has been calculated using a new methodology, and this data now fully incorporates the new Annual Business Inquiry results. As the new inquiry information indicates, economic activity was higher than had previously been calculated. This has resulted in revisions to earlier periods.

ESTIMATES AND STATISTICS

The figures and their sources

The estimates produced here have been compiled from a variety of sources. Adjustments have had to be made to produce estimates which show the overall trends in maintenance expenditure. Details of the individual inputs are given below but three points need to be highlighted. First of all, the figures for both maintenance expenditure and stock include civil engineering works as well as buildings; however, the term 'building' has been used throughout for simplicity. Secondly, construction output figures for repair and maintenance are compiled on two different bases: housing includes all work to existing dwellings including alterations and improvements; non-housing includes only repair and maintenance work. Finally, estimates of maintenance relate to Great Britain while the figures for the capital stock of buildings and for GDP are for the United Kingdom as a whole. While this will produce an underestimate of the overall level of maintenance relative to these comparators, it should not distort the trend in the results. Where possible, the information has been taken from official sources – mainly the various departmental reports from the Office for National Statistics. In some instances, BCIS has had to produce estimates based on the combination of a variety of pieces of information. The details of relevant sources are given in the bibliography. The components of the overall estimate are: repair and maintenance output of the construction industry; public sector directly employed labour; the output of directly employed labour in the private sector; and expenditure on DIY materials and labour by households.

INTRODUCTION

Construction Output (Tables 9 and 10)

The official statistics on construction output, published quarterly by National Statistics, are based on output by contractors, estimates of unrecorded output by small firms and self-employed workers, and output by public sector direct labour departments. They include general construction and demolition work, construction improvement and repair of both residential and non-residential buildings, civil engineering work, fixtures, fittings, services and finishes to buildings.

The figures for new work output include extensions, major alterations (i.e. improvements), site preparation and demolition; except for housing where work done on improvements, extensions and alterations, and house/flat conversions are included under repair and maintenance. New construction work includes houses converted to other uses.

The figures for repair and maintenance output include all work to existing houses including alterations and conversions, but not such work to other types of buildings. As alterations and improvement work will always include some element of substitute maintenance (i.e. maintenance work will be overtaken by the improvement), these figures may be taken as a slight understatement of the total repair and maintenance carried out to existing buildings.

Private Sector Non-Housing Maintenance by Directly Employed Staff

(Tables 11 and 12)

Construction output figures (Tables 9 and 10) exclude maintenance work carried out in the private sector by directly employed labour. There are no readily available statistics covering this sector. BMI Special Report 217 presented an estimate of the output for directly employed labour based on the relationship of contract work and directly employed labour in a sample of private sector organisations. There is very little information available on the level of directly employed labour, since the publication by OSCAR⁵ in 2005. Recent figures published by both the Local Government Association and by the Health Service estates department suggest that the figure has fallen from the previously assumed 40% to a figure closer to 25%. This new ratio has been applied to all figures in the table so as not to show a major fluctuation in the trend line.

Housing Maintenance Expenditure (Tables 13 and 14)

The estimate of total maintenance expenditure includes for DIY goods bought by householders. This estimate has been taken from the *Consumer Trends Survey*⁶, which splits private consumer expenditure on maintenance materials and services for the repair of the dwelling, and goods and services for routine household maintenance. The overall estimate of housing maintenance expenditure, given in Table 6, is made up of construction output⁷ in the housing sector and householders' expenditure on DIY goods and materials - the total spending in 2008 at constant 2005 prices has been calculated at £33,477 million as follows:

Construction output on Housing R & M (Table 10)	£23,677
DIY maintenance goods (Table 14)	<u>£9,770</u>
Total housing maintenance (Table 6)	<u>£33,447</u>

Building Stock (Table 8)

The figures of gross capital stock (Table 8) have been supplied by the Office for National Statistics and are taken from the *UK National Accounts*². The figures show the importance of building assets within the fabric of the economy. Dwellings and other buildings and works account for over two thirds of the country's gross capital stock, a relationship which has stayed fairly constant over the past 10 years.

INTRODUCTION

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TOTAL MAINTENANCE EXPENDITURE

Table 1. Total Maintenance Expenditure at Current Prices

£ million

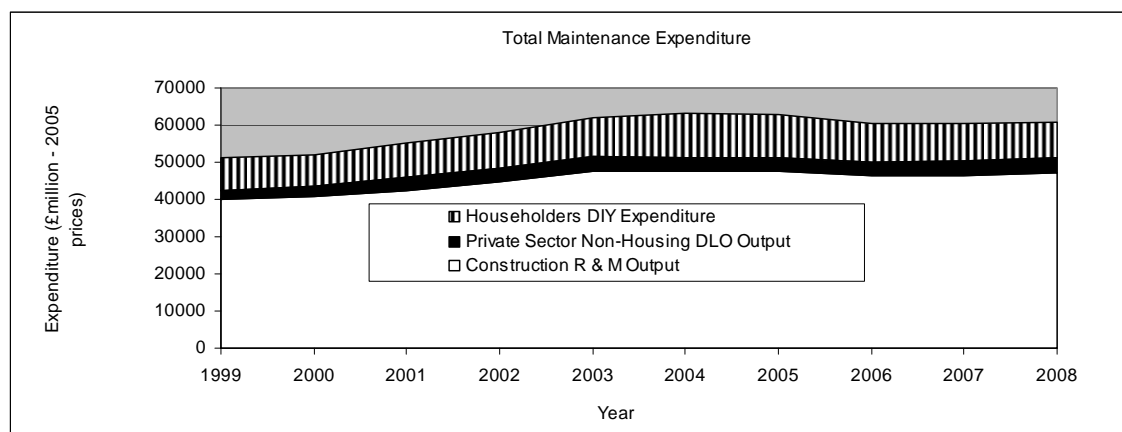
Year	Construction R & M Output (Table 9)	Private Sector Non-Housing DLO Output (Table 11)	Householders' DIY Goods Expenditure (Table 13)	Total Maintenance Expenditure
1999	30,117	2,094	8,161	40,372
2000	32,106	2,356	8,106	42,478
2001	34,729	2,748	8,993	46,470
2002	38,222	3,085	9,527	50,834
2003	42,931	3,422	10,058	56,411
2004	45,125	3,470	11,694	60,289
2005	47,594	3,680	11,523	62,797
2006	49,058	3,912	10,670	63,640
2007	52,164	4,489	10,616	67,269
2008	55,755	4,555	10,711	71,021

Table 2. Total Maintenance Expenditure at Chained Volume Measures, 2005 Prices

£ million

Year	Construction R & M Output (Table 10)	Private Sector Non-Housing DLO Output (Table 12)	Householders' DIY Goods Expenditure (Table 14)	Total Maintenance Expenditure
1999	39,817	2,754	8,562	51,133
2000	40,610	2,974	8,470	52,054
2001	42,552	3,358	9,356	55,266
2002	44,658	3,597	9,894	58,149
2003	47,674	3,795	10,450	61,919
2004	47,689	3,666	11,755	63,110
2005	47,594	3,680	11,523	62,797
2006	46,219	3,683	10,482	60,384
2007	46,407	3,992	10,078	60,477
2008	47,224	3,860	9,770	60,854

Chart 1. Total Maintenance Expenditure 1999-2008



TOTAL MAINTENANCE EXPENDITURE

Table 3. Maintenance Expenditure and Gross Domestic Product at Current Prices

£ million

Year	GDP*	Total Maintenance Expenditure (Table 1)	Maintenance as a % of GDP
1999	928,730	40,372	4.35%
2000	976,533	42,478	4.35%
2001	1,021,828	46,470	4.55%
2002	1,075,564	50,834	4.73%
2003	1,139,746	56,411	4.95%
2004	1,202,956	60,289	5.01%
2005	1,254,058	62,797	5.01%
2006	1,325,795	63,640	4.80%
2007	1,398,882	67,269	4.91%
2008	1,448,054	71,021	4.90%

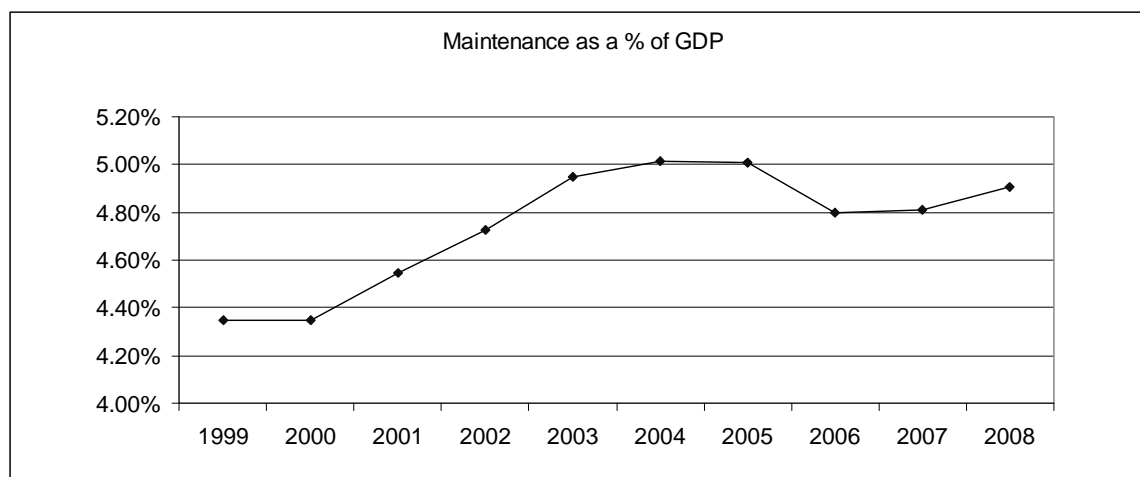
Table 4. Maintenance Expenditure and Gross Domestic Product at Chained Volume Measures, 2005 Prices

£ million

Year	GDP*	Total Maintenance Expenditure (Table 2)	Maintenance as a % of GDP
1999	1,066,768	51,133	4.79%
2000	1,108,538	52,054	4.70%
2001	1,135,823	55,266	4.87%
2002	1,159,641	58,149	5.01%
2003	1,192,206	61,919	5.19%
2004	1,227,387	63,110	5.14%
2005	1,254,058	62,797	5.01%
2006	1,289,833	60,384	4.68%
2007	1,322,842	60,477	4.57%
2008	1,330,118	60,854	4.58%

* Gross Domestic Product, expenditure based measure at market prices from United Kingdom National Accounts²

Chart 2. Maintenance as a % of Gross Domestic Product 1999-2008



TOTAL MAINTENANCE EXPENDITURE

Table 5. Maintenance and Capital Stock at Chained Volume Measures, 2005 Prices £ million

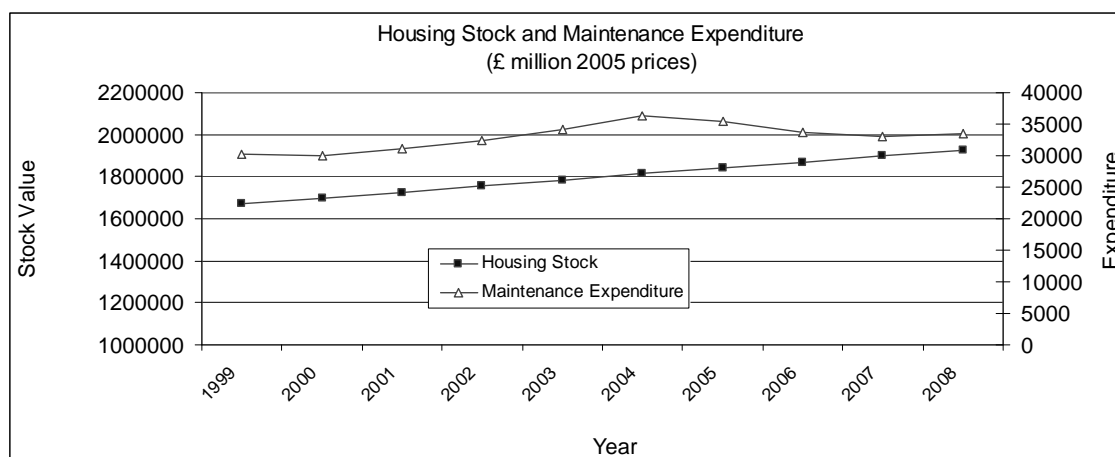
Year	Gross Capital Stock Buildings and Works (Table 8)	Total Maintenance Expenditure (Table 2)	Maintenance as a % of Stock
1999	2,962,500	51,133	1.73%
2000	3,027,300	52,054	1.72%
2001	3,094,000	55,266	1.79%
2002	3,164,000	58,149	1.84%
2003	3,239,000	61,919	1.91%
2004	3,301,300	63,110	1.91%
2005	3,367,100	62,797	1.87%
2006	3,436,700	60,384	1.76%
2007	3,513,000	60,477	1.72%
2008	3,593,500	60,854	1.69%

Table 6. Housing Maintenance and Capital Stock at Chained Volume Measures, 2005 Prices £ million

Year	Housing Stock (Table 8)	Maintenance Expenditure*	Maintenance as a % of Stock
1999	1,668,500	30,239	1.81%
2000	1,695,700	29,951	1.77%
2001	1,723,900	30,985	1.80%
2002	1,754,100	32,305	1.84%
2003	1,785,200	34,125	1.91%
2004	1,812,800	36,308	2.00%
2005	1,839,800	35,460	1.93%
2006	1,868,700	33,692	1.80%
2007	1,898,000	33,119	1.74%
2008	1,923,300	33,447	1.74%

*Housing Output from Table 10 and Occupiers' Expenditure on DIY Goods from Table 14

Chart 3. Housing Stock and Maintenance Expenditure 1999-2008



NON-HOUSING MAINTENANCE EXPENDITURE

Table 7. Non-Housing Maintenance and Capital Stock at Chained Volume Measures, 2005 Prices
£ million

Year	Stock of Buildings and Works Excluding Housing (Table 8)	Maintenance Expenditure*	Maintenance as a % of Stock
1999	1,294,000	20,894	1.61%
2000	1,331,600	22,102	1.66%
2001	1,370,100	24,281	1.77%
2002	1,409,900	25,845	1.83%
2003	1,453,800	27,794	1.91%
2004	1,488,500	26,802	1.80%
2005	1,527,300	27,337	1.79%
2006	1,568,000	26,692	1.70%
2007	1,615,000	27,358	1.69%
2008	1,670,200	23,546	1.41%

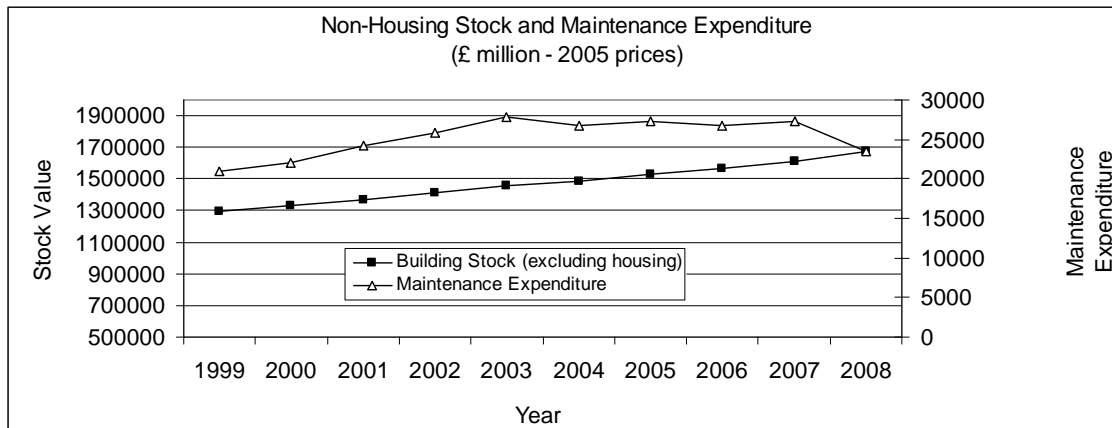
*Non-Housing Output from Table 10 and Private Sector DLO Expenditure from Table 12

Table 8. Gross Capital Stock at Replacement Cost at Chained Volume Measures, 2005 Prices
£ billion

Year	Gross Capital Stock, Buildings and Works*		
	Dwellings	Other	Total
1999	1,668.5	1,294.0	2,962.5
2000	1,695.7	1,331.6	3,027.3
2001	1,723.9	1,370.1	3,094.0
2002	1,754.1	1,409.9	3,164.0
2003	1,785.2	1,453.8	3,239.0
2004	1,812.8	1,488.5	3,301.3
2005	1,839.8	1,527.3	3,367.1
2006	1,868.7	1,568.0	3,436.7
2007	1,898.0	1,615.0	3,513.0
2008	1,923.3	1,670.2	3,593.5

*Gross Capital Stock values are the values of the assets in place at their full replacement cost, i.e. the cost to replace anew

Chart 4. Non-Housing Stock and Maintenance Expenditure 1999-2008



NON-HOUSING MAINTENANCE EXPENDITURE

Table 9. Construction Output at Current Prices

£ million

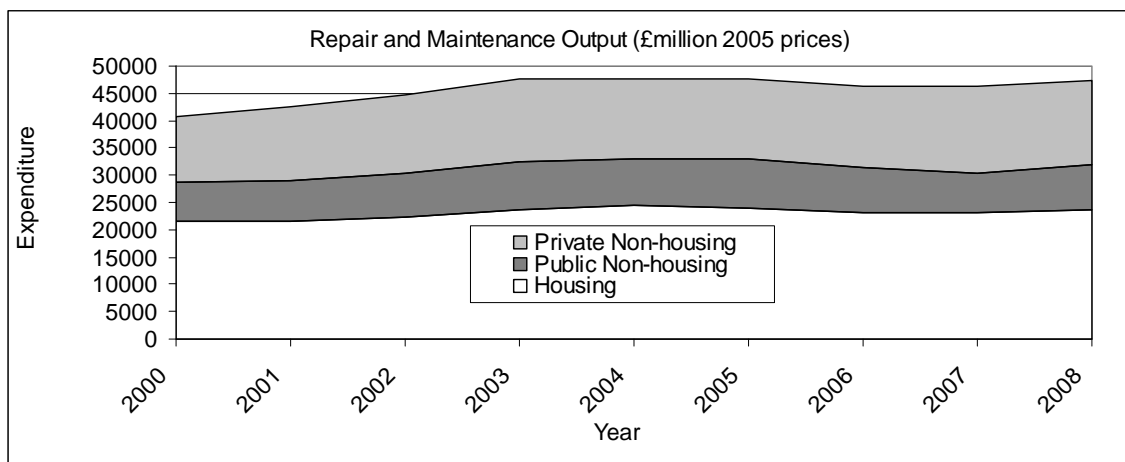
Year	Repair and Maintenance				Total All Work	R & M as a % of Total
	Housing	Other Work		Total		
		Public	Private			
1999	16,370	5,371	8,376	30,117	65,704	45.84%
2000	16,906	5,685	9,424	32,016	69,676	45.95%
2001	17,626	6,111	10,992	34,729	74,703	46.49%
2002	19,170	6,712	12,340	38,222	83,592	45.72%
2003	21,315	7,930	13,686	42,931	93,284	46.02%
2004	23,229	8,015	13,881	45,125	102,363	44.08%
2005	23,937	8,939	14,718	47,594	107,006	44.48%
2006	24,630	8,779	15,648	49,058	113,571	43.20%
2007	25,893	8,313	17,957	52,164	121,985	42.76%
2008	27,695	9,571	18,219	55,755	123,584	45.12%

Table 10. Construction Output at Chained Volume Measures, 2005 Prices

£ million

Year	Repair and Maintenance				Total All Work	R & M as a % of Total
	Housing	Other Work		Total		
		Public	Private			
1999	21,677	7,125	11,015	39,817	91,746	43.40%
2000	21,481	7,234	11,894	40,610	92,683	43.82%
2001	21,629	7,493	13,430	42,552	94,269	45.14%
2002	22,411	7,859	14,389	44,658	98,520	45.33%
2003	23,675	8,818	15,181	47,674	104,013	45.83%
2004	24,553	8,473	14,663	47,689	107,852	44.22%
2005	23,937	8,939	14,718	47,594	107,007	44.48%
2006	23,210	8,276	14,733	46,219	108,364	42.65%
2007	23,041	7,398	15,968	46,407	110,952	41.83%
2008	23,677	8,106	15,440	47,224	109,716	43.04%

Chart 5. Repair and Maintenance Output 1999-2008



HOUSING MAINTENANCE EXPENDITURE BY OCCUPANTS

Table 11. Private Sector Non-Housing Maintenance Expenditure at Current Prices £ million

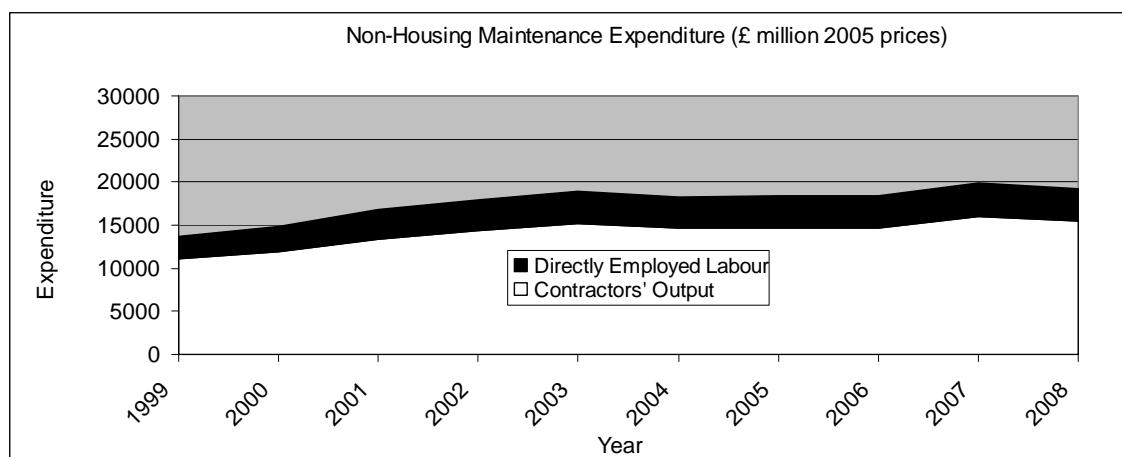
Year	Contractors' Output (Table 9)	Directly Employed Labour*	Total
1999	8,376	2,094	10,470
2000	9,424	2,356	11,780
2001	10,992	2,748	13,740
2002	12,340	3,085	15,425
2003	13,686	3,422	17,108
2004	13,881	3,470	17,351
2005	14,718	3,680	18,398
2006	15,648	3,912	19,560
2007	17,957	4,489	22,446
2008	18,219	4,555	22,774

Table 12. Private Sector Non-Housing Maintenance Expenditure at Chained Volume Measures, 2005 Prices £ million

Year	Contractors' Output (Table 10)	Directly Employed Labour*	Total
1999	11,015	2,754	13,769
2000	11,894	2,974	14,868
2001	13,430	3,358	16,788
2002	14,389	3,597	17,986
2003	15,181	3,795	18,976
2004	14,663	3,666	18,329
2005	14,718	3,680	18,398
2006	14,733	3,683	18,416
2007	15,968	3,992	19,960
2008	15,440	3,860	19,300

* Estimate based on a constant relationship of contract work to DEL

Chart 6. Non-Housing Maintenance Expenditure 1999-2008



HOUSING MAINTENANCE EXPENDITURE BY OCCUPANTS

Table 13. Housing Maintenance Expenditure by Occupiers at Current Prices £ million

Year	Total Consumer Expenditure	Costs Incurred by Occupiers				Maintenance as a % of Total Expenditure
		Materials	Services	Dwellings Insurance	Total	
1999	582,371	8,161	7,164	2,111	17,436	2.99%
2000	616,558	8,106	7,749	2,067	17,922	2.91%
2001	647,778	8,993	7,979	2,096	19,068	2.94%
2002	680,964	9,527	8,770	2,466	20,763	3.05%
2003	714,608	10,058	8,914	2,888	21,860	3.06%
2004	749,867	11,694	9,517	3,763	24,974	3.33%
2005	784,140	11,523	10,324	3,681	25,528	3.26%
2006	817,036	10,670	10,646	4,024	25,340	3.10%
2007	859,268	10,616	11,020	2,733	24,369	2.84%
2008	891,290	10,711	10,561	3,375	24,647	2.77%

Table 14. Housing Maintenance Expenditure by Occupiers at Chained Volume Measures, 2005 Prices £ million

Year	Total Consumer Expenditure	Costs Incurred by Occupiers				Maintenance as a % of Total Consumer Expenditure
		Materials	Services	Dwellings Insurance	Total	
1999	644,070	8,562	10,359	2,580	21,501	3.34%
2000	673,315	8,470	10,477	2,420	21,367	3.17%
2001	694,810	9,356	10,104	2,304	21,764	3.13%
2002	720,417	9,894	10,383	2,638	22,915	3.18%
2003	742,755	10,450	9,946	2,998	23,394	3.15%
2004	766,856	11,755	10,038	3,939	25,732	3.36%
2005	784,140	11,523	10,324	3,681	25,528	3.26%
2006	795,595	10,482	10,140	3,878	24,500	3.08%
2007	815,157	10,078	9,981	2,569	22,628	2.78%
2008	822,335	9,770	9,124	3,057	21,951	2.67%

Note: Due to changes made to the categorisation used by National Statistics to classify Consumer Expenditure, the figures shown in Tables 13 and 14 cannot be compared with those from editions of BMI's *Economic Significance of Maintenance* prior to 2005.

- *Materials* include such items as paint, wallpaper, plaster, tiles and small plumbing items.
- *Services* include fees paid to plumbers, electricians, carpenters, glaziers, decorators, etc.
- *Dwellings Insurance* includes the cost of insuring the building, but not the contents.

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National Statistics Public Enquiry Service-0845 601 3034
E-mail - info@ons.gov.uk
Web page - www.statistics.gov.uk

Department for Business, Innovation and Skills

Construction Output - 020 7215 2912
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Web page - www.bis.gov.uk

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