

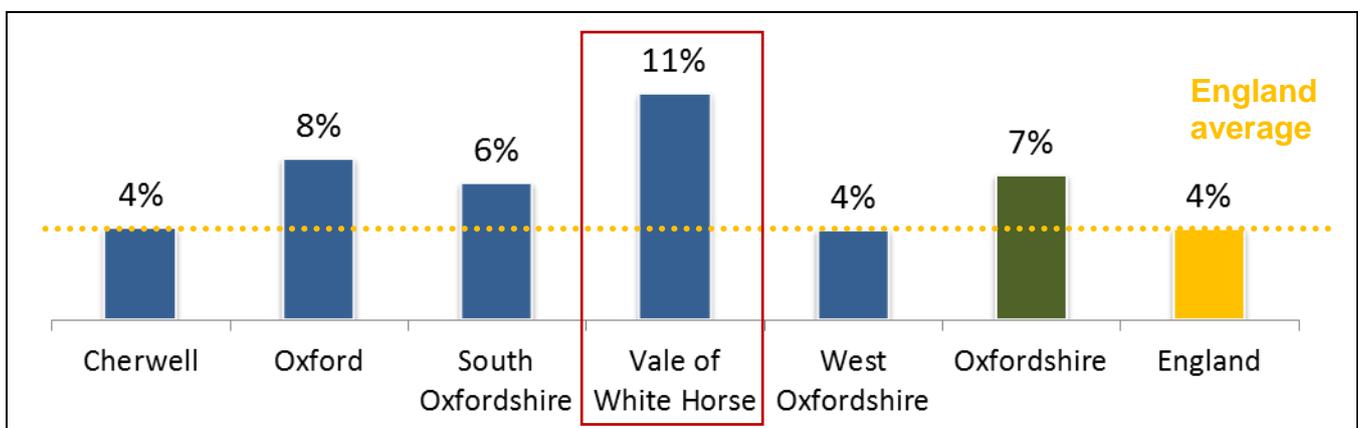
Mapping Oxfordshire's science professionals



According to detailed Census 2011 data on occupation by place of work, a total of 23,000 science professionals were working in Oxfordshire in 2011. Just under half (46%, 10,500) were working in the two districts of South Oxfordshire and Vale of White Horse and around a third (32%, 7,500) were working in Oxford.

Science research, engineering and technology professionals made up 7% of Oxfordshire's workforce compared with 4% nationally. Vale of White Horse district had almost three times the England average rate of science, research, engineering and technology professionals in employment.

Proportion of science, research, engineering and technology professionals of those in employment in the area (workplace population) 2011

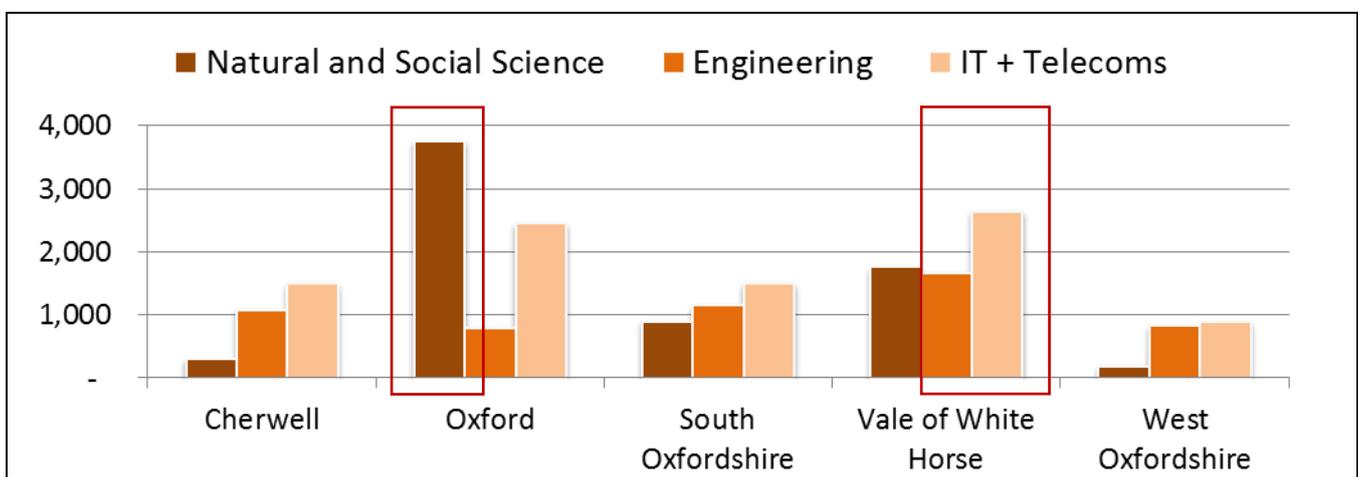


Source: ONS Census 2011 table WP606 (workplace population)

A detailed breakdown of science professionals by sub category shows:

- Oxford with the greatest number of natural and social science professionals (3,800, 54% of the Oxfordshire total);
- Vale of White Horse with the greatest numbers of Engineering and of IT & Telecommunications professionals.

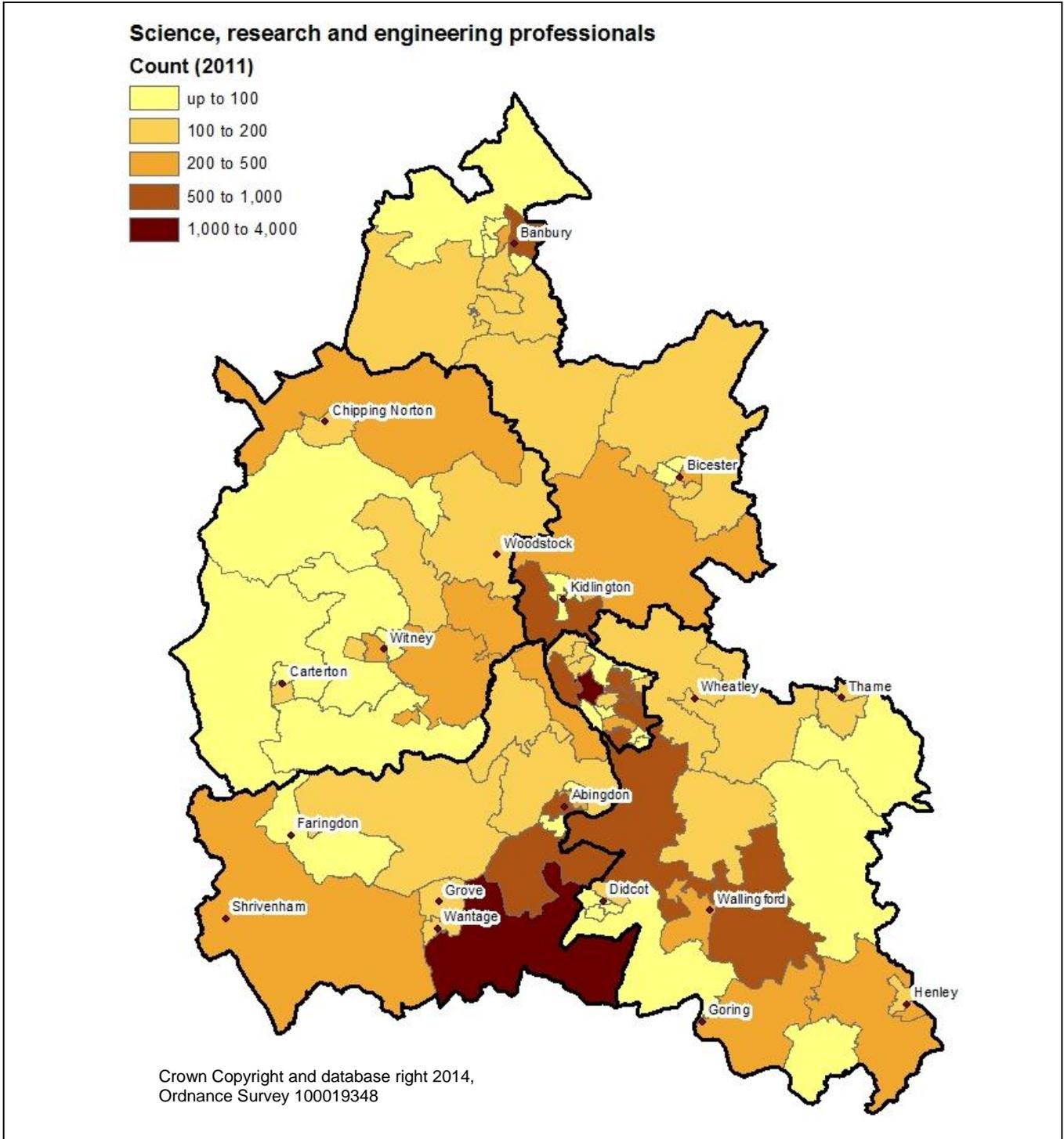
Count of science, research, engineering and technology professionals by sub group (workplace population) Oxfordshire districts 2011



Source: ONS Census 2011 table WP606 (workplace population); *Natural and Social science* includes chemical, biological and physical science, social and humanities and natural and social scientists (see annex)

The following map and table shows areas with the greatest number of science professionals in Oxfordshire, highlighting parts of Oxford, Science Vale and Banbury.

Count of science, research, engineering and technology professionals by Middle Layer Super Output Area (workplace population) 2011



Source: ONS Census 2011 table WP606 (workplace population)

Number and percentages of science, research, engineering and technology professionals (workplace population) 2011, districts and top MSOAs

2011 super output area - middle layer	Area	Science, research, engineering and technology professionals		All people in employment
Cherwell	Local Authority District	3,061	4%	71,803
Oxford	Local Authority District	7,457	8%	99,423
South Oxfordshire	Local Authority District	3,921	6%	61,683
Vale of White Horse	Local Authority District	6,553	11%	62,253
West Oxfordshire	Local Authority District	2,012	4%	48,222
Middle Layer Super Output Areas with largest numbers of Science professionals working in Oxfordshire				
Vale of White Horse 015	Harwell/Milton Park	3,100	27%	11,490
Oxford 008	Oxford city centre	2,650	9%	28,064
Oxford 010	southern part of Headington	953	14%	6,871
Oxford 006	northern part of Headington	897	7%	12,837
Vale of White Horse 006	central Abingdon	763	7%	10,886
South Oxfordshire 011	Crowmarsh Gifford/Benson	710	11%	6,413

Source: ONS Census 2011 table WP606 (workplace population)

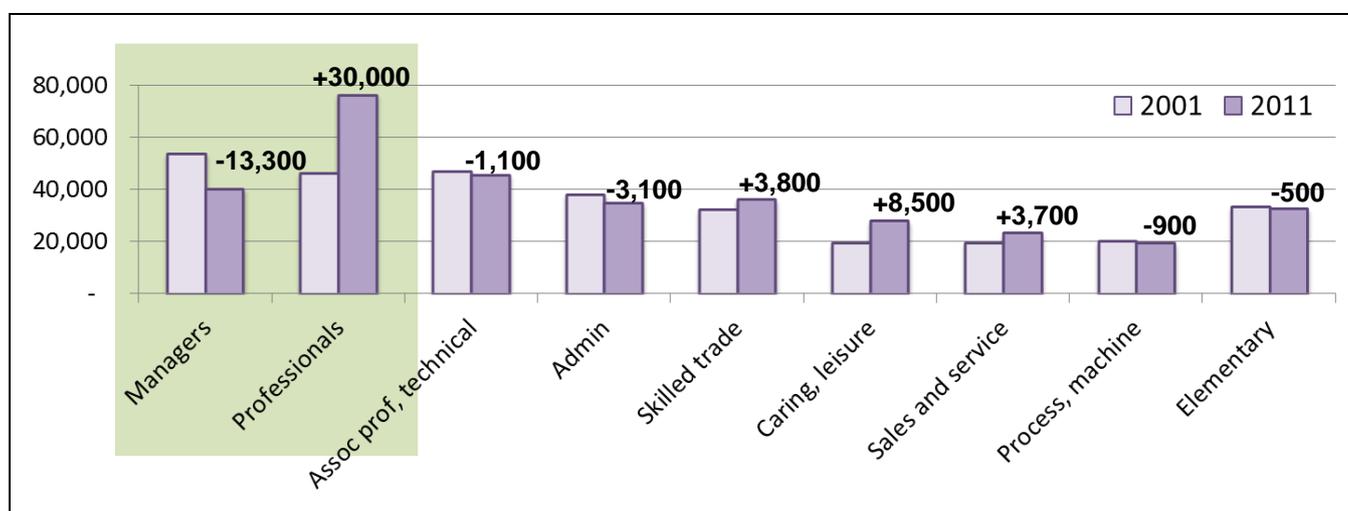
Trend in science workers

Limited 2001 census data on detailed occupational sub-groups by workplace means that it is not possible – with publically released data – to show a trend over time for the sub-category of science professionals.

In addition, the definition of science professionals changed significantly between the 2001 and 2011 census surveys. It now includes professional academic researchers (previously in a separate occupational category) – see Annex for more detail.

At a higher level of classification (major occupational group) other definitional changes reallocated people formerly classified as managers into other groups. This explains some of the fall in the managerial group and growth in the professional sector in Oxfordshire over 10 years (see chart below).

Change by major occupational group for residents of Oxfordshire 2001 to 2011



Source: ONS Census 2011 table KS608; Census 2001 table KS12; note that this chart is for residents rather than workers in Oxfordshire

NOTES and DEFINITIONS

- Note that the majority of data in this publication relates to place of work and is a count of people working in the area by occupation rather than people living in the area.
- Occupations at professional level normally require a degree or equivalent period of relevant work experience.
- Data downloaded from www.nomisweb.co.uk
- Middle layer super output areas are a statistical geography. There are 86 MSOAs in Oxfordshire with a minimum population (living in households) of 5,100, a maximum population of 13,100 and an average household population of 7,300.
- The 9 major groups in the Standard Occupational Classification are:
 1. Managers, Directors and Senior Officials
 2. Professional Occupations
 3. Associate Professional and Technical Occupations
 4. Administrative and Secretarial Occupations
 5. Skilled Trades Occupations
 6. Caring, Leisure and Other Service Occupations
 7. Sales and Customer Service Occupations
 8. Process, Plant and Machine Operatives
 9. Elementary Occupations
- See annex for sub groups included within Group 2 Professional Occupations.

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On behalf of: Cherwell District Council, Oxford City Council, South Oxfordshire District Council, Vale of White Horse District Council and West Oxfordshire District Council

Data notes and briefings from this service are available at www.oxford.gov.uk/districtdataservice



ANNEX – Change to Standard Occupational Classification group 2

The classification of major group 2 Professional Occupations changed between SOC 2000 and SOC 2010:

In major group 2 additional unit groups for information technology and telecommunications professionals have been created, recognising the changing structure of IT occupations and their integration into a wide range of functional areas. IT specialist managers and IT project and programme managers are allocated new unit groups, transferring these occupations from SOC2000 major group 1. IT business analysts, architects and systems designers and Programmers and software development professionals reconfigure many of the IT occupations in SOC2000 major group 2. Web design and development professionals bring together web-related occupations previously classified in SOC2000 major groups 2 and 3.

*Scientists within the professional area of SOC2010 are deemed to encompass both the natural and social sciences and the humanities, as reflected in the minor group title: Natural and Social Science Professionals and the addition of a unit group for Social and humanities scientists. **The decision has also been made to include the professional researchers within their respective scientific disciplines and not to distinguish research professionals separately.***

A new minor group, Conservation and Environment Professionals, has been created into which are classified occupations that were assigned in SOC2000 to sub major group 12 and associate professional level.

SOC 2001	SOC 2010
21 SCIENCE AND TECHNOLOGY PROFESSIONALS 211 Science Professionals 2111 Chemists 2112 Biological scientists and biochemists 2113 Physicists, geologists and meteorologists 212 Engineering Professionals 2121 Civil engineers 2122 Mechanical engineers 2123 Electrical engineers 2124 Electronics engineers 2125 Chemical engineers 2126 Design and development engineers 2127 Production and process engineers 2128 Planning and quality control engineers 2129 Engineering professionals n.e.c. 213 Information And Communication Technology Professionals 2131 IT strategy and planning professionals 2132 Software professionals	21 SCIENCE, RESEARCH, ENGINEERING AND TECHNOLOGY PROFESSIONALS 211 Natural and Social Science Professionals 2111 Chemical scientists 2112 Biological scientists and biochemists 2113 Physical scientists 2114 Social and humanities scientists 2119 Natural and social science professionals n.e.c. 212 Engineering Professionals 2121 Civil engineers 2122 Mechanical engineers 2123 Electrical engineers 2124 Electronics engineers 2126 Design and development engineers 2127 Production and process engineers 2129 Engineering professionals n.e.c. 213 Information Technology and Telecommunications Professionals 2133 IT specialist managers 2134 IT project and programme managers 2135 IT business analysts, architects and systems designers 2136 Programmers and software development professionals 2137 Web design and development professionals 2139 Information technology and telecommunications professionals n.e.c. 214 Conservation and Environment Professionals 2141 Conservation professionals 2142 Environment professionals 215 Research and Development Managers 2150 Research and development managers

Standard Occupation Classification 2000 summary of structure is available here..

<http://www.ons.gov.uk/ons/guide-method/classifications/archived-standard-classifications/standard-occupational-classification-2000/index.html>

Standard Occupation Classification 2010 summary of structure is available here..

<http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-1-structure-and-descriptions-of-unit-groups/index.html#1>