

# UNIVERSITY OF WARWICK

# IER FORECASTING SERVICES

Further information may be obtained from

Dr Rob Wilson, IER, University of Warwick, Coventry, CV4 7AL

Tel: +44 (0)2476 523530 Fax: +44(0)2476 524241

# **Institute Forecasting Service**

#### **General Introduction**

The Institute has been a pioneer in the area of labour market assessment and forecasting work in the UK. In various guises, it has been engaged in medium term labour market projections since 1975. Its first detailed employment forecasts were published in *Britain's Medium Term Employment Prospects* (1978) and in *Economic Change and Employment Policy* (1980). Subsequently, the results of the Institute's annual assessments were made available in the *Review of the Economy and Employment* with summaries in the Institute's *Bulletin*. More recently the Institute has produced forecasts in support of the National Skills Taskforces, with DfES funding. and on behalf of the Sector Skills Development Agency (and its partners) under the *Working Futures* banner. The latter represent the most comprehensive and detailed set of labour market projections ever produced in the UK, covering all countries and regions and local LSC areas. The projections also provide considerable sectoral detail, including results for the Sector Skills Councils. The focus is on occupations and qualifications.

The Institute remains at the forefront of employment forecasting, with an international reputation for the quality of its work. The details of the philosophy behind the Institute's work in this area and the methods used, have always been in the public domain. (See, for example, the Institute's contributions to Labour Market Forecasts by Occupation and Education: The Forecasting Activities of Three European Labour Market Research Institutes. (1994). Ed. H. Heijke. Massachusetts: Kluwer Academic). The Institute remains committed to developing projections using the best data and methods available and making the process of forecasting as transparent and straightforward as possible to users. It is currently engaged in a major project funded by CEDEFOP to produce consistent employment projections across the whole of Europe.

The production of such forecasts inevitably encourages a demand for greater amounts of detail. The Institute Forecasting Service provides the mechanism by which those who require more detailed information can obtain data customised to their own requirements. The remainder of this document summarises the kind of information that is available and provides an indication of charges.

### **Range of Services**

The Institute can provide employment projections tailored to the client's individual requirements. UK Forecasts are currently produced to the year 2020 with full detail of the time profiles between now and then.

The main dimensions available are as follows:

- industries (up to 41 sectors distinguished, 2003 SIC) plus Sector Skills Council footprints
- gender
- type (full-time, part-time, self-employed)
- region (12 standard regions) or the new RDA geographies
- occupation (25 sub-major groups, SOC 2000)

Details of the classification used are shown in the Annex to this document.

In addition, the Institute has developed models which enable the production of projections distinguishing:

- qualifications
- · generic and key skills
- age
- · temporary work

Historical data are available on a consistent basis. Over the past 30 years the Institute has assembled a huge databank of labour market statistics. This has included the development of long time series on employment by industry, status, region and occupation. While these are based on official data sources, the Institute has placed great emphasis on producing consistent data sets despite the many and frequent changes in classification and definition used in the official data sets. The current sectoral employment database extends back to 1948, far longer than the 1981-date period covered by most alternatives. Such information is crucial to understanding the longer-term trends influencing the labour market.

# **Local Employment Analysis and Forecasts**

From an early stage, the Institute has included a spatial dimension in its labour market assessment work. Initially, this concentrated on the Standard Planning Regions including Wales, Scotland and Northern Ireland. More recently the Institute has developed the pathbreaking *Local Economy Forecasting Model* (LEFM) software package (in collaboration with Cambridge Econometrics). At a broader level, the most recent analyses focus on areas covered by the Government Offices and Regional Development Agencies. This facilitates the development of consistent projections for any local geography, including the areas covered by the Local arms of the Learning and Skills Councils.

The Local Economy Forecasting Model is a state of the art software tool which enables projections at local level to be developed linked to the Institute's national and regional forecasts. The Institute can therefore provide comparable data sets at local level, all on a consistent basis with the information available at regional and national level.

#### **Access to National Datasets**

The Institute is also able to facilitate access to the major national datasets such as the Labour Force Survey, Annual Business Inquiry, Census of Population and many others. While the Office for National Statistics imposes royalty charges for access to many of these datasets, the Institute's expertise in accessing and interrogating these sources can save clients considerable expense in obtaining data crucial to their particular requirements.

### Charges

While it is possible to provide details of charges for certain 'standard' sets of results, the typical situation is one in which the client requires results customised to their own particular purposes. The charges in such areas are subject to negotiation with significant discounts for regular customers.

# Typical Charges for Providing Additional Detail for Review Employment Tables (exc. VAT which will be charged at the prevailing rate)

#### **Industries and Sectors**

17 Sectors (see Table A.1) £250 41 SAM Industries (see Table A.2) £500

# **Occupations**

25 SOC 2000 Sub Major groups (see Table A.3) £250

# Breakdown by Gender and Status

In addition, breakdowns by gender, full-time and part-time status and self employment are available. The charge for a single breakdown is as above. The marginal cost for each additional breakdown is £150 for the first, £100 for the second and £50 for each subsequent breakdown. A full set of industry by gender and status tables for the 17 sectors is available therefore for £700. The corresponding charge for the 49 SAM industries is £950. Occupational data are only available by gender not by status. Prices quoted are for provision of data for a single geographical area (e.g. a region or the whole of the UK).

### Discount for Regular Customers

There are significant discounts for regular customers. The charge for the second and any subsequent repeat purchase can be up to 50 per cent less for regular orders. Forecasts are updated every 6 months. Discounts are also available for those requiring data for more than one geographical area.

# Contact

Clients are invited to email Dr Rob Wilson <u>r.a.wilson@warwick.ac.uk</u> to discuss their requirements in more detail.

# **European Labour Market Assessments**

The IER was the first research group in Europe to produce a regular assessment of prospects for the structure of employment distinguishing employment by sector, occupation, employment status, and gender. It has extended this work into the European comparative area. The Institute has been the lead contractor or a major partner in a number of key international projects concerned with the assessment of European labour market developments and prospects, usually funded by the Commission of the European Communities. Through its European programme and a network of collaborating institutions and individuals, the IER is able to provide a wide range of quantitative and qualitative scenarios and projections.

Contact: Dr Rob Wilson 02476 523530 or

Professor Robert Lindley, Tel.:44-(0)-2476-523503, Fax:44-(0)- 2476-524958,

Email: R.M.Lindley@warwick.ac.uk

# ANNEX A: DETAILS OF CLASSIFICATIONS USED IN UK LABOUR MARKET ASSESSMENT

**Table A.1 Classification of Main Sectors** 

# Aggregate Sectors (and Comparison with Industry Groups used in Previous projections)

Broad Sector		l Industry Group <sup>a</sup>	MDM Industries	
Primary sector and utilities	1.	Agriculture	1	
•	2.	Mining etc.	2,3,4	
	9.	Utilities	22-24	
2. Manufacturing	3.	Food, drink and tobacco	5	
_	4.	Textiles and clothing	6	
	5.	Chemicals	9-12	
	6.	Metals, and mineral products	13-15	
	7.	Engineering	16-20	
	8.	Other manufacturing	7,8,21	
3. Construction	10.	Construction	25	
4. Distribution, transport etc.	11.	Distribution, hotels etc.	26-28	
·	12.	Transport and communication	29-32	
5. Business and other services	13.	Banking and business services	33,34,37	
	14.	Professional services	36	
	15.	Other services	42	
<ol><li>Non-marketed services</li></ol>	16.	Health and education services	39,40	
	17.	Public administration and defence	38	

Notes: (a) Estimates at the more detailed level of individual industries or industry groups are available from IER.

Table A.2 Classification of Industries<sup>a</sup>

Indu	ıstries	SIC2003	25	27
4	Agricultura	01.02.05	industries 1	industries 1
1. 2.	Agriculture	01,02,05 10	2	2
∠. 3.	Coal etc. Oil & Gas	_	2	2
		11,12	2	2
4. -	Other Mining	13,14	3	3
5.	Food, Drink & Tobacco	15, 16	3 4	
6. 7	Textiles, Clothing & Leather	17, 18, 19	4 5	4 5
7.	Wood & Paper	20, 21	5 5	6
8.	Printing & Publishing	22		
9.	Manufactured Fuels	23	6	7
10.	Pharmaceuticals	24.4	6	7
11.	Chemicals nes	24 (ex 24.4)	6	7
12.	Rubber & Plastics	25	6	7
13.	Non-Metallic Mineral Products	26	6	7
14.	Basic Metals	27	7	8
15.	Metal Goods	28	7	8
16.	Mechanical Engineering	29	8	9
17.		30, 32	8	9
18.	Electrical Engineering & Instruments	31, 33	8	9
19.	Motor Vehicles	34	9	10
20.	Other Transport Equipment	35	9	10
21.	Manufacturing nes	36, 37	10	11
22.	Electricity	40.1	2	12
23.	Gas Supply	40.2, 40.3	2	12
24.	Water Supply	41	2	12
25.	Construction	45	11	13
26.	Distribution	50, 51	12, 13	14, 15
27.	Retailing	52	14	16
28.	Hotels & Catering	55	15	17
29.	Land Transport	60, 63	16	18
30.	Water Transport	61	16	18
31.	Air Transport	62	16	18
32.	Communications	64	17	19
33.	Banking & Finance	65, 67	18	20
34.	Insurance	66	18	20
35.	Computing Services	72	20	22
36.	Professional Services	70, 71, 73, 74.1-74.4	19	21
37.	Other Business Services	74.5-74.8	21	23
38.	Public Administration & Defence	75	22	24
39.	Education	80	23	25
40.	Health & Social Work	85	24	26
41.	Miscellaneous Services	90-99	25	27
42.	Unallocated	50 00		

Note: (a) This is the level of detail immediately available from the model database and forecasts. Consistent historical and projected data for employment can be produced at a more detailed level if necessary.

**Table A.3: Classification of Major Occupational Groups (SOC 2000)** 

SOC Major Groups	Sub-Major Groups
Managers and administrators	1.1 Corporate managers and administrators
	1.2 Managers/proprietors in agriculture and services
2. Professional occupations	2.1 Science and engineering professionals
	2.2 Health professionals
	2.3 Teaching professionals
	2.4 Other professional occupations
3. Associate professional and technical occupations	3.1 Science and engineering associate professionals
occupations	3.2 Health associate professionals
	3.3 Other associate professional occupations
4. Clerical and secretarial occupations	4.1 Clerical occupations
	4.2 Secretarial occupations
5. Craft and related occupations	5.1 Skilled construction trades
	5.2 Skilled engineering trades
	5.3 Other skilled trades
6. Personal and protective services occupations	6.1 Protective service occupations
	6.2 Personal service occupations
7. Sales occupations	7.1 Buyer, brokers and sales representatives
	7.2 Other sales occupations
8. Plant and machine operatives	8.1 Industrial plant and machine operators, assemblers
	8.2 Drivers and mobile machine operators
9. Other occupations	9.1 Other occupations in agriculture, forestry and fishing
	9.2 Other elementary occupations (excl. agriculture)

Notes: For further details see Office of Population Censuses and Surveys Standard Occupational Classification.

Table A.4: SOC 2000 Classification of Occupational Categories (Sub-major Groups)

		Groups)	
	Sub-major groups	Occupations	Occupation minor group number <sup>a</sup>
11	Corporate managers	Corporate managers and senior officials; production managers; functional managers; quality and customer care managers; financial institution and office managers; managers in distribution and storage; protective service officers; health and social services managers	111, 112, 113, 114, 115, 116, 117, 118
12	Managers/proprietors in agriculture and services	Managers in farming, horticulture, forestry and fishing; managers and proprietors in hospitality and leisure services; managers and proprietors in other service industries	121, 122, 123
21	Science and technology professionals	Engineering professionals; information and communication technology professionals	211, 212, 213
22	Health professionals	Health professionals, including medical and dental practitioners and veterinarians	221
23	Teaching and research professionals	Teaching professionals, including primary and secondary school teachers and higher and further education lecturers; research professionals (scientific)	231, 232
24	Business and public service professionals	Legal professionals; business and statistical professionals; architects, town planners, and surveyors; public service professionals; librarians and related professionals	241, 242, 243, 244, 245
31	Science and technology associate professionals	Science and engineering technicians; draughtspersons and building inspectors; IT service delivery occupations	311, 312, 313
32	Health and social welfare associate professionals	Health associate professionals, including nurses and other paramedics; therapists; social welfare associate professionals	321, 322, 323
33	Protective service occupations	Protective service occupations	331
34	Culture, media and sports occupations	Artistic and literary occupations; design associate professionals; media associate professionals; sports and fitness occupations	341, 342, 343, 344
35	Business and public service associate professionals	Transport associate professionals; legal associate professionals; financial associate professionals; business and related associate professionals; conservation associate professionals; public service and other associate professionals	351, 352, 353, 354, 355, 356
41	Administrative and clerical occupations	Administrative/clerical occupations: government and related organisations; finance; records; communications; general	411, 412, 413, 414, 415
42	Secretarial and related occupations	Secretarial and related occupations	421
51	Skilled agricultural trades	Agricultural trades	511
52	Skilled metal and electrical trades	Metal forming, welding and related trades; metal machining, fitting and instrument making trades; vehicle trades; electrical trades	521, 522, 523, 524
53	Skilled construction and building trades	Construction trades; building trades	531, 532
54	Other skilled trades	Textiles and garment trades; printing trades; food preparation trades; skilled trades n.e.c.	541, 542, 543, 549
61	Caring personal service occupations	Healthcare and related personal services; childcare and related personal services; animal care services	611, 612, 613
62	Leisure and other personal service occupations	Leisure and other personal service occupations; hairdressers and related occupations; housekeeping occupations; personal service occupations n.e.c.	621, 622, 623, 629
71	Sales occupations	Sales assistants and retail cashiers; sales related occupations	711, 712
72	Customer service occupations	Customer service occupations	721
81	Process plant and machine operatives	Process operatives; plant and machine operatives; assemblers and routine operatives	811, 812, 813
82	Transport and mobile machine drivers and operatives	Transport drivers and operatives; mobile machine drivers and operatives	821, 822
91	Elementary occupations: trades, plant and machine related	Elementary occupations: agricultural trades related; process and plant related; mobile machine related	911, 912, 913, 914
92	Elementary occupations: clerical and services related	Elementary occupations: clerical related; personal services related; cleansing services; security and safety services; sales related	921, 922, 923, 924, 925

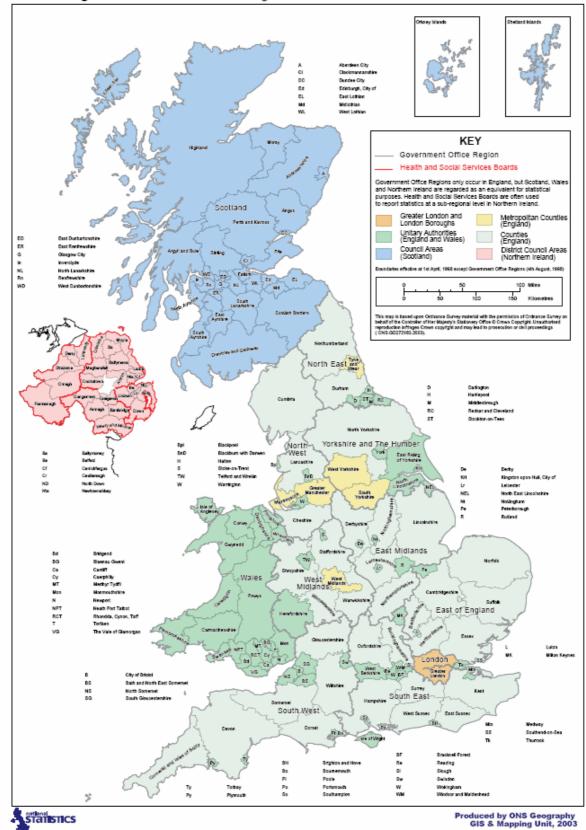
Notes: (a) Standard Occupational Classification. ONS 2001.

United Kingdom: Government Office Regions, as at 3 August 1998 Government Office Regions Scotland Government Office Regions apply to England only. Scotland, Northern Ireland and Wales are not Government Office Regions, but are often used as equivalents for the purpose of representing statistics that cover whole of the UK © Grown copyright. All rights reserved (CNS GD272183 2003). North East Northern Ireland North West Yorkshire and The Humber East Midlands West Midlands East of England South East South West STATISTICS Produced by ONS Geography GIS & Mapping Unit, 2003

Figure A.1 Government Office Regions

Figure A.2





# Table A.5 Definitions of Qualifications

Qualifications are defined by reference to the *National Qualifications Framework*. This is the framework into which all QCA-accredited qualifications fit. The framework has six levels and three categories for types of qualification. The three categories of qualifications are general, vocationally-related and occupational. The different levels are:

- NFQ 0 (Entry and none)
- NFQ 1 (Foundation)
- NFQ 2 (Intermediate)
- NFQ 3 (Advanced)
- NFQ 4 (Degree level or equivalent)
- NFQ 5 (Postgraduate level)

Levels 4 and 5 relate to higher level qualifications (e.g. degrees and other higher level awards at Levels 4 and 5). Entry Level is defined as being pre-Level 1 and is aimed at those learners who are not yet able to attain a Level 1 qualification. These include academic as well as vocational qualifications. For brevity the five levels are referred to as NQF 1-5. In addition a 6th category for those with no formal qualifications is defined, NQF 0. For most purposes, the focus is upon the highest qualification held.

Other more detailed breakdowns are also possible.