LMI for All: Providing careers labour market information

To increase and widen use of high quality labour market information to support decisions about careers and learning

www.lmiforall.org.uk/
Funded by:

Department for Education

Developed by consortia:

- An online data portal which brings together existing national sources of high quality, reliable labour market information (LMI)
- An open data project, which supports the wider government agenda to encourage use and re-use of government data sets
- After successfully completing its pilot stage, LMI for All has been given full project status.
Aims of LMI for All

The overall aims of the project have remained constant:

• To identify and investigate which robust sources of LMI can be used to inform the decisions people make about learning and work
• To bring these sources together in an automated, single, accessible location, referred to as the LMI for All database
• To support the use of the database by developers to create interfaces, websites and applications for career guidance purposes
• To promote the LMI for All service

Purpose of LMI for All

• To develop a comprehensive, high quality data offering that can inform career choices
• To promote third-party websites and applications as a means of opening-up the data to individual decision-makers
• To offer an engaging, accessible and reliable platform for developers
• To build wider awareness and support for LMI for All among key stakeholder groups
**Careers Strategy**

The strategy sets out the Government's plan to improve social mobility and offer opportunity to everyone. The importance of careers information is at the heart of the plan ensuring that people:

‘get the information they need to understand the job and career opportunities available, and how their knowledge and skills can help them in considering suitable careers.’

(DfE, 2017, p.4)

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**Development process: Dynamic and Iterative**

- Data
- Accessibility & Open Data
- Stakeholders & Communication
Current data and indicators

The LMI for All database includes the following:

- Employment: historical, current, projected and replacement demand (Working Futures based on LFS and the BRES)
- Pay and earnings (estimates based on ASHE and LFS)
- Hours (ASHE)
- Unemployment rates (LFS)
- Number of vacancies (Employer Skills Survey (ESS))
- Higher education destinations (HESA)
- Occupational descriptions (ONS)
- Skills, knowledge, abilities and interests (O*NET)
- Geographical location of jobs and travel to work distances (Census of Population)
- Current vacancies (FindaJob)
Organising framework for LMI for All

Data are linked together by occupation classified at the unit group 4-digit level of the 2010 Standard Occupational Classification (SOC).

An index of around 28,000 job titles mapped to SOC enables the end-user to search for and access data of interest and relevance to careers in an intuitive fashion.

Data dimensions

- Occupational title, (SOC2010 4-digit)
- Industry (SIC2007, 75 industries)
- Qualification (NQF 0-8)
- UK, devolved nations and English regions
- Employment status (FT, PT, SE)
- Gender
Big questions...

<table>
<thead>
<tr>
<th>Employment levels by occupation</th>
<th>How many jobs are there? How many in my area? What are the past trends? What are likely future trends?</th>
<th>Labour Force Survey, Working Futures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average earnings by occupation</td>
<td>How much do people get paid for this job? How much at the start of their career? How much in my area?</td>
<td>Annual Survey of Hours and Earnings</td>
</tr>
<tr>
<td>Unemployment by occupation</td>
<td>What proportion of people in this occupation are currently out of work?</td>
<td>Annual Population Survey</td>
</tr>
<tr>
<td>Profile of qualification level by occupation</td>
<td>What level of qualification do people have in this job and what am I likely to need?</td>
<td>Labour Force Survey, Working Futures</td>
</tr>
<tr>
<td>Vacancies by occupation</td>
<td>How many vacancies are there for this job? What proportion are hard to fill?</td>
<td>Employer Skills Survey</td>
</tr>
</tbody>
</table>

Current statistics on usage

The current statistics on LMI for All usage shows that:

- Usage is continuing to increase
- Best base-line minimum estimated at 60,000 users
- Daily queries to the API are on average 600,000 per day (peak 800,000 per day)
- The LMI for All service manages around 7.8 queries per second
- Working Futures and ASHE remain the most popular datasets accessed through the API
- Careerometer is estimated to be deployed in over 65 websites
## Usage: Datasets accessed

Working Futures (employment data), ASHE (pay and hours) and ONS (occupational descriptions) are the most popular datasets accessed.

![Pie chart showing usage of different datasets](chart.png)

- ASHE: 41%
- ESS: 26%
- HESA: 17%
- LFS: 7%
- O*Net: 4%
- SOC: 2%
- Vacancies: 1%
- Working Futures: 2%

## Accessing data in LMI for All

There are three ways in which to access and use data in the LMI for All database:

1. **Develop a web interface or mobile application that uses the API to access the LMI for All database**

2. **Embed Careerometer, a free widget, into your own website**

3. **Explore a third party website or application that uses LMI for All data**
For inspiration...JobHappy, by Harry Jones

https://www.youtube.com/watch?v=7imKYpvKZjk&index=3&list=PLuvzHVGAOpIyJgBX2IHLUAecElK3ljQ

Pathways through the data...

These are my ... skills

These are my ... interests

Occupation

Job description
Workforce profile
Employment statistics
Pay
Vacancies
Combining LMI for All with other data

Some examples of how others have combined data from LMI for All with other data (such as careers videos and local data):

**icould**

Explore
Take a closer look at selected subjects and issues, with a selection of videos, guides and advice.

**Senior Project Manager**
Bovis Lend Lease

From landbuying to sales: 10 careers in the house-building industry

**SkillsmatchLondon**

Analysis
- Forecasts of learners successfully completing courses in different subject areas, compared with the vacancies linked to these areas and forecasted below, split by top-level subject area, or individual subjects, as well as level of qualification.

1. Skils Days
Forecast needs of new apprentices in 2020 linked to their related subject area for courses and jobs at Level 3 and above, split by sector subject and level

3. Projected Vacancies Trends
Map of educational establishments in London that have historically offered different subjects at level 3, split by type of qualification.

**LMI for All Careerometer**

**UK Average**
- **Weekly Pay**: £505
- **Annual Pay**: £26,260
- **Hours/Week**: 37.5h
- **Hourly Pay**: £13

**Workforce Change (projected)**
- **Growth**: 6%
- **Replacement**: 39.5%

The workforce is projected to grow by 6% over the period to 2024, creating 1,374,000 jobs. In the same period, 39.5% of the workforce is projected to retire, creating 13,110,000 job openings.

You might find this job in all industries combined. This is the average across all UK.

**Nurses**
- **Weekly Pay**: £670
- **Annual Pay**: £34,840
- **Hours/Week**: 39h
- **Hourly Pay**: £17

**Workforce Change (projected)**
- **Growth**: 10.7%
- **Replacement**: 31.6%

The workforce is projected to grow by 10.7% over the period to 2024, creating 73,840 jobs. In the same period, 31.6% of the workforce is projected to retire, creating 217,967 job openings.

You might find this job in Health, Residential care, Social work, Public admin. & defence, Education.

Common tasks in this job:
- Assists medical doctors and works with other healthcare professionals to deal with emergencies and pre-planned treatment of patients;
- Manages own case load;
- Monitors patient’s progress, administers drugs and medicines, applies surgical dressings and gives other forms of treatment;
- Participates in the preparation for physical and psychological treatment of mentally ill patients;

Freely available widget!
RCU data dashboard

https://datahub.rcultd.co.uk/blocks/labour-market-information

SACU – Labour market explore

http://sacu-student.com/?page_id=728
Kareerhub

https://www.kareerhub.co.uk/

Next Steps Cornwall Career Card Challenge

• Provides valuable LMI data
• Support teachers and advisers with an engaging activity
• Increase knowledge around pay and % workforce in 100 selected careers/job roles in a fun and informative way
• Developed into Next Steps Challenge App

www.nextstepscornwall.co.uk
What next for LMI for All?

Upcoming activities:

- Data refresh
- New occupational mappings for Apprenticeship Standards
- Development work for occupational changes
- Review and maintenance of technical infrastructure
- Exploration of the role of AI to match courses and occupations
- Design and development of a new widget
- Redesign and update of LMI for All website
- Undertake a range of stakeholder engagement activities
- Support third party users evaluate their web interface or app

For more information...

Website:
http://www.lmiforall.org.uk/
http://api.lmiforall.org.uk/

Email:
Sally-Anne.Barnes@warwick.ac.uk