

## Methodology for labour market demand profiles

### 1. Data sources

1.1. The profiles use the following data sources:

- Cambridge Econometrics residence based and workplace based employment projections by occupation from the public sector austerity scenario (produced in July 2009);
- Office for National Statistics 2006 mid-year population estimates on population by broad age group;
- Office for National Statistics 2008 based sub-national population projections on population by broad age group; and
- Annual Population Survey 2005 to 2008 data on highest qualification held.

### 2. Modelling assumptions

2.1. The profiles are based on the public sector austerity scenario.

2.2. This scenario assumes that public spending will fall year-on-year through to 2013, falling most sharply (by 2%) in 2011. It assumes that spending will rise again in 2015/2016 but growth will be modest. The biggest reductions will be in (non-health or education) public administration central and local government spending, including defence.

2.3. The scenario also assumes that cuts in spending will result in a loss of 7% of current employment in public services (public administration, education and health & social services) – with most jobs being lost in public administration<sup>1</sup>.

2.4. Overall, it projects there will be 5 percent fewer jobs in the West Midlands in 2020 than in 2006 (127,600 less jobs in total).

2.5. The scenario is based on direct impacts of contraction of employment and output. It does not take into account indirect implications in the public sector supply chain or induced spending from consumption by public sector employees.

2.6. The assumptions in the scenario are also informed by the following:

- Working Futures projections on workplace jobs (produced by the Institute for Employment Research and Cambridge Econometrics). These are based on forecasts from the Cambridge Econometrics regional multi-sectoral dynamic macroeconomic model (RMDM).
- Census 2001 data and Annual Population Survey data on commuting patterns to determine residence based employment.

### 3. Geography

3.1. We are writing labour market demand profiles at Local Authority level to show differences between local areas. We have also compared areas within the West Midlands against to one another to benchmark them.

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<sup>1</sup> The projections do not split employment in public administration from other Government employment so it's not possible to quantify how much employment public administration will lose specifically.

#### 4. Time period

4.1. The profiles look at indicators at three different points in time:

- 2006 – this is the baseline year for the projections and pre-dates the recession. Therefore, we call this time point the ‘**pre-recession**’ stage.
- 2010 – this is the first available projection after the baseline year. We call this the ‘**post-recession/recovery**’ stage as the recession officially ended in 2010.
- 2020 – this is the next available projection after 2010. This time point gives us an idea of future trends so we are calling this the ‘**long-term**’ stage. This time point is fairly far in the future, so won’t take into account all future changes in the economy. Therefore, it should be treated with caution.

4.2. Data for the time periods in between these years is not available.

#### 5. Indicators

5.1. The profiles analyse data on a range of indicators as listed below:

**Table of indicators**

Indicator Name	Data Source	Method
Workplace employment	Cambridge Econometrics workplace based employment	Provided by Cambridge Econometrics.
Employment rate	Cambridge Econometrics residence based employment, ONS 2006 mid-year population estimates, ONS 2008-based population projections	Calculated by dividing residence based employment by the number of working age residents.
Job density	Cambridge Econometrics workplace based employment, ONS 2006 mid-year population estimates, ONS 2008-based population projections	Calculated by dividing the number of workplace jobs by the number of working age residents.
Worklessness rate	Cambridge Econometrics workplace based employment, ONS 2006 mid-year population estimates, ONS 2008-based population projections	Calculated by deducting residence based employment from the total working age population, and dividing this by the total working age population.
Working age population	ONS 2006 mid-year population estimates, ONS 2008-based population projections	Provided by the Office for National Statistics.
Number of residents qualified to NVQ level 4+	Annual Population Survey	2006 data taken from the Survey data. Calculated average annual rate of change between 2005 and 2009 and applied this to future years to estimate how many people would be qualified to NVQ level 4+ in the future if current trends continued.
Number of residents with no qualifications	Annual Population Survey	2006 data taken from the Survey data. Calculated average annual rate of change between 2005 and 2009 and applied this to future years to estimate how many people would have no qualifications in the future if current trends continued.
Proportion of workless residents that want to work	Annual Population Survey	Based on 2009 data. This includes people that are economically active but don’t have a job, and those that are economically inactive but want a job.

Proportion of workless residents that don't want to work	Annual Population Survey	Based on 2009 data. This includes people that are economically active but don't have a job, and those that are economically inactive but want a job.
Difference between number of jobs and people that want to work	Cambridge Econometrics workplace based employment, Annual Population Survey, ONS 2006 mid-year population estimates, ONS 2008-based population projections	<ol style="list-style-type: none"> <li>1. First calculated number of workless people by deducting residence employment from working age population.</li> <li>2. Then calculated the proportion of workless people that wanted to work in 2009 (i.e. those that are economically active but don't have a job, and those that are economically inactive but want a job, as a proportion of all that don't have a job).</li> <li>3. Applied this rate to the projected workless figure to get a figure for the number of workless people that want to work.</li> <li>4. Added together residence based employment and the number of workless people that want to work to get a figure for those that are employed or want to work.</li> <li>5. Deducted number of people that are employed or workless and want to work from the total workplace employment to show whether there was an oversupply or deficit of workplace jobs.</li> </ol>