Modelling employment impacts from population projections

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Population projections

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Working age population

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Labour force

⬇

Jobs

⬇

Land requirement

Start with your population projection…

- Start and end date of projection period?
- School leaving age
  - Changes over time?
- State pension age – male and female different?
  - Changes over time?

…gives working age population projection

Apply economic activity rates

- Economic activity rates
  - Sources – Census, Annual Population Survey
  - Total population or by age/gender
  - Static or change over time? By age/gender?
  - UK predictions/differentials re: change – applied locally

… gives you labour force projections

Allowance for unemployment and commuting

- Unemployment
  - Sources – ILO, claimant count.
  - Change over time?
  - Should not aim for zero unemployment, as unrealistic, and allows for churn
- Commuting
  - Sources – APS (annual – StatsWales)
  - Be careful of poaching neighbour's workforce

…gives you a predicted jobs requirement

Calculate job density

- How many jobs per hectare
  - National average job density (21/sqm)
  - National average developer density (3,000 sqm/ha)
- Local adjustment (some industries have higher/lower density)
- Work backwards from your Employment Land Review?
- Ask your consultants for advice

…gives you a prediction for land requirement

Example calculation: jobs growth in Conwy CB

Change 2016-2031	2011-based 10 yr mig trend
Total working age population	1,300
Labour force (economically active population of working age)	1,050
Unemployment rate (ILO)	6.2%
Working population (labour force less unemployed)	1,000
Out commuting rate (proportion of working residents who work outside Conwy CB – 3 yr ave)	28.2%
Jobs needed to meet projected population growth in Conwy CB (Working pop. less % out commuters)	700

Example calculation: employment land requirement in Conwy CB

Change 2016-2031	2011-based 10 yr mig trend
Total jobs	700
National ave. job density (21 sqm per job)	21
Total jobs density (Jobs x ave. density)	14,850
National ave. developer density (3,000 sqm per ha)	3,000
Hectares required (Total job density / developer density)	4.94