

Bath & North East Somerset Council

BUSINESS GROWTH AND EMPLOYMENT LAND UPDATE



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1 INTRODUCTION

- 1.1 The purpose of this study, commissioned by Bath and North East Somerset (BANES) Council in February 2010, is to review the job targets for the district set out in the emerging Regional Spatial Strategy (RSS)¹. The study, which forms part of the Council's Core Strategy evidence base, considers whether this employment target is still appropriate or whether it should be replaced.
- 1.2 The emerging Regional Spatial Strategy implies an employment target for BANES of 21,000 net additional jobs over the RSS plan period 2006-2026. This figure was taken from employment forecasts prepared by Cambridge Econometrics (CE), based on the key assumption of annual output growth of 3.2% for the South West region over the RSS plan period 2006-26. The Council is now reconsidering the targets, for two main reasons. Firstly, it seems likely that the recession has made them unrealistic. Secondly, the new Government has announced that RSSs are shortly to be abolished, so it is likely that the RSS will never be finalised and its targets will never become binding on local planning authorities.
- 1.3 In this document, therefore, we consider whether the Cambridge Econometrics forecast underlying the RSS is still realistic, and if not broadly what results an up-to-date forecast might produce. Below, we approach this question from two angles:
 - In chapter 2 we examine the assumptions and method used to generate an employment target of 21,000 jobs for the district and reality-check the forecasts against historical evidence.
 - In chapter 3 we consider what employment growth an updated forecast might produce, both in terms of jobs and employment space requirements, and what key assumptions this would depend on. At this stage we do not attempt to produce robust forecasts or policy targets, but only a broad view of possible futures.
- 1.4 Conclusion and recommendations are in Chapter 4.

¹ The latest version of the RSS is the Secretary of State's Proposed Changes (2008). All mentions of the RSS refer to this document.

2 THE RSS EMPLOYMENT TARGETS

Assumptions and Method

2.1 The emerging Regional Spatial Strategy (RSS) shows employment growth targets by Housing Market Area and Travel-to-Work Area, but not by local authority district. As noted earlier, these targets are derived from an economic forecast by Cambridge Econometrics. In order to plan for employment land, the District Council asked Cambridge Econometrics to produce a finer-grained geographical disaggregation of its RSS forecast, covering BANES district. This exercise showed 21,000 net additional jobs in the district in the plan period 2006-26². This figure is in effect the RSS employment growth target for BANES, although it is not explicitly mentioned in the RSS. The Business Growth and Employment Land Study, produced by Roger Tym & Partners (RTP) for the Council in March 2009, used the underlying CE forecast to calculate future land requirements and inform policy recommendations for the Core Strategy. In this section, we discuss the assumptions and methods on which the forecast is based.

The Model

2.2 The usual starting point of this CE forecast is an econometric model of the UK economy, in which the main inputs ('exogenous variables') include:

- World growth in output
- UK population, labour force and natural resources
- Government expenditure and taxation
- Exchange rates and interest rates.

2.3 The main outputs of the model are output and employment change, split into 41 activity sectors, which for presentation purposes are aggregated into 19 broader sectors. Employment change is derived from output change, based on sector-specific productivities³.

2.4 To step down from the national economy to regions, CE normally uses fully specified models of regional economies, similar in structure to the UK model and linked to that model and to each other. Regional economies are linked because a slump in household spending in the South West, for example causes reduced output in the regions that supply the South West.

Output

2.5 In the forecasts prepared for the South West RSS, CE followed a different method. It started from the key assumption that output growth in the South West region over the plan period would be 3.2% per annum. (Output in the model is measured by Gross Value

² For the avoidance of doubt, we note that the figures in this report relate to calendar years rather than financial years. Unlike local government, economic analysis and forecasting by convention always use calendar years.

³ Output equals employment times productivity.

Added (GVA).) This was an 'exogenous' assumption, not generated by CE's model, but decided on by the regional partners. As explained in the RSS' supporting text, SWRA and SWRDA initially agreed to assume annual growth rates of 2.8% and 3.2% for the period 2006-26, based on historical data, judgment and policy aspiration.

- 2.6 The 2.8% is derived from assumptions about the UK economy. The RSS says that studies made at the time of the RSS forecasts showed the underlying UK growth was estimated to range between 2 ¼%-2 ¾% and historical evidence showed the South West economy performing slightly better than the UK economy; therefore it was assumed that a reasonable future growth rate for the South West economy would be at the top end of this range, 2.8%.
- 2.7 The 3.2% is based on recent real growth rates for the regional economy over the period 1994-2004, which showed output increasing by 3.15% pa. This faster growth rate assumes improved performance in the supposedly more dynamic sectors targeted by the Regional Economic Strategy and sectors especially likely to benefit from rapid technology change or from rising consumer expenditure, resulting from faster growth in population, household numbers and incomes.
- 2.8 Both of these growth rates are higher than the baseline scenario produced by Cambridge Econometrics' Regional Economic Prospects, which at the time showed GVA growth over the twenty year period, 2006-26 at 2.5% pa.
- 2.9 In its current version, the emerging RSS uses the 3.2% scenario as the basis of targets relating to BANES.

Employment

- 2.10 To translate these regional growth targets into regional forecasts of employment by sector, Cambridge Econometrics started from the baseline forecasts generated under the 2.5% GVA scenario. It then increased these numbers pro rata by industry to produce a sector breakdown corresponding to the regional GVA target of 2.8%. Under this scenario employment in the region was forecast to increase by 365,000 jobs over the twenty year period 2006-26 - an annual growth rate of approximately 0.9%.
- 2.11 To produce employment forecasts that add up to the higher regional GVA growth of 3.2%, additional jobs were added in selected sectors over and above the 2.8% scenario. These sectors include the eight priority sectors set out in the draft Regional Economic Strategy, as follows:
- Aerospace and Advanced Engineering
 - Food and Drink
 - Creative Industries
 - Tourism
 - Marine
 - Bio Medical and health care
 - ICT- especially semi conductor design and wireless networks
 - Environmental technologies - especially renewables.

- 2.12 Furthermore faster population and housing growth in the region would also lead to increasing demand for retailing, recreation, miscellaneous services, government services and recreation, cultural and sporting activities. Under this scenario employment in the region was expected to increase by an additional 464,000 jobs over the twenty-year period - an annual growth rate of approximately 1.1%.
- 2.13 To disaggregate these regional forecasts by local authority district, Cambridge Econometrics used a different model, the Local Economy Forecasting Model (LEFM), which used a shift share method to estimate districts sector forecasts. For example, if BANES employment in Banking and Insurance had been declining in the past more slowly than the South West, in the future the district's share of the region's Banking and Insurance employment would also be falling.
- 2.14 For the West of England sub area, the 3.2% scenario shows an increase of 137,000 jobs over the plan period 2006-26, representing an annual average growth of 0.9%. Much of this future employment growth is forecast to occur in the three sectors: business services, education and health and distribution. These three sectors combined are forecast to gain 122,000 jobs.
- 2.15 For BANES, the RSS forecasts show total employment over the twenty years increasing by 21,000, equivalent to an annual average growth rate of 1%, virtually the same as the West of England. Again, most of these net new jobs, approximately 17,000, are in the three sectors, business services, education and health and distribution.

Table 2.1 RSS employment change 2006-26 for West of England and BANES

	West of England	BANES
Agriculture etc	-2,200	-400
Mining & Quarrying	-400	0
Food, Textiles & Wood	-5,000	-500
Printing & Publishing	300	0
Chemicals & Minerals	-2,200	-300
Metals & Engineering	-3,000	-200
Electronics	-900	-100
Transport Equipment	-5,700	0
Manufacturing not elsewhere specified	100	0
Electricity, Gas & Water	-700	-100
Construction	9,900	1,400
Distribution	29,700	3,400
Hotels & Catering	11,200	2,400
Transport & Communications	2,400	0
Banking & Insurance	1,900	0
Other Business Serv.	59,900	10,000
Public Admin. & Defence.	2,000	800
Education & Health	32,500	3,600
Miscellaneous Services	8,100	1,000
Total	137,900	21,000

Source Cambridge Econometrics

Population and Housing

- 2.16 Unlike many other economic forecasts, the economic forecasts underlying the South West are not based on exogenous assumptions about the population and workforce. Rather, in the South West RSS forecast the population and workforce are largely an output of the model. More specifically, the employment forecast, derived from assumed output growth as we have described, was compared with standard population and workforce projections for different parts of the region, based on demographics and continuation of past migration trends. Where this comparison indicated that the projected workforce would not be enough to fill the forecast jobs, the forecast migration flows into the area concerned were adjusted to provide the additional workers. The resulting population and workforce forecasts, subject to various adjustments, formed the basis of the RSS's housing targets.
- 2.17 Thus, in short, the region first decided on the total output growth it would aim for, then considered how much population, and hence how much housing, would be needed in different areas to make that growth possible. The target of 3.2% pa output growth largely determines the RSS's proposals for housing as well as economic development.

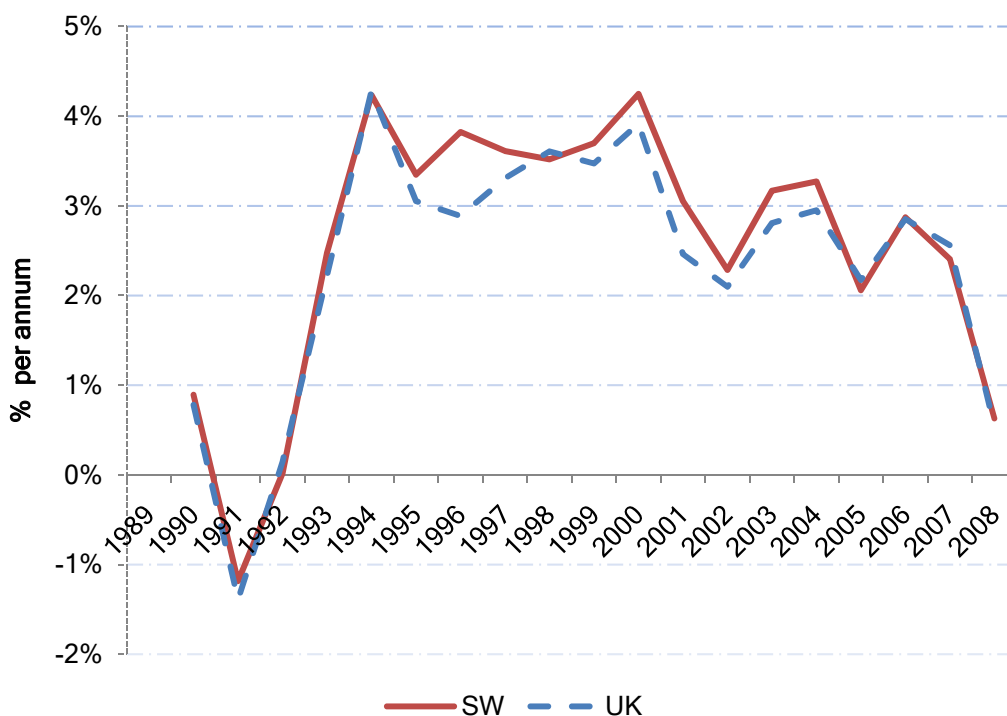
Reality Tests

- 2.18 Below, we test the RSS forecast against historical evidence and informed expectation, looking firstly at the forecast's key assumption regarding regional output growth and secondly at its predictions regarding employment change. The purpose of this analysis is to see how far the RSS forecast was consistent with the evidence available at the time when it was prepared. Therefore the analysis only considers evidence up to 2006, the base year of the RSS forecasts. We will consider more recent developments, including the impact of the recession, in Chapter 3 below.

Output

- 2.19 Figure 2.1 below shows past output change for the South West region and the UK. Unfortunately official estimates of regional real output are unavailable; therefore we have constructed estimates of real output for the South West, by calculating the region's share of the UK's nominal output and applying this share to the UK's real output.
- 2.20 Change in the region's economy closely paralleled the national total. Over the ten year period 1994-2004 the estimated annual output growth is 3.4% for the South West and 3.1% for the UK. But this strong growth may have been in part the product of short-term cyclical influences as well as longer-term trends, because the Treasury's analysis of economic cycles shows that in 1994 the economy was still recovering from the early 1990s recession and operating below full capacity, while in 2004 it was operating at full capacity. Hence, change over the period 1994-2004 is not a robust basis on which to estimate long-run growth.

Figure 2.1 Annual output (GVA) change 1989-2008



2.21 To measure past trends more accurately, we need to consider growth between dates which represent a similar point of the economic cycle. Based on an analysis of cyclical indicators, the Treasury estimates the start and end dates of full economic cycles - moving from one point when the economy is operating at full capacity to another such point. Based on this analysis, the UK experienced a complete economic cycle from 1997-2006, with half cycles between 1997-2001 and 2001-2006.

Table 2.2 Annual average GVA growth rates 1997-2006

% pa	SW	UK
1997-2006	3.1%	2.9%
1997-2001	3.6%	3.4%
2001-2006	2.7%	2.6%

Source ONS and RTP

2.22 Table 2.2 shows over the nine-year period the region's annual growth rate was approximately 3.1%. The region's growth slowed down sharply between the two half-cycles, 3.6% pa in 1997-2001 and 2.7% pa in 2001-2006. Similarly the UK's output growth slowed down from 3.4% pa in the first half-cycle to 2.6% pa in the second half-cycle. An explanation for these differences is productivity growth, which was much stronger in the first period than the second period and is the key reason why the nine-year period shows a similar growth rate to the RSS forecasts. However the high productivity rates were short-term and were not sustained in the second period 2001-2006. This suggests that the RSS growth rate may overestimate the region's future growth. In the next chapter we shall discuss alternative GVA rates.

- 2.23 Does this mean that the 2.7% growth for the South West shown in the period 2001-06 is an appropriate rate to assume for the whole of the 2006-26 period? It is after all close to the Treasury's 2¾% estimate of trend growth for the UK economy which underpinned (and still does) their economic forecasts in 2006. The answer is no, because the Treasury only used this 2¾% assumption in 2006 for the period up to 2011. From 2015 they assumed long-run output growth in the UK economy of just 2% on the basis of productivity growth of 2%, in line with the UK's 50 year average annual productivity, and zero employment growth. If we combine these two assumptions and assume that in the years 2012-14 growth gradually decelerates from 2¾% to 2% then on average the UK is projected to grow by 2¼% on average per annum between 2006 and 2026. The South West economy historically has tended to grow at either the same rate as the UK or slightly above that rate. Hence a reasonable assumption in 2006 for annual average growth in the South West economy between 2006 and 2026 would have been 2¼ to 2½%, rather than the RSS's 3.2%.

Employment

- 2.24 As a further reality test, the table below compares the RSS employment forecast with past employment change for the South West. As in the analysis of output in the last section, the past period is 1997-2006, which we split into two sub-periods, 1997-2001 and 2001-2006⁴. The table also shows change in productivity (output per worker), which links the analysis of employment change in this section with the analysis of output change in the last section.

Table 2.3 Growth in employment and productivity

% per annum	SW jobs	SW output	SW productivity	UK productivity
Actual 1997-2001	1.7%	3.6%	1.9%	2.7%
Actual 2001-06	1.1%	2.7%	1.6%	1.9%
RSS forecast 2006-26	0.8%	3.2%	2.4%	

Source: ONS, HM Treasury, RTP

- 2.25 The region's past employment and productivity show a similar time pattern to its output. Both employment and productivity grew rapidly in 1997-2001, at annual rates of 1.7% and 1.9% respectively, and much more slowly in 2001-06, at 1.1% and 1.6% respectively. In both these past periods, the region's productivity growth was considerably below the UK's.
- 2.26 For the plan period after 2006, as noted in the last section the RSS scenario shows faster output growth that occurred the immediate past period, 2001-06. At the same time, it shows considerably slower employment growth - an annual rate of 0.8% in 2006-26 against 1.1% in 2001-06. The reason for this apparent contradiction is that in the RSS scenario the region's productivity growth speeds up dramatically in the future, from 1.6%

⁴ The historical figures are taken from the Annual Business Inquiry (ABI) which excludes the self-employed; so the comparison with the RSS forecasts, which do include the self-employed, is not exact.

pa in 2001-06 to 2.4% pa in 2006-26. The latter figure is well above the national productivity growth of 2% forecast by the Treasury for the same period.

- 2.27 How convincing is this view of the future, bearing in mind our earlier discussion of output trends? At first sight and considered in isolation, the RSS *employment* scenario does not look unreasonable: it shows slower job growth in the plan period than in the preceding five years, just as one would expect from the discussion in the last section. But the assumptions behind this job growth do not look convincing. We have already shown that the annual output growth of 3.2% is likely to be too high. Table 2.3 suggests that the annual productivity growth may also be too high. The RSS scenario implies that the South West's productivity growth, which at least since 1997 has been well below the UK's, in the future will be well above it. This speeded-up productivity growth probably reflects the RSS's assumptions about the sector composition of the region's future 'supergrowth' (see paragraph 2.11). In terms of their impact on employment growth, these apparent misjudgements pull in opposite directions: all other things being equal overstating output growth leads to overstated employment growth, while overstating productivity growth leads to understated employment growth. So at this stage we can tell that the RSS employment growth targets seem based on shaky foundations, but we cannot yet tell whether the targets are too high or too low. We attempt to answer this question in Chapter 3 below, which builds alternative employment scenarios.
- 2.28 Table 2.4 below compares past with future employment growth for the West of England and BANES as well as the South West region.

Table 2.4 Annual Employment Growth 1986-2007

% per annum	Actual			Forecasts
	1997-2006	1997-2001	2001-2006	RSS 06-26
SW	1.4%	1.7%	1.1%	0.8%
West of England	1.2%	1.8%	0.8%	0.9%
BANES	1.0%	0.7%	1.4%	0.9%

Source: ONS, RTP

- 2.29 Over the whole period 1997-2006, employment in both the West of England and BANES grew more slowly than in the region as a whole. But these relationships were not stable over time; thus BANES grew considerably more slowly than the South West in the first part of the period and faster in the second half. For the future, the RSS forecast shows fractionally higher growth in both the sub-region and the district as the region. This does not seem unreasonable, though of course we cannot tell if it is exactly right.

3 ALTERNATIVE SCENARIOS

- 3.1 In the last chapter we established that the 3.2% output growth assumption underlying the RSS employment targets was optimistic at the time it was made. We now attempt to set out some new scenarios which take account of the historical evidence analysed in that chapter as well as what has happened in the national, and regional economies since 2006 and what now appear to be sensible assumptions for future economic growth through to 2026.
- 3.2 In doing so, we need to look first at the national UK economy before turning to look at the South West regional economy. This is both because we need to understand the national context, which clearly influences the prospects for the South West economy, and because, as discussed in the previous chapter, the South West economy has tended to grow at a similar, albeit slightly higher, rate to the UK economy over the last two decades. Hence we might expect this to continue and thus the prospects for the UK economy serve as a useful proxy for the economic future of the South West region.

The Impact of the Recession

- 3.3 Table 3.1 below shows the growth rate of UK output (GDP) since 2006. The impact of the recession can clearly be seen in the low growth rate for 2008 and then the 5% loss of output in 2009 - the largest single-year loss of output in the UK economy since the Second World War.

Table 3.1 UK Output Growth

	% per annum
2006	2.9%
2007	2.6%
2008	0.5%
2009	-5.0%

Source: ONS

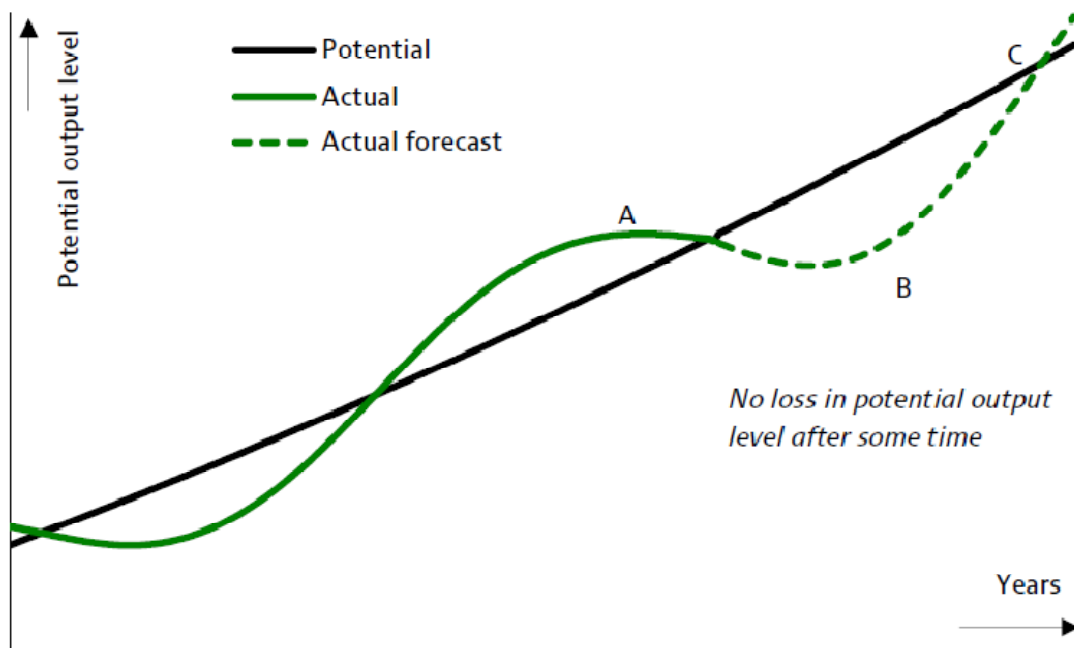
Possible Scenarios

- 3.4 Recessions potentially inflict two sorts of economic costs. First, there are the 'cyclical' (or short-run) costs, such as the decline in employment that always goes hand in hand with a marked drop in output. If a recession is relatively mild, in terms of the decline of output it involves, and it lasts a relatively short period, and does not persist, then we might expect that these short-run costs will be the only costs and that the long term growth prospects of the economy will not be affected.

- 3.5 However as the recent recession⁵ involved a substantial loss of output then it may also have inflicted 'structural' (or long-run) costs on the underlying economic potential of the UK economy. These costs can be either a one-off fall in the level of potential output or a reduction in the growth rate of potential output. In the worst case, a recession could produce both kinds of adverse effect.
- 3.6 Economists use the term 'potential output' to mean the level of output that the economy can produce if there is full utilisation of both capital and labour. Hence it represents the total capacity of the economy to produce goods and services in a sustainable (non-inflationary) way. The growth in potential output thus represents the growth rate that the economy can sustain in the longer term without leading to rising inflation.
- 3.7 The case where the recession leaves potential output unaffected is shown in Figure 3.1. The actual level of output falls temporarily below potential as the recession bites. The UK economy moves from the peak of the boom at point A to the trough of the recession at point B. Over the subsequent economic recovery actual economic growth is faster than the growth in potential output and the difference between actual and potential output (which economists call the 'output gap') is closed, with the economy moving from point B to point C without suffering long-term (structural) loss of output. In the end the economy gets back the output and employment that it temporarily lost during the recession.
- 3.8 If we believed that the impact of the recent recession has been like this, then the experience of the recession would not by itself be a cause to reconsider our assumptions for output (and employment) growth in the UK between 2006 and 2026, from what we would have previously deemed sensible in 2006 - that is 2 ¼% pa.
- 3.9 Figure 3.2 shows the situation in which a recession, as well as generating short-run losses of output, reduces the level of potential output. Once the recession is ended the economy goes back to growing at its existing long-run rate of growth (rate of growth of potential output) but the one off loss of output caused by the recession is never recovered.
- 3.10 In this case, we would need to revise our assumptions for output (and employment) growth in the UK economy between a pre-recession year such as 2006 and a post recession year such as 2026 to take account of this permanent one-off loss of output and employment.

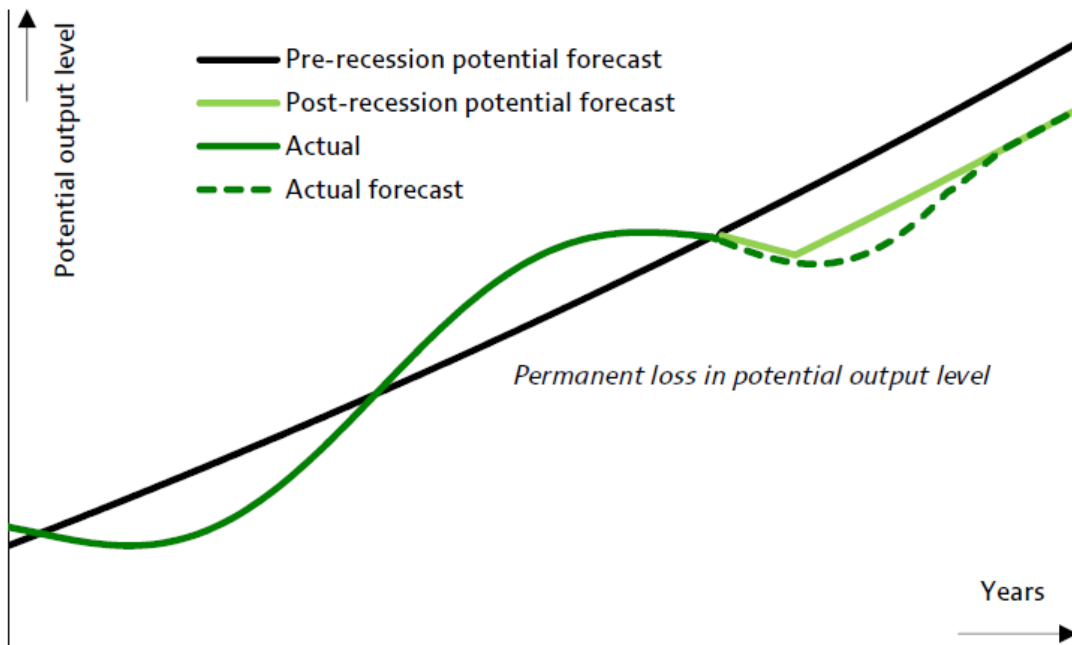
⁵ This analysis is being written in March-April 2010. It implicitly assumes, in describing the recession as 'recent' rather than 'current', that the economy does not subsequently suffer a downturn in 2010 and so a 'double dip' recession.

Figure 3.1 A recession with no long-run economic costs



Source: IFS Green Budget 2010

Figure 3.2 A recession causing a one-off permanent loss of output

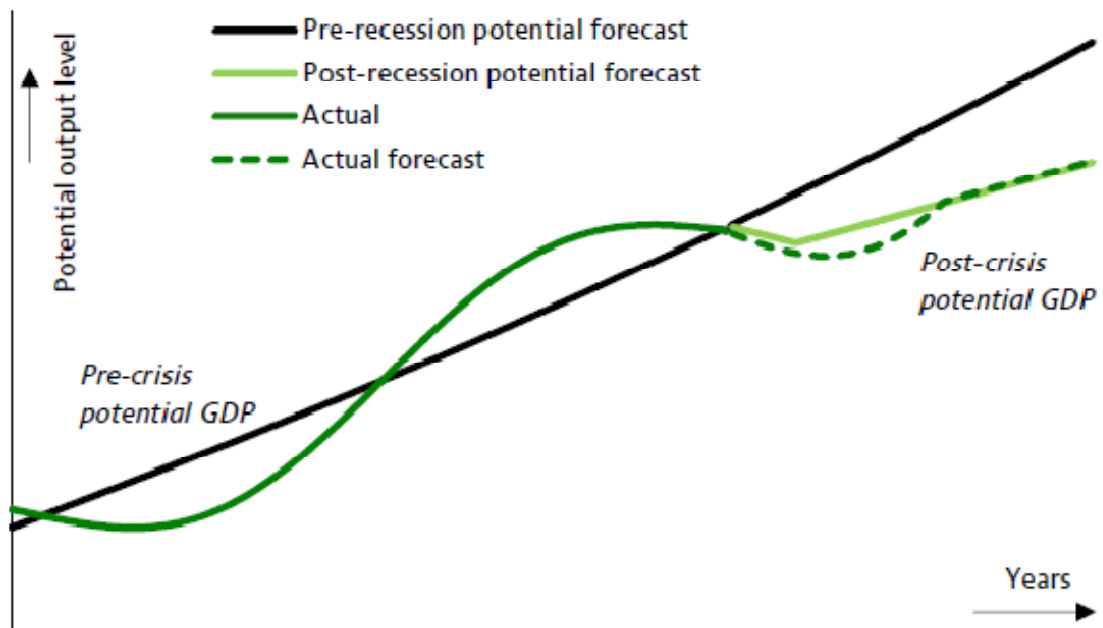


Source: IFS Green Budget 2010

- 3.11 The worst-case scenario is shown in Figure 3.3, where the recession causes both a one-off loss of output and a reduction in the long-run sustainable growth rate of the economy. Once the recession is ended the economy fails to go back to growing at its existing long-run rate of growth (rate of growth of potential output) and instead it now grows at a lower rate on average over the longer term. In addition there is also a one-off loss of output caused by the recession which is never recovered.

- 3.12 As the long-run rate of growth of the economy has fallen, the recession causes not just a constant loss of output but one that increases over time. In this case, we would need to revise our assumptions for output (and employment) growth in the UK economy between a pre-recession year such as 2006 and a post recession year such as 2026 to take account of both this permanent one off loss of output and the reduction in long-run output growth.

Figure 3.3 A recession causing both a one-off loss of output and a reduction in long-run economic growth



Source: IFS Green Budget 2010

- 3.13 In discussing the possible impact of the recession on potential output levels and growth in the longer term we have not explained *why* the recent recession might have had these effects. The current recession has been the result of a worldwide credit crunch which is likely to increase the price of credit to businesses, thereby raising the cost of capital, which would lead to a reduction in the stock of capital in the economy and so to a lower level of potential output. As the pricing of risk prior to the credit crunch was probably unsustainably low this effect is likely to persist, as increases in the risk premia in commercial interest rates raise the cost of borrowing. More generally, the crunch is likely to reduce the supply of credit, by impairing the critical role that the financial system plays in matching funds from savers to investors. This reduces the efficiency of the process by which capital is allocated within the economy with a subsequent negative impact on potential output.

Actual Impact

- 3.14 The Treasury's latest published estimate of the impact of the recession on potential output at the time of writing is contained in the 2009 Pre-Budget Report published in December

2009⁶. The Treasury estimates that the recession has caused a permanent one-off loss of output of 5% of total output in the UK economy. The Treasury does not believe that the recession has impacted on the growth of potential output or the long-run rate of growth in the UK economy. The Treasury's view is similar to the latest estimates produced by the National Institute for Economic and Social Research (NIESR). In October 2009, NIESR estimated that the recession has had a permanent one-off impact on the level of output in the UK of 3 to 5 %⁷. However there are more pessimistic estimates. Barclays Wealth in this year's influential IFS Green Budget estimate a one off loss of 7½% of output plus a reduction in the long-run trend rate of growth of ½% per annum. This is their best estimate of the impacts. They estimate that the one-off impact could be as high as 10% of total UK output⁸.

The UK Economic Outlook to 2026

The short to medium run UK economic outlook

- 3.15 Table 3.2 shows the Treasury's latest UK economic forecasts, as published in the December 2009 Pre-Budget Report through to 2014, Barclay's Wealth forecasts from the IFS Green Budget and the Consensus forecasts for the same period. These Consensus forecasts are taken from the Treasury's February 2010 survey of independent forecasters and represent the average or consensus view of the UK's economic prospects to 2014.

Table 3.2 Short to Medium Run Economic Forecasts for the UK

UK Output Growth % per annum	Consensus	HM Treasury	IFS Green Budget
2010	1.3	1¼	1.8
2011	2.1	3½	2.3
2012	2.3	3½	1.4
2013	2.6	3½	1.5
2014	2.5	3½	1.7
Five year average	2.2	3	1.7

Source: ONS, RTP, IFS

Note: Unlike other forecasters the Treasury forecasts to the nearest quarter of a % point rather than to the nearest first decimal place.

- 3.16 It is clear that the Treasury's view of economic prospects between 2011 and 2014 is rather optimistic relative to the Consensus view. Accordingly the Treasury's view of the economic outlook over this period has been widely viewed as over optimistic, and for this reason we do not base any of our scenarios on the Treasury's projections for this period.

⁶ The 2010 Budget Report was published on 24 March 2010, after the draft of this report had been delivered. Therefore we do not refer to the 2010 Budget Report. But, in our opinion, if our analysis did take account of the Budget Report our conclusions would not change materially. A new 'emergency Budget' is due on 22nd June which will be supported by yet another set of official forecasts.

⁷ R. Barrell, 'Long-term scarring from the financial crisis', in NIESR Economic Review, October 2009.

⁸ M. Dicks, 'The UK's productive capacity: surveying the damage', Chapter 1 in the IFS Green Budget, February 2010.

Hence our first scenario for the UK economy assumes the growth rates to 2014 set out in the Consensus view rather than the Treasury view. Our second scenario assumes the growth for the UK shown in the IFS Green Budget. Overall over the period 2009 -2014 this shows rather slower growth on average per annum, 1.7% compared to 2.2% in our first scenario based on the consensus amongst independent economic forecasters.

The longer-term UK economic outlook

- 3.17 The Treasury sets out its longer-term economic assumptions in its long-term public finance reports. The latest (2009) report⁹ assumes economic growth in the UK between 2019 and 2029 of 2½% per annum. These projections are based on assumptions for productivity and employment growth. Productivity is assumed to grow at 2% per annum - the average annual rate of growth experienced over the last 50 years in the UK - and employment is assumed to grow at ½% per annum, which is in turn derived from the Office for National Statistics (ONS) population projections. Hence in contrast with their short to medium term projections the Treasury's longer-term assumption appear entirely realistic.
- 3.18 Given the Treasury's short to medium term assumptions only extend to 2014, it is not entirely clear what growth they assume for the period 2015-19. Given our consensus based forecasts for 2014 is 2.5% in line with the Treasury's assumption for 2019-29 we assume that growth between 2015 and 2019 is also 2.5% per annum. This gives us our first scenario for UK growth between 2006 and 2026 - combining the actual experience of the UK economy between 2006 and 2009, the consensus forecasts for 2009-14 and an assumption of 2.5% annual growth in line with the Treasury's long-run growth assumption thereafter to 2026.
- 3.19 As noted above, Barclays Wealth's research concludes that the recession has reduced the growth of potential output or long-run growth by ½% point. Prior to the recession Barclays Wealth took a relatively pessimistic view and believed that long-run growth in the UK would average 2¼% per annum. Hence they now believe that this has fallen to 1¾% and will stabilise at this level around 2014. Our second scenario takes the results of the Barclays Wealth research and assumes that the ½% point reduction in long term growth is gradually unwound between 2015 and 2025. We can rationalise this as reflecting a natural 'healing' of the economy as the experience of the recession recedes or as reflecting the results of supply side reforms by the UK government to improve the underlying performance of the UK economy. Any UK government is unlikely to be satisfied with an economy which is only able to generate growth of around 1¾ on a long term basis. This gives us our second scenario for UK growth between 2006 and 2026 - combining the actual experience of the UK economy between 2006 and 2009, the Green Budget forecast for 2009-15 and an assumption of the long-run annual rate of growth gradually rising from 1¾% to 2¼% between 2015 and 2025.

⁹ HM Treasury, 'Long term public finance report: an analysis of fiscal sustainability', 2009.

3.20 We summarise these two scenarios in Table 3.3 below¹⁰.

Table 3.3 Summary of Economic Scenarios for the UK

UK Output Growth % per annum	Consensus Based	Green Budget Based
2006-09	-0.7	-0.7
2009-14	2.2	1.7
2014-26	2.5	2.0
2006-26	1.9	1.6

Source: ONS, RTP, IFS

The Economic Outlook for the South West to 2026

The short-run economic outlook for the South West

- 3.21 An alternative to the RSS employment forecasts for the regional economy are the projections published by the South West Observatory. These are produced for the Observatory by Experian Business Strategies.
- 3.22 The key objective of the Observatory forecasts is to give an indication of the prospects for the regional economy if historical trends continue and if the UK economy performs as predicted by the most recent consensus amongst independent forecasters, taken from the Treasury's survey of such.
- 3.23 These projections are based on a detailed analysis of past trends in output and employment by industry at national, regional and sub regional levels. This analysis uses ONS estimates of output (GVA) and employment (ABI jobs and self employment) combined with SW regional accounts to generate consistent historical estimates of GVA and full-time equivalent (FTE) employment for the region and its districts. Therefore the projections take account of the relationships between growth in the main components of expenditure and industry performance, national and regional economic activity by sector and the most recent consensus forecast for UK economic growth. The main outputs of the model are output and FTE employment for the region and the districts.
- 3.24 The South West Observatory publishes short-run economic projections for the region to 2012 and longer-term projections for 2015, 2020 and 2030. Table 3.4 below compares the Autumn 2009 version of these projections with the Cambridge Econometrics (CE) forecasts published in July 2009.

¹⁰ We do not show the Treasury's own forecasts to 2014 in the table, because as discussed earlier we consider they are over-optimistic.

Table 3.4 Short-Run Economic Scenarios for the South West

SW Output Growth % per annum	SW Observatory	CE
2006-08 'actual' annual average	1.0	1.0
2009	-4.2	-3.4
2010	1.2	-0.3
2011	1.9	-
2012	2.4	-

Source: SW Observatory, Cambridge Econometrics, RTP

The longer-term economic outlook for the South West Economy

- 3.25 In the longer-term the South West Observatory projects that economic growth in the region is expected to be 2.3% on average per annum between 2012 and 2030. This is in line with their projections for the UK, which also show growth of 2.3% per annum over the same period. This is perhaps a little pessimistic given firstly, as discussed above, that a reasonable expectation for longer-term UK economic growth is around 2.5% per annum and secondly that historically, if anything, the South West economy has grown slightly faster than the UK economy as a whole. In contrast, Cambridge Econometrics projected that annual average growth in the South West and UK economies would be 2.5% over the period 2010-2020 which we carry forward to 2026. We can combine these different longer-term projections with the short-run projections shown in Table 3.4 to generate two scenarios for output growth in the South West economy between 2006 and 2026. These two scenarios are summarised in Table 3.5 below.

Table 3.5 Summary of Economic Scenarios for the SW Economy

SW Output Growth % per annum	SW Observatory	CE-Based
2006-10	-0.3	-0.5
2010-26	2.3	2.5
2006-26	1.8	1.9

Source: SW Observatory, Cambridge Econometrics, RTP

Scenarios for BANES

Total Employment

- 3.26 We have developed four scenarios for output growth between 2006 and 2026 - two for the UK economy and two for the South West economy. Since the South West economy historically has tended to grow at or slightly above the rate for the UK economy it is not unreasonable to treat the two UK scenarios as also holding for the South West. This gives us four potential scenarios for output growth in the South West. Table 3.6 shows both the average annual growth over the period 2006 to 2026 and the cumulative growth over that 20-year period in the four scenarios and in the 3.2% annual growth assumed in the RSS.

Table 3.6 Summary of output growth scenarios, South West region, 2006-26

	Consensus Based	Green Budget Based	SW Observatory	CE	RSS
Average annual output growth 2006-26 % pa	1.9	1.6	1.8	1.9	3.2
Cumulative output growth 2006-26 %	46.7	36.2	42.1	45.7	87.8

Source: ONS, Cambridge Econometrics, IFS, SW Observatory, RTP

- 3.27 Our four scenarios clearly suggest much less output growth in the South West economy, both in annual average terms and cumulatively over the plan period, than the RSS 3.2% scenario on which the BANES target of 21,000 net new jobs is based.
- 3.28 One way of assessing the implications of lower growth in the South West economy for employment growth in BANES is to proportionate down the 21,000 RSS target for BANES. For this, we multiply 21,000 by the ratios of the cumulative growth over that period in the four scenarios to the cumulative growth in the RSS. These calculations are shown in Table 3.7. This is an approximate method but does give an indication of the implications for BANES of lower growth in the South West economy.
- 3.29 Our output-based scenarios suggest employment growth in BANES of between 8,700 and 11,200 between 2006 and 2026. If we take an average of the four scenarios this gives an increase in employment in BANES of around 10,000 between 2006 and 2026. This is just under half the RSS target. If our output-based scenarios are correct and growth continues at the same rate beyond the plan period, it will take another 16 years beyond 2026 for BANES to achieve the RSS target of 21,000 extra jobs.

Table 3.7 BANES employment growth 2006-26: average of RTP output-based scenarios

Thousands	Consensus Based	Green Budget Based	SW Observatory	CE	Average
Employment Change 2006-26	11.2	8.7	10.1	10.9	10.2
	(= 46.7 / 87.8) x 21)	(= 36.2 / 87.8) x 21)	(= 42.1 / 87.8) x 21)	(= 45.7 / 87.8) x 21)	(= (11.2+8.7+10.1+10.9)/4)

Source: RTP

- 3.30 A fifth scenario is provided by the Autumn 2009 projections from the South West Observatory, mentioned earlier. These figures are expressed as full-time equivalent (FTE) jobs and are not available for the exact period 2006-26. Translated into total job change for 2006-26¹¹, they show an estimated 5,100 net new jobs for BANES in 2006-26, roughly a quarter of the RSS target. If the Observatory scenario is correct and growth continues at the same rate beyond the plan period, it will take another 24 years beyond 2026 for BANES to achieve the RSS target of 21,000 net new jobs.
- 3.31 Why does the Observatory forecast only half as many net new jobs in BANES as our output-based scenarios? There seem to be two reasons. Firstly, as noted earlier the

¹¹ To translate FTE jobs into total jobs, we use factors derived from Cambridge Econometrics' 2008 forecasts, which were provided to us as part of earlier studies for BANES and showed both FTE and total jobs by sector. For each sector, we calculated the ratio of total to FTE jobs in the CE figures and applied it to the Observatory's FTE figures to estimate total jobs.

Observatory is relatively pessimistic about the UK's future output growth, seemingly because it is relatively pessimistic about productivity. A second likely reason relates to the local population and workforce. Our four output-based scenarios, being scaled-down versions of the RSS forecast, treat population growth in the same way as the RSS forecast: they start from a view of future output and assume that the workforce necessary to produce that output, and the housing necessary to accommodate that population, will be forthcoming. In contrast, in the Observatory figures population is an exogenous input, taken from ONS population projections, which in turn are based on demographics and historical trends in migration. It seems likely that BANES' resident population and workforce, as projected by the ONS, in the Observatory forecast acts as a constraint on the district's employment growth. But we cannot be sure of this, because we have no details of the Observatory's model.

Jobs by Sector and Land Use

- 3.32 Table 3.9 below compares the employment scenarios introduced in the last section. We refer to the Observatory based projections as Scenario 1 and the average of output-based scenarios (Table 3.7) as Scenario 2¹². The table breaks down the total employment change scenarios derived in the last section into activity sectors (industries and services). This is the first step in examining the implications of the scenarios for future employment land requirements. At the next step, we will translate employment by sector into employment by land use - distinguishing the 'employment' or B-class uses, comprising industry/warehousing and offices, and the remaining ('non-B') sectors.
- 3.33 The Observatory projections that constitute Scenario 1 are broken down by activity sector¹³, but our output-based Scenario 2 is not. Therefore, to break down the Scenario 2 total into sectors we have assumed that the percentage distribution of jobs across sectors in 2026 is the same as in Scenario 1. This distribution of jobs is only a rough approximation of the expected sector breakdown that would result from a fully-fledged econometric forecast. As explained below we take this sector breakdown from the Observatory's Spring 2010 projections rather than the Autumn 2009 ones.
- 3.34 It is important to note that the figures shown in Table 3.8 are not based on fully specified economic and demographic projections. Scenario 1 is based on a hybrid of two forecast produced by Experian, using assumptions and methods which are largely unknown to us. Scenario 2, produced by RTP, is not a forecast, but a rough first approximation based on a relatively simple top-down approach. If BANES Council wants to turn any of these

¹² In Table 3.9, employment in the base year, 2006, is taken from the Observatory scenario, which shows a total of 93,662 jobs. This differs from the Business Growth and Employment Land Study (BGELS), in which the 2006 total was 102,000 jobs. The reason for the difference is that, as discussed earlier, BGELS was based on Cambridge Econometrics data while the Observatory forecast is based on Experian data. While both these data sets are derived from Government statistics, they each apply different adjustments and corrections to these statistics. In Table 3.9 we use the Observatory's base figures. This choice does not make a significant difference to our comparison of the two scenarios, because we are comparing employment *change* rather than *levels*.

¹³ As we understand it, this sector breakdown is a 'baseline' scenario, showing Experian's best estimates of the future of different sectors. It does not incorporate policy-led adjustments as does the RSS scenario used in BGELS (see paragraph 2.11 above).

scenarios into targets for its Core Strategy, it should first thoroughly review their assumptions and methods and adjust them in the light of local knowledge and policy objectives.

- 3.35 The sectoral composition of the South West Observatory's Autumn 2009 projections (which are produced by Experian Business Strategies) appear somewhat odd with in particular the figures for public administration and defence showing substantial growth between 2006 and 2026. This is despite the expectation of considerable and sustained reductions in public expenditure over the foreseeable future, given the need to reduce public borrowing and debt levels in the UK. The documentation provided with these projections unfortunately does not include details of how the sectoral projections were produced.
- 3.36 Between the first version of this report and this revised version, the South West Observatory published their Spring 2010 economic projections. Given the odd numbers for public administration and defence in the Autumn 2009 projections we looked to see if we could use these later projections. Unfortunately we cannot use these later projections directly as they suffer from a fundamental problem. They give annual average employment growth between 2010 and 2030 in the UK and South West region of 0.9% and 1.1% respectively. In contrast, the Treasury's long-run assumption is for employment in the UK to grow by 0.5% per annum after 2014. The Treasury's projections are in turn based on the ONS's demographic projections. Hence these employment growth numbers contained within the South West Observatory's Spring 2010 economic projections are in our judgement unrealistically high. They are driven by very low productivity growth assumptions as the projections for output do not appear unreasonable. Given the unrealistically high projections for employment growth in the economy as a whole, we do not view the South West Observatory's Spring 2010 economic projections as robust and thus in our opinion they are not a suitable basis for producing estimates for employment growth in BANES between 2006 and 2026.
- 3.37 However, within this unrealistically high overall employment growth the outlook for public administration and defence by itself appears more realistic as the Spring 2010 projections for BANES show only minimal growth in employment in this activity between 2010 and 2030 and a declining share of total FTE employment - see Table 3.8. Hence we apply the sectoral pattern of total employment growth based on the Spring 2010 projections to the overall employment growth in our two scenarios based on the Observatory's Autumn 2009 projections and on our top down approach based on an assessment of the growth prospects in the UK and the South West region.

Table 3.8 Sectoral Pattern of FTE Employment in BANES in 2010 and 2030

Sector	Shared total FTE employment in 2010	Shared of total FTE employment in 2030	Charge in share of total FTE employment 2010 to 2030
Agriculture etc.	1.1%	0.8%	-0.3%
Extraction	0.0%	0.0%	0.0%
Manufacturing	8.3%	4.7%	-3.6%
Utilities	0.5%	0.2%	-0.3%
Construction	6.3%	4.7%	-1.6%
Distribution	13.4%	13.0%	-0.4%
Hotels & Catering	6.3%	6.2%	-0.1%
Transport & Communication	4.6%	5.2%	0.7%
Financial Services	3.0%	4.1%	1.1%
Business Services	18.7%	28.2%	9.5%
Public Admin & Defence & Education	17.0%	12.4%	-4.6%
Health & Social	15.4%	15.9%	0.5%
Other Services	5.4%	4.5%	-0.9%

Source: South West Observatory Spring 2010 Economic Projections, RTP Calculations

Table 3.9 BANES employment scenarios by sector 2006-26

Jobs	Base Year	Scenario 1 (Observatory)			Scenario 2 (RTP output based)		
	2006	2026	Change 06-26	% Change	2026	Change 06-26	% Change
Agriculture etc.	2,384	751	-1,634	-69%	788	-1,597	-67%
Extraction	0	0	0		0	0	
Manufacturing	7,724	4,613	-3,110	-40%	4,841	-2,882	-37%
Utilities	984	224	-759	-77%	236	-748	-76%
Construction	5,544	4,279	-1,266	-23%	4,490	-1,054	-19%
Distribution	13,642	14,036	394	3%	14,731	1,088	8%
Hotels & Catering	7,133	7,250	117	2%	7,609	476	7%
Transport & Communication	3,220	4,611	1,391	43%	4,839	1,619	50%
Financial Services	2,574	3,568	994	39%	3,745	1,171	45%
Business Services	14,981	24,288	9,307	62%	25,490	10,509	70%
Public Admin & Defence & Education	16,305	13,715	-2,590	-16%	14,393	-1,912	-12%
Health and Social	14,469	16,755	2,286	16%	17,584	3,115	22%
Other Services	4,701	4,685	-16	0%	4,917	215	5%
Total	93,662	98,776	5,114	5%	103,662	10,000	11%

Source: SW Observatory, RTP

- 3.38 To return to our Scenarios 1 and 2 (Table 3.9) in both scenarios the largest employment gain by far is forecast to be business services. Employment change in this sector in both scenarios is similar to the RSS forecast of 10,000 additional jobs. Other notable growing sectors in both scenarios are Health and Social and Transport and Communications
- 3.39 To translate these sector forecasts into B-space jobs we use the same mapping of sectors into land uses, based on the Standard Industrial Classification (SIC 2003), as the 2009

Business Growth and Employment Land Study. For convenience this is reproduced at Appendix 1. Broadly, we assume industrial/warehouse space is occupied by manufacturing, plus certain parts of construction, motor repairs/maintenance and sewage/refuse¹⁴. Warehousing is occupied by a variety of transport and distribution activities which are widely spread across the Standard Industrial Classification. Office sectors are those defined by ODPM in 2004, in a research project about town centres, plus selected parts of public administration and defence.

- 3.40 Neither set of forecasts provides as much detail as would ideally be required to apply these definitions. For example we only count part of the construction industry (SIC 45.3 and 45.4) as a B-space activity, while the forecasts provide the total for the whole of construction. To estimate future employment in 'sub-sectors' which are not identified separately in the forecast, we assume the future share of each sub sector's employment in the larger sector of which it forms part remains constant. If, for example, in the base year SIC 45.3 and 45.4 together account for 40% of all construction jobs, we assume they will continue to account for 40% of all construction jobs throughout the plan period.

Table 3.10 BANES employment change by land use 2006-26

Jobs	2006	2026	Change 06-26	% Change
Scenario 1 (Observatory)				
Industry/warehouse	13,203	11,079	-2,124	-16%
Office jobs	18,352	26,765	8,414	46%
Total B jobs	31,555	37,844	6,290	20%
Non B jobs	62,108	60,932	-1,176	-2%
Total Jobs	93,662	98,776	5,114	5%
Scenario 2 (RTP output-based)				
Industry/warehouse	13,203	11,671	-1,532	-12%
Office jobs	18,352	28,060	9,708	53%
Total B jobs	31,555	39,731	8,177	26%
Non B jobs	62,108	63,931	1,823	3%
Total Jobs	93,662	103,662	10,000	11%

Source SW Observatory, RTP

- 3.41 In the above scenarios, total B-space employment expands by 6,300 jobs (20%) in Scenario 1 and 8,200 jobs (26%) in Scenario 2. Industrial/warehouse jobs fall in both scenarios and office jobs increase, by 8,400-9,700 (46-53%), depending on the scenario. Non-B jobs show a modest change of between -1,200 jobs and 1,800 jobs. Like the sector scenarios on which they are based, these figures of course are only broad indications of what a fully fledged forecast might produce.

¹⁴ Adding these non-manufacturing sectors tends to increase industrial employment and hence the demand for industrial space, because they often show employment growth, while manufacturing employment is in decline.

Employment Space Requirements

3.42 To translate these B-space jobs into floorspace we use the same standard floorspace per worker ratios as in the 2009 report:

- 18 sq m for offices
- 35 sq m for industry and warehousing.

Table 3.11 BANES B floorspace change 2006-26

Sq m	Scenario 1	Scenario 2	RSS Forecasts
Industry/Warehousing	-74,337	-53,603	8,808
Office	151,446	174,747	152,981
Total B space	77,109	121,144	161,789

Source: SW Observatory, RTP

- 3.43 Our two new scenarios show requirements for additional office space of 151,500 sq m and 174,750 sq m respectively. Similar and slightly higher than the requirement set out in our 2009 report - based on the RSS target - which showed a gain of 153,000 sq m.
- 3.44 In industry and warehousing, the new scenarios show floorspace losses of 74,400 sq m and 53,600 sq m respectively. Much different from the RSS forecasts which showed an insignificant gain of 8,100 sq m - in effect no change.

4 CONCLUSIONS

- 4.1 Historical analysis and a review of current national and regional forecasts suggest that RSS target of 21,000 net additional jobs for BANES in 2006-2026 is not achievable. The main reason is that the target of 3.2% annual output growth for in the South West, on which the employment figures are based, seems to be wide of the mark. The 3.2% target was probably over-optimistic at the time when it was produced, and the intervening recession has widened the gap between it and likely reality. Current estimates of the region's likely annual average output growth over the period 2006-2026 are around 1.6-1.9%.
- 4.2 The autumn 2009 economic projections from the South West Observatory suggest that BANES in 2006-26 will gain around 5,000 net new jobs. Our own scenarios, based on scaling down the BANES target in line with current forecasts of national and regional output growth, show around 10,000 net new jobs. Being based on simple pro rata calculations, this figure is only a rough approximation of what a formal modelled forecast would produce. Nevertheless, in our opinion the bookends of 5,000 and 10,000 net new jobs set the boundaries of reasonable expectation for BANES, given current macroeconomic prospects. Within this range, the outcome will partly depend on future population growth, which in turn will partly depend on planning policies and decisions regarding housing land supply.
- 4.3 If BANES Council includes the RSS job growth target in its Core Strategy, it should accept, formally or informally, that fulfilment of the target is likely to be delayed considerably beyond 2026. Conversely, if BANES Council chooses to review its job growth target at this time, we recommend that it should do so jointly with the other authorities in the West of England. This would maintain consistency across the Housing Market Area, which is also likely to be a labour market area and property market area, and therefore the right scale for decisions about numbers of jobs, numbers of dwellings and the balance between the two. If each authority were to make its own forecasts and establish its own targets, at different times and using different approaches from its neighbours, it is very unlikely that these figures would add up to a reasonable future for the West of England as a whole. Now that Regional Spatial Strategies are to be abolished, the case for strategic planning at sub-regional level is strengthened.
- 4.4 Before commissioning any new forecast, the Council and its partners should carefully consider the assumptions they wish to input into that forecast, both as regards macroeconomic prospects and future population and housing provision. This report has set out some relevant information relating to macroeconomic prospects in the South West region and the UK as a whole. However it has not (as per the brief) considered future population and housing provision. The Council and its partners will also need to decide how to deal with the relationship between employment and housing, both in terms of technical forecasting and policy priorities. Technically, an effective forecasting model should determine future employment and future population and housing simultaneously, recognising the mutual interactions between the two. Politically, the Council and its partners may wish to reconsider the approach whereby the region first decides how much

total output growth it wants, and then sets its housing targets to aim for whatever population is necessary to achieve that growth.

- 4.5 In developing any new employment targets, the Council should also pay close attention to the prospects for different activity sectors. The scenarios we have produced do break down employment by sector (and uses these figures to estimate jobs by land use and hence employment land requirements) but these breakdowns are based on the South West Observatory's projections, whose assumptions and methods we have no access to and whose predictions vary widely and inexplicably from one version to the next. no more than broad indications. To provide robust targets, the Council should carefully weigh up the assumptions and methods behind any economic forecasts it commissions, experiment with different sets of assumptions, and consider adjusting the forecasts in the light of local knowledge and policy objectives.

APPENDIX 1

DEFINITION OF B-SPACE SECTORS

Industrial Sectors	SIC (2003)	Activities
Manufacturing	15.11-37.20 (ex publishing, 22.11-22.15)	<ul style="list-style-type: none"> ▪ Includes all manufacturing, including recycling, but excludes publishing)
Some Construction	45.3-45.4	<ul style="list-style-type: none"> ▪ Electricians ▪ Plumbing ▪ Other building installation ▪ Plastering ▪ Joinery installation ▪ Floor and wall covering ▪ Painting and glazing ▪ Other building completion
Motor Vehicle Activities	50.20, 50.40	<ul style="list-style-type: none"> ▪ Maintenance and repair of motor vehicles ▪ Sale, maintenance and repair of motor cycles and related parts and accessories
Sewage and Refuse Disposal	90.00	<ul style="list-style-type: none"> ▪ Sewage and refuse disposal, ▪ Sanitation and similar activities.
Labour Recruitment and Provision of Personnel (part) ¹⁵	74.5	<ul style="list-style-type: none"> ▪ Labour recruitment and provision of personnel
Warehousing Sectors	SIC (2003)	Activities
Wholesale	51.11-51.70	<ul style="list-style-type: none"> ▪ Wholesale on a fee contract basis ▪ Wholesale of goods
Freight Transport by Road	60.24	
Cargo Handling	63.11	
Storage and Warehousing	63.12	
Other Supporting Land Transport Activities	63.21	
Post and Courier Activities	64.11-64.12	
Packaging Activities	74.82	<ul style="list-style-type: none"> ▪ Packaging activities
Labour Recruitment and Provision of Personnel (part)	74.5	
Office Sectors (including R&D)	SIC (2003)	Activities
Some Other Business Activities	74.60, 74.85, 74.86, 74.87 74.1, 74.2, 74.3, 74.4	<ul style="list-style-type: none"> ▪ Investigation and security activities ▪ Secretarial and translation activities ▪ Call centre activities ▪ Other business activities not elsewhere classified ▪ Accounting/bookkeeping activities etc ▪ Architectural/engineering activities etc ▪ Technical testing and analysis ▪ Advertising

¹⁵ Labour Recruitment and Provision of Personnel covers all the workers employed through agencies. These workers operate in a wide range of activities throughout the economy. Therefore, we allocate them to industrial, warehouse, office and non-B sectors in proportion to their shares in Crawley's total employment.

Office Sectors continued

Some Social and Personal Service Activities	91.11, 91.12, 92.11, 92.12, 91.20, 91.32, 91.33, 92.11, 92.12, 92.20, 92.40	<ul style="list-style-type: none">▪ Activities: business/employers orgs▪ Activities of professional orgs▪ Motion picture and video production▪ Motion picture and video distribution▪ Radio and television activities▪ News agency activities
Administration of the State	75.1, 75.3	<ul style="list-style-type: none">▪ Administration of the State and the economic and social policy of the community▪ Compulsory social services activities
Publishing	22.1	
Financial intermediation	65, 66, 67	<ul style="list-style-type: none">▪ Financial intermediation, except insurance and pension funding▪ Insurance and pension funding, except compulsory social security▪ Activities auxiliary to financial intermediation
Real Estate and Business activities	70, 72, 73	<ul style="list-style-type: none">▪ Real estate activities▪ Computer and related activities▪ Research and development
Labour Recruitment and Provision of Personnel (part)	74.5	
