



**TECHNICAL DISCUSSION PAPER: Submission to  
EiP – Topic 3: Economic Forecasts**

South East England Development Agency (SEEDA)

**October 2006**

SEEDA initially commissioned Deloitte in November 2004 to undertake a focused review of the evidence base underpinning the draft South East Plan, explore the relationship between economic growth and spatial planning and identify the economic implications of the three proposed housing options in the Plan. This submission represents a clarification of the forecast data sources used to develop that analysis.

### **The Methodology**

The above work was underpinned by Experian's forecasts for the South East Regional Assembly (the Assembly), as published in 2004. Specifically the Deloitte work was based upon Scenario 3 (short-term migration led population based).

This section explains Experian's forecasting methodology and also relates how forecasts were extended beyond the then forecast horizon of 2016. Experian's methodology is identical for all scenarios carried out for the Assembly, with the difference being alternative demographic/household projections fed into the model.

For a fuller discussion of the modelling methodology, the Economic and Labour Demand Forecasting Technical Note 1 (updated March 2006) is available on the South East Plan website.

#### *Experian Methodology*

The starting point for Experian forecasts is a very wide range of historical economic data that is collected at a highly disaggregated level and covers all the major economic indicators. The majority of this data come from the Office of National Statistics (ONS), formerly the CSO (Central Statistical Office) and OPCS (Office of Population Censuses and Statistics). Data also come from a number of other sources including the Labour Force Survey, the CBI's survey of manufacturing industries, and the European Commission's survey of consumer confidence.

These data describe the historical performance of the UK economy and its constituent regions. Two areas of effort are then required. The first is to ensure that the data are consistent with one another. Data from different sources are invariably of different vintages. Furthermore, official data are frequently revised in the light of new information.

The second effort is the construction of equations which represent the historical pattern of relationships between the many indicators involved. Each equation explains the performance of a particular indicator in terms of a number of other indicators. There is an equation for all the major indicators, at the national and regional level. In principle, everything is related to everything else.

The model is then used to produce an initial forecast. This is inspected by regional and sector experts both internal and external to the company. These experts pass judgement on the forecast in light of their detailed knowledge. Alterations are made for significant pieces of inward investment, or infrastructure development, or changes to European funding, in the form of "add factors". A new forecast is then produced, which is again subject to rigorous inspection. This process continues until those ultimately responsible for the forecast are satisfied with the results.

Whilst the model is demand-led in the short to medium term, provisions are made for supply side issues in the longer term. Over the longer-term (about a decade out), supply-side factors become more important in influencing the performance of economies.

The Experian Business Strategies modeling framework incorporates supply-side factors. These include labour supply, labour force quality, infrastructure, population density and ethnic mix, which help determine potential participation rates (the potential for people to be economically active for a given employment rate), productivity and employment rates. Because supply-side variables change relatively slowly over time, it is easier to assess where an economy is headed over the next decade or so.

*Extending the Forecasts*

In order to extend the analysis from 2016 to 2026 to address the South East Plan horizon it was necessary to consider underlying fundamentals. By simply considering growth trends to 2016 and extrapolating them, there is the obvious danger that underlying fundamentals, most notably demographic structure, can be missed leading to spurious extension of projections. To avoid the associated issues, Experian extended forecasts by considering The Assembly’s population projections between 2016 and 2026 and applying relevant employment rates to working age population to gain a truer picture of longer-term employment growth prospects.

Productivity trends were simply extrapolated – the grounds for basing productivity changes on fundamentals rather than trend are less clear as productivity changes come generally in the form of shocks and are thus harder to predict.

Together productivity and employment projections yield Gross Value Added (GVA) completing the forecast extension procedure. This approach is entirely consistent with HM Treasury’s long term forecasting methodology.

**The Economic Forecasts**

Figure 1 shows how changes to input assumptions, have led to different economic outcomes from the the model.

**Figure 1 – Changes to South East Forecasts over the 2001-2026 period**

	Assembly Scenario 3: STMB 1 <sup>st</sup> Run - Used in Deloitte Analysis as base scenario	Deloitte Scenario 1 (historic productivity and reducing inactivity by 65,000)	Deloitte Scenario 2 (5% per annum additional productivity and reducing inactivity by 265,000)	Assembly Scenario 6: Extrapolation of existing plans*	Assembly Scenario 7: Latest forecasts	Latest Experian RPS: Spring 2006**
GVA Growth	2.99	2.99	2.99	2.90	2.74	2.91
Employment Growth	0.71	0.67	0.60	0.62	0.50	0.64
Productivity Growth	2.27	2.32	2.39	2.27	2.23	2.27

\* Closest existing scenario to 28,900 households embodied in draft South East Plan

\*\* Non-policy neutral forecasts – to 2020 only.

Source: South East England Regional Assembly, Experian, Deloitte Analysis

The Deloitte Scenarios 1 and 2 are based on the Assembly’s Scenario 3 but assume significant policy-led outcomes in terms of raising rate of productivity growth and increasing economic activity rates. Both of the scenarios assume GVA growth of 2.99% but assume alternative productivity and economic activity rates to assess their implications for housing requirements in the region.