

# “Public Procurement – Quantifying Economic Value in the North East”

Final Report to ONE North East

May 2007

**Adam Wilkinson and Associates**

Gable End  
1 Sanderson Road  
Whitley Bay  
Tyne and Wear  
NE26 3PF

07811160822

Email: [adam@adamwilkinson.com](mailto:adam@adamwilkinson.com)



## *Executive Summary*

# “Public Procurement – Quantifying Economic Value in the North East”

[www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement)

May 2007

### **Adam Wilkinson and Associates**

Gable End  
1 Sanderson Road  
Whitley Bay  
Tyne and Wear  
NE26 3PF

07811160822

Email: [adam@adamwilkinson.com](mailto:adam@adamwilkinson.com)



## EXECUTIVE SUMMARY

This report has been commissioned by One NorthEast to support the development of the North East Procurement Agreement. The aim of the report is to produce an improved evidence base to demonstrate the importance of the public sector and in particular procurement to the regional economy of the North East.

This summary considers:

- The objectives of the project,
- The current impacts identified,
- The economic potential identified, and
- Key findings relevant to One NorthEast.

## OBJECTIVES

1. Quantify total public procurement expenditure in the North East and broad inward/outward investment patterns.
2. Analyse current economic impact of this expenditure on participation levels, productivity levels, and regional Gross Value-Added (GVA), and model a baseline trend to 2016.
3. Develop a modelling profile to evaluate the potential economic impact of this expenditure to 2016.
4. Carry out a gap analysis to identify the potential economic contribution of public procurement expenditure to achievement of the overall 2016 Regional Economic Strategy (RES) targets.

## METHODOLOGY

The project methodology reconciled data available from three sources, these were:

1. Durham Business School Input-Output (DBS) model,
2. North East LM3 project, and
3. Intensive desk-based research.

A triangulation approach that enabled cross-checking was adopted to produce a consistent and reliable result in an area that has not previously been so intensively investigated. It is inevitable that certain assumptions still have to be made, wherever this is the case the assumptions have been highlighted and explained with footnotes. A web-based version of the methodology was also produced to allow online scenarios to be produced and downloaded – [www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement)

The public sector was defined as central government, local government and public corporations, along with universities and further education (FE) colleges.

The results have been calculated based on constant productivity, which is predicted to increase at differential rates for each sector of the economy. The impact of this variation and changing patterns of demand is likely to reduce the actual number of jobs created<sup>1</sup>.

---

<sup>1</sup> Labour productivity is projected to grow in the period to 2016 and the number of FTE workers required to produce a given level of output or gross values added will fall. The implication of this is to overstate the FTE workers required to fulfil the future demands that public sector procurement may place on the region. While modelling changes in regional productivity is beyond the scope of this research, the National Institute of Economic and Social Research forecasts that productivity will grow by 2.2% per annum over the long-term

## CURRENT IMPACTS

This report examines how money is spent within the regional economy through a series of transactions within the supply chain.

1. Budget spend by the public sector (initial impact),
2. Impact of that spending with suppliers (direct impact), and respending of those suppliers (other impact).

---

## INITIAL IMPACT OF PROCUREMENT SPEND

The annual budget of the public sector in the North East is currently estimated at £10.4 billion per annum. The public sector spends approximately £3.45 billion per annum on procurement and **spends approximately £1.57 billion, or 45%, of this initial spend within the North East.**

Total GVA<sup>2</sup> in the North East was £34.4 billion in 2004. Public sector expenditure directly accounts for £8.4 billion or 24.4% of the region's total. On a pro rata basis<sup>3</sup>, this indicates that **procurement activity resulting from initial spending accounts for £2.77 billion of GVA.**

The public sector currently directly employs 261,000 people, and this represents 23.7% of the workforce within the North East. On a pro-rata basis, this indicates that **public sector procurement activity accounts for 86,000 Full-Time Equivalent (FTE) jobs.**

---

## DIRECT AND OTHER IMPACT OF PROCUREMENT SPEND

As a result of direct and other spend in supply chains, **a further £1,16 billion GVA and approximately 35,600 FTE jobs in the North East are dependent upon regional public procurement spend.**

---

2

GVA at regional level is calculated using the "income method", which is based on compensation of employees (salaries etc) and the profits earned by businesses. For the public sector this is almost entirely based on compensation of employees (public corporations will earn profits and some public sector agencies/departments may earn rental income, but other than that GVA for the public sector is made of salary costs) To demonstrate the importance of the public sector to the regional economy we need to use a sector breakdown of GVA. Whilst there is no properly defined definition of the public sector based on SICs, for GVA the sector is generally represented by three broad industrial groups: public admin & defence, health and social work and education. Whilst this has to come with a health warning, as there are elements of the latter two groups that fall within to the private sector, this is the best fit available at a regional level. The source for this data is Regional Gross Value Added 2005, ONS (Dec 2006).

<sup>3</sup> The pro rata calculation is necessary as it is not possible to divide data below the Regional Gross Value source data cited. Calculation is as follows Public Sector budget = 10.4b Procurement accounts for 3.45 b or 33%. Total public GVA is 8.4b X 33% = 2.77 b. The same method is used for FTE however in this case more of a caveat is needed and a labour market survey would produce a more accurate figure.



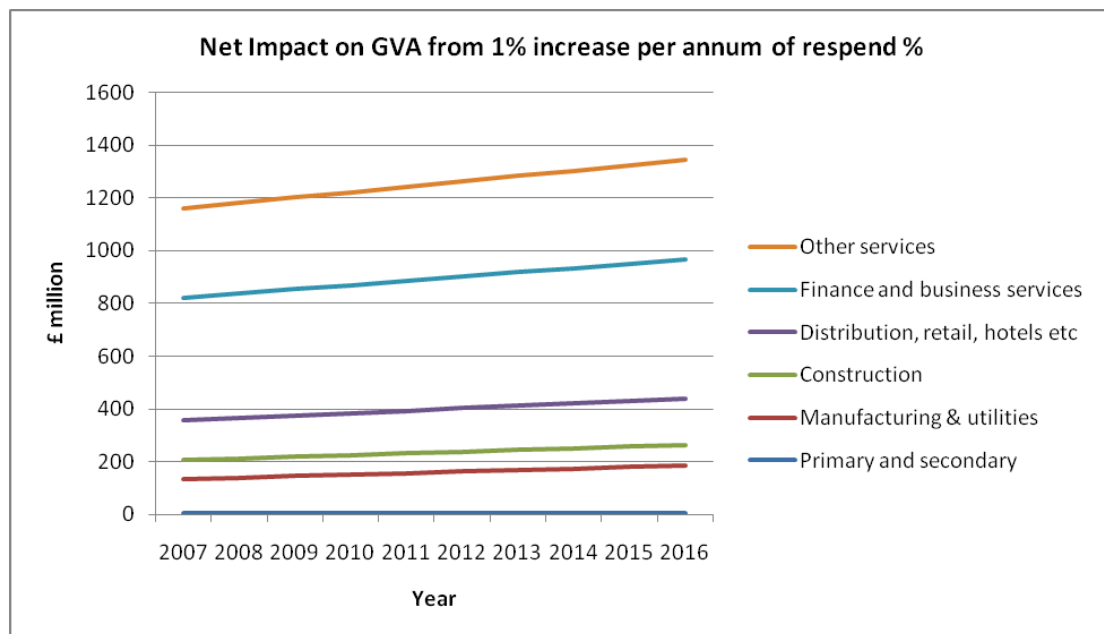
## ECONOMIC POTENTIAL OF SMARTER PROCUREMENT

### INCREASING THE PROPORTION OF REGIONAL PUBLIC PROCUREMENT SPEND BY 1%

There is significant potential to improve the economic impact of this procurement expenditure simply by changing the way it is spent, without expecting any change in the procurement budget itself.

The graphs below show the impact on GVA and FTE that a shift in spending of 1% has on the regional economy; this is a shift of existing spending from non-regional to regional suppliers, maintaining the current procurement budget at £3.4 billion per annum.

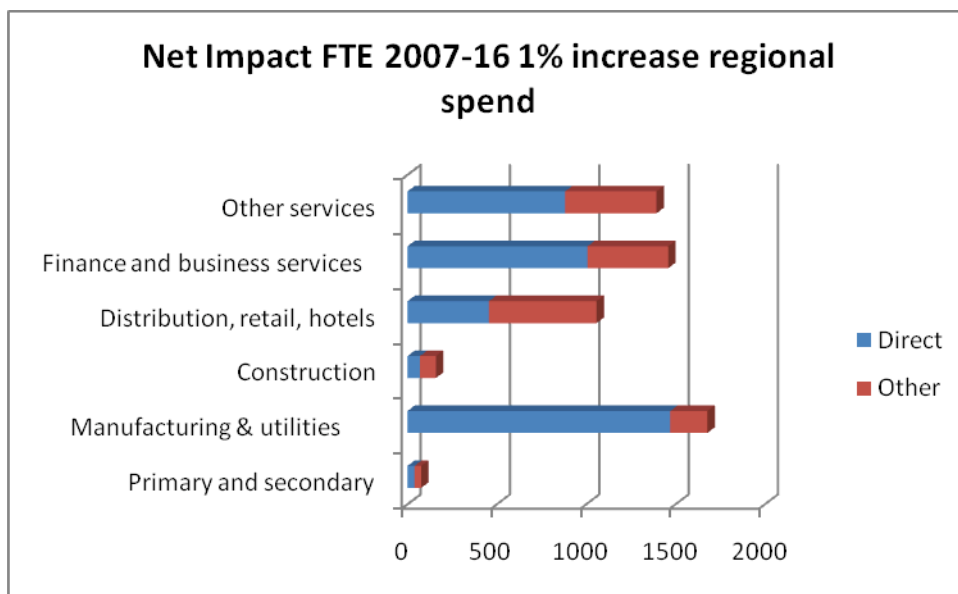
As a result of this change, GVA would increase from £1,160 to £1,346 million per annum by 2016.



The spending shift increases the FTE number or jobs within the region by 5,830, or nearly 10% of the region's target for the period. <sup>4</sup>

---

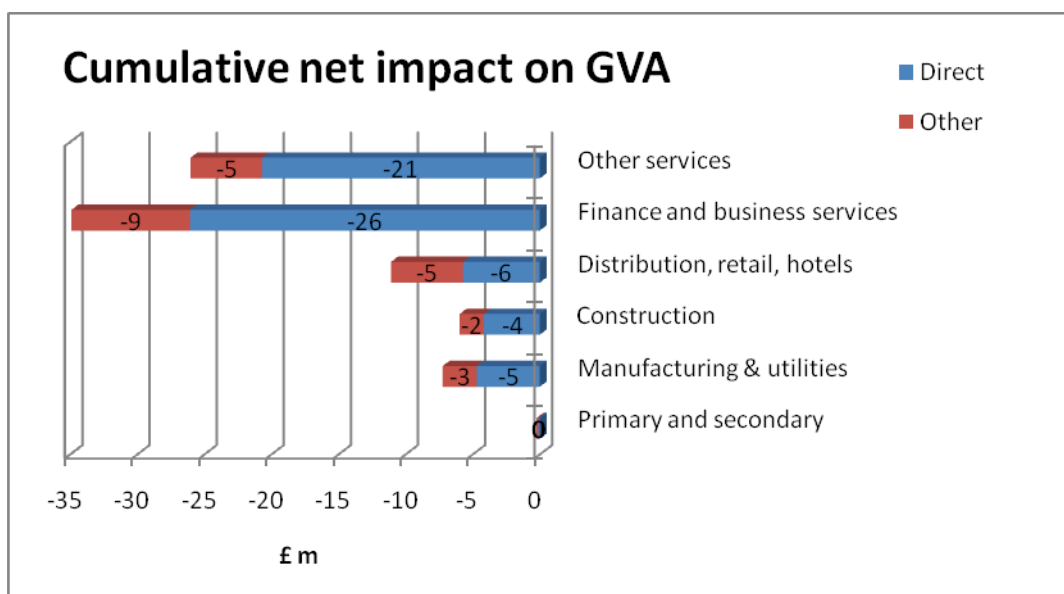
<sup>4</sup> All of the impacts in this report assume a constant labour productivity within the regional economy. This implies that scenarios should be interpreted as the possible effects of changes (in the level of procurement spend etc) that could occur given current production methods/techniques/technology. Over time productivity will rise implying that the number of FTE workers required to produce a given level of output or gross values added will fall. The implication of this is to overstate the FTE workers required to fulfil the future demands that public sector procurement may place on the region. Modelling changes in regional productivity is beyond the scope of this research, however the following should be a reasonable first approximation. The National Institute of Economic and Social research forecasts that while economy productivity will grow by 2.2% per annum over the long-term. If this occurs in the North East then applying a 'static' productivity adjustment will imply that any 2016 FTE estimates will need to be lowered by 18.1%.



## RISKS AND CHALLENGES

### The impact of efficiency savings on the regional economy

Further modelling was also undertaken considering the impact of a 3% decline of procurement budgets for the next three years and nil change until 2016. In this scenario, shown below there is a negative impact on the economy, and this represents a risk to the viability of some smaller regional suppliers. In summary, there would be a cumulative net loss to the regional economy of 1,700 FTE jobs and a cumulative decline in GVA of £56 million.



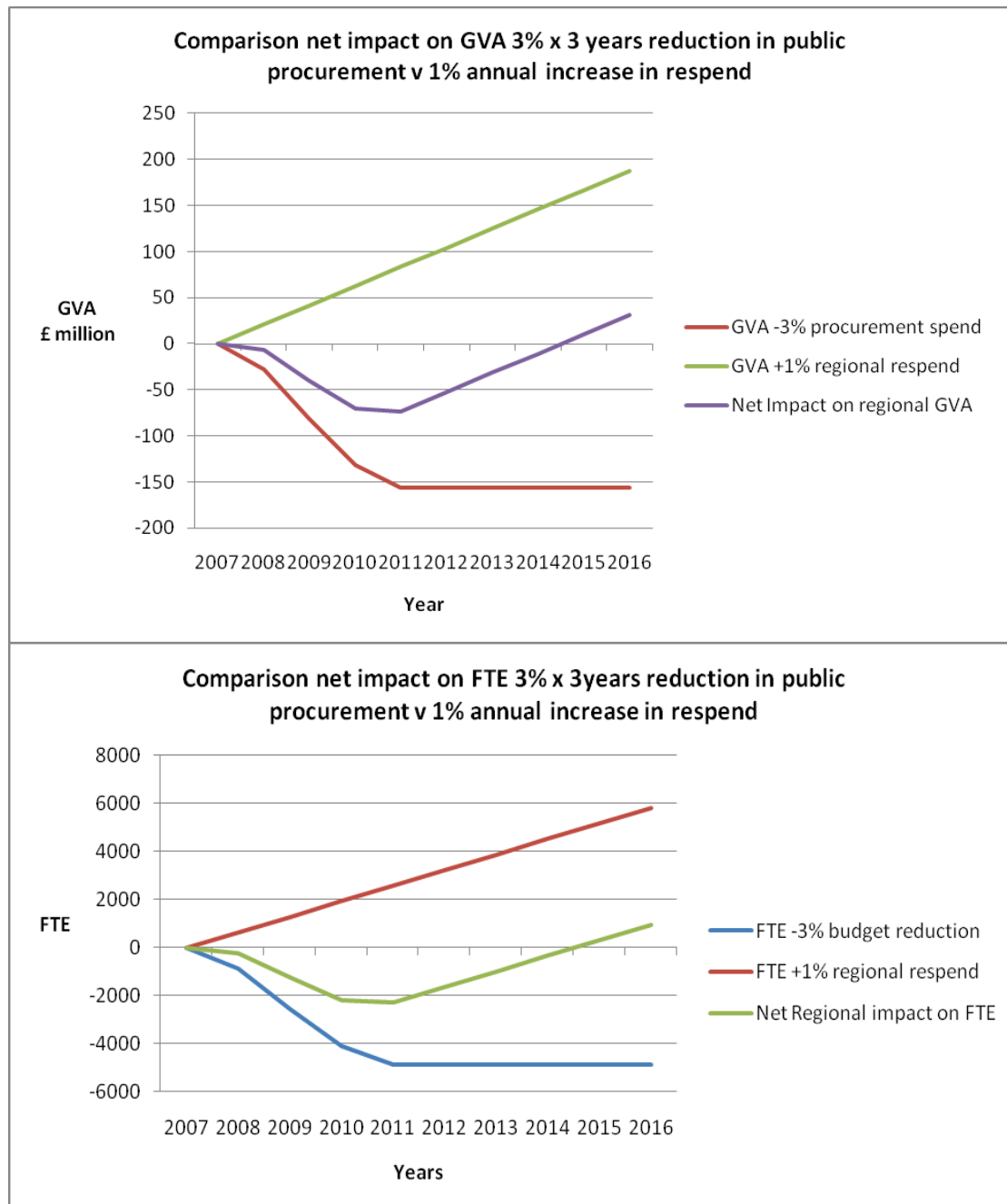
This demonstrates clearly the impact on the economy of a 'do nothing' approach to public procurement in the region between 2007 and 2016.



## Mitigating the impact of efficiency savings on the regional economy.

The graphs below combine these scenarios and indicate the cumulative net impact on the economy for both GVA and employment. In particular, the graphs demonstrate that the impact of changing policy and practice to generate an additional annual increase of 1% in North East procurement more than offsets the impact of cashable efficiency savings reducing the actual budget expenditure.

In summary, there would be a cumulative net increase to the region's economy of around 1,000 jobs and £34 million of GVA over the period to 2016.



This scenario demonstrates a realistic and achievable policy response, ensuring current economic performance can be maintained, alongside efficiency and productivity gains.

## KEY FINDINGS

### THE IMPORTANCE OF PUBLIC SECTOR PROCUREMENT TO THE REGIONAL ECONOMY

This project has broken new ground in a number of areas. It has looked for the first time at the economic role of public sector procurement, using a combination of Input-Output and LM3 research to develop and demonstrate the potential impacts on the regional economy as a whole. The key findings are:

- The public sector spends £3.4 billion per annum on procurement and £1.57 billion or 45% of this amount within the North East.
- This re-spending rate of 45% results in a contribution to the region of a further £1,160 million GVA and 35,600 FTE jobs.
- Data regarding the FTE occupations shows that changes in employment would focus on professional and managerial types.
- A likely baseline scenario demonstrates a net reduction in GVA of £56 million by 2016, with the vast majority of this reduction being born by the construction and service sectors. This includes 'Other Services' and is important as most of this category relates to workers spending incomes. The reduction in FTE was projected to be approximately 1,700 jobs within the region.
- Mitigation of these consequences can be achieved by increasing the propensity to re-spend public budgets regionally. An annual 1% increase in the regional re-spend rate from 2007 to 2016 is projected to offset the impact of cashable efficiencies.
- Evidence from desk-based research has demonstrated that the increasing national control over procurement contracts means that North East businesses will need to be capable of competing nationally in the future; this represents both a threat and an opportunity for the region.
- A 'market intelligence' system could develop a strategically targeted delivery mechanism, which would be able to draw together public, private, and regional agendas around creating an efficient use of resources and growing the regional economy. This would be driven by 'smarter' procurement – forward procurement opportunities, shifting policy to invest in regional economic impact and targeted supply chain development where opportunities exist. This place-making approach would also strengthen the region's businesses to compete for national and European public sector procurement contracts.

#### A 'market intelligence' system

The broad theme arising from this report's analysis is the opportunity for ONE to support the development and delivery of a 'market intelligence' system for public service delivery. Such a mechanism would serve to:

- Build on existing investment by ONE and others in understanding public procurement behaviour and acting on the results,
- Offer a cohesive regional approach to delivering on both public procurement and regional economic development targets, and
- Grow regional businesses based on actual, rather than anticipated, opportunities.
- Enables a rationale into which 'smarter procurement' directs the demand side of the system

This system would sit well within the scope of the Regional Procurement Forum and could become the flagship for that partnership. A fuller explanation of this approach is set out in the recommendations section of the main report.

# “Public Procurement – Quantifying Economic Value in the North East”

## Final Report to ONE North East

[www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement)

May 2007

### Adam Wilkinson and Associates

Gable End  
1 Sanderson Road  
Whitley Bay  
Tyne and Wear  
NE26 3PF

07811160822

Email: [adam@adamwilkinson.com](mailto:adam@adamwilkinson.com)



# CONTENTS

Executive Summary .....	3
Objectives .....	3
Methodology .....	3
Current impacts .....	5
Economic potential of smarter procurement .....	7
Key findings .....	10
Introduction .....	14
Project methodology and Objectives .....	14
Project Objectives .....	14
Defining the public sector .....	15
Research steering group .....	15
Models used .....	15
Current spending figures .....	20
Results Methodology .....	22
Results .....	24
Current Public sector impacts .....	24
Modelling special scenarios – Results .....	28
Interactive model .....	44
Conclusions .....	46
Recommendations .....	51
Demand side .....	51
Supply side .....	51
Performance Management .....	52
Specific actions .....	52
Issues and limitations .....	52
Acknowledgments .....	54

Adam Wilkins  
**Deleted: 4**

Adam Wilkins  
**Deleted: 4**

Adam Wilkins  
**Deleted: 4**

Adam Wilkins  
**Deleted: 6**

Adam Wilkins  
**Deleted: 8**

Adam Wilkins  
**Deleted: 11**

Adam Wilkins  
**Deleted: 16**

Adam Wilkins  
**Deleted: 16**

Adam Wilkins  
**Deleted: 16**

Adam Wilkins  
**Deleted: 17**

Adam Wilkins  
**Deleted: 17**

Adam Wilkins  
**Deleted: 17**

Adam Wilkins  
**Deleted: 23**

Adam Wilkins  
**Deleted: 25**

Adam Wilkins  
**Deleted: 27**

Adam Wilkins  
**Deleted: 27**

Adam Wilkins  
**Deleted: 31**

Adam Wilkins  
**Deleted: 50**

Adam Wilkins  
**Deleted: 51**

Adam Wilkins  
**Deleted: 56**

Adam Wilkins  
**Deleted: 57**

Adam Wilkins  
**Deleted: 57**

Adam Wilkins  
**Deleted: 57**

Adam Wilkins  
**Deleted: 57**

Adam Wilkins  
**Deleted: 58**

Adam Wilkins  
**Deleted: 60**

## INTRODUCTION

This report has been commissioned by One NorthEast to support the development of the North East Procurement Agreement. The aim of the report is to produce an improved evidence base to demonstrate the importance of the public sector, and procurement in particular, to the regional economy of the North East.

The timing is especially appropriate as key policy drivers such as the Regional Economic Strategy (RES) and the North East Centre for Excellence (NECE) respond to a more integrated national approach to procurement. There is now a need to deliver against a more complex agenda where Gershon and other efficiency savings need to be balanced against equally important and sometimes apparently contradictory needs, both nationally and regionally. This balance has to find a way to produce the most effective use of public spending for regenerating communities, creating a more sustainable third sector, and achieving best value.

This growing complexity underlines a need to improve the way in which data is both collected and analysed to produce a meaningful evidence base on which to base strategic intervention and partnership. Examples of such partnership-based initiatives that could benefit from this approach are the NECE regional collaborative contract programme, Business Link, ONE's Growth Project, and the Procurement Agreement which will underpin the Regional Procurement Forum.

## PROJECT METHODOLOGY AND OBJECTIVES

This section considers the methodology used to establish:

- Project Objectives,
- Models used,
- Current spending figures,
- Results methodology, and
- Results interpretation.

## PROJECT OBJECTIVES

- Quantify total public procurement expenditure in the North East and broad inward/outward investment patterns.
- Analyse current economic impact of this expenditure on participation levels, productivity levels, and regional GVA, and model a baseline trend to 2016.
- Develop a modelling profile to evaluate the potential economic impact of this expenditure to 2016.
- Carry out a gap analysis to identify the potential economic contribution of public procurement expenditure to achievement of the overall 2016 RES targets.

## DEFINING THE PUBLIC SECTOR

In order to undertake this research, an accurate definition of the ‘public sector’ was agreed. In summary, the public sector comprises central government, local government and public corporations.

1. Central government includes all administrative departments of government and other central agencies and non-departmental public bodies.
2. Local government includes all government units with a local remit. Local education authorities are part of local government, as are voluntary aided schools, county schools and, from September 1999, grant-maintained schools (which were reclassified from central government). Polytechnics and higher education colleges were transferred from local authority control in April 1989, as were further education (FE) and sixth-form colleges from April 1993. Like universities, these institutions are part of the private sector and classified as non-profit institutions serving households.
3. Public corporations are companies or quasi-corporations (organisations that behave like corporations) controlled by government, such as government-owned companies, trading funds, and NHS trusts.

Whilst by definition universities and FE colleges are private sector organisations, this report has included them in the mapping exercise given their reliance on public funding to operate.

## RESEARCH STEERING GROUP

This piece of research has been overseen by a steering group comprising key regional stakeholders, including: CBI, North East Chamber of Commerce, North East Centre of Excellence and One NorthEast. The Steering Group has been consulted on the range of scenarios used in preparation of this report, and has provided advice in the application of project methodology.

## MODELS USED

The project methodology reconciled data available from three sources and manipulated this data in two economic models. Each of these sources is discussed separately below; however, the reasons for taking three different approaches to establishing base data are as follows:

- There is no existing source of data that identifies the extent of public sector procurement on a regional basis.
- Historically, the public sector itself has not applied any geographical measure to its spending, as this has not been an issue under ‘compulsive competitive tendering’, or ‘best value’ approaches.
- There was no existing measure of the proportion of total public sector procurement that was spent regionally.

In view of the above, a triangulation approach that enabled cross-checking was felt to be the most likely to produce a consistent and reliable result.

The results have been calculated based on constant productivity, which is predicted to increase at differential rates for each sector of the economy. The impact of this and changing patterns of demand is likely to reduce the actual number of jobs created<sup>5</sup>.

Labour productivity is projected to grow in the period to 2016, and the number of FTE workers required to produce a given level of output or GVA is therefore projected to fall. The implication of this is to overstate the FTE workers required to fulfil the future demands that public sector procurement may place on the region. While modelling changes in regional productivity is beyond the scope of this research, the National Institute of Economic and Social Research forecasts that productivity will grow by 2.2% per annum over the long-term.

Productivity improvement will have a differential impact on individual sectors, alongside changing patterns of demand, which will impact on the number of jobs associated with sector employment. This should be considered when interpreting the results of this report.

Throughout the report a consistent terminology is used with the initial spending of budgets as calculated from the desk based research and other data sources called 'Initial Impact' (round 1). The impact of direct spending with suppliers called 'direct' (round 2), and subsequent supply chain impacts (other). This approach was adopted to maintain consistency with the Durham Business School model nomenclature.

---

## NECE/LM3 MODEL

The North East Local Multiplier 3 (LM3) Project, funded by the North East Centre of Excellence and One NorthEast, arose from work originally undertaken Northumberland County Council that used a developed LM3 model to identify the impact of public sector spending on the local community. The model generates an indicative element of the total income to an area using a sales multiplier. This work has been extended to all local authorities in the North East. Data from the LM3 Project was made available for this research project, for which data from 11 local authorities was aggregated to a regional scale.

This methodology uses a direct survey of the supply chain in order to identify the impact of supplier spending. The data contained within this exercise, which is ongoing, was based on the 2004/05 financial year, therefore contributing a valuable source of very recent empirical data with regard to the spending behaviour of a significant part of total public sector expenditure (approximately 13%). This data was used to achieve the following:

- Produce a check against the total procurement spend of the public sector from the other two data sources.

---

<sup>5</sup> Labour productivity is projected to grow in the period to 2016 and the number of FTE workers required to produce a given level of output or gross values added will fall. The implication of this is to overstate the FTE workers required to fulfil the future demands that public sector procurement may place on the region. While modelling changes in regional productivity is beyond the scope of this research, the National Institute of Economic and Social Research forecasts that productivity will grow by 2.2% per annum over the long-term



- Provide a measure of the percentage respond of local authorities in the North East against which to compare the propensity percentages in the DBS model.
- Produce a sales multiplier against which to compare existing model multipliers.

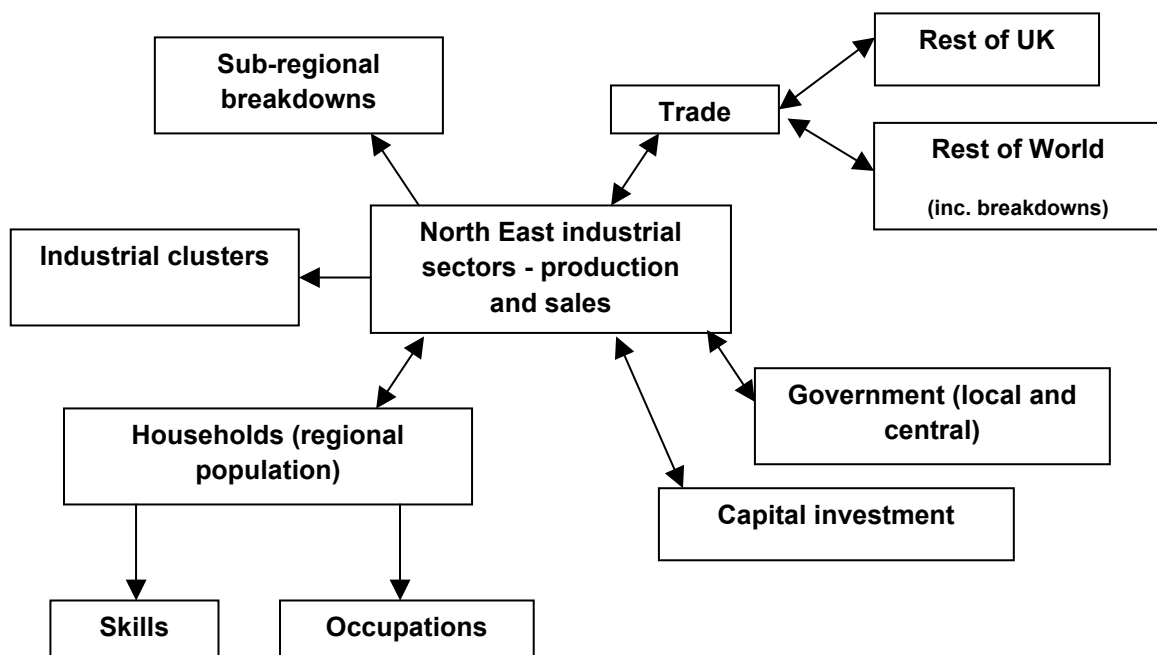
---

## DURHAM BUSINESS SCHOOL INPUT/OUTPUT INPUT-OUTPUT MODEL

### Model Specification

The economic impact of the public sector has been estimated using the North East Regional Economic Accounts and Input-Output model. This model is produced by Durham Business School and funded by One NorthEast. The model contains data on 111 industry/sector groups (using three-digit Standard Industrial Classification codes). Data includes variables such as number of business sites, number of employees, number of self-employed people, output, total purchases, gross value-added, compensation of employment, capital spending, occupation & qualification mappings, exports by European countries and Non-European continent, etc. The accounting framework and model links together the different aspects of the economy and allows for 'interactivity' between data (e.g. exports and employment together enable you to derive exports per employee). The model is the second of its kind to be developed for English regions (the other is the South West, developed by Plymouth University Business School).

The diagram below illustrates the key components of the model and their main relationships. At its core is an input-output matrix (or transactions table), essentially a set of (previously unavailable) regional accounts. These accounts are based upon the monetary value of purchase and supply interactions between each of the main 111 industrial sectors in the region, with employment implications of these transactions identified within the model.



To this core matrix, data relating to consumer spending of households, local and central government, capital investment, the external sectors (rest of UK and rest of the world – disaggregated by country or area), and wages and salaries are incorporated. This produces a model representing *all key economic flows within the region*.

A note of explanation is needed to distinguish between this report's approach to the LM3 and DBS models.

---

## MULTIPLIERS

The concept of the multiplier dates back several centuries, but was popularised and formalised by British chief economist John Maynard Keynes in the 1930s. Multiplier analysis relies on regional and national statistics, but often in a more aggregated form, making it easier to pursue. In many ways, Input-Output analysis arose as a reaction to multiplier analysis's shortcomings.

---

## INPUT-OUTPUT ANALYSIS

Input-output analysis (IO), which is the model used in conjunction with the Durham Business School, came to the fore in the 1950s, and was spearheaded by Harvard economist Wassily Leontief. IO relies entirely on regional and national industrial statistics.

---

## UTILISATION OF BOTH METHODOLOGIES

In their ideal forms, IO is more robust and useful than multiplier analysis because it illustrates precisely where linkages exist or do not exist in the local economy and the jobs and income generated from those linkages. In reality, IO draws on data dating back at least five years and makes many assumptions, so this gulf between the ideal forms of IO and multiplier analysis is much narrower. In the case of LM3, the data is drawn from the latest financial year, which is more recent than most multiplier models and IO models.

The project team has joined these two models in a specific way:

The current, more recent data generated by LM3 has been used to inform a portion of the DBS model. The portion of the DBS model that has been altered based on LM3 is the 'propensity to consume' figure for public bodies. This figure represents how much public bodies in the North East spend on regional suppliers.

Use of the two models enables ONE to make a more informed judgment about both the economic impact of public procurement as well as the key leverage points to improve that impact. LM3 offers an overall figure that ONE can use for ongoing performance management while IO offers explicit industry information that ONE can use to enhance its policy and programme delivery.

In this sense, the LM3 approach has been shown to be effective in acting as a catalyst for change at an operational level; however. The IO approach is better suited (particularly where informed by empirical multiplier data) at a strategic level.

---

## DESK-BASED RESEARCH

The research programme carried out an intensive questionnaire approach in order to confirm overall procurement budget, and regional spend propensity. According to the Office for National Statistics (Public Expenditure Statistical Analysis (PESA) 2006), total identifiable public sector expenditure amounted to £18.2 billion in the North East during 2004/05, including £5.4 billion by local government and £12.8 billion by central government and public corporations. Whilst much of the £18.2 billion will relate to payroll and associated costs (pension, etc) as well as benefits payments, this still leaves substantial spending power within the public sector for the procurement of goods and services – estimated at £10.4 billion.<sup>6</sup>

Whilst considerable work has already been undertaken to better understand procurement practices and patterns of spending amongst local authorities in the North East, through LM3 and NECE; the same cannot be said for the rest of the public sector. The study undertook a preliminary mapping exercise of the public sector outside of local government to determine the following for each organisation/ agency:

- Total annual budget,
- Total annual payroll costs,
- Total annual procurement budget,
- Balance of spend with suppliers of goods and services located within and outside of the North East region, and
- Areas of spend including capital expenditure.

This survey uncovered anecdotal information concerning the current climate of public sector procurement. This is discussed in more detail in the 'Results' section of the report.

---

<sup>6</sup> PESA statistics are broken down by region based on the location of the beneficiary rather than where budgets are controlled. In addition, there are other elements of public expenditure that do not benefit regions per se and are seen as being of national significance. For the purposes of calculating procurement spend expenditure on Social Protection, which is largely payment of benefits was subtracted. This then gives a total expenditure figure of £10.396 bn.

## CURRENT SPENDING FIGURES

The table below shows the aggregation of these various data sources into a single table showing breakdown of current spending figures for financial year 2004/05.

PESA classification <sup>7</sup>	DBS Model Sector	Total Expenditure (£m)	Procurement spending as % of total spending	Estimate of total procurement spending
General Public Services	Public Admin & Defence	239	52	124
Public Order & Safety	Public Admin & Defence	1106	24	265
Enterprise & Economic Development	Public Admin & Defence	538	52	280
Science & Technology	Public Admin & Defence	50	52	26
Employment Policies	Public Admin & Defence	200	37	74
Agriculture, fisheries & forestry	Public Admin & Defence	199	52	103
Transport	Public Admin & Defence	468	52	243
Environmental Protection	Sewage & Sanitary Services	214	33	71
Housing & Community Amenities	Public Admin & Defence	339	52	176
Health	Health Service	3717	33	1227
Recreation, Culture, Religion	Recreational Services	352	35	123
Education & Training	Education	2974	25	744

---

7

1. The PESA classification is produced by HM Treasury and is used as the benchmark across all data sources.
2. The Durham model does not use all of the PESA classification; thus, data has been merged to match the Durham model classification.

This table shows that total public spending in the North East in 2004 was estimated to be £10.4 billion. Of this total, £3.45 billion is estimated to have been spent on procurement. This equates to one-third of total public spending.

There is considerable variation between areas of public spending and some variance is attributable to classification, in particular the inclusion of capital spending in procurement budgets. It is therefore suspected that the actual expenditure on procurement may be significantly higher. More research would be necessary to determine this breakdown more precisely.

The table below then shows the two different data sources applied to the procurement re-spend. The DBS model propensities (multipliers) are embedded within the model and are derived from a methodology that equates the demand for each industry's products at the regional level to be equal to supply for each and every industry. The NECE figure of 58% is a direct empirical result from the surveys sent to suppliers of the local authorities as part of the NECE LM3 Project. In each case, companies were asked what proportion of the contract value from the local authority they re-spent in the North East. All survey forms were checked.

PESA classification	DBS Model Sector Classification	DBS model estimate (% regional respnd)	NECE/LM3	DBS estimate (£m)	Nece/LM3Project
General Public Services	Public Admin & Defence	32	58	40	72
Public Order & Safety	Public Admin & Defence	32	58	85	154
Enterprise & Economic Development	Public Admin & Defence	32	58	90	162
Science & Technology	Public Admin & Defence	32	58	8	15
Employment Policies	Public Admin & Defence	32	58	24	43
Agriculture, fisheries & forestry	Public Admin & Defence	32	58	33	60
Transport	Public Admin & Defence	32	58	78	141
Environmental Protection	Sewage & Sanitary Services	46	58	32	41
Housing & Community Amenities	Public Admin & Defence	32	58	56	102

- 
- Procurement spending as a % of total spending merges the data obtained through the desktop research with the existing proportions contained within the Durham Business model.

Health	Health Service	35	58	429	711
Recreation, Culture, Religion	Recreational Services	37	58	46	71
Education & Training	Education	45	58	335	431
Total		36	58	1256	2005

In addition, the research considered variation in type of function for each dataset. For example, the research considered that local authorities procure proportionately more people-delivered services in the region than other public bodies. This issue was also discussed with the steering group. The conclusion reached was that a prudent baseline re-spend of 45% was the most reasonable figure, although additional empirical research could improve the evidence base for this conclusion.

For modelling purposes, baseline figures of £3.4 billion overall public procurement budget and 45% regional re-spending rate were utilised.

The steering group also asked for a separate run of the model (see results) using only local authority data, for which was used the re-spending figure of 58% generated by the LM3 Project.

## RESULTS METHODOLOGY

Taking the agreed baselines and propensities, results were modelled within the DBS model to determine current impacts on the regional economy as expressed through the measures of:

1. Gross Output,
2. Gross Value-Added (GVA), and
3. Full Time Employment (FTE).

This approach also enabled a calculation of how a change of 1% for every £1.0 million in local spending per £1 million of budget impacted on Gross Output, GVA, and FTE. This innovation enables calculations of any range of results by two variables. The full table containing the 1% variations are shown below.

	Gross Output			GVA			FTE jobs		
	Direct	Other	Total	Direct	Other	Total	Direct	Other	Total
1% more									
Primary and secondary	0.000038	0.000037	0.000075	0.000017	0.000016	0.000032	0.001265	0.001209	0.002474
Manufacturing & utilities	0.005211	0.000825	0.006036	0.001389	0.000252	0.001642	0.047222	0.006661	0.053909
Construction	0.000147	0.000186	0.000334	0.000057	0.000072	0.000129	0.002249	0.002850	0.005099
Distribution, retail, hotels etc	0.000582	0.000737	0.001319	0.000333	0.000431	0.000765	0.014643	0.019338	0.033994
Finance and business services	0.002276	0.000964	0.003239	0.001459	0.000676	0.002136	0.032356	0.014489	0.046832
Other services	0.001598	0.000823	0.002422	0.000870	0.000438	0.001309	0.028346	0.016404	0.044776
Total	0.009852	0.003572	0.013425	0.004126	0.001886	0.006013	0.126081	0.060950	0.187097

The table shows the split between the impacts from the direct expenditure of the public sector and then subsequent impacts from secondary activity within the supply chain. It also shows the impact of this across various economic sectors. It is these tables adjusted for total procurement spending and percentage re-spent that underpin the calculations in the results sections.

Using this data as a baseline, a number of 'What if' scenarios have been calculated to show the impact of changes to both the total value of procurement spending and variations of percentage re-spent in the region.

This approach possesses another valuable characteristic: It makes it possible to make available on the web the full range of base data for 'what if' projections. Almost all of the analysis contained within the report is available interactively online at [www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement).

## RESULTS

This section considers:

- The overall spending figure of the North East public sector,
- The overall regional economic impact of the North East public sector, and
- The impact of bespoke budget and spending scenarios on the regional economy from 2007-2016.

### CURRENT PUBLIC SECTOR IMPACTS

Baseline research identified that the public sector spends £3.4 billion per annum on procurement, equating to £2.27 billion of the region's GVA. For clarity, this figure includes sub-threshold contracts. This figure excludes all payroll spending. All baseline results assume 45% local re-spending, as discussed in the methodology section.

The additional impact of this spending, as calculated by the application of the DBS model, is an additional £1,160 million GVA and approximately 35,600 FTE jobs, as demonstrated below.

### GROSS VALUE ADDED FOR THE NORTH EAST – BASELINE

All of the figures represented in this section show the **additional** impacts of public sector procurement on the regional economy; that is, the extra benefit to the economy which accrues from the activity above the direct figures shown in the Introduction and methodology sections. In this case, public sector procurement directly accounts for an additional £1.16 billion of the region's total GVA.

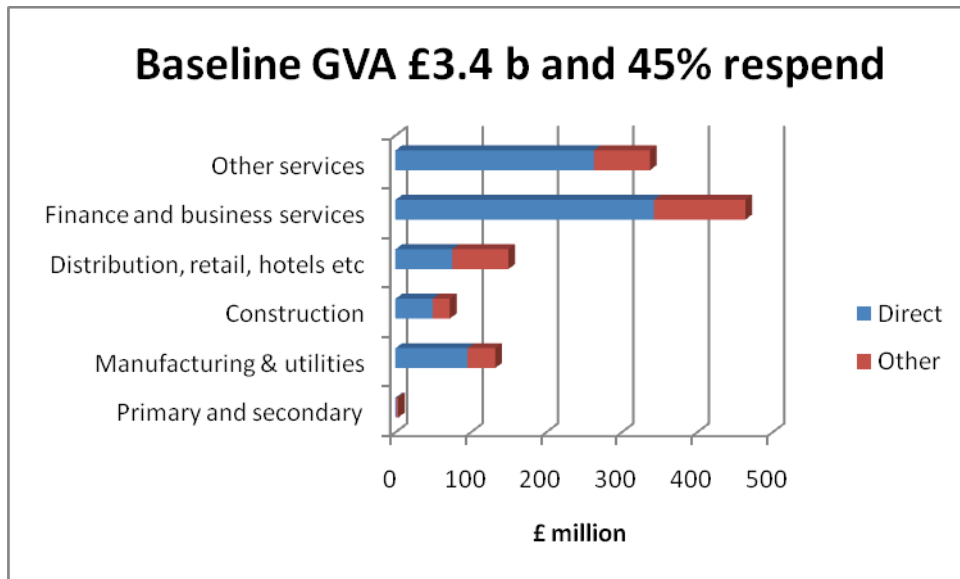
Using the established baseline of £3.4 billion and a regional re-spend propensity of 45%, an additional £827.79 million is generated when public sector organisations spend money with suppliers, and in addition to this a further £332.07 million is generated when these suppliers then spend the money with their suppliers. It should therefore be clear that the more money that is spent within the region (regional re-spend propensity), the more the region benefits.

GVA £m	Direct	Other	Total
Primary and secondary	1.61	2.15	3.75
Manufacturing & utilities	95.63	36.74	132.37
Construction	49.38	22.87	72.24
Distribution, retail, hotels	75.40	74.52	149.92
Finance and business services	342.60	121.46	464.06
Other services <sup>8</sup>	263.18	74.34	337.52
Total	827.79	332.07	1159.86

<sup>8</sup> 'Other Services' is important as most of this category relates to the income spending of workers.

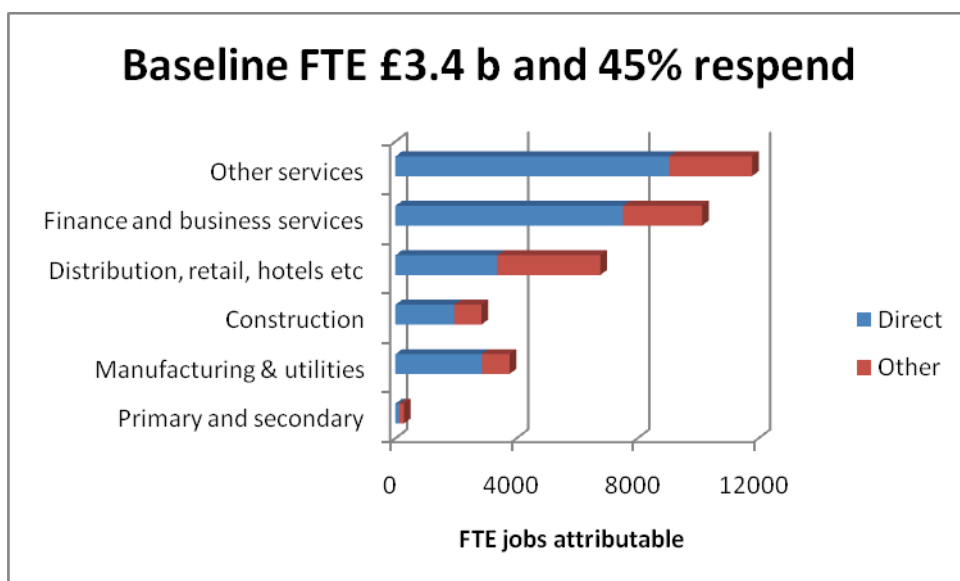


The data shown then divides this additional GVA between various elements of the regional economy, identifying that financial and business services derive the greatest GVA impact from public sector procurement spending, and represent a potential focus for investment in supply chain development.



#### FULL TIME EMPLOYMENT FOR THE NORTH EAST – BASELINE

FTE Created	Direct	Other	Total
Primary and secondary	123	162	286
Manufacturing & utilities	2854	917	3772
Construction	1945	901	2847
Distribution, retail, hotels	3360	3410	6771
Finance and business services	7522	2613	10135
Other services	9050	2736	11787
<b>Total</b>	<b>24857</b>	<b>10741</b>	<b>35601</b>



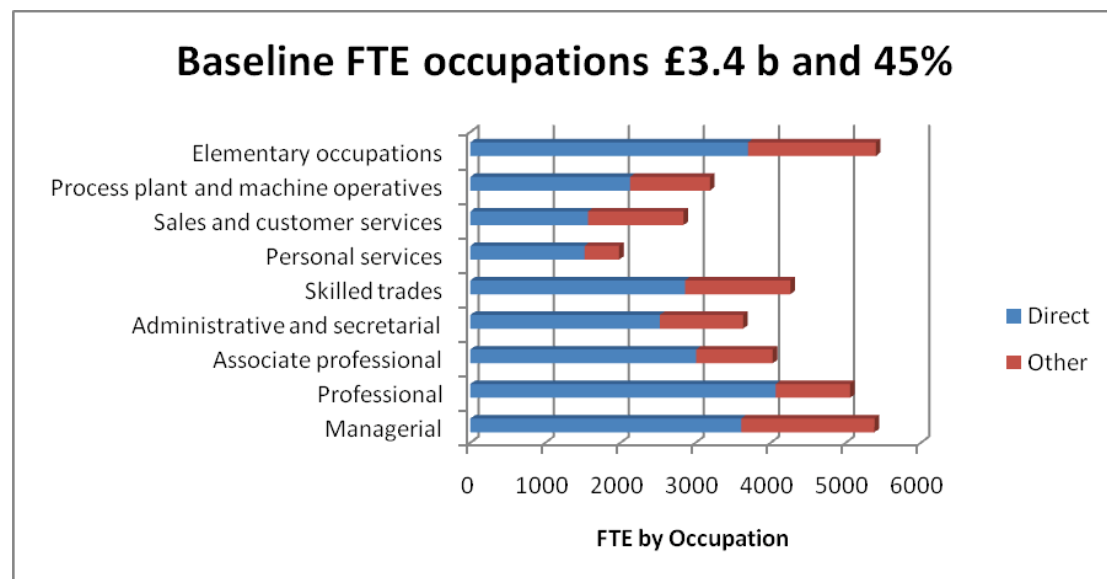
The baseline and other data has also been analysed by the DBS model to demonstrate the impact of respond on the employment market.

In this case, the data demonstrates that the first round of respond with suppliers generates an additional 24,968 jobs, with a further 10,621 being generated by supplier re-spend. The total additional employment generated above the estimated 86,000 from procurement budgets is therefore 35,589.

Employment in the service industry benefits most because of the higher proportion of personnel related costs than in other sectors. This provides a potential pointer for investment to generate greater employment opportunities.

#### FULL TIME EMPLOYMENT BY OCCUPATION FOR THE NORTH EAST – BASELINE

FTE Occupations	Direct	Other	Total
Managerial	3606	1606	5212
Professional	4065	991	5056
Associate professional	3006	1020	4026
Administrative and secretarial	2523	1108	3631
Skilled trades	2858	1402	4260
Personal services	1520	460	1980
Sales and customer services	1567	1270	2837
Process plant and machine operatives	2127	1062	3189
Elementary occupations	3696	1702	5398
<b>Total</b>	<b>24968</b>	<b>10621</b>	<b>35589</b>



Finally, a further analysis indicates what type of employment is generated by existing spending in public procurement. This analysis is particularly relevant to strategic policy-making. It is significant that taken together Managerial and Professional occupations outweigh elementary occupations by a ratio of nearly 2:1.

This shows clearly the impact of knowledge-based economy labour market movements and, in particular, could challenge the capacity of the employment pool to respond to increased regional procurement. These issues will become more apparent when the various 'what if' scenarios are considered below.

## MODELLING SPECIAL SCENARIOS – RESULTS

A number of scenarios have been modelled. The two variables considered in each are:

1. Public sector procurement budget (£)
2. Regional re-spending propensity (%).

The scenarios are:

1. Focus on the impact of likely efficiency savings on the supply chain
  - Budget: 3% reductions per annum for three years and then nil change.
  - Regional spending propensity: Rate held at 45%.
2. Focus on increasing regional re-spending – Reasonable ambition
  - Budget: Held at £3.4 billion.
  - Regional propensity: 1% increase in re-spending propensity per annum for nine years. Procurement spending held at £3.4 billion
3. Combination of scenarios 1 and 2 - Demonstrates mitigation against efficiency savings
  - Budget: 3% reductions per annum for three years and then nil change.
  - Regional propensity: Rate increases by 1 percent each year.
4. Optimistic – Growth both in budget and respond
  - Budget: 2% increase per annum.
  - Regional propensity: Annual 2% re-spend propensity increase per annum.
5. Aggregated Local Authority data - To show the impact of local government procurement on the regional economy. A special report using the higher re-spend as determined by the actual data arising from the NECE LM3 project.
  - Budget: Held at £3.4 billion.
  - Regional spending: Higher rate of 58% as determined by the NECE LM3 project.

All projections within this report are presented as the net impact of change from 2007- 2016 as compared against the baseline projection of £3.4 billion procurement spending at 45% regional re-spend (with the exception of the Local Authority report which uses 58%). The impacts on GVA, FTE and FTE occupations in each of these scenarios are shown below. The impacts of the key scenarios are then compared directly with the impact on RDA targets. All of these results can be reviewed interactively on the web site part of this report, [www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement). This web site

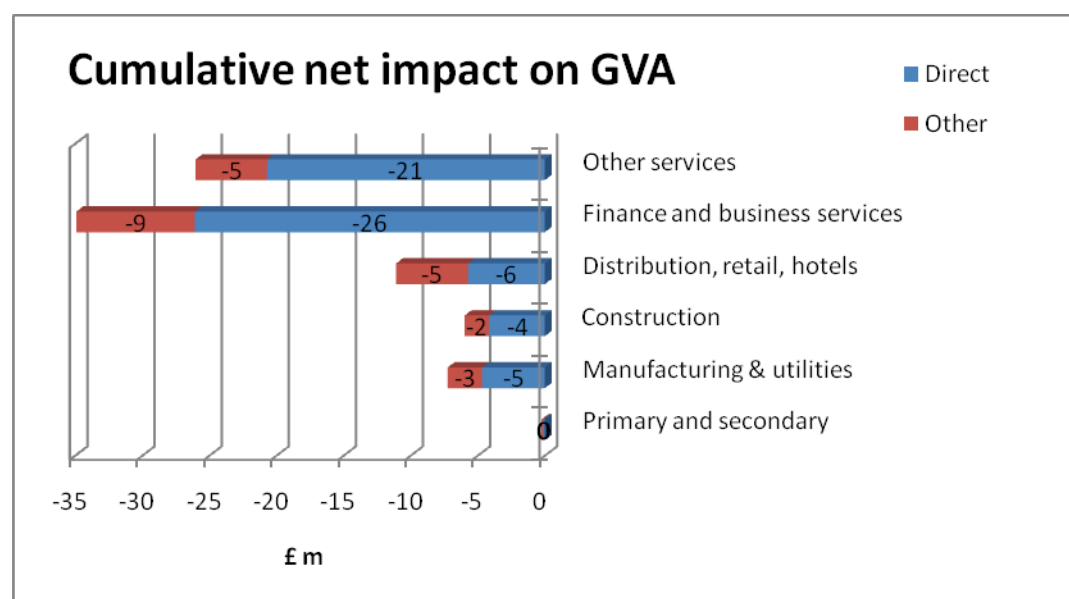
also enables the user to create his/her own projections and print and download them as Excel spreadsheets.

**PROCUREMENT BUDGET 3% YEAR-ON-YEAR REDUCTION TO 2010. RE-SPEND PROPENSITY 45% HELD.**

This scenario was considered a likely trend in public procurement budgeting in the region and was modelled by extending the baseline position to 2007-2016. This is compared against the model with a 3% year-on-year budget reduction to 2010. The results have a negative impact on the regional economy and pose a risk to the viability of some smaller regional suppliers. The cumulative impact from 2007-2016 is shown below by sector.

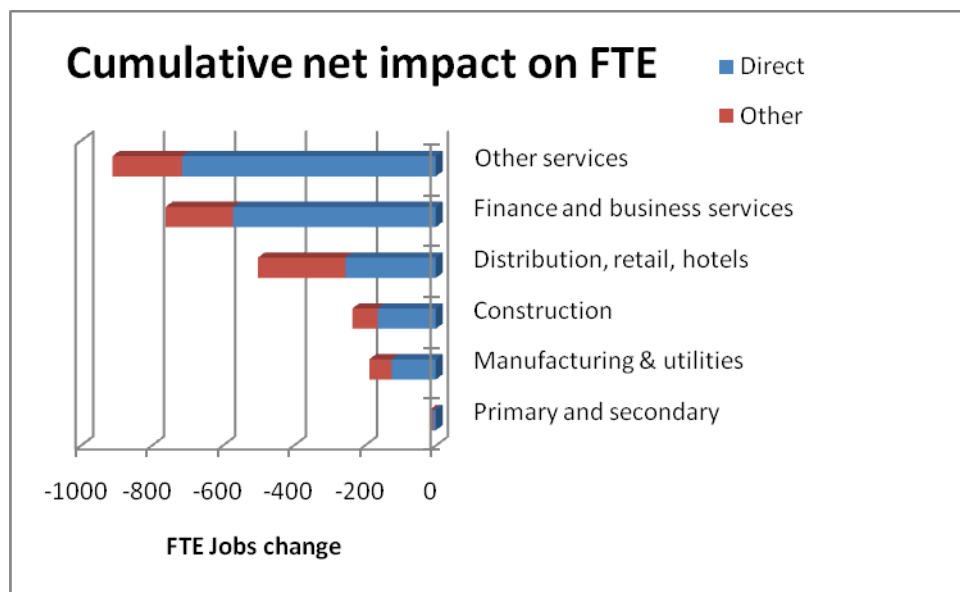
**Cumulative impact of 3% budget reduction 2007-2010 on GVA**

	GVA £m	Direct	Other	Total
Primary and secondary		0	0	0
Manufacturing & utilities		-3	-2	-5
Construction		-3	-1	-4
Distribution, retail, hotels		-4	-4	-7
Finance and business services		-17	-6	-23
Other services		-14	-4	-17
<b>Total</b>		<b>-40</b>	<b>-16</b>	<b>-56</b>



### Cumulative impact of 3% budget reduction 2007-2010 on FTE

	Direct	Other	Total
Primary and secondary	-5	-7	-12
Manufacturing & utilities	-82	-41	-123
Construction	-108	-47	-154
Distribution, retail, hotels	-167	-162	-329
Finance and business services	-375	-125	-500
Other services	-470	-129	-598
	-	-	-
<b>Total</b>	1206.8	-510.3	-1717.1



This scenario demonstrates the impact on the regional economy and RES targets from focussing on efficiencies without complementary mitigating actions. Current expectations are that to deliver Gershon efficiency gains, the public sector procurement budget will be reduced by 3% per annum for the next three years. The data shown calculates the impact that such a scenario would have on the regional economy.

In particular, it is striking that net GVA would decline by £56 million if no other action were to take place. In effect, a third of the economy would be making a negative contribution to the total over the next 10 years. This impact is significant when the achievement of RES objectives requires significant growth if the overall target of £45.5 billion GVA is to be achieved.

This change is almost entirely outside the control of either the public sector organisations or the RDA and constitutes a significant risk which is likely to occur unless strategic mitigating action is taken.

If this scenario is compared to the baseline position it is clear that the primary area of impact is concentrated on the services areas. This is a consistent effect throughout the report when budget spend is considered and provides a clear indication that this is an area in which the impacts of change (both positive and negative) are concentrated. Consequently this finding would also suggest that it is service related procurement opportunities which should be the focus of any mitigating approach when budget spend is the main variable, however later scenarios show a more complex picture.



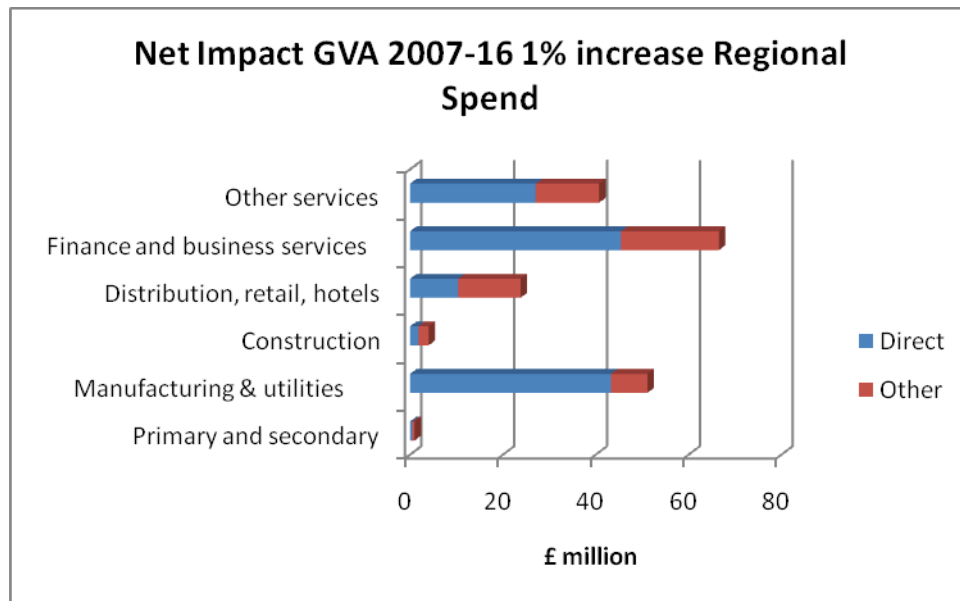


**ANNUAL 1% INCREASE IN RE-SPEND PROPENSITY. PROCUREMENT BUDGET HELD AT £3.4 BN.**

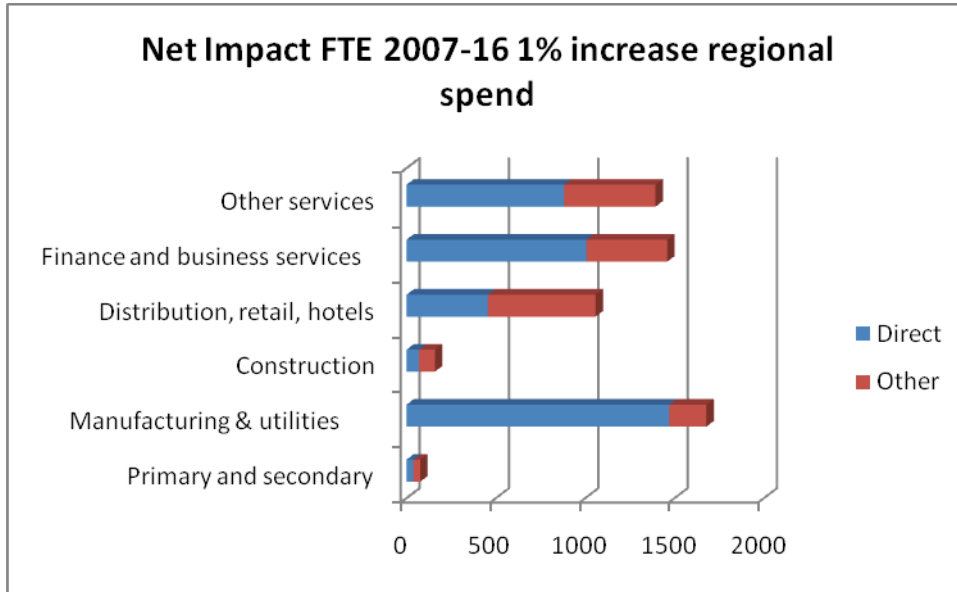
This scenario is expressed as a ‘reasonable’ ambition for the region to achieve by application of better market intelligence and strategic support to build capacity and awareness from the region’s business base.

GVA	Direct	Other	Total
Primary and secondary	0.52	0.49	1.01
Manufacturing & utilities	43.28	7.86	51.13
Construction	1.78	2.25	4.03
Distribution, retail, hotels	10.39	13.43	23.82
Finance and business services	45.46	21.07	66.53
Other services	27.11	13.66	40.76
<b>Total</b>	<b>128.53</b>	<b>58.76</b>	<b>187.29</b>

In contrast with the previous scenario, this scenario calculates the impact of the other variable – the re-spend propensity. This factor is within greater control of the region and smarter procurement and partnerships could make a significant difference to regional re-spend.



FTE	Direct	Other	Total
Primary and secondary	39.40	37.66	77.47
Manufacturing & utilities	1470.91	207.48	1679.20
Construction	70.06	88.76	158.82
Distribution, retail, hotels	456.12	602.35	1058.88
Finance and business services	1007.87	451.32	1458.78
Other services	882.94	510.96	1394.72
<b>Total</b>	<b>3927.30</b>	<b>1898.54</b>	<b>5827.89</b>



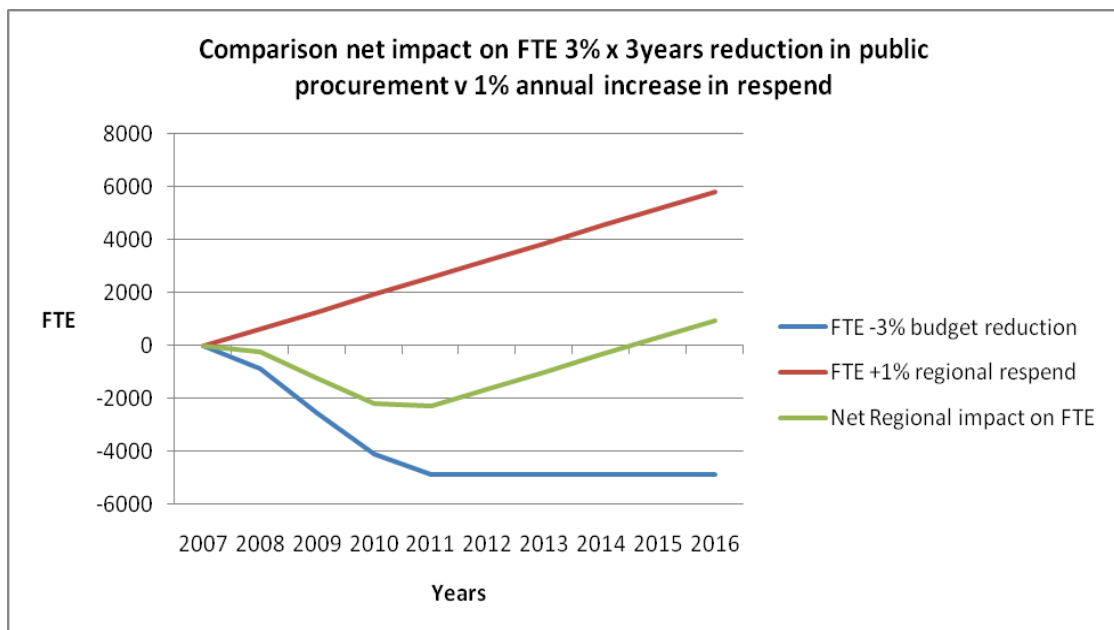
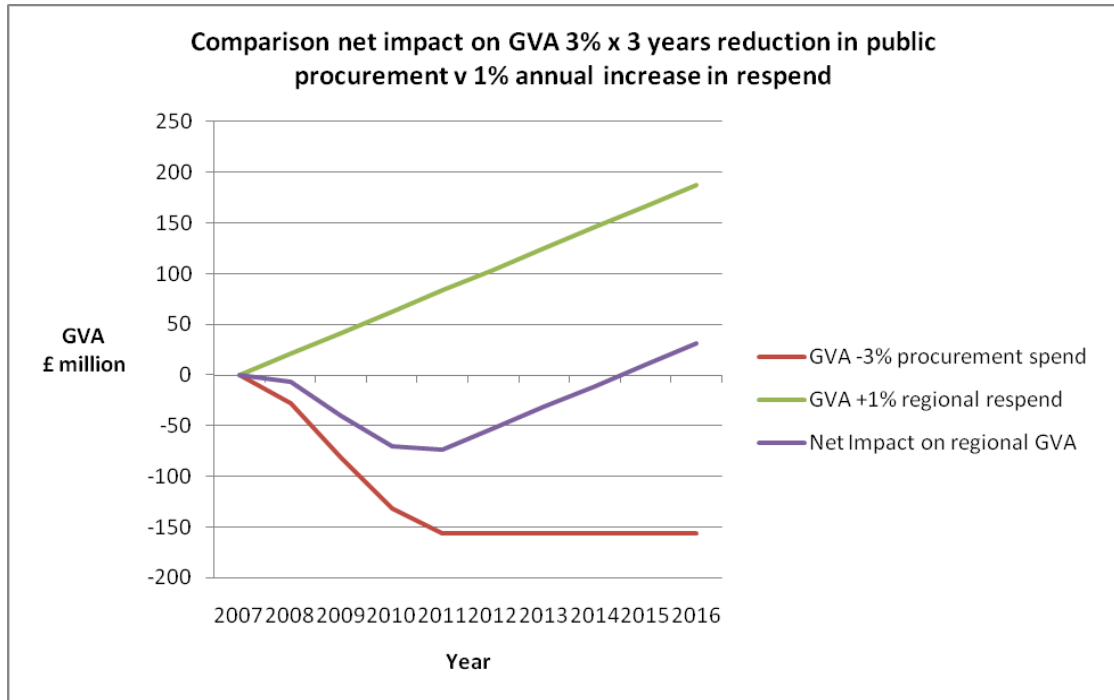
This scenario demonstrates how it is unnecessary to spend more money in terms of actual total budget to effect change, and that by procuring ‘smarter’ the public sector can make a significant contribution to the growth in the economy of the North East. This scenario demonstrates that a ‘market intelligence’ system for strategic intervention could deliver significant benefits to the economy. Specifically, the region’s public funders may consider focusing supply chain development in sectors that are expected to benefit from increased or smarter procurement spend and to maximise investment in those companies with market growth prospects.

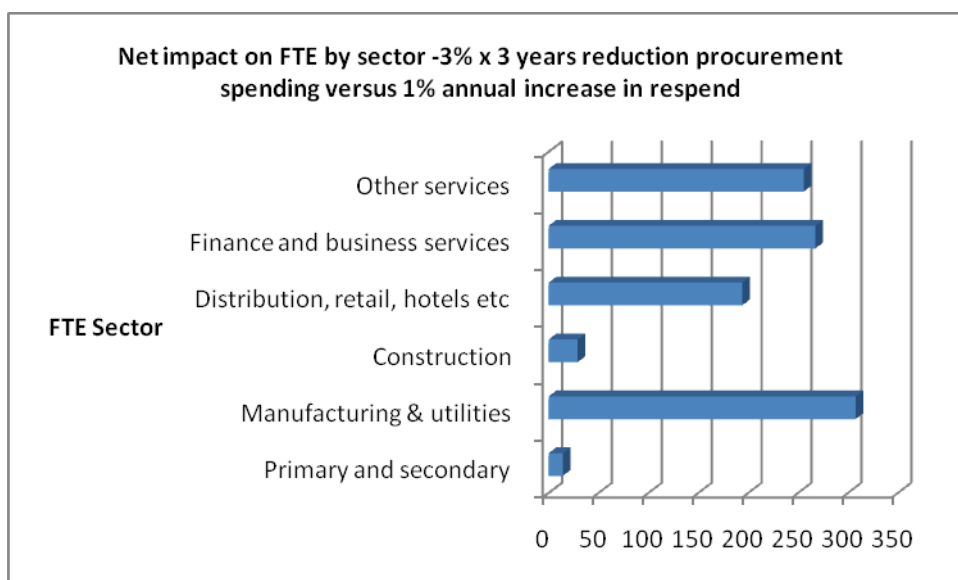
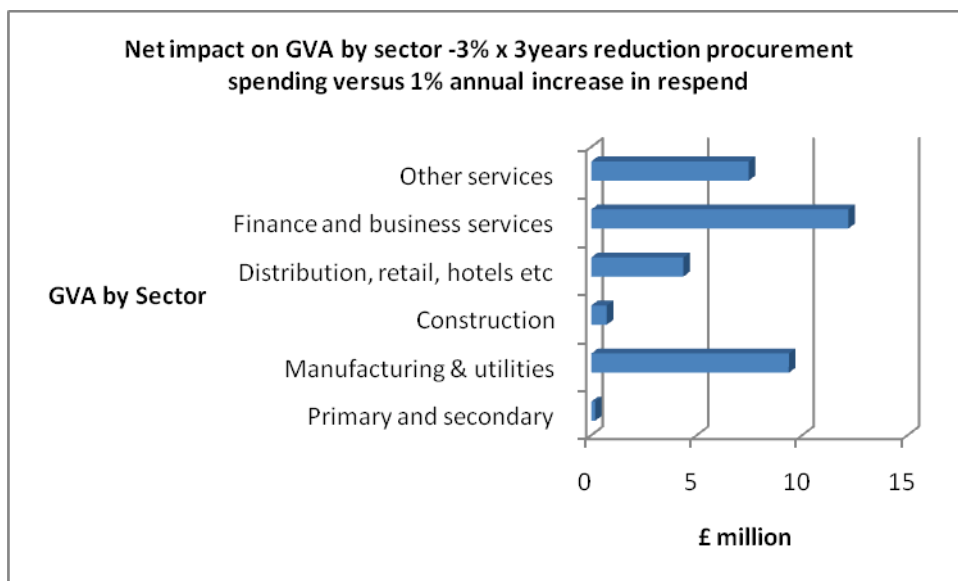
It is noticeable how FTE levels in the manufacturing and utilities category benefit in particular from such an approach, with other significant impacts on FTE levels in financial and business services, and other services. By contrast, the GVA impact of this scenario is most obvious in finance and business services, demonstrating a potential continuing need for a balanced approach to investment to meet both productivity and participation goals.

This ‘market intelligence’ could be developed in detail to guide strategic intervention and provide market opportunity for the region’s businesses. The findings within this scenario do emphasise a majority of impact being seen in the manufacturing and utility sectors in this case outweighing the more common impact on the services sectors. It would suggest that a simple concentration on services may not produce the most response where increasing spend propensity is the primary strategy.

**ANNUAL 3% REDUCTIONS IN PROCUREMENT BUDGET FOR THREE YEARS AND THEN HELD. RE-SPENDING PROPENSITY INCREASING BY 1% EACH YEAR.**

The graphs below combine scenarios 1 and 2 and indicate the cumulative net impact on the economy for both GVA and employment. In particular, they demonstrate the impact of mitigating actions, offsetting the impact of budget reductions with policy and practice that increases regional re-spending by 1% each year.





This scenario is of particular interest as it is likely to represent the most realistic forward strategic target for procurement in the public sector. It is realistic in terms of the real likelihood of budgetary constraints; on the other hand, it is equally realistic in terms of annual 1% improvement in local re-spend, which the public sector could achieve by adopting a ‘smart procurement’ approach. This in effect describes the demand led side of a market intelligence system.

The net impact of combining these two scenarios is that GVA would increase in the region by £34 million over the period while FTE jobs would increase by just over 1,000. In this sense, the public sector would be ‘holding its own’ while the other sectors of the economy grew at a faster rate to deliver the RES targets. This scenario shows clearly how increasing re-spend by a relatively small amount more than offsets the impact of budgetary constraints. In effect, it is not just how much money there is to spend, it is how that money is spent that is important to the economy.

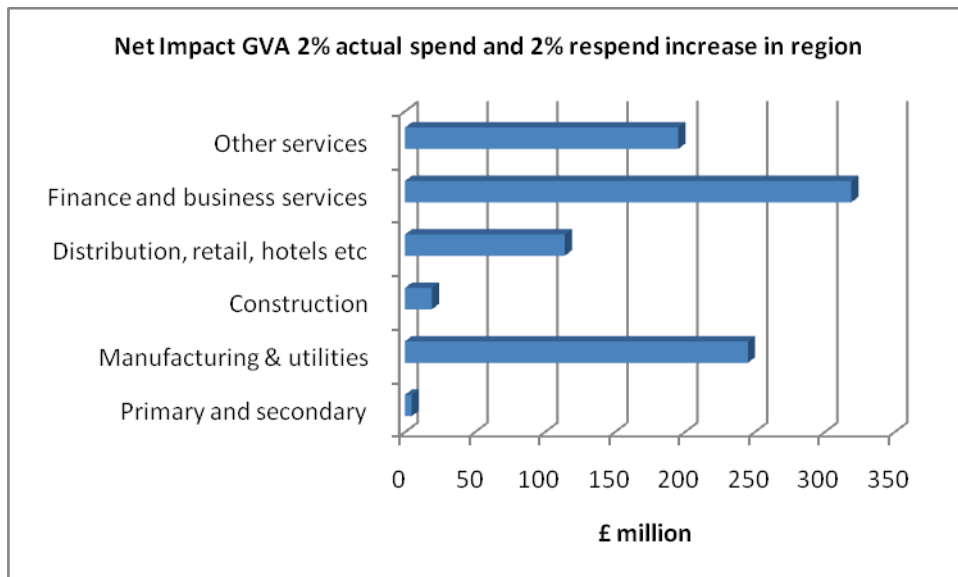
It would be useful as a further piece of work to identify precisely which procurement opportunities would need to move into regional delivery to achieve this re-spend increase. This piece of work could be coupled with other work to identify how additional benefit could be derived for the region by competing successfully for the same type of public procurement contracts elsewhere in the UK and European markets.

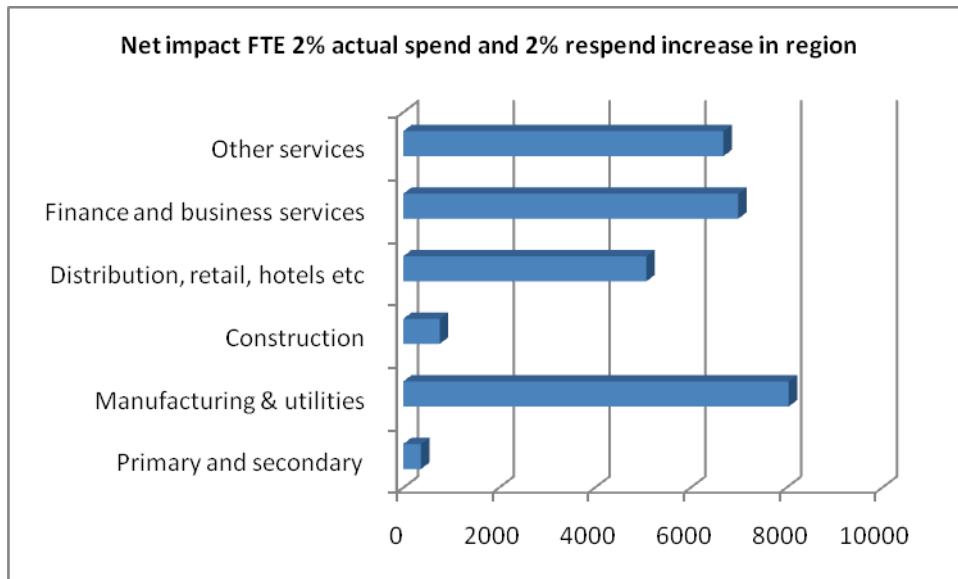
The net impact reinforces the importance of the service sectors but does also show again that manufacturing and utility sectors are of increased importance when re-spend propensity is considered.

---

**AN OPTIMISTIC SCENARIO SHOWING 2% BUDGET INCREASE AND ANNUAL 2 % RE-SPEND PROPENSITY INCREASE**

This scenario was chosen to balance the straight 3% budget reduction and demonstrates how increased public sector spending does have a significant impact on the economy. If the region was able to couple this budget increase with an ambitious programme of building local capacity to deliver procurement contracts, the graphs below show how quite spectacular growth could result.





The results, based on increased overall spend deployed in the same proportions as current spending levels, and increasing regional respend, indicate that, again, it is growth not in the underpinning sectors such as construction which results from such an approach but more in finance, and in other services. Should government policy change, this scenario would become a more viable option. The actions needed to maximise such an outcome remain the same: concentrating on informed supply chain development in areas of identified opportunity both within and without the region will maximise the regional benefit arising from public procurement.

Other scenarios such as these, as well as more complex variations, can be constructed from the online report function at [www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement). All reports may be saved and downloaded as Excel spreadsheets.

## LOCAL AUTHORITY DATA TO SHOW THE IMPACT OF THE LOCAL GOVERNMENT PROCUREMENT ON THE REGIONAL ECONOMY

This special report was included at the specific request of the Steering Group. It differs from the other scenarios in two significant ways. First, it looks only at one part of the public sector, local authorities. Second, it applies a different re-spend propensity from elsewhere in the report. Under the umbrella of NECE, local authorities in the North East have taken the lead nationally in looking in detail at where public money has been spent and, in particular, what the potential impact of this spending might be on local economies.

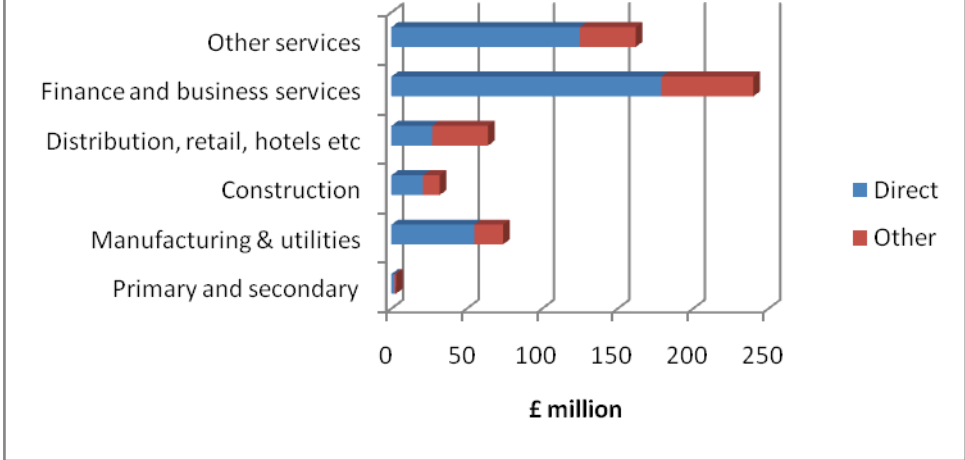
This work is ongoing through the NECE LM3 project, and it is the aggregated data from this project that has been used to inform this scenario. (This could be replicated for the whole of the public sector using the online reporting tool included as part of this report.)

In this case, the re-spend percentage has been increased to 58%, which has been derived from the direct survey data undertaken with suppliers as part of the project work. This is fresh empirical data and should be more accurate than the aggregated IO data used elsewhere in this report; although, care should be taken as this work is in the early stages.

### GROSS VALUE ADDED (£ m) FOR NORTH EAST LOCAL AUTHORITY SPENDING

LA @ 58%	Direct	Other	Total
Primary and secondary	2	1	3
Manufacturing & utilities	55	19	74
Construction	21	11	32
Distribution, retail, hotels	27	37	63
Finance and business	179	61	239
Other services	125	37	162
Total	408	165	574

### (GVA) LA Data 58% respond



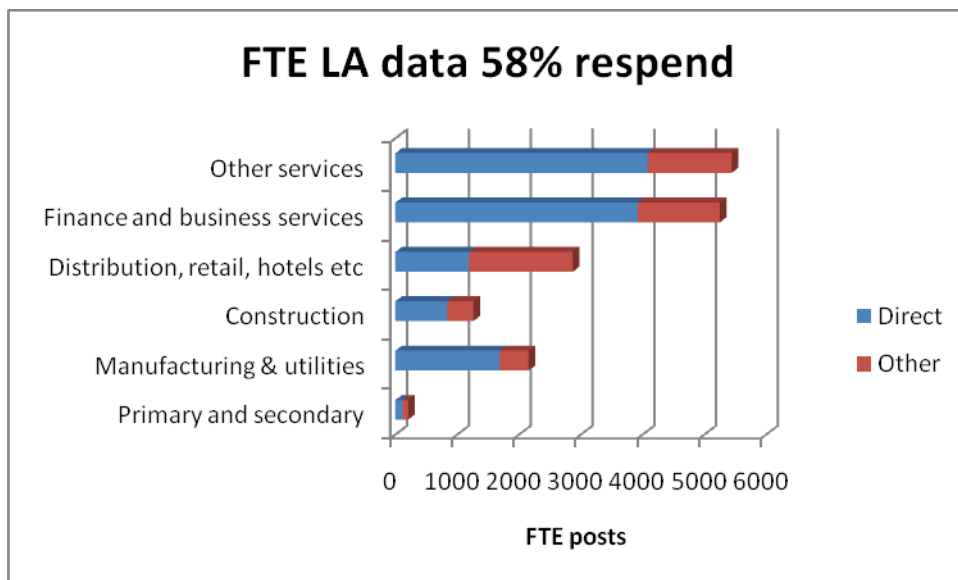
Of particular note is the recurring element of increased return in 'advanced' knowledge-based parts of the regional economy, particularly finance and business services , including such areas as IT.

This scenario suggests how smarter procurement across services coupled with capacity building measures could help to support a more vibrant sector that could then also compete more effectively for private sector business.



FULL TIME EMPLOYMENT GENERATED FOR NORTH EAST LOCAL AUTHORITY EXPENDITURE– BASELINE

Local Authority@ 58%	Direct	Other	Total
Primary and secondary	119	84	203
Manufacturing & utilities	1690	467	2158
Construction	839	423	1262
Distribution, retail, hotels etc	1189	1684	2873
Finance and business services	3926	1326	5252
Other services	4083	1359	5442
Total	11847	5343	17190



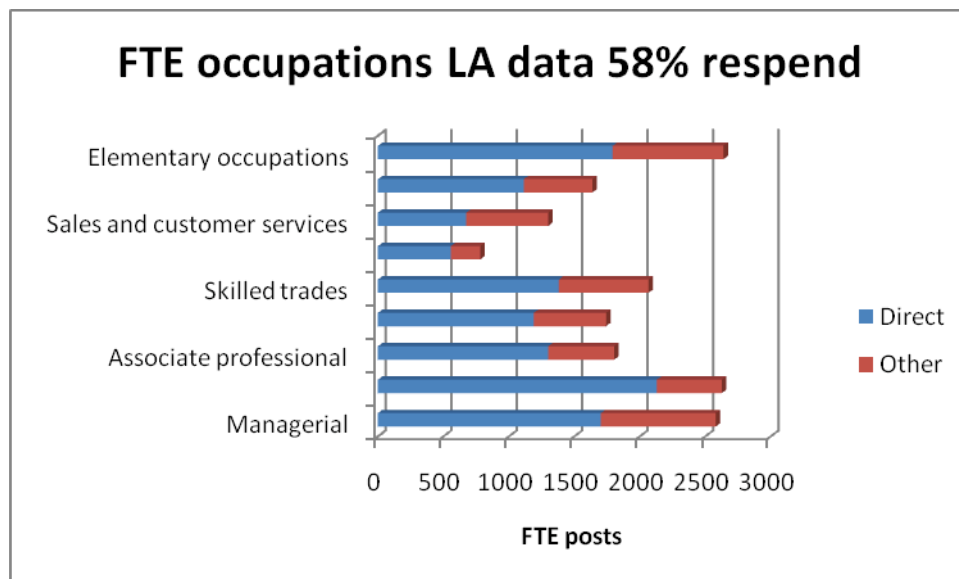
The higher level of re-spend shows how the impact on employment is particularly significant. An additional 3000 FTE's are supported, using the 58% respend propensity, than would occur from public sector procurement as a whole, using the 45% baseline. While caveats should be applied to the data, the pattern is clear.

Once more, this scenario reinforces the need to take a selective approach to procurement, based on a carefully constructed evidence base, and policy decisions that value investment in the place-making and the regional economy. There is a danger that efficiency drivers will focus only on short-term cost saving aggregation approaches and lose the potentially greater value to the region of smarter procurement delivering more sustainable and enterprising communities.

However it may be significant that if manufacturing and utilities play a smaller role within this particular sector, this may indicate that concentrating on service and service delivery is particularly appropriate as a strategy from within the Local Authority sector as compared with the entire public sector.

FULL TIME EMPLOYMENT – BY OCCUPATION FOR THE NORTH EAST LOCAL AUTHORITY  
EXPENDITURE– BASELINE

58% respnd	Direct	Other	total
Managerial	1703	879	2582
Professional	2131	497	2628
Associate professional	1300	506	1806
Administrative and secretarial	1191	552	1743
Skilled trades	1383	685	2068
Personal services	557	225	782
Sales and customer services	675	626	1301
Process plant and machine operatives	1114	525	1639
Elementary occupations	1794	847	2641
Total	11848	5342	17190



The associated breakdown of source of employment for such an approach reinforces the need of the region to continue to build on the Managerial and Professional skills and in general on a highly skilled labour force. Scenarios consistently show growth in employment in these occupational groups. If capacity does not exist in the labour market, then positive impacts will be undermined.

## COMPARISON OF DATA AGAINST RES TARGETS FOR 2016

The RES identifies a number of ambitious targets for the region's economy by 2016. The targets directly relevant to this research are:

- To increase regional GVA to £45.5 billion, or 90% of national GVA per head.
- To generate 1,095,000 FTE jobs in the region – an increase of 61,000-73,000 from baseline.

Below, these targets are compared against the earlier budget/re-spending scenarios, demonstrating the impact of public procurement activity as a proportion of the total RES target below. This allows direct comparison with the GVA performance of projects of a similar nature.

### THE IMPACT ON GVA (ALL FIGURES IN £ BILLION (2002 PRICES))

Direct public sector GVA current (£bn)	Public Sector Contribution - Indirect (£bn)	Total Current public sector GVA (£bn)	Total Contribution (£bn)	% of Regional GVA
8.4	1.16	9.56	9.56	24.4
<b>Scenario Analysis</b>				
Scenario	GVA in 2016	Target 2016	% of target projected	% change current to 2016
Budget reduction of 3% for 3 years	9.00	45.5	19.7	-4.7
1% increase in regional spend no budget increase	9.7	45.5	21.3	-3.1
Scenario 1 and 2 combined	9.57	45.5	21.0	-3.4
2% increase in regional spend 2% budget increase	11.6	45.5	25.49	1.1

The figures shown in the table below demonstrate a consistent reduction in the contribution of the public sector to the GVA within the regional economy (with the exception of the optimistic scenario). However, it should be stressed that this is the effect of the ambitious growth targets contained with the RES rather than a 'performance' reduction in the public sector.

The most likely scenario – a combination of budget reductions and increased local spend – will maintain current absolute performance only. Yet, there are significant policy and societal drivers for supporting suppliers to access public procurement opportunities - public sector procurement can act as a catalyst for innovation, and through a 'market intelligence' approach can help to build more vibrant sectors within the economy, supporting competitive success elsewhere in the UK and Europe, through targeted business support.

Most importantly, failure to support existing regional suppliers, many of whom rely on public sector procurement for a significant proportion of sales volumes, could result in a disproportionately negative impact. A 'market intelligence' approach could again be utilised to target support at those businesses and sectors that are likely to be impacted by increased aggregation.

## JOBS – THE IMPACT ON FTE OF VARIOUS SCENARIOS (NO PRODUCTIVITY CHANGE)

	Current Regional position	Public Sector Contribution - Direct	Public Sector Contribution - Indirect	Total Contribution	% of Regional FTE
Baseline	1018000	261000	35600	296600	29.14

### Scenarios

	FTE in 2016	Target 2016 (73000 additional)	% of target projected	% change current to 2016
budget reduction of 3% for 3 years	274210	1091000	25.13	-4.01
1% increase in regional respond no budget increase	302380	1091000	27.71	-1.43
Scenario 1 and 2 combined	288295	1091000	26.42	-2.72
2% increase in regional respond 2% budget increase	324500	1091000	29.74	+0.6

As indicated in the sections above, no assumption has been made in relation to the relationship of productivity and changing market demand to FTE creation.

It is noticeable that, while FTE declines, this percentage decline is significantly less than that associated with GVA, and is reversed when the 'optimistic' scenario is considered. The implication for this is that, looked at strategically, public sector procurement can make more of a contribution to the economy in terms of employment than in GVA as a whole. This is unsurprising as almost all public organisations are operating as service delivery organisations or purchasing similar goods and services. It is always likely, therefore, that the employment component of costs will be high. The implication of this difference between public and private sector operation is that to maximise the impact of public procurement, it would be more beneficial to choose service areas of procurement, as these will make a greater overall contribution than manufacturing and utility sectors.

## INTERACTIVE MODEL

A key part of the brief was the need to provide a model to project the impacts of public procurement and changes to procurement practice on the region from 2007 to 2016. This report is available as an interactive website, available to all via the Internet.

As a result of this interactive model, any interested party will not only be able to see the report but also be able to create and download his or her scenarios. This model is now running online and within the tolerances laid out will perform in the same way as the offline version. Four variables are available to the user. These are:

1. Start amount in £ million of procurement spend: Single entry default is £3.4 billion.
2. Start % of re-spend propensity: Single entry default is 45%.
3. Annual change in % of procurement budget: Enter either as annual from 2007–2016 or as individual years.
4. Annual change in % of - regional re-spend %: Enter either as annual from 2007–2016 or as individual years.

Outputs from the interactive model are:

1. Annual change in GVA and FTE for each year by industry sector, with totals.
2. Same results with totals in graph form.
3. Downloadable excel spreadsheet for any scenario

The URL of the interactive model is [www.beyondprofit.org/procurement](http://www.beyondprofit.org/procurement).

## CONCLUSIONS

### THE IMPACT OF INFORMATION GAPS ON BROADER COMMUNITY BENEFITS

The lack of readily available information on public procurement expenditure suggests that the understanding of procurement's impact on broader community benefits, regeneration or the environment remains limited in practice. This is significant given the shift in national policy by organisations such as Audit Commission, Communities & Local Government, HM Treasury and others towards sustainable procurement and the active use of procurement to secure increased economic, social and environmental benefits to communities.

There are other factors alongside these changes in attitude towards the role of public sector funding. For example, the statutory and regulatory environment for public sector procurement is extensive. There is a debate to be had to what extent these factors actually prevent procurement from securing greater social impact. In general, (and this is what the LM3 Project has been designed to achieve, for example) a more innovative and enterprising approach to procurement that identifies opportunities early in the procurement process means that the regulations are not in themselves a barrier. The use of approaches such as community clauses and broader core elements in tenders is slowly becoming both better understood and more widely adopted.

There is a third element, however, within the environment of public procurement that undoubtedly does act in the current climate as a deterrent to smarter procurement: the drive to achieve 'cashable efficiency savings'. Realistically, it has to be accepted that for the vast majority of public procurement decisions, this is the key consideration in both the decision-making and tender development processes. This focus on short-term costs will inhibit to some extent the scope for further initiatives such as LAAs to maximise possible local gains. It would be incorrect to see this as an insuperable barrier. It merely reinforces the need for a good evidence base to inform key procurement decisions and the impacts of these decisions.

Improving regional data would underpin the aims of key public sector policymakers and organisations and support the creation of a competitive advantage for the region in the future. It is for this reason that the report concentrates its recommendations on how to realise a coherent regional approach based on ongoing reliable data.

### THE LIKELY IMPACT OF AGGREGATION

Person-to-person research revealed the continual reference to central government taking a far stronger line on aggregation and centrally-controlled procurement using national framework contracts. This was mentioned particularly by the defence sector.

There is an implicit contradiction between this approach and the desire to effect broader community benefits and regional economic benefits through procurement. However, short-term cost reductions appear to be a far more active driver at present.

This clearly presents threats and challenges to the North East economy:

1. As the baseline data shows clearly, nearly one-third of the economy is driven by the public sector and may consequently have a disproportionate impact in the region.
2. North East businesses will increasingly need to compete with national and international competitors for local, regional and national contracts. It is likely that the region has comparative advantage in some sectors that could support this.

---

## OPPORTUNITIES

Opportunity lies in changing attitudes towards the public sector role within the economy. The quotation below demonstrates the current approach toward the public sector in the Regional Economic Strategy:

*“The public sector is... a significant purchaser of goods and services within the North East, with the region’s NHS alone responsible for a budget of £3 billion. The role of public sector procurement in the region’s economy is likely to further increase over period the RES, given the current trend the of towards outsourcing of products and services.”<sup>9</sup>*

This report demonstrates that the most significant contribution that public sector procurement can make to the regional economy is through a combination of:

1. Procuring more goods and services from the region, as demonstrated by the scenario showing that budget cuts in the next three years are more than offset by a 1% increase in regional re-spend; and
2. Investing in building the capacity of regional businesses (where comparative advantage or potential advantage is demonstrated) to supply not only more to the region’s public sector but to bid successfully for national or other regions’ contracts.

The region can then realistically seek to maintain and enhance its current supplier base in the face of an increasingly competitive procurement environment.

---

## INITIAL FINDINGS – WHICH SECTORS TO FOCUS ON & THE IMPACT ON GVA AND EMPLOYMENT

When the variations between sectors and FTE occupations are considered an important difference between the impact of increasing (or decreasing) actual procurement spending, and varying the respond propensity was revealed. When the respond propensity is varied then it can be seen consistently that the manufacturing and utility sector is more sensitive to this change than when the

---

<sup>9</sup> *Realising our potential*, Regional Economic Strategy, One NorthEast, 2006, p23.

actual budget amount is varied. This change is in addition to the impacts seen within the service sectors.

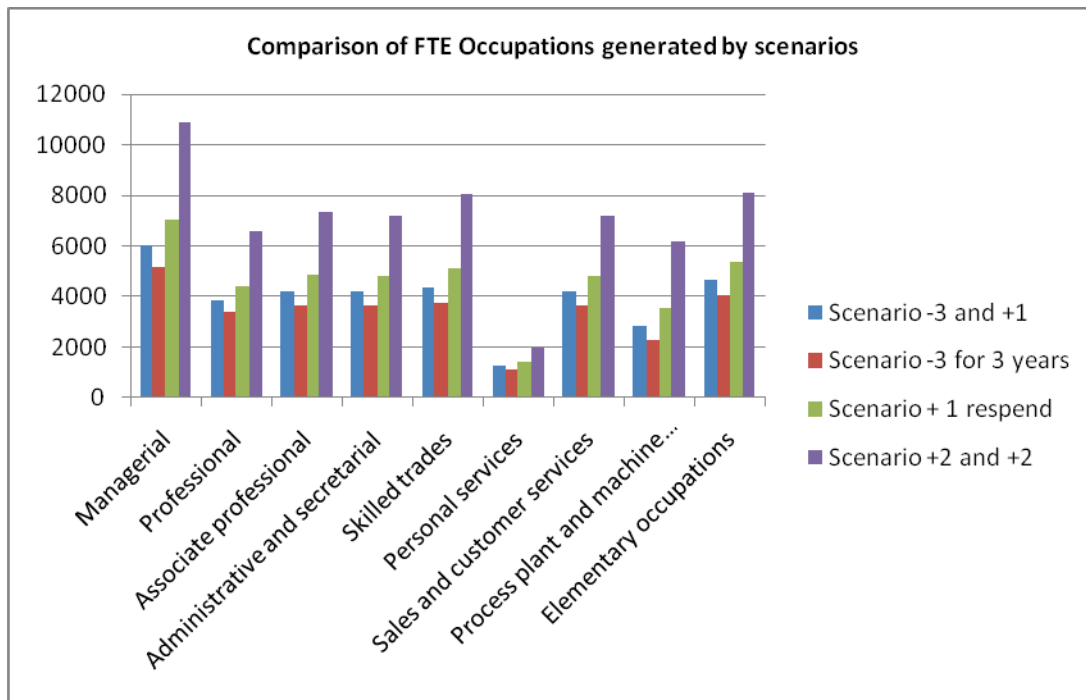
This preliminary finding does have implications for the adoption of any mitigating or growth strategy. If it is assumed that such an approach would operate around activity to increase regional respond, as this is more in control of the region; then while there should be an underpinning focus on procurement activity around the service sectors, manufacturing and utility sectors should also be carefully considered.

This may pose additional challenges to influencing procurement behaviour as much of the aggregation approach to procurement is centred around manufacturing and utility sectors. However this simply reinforces the argument that a balanced approach to procurement built around good data which identifies strengths and opportunities is essential.

Turning to actual occupations the table below summarises the changes in occupation data across the various scenarios.

<b>FTE Occupations</b>	Scenario -3 and +1	Scenario -3 for 3 years	Scenario + 1 respond	Scenario +2 and +2
Managerial	6019	5175	7035	10891
Professional	3852	3376	4425	6596
Associate professional	4178	3628	4840	7349
Administrative and secretarial	4193	3670	4822	7209
Skilled trades	4369	3733	5133	8034
Personal services	1250	1122	1404	1989
Sales and customer services	4187	3670	4810	7171
Process plant and machine operatives	2858	2285	3546	6159
Elementary occupations	4649	4046	5373	8122
Total	35555	30706	41389	63519





The data demonstrates that all scenarios generate broadly similar patterns of occupation need. In all cases the greatest increase is seen in managerial occupations and the least in personal services, with the other areas being broadly similar. Any strategic approach will need to assess the potential for supplying this need from the existing and planned labour market in the region.

In conclusion there is a need for a balanced approach to strategic planning. This is reinforced by the evidence that manufacturing and utility sectors are significant when increasing respond is considered. This suggests that the market intelligence approach outlined below is needed if real change around intended outcomes is to be achieved.

---

## A MARKET INTELLIGENCE SYSTEM

This report could represent the first step in establishing a 'market intelligence' system that could bring significant benefits to the region. Existing analysis could be combined with a pipeline of upcoming regional public procurement opportunities and correlated with the capacity of regionally based businesses, to create a strategic planning tool for both the region and businesses based within it.

This approach would require analysis of the current performance of North East businesses in competing for public procurement contracts outside the region and opportunities for businesses to compete. Matching the two would indicate where strategic investment in capacity would be likely to bring the greatest return and could facilitate partnering between public, private, and third sectors to make the most of regional opportunities to build businesses that can compete more effectively at a national and European scale.

The attached table (Appendix 2) shows that the North East currently represents only 4.3%<sup>10</sup> of total national GVA despite the public sector accounting for around 33% of the economy. This clearly demonstrates the vulnerability of the region, as there is a continuing move to aggregation of public service contracts; however, at the same time, it represents a significant opportunity for the region to win more business from other parts of the public sector.

A 'market intelligence' system would be well suited to public procurement as anticipated demand is better able to be determined than in many other market sectors, and it is possible to develop strategic partnerships (such as the Regional Procurement Forum) to maximise opportunities. By preparing ahead for the predicted shift to national procurement, the North East should be able to secure a competitive advantage for its business base, harnessing the spending power of the public sector to secure the RES growth objectives.

---

## SUMMARY

This project has broken new ground in a number of areas. It has looked for the first time at the economic role of public sector procurement, using a combination of Input-Output and LM3 research to develop and demonstrate the potential impacts on the regional economy as a whole. The key findings are:

- The public sector spends £3.4 billion per annum on procurement and around £1.57 billion or 45% of this amount within the North East.
- Baseline re-spending of 45% results in an additional contribution to the region of a further £1,160 million GVA and approximately 35,600 FTE jobs.
- Data regarding the FTE occupations shows that changes in employment would focus on professional, and managerial types.
- A likely base scenario demonstrates a net reduction in GVA of £56m million by 2016, with the vast majority of this reduction being born by the construction and service sectors. The reduction in FTE was projected to be approximately 1,700 jobs within the region.
- Mitigation of these consequences can be achieved by increasing the propensity to re-spend public budgets regionally. An annual 1% increase in the regional re-spend rate from 2007 to 2016 is projected to offset the impact of cashable efficiencies.
- Following the recommendations below would further advance this approach from a statistical base to a practical but strategically targeted delivery mechanism, which would be able to draw together public, private, and regionally agendas around creating and efficient use of resource and growing the regional economy.

These findings, coupled with the optimistic scenarios, reveals how the public, private, and third sectors could work together to make a positive impact on the economy by procuring smarter. As both individual buyers and viewed as a whole, the North East public sector, working alongside the private and third sectors has the ability to shape the regional market by combining a shift in its spending

---

<sup>10</sup> Source. Regional GVA 2005, Office for National Statistics

behaviour with enterprise support for potential growth areas. This would also strengthen the region's businesses to compete for national and European public sector procurement contracts.

## RECOMMENDATIONS

The broad theme arising from this report's analysis is the opportunity for ONE to lead the development and delivery of a 'market intelligence mechanism' for public service delivery. Such a mechanism would serve to:

- Build on existing investment by ONE and others in understanding public procurement behaviour and acting on the results,
- Offer a cohesive regional approach to delivering on both public procurement and regional economic development targets, and
- Grow regional businesses based on actual, rather than anticipated, opportunities.

The components of this entail the development of both the demand side and the supply side of the market:

- Demand: Identify procurement opportunities in advance of formal tendering to ensure they are structured in the best way possible to achieve multiple targets and true efficiency. This approach could be applied across the private and non-profit sectors as well.
- Supply: Identify and stimulate supplier development to deliver the procurement opportunities identified, including consortium development and second/third-tier contracting opportunities.
- Performance management: Use LM3 Online (or other tool) to measure ongoing progress of this approach as well as to identify opportunities for improvement.

Taking such a place-making approach builds on the strengths of the region to increase competitiveness and address opportunity. Such an approach would sit particularly well within the Regional Procurement Forum. It should also be noted that such an approach would also make a significant contribution to a mechanism to decide how to utilise business support to maximum effect in realising RES objectives.

## DEMAND SIDE

Growing a competitive regional economy depends not just on shaping the supplier base but also shaping what buyers ask for. A 'market intelligence' system should address the demand side of the market; that is, what and how buyers ask for goods and services – identified forward procurement opportunities. A regional approach to identifying procurement opportunities as they arise, exploring how these opportunities can be best exploited for regional economic benefit, and mainstreaming these approaches in the future, would be beneficial.

## SUPPLY SIDE

Suppliers require support to access and compete for public contracts. A regional approach to matching supplier capacity with identified forward procurement opportunities in the North East and nationally (and in the EU) would be beneficial. By identifying solid opportunities for commercial activity, ONE can focus enterprise support – through Business Link and other complementary initiatives such as the Growth Project - towards those markets where there stands the greatest economic gain.

## PERFORMANCE MANAGEMENT

The ongoing efficacy of the market intelligence mechanism and opportunities for its improvement can be most directly and simply captured using LM3 (though other tools could be used). LM3 demonstrates where public spending circulates in the local and regional economy. This approach would build on ONE's previous investment in the North East LM3 Project, for which almost all local authorities have produced a benchmark figure. By shifting existing LM3 data onto a web-based platform, such as LM3 Online, the region can ensure ongoing application and use of LM3 results as well as the ability to share results across the region.

By encouraging the integration of this approach into tender and contract obligations, the region would build an invaluable source of actual economic behaviour and data that could inform progress towards RES objectives via DBS and other models.

## SPECIFIC ACTIONS

For this approach to succeed the following elements would need to be in place:

1. A picture of forward procurement opportunities across the North East classified by potential for regional procurement,
2. Agreement to target these opportunities with forward planning of the tender process,
3. An appreciation of supply chain capacity which is regionally based, or in which regional businesses formed a significant part of national or international consortia,
4. An appreciation of labour market capability against procurement opportunity,
5. A study of current performance by North East businesses in competing for public sector procurement outside the region and within Europe, and
6. Adoption of LM3 Online or a similar tool to enable ongoing data collection and performance management.

## ISSUES AND LIMITATIONS

As a new piece of research, there are limitations to available data, and a number of assumptions have been used to address this. The table below identifies these areas and possible ways in which they could be addressed in future.

Issue	Description	Assumption made	Potential way to improve
-------	-------------	-----------------	--------------------------

Availability of Regional data	There is no generally accepted form of public procurement data. There is a particular difficulty with the treatment of capital spend which is not consistent.	Triangulation approach and comparison of sources led to best position	There is evidence that the position is improving as data systems improve. Health as the biggest spender is investing in this area. Repeat survey with more time in 6-12 month should produce a significant improvement.
Establishing respond Propensity	The range of respond varied from 36% in DBS model to 58% from Im3 LM3 Nece data	45% was chosen as a prudent compromise for baseline purposes	Moving to LM3 Online(see recommendations) and more direct research would particularly assist particularly around capital projects
Aggregation of data	The Pesa data has 14 categories the DBS model for public sector contains 5	Aggregation is shown in table	An increase in the number of categories particularly around administration and defence would benefit the analysis.
Cannot map output model directly to ONE priority areas	It is not possible to map directly data to the specific RES priorities	Not undertaken within the research	A development of the approach to map to the ONE priorities could be beneficial
Research does not consider procurement business won outside the North East	This is key information if a market intelligence approach is to be taken.	Lay outside the brief of the research  See below	Further research could establish this and then incorporate it into a market intelligence approach.

## ACKNOWLEDGMENTS

I would like to acknowledge the team of people who have worked on this project under intense time pressure and with a truly remarkable ability to get on and deliver whatever the unreasonable request from myself. Bryan Latty is to be thanked for being prepared to try and largely succeed in doing the impossible by persuading large drifts of the public sector to give him their financial data in ways never before considered. Andrew Hunt for his willingness to continually rebuild the DBS model and think of new ways to accommodate foreign data. Justin Sacks for his invaluable ability to work throughout the night and produce high quality content.

Chris Taylor has made a huge contribution which is I suspect well beyond his normal remit in beating this work into shape. I am also indebted to the counsel of the steering committee and their ability to bring a wider perspective to bear. Finally I would particularly like to thank David Wright for his willingness to venture into new areas with high risks attached.

Adam Wilkinson

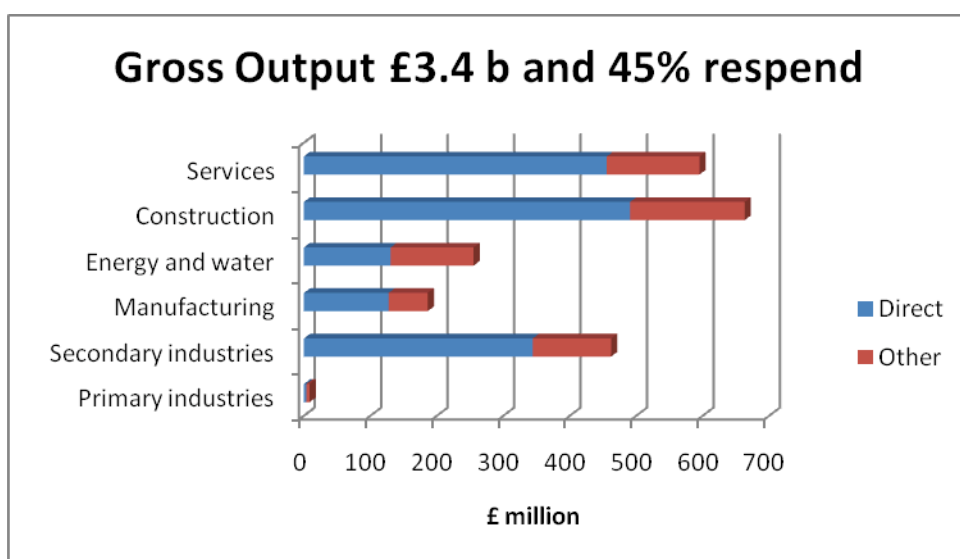
01/06/2007

## APPENDICES

## APPENDIX 1 - GROSS OUPUT DATA OUTPUTS AND GRAPHS.

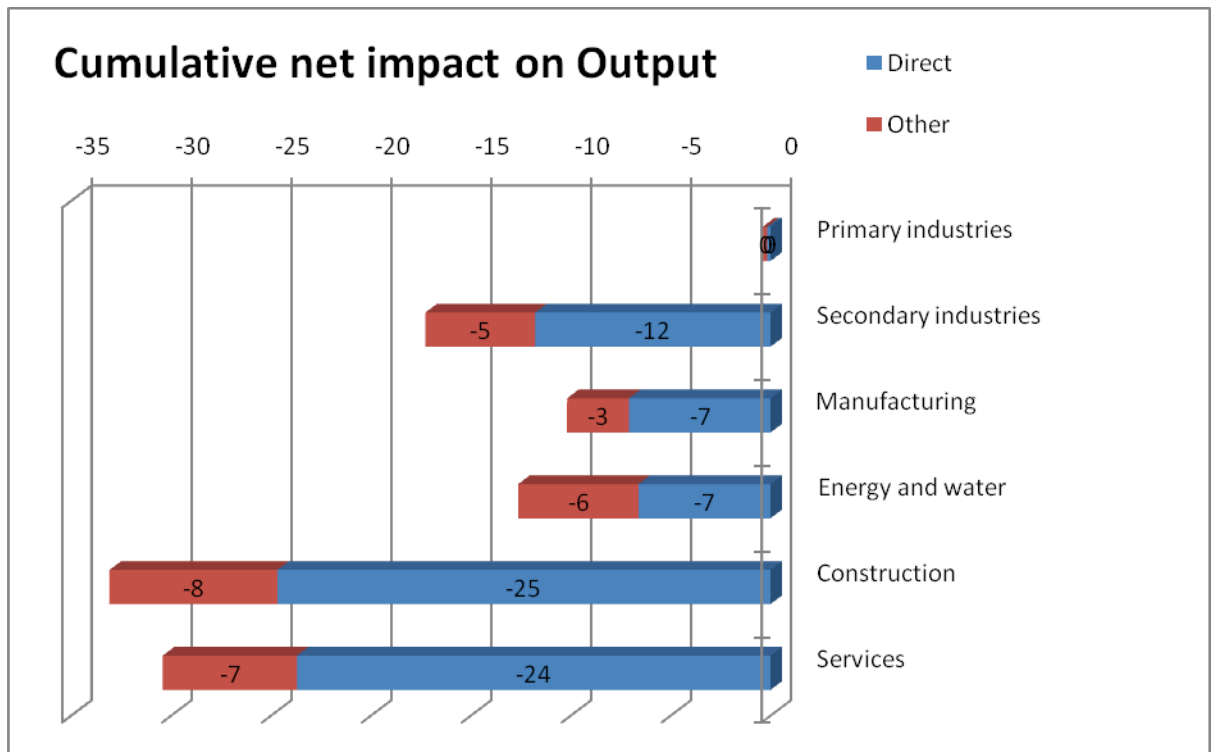
### GROSS OUTPUT FOR THE NORTH EAST – BASELINE

Gross Output £m	Direct	Other	Total
Primary industries	3.69	5.09	8.77
Secondary industries	344.31	117.88	462.19
Manufacturing	127.42	59.02	186.44
Energy and water	130.65	124.71	255.37
Construction	491.04	172.31	663.34
Services	455.90	139.29	595.19
Total	1553.01	618.29	2171.30

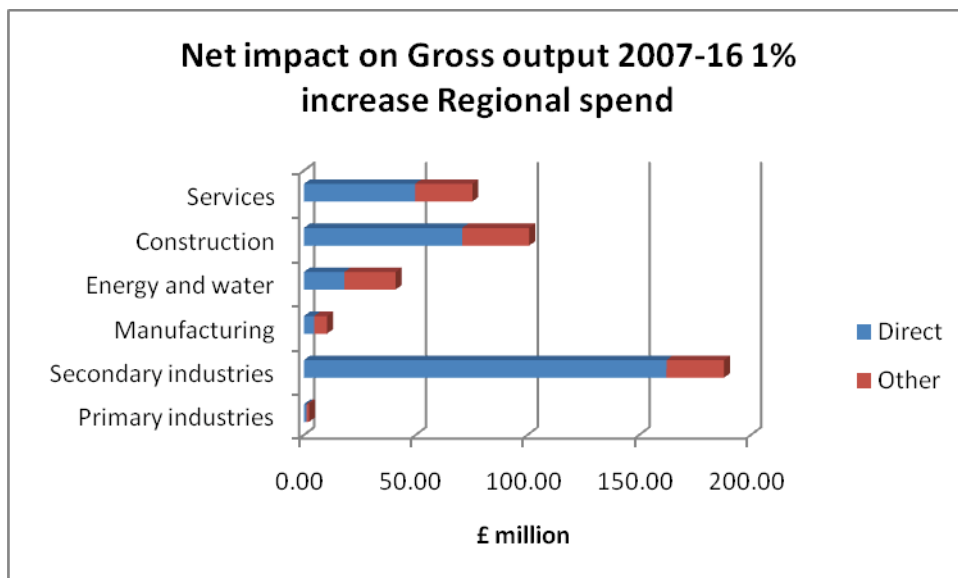


### Cumulative impact of 3% spend reduction 2007-2010 on Output

Gross output £m	Direct	Other	Total
<b>Primary industries</b>	0	0	0
<b>Secondary industries</b>	-12	-5	-17
<b>Manufacturing</b>	-7	-3	-10
<b>Energy and water</b>	-7	-6	-13
<b>Construction</b>	-25	-8	-33
<b>Services</b>	-24	-7	-30
<b>Total</b>	-74	-30	-104



Output	Direct	Other	Total
Primary industries	1.19	1.16	2.35
Secondary industries	162.31	25.71	188.01
Manufacturing	4.58	5.81	10.39
Energy and water	18.13	22.95	41.08
Construction	70.88	30.01	100.90
Services	49.79	25.65	75.43
<b>Total</b>	<b>306.88</b>	<b>111.28</b>	<b>418.16</b>





GROSS OUTPUT FOR THE NORTH EAST LOCAL AUTHORITY SPENDING – BASELINE

Local Authority @ 58%	Direct	Other	Total
Primary and secondary	3	3	6
Manufacturing & utilities	200	60	260
Construction	55	28	83
Distribution, retail, hotels etc	46	62	108
Finance and business services	258	87	345
Other services	221	70	290
	784	308	1092

