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ECONOMICS·RESEARCH·ANALYSIS

Durham Tees Valley Airport: Economic Impact Assessment

A Final Report by
Regeneris Consulting

Tees Valley Unlimited

Durham Tees Valley Airport: Economic Impact Assessment

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Executive Summary

Introduction

i. Tees Valley Unlimited (TVU), on behalf of the Durham Tees Valley Airport Joint Development Working Group[1], commissioned Regeneris Consulting in May 2012 to undertake an independent analysis of the economic and wider impacts of Durham Tees Valley Airport (DTVA) upon the Tees Valley economy[2]. Regeneris Consulting undertook an economic impact assessment of the facility back in 2004 for Peel Airports.

ii. The study was commissioned following the outcome of a sale process in early 2012. There was a danger the airport might close but following discussions with the minority local authority shareholders, The Peel Group reacquired the interest of Vancouver Airport Services and is now the majority shareholder.

iii. While the report focuses on the quantitative impacts of the airport for the Tees Valley economy, TVU and partners are also particularly interested in the wider or catalytic benefits the airport delivers, both currently and potentially in the future. In the main, these impacts are discussed qualitatively, drawing on a range of existing research, and complimented by recent consultations with some businesses, business representative organisations, local authorities and other partners.

Challenges at DTVA

iv. The airport experienced a significant expansion in passenger numbers from 2002 to 2006, with passenger levels reaching approximately 906,000 per annum. This growth was supported by the airport's mix of scheduled and chartered services from a number of airlines (e.g. KLM, BMI Baby, Ryanair), as well as holiday companies (e.g. Thomson, First Choice)[3].

v. However, passenger numbers have now declined significantly to around 192,400 (2011). This contraction can be attributed to a number of reasons including: the UK and global recession, aviation sector competitiveness (particularly amongst low-cost carriers driving down costs to be located at regional airports), competition from other airports, increased costs of accessing key hub airports such as Heathrow, and consolidation in the charter flight market. The aviation sector has been dramatically squeezed in recent years, leading to a particularly challenging environment for smaller regional airports such as DTVA.

[1] The working group consists of TVU (Chair), Darlington Borough Council, Stockton Borough Council, and Durham Tees Valley Airport Ltd.

[2] The Tees Valley area covered by the Local Enterprise Partnership includes the following local authority areas: Middlesbrough, Hartlepool, Darlington, Stockton on Tees, and Redcar & Cleveland. This is the defined impact area for this assessment.

[3] In particular, this growth was driven by scheduled services provided by KLM to Amsterdam; BMI Baby to London Heathrow; Ryanair to Alicante, Dublin and Girona; and Globespan to Malaga and other Spanish/Portuguese destinations. Holiday operators such as Thomson and First Choice also operated a wide number of chartered flights to European holiday destinations.

vi. The airport's routes are now predominantly based on two scheduled carriers – KLM flying three times a day to Amsterdam Schiphol, one of Europe's major hub airports, and Eastern Airways flying four times a day to Aberdeen. Currently, therefore a significant level of sub-regional leisure and business demand is being picked up by other airports, most notably Newcastle and Leeds-Bradford which offer a much wider selection of carriers and routes, including low-cost options.

DTVA – Current Impacts

Types of Impact

vii. The current economic impact of DTVA has been assessed. Typically in these types of assessments the following types of impacts are assessed:

- **Direct on-airport employment:** this is employment in businesses whose activity is directly and solely related to the airport and located on the airport operational area.
- **Direct off-airport employment:** jobs in a business whose activity is directly and mainly related to the activities of the airport, but is located outside the airport operational area. It is usual for such employment to be located very close to the airport. Examples typically include airline offices, private general aviation, freight forwarding agents, and flight schools.
- **Indirect employment:** jobs generated in the supply chains from purchases made by businesses in the previous two categories.
- **Induced employment:** jobs supported by the spending of those individuals employed directly or indirectly by the airport.
- **Catalytic or wider impacts:** These impacts can cover a range of issues, including the impact of the airport on investment decisions by companies considering expanding, relocating to or setting up in the area served by the airport, perceptions of an area. These impacts relate to the role of airports as facilitators of economic growth.

viii. For the purposes of this assessment the direct (on and off airport), indirect and induced effects are all quantified. The wider/catalytic effects are discussed qualitatively, while GVA impacts of the airport activities have also been quantified.

Current Economic Impacts

ix. We estimate that there are around currently **595 FTE direct jobs** supported at DTVA. In 2004 our earlier report estimated that around 680 FTE jobs were supported – a decrease in employment of around 13% (85 FTE jobs). Interestingly, employment associated with third party operators at the airport actually accounts for just over **half** of all airport-related employment. Companies such as Cobham (c.110 jobs), SERCO (c.85 jobs) and TNT (c.50 jobs) support around three-quarters of all third party employment. The Airport Company itself only supports around a fifth of all airport-related jobs. Some of the employment associated with the terminal operations and airport health and safety is statutorily required (e.g. fire, border agency, police etc), and is required for a civilian airport regardless of passenger levels.

x. We estimate that approximately 445 FTE jobs (480 jobs in total) are taken by Tees Valley residents (i.e. a leakage rate of 25%). Applying reasonable combined indirect and induced multipliers, we assess the current overall (direct, indirect and induced) employment impact of DTVA to be approximately **560 – 600 FTE jobs** (600-645 total jobs) at the Tees Valley level. The indirect and induced component supports around 110-155 FTE jobs.

DTVA Estimated Current Employment Impacts (Direct, Indirect and Induced)				
	Lower multiplier		Higher multiplier	
Tees Valley – assumed combined indirect and induced multipliers	0.25		0.35	
	FTEs	All Jobs	FTEs	All Jobs
Estimated Direct Jobs	594	637	594	637
Direct jobs taken by Tees Valley residents*	445	478	445	478
Indirect & Induced Employment	111	119	156	167
All employment impacts at the Tees Valley level	557	597	601	645
Note: the 25% leakage factor is for jobs taken by residents from outside Tees Valley (albeit largely from relatively close by within the rest of the North East and North Yorkshire). This leakage rate has been applied based on a 2004 survey of employees and their residence (this survey has not been updated). Source: Regeneris Consulting estimates				

xi. We also estimate that the current gross direct GVA contribution of the airport is around £37m. This level of GVA represents roughly 0.4% of GVA of the Tees Valley economy. In 2004 the airport accounted for around 0.6% of the area's total GVA. This fall can be attributed to the decline in employment at the airport over this period, and overall GVA growth over this period.

Wider Impacts

xii. To understand the wider set of impacts, or the catalytic effects, which DTVA currently has for the Tees Valley area, we have drawn on existing research undertaken by local partners (2009 business surveys), as well as supplementing this with recent selective business consultations with Tees Valley businesses. The wider impacts are considered in greater detail in the main report. However, the key themes which emerged focussed on:

- **Impact on International connectivity and business:** Given the nature of many of the businesses operating in the Tees Valley area (e.g. petrochemicals, oil and gas, and engineering and design businesses operating internationally), access to an airport which provides connectivity and accessibility to international markets is seen as critical – particularly hub airports. There is demand within businesses in the Tees Valley to undertake more international air travel from DTVA. The airport has some clear location and time-saving benefits for local businesses, which many businesses consider as competitive advantages. However, international business and trade is still taking place in the Tees Valley area, despite the limited route offer from DTVA at present. Where it is not possible to travel from DTVA, businesses have been making alternative airport arrangements which best suit their business/employee/client needs.

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- **Impact on International Trade – role of cargo:** Cargo services have only recently returned to DTVA via the KLM service, and are handled by Camair Freight Solutions (approximately 2 tonnes per month). Cargo services via DTVA benefit those businesses operating in sectors which rely on receiving goods and components under short-timeframes. Industries in the Tees Valley, including shipping, petro-chemical and pharmaceutical, often require fast shipping of smaller, high value items. Cargo services can help to reduce road miles and deliver greater efficiencies.
- **Impact on sub-regional competitiveness:** Access to DTVA and its KLM routes, as well as other airports in North, means that Tees Valley businesses are still able to compete internationally, and that clients and owners were able to visit the area, albeit sometimes via less-direct routes. There is no conclusive evidence that the Tees Valley area has been missing out on inward investment opportunities as a result of airport accessibility issues at DTVA (although it is always difficult to prove the impact of a negative effect). However, it is clear that an airport with a wider selection of carriers and route availability would provide a more robust proposition to a potential inward investor, and would considerably help to improve the perception of the Tees Valley area as a place for international business.
- **Supporting employment & high-skilled employment by the Third Parties:** DTVA plays an important role in facilitating the retention of employment around the airport estate. In particular, an operational airport is critical to the retention of some highly skilled jobs in the Tees Valley. Cobham's operations require the airspace to remain open; whilst Serco's international fire training centre is reliant on the airport estate for its training programmes.
- **Impact on tourism and leisure in Tees Valley:** There is little empirical evidence on the current impact of DTVA in supporting tourism and leisure activity (i.e. visitors attributable to the flight services offered by the airport) in the Tees Valley. Evidence from the CAA from 2009 showed only a modest amount of inbound tourists. Our assessment is that the airport is currently not a significant driver of impact for tourism in Tees Valley. Clearly, a wider range of scheduled routes would offer the opportunity to attract more inbound tourism linked to the North York Moors, the Dales and other attractions in the vicinity.

DTVA – Future Impacts

Impact Scenarios

xiii. The future economic impact of the airport has been assessed using a number of scenarios. These scenarios were agreed with the Durham Tees Valley Airport Joint Development Working Group. The scenarios are as follows:

- **1. Reference Case 'the Do-Nothing':** This scenario assumes the current economic impact of the airport is maintained going forward. It also sets out the scale of impacts which would be lost to the Tees Valley area if the airport closed (see Section 3 current impacts).
- **2. Passenger growth:** This scenario sets out the potential economic impacts from annual passenger numbers growing to 400,000 over the next 10 years (an additional 207,600 passengers). This is an aspirational scenario based on a return to passenger numbers to half of 2004 levels.

- **3. Land development at Southside:** This scenario models the economic impact of the Southside development enabled by RGF infrastructure funding. It assesses the total scheme impacts once fully developed and occupied, as well as phased impacts. The total scheme aims to bring forward around 176,900 sqm of industrial and logistics warehousing space, with some airside access and apron space.
- **4. Current impact of the Airport plus Southside development impacts:** The current impact of the airport remains relatively constant going forward (i.e. the existing impacts continue (impacts are safeguarded) as a result of the Southside development securing the viability of the Airport), plus the Southside development employment impacts.
- **5. Passenger growth to 400,000 per annum and development of Southside:** This scenario is the most positive, focussing on both passenger growth driving additional economic impacts for Tees Valley, as well as the impacts associated with the Southside development (once fully developed out and occupied).

Summary of Scenario Impacts

xiv. The following provides a summary of the job and GVA impacts for the impact scenarios:

- **Scenario 1:** DTVA currently supports around 600 FTE gross jobs and contributes around £37m of gross direct GVA to the Tees Valley economy. We estimate that in net terms (taking account of leakage and multiplier effects) the airport supports around 560 FTE jobs in Tees Valley. If the airport closed these economic benefits would almost entirely be lost to the Tees Valley economy. Of the near 600 jobs linked directly to on and off airport employment activities, the vast majority of these are tied to having an operational airfield, or from being tenants of the airport and the freedoms this brings for their activities.

- **Scenario 2:** Based on the past experience of fall in passenger numbers and employment at DTVA, we estimate that an increase in passengers at DTVA to 400,000 per annum, an increase of approximately 208,000 additional passengers per annum, could support a further 30 gross jobs at the airport. These gross new additional jobs could generate approximately £1.8m of GVA in the Tees Valley area per annum. In net terms (taking account of leakage and multiplier effects) we estimate that around 27 FTE jobs could be supported in the Tees Valley economy under this scenario. Clearly, the economic outcome for the Tees Valley area from this level of increase in passenger numbers, over and above those existing jobs supported by the airport's operation, is relatively modest. However, the opening up of any new schedules routes, especially if to hub airports or larger European cities, could contribute to local economic competitiveness and possibly inbound tourism.

- **Scenario 3:** The Southside development, if fully developed out and occupied as planned, has the potential to support the creation of a significant number of jobs. In total, we estimate that the overall development of the industrial and logistics park could support around 3,050 gross jobs. The GVA contribution from this employment could be of the order of around £183m per annum. In terms of net additional employment supported in the Tees Valley area, we estimate that around 1,870 FTE net jobs could be supported in the Tees Valley as a result of the development of Southside. We also estimate that the development could also support around 1,800

FTE construction jobs over its lifetime.

- **Scenario 4:** This scenario draws together the current impacts of the Airport (Scenario 1) and the Southside development (Scenario 3). Once fully developed and occupied, alongside the current operation of the airport, the whole DTVA site has the potential to support around 3,650 gross FTE jobs, supporting approximately £220m of gross direct GVA for Tees Valley each year. We estimate that around 2,420 of these are net FTE jobs and these could be taken by Tees Valley residents.

- **Scenario 5:** This scenario draws together the future potential impacts of the Airport growing its passenger numbers to 400,000 per annum (Scenario 2), and the Southside development (Scenario 3). Our analysis shows that the economic outcome for the Tees Valley area from an increase in passenger numbers, over and above those existing jobs currently supported, is relatively modest. Nonetheless, when combined with a fully developed and occupied Southside, the whole DTVA site has the potential to support around 3,700 gross FTE jobs supporting approximately £222m of gross direct GVA for Tees Valley each year. We estimate that around 2,450 of these are net FTE jobs and could be taken by Tees Valley residents.

xv. It is important to note that any scenario that leads to more income being generated by the owners of the airport, whether via property development or more passengers or both, clearly increases the likelihood that the airport can be kept open on a long term basis – ensuring the continuation of its current economic impact and benefits for the local area.

Summary of Scenario Impacts				
Scenarios		Total Gross Jobs	Total Net Jobs in Tees Valley (inc. Leakage)	GVA Impacts based on Gross Direct jobs (£m pa)
Scenario 1	Current Impact	594	557	37
Scenario 2	*Passenger Growth*	*29*	*27*	*2*
	Future Impact of Airport	623	584	39
Scenario 3	Southside	3,055	1,861	183
Scenario 4	Current + Southside	3,649	2,418	220
Scenario 5	Passenger Growth + Southside	3,678	2,446	222
Source: Regeneris Consulting calculations				

Potential Future Wider Impacts

xvi. Assessing the potential wider benefits of different scenarios for the airport does not lend itself to a quantitative analysis. However, the following table provides an overview of the wider impacts which could occur in the Tees Valley area in light of the scenarios for DTVA.

<table>
<tr><th>Summary of Potential Future Wider Impacts by Scenario</th></tr>
<tr><td>Airport Closure</td></tr>
<tr><td>As well as these quantitative impacts the closure of the airport could have the following potential negative wider impacts:
The loss of local daily connectivity to an important international hub at airport at Schiphol, as well as links to Aberdeen. The 3 times a day service provided by KLM provides Tees Valley businesses and residents with an important link to Europe and onward destinations.
This is a critically important service for some sectors in the area (process industries, advanced manufacturing and engineering), particularly those in foreign ownership and/or who serve an international client base – in terms of ease of access for sending staff/executives overseas, as well as hosting clients or senior company executives.
Our consultations have indicated that the loss of a convenient and accessible local airport with these routes is likely to lead to further road miles and additional travel time for businesses in the area. While the route selection at DTVA is currently limited, we understand the load factors for KLM and Eastern are relatively healthy. Passengers currently using these services would have to find alternatives. These are likely to require road or rail travel, including trips to Newcastle Airport or Leeds-Bradford.
However, consultations have also highlighted that businesses in the region are still trading effectively in international markets and serving their client base, despite the limited routes available from DTVA. This is typically through using services at other airports in the North. Some consultees felt that the closure of the airport could lead to negative perceptions for the area, particularly business and investor perceptions.
While there is no clear evidence that the Tees Valley area would miss out on inward investment opportunities consultees have commented that an airport can provide a much more robust proposition to a potential inward investor, and it helps to improve the perception of the Tees Valley area as a place for international business.
The closure of the airport would also end the opportunity for businesses in the region to import goods via the KLM service. The loss of the service could affect the speed by which some businesses receive their goods, particularly those businesses in Tees Valley reliant on fast/just-in-time high value goods and components. Additional road miles and travel time is likely to occur as goods would reach the Tees Valley by road, via alternative entry airports.
While the closure of the airport would lead to some significant jobs losses, the Tees Valley area would also suffer from losing high skilled employment from the area. An operational airport is essential for some of the businesses based at DTVA. In particular, Cobham, Serco's international fire centre, Emergency Services, and the Flying schools. Most of these businesses/services require the airport to continue its operations. Without the airport, they are likely to have to relocate.
</td></tr>
<tr><td>Airport Continues to Operate at Current Levels</td></tr>
<tr><td>Under this scenario, the wider impacts set out in Section 3 of the assessment remain valid. They are also the impacts which we have described as being lost from the Tees Valley area if the airport closed.</td></tr>
<tr><td>Passenger Growth</td></tr>
<tr><td>As well as the modest quantitative impacts (small increases in employment and GVA) under the passenger growth scenario, there is also the potential for some wider impacts to occur at the Tees Valley level. These could include:
An improved perception for business and leisure travellers that DTVA is on an upward trajectory after a period of contraction in passenger numbers and routes.
While this scenario does not set out how this passenger growth will be achieved (i.e. through additional flights by existing operators, such as KLM with a fourth flight per day, or through the
</td></tr>
</table>

Summary of Potential Future Wider Impacts by Scenario
attraction of a new airline), a growing airport can provide a much more robust proposition to a potential inward investor and helps to improve the perception of the Tees Valley area as a place for international business. • A reduction in road miles undertaken by businesses and their employees who opt to fly from DTVA rather than other northern airports – an important sustainability consideration for the Tees Valley, as well as the CSR commitments of some businesses. • DTVA currently under-performs as a driver of international tourism and leisure visitors to the Tees Valley. Combined with marketing efforts, a wider choice of flights/routes could play a positive contribution in improving this position, with access to northern cities and natural assets. The airport could also play a greater role as an access point to the area for international students and academics. • If the airport is able to encourage an increase in Tees Valley residents using the airport for their leisure trips, there could potentially be a reduction in road miles from Tees Valley residents travelling to other airports. Latent demand is still there in the area to use DTVA. The recent Evening Gazette survey highlighted that around 75% of respondents would use the airport more if the range of flights offered improved.
Southside Development
The development of Southside as an industrial and logistics park has the potential to deliver significant employment impacts for the Tees Valley area, if it is fully developed and occupied. As well as the economic benefits that could be delivered, there are also some potential wider impacts which could occur at the Tees Valley level. These could include: • Regeneration and economic development benefits for the Tees Valley area. While the job creation potential of the site will only be realised over the longer-term, the jobs created here will provide a mix of low, intermediate, and higher level skilled opportunities. There is scope for local partners to work with Peel and future occupiers to link this opportunity to areas of local need. In particular, to target areas of high unemployment and worklessness, and to up-skill where necessary in preparation. • Potential for growing the cargo operations at DTVA to allow greater levels of cargo to be both imported to, and exported from the Tees Valley. The Southside proposals currently include apron space for air cargo, as well as adjacent floorspace. Manufacturing goods and exporting of goods to markets overseas is of critical importance to the future economic performance of the Tees Valley area, and the wider North East. While Teesport provides a key role in the area's exporting performance, the airport could potentially play a greater role in developing the area's exporting performance, supporting clients who require goods quickly and efficiently. Future rail links for freight between the port and the airport could also be considered. • Airports around the UK and internationally have in recent years focussed on airports as catalysts of economic growth, developing adjacent employment parks (both business and industrial). While the proposals for Southside are not at this scale, there could be an opportunity to alter investor and business perceptions of the area, with the development being an indicator of the ambition of the area.

2. Introduction

2.1 Tees Valley Unlimited (TVU) commissioned Regeneris Consulting in May 2012 to undertake an independent analysis of the economic and wider impacts of Durham Tees Valley Airport (DTVA) upon the Tees Valley economy[4]. Regeneris Consulting is familiar with the airport and undertook an economic impact assessment of the facility back in 2004 for Peel Airports, a division of Peel Holdings.

2.2 The study was commissioned following the outcome of a sale process in early 2012. There was a danger the airport might close but following discussions with the minority local authority shareholders, The Peel Group reacquired the interest of Vancouver Airport Services and is now the majority shareholder. While this work has been commissioned by TVU, it is carried out on behalf of the Durham Tees Valley Airport Joint Development Working Group[5].

2.3 The report will be used for a range of purposes, including:

- To help the local authority partners and other stakeholders to fully understand the current and potential future value of the airport to the Tees Valley economy[6]
- To help support future funding bids for investment at or by the airport (for example Regional Growth Fund)
- To provide a useful source of information for marketing campaigns to promote the airport to new airlines.

2.4 While this report focuses on the quantitative impacts of the airport for the Tees Valley economy, TVU and partners are also particularly interested in the wider or catalytic benefits the airport delivers, both currently and potentially in the future. In the main, these impacts are discussed qualitatively, drawing on a range of existing research, and complimented by recent consultations with some businesses, business representative organisations, local authorities and other partners.

2.5 In summary, the report sets out:

- The current economic role of DTVA airport in the Tees Valley area, covering:
  - ➢ Contributions from the passenger and cargo activity at the airport (supporting direct, indirect and induced employment impacts)

[4] The Tees Valley area covered by the Local Enterprise Partnership includes the following local authority areas: Middlesbrough, Hartlepool, Darlington, Stockton on Tees, and Redcar & Cleveland.

[5] The working group consists of TVU (Chair), Darlington Borough Council, Stockton Borough Council, and Durham Tees Valley Airport Ltd.

[6] This is particularly important for TVU, the local enterprise partnership, who see the Airport playing a key role in supporting their economic and business objectives for the Tees Valley, both directly and indirectly through its role as a facilitator for international trade and access to markets.

  - Contributions from other users based at the airport (e.g. flying and training facilities, freight forwarders, general/private aviation)

  - The role the current airport routes and facilities play in retaining, attracting businesses and visitors, providing connectivity to key destinations, supporting the competitiveness of firms in the Tees Valley area, (e.g. the wider/catalytic impacts of the airport).

- The future potential economic role of the airport:

  - By attracting passengers back to using DTVA for both chartered and schedules flights, and through increased cargo activity.

  - Through the development of adjacent airport land, via initial infrastructure works, helping to unlock the development potential of the Southside of the Airport site for a range of B1/B2/B8 employment uses.

  - As a facility which, through its routes and connectivity, is important in supporting the competitiveness of the Tees Valley area; in supporting international trade; and in supporting the business needs of a range of companies in the Tees Valley who operate internationally - enabling them to access key markets, clients, and investors.

  - In supporting the needs in particular key sectors of chemical/process industries, gas and oil-related businesses, professional/technical services companies, and advanced manufacturing companies.

3. DTVA - Context

Location and Ownership

3.1 Durham Tees Valley Airport (DTVA) is one of 8 international airports serving the North of England. The others are Newcastle Airport, Liverpool John Lennon Airport, Leeds Bradford International Airport, Manchester Airport, Blackpool Airport, Robin Hood Airport Doncaster Sheffield and Humberside International Airport. DTVA is located around 8 kilometres east of Darlington and 8 kilometres south west of Stockton-on-Tees on the A67 and is approximately an hour's drive from both York and Newcastle, and an hour and half from Leeds.

3.2 Originally the Airport was established as Royal Air Force Station Middleton-St-George in 1941, as the base for No. 78 (Bomber) Squadron, and subsequently No. 76 (Bomber) Squadron. Later it housed 419, 420 and 428 (Bomber) Squadrons of the Royal Canadian Air Force. In 1963 it was decided that RAF Middleton-St-George should close down, with the area's Local Authorities taking over the site for use as a civil airport.

3.3 In 2003 an agreement was reached with Peel Airports Ltd to become the strategic partner for the airport. Under this agreement, Peel Airports Ltd acquired a majority shareholding in the Airport, with the local authorities retaining a significant interest in the company and being involved in the development of the airport. However, in 2010 Peel sold 65% of Peel Airports to Vancouver Airport Services (VAS), retaining a minority share in the company. Following a very challenging climate for the aviation sector, VAS put DTVA up for sale in December 2011 in light of the considerable losses that were accruing at the airport. Peel Investments (DTVA) Ltd, part of the Peel Group, bought the VAS shareholding in February 2012 and took majority ownership of the Airport once again. Peel now owns 89% of the airport, with the Tees Valley local authorities owning the remaining 11%.

The Airport's Challenges

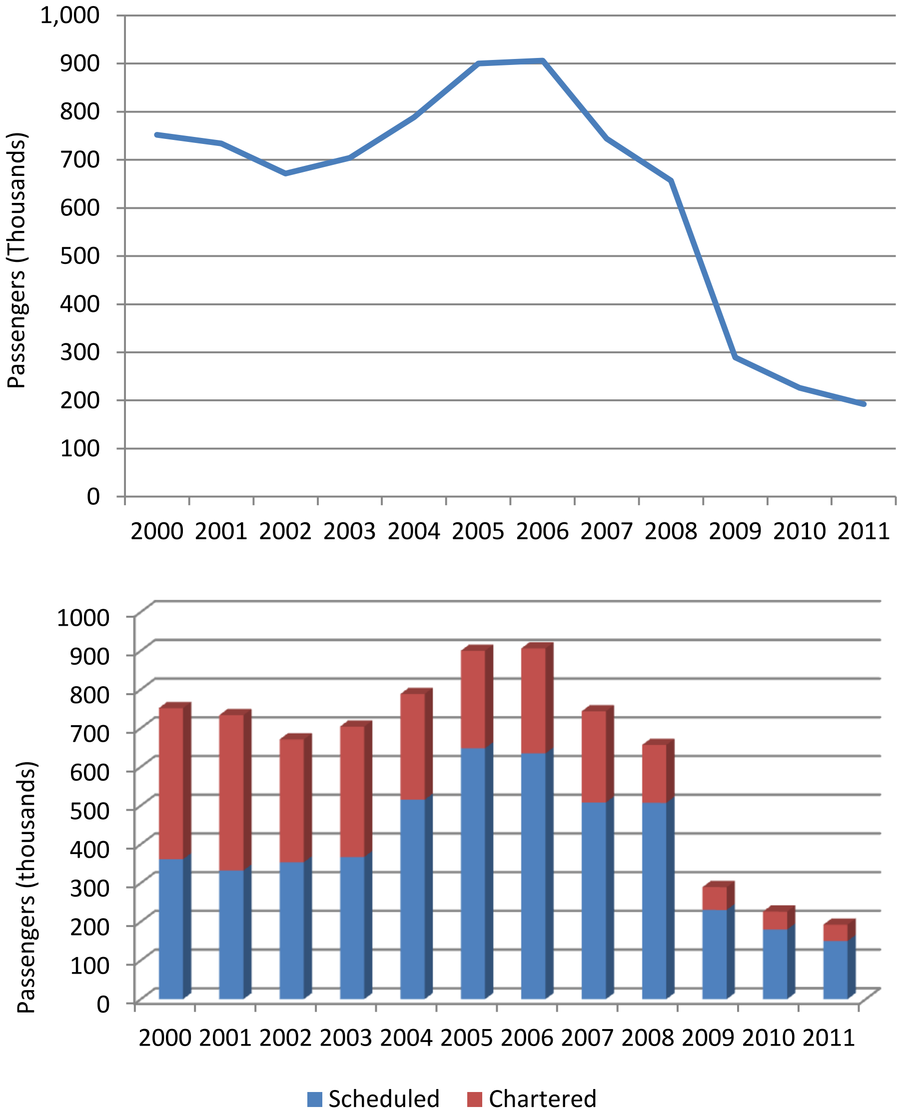
3.4 The airport experienced a significant expansion in passenger numbers from 2002 to 2006. By 2006 passengers using the airport had risen to approximately 906,000 per annum, an increase of 235,000 passengers per annum compared with 2002 levels (+35%). This growth in passenger numbers was supported by the airport's mix of scheduled and chartered services from a number of airlines (e.g. KLM, BMI Baby, Ryanair), as well as holiday companies (e.g. Thomson, First Choice)[7].

3.5 However, from 2006-2008 passenger numbers declined to 657,000 per annum, and have now dropped dramatically to around 192,400 (2011). There are a number of reasons for this contraction at DTVA. This includes; the UK and global recession, airlines going in to administration, aviation sector competitiveness (particularly amongst low-cost carriers driving down costs to be located at regional airports), increased costs of accessing key hub

[7] In particular, this growth was driven by scheduled services provided by KLM to Amsterdam; BMI Baby to London Heathrow; Ryanair to Alicante, Dublin and Girona; and Globespan to Malaga and other Spanish/Portuguese destinations. Holiday operators such as Thomson and First Choice also operated a wide number of chartered flights to European holiday destinations.

airports such as Heathrow[8], and consolidation in the charter flight market. The aviation sector has been dramatically squeezed economically in recent years, leading to a particularly challenging environment for smaller regional airports such as DTVA.

Figure 3-1: Changes in Overall Passenger (PAX) numbers at DTVA and by Flight Type, 2000-2011



Source: CAA

3.6 Following these losses the airport's routes are now predominantly based on two scheduled carriers – KLM flying three times a day to Amsterdam Schiphol, one of Europe's major hub airports, and Eastern Airways flying four times a day to Aberdeen. Connectivity to the Schiphol hub is a major benefit for DTVA given the onward routes available to Europe, the Middle East, North America and Asia, while the Eastern Airways services provides an important link between the Tees Valley process, chemicals and oil and gas sector and Aberdeen. The full list of routes (including seasonal holiday routes) which are available from DTVA include:

[8] Cited by BMI Baby as a key reason why the DTVA-Heathrow link ended.

- KLM to Amsterdam - 3 x daily all year round
- Eastern Airways to Aberdeen - 4 x daily all year round
- Thomson Holidays to Majorca - summer weekly service
- Newmarket Holidays - one off departures to Italy
- Channel Island Travel Services to Jersey - weekly summer service
- Thomson Holidays to Alicante and Tenerife - winter weekly service
- Transun Holidays to Lapland - offer a winter service.

3.7 Given the passenger levels experienced in the past at DTVA (up to around 900,000), there is clearly demand in the Tees Valley and wider North East and North Yorkshire area for international travel. This demand for international travel has not disappeared since the airport's loss of routes. A 2011 survey by the Evening Gazette[9] found that around 70% of respondents would use the airport more if there was a wider selection of routes, particularly to London and Western Europe. Importantly, around 95% of respondents also said that DTVA was either vital or important to the future of Tees Valley.

3.8 Currently sub-regional demand is being picked up by other airports, most notably Newcastle and Leeds-Bradford which offer a much wider selection of carriers and routes, including low-cost options. Research shows that approximately 3.5m people reside within a 60 minute drive time of DTVA (1.1 million within 30 minutes), while there are also 115,000 businesses with 60 minutes of the airport[10]. Key to tapping back in to this local latent demand for DTVA will be growth in carriers and provision of a wider selection of routes.

3.9 With the airport currently making substantial losses, the purchase of the airport by Peel has provided new impetus and direction to turn around its fortunes. Working with TVU and other local partners, Peel have begun to address a number of points on marketing the airport, developing better relationships with airlines and the wider aviation sector to promote DTVA, and in bringing forward proposals for the development of airport land at Southside for employment and other aviation uses to help generate income to support the airport.

[9] www.gazettelive.co.uk/news/interactive/2012/03/22/durham-tees-valley-airport-survey-results-84229-30593275/

[10] DTVA evidence on residential and business catchments, 2011.

4. DTVA – Current Impact

4.1 This section of the report focuses on the current economic impact of Durham Tees Valley Airport (DTVA) on the Tees Valley area[11]. The methodology employed to estimate the current economic impact of the airport has been informed through:

- Data provided by the Airport Manager, Shaun Woods, including a survey of employment based at the airport site (airport company employees as well as tenant's employees), salary costs, and operational and capital expenditure.
- The 2004 airport tenant survey undertaken by Regeneris Consulting – while this new commission has not replicated the survey, the evidence from the 2004 survey (where possible updated appropriately) has helped to inform assumptions used in this assessment.
- Consultations with key businesses at the airport site (e.g. Cobham, Weston Aviation, Camair Freight Solutions).
- Other research on the economic impact of airports.

Types of Economic Impact

4.2 In work on the economic impact of airports, studies typically distinguish between the following main categories of employment and impacts linked to the operation of airports (and their associated income effects)[12]:

- **Direct on-airport employment:** this is employment in businesses whose activity is directly and solely related to the airport and located on the airport operational area.
- **Direct off-airport employment:** jobs in a business whose activity is directly and mainly related to the activities of the airport, but is located outside the airport operational area. It is usual for such employment to be located very close to the airport. Examples typically include airline offices, private general aviation, freight forwarding agents, and flight schools.
- **Indirect employment:** jobs generated in the supply chains from purchases made by businesses in the previous two categories.
- **Induced employment:** jobs supported by the spending of those individuals employed directly or indirectly by the airport.
- **Catalytic or wider impacts:** These impacts can cover a range of issues, including the impact of the airport on investment decisions by companies considering expanding,

[11] The impact area for this assessment is focussed on the Tees Valley area. Research from the 2004 study by Regeneris Consulting sowed that approximately 75% of those employed at the airport resided in the Tees Valley. Others resided in other areas of the North East or North Yorkshire. As the impact area is Tees Valley, clearly some of the economic impacts associated with the airport accrue outside of the area (i.e. as we have assumed around a quarter of related employees reside outside of Tees Valley, albeit in relative close proximity).

[12] In addition airports can also produce employment and income from their construction activity

relocating to or setting up in the area served by the airport, perceptions of an area. These impacts relate to the role of airports as facilitators of economic growth.

4.3 For the purposes of this report the direct (on and off airport), indirect and induced effects are all quantified. The catalytic effects are discussed qualitatively under a range of categories. We have also quantified the GVA impacts of the airport activities.

Direct Employment

4.4 The total direct job estimates presented here were provided by the Airport Company, based on a recent appraisal of their staffing, along with an assessment of the employment associated with terminal operations, and with third party operators[13] at the airport. Regeneris consultations with third parties have confirmed some of these third party estimates.

4.5 On this basis we estimate that there are approximately **637 airport related jobs** currently supported at DTVA. Of these, we estimate that around 15% are part-time, putting the full-time equivalent (FTE) figure at around 595 jobs. In 2004 we estimated that around 680 FTE jobs were supported – a decrease in employment of around 13% (85 FTE jobs).

4.6 Interestingly, employment associated with third party operators at the airport actually accounts for just over **half** of all airport-related employment. Companies such as Cobham (c.110 jobs), SERCO (c.85 jobs) and TNT (c.50 jobs) support around three-quarters of all third party employment. The Airport Company itself only supports around a **fifth** of all airport-related jobs. Some of the employment associated with the terminal operations and airport health and safety is statutorily required (e.g. fire, border agency, police etc), and is required for a civilian airport regardless of passenger levels.

[13] Third parties are defined as those businesses operating at the airport which are not the airport company or companies associated with the terminal's activities. Third parties do include businesses which rely on access to an operational airport, and tenants on the airport estate.

Table 4-1: Scale and nature of employment based at DTVA (May 2012)					
	Total Jobs	Full-Time	Part-Time	Total FTEs	% of Total FTEs
Airport Company Employment	113	109	4	111	19%
Employment associated with Terminal Operations	207	158	49	183	31%
Airline/Handling Agents	*61*	*40*	*21*	*50*	
Concessions	*44*	*27*	*17*	*36*	
Security/Border Agency/Police	*86*	*77*	*9*	*81*	
*Other terminal activity**	*16*	*14*	*2*	*15*	
Employment associated with third party operators at the Airport**	317	284	33	300	51%
Total Direct Employment linked to the Airport	**637**	**551**	**86**	**594**	**100%**

Source: DTVA Ltd/Regeneris Consulting
Note: Estimates of part-time and full-time jobs is informed by the 2004 survey. This information was not available without further survey work being undertaken. * Other terminal activity relates to taxis and fuel providers. ** Third parties relates to companies such as Cobham, Weston Aviation, TNT, SERCO, Flying Schools.

4.7 The Airport Company has provided information on the average earnings of those it employs. Unlike the 2004 study a tenant survey has not been undertaken. The 2004 survey showed that the average gross wage for full-time employees employed directly at the airport (both on and off airport) was approximately 50% above the gross annual wage for the Tees Valley. Using the latest earnings data[14] for the Tees Valley local authorities, this suggests an average gross annual wage of approximately £35,000. Taken together with the Airport company information, we estimate that all companies at the airport generate an annual gross wages and salaries bill of around £20m.

Table 4-2: Earnings of those in employment based at DTVA (estimated for 2012)	
	DTVA
Total staff (FTE)	594
Total Annual Gross Salary Bill (£ms)	£19.6m

Source: DTVA Ltd, 2004 Regeneris Airport Tenant Survey & 2011 ONS ASHE data for the Tees Valley, Regeneris calculations

Indirect and Induced Impacts

4.8 We have carried out an assessment of indirect impacts based on analysis of actual spend by the Airport Company. This is useful in providing an assessment of how the Airport Company itself, through its expenditure, supports employment in the rest of the Tees Valley. Their latest estimates show an overall spend of £6.5m (operational and capital) in the last financial year. The Airport Company consider that a similar proportion of overall expenditure is still

[14] ASHE, Annual Survey of Hours & Earnings, 2011. 50% uplift applied to median earnings for the Tees Valley area (£23,300).

spent in the Tees Valley area as in 2004. On this basis we have assumed that approximately 80% of expenditure leaks out of the Tees Valley area, with 20% spent with firms locally, equating to an indirect multiplier of around 0.12 (12 jobs in the supply chain for every 100 direct jobs).

Table 4-3: Indirect Employment effects, 2012

	Airport Company
Total Expenditure £ms	£6.5
Expenditure with suppliers in sub-regional area £ms	£1.3 (20%)
Jobs with suppliers in Tees Valley (first round)	12.3
Jobs with suppliers in Tees Valley (first and second round)	13.5
Estimated overall indirect multiplier	0.12*

Source: Information provided by the Airport Company and Regeneris Consulting estimates
Note: jobs calculated by using turnover per worker for all sectors at the UK level £106,000 (ONS, Annual Business Survey). *Indirect multiplier calculated as 13.5 divided by 113 (airport company employment).

4.9 If we apply the indirect multiplier based on the purchasing patterns of the Airport Company across the range of companies based at the airport, this would suggest total indirect employment of approximately 70 FTE jobs (594 x 0.12). The 0.12 indirect multiplier compares to and would be consistent with the range of benchmark combined indirect and induced multipliers of 0.25-0.35 (based on low and higher-end multipliers for a sub-region of this size of population[15]). We estimate that approximately 445 FTE jobs (480 jobs in total) are taken by Tees Valley residents (applying a leakage rate of 25%). Applying our assumed combined indirect and induced multipliers, we assess the current overall (direct, indirect and induced) employment impact of DTVA to be approximately 560 – 600 FTE jobs (600-645 total jobs) at the Tees Valley level. The indirect and induced component supports around 110-155 FTE jobs.

Table 4-4: DTVA Estimated Employment Impacts (Direct, Indirect and Induced)

	Lower multiplier		Higher multiplier	
Tees Valley – assumed combined indirect and induced multipliers	0.25		0.35	
	FTEs	All Jobs	FTEs	All Jobs
Estimated Direct Jobs	594	637	594	637
Direct jobs taken by TV residents*	445	478	445	478
Indirect & Induced Employment	111	119	156	167
All Employment impacts at the TV level	557	597	601	645

Note: applying a 25% leakage factor for jobs taken by workers from outside Tees Valley (albeit from within the North East and North Yorkshire). This was identified within the 2004 employee survey (this has not been updated). Source: Regeneris Consulting estimates

15 Regeneris Consulting benchmarks drawn from: *BIS Occasional Paper No. 1, Research to improve the assessment of additionality*, BIS October 2009; *Additionality Guide –a Standard Approach to Assessing the Additional Impact of Interventions*, English Partnership 2008

GVA Impacts

4.10 To estimate Gross Value Added (GVA) impacts we have used national average GVA per employee for the Air Transport sector[16] of £62,800 to estimate the likely GVA contribution of the airport. We estimate that the GVA contribution is currently around £37m. This level of GVA represents roughly 0.4% of GVA of the Tees Valley economy. In 2004 the airport accounted for around 0.6% of the area's total GVA. This fall can be attributed to the decline in employment at the airport over this period, and overall GVA growth over this period[17].

Wider Impacts of the Airport

4.11 To understand the wider set of impacts, or the catalytic effects, which DTVA can have for the Tees Valley area, we have drawn on existing research undertaken by local partners[18], as well as supplementing this with selective business consultations with Tees Valley businesses.

4.12 One key piece of research commissioned in 2009 by DTVA Ltd, Tees Valley Regeneration (TVR), and One North East from Marketwise Strategies, was a business survey (large businesses and SMEs) to better understand business opinion of the airport, assess future demand, and to inform marketing activity. The aim was to establish whether the existing flight destinations available from DTVA were valued by key businesses within the Tees Valley, as well as the wider business community of the North East. The research also assessed current international activity among businesses, destinations, and future demand for new destinations.

4.13 Business consultations were undertaken by Regeneris Consulting mainly over the telephone during a two-week period in May 2012. In particular, the focus was on consulting with a number of businesses that undertake a considerable level of international travel. TVU provided contact details for businesses which fitted this criterion from a range of sectors, including the process industries and chemicals sector, engineering and advanced manufacturing, and professional/technical services companies[19]. Consultations also took place with sector representative organisations (e.g. NEPIC[20]), the North East Chamber of Commerce, and local authority partners. A full list of consultees is appended at the end of the report as Appendix A.

[16] This SIC Group 51 covers all air transportation including passengers and freight. In 2009, the latest available data, this was £62,800 per employee

[17] Latest GVA estimates for the Tees Valley are 2009 based.

[18] While somewhat out of date in light of the changes experienced at DTVA, particularly the loss of the Heathrow route, the survey still provides some useful messages and themes about the role of the airport for local businesses. The survey was of 117 Tees Valley companies (51 large businesses and 66 SMEs). Respondents were relatively evenly split between manufacturing, chemicals, energy, construction, and professional services companies.

[19] TVU's John Leer and Rory Sherwood-Parkin provided contact details for businesses

[20] We consulted with NEPIC - The North East of England Process Industry Cluster (Paul Butler and Stan Higgins). We also tried to arrange a consultation with Joanne Leng from NOF Energy, but it has not been possible to arrange this.

International Connectivity & Trade

4.14 The 2009 business survey highlighted that 78% of major companies in the Tees Valley traded internationally and international trade was important or very important to the majority of these businesses. Despite the challenging economic climate and recession across many areas of the world, three-quarters of those surveyed anticipated that international trade would increase or at least stay the same over the two years following the survey. This is perhaps not too surprising given the poor health of the UK economy. The recent business consultations have reiterated this view, with international business continuing to form a major share of the work undertaken by a range of companies in the area[21].

4.15 Given the nature of many of the businesses operating in the Tees Valley area, many within the chemical and process industries, oil gas and energy sectors, and advanced manufacturing, access to an airport which provides connectivity and accessibility to international markets is seen as critical. In particular, businesses stated that access to hub airports such as Amsterdam Schiphol, London Heathrow, Frankfurt, and Paris, with their array of carriers and onward destinations is important to them. Our consultations have shown that many businesses find airport accessibility critical for a number of reasons including:

- Access to key air transport hubs for onward travel to a wide range of destinations to win work and to serve clients.
- The ability to get employees to overseas offices and headquarters quickly, efficiently, and at a cost which is acceptable.
- Supplying skilled employees to the right locations to serve clients needs at short notice.
- The ability to host client and investor visits.

4.16 At present the only route offered by DTVA to access onward international flights is operated by KLM to Amsterdam (Eastern Airways operate a service to Aberdeen). Our consultations have shown that businesses in the Tees Valley value this access to the Schiphol hub and its onward connections[22]. In the main, businesses commented that the three flights per day were spread well, with good return options, while it is the convenience and proximity to businesses which was highlighted as a major benefit to local businesses, cutting down on travel time. As well as being convenient, businesses commented that the airport was easy to access and that it passenger processing was quick and efficient – often a factor which can add considerable time to a journey[23].

4.17 However, businesses are also conscious of a range of factors which influence their departure

[21] The 2009 survey highlighted that major companies in the area were trading across Europe (23% of respondents), the USA (15%), the Middle East (11%). Smaller businesses tended to trade significantly in Europe (90% of respondents) but also in the US, Far East and Middle East. Recent business consultations have also highlighted that access to markets in Asia, the sub-continent, and Latin America are important to businesses in the Tees Valley.

[22] However, many businesses also commented that the lack of connectivity to London Heathrow was a major loss for the area. Both in terms of accessibility to onward flights, and in connecting flights to the Tees Valley for their visiting clients.

[23] These are similar messages to those identified in 2009.

point. Our consultations have shown that these can include:

- Flight costs[24]
- Choice of onward destinations and routes/carriers
- Transit times (lay-over times) at a hub airport
- Time taken to access the airport and clear to the gate.

4.18 Given that Newcastle Airport is approximately 1 hour away and Leeds Bradford 1 hour 30 (with Manchester airport 2 hours 20 minutes away), the range of international flights available to meet Tees Valley businesses' needs are also well served by these airports and airlines, albeit with greater airport travel times involved. With direct access to only one key international hub (since the loss of the Heathrow link from BMI Baby), the range of routes and carriers to European destinations and hub airports for onward travel is currently a major factor in why business travel has fallen away from DTVA to other airport locations within an acceptable drive/travel time.

4.19 Our business consultations have highlighted that there is demand within the Tees Valley to undertake more of their international air travel from DTVA. The airport has some clear location and time-saving benefits for local businesses, which many businesses consider as competitive advantages. However, a key message was that international business and trade is still taking place in the Tees Valley area, despite the limited route offer from DTVA at present. Where it is not possible to travel from DTVA, businesses have been making alternative airport arrangements which best suit their business/employee/client needs.

4.20 The 2009 survey showed that amongst larger businesses the key markets accessed by major companies were Europe (23% of respondents), the US (15%), and the Middle East (11%). Our consultations have also shown that access to Asia, India and Latin America are also key routes for businesses in the Tees Valley. The following table is based on the 2009 business survey response data. It highlights the number of flights taken in 2009 by Tees Valley businesses. Over a third of the businesses surveyed undertook 50+ flights per year, while just under half took between 10-50 flights each year. While DTVA share of this has fallen in recent years, the market for international travel in the area is currently still strong.

[24] Many businesses commented that flight costs are a key factor in decisions made on airport departure. Anecdotal evidence suggests that for day travel to Europe low cost carriers at Newcastle and Leeds Bradford have more competitive pricing structures than those offered by KLM. However, for longer and onward travel, the KLM service can provide better value for money, with flight costs bundled together. Although Newcastle Airport can also provide this service.

Table 4-5: Larger Businesses in the Tees Valley – Flight Frequency, 2009	
Frequency of Flights	Proportion (%)
Zero	2%
1 to 10	17%
11 to 50	47%
51 to 100	19%
>100	15%
Total	100%
Note: This survey evidence was not grossed up for the wider area so just provides a snapshot of flight frequency. Source: TVR/DTVA Business Survey, 2009	

4.21 The following section provides some brief business examples from key sectors in the Tees Valley, highlighting the importance of international travel and their current use of DTVA.

DTVA Supporting Key Sectors across the Tees Valley

4.22 TVU's research has shown that the process industries - that is the chemical, polymer, and pharmaceutical sectors - make up more than half of the local economy and employ thousands of staff across the Tees Valley. The Tees Valley is also home to the internationally renowned Wilton Centre[25] – which includes international process industry businesses such as SABIC and Lucite. As well as this strength, the Tees Valley also has a growing energy sector (including renewables). The area is also home to advanced manufacturing and engineering businesses. It is these businesses which play an important role in supporting the process and manufacturing industries, providing a range of professional and technical services here and overseas.

4.23 The 2009 Business Survey highlighted that these key sectors were undertaking a considerable volume of international travel (both out-bound and inbound). While DTVA accounted for some of this travel partners in the region were keen to better understand their use of DTVA and their demands/drivers for air-travel. As part of this assessment, we have spoken with a select number of businesses which operate in the process industries, energy, and engineering and technical services sectors. The following text boxes provide a brief summary of some examples of their use and views of DTVA.

[25] Opened in 1974 by ICI and developed as a world-class research and technology facility for its petrochemicals, plastics and advanced materials businesses. Now privately owned, it is now home to over 60 businesses including SMEs and multi-nationals. A centre of excellence for the Tees Valley in a global market place.

Tracerco – Oil and Gas Technical Services Company

Tracerco provides unique and specialised detection, diagnostic and measurement solutions for the oil and gas sector. It has 170 staff based at its Billingham HQ. The company sends teams out to diagnose problems for clients all over the world. They therefore rely heavily on having access to airports to respond quickly to client needs. They also work extensively in Aberdeen and use the Eastern Airways services regularly (10-20 employees per month at DTVA). On average Tracerco generates around 20-30 flights per month as a result of sending teams out to clients overseas. They also receive a similar number of client visits to their HQ per month. Typically most of these flights go via Newcastle, given the greater range of flights and operators. While the company does promote the use of DTVA, due to its convenience and reduced non-air travel-time, accessibility to their client base and global offices (28 in total) takes precedence. The lack of access to other hub airports (London, Paris, Frankfurt) as well as longer transit times via Schiphol, for some destinations, meant that DTVA has seen a drop off in Tracerco business travel in recent years.

Wilton Engineering Ltd – Engineering and Advanced Manufacturing

Wilton Engineering (part of the wider Wilton Group) provide design, project management and fabrication services for the marine, offshore and process industries. Their HQ is in Teesside employing around 500; with a further 200 in Aberdeen (the Eastern Airways link is important). The company employs a wide range of skilled staff in the Tees Valley, including structural engineers, planners, welders, fitters, as well as finance, HR and administration staff.

DTVA is considered convenient and accessible for executives and employees of Wilton, particularly given its access to Amsterdam, for onward connections (e.g. Dubai, Houston, Scandinavia), and Aberdeen. While Wilton actively promote the use of DTVA, for some journeys the range of routes available, as well as timings and costs, result in Wilton looking to other airports in the North. Typically this is Newcastle Airport and Leeds-Bradford, who are served by low-cost carriers. Given their links to Aberdeen, the Eastern Flight is well used by employees most weeks, and provides significantly better than train access would be, or by flying from Newcastle.

Jacobs Engineering – International Constructing/Engineering Practice

Jacobs undertake process contracting, designing and building process industry plant and equipment. They also undertake engineering and construction work within the nuclear and biomass sectors. Based in Stockton on Tees and employing around 400 people, the Jacobs practice undertakes work within the region, across the rest of the UK and internationally. Key to their business is having the ability to quickly and conveniently get employees to clients and their other offices. Recent destinations have included Asia, USA (where their global HQ is located), and South Africa. Employees at Jacobs have been using DTVA much less in recent years. The KLM service to Schiphol is still used by staff where possible, however, Newcastle provides, in their view, a better service and route offering. In terms of clients visiting their offices, again Newcastle appears to be the preferred entry point. This links to the fact that Newcastle has a greater number of connections, as well as a Heathrow link. Often clients will be undertaking other business as part of the same trip.

Impact on International Trade - The Role of Cargo and Supporting Business Needs

4.24 With the length and width of the runway DTVA[26], the airport can accommodate a wide range of cargo aircraft currently in operation, including the Boeing 747 and the AN124. With the ability to provide 24 hour operations, when requested, the airport has some significant capacity and operational advantages for cargo services.

4.25 In 2000 the airport handled around 3,000 tonnes of cargo, including cargo services for companies such as TNT (now just a road-based operation located at a hangar at the airport) and KLM. However, since this high-mark cargo tonnage has significantly declined (to just around 300 tonnes in 2009[27]), which led to freight services being discontinued at DTVA.

4.26 While exports are currently not possible at DTVA[28], the upshot of losing the importation route via DTVA for some businesses in the Tees Valley resulted in additional costs and time inefficiencies (additional days in some circumstances). Consultations have shown that for some businesses in the area, important and time-critical goods and components were being imported into the UK via other airports (e.g. London Heathrow), and then being transported to the north via road (adding road miles and costs for the business). If these goods and components were handled by a Newcastle based freight company, for example, the goods could pass the Tees Valley area, to then be handled and sent to their final destination back in the Tees Valley.

4.27 Following negotiations involving DTVA Ltd and Camair Freight Solutions[29] with KLM, import services resumed at DTVA in 2011. Approximately 2 tonnes of cargo now arrive at DTVA via KLM flights each month[30], since the return of the service, demonstrating the latent demand in the Tees Valley for this type of service. This cargo is handled by Camair as they are the last remaining freight forwarding company at DTVA. Many other freight forwarders closed their operations at DTVA, or concentrated their operations at other regional airports, including Newcastle over recent decades.

4.28 Consultations with Camair Freight Solutions and businesses within the Tees Valley have shown that an airport which has the capabilities to handle cargo traffic is a real benefit for the area. In particular, it is a benefit for those businesses operating in sectors which rely on receiving goods and components under short-timeframes. Industries in the Tees Valley, including shipping[31], petro-chemical and pharmaceutical, often require fast shipping of smaller, high value items. The availability of a cargo service via the KLM Amsterdam flights in

[26] The runway is approximately 2,291 metres in length, and 46m wide (DTVA Ltd)

[27] CAA statistics

[28] The airport cannot be used by businesses in the Tees Valley area to export goods via scheduled flight carriers, such as KLM. The airport does not have the facilities and processes in place to provide this service.

[29] Camair Freight Solutions are part of the Casper Shipping group, Teesside's biggest shipping agency. Casper Shipping handle over 130 vessels a month at Teesport

[30] Source: DTVA Ltd Management Team/Camair Freight Solutions

[31] PD Ports – it has not been possible to speak with PD Ports given the availability of key individuals. We would like to better understand their current use of the airport (as well as the use of the airport by ship operators they handle for staff and parts links), as well as their thoughts on improving linkages between the port and the airport for cargo.

to DTVA is appealing for local businesses. Camair are currently working with their clients, as well as supporting wider marketing initiatives, to drive-up cargo levels at DTVA. We also understand that Camair are keen to work with the airport company on any proposals brought forward related to cargo activity at DTVA.

Impact on Sub-Regional Competitiveness

4.29 The airport's three KLM flights per day to Amsterdam's Schiphol airport provide direct international access for Tees Valley businesses to one of the busiest and well-connected hub airports in Europe. Connecting flights onwards to other parts of Europe, the Middle East, Asia, and North America can be made. While these flights provide access to international markets for Tees Valley businesses, the KLM access from Schiphol to DTVA also provides an important route for international workers to come to work in the Tees Valley. The route also provides access for investors and the international clients of Tees Valley businesses coming in to the local area to do business.

4.30 DTVA serves one of the UK's important industrial complexes, including around a third of the UK's process industries, as well as sizeable engineering, advanced manufacturing, and energy companies. Research by TVU[32] has highlighted that approximately 60% of the area's major businesses are foreign owned, with just under half of these with owners outside of Europe (e.g. the Middle East, US, Japan). Clearly access in to the Tees Valley area is essential both for the executives based in the area and for overseas senior management. For some companies this can be is particularly important in terms of business investment decisions.

4.31 The business consultations have highlighted that, where possible, many businesses try to use DTVA to fly out from, or to bring clients and investors to the region[33], due to its proximity and access to Schiphol. However, a lack of alternative routes to DTVA, particularly links to other hubs such as Heathrow, as well as relatively good access to the Tees Valley from other airports in the region (e.g. Newcastle), mean that business needs can also be served by alternative airports. While this can mean additional travel time once in the UK (for businesses, clients and investors), chauffeur services or first class train travel are typically used by businesses to make this process easier[34].

4.32 The business consultations showed that Tees Valley businesses were still able to compete internationally, and that clients and owners were able to visit the area, albeit sometimes via less-direct routes[35]. From discussions with TVU, businesses and other stakeholders, there is no clear evidence that the Tees Valley area has been missing out on inward investment opportunities as a result of airport accessibility issues at DTVA. Nonetheless, business and other consultees have commented that an airport with a wider selection of carriers and route availability provides a much more **robust proposition** to a potential inward investor, and would considerably help to improve the **perception of the Tees Valley** area as a place

[32] TVU, 2012

[33] Several businesses commented that they actively promote the use of DTVA to their employees and when inviting clients and visitors from overseas. There is often a perception issue and lack of understanding about the airports.

[34] Airlines such as Emirates at Newcastle also provided chauffeur services for business class passengers.

[35] This also applies to trade missions visiting the region. The Valley received around 20 trade missions in the last year and sent a similar number overseas. Where possible DTVA is used, but often trade missions to the area are part of a wider agenda of events, so this is not always possible (NE Chamber of Commerce).

for international business.

4.33 The Tees Valley is also home to Teesside University, with Durham University also in close proximity. The attraction of the Tees Valley area for international students, education conferences and seminars, and international research exercises is aided by the presence of an international airport at DTVA. However, consultations with the University of Teesside have shown that while some students and visitors use the DTVA KLM services, predominately Newcastle Airport is the route of choice into the area, either directly or through connections from London Heathrow[36]. Given the lack of routes available into the area, the airport currently under-performs in its role as a facilitator for bringing academic expertise and students into the Tees Valley area.

Supporting Employment, and particularly Highly skilled Employment, via Third Parties at the Airport

4.34 The quantitative economic impact analysis highlighted that third parties[37] based at the DTVA support around half of all employment at the airport (approximately 320 jobs). Clearly this ratio has increased in recent years given the reductions in staffing associated with the airport's operation. Nonetheless, the mix of employment supported by third parties is an important element of the overall economic impact of the airport in the Tees Valley. Third parties cover a range of sectors and a range of occupations/skills levels (low, intermediate and high level skills). For example:

- Cobham employs around 110 highly skilled staff, and has a dedicated hangar airside to facilitate its military flight training and airport inspections and diagnostics teams. Without the presence of the airport, and the flexible arrangements in place with the airport management to facilitate their operations, this business would have to relocate.

- TNT has a hangar based at DTVA which supports road-based freight and supports around 50 jobs. TNT used to have air-based cargo coming to DTVA, but this stopped some years ago.

- SERCO has its International Fire Training Centre, a facility which attracts users from around the UK and internationally for fire training courses. This facility supports around 80 jobs, and is considered a centre of excellence in its field.

- Weston Aviation – five jobs are supported providing handling services for private aviation users coming to the region. Weston is the only provider at DTVA which handles private aviation activity coming in to the area (e.g. executive business travel, VIP services for high wealth individuals). Private aviation (including private business and leisure aviation) at DTVA currently benefits from the capacity available and the

[36] Teesside University's anecdotal evidence shows that a high proportion of international visitors arrive in the Tees Valley through other entry points; particularly Newcastle Airport (Keith Brown, Director International Development, Teesside University). The loss of the Heathrow link to DTVA has meant that visitors arriving via Heathrow only have Newcastle as a connecting option.

[37] Third parties are defined as those businesses operating at the airport which are not the airport company or companies associated with the terminal's activities. Third parties do include businesses which rely on access to an operational airport, and tenants on the airport estate.

ease of access to get airborne, compared with other airports.

- Camair – a freight forwarding company, supporting four jobs, for both road-based and air freight coming into the Tees Valley area. Camair is the only freight forwarded remaining at DTVA, and handles all cargo coming via the KLM flights.

- Emergency Services – the Air ambulance and Police Air Support units are based at DTVA, supporting around 45 jobs.

- Flying Schools – two flying schools are based at DTVA supporting around 10 jobs.

Cobham

Cobham is an international company engaged in the development, delivery and support of leading edge aerospace and defence systems. The company has two teams based at DTVA, airside for runway access, in a purpose built hangar developed in the mid 1990s. Cobham operate their Engineering and Aviation Services team – primarily focussed on servicing an MoD contract to provide warfare training to RAF squadrons in military airspace over the North Sea; as well as operating their Flight Inspection team – who operate all over the UK and overseas undertaking airfield calibrations (e.g. radar, flight instrumentation).

Cobham has gradually grown its operation, and now employs approximately 110 staff at DTVA. The majority of these employees are highly skilled and well-paid operations staff, engineers or flight crew (captain, first officers). While many staff are ex-air force, given the proximity to current and former RAF bases, most employees reside within the Tees Valley area, with some across the wider North East or North Yorkshire areas.

Cobham chose to develop their operations at DTVA in the mid 1990's for some key reasons:

- The airport was well positioned for key RAF bases in England and Scotland as well as MOD airspace. This provides their clients with short transit time to the training airspace over the North Sea, ensuring training time is maximised (approximately 2hours).
- A civilian airport base has many advantages of a private airfield, with long operating hours (and flexibilities offered by the Airport operators for night flying exercises), as well as air traffic control, fire and emergency services.
- The weather in the area means that there are, on average, fewer days lost to inclement weather. With the need to fly 3,500 hours for their MOD contract, as well as service airfields, non-flying time needs to be kept to a minimum.

The past growth of Cobham here, and future success, is intrinsically linked to the future of DTVA. Without an operational airfield Cobham would be unable to fulfil their contracts. If the airport closed we understand that Cobham would have to evaluate alternative locations outside of the area, with the likelihood that the majority of skilled staff would also look to relocate to remain with the organisation, given the specificity of their skills and roles.

Impact of DTVA on supporting tourism and leisure in Tees Valley

4.35 There is little empirical evidence on the current impact of DTVA in supporting tourism and leisure activity (i.e. visitors attributable to the activities of the airport) in the Tees Valley. While local partners the Tees Valley area have deployed resources in recent times to promote tourism in the area, it is not clear that the outcome of this has been on attracting international visitors flying directly in to Tees Valley.

4.36 Our judgement is that while there are a range of important urban and natural attractions (e.g. the Cleveland hills) within the Tees Valley area, as well as access to York and the North

Yorkshire Moors, which are popular both domestically and with overseas visitors to the UK who may visit these as part of their stay, the airport is currently not a significant driver of impact for tourism in Tees Valley. While this applies from a schedules and chartered flights perspective, it should be noted that Weston Aviation handles some private leisure traffic at DTVA. In particular, they handle a number of grouse shooting parties from across the UK and overseas that travel via DTVA during the shooting season[38].

4.37 Inbound international tourism does occur via DTVA. However, it is very modest and is likely to have actually contracted further in recent years given the route closures experienced at DTVA. Data from the CAA Passenger Survey in 2009 showed that only around 22,000 international leisure visitors flew into DTVA. For comparison, Newcastle Airport has approximately 12 times as many international tourists during the same period.

Table 4-6: International Leisure Travel from and to DTVA

	International Leisure			
	UK Passengers (outbound)		Foreign Passengers (inbound)	
	Pax	% of all passengers	Pax	% of all passengers
Durham Tees Valley	157,000	55.6	22,000	7.6
Comparator: Newcastle	*2,534,000*	*56.0*	*281,000*	*6.2*
Comparator: Manchester	*11,694,000*	*63.9*	*2,030,000*	*11.1*

Note: Leeds-Bradford Airport not surveyed in the 2009 report
Source: CAA, Passenger Survey Report, 2009

[38] While these groups could access the shooting areas from other airports, clearly the location of DTVA enables parties to spend longer visiting the area and less time travelling.

5. DVTA - Future Impact of the Airport & Associated Development

5.1 This section of the report focuses on the future economic impact of the airport based upon a number of scenarios. The scenarios have been informed by discussions with the Durham Tees Valley Airport Joint Development Working Group. The scenarios were developed to meet the needs of both TVU, with their requirements for better understanding the economic potential of the airport and in promoting the airport, and to help inform Peel's Regional Growth Fund (RGF) application for Round 3 in June 2012.

Impact Scenarios

5.2 The agreed impact scenarios are:

- **1. Reference Case 'the Do-Nothing':** This scenario assumes the current economic impact of the airport is maintained going forward. It also sets out the scale of impacts which would be lost to the Tees Valley area if the Airport closed (see Section 3 current impacts).

- **2. Passenger growth:** This scenario sets out the potential economic impacts from annual passenger numbers growing to 400,000 over the next 10 years (an additional 207,600 passengers). This is an aspirational scenario based on a return to passenger numbers to half of 2004 levels.

- **3. Land development at Southside:** This scenario models the economic impact of the Southside development enabled by RGF infrastructure funding. It assesses the total scheme impacts once fully developed and occupied, as well as phased impacts. The total scheme aims to bring forward around 176,900 sqm of industrial and logistics warehousing space, with some airside access and apron space.

- **4. Current impact of the Airport plus Southside development impacts:** The current impact of the airport remains relatively constant going forward (i.e. the existing impacts continue (impacts are safeguarded) as a result of the Southside development securing the viability of the Airport), plus the Southside development employment impacts.

- **5. Passenger growth to 400,000 per annum and development of Southside:** This scenario is the most positive, focussing on both passenger growth driving additional economic impacts for Tees Valley, as well as the impacts associated with the Southside development (once fully developed out and occupied).

Drivers of Impact

5.3 In assessing the future economic impact we have developed the scenarios by considering two main drivers of impact. These are:

- Passengers using the airport

- Property development on airport land

Passenger Related

5.4 In undertaking assessments of the future economic impact of airports it is standard practice to apply a relevant employment density to forecast passenger growth. In assessments we have undertaken in the past, for DTVA and other airports, there are two kinds of employment densities we have typically used. One relates direct airport employment (essentially directed employment located at the airport) to passenger numbers; while the second relates direct employment to 'work-load units'. The idea of a work load unit is to take account of cargo traffic, which can be very much more significant at some airports than others. To put cargo and passenger traffic on a common basis in terms of their employment creational potential, 100,000 tonnes of cargo traffic is treated as 1 million passengers per annum.

5.5 The assumption behind these principles is that with other things being equal, more passengers or more cargo would require more employment based at the airport (across a range of activities). However, given the structural changes within the aviation sector over the last decade or so, there have been significant productivity gains (i.e. employment savings at airports) due to changes in aircrafts, greater automation of passengers and cargo, as well as the now mature low-cost market within the UK driving down costs. These are important considerations when analysing the employment impacts of airports, particularly when considering smaller regional airports where a different mix of activities can often take place.

5.6 Research undertaken across European airports by ACI Europe in 2004[39] indicates that the average number of jobs per 1,000 work load units is approximately 925 jobs[40]. The research team at ACI Europe indicate that this study has not been replicated or updated, and thus this remains the most robust assessment of airport employment densities. On this basis, the evidence has once again been referred to in this assessment in light of our impact estimates based on passenger growth.

5.7 Given the significant decline in passengers at DTVA over recent years (see earlier analysis in section 2), TVU requested that one of the scenarios considered in the assessment was driven by passenger growth. With the extremely challenging economic climate, as well as a much more consolidated and changing aviation sector since the previous DTVA impact assessment was undertaken in 2004, a scenario was agreed which would model the return of passenger numbers to approximately 400,000 per annum (approximately half of the achieved 2004 level).

5.8 Without any formal forecasts undertaken on the aviation market for DTVA, this is purely an aspirational scenario for partners, to enable them to better understand the future impact of the airport on the Tees Valley economy. Employment associated with cargo has not been considered here, as we have assumed that some of the employment associated with the property development scheme at Southside would be linked to any additional growth in

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[39] ACI Europe and York Aviation, *Social and Economic Impact of Airports in Europe*(2004)

[40] The ACI research refers to jobs and not FTE jobs.

cargo at DTVA in the future[41].

Property Development Related

5.9 DTVA Ltd retained their land-holdings when they sold the Airport to VAS. Now the airport is back in their ownership, DTVA Ltd are progressing with revised plans to develop a new Industrial and Logistics Park on land to the south of the airport (referred to as Southside), with some potential airside linkages for freight/cargo operations. This scheme would come forward at DTVA if new road and associated infrastructure can be funded to open the site up for development. DTVA Ltd is seeking public-sector grant support, via Round 3 of the Regional Growth Fund (RGF), to assist with the costs of delivering the infrastructure element of the scheme. This bid will be submitted by the 13th June 2012.

5.10 Our assessment of the future impact of the airport also focuses on the potential economic impact of developing Southside, both in construction employment and employment associated with future occupiers. Our methodology for this is as follows:

- DTVA Ltd and the consultant team provided a development schedule for the site based on updated development vision for the site. Developed by URS and incorporating work from Fairhursts, this schedule sets out the phasing of the scheme (Phases 1-4), plots, floorspaces, and end-uses (e.g. B2, B8).
- Construction cost estimates have been prepared by Gleeds for the infrastructure costs, and the costs associated with building the units. We have used these estimates to estimate the level of construction employment associated with the total scheme.
- Using the estimated floorspaces (gross-internal area in the main) and type of space (B use-classes), we have applied standard floorspace employment densities. These have been applied using the HCA's Employment Densities Guide[42].
- Without any revised property market analysis, we have estimated the gross employment impacts based on the whole of the scheme being developed out (in total and by phase) and fully occupied. We have also assessed the overall headline impacts based on a void level of 15% (85% occupation) for comparison. We have also estimated the range of skill levels associated with the logistics park.
- Following the estimation of the gross employment impacts, we have made assumptions on the net employment impacts of the Southside development scheme for total net jobs in Tees Valley. We have assumed the following for deadweight, displacement and multiplier effects[43]:

[41] This assumption has been made given the nature of the scheme proposed by DTVA Ltd at Southside (logistics/distribution) and to avoid any issues of double-counting.

[42] HCA, 2010. *Employment Densities Guide*, 2nd Edition. We have applied an employment density of 36 sqm per FTE for B2, 80sqm for B8, and 12 sqm for a limited amount of B1 space.

[43] We have reviewed the assumptions made by Genecon in the 2007 Southside Business Park Economic Appraisal. We have updated these, where appropriate, but in the main the gross to net assumptions are broadly of a similar magnitude.

- Deadweight: We have assumed that deadweight is zero. The development appraisals show that public sector grant is required to fund the infrastructure development to bring the site forward for employment uses. Without this public grant support, the Southside scheme does not stack-up and would not progress.

- Displacement: We have assumed a 35% displacement rate for the scheme at the Tees Valley level. This is on the basis that the scheme is more likely to attract new businesses from outside of the area; however, we have made an allowance that some local businesses may chose to also locate here.

- Multipliers: In line with HCA guidance on multipliers, we have assumed a multiplier of 1.25 for the Tees Valley area – this is at the lower end of the scale used in the current impact assessment. We have applied a multiplier from the lower range as we have assumed that the majority of the jobs created will be within low to medium level wage group categories, thus depressing the potential induced effects. The high level of B8 use will also tend to generate lower levels of supply chain linkages in to the local economy, limiting indirect employment effects.

- We have also estimated and presented the total net employment impacts for the Tees Valley area to take account of leakage. We have assumed that approximately 25% of all jobs could be taken by people from outside of Tees Valley. This is in line with our assumption about existing airport related employment.

Scenario-based Impacts

1. Reference Case/Airport Closes

5.11 This scenario refers to the headline economic impacts of the airport set out in Section 3. The airport currently directly supports around 595 FTE jobs in Tees Valley (around 640 jobs in total). We estimate that a further 110-160 FTE jobs are supported in the Tees Valley area either indirectly or through induced expenditure. The GVA contribution of those jobs directly associated with on and off-airport employment is estimated at around £37m.

5.12 If the airport did close these economic benefits would largely be lost to the Tees Valley economy. We estimate that of the near 600 jobs linked to on and off airport employment activities, the majority of these are tied to having an operational airfield, or from being tenants of the airport and the freedoms this brings for their activities (e.g. Serco international fire training for the aviation sector, Cobham). Our analysis indicates that TNT, who employ around 50 staff, could find potentially find alternative accommodation in Tees Valley. All other third party occupiers significantly rely on an operational airport.

2. Passenger Growth Scenario

5.13 This scenario is focussed on DTVA being able to grow its passenger levels back to a level of around 400,000 per annum. This equates to around half of the passenger numbers experienced in 2004. This aspirational scenario has been developed to assist TVU and partners in better understanding the potential economic impacts of additional passenger growth at DTVA for the Tees Valley economy.

5.14 This scenario has been developed in the knowledge that the aviation sector has become extremely challenging for a wide range of reasons (see earlier analysis). However, DTVA Ltd are currently working with their existing airlines, particularly KLM, to market the routes they already offer, while efforts are also being made to actively promote the airport to other airlines (both chartered and scheduled). This scenario should be viewed as the impacts associated with a modest increase in passengers using DTVA of a medium to long-term (i.e. within 10 years).

5.15 We estimate that if DTVA was able to support up to 400,000 passengers per annum in the future, approximately 208,000 additional passengers per annum, this level of additional passenger growth could support a further **30 gross jobs** at the airport[44]. We have applied a similar assumption that 75% of these jobs would be taken by Tees Valley residents (22 jobs). We estimate that these gross new additional jobs could generate approximately **£1.8m** of GVA in the Tees Valley area per annum. With multiplier effects considered (both supply chain and employment effects), we estimate that a further 5 jobs could be supported across Tees Valley, with overall additional employment rising to **27 jobs**. Clearly, the economic outcome for the Tees Valley area from this level of increase in passenger numbers, over and above those existing jobs supported by the airport's operation, is relatively modest.

Table 5-1: Estimated Impacts Associated with Passenger Growth Scenario

	Passengers & Impacts (Jobs and GVA)
Current Passengers	192,410
Future Passengers	400,000
Additional Passengers	207,590
Total gross jobs supported by new additional passengers	29
Total net jobs in Tees Valley supported by new additional passengers	22
Indirect and induced employment supported in the Tees Valley (based on lower end multiplier 0.25)	5
Total additional net employment impacts for the Tees Valley	27
GVA Impacts associated with gross airport related additional Jobs (a workplace based impact)	£1.8

Source: Regeneris Consulting Calculations

5.16 We have not considered the growth of cargo activity here. Currently there is very little cargo currently coming through the airport (approximately 20 tonnes per annum via KLM handled by Camair Freight Solutions who employ three staff). Any future growth in cargo activity, and the employment associated with this, has been considered as employment associated with the Southside development's warehousing/logistics focus. Without any forecasts on the future growth potential of cargo at DTVA, we do not want to double count these effects. If cargo was to increase significantly, clearly the Southside development could provide space

[44] This has been calculated using information on the level of airport-related employment in 2004 (excluding cargo) and employment for 2012. The loss of jobs (84) and the loss of passengers (595k) have been used to establish a passenger per job ratio. This ratio has been applied to the uplift in passengers under this scenario to estimate gross new jobs. Using ACI Europe's employment density of 925 jobs supported by 1mppa, and converting this to assume that 0.00093 jobs are supported per passenger led to an unfeasibly high level of additional employment (approximately 190 jobs). In the context of a regional airport such as DTVA, this was too high.

to accommodate these uses, particularly with its airside apron and adjacent plots.

3. Development of Southside Scenario

The Scheme

5.17 The development of Southside, and its future economic impact, is linked to DTVA Ltd receiving public sector grant funding support to contribute towards the costs of developing road and service infrastructure to the east of the runway to open up the development site for an Industrial and Logistics Park with some airport cargo access. Without this funding support, we understand that the costs of bringing forward the scheme alone are too high to bear for Peel, and the scheme would not proceed.

5.18 It is proposed by DTVA Ltd that the development of Southside would be in four distinct phases, with the total floorspace developed being 176,900 sqm[45]. The first phase would develop the infrastructure (both road and key services) to the site, with Plot 4 developed for first for B8 uses (approximately 7,900 sqm). A further two plots would be brought forward in phase 2 (24,400 sqm), and three further plots under Phase 3 (57,900 sqm). Plots 7-10 would be brought forward in Phase 4 at a much later stage (86,500 sqm).

Table 5-2: Southside Phasing and Plots

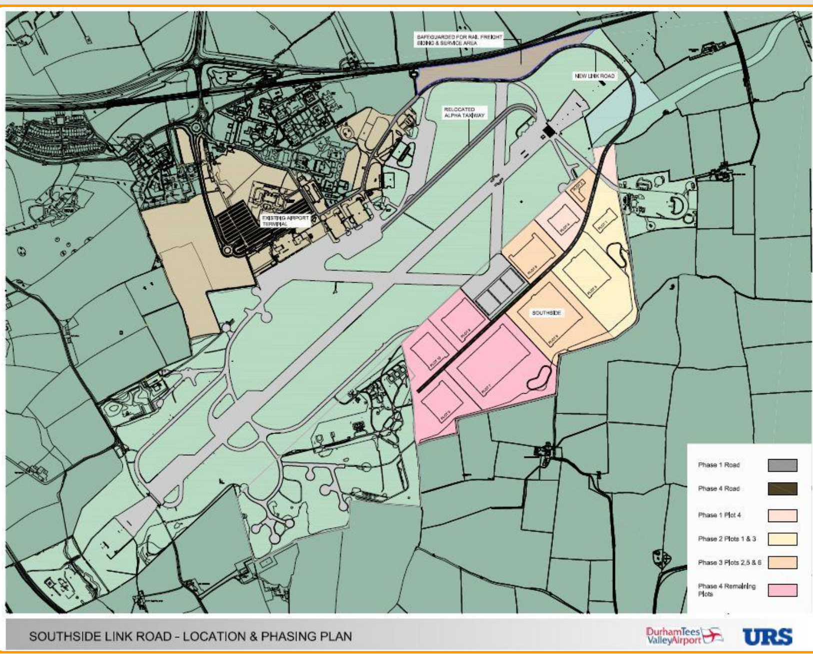
Timescales	Phasing	Plots
0-3 years	Phase 1	Plot 4
3-5 years	Phase 2	Plots 1 and 3
5-8 years	Phase 3	Plots 2, 5 and 6
8 years +	Phase 4	Remaining plots

Source: DTVA Ltd

[45] Note: The employment estimates in this assessment have been calculated on 176,700 sqm for the total scheme. The majority of space is presented in gross terms for B2/B8 uses in the Fairhurst plans. However, the B1 use is presented as net internal. This accounts for the modest reduction in the overall scheme floorspace from 176,900 sqm.

Table 5-3: Southside Phasing, Plots and Uses						
Phases	B1 (sqm)	B1 supporting other B use (sqm)	B2 (sqm)	B8 (sqm)	Total (sqm)	% of Total
Phase 1		**480**		**7,440**	**7,920**	**4%**
Plot 4		480		7,440	7,920	
Phase 2		**1,344**	**3,600**	**19,423**	**24,367**	**14%**
Plot 1		480	3,600		4,080	
Plot 3		864		19,423	20,287	
Phase 3	**3,386**	**2,112**		**52,416**	**57,914**	**33%**
Plot 2	3,386				3,386	
Plot 5		1,344		35,424	36,768	
Plot 6		768		16,992	17,760	
Phase 4		**3,048**		**83,454**	**86,502**	**49%**
Plot 10		840		11,376	12,216	
Plot 7		1,344		42,222	43,566	
Plot 8		288		15,648	15,936	
Plot 9		576		14,208	14,784	
Total Floorspace (sqm)	**3,386**	**6,984**	**3,600**	**162,733**	**176,703***	**100%**
Note: * see explanation in footnote on page 33. Source: DTVA Ltd/Fairhursts						

Figure 5-1: Southside Scheme Overview



Source: DTVA Ltd/URS

Future Occupier Employment Impacts

5.19 We estimate that the Southside development, if fully developed out and occupied, could support around **3,060 gross FTE jobs** mainly within B2 and B8 uses (there is a small element potentially of B1 accommodation in Phase 3). We estimate that the net number of jobs which could be created in Tee Valley is around **2,500 FTE jobs**. Based on potential leakage (assumed at a rate of 25%[46]), approximately 1,870 net additional FTE jobs could be supported by the scheme for Tees Valley residents.

Table 5-4: Estimated Southside Gross and Net Employment Impacts (based on Full Occupancy and 85% Occupancy)

Phases	Sum of Floorspace (sqm)	Full Occupancy			85% Occupancy		
		Gross Jobs (FTEs)	Net Jobs Exc. Leakage (FTEs)	Net Jobs Inc. Leakage (FTEs)	Gross Jobs (FTEs)	Net Jobs Exc. Leakage (FTEs)	Net Jobs Inc. Leakage (FTEs)
Phase 1	7,920	133	108	81	113	92	69
Phase 2	24,367	455	370	277	387	314	236
Phase 3	57,914	1,170	950	713	994	808	606
Phase 4	86,502	1,297	1,054	790	1,103	896	672
Total	**176,703**	**3,055**	**2,482**	**1,861**	**2,597**	**2,110**	**1,582**

Source: Regeneris Consulting calculations

5.20 The build-up of employment impacts are concentrated to the later phases of development. Approximately 40% of total scheme gross employment impacts (based on full occupancy) will come forward once Phase 4 has been developed. Phase 1 of the scheme would include the first development at Southside. This would be the first unit developed on site following the opening of the site via the new road and other infrastructure (supported by RGF funding). Around two-thirds of all jobs would be associated with B8 uses, while a fifth of gross employment is associated with B1 office uses within other B2/B8 uses – office support and management space. While a modest amount of pure B1 floorspace is provided with Plot 2 (3,400 sqm in Phase 3), this development would account for around 10% of all jobs, given the higher employment densities associated with an office workplace.

Table 5-5: Estimated Southside Gross and Net Employment Impacts (based on Full Occupancy) by Use Class

Uses	Proportion of overall Floorspace at Southside	Based on the Total Southside Development at Full Occupancy		
		Gross Jobs (FTEs)	Net Jobs Exc. Leakage (FTEs)	Net Jobs Inc. Leakage (FTEs)
B1	2%	339	275	206
B1 supporting other B use	4%	582	473	355
B2	2%	100	81	61
B8	92%	2,034	1,653	1,240
Total jobs (FTEs)	100%	3,055	2,482	1,861

Source: Regeneris Consulting calculations

[46] Similar level assumed to that of existing airport based employment

5.21 DTVA Ltd proposals for Southside are focussed on developing floorspace which will predominantly, at this juncture, serve the logistics sector. We have applied a qualification split to the estimated gross jobs which the development will support once fully built-out and occupied. This has been informed by the Sector Skills Council for Logistics, Skills for Logistics, research in the North East. Approximately 60% of all future logistics jobs at Southside could be at NVQ Level 2 or below, around a quarter at Level 3, with the remaining jobs at NVQ Level 4 or above – typically degree or higher degree level occupations.

Table 5-6: Potential qualification levels of employees at Southside (based on gross employment impacts from a fully developed site, excluding pure B1 employment, i.e. logistics based employment)

Qualification Level	% of Qualifications	Gross Jobs (Exc. B1)
Level 1	32%	869
Level 2	28%	761
Level 3	27%	733
Level 4 and above	13%	353
Total		2,716*

Note: *Total gross jobs excludes B1 employment at Plot 2
Source: Qualification split informed by the *Skills for Logistics North East Report*, 2009

5.22 We estimate that the total gross direct GVA impact to the Tees Valley area from the creation of logistics based employment at Southside could be of the order of **£182.6m** per annum in current prices[47]. This is based on the 2,700 gross jobs which could be created in the logistics sector here once the full scheme has been developed.

Construction Impacts

5.23 Gleeds Cost Consulting has prepared a cost schedule for the development of the Southside scheme. The costs presented here refer to the construction of the road and services infrastructure, as well as floorspace. In total Gleeds estimate that the total cost of the construction programme would be approximately £110m. The infrastructure costs account for around £10m of this (excluding professional fees and land purchases).

5.24 There are two different approaches which can be undertaken to estimate the construction employment associated with this development. The first uses labour coefficients (i.e. workers per £1m of construction output per year) using data from the Department for Communities and Local Government (DCLG) in England, and Offpat[48]. The second approach uses data from the Annual Business Survey for the construction sector turnover. Given that significant research has been undertaken by DCLG assessing the labour coefficients for different types of construction expenditure, in particular private sector commercial and infrastructure developments, we believe that the labour coefficient approach provides a more robust assessment of the likely construction employment impacts from the development.

[47] Excluding pure B1 employment as it is unclear at this stage what occupier may be located here. A GVA per worker estimate of £67,230 has been used for 'Warehousing and Support Activities for Transportation' taken from the Annual Business Survey, 2009.

[48] This DCLG/Offpat evidence is based upon the analysis of construction data from a wider range of construction sub-sectors (e.g. new housing, infrastructure, commercial developments etc). As such, there is a specific labour coefficient for private sector commercial developments.

5.25 Using CLG/Offpat guidance on the level of construction output (or turnover) which supports 1 full-time equivalent (FTE) construction job[49], it is estimated that the whole development scheme could support around **1,870 person years of construction employment over its lifetime**. While the phasing of the scheme and the number of plots brought forward varies, based on a 10 year development trajectory, on average 190 FTE construction jobs would be supported annually in the Tees Valley area from this investment.

Table 5-7: Construction Costs for the Total Development		
Phases	Construction Costs of Units	Person Years of Employment Supported by Construction Expenditure
Phase 1	£13,810,881	210
Phase 2	£13,931,056	238
Phase 3	£34,390,567	587
Phase 4	£47,522,947	812
Total Cost	£109,655,451	1,873
Source: Gleeds Cost Estimates and Regeneris Calculations		

4 Current impact of the Airport plus Southside development impacts

5.26 This scenario draws together the current impacts of the Airport and the Southside development. The following two tables set out the estimated employment and GVA impacts for the two elements. The final table highlights the combined impacts for Tees Valley of the airport continuing to be operational as well as the development of Southside. Once fully developed and occupied, alongside the airport itself, the whole DTVA site has the potential to support around **3,650 gross FTE jobs**, supporting approximately **£220m** of gross direct GVA for Tees Valley each year. We estimate that around **2,420** of these are net FTE jobs and these could be taken by Tees Valley residents.

Table 5-8: Estimated Current Airport Impacts (Jobs and GVA)	
	Current Impact
Estimated Direct Jobs (FTEs)	594
Direct jobs taken by TV residents (FTEs)	445
Indirect & Induced Employment (FTEs)	111
All Employment (FTEs)	557
Airport related employment GVA £m (based on 594 gross jobs)	37.3
Source: Regeneris Consulting calculations	

49 Turnover per 1 FTE construction job is £58,500 per annum in 2011 prices

Table 5-9: Estimated Southside Impacts (Jobs and GVA)			
Phases	Full Occupancy		
	Gross Jobs (FTEs)	Net Jobs Exc. Leakage (FTEs)	Net Jobs Inc. Leakage (FTEs)
Phase 1	133	108	81
Phase 2	455	370	277
Phase 3	1,170	950	713
Phase 4	1,297	1,054	790
Total Employment Impacts	3,055	2,482	1,861
Gross Direct GVA Impacts Based on Gross Jobs (£m)	£182.6		
Source: Regeneris Consulting calculations			

Table 5-10: Scenario 4 Summary Table Estimated Jobs and GVA Impacts			
Scenario 4	Total Gross Jobs	Total Net Jobs in Tees Valley (inc. Leakage)	GVA Impacts based on Gross Direct jobs (£m)
Current impact of DTVA + Southside	3,649	2,418	219.9
Source: Regeneris Consulting calculations			

5. Passenger growth to 400,000 per annum and development of Southside

5.27 This scenario draws together the future potential impacts of the Airport growing its passenger numbers to 400,000 per annum and the Southside development. Our analysis of the growth of airport passengers to 400,000 per annum (an additional 207,500 passengers) has shown an increase in employment of an extra 30 FTE gross jobs. Clearly, the economic outcome for the Tees Valley area from this level of increase in passenger numbers, over and above those existing jobs supported by the airport's operation, is relatively modest.

5.28 Nonetheless, when combined with a fully developed and occupied Southside, the whole DTVA site has the potential to support around **3,700 gross FTE jobs** supporting approximately **£222m** of gross direct GVA for Tees Valley each year. We estimate that around **2,450** of these are net FTE jobs and could be taken by Tees Valley residents.

Table 5-11: Estimated Future Additional Airport Impacts arising from passenger growth (Jobs and GVA)	
Impacts	Impacts (Jobs and GVA)
Total gross jobs supported by new additional passengers (207k)	29
Total net jobs in Tees Valley supported by new additional passengers	22
Indirect and induced employment supported in the Tees Valley (based on lower end multiplier 0.25)	5
Total Additional net Employment impacts for the Tees Valley	27
GVA (£m) Impacts associated with gross Airport related Additional Jobs (workplace based impact)	£1.84
Source: Regeneris Consulting calculations	

Table 5-12: Estimated Southside Impacts (Jobs and GVA)			
	Full Occupancy		
Phases	Gross Jobs (FTEs)	Net Jobs Exc. Leakage (FTEs)	Net Jobs Inc. Leakage (FTEs)
Phase 1	133	108	81
Phase 2	455	370	277
Phase 3	1,170	950	713
Phase 4	1,297	1,054	790
Total Employment Impacts	3,055	2,482	1,861
Gross Direct GVA Impacts Based on Gross Jobs (£m)	£182.6		
Source: Regeneris Consulting calculations			

Table 5-13: Scenario 5 Summary Table Estimated Jobs and GVA Impacts			
Scenario 5	Total Gross Jobs	Total Net Jobs in Tees Valley (inc. Leakage)	GVA Impacts based on Gross Direct jobs (£m)
Future Impact of Airport	623	584	39.1
Southside	3,055	1,861	182.6
Passenger Growth + Southside	3,678	2,446	221.8
Source: Regeneris Consulting calculations			

Summary of Scenario Impacts

5.30 The following provides a summary of the job and GVA impacts for the impact scenarios:

- **Scenario 1:** DTVA currently supports 594 FTE gross jobs and contributes around £37m of gross direct GVA to the Tees Valley economy. We estimate that in net terms (taking account of leakage and multiplier effects) the airport supports around 560 FTE jobs in Tees Valley. If the airport closed these economic benefits would largely be lost to the Tees Valley economy. We estimate that of the near 600 jobs linked directly to on and off airport employment activities, the majority of these are tied to having an operational airfield, or from being tenants of the airport and the freedoms this brings for their activities.

- **Scenario 2:** We estimate that an increase in passengers at DTVA to 400,000 per annum, an increase of approximately 208,000 additional passengers per annum, could a further 30 gross jobs at the airport. These gross new additional jobs could generate approximately £1.8m of GVA in the Tees Valley area per annum. In net terms (taking account of leakage and multiplier effects) we estimate that around 27 FTE jobs would be supported in the Tees Valley economy under this scenario. Clearly, the economic outcome for the Tees Valley area from this level of increase in passenger numbers, over and above those existing jobs supported by the airport's operation, is relatively modest.

- **Scenario 3:** The Southside development, once fully developed and occupied, has the potential to support the creation of a significant number of jobs. In total, we estimate that the overall development of the industrial and logistics park could support around 3,050 gross jobs. The GVA contribution from this employment could be of the order of around £183m per annum. In terms of net additional employment supported in the Tees Valley area, we estimate that around 1,870 FTE net jobs could be supported in the Tees Valley as a result of the development of Southside. We also estimate that the development could also support around 1,800 FTE construction jobs over its lifetime.

- **Scenario 4:** This scenario draws together the current impacts of the Airport (Scenario 1) and the Southside development (Scenario 3). Once fully developed and occupied, alongside the current operation of the airport, the whole DTVA site has the potential to support around 3,650 gross FTE jobs, supporting approximately £220m of gross direct GVA for Tees Valley each year. We estimate that around 2,420 of these are net FTE jobs and these could be taken by Tees Valley residents.

- **Scenario 5:** This scenario draws together the future potential impacts of the Airport growing its passenger numbers to 400,000 per annum (Scenario 2), and the Southside development (Scenario 3). Our analysis shows that the economic outcome for the Tees Valley area from an increase in passenger numbers, over and above those existing jobs currently supported, is relatively modest. Nonetheless, when combined with a fully developed and occupied Southside, the whole DTVA site has the potential to support around 3,700 gross FTE jobs supporting approximately £222m of gross direct GVA for Tees Valley each year. We estimate that around 2,450 of these are net FTE jobs and could be taken by Tees Valley residents.

Table 5-14: Summary of Scenario Impacts				
Scenarios		Total Gross Jobs	Total Net Jobs in Tees Valley (inc. Leakage)	GVA Impacts based on Gross Direct jobs (£m)
Scenario 1	Current Impact	594	557	37.3
Scenario 2	*Passenger Growth*	*29*	*27*	*1.8*
	Future Impact of Airport	623	584	39.1
Scenario 3	Southside	3,055	1,861	182.6
Scenario 4	Current + Southside	3,649	2,418	219.9
Scenario 5	Passenger Growth + Southside	3,678	2,446	221.8
Source: Regeneris Consulting calculations				

Potential Future Wider Impacts

5.31 While the previous section focussed on the quantitative economic impacts of the scenarios, the following table provides an overview of the wider impacts which could occur in the Tees Valley area in light of the scenarios for DTVA.

Table 5-15: Summary of Potential Future Wider Impacts by Scenario
Airport Closure
As well as these quantitative impacts the closure of the airport could have the following potential negative wider impacts: • The loss of local daily connectivity to an important international hub at airport at Schiphol, as well as links to Aberdeen. The 3 times a day service provided by KLM provides Tees Valley businesses and residents with an important link to Europe and onward destinations. • This is a critically important service for some sectors in the area (process industries, advanced manufacturing and engineering), particularly those in foreign ownership and/or who serve an international client base – in terms of ease of access for sending staff/executives overseas, as well as hosting clients or senior company executives. • Our consultations have indicated that the loss of a convenient and accessible local airport with these routes is likely to lead to further road miles and additional travel time for businesses in the area. While the route selection at DTVA is currently limited, we understand the load factors for KLM and Eastern are relatively healthy. Passengers currently using these services would have to find alternatives. These are likely to require road or rail travel, including trips to Newcastle Airport or Leeds-Bradford. • However, consultations have also highlighted that businesses in the region are still trading effectively in international markets and serving their client base, despite the limited routes available from DTVA. This is typically through using services at other airports in the North. Some consultees felt that the closure of the airport could lead to negative perceptions for the area, particularly business and investor perceptions. • While there is no clear evidence that the Tees Valley area would miss out on inward investment opportunities consultees have commented that an airport can provide a much more robust proposition to a potential inward investor, and it helps to improve the perception of the Tees Valley area as a place for international business. • The closure of the airport would also end the opportunity for businesses in the region to import goods via the KLM service. The loss of the service could affect the speed by which some businesses receive their goods, particularly those businesses in Tees Valley reliant on fast/just-in-time high value goods and components. Additional road miles and travel time is likely to occur as goods would reach the Tees Valley by road, via alternative entry airports. • While the closure of the airport would lead to some significant jobs losses, the Tees Valley area would also suffer from losing high skilled employment from the area. An operational airport is essential for some of the businesses based at DTVA. In particular, Cobham, Serco's international

Table 5-15: Summary of Potential Future Wider Impacts by Scenario

fire centre, Emergency Services, and the Flying schools. Most of these businesses/services require the airport to continue operations. Without the airport, relocation is likely.

Airport Continues to Operate at Current Levels

Under this scenario, the wider impacts set out in Section 3 remain valid. They are also the impacts which we have described as being lost from the Tees Valley area if the airport closed.

Passenger Growth

As well as the modest quantitative impacts (small increases in employment and GVA) under the passenger growth scenario, there is also the potential for some wider impacts to occur at the Tees Valley level. These could include:

- An improved perception for business and leisure travellers that DTVA is on an upward trajectory after a period of contraction in passenger numbers and routes.
- While this scenario does not set out how this passenger growth will be achieved (i.e. through additional flights by existing operators, such as KLM with a fourth flight per day, or through the attraction of a new airline), a growing airport can provide a much more robust proposition to a potential inward investor and helps to improve the perception of the Tees Valley area as a place for international business.
- A reduction in road miles undertaken by businesses and their employees who opt to fly from DTVA rather than other northern airports – an important sustainability consideration for the Tees Valley, as well as the CSR commitments of some businesses.
- DTVA currently under-performs as a driver of international tourism and leisure visitors to the Tees Valley. Combined with marketing efforts, a wider choice of flights/routes could play a positive contribution in improving this position, with access to northern cities and natural assets. The airport could also play a greater role as an access point to the area for international students and academics.
- If the airport is able to encourage an increase in Tees Valley residents using the airport for their leisure trips, there could potentially be a reduction in road miles from Tees Valley residents travelling to other airports. Latent demand is still there in the area to use DTVA. The recent Evening Gazette survey highlighted that around 75% of respondents would use the airport more if the range of flights offered improved.

Southside Development

The development of Southside as an industrial and logistics park has the potential to deliver significant employment impacts for the Tees Valley area, if it is fully developed and occupied. As well as the economic benefits that could be delivered, there are also some potential wider impacts which could occur at the Tees Valley level. These could include:

- Regeneration and economic development benefits for the Tees Valley area. While the job creation potential of the site will only be realised over the longer-term, the jobs created here will provide a mix of low, intermediate, and higher level skilled opportunities. There is scope for local partners to work with Peel and future occupiers to link this opportunity to areas of local need. In particular, to target areas of high unemployment and worklessness, and to up-skill where necessary in preparation.
- Potential for growing the cargo operations at DTVA to allow greater levels of cargo to be both imported to, and exported from the Tees Valley. The Southside proposals currently include apron space for air cargo, as well as adjacent floorspace. Manufacturing goods and exporting of goods to markets overseas is of critical importance to the future economic performance of the Tees Valley area, and the wider North East. While Teesport provides a key role in the area's exporting performance, the airport could potentially play a greater role in developing the area's exporting performance, supporting clients who require goods quickly and efficiently. Future rail links for freight between the port and the airport could also be considered.
- Airports around the UK and internationally have in recent years focussed on airports as catalysts of economic growth, developing adjacent employment parks (both business and industrial). While the proposals for Southside are not at this scale, there could be an opportunity to alter investor and business perceptions of the area, with the development being an indicator of the ambition of the area.

Appendix A Consultees

1. The following table summarises the consultations undertaken as part of this assessment.

Economic Impact Assessment - Consultees	
Name	**Organisation**
Partners	
John Leer	TVU - Inward investment account manager
Rory Sherwood-Parkin	TVU - Business Research Officer
Louise McDonald	Stockton Borough Council - Regeneration Projects Manager (Economic Strategy Lead)
Mark Rowell	Stockton Borough Council - Inward investment and Business engagement
John Simpson	Darlington Borough Council - Principal Programmes and Contract Management Officer
Shaun Woods	Airport Manager
Vic Brodrick	Commercial Director (seconded from Peel Ports)
Sector/Business Groups	
Stan Higgins	NEPIC - Chief Executive
Paul Butler	NEPIC - Customer Services Manager
James Ramsbottom	North East Chamber
Businesses	
Ted Threapleton	Cobham
Mike Shakesheff	CamAir Freight Forwarder/Casper Shipping
Nick Weston	Western Aviation
John Shipman	Huntsman
John Cumming	Foster Wheeler
Andrew Home	K Home International
Giles Gillett	Jacobs Engineering
Phil Bailey	Lucite International
Stephen Lowdon	Vopak
Joan Henderson	Whessoe Oil & Gas
Lee Goult	Faithful & Gould
Mark Pemberton	Traceco
Juliet Lawson	Wilton Engineering Group
Keith Brown	Teesside University
Note: It has not been possible to arrange a consultation with Joanne Leng at NOFEnergy and Paul Booth at SABIC due to their schedules.	

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