

21 SOCIO-ECONOMICS

21.1 INTRODUCTION

This section assesses the impact of the proposed PFDI on the local economy, including employment, and is based upon the work conducted for the Economic Impact Study and Assessment of Port of Falmouth (Arup, 2008).

Employment impacts are affected by a number of sources, set out below, which have been considered herein:

- project construction – this is a large-scale capital project with a capital value of between £15 and £20 million for the dredging and disposal costs alone;
- project operations – the increased accessibility of the port will enable more large ships to be repaired and to receive alongside services and for larger cruise ships to use the port facilities.
- tourism expenditure – increased passenger numbers will lead to increased spend which in turn will lead to further employment; and
- other effects – most notably through supply chain effects.

21.2 METHODOLOGY

21.2.1 *Baseline Data Collection*

Baseline socio-economic data is taken from the Economic Impact Study and Assessment of Port of Falmouth and, where possible, uses local statistics (i.e. Cornwall) which are presented with reference to national statistics (i.e. England and Wales) and regional statistics (i.e. South West) to provide a basis for comparison.

21.2.2 *Surveys*

No surveys were undertaken the Economic Impact Study and Assessment of Port of Falmouth.

21.2.3 *Assessment Criteria*

As described in the Economic Impact Study and Assessment of Port of Falmouth, “the economic impact has been considered in terms of net additional employment generated through increased activities at Falmouth Docks and also through additional visitor spending” (Arup,2008). The impact on the economies of the Falmouth area, Cornwall and the South west has been considered using some assumptions on leakage, displacement and substitution effects have been employed.

21.2.4 *Assessment Technique*

As described in the Economic Impact Study and Assessment of Port of Falmouth, the economic impact is related to an options analysis. Options include scenarios for “do nothing”, “do minimum” and “do proposed project”. Net impacts for the do proposed project scenario have been calculated by considering A&P, FDEC and FHC activities and assessed by subtracting the do nothing scenario.

21.2.5 Assessment of Impact Significance

Impact significance has been determined qualitatively by relating the results of the Economic Impact Study and Assessment of Port of Falmouth to the contexts described in Section 1.4.3 and terminology identified in Table 1-1.

21.3 BASELINE ENVIRONMENTAL CONDITIONS

21.3.1 Demographics

The population of Cornwall and the Isles of Scilly was estimated to be 538,600 in 2008 (ONS). In the period 2004 to 2008 the population growth rate averaged 1%. The rate of population growth is predicted to decline in the future falling to 0.6% in 2026. The current population projection for the county in 2029 is 643,100.

The total population of the county is slowly increasing. However, within this population the proportion of individuals in younger age brackets is decreasing. The proportion of the population within the 0-19, 20-39 and 40-59 age brackets are all projected to decrease over the next two decades. The population is projected however to see an increase in the proportion of individuals in the 60-79 and the 80+ age ranges. These individuals are expected make up more than a third of the local population by 2028. While the trend of populations getting older is observed across England and Wales it is occurring at a faster rate within Cornwall. Young people are tending to move away from the area and more individuals are choosing Cornwall as a place to retire to.

21.3.2 Economic Participation

Employment rates between 2005 and 2007 fell from being slightly above to being slightly below the England and Wales average. The local employment rate is significantly below the regional average. In 2005 the Cornish employment rate (proportion of the working age population in employment) was 75% as opposed to the regional average of 78%. The gap between these two rates steadily increased between 2005 and 2007.

The unemployment rate for Cornwall between 2006 and 2007 was broadly similar to the regional average and significantly below the national average. The fact that the local employment rate is below the national average but the unemployment rate is similar to the national average would indicate that there are a significant number of “under-employed” individuals within the workforce. These are individuals who are ineligible for unemployment benefits but may be available and willing to work should work be available.

21.3.3 Wage Levels

2007 wage levels in Cornwall and Isles of Scilly are shown in Table 21-1 below. Average earnings are about 8% lower than the South West region and England and Wales as a whole. Growth rates over the preceding five years were slightly higher however.

Table 21-1 Average Gross Annual Earnings (source: ONS)

	Cornwall and Isles of Scilly	South West	England and Wales
Average Gross Annual Earnings in 2007	£20,335	£22,966	£24,242
Average Gross Annual Earnings as Percentage of England and Wales Average	92.1%	94.7%	100%
Average Annual Growth Rate of Gross Annual Earnings 2002-2007	3.8%	3.5%	3.3%

21.3.4 Sectoral Composition

The sectoral breakdown by employment in Cornwall is dominated by the distribution, hotels and restaurant sector and by the public sector (public administration, education and health). Banking, finance and insurance and manufacturing both employ a smaller proportion of the workforce than in the South West region or England and Wales as a whole. Of the two largest sectors, the distribution, hotels and restaurant sector employs only 1% less of the workforce than the public sector. This figure highlights the area's reliance on tourism.

21.3.5 Deprivation

The Indices of Multiple Deprivation (IMD) is a measure for comparing the relative deprivation of different areas. The lower the IMD score the less deprived an area is. Within Penryn, 12 areas had an IMD score between 40 and 50 indicating moderate to high levels of deprivation. Falmouth is generally less deprived than Penryn with the majority of output areas having an IMD score of 20-40. The areas surrounding the Falmouth/Penryn conurbation generally have scores of between 10 and 20 indicating low levels of deprivation. The town of Redruth is 10 miles to the north-west of Falmouth. Three per cent of the docks' employees commute from this town. Several output areas in Redruth have IMD scores of 57 and are among the most deprived areas in Cornwall.

21.3.6 Education Levels

Qualification levels for Cornwall, the South West and Great Britain are shown in Table 21-2 below. While a greater proportion of individuals in Cornwall hold qualifications at NVQ levels 1-3 than in Great Britain as a whole, a lesser proportion hold qualifications at NVQ4 level four and above.

Table 21-2 Education Qualification Levels

Qualification Level	Cornwall	South West	Great Britain
NVQ4 and above	24.5%	27.3%	27.4%
NVQ3 and above	47.7%	47.3%	45.3%
NVQ2 and above	68.5%	67.2%	63.8%
NVQ1 and above	83.0%	82.5%	77.8%
Other qualifications	7.0%	7.7%	8.5%
No qualifications	10.0%	9.8%	13.8%

21.3.7 Baseline Contribution of Falmouth Docks

Falmouth Docks is situated within Falmouth Harbour, one of the world's largest natural deepwater harbours and is strategically well placed to provide support to shipping

operating in North West Europe. Falmouth Docks play an important role in the economy of the town and region. It is the largest private employer in the area currently providing jobs to 978 people. There are five major employers based in the yard:

- A&P Falmouth Limited;
- Falmouth Fishselling Company;
- Falmouth Harbour Commissioners;
- Falmouth Oil Services; and
- Pendennis Shipyard.

In addition 17 other firms are located within the docks area. Marine related businesses at Falmouth are estimated to achieve a combined turnover of £60.5 million per year.

A&P Falmouth handles approximately 100,000 tonnes of cargo per year, most of it imported. Imported cargos include about half of Devon and Cornwall's fertiliser supply as well as animal feed and coal.

Some facilities in Falmouth Docks are currently in a poor condition. Due to the depths of the main approach channel, only ships with a draft of 4.2m or less can be accommodated at all states of the tide. If the deterioration of the docks is not addressed the business environment for firms within the docks will become less favourable. Without investment port business would be expected to at best remain static in the short term but will decline in the medium to long term.

21.3.8 *Baseline and Forecast of Cruise Market*

Worldwide, the cruise industry has recently been the fastest growing sector in the leisure industry. UK cruising has seen significant growth over the past decade and some years have seen impressive increases in passenger numbers. Between 2003 and 2004 there was a 13% increase in the numbers of UK passengers on UK cruises and a 44% growth in overseas passengers starting a cruise from a UK port.

Table 21-3 shows the number of day calls and turnaround visits by cruise ships to Falmouth in the past 2 years.

Table 21-3 Cruise Ship Calls to Falmouth 2006/2007 and 2007/2008

Year	Day Calls	Turnaround
2006/2007	27	12
2007/2008	36	2

While day call visits showed significant growth the number of turnaround reduced significantly. This reduction may well be partially related to Travelscope, a local holiday firm that went into administration in late 2007. For example, Travelscope had scheduled eleven cruises to depart from Falmouth in 2008. It should be noted that this reduction may reflect the misfortunes of one local company and the impact on a single port rather than for the general trend in cruise market demand which is more positive.

21.4 POTENTIAL IMPACTS DURING THE CONSTRUCTION PHASE

21.4.1 *Increased Local Employment through Construction*

The construction works for the proposed PFDI will create a substantial quantity of short-term and medium-term construction employment.

If a standard construction industry GVA per employee of £33,000 is applied, an estimate of total construction years can be assessed. One Full Time Equivalent (FTE) job is generally assumed to be created for each 10 construction years. This is shown in Table 21-4.

Table 21-4 Direct Construction Jobs Created (source: Arup, 2008)

Capital Costs	Construction Years	Jobs FTE
£39 million	1302	130

Additional construction employment will support additional indirect and induced employment. However because much of the construction employment will be of a specialist nature those employed may well come from outside the local areas. The net increase in employment in these three areas once leakage, substitution and multipliers have been taken into account is shown in Table 21-5.

Table 21-5 Net Additional FTE Jobs by Area (source: Arup 2008)

Falmouth	Cornwall	South West
62	93	199

Additional local employment generated both directly and indirectly through the construction period will be limited and of a short-term to medium-term nature. It is assessed as having a temporary moderate beneficial impact on the local economy.

Mitigation and Residual Impact

No mitigation measures are recommended and there will be a temporary moderate beneficial residual impact.

21.5 POTENTIAL IMPACTS DURING THE OPERATIONAL PHASE

21.5.1 *Additional Direct Revenue to Port Based Businesses from Cruise Ships*

Once constructed, the proposed project will allow larger cruise ships to dock at Falmouth. In addition, it is forecast that the number of cruise ships will increase over time. These operations will increase the berthing charges, harbour dues and charges for pilot services which are paid to FDEC, FHC and the self-employed pilots. The predicted increase in these revenues over time is shown in Table 21-6.

Table 21-6 Port revenues by Year (source: Arup, 2008)

Year	Revenue	Increase from 2005 baseline
2005	£439,500	£0
2008	£494,438	£54,938
2009	£526,684	£87,184
2010	£548,181	£108,681
2015	£698,662	£259,162
2020	£730,908	£291,408

Revenue from charges currently represents 0.73% of the current docks turnover of £60.5 million, a small but significant contribution. At this magnitude, the additional port revenues will have a long-term, minor beneficial impact on the local economy.

Mitigation and Residual Impact

No mitigation measures are recommended and there will be a long-term minor beneficial residual impact.

21.5.2 Additional Spend by Cruise Passengers and Crew

Once constructed, proposed project will support the services required by a greater number of cruise passengers and crew, and the larger cruise vessels.

The forecast of additional cruise passengers to Falmouth was made by Arup (2008) and is shown in Table 21-7 below. The low estimate of additional passengers if the project is built assumes that passenger numbers grow at 10% per year until 2015 and 5% thereafter. The high estimate assumes passenger number increase at 20% per year until 2015 and 10% thereafter.

Table 21-7 Forecast Passenger Numbers for Falmouth (source: Arup, 2008)

	2005	2008	2009	2010	2015	2020	2025
Do Nothing	28,700	38,200	36,290	34,475	29,304	24,908	19,927
Low estimate	28,700	38,200	42,020	46,222	74,440	95,007	121,256
High estimate	28,700	49,594	59,512	71,415	177,703	286,192	365,262

The number of additional ships estimated to call at Falmouth should the project proceed are shown in Table 21-8. The number of ships increases over time however it should also be noted that the projected proportion of day call to turnaround visits is presumed to stay constant at 2008 levels (73% day call, 27% turnaround) and that the average number of passengers per ship increases over time.

Table 21-8 Forecast Ship Numbers for Falmouth (source: Arup, 2008)

	2005	2008	2009	2010	2015	2020
Day Calls	22	34	36	37	47	50
Turnarounds	18	12 ²²	13	14	18	18
Total Calls	40	46	49	51	65	68

²² Subsequent to the assessment undertaken by Arup (2008) only 4 turnaround calls and 31 day calls were made during 2008.

Average Passengers (low estimate)	718	830	858	906	1,145	1,397
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Arup (2008) assumes that 75% of cruise passengers go ashore during day call cruise ship visits to Falmouth. Cruise passengers who go ashore are assumed to spend on £65 on average. Half of passengers who go ashore (37.5% of all passengers) are assumed to go on an excursion which increases spend per passenger by £10. 5% of day call passengers are assumed to use taxis or hire a car spending an additional £20 per head.

Turnaround passengers spend slightly more on average than day visitors as they may choose to stay an extra night in local accommodation ashore. A third of turnaround visitors are assumed to spend an extra night in Falmouth at the beginning or end of their trip spending £100 on average. Other turnaround visitors are assumed to spend the same as day visitors £65.

Arup (2008) assumes that there is a ration of two passengers to one crew on cruise ships. 15% of the crew are assumed to go ashore during day visits and spend on average £40. During a turnaround visit it is assumed that a quarter of the crew disembark and spend a night ashore spending on average £50.

Total spending onshore by cruise ship passengers and crew is presented in Table 21-9.

Table 21-9 Onshore Spending by Cruise Passengers and Crew (source: Arup, 2008)

	2005	2008	2009	2010	2015	2020
Total passengers	28,700	38,200	42,020	46,222	74,440	95,007
Day visit passenger spending (£)	591,938	1,045,725	1,150,298	1,644,925	2,649,134	3,381,062
Turnaround passenger spending (£)	852,390	680,724	748,796	947,227	1,525,499	1,946,978
Day visit crew spending (£)	47,355	83,658	92,024	101,226	163,024	208,065
Turnaround crew spending (£)	852,390	680,724	768,796	947,227	1,525,499	1,946,978
Excursion Spending (£)	107,625	143,250	157,575	173,333	279,150	356,276
Local Transport spending (£)	15,785	27,886	30,675	33,742	54,341	69,355
Total Spending (£)	1,695,811	2,045,706	2,250,276	2,978,453	4,796,765	6,122,061
Baseline Scenario Spending (£)	1,695,811	2,045,706	1,943,420	2,221,500	1,888,291	1,605,022
Total Additional Spending (£)	0	0	306,856	756,953	2,908,474	4,517,039

It was assumed in Arup (2008) that each £24,000 of additional spending supports one additional tourist sector job. This estimate is lower than that of SWRDA but is considered appropriate due to the lower wages and seasonal nature of tourist sector jobs in the area. Additional employment in the tourist sector due to cruise visitors is shown in Table 21-10.

Table 21-10 Additional Tourism Employment through Cruise Visitors

	2005	2008	2009	2010	2015	2020
Total tourism jobs supported	71	85	94	124	200	255
Additional tourism jobs supported	0	0	13	32	121	188

In addition there is some evidence that holiday makers use cruises as a way of identifying locations for future holidays. A good visitor experience of Cornwall would be expected to increase visitor's propensity to return for a land based holiday, and to recommend the area to family and friends. This multiplier effect has not been confirmed explicitly by any study and as such has not been quantified here.

Increased tourist revenue from cruise passengers represents a long-term effect and is assessed as being a moderate beneficial impact on the local economy.

Mitigation and Residual Impact

No mitigation measures are recommended and there will be a long-term moderate beneficial residual impact.

21.5.3 Additional Employment by A&P Falmouth and Other Port Related Businesses

A&P Falmouth is the most important ship repair facility in south west England in terms of both turnover and facilities. It currently employs around 470 people of whom 80% live in the Falmouth and Penryn area. The industry is inherently fluctuating with work coming in peaks and troughs. The workforce varies rapidly to take account of changing work orders and as such employment is a mix of permanent, casual and agency staff.

Falmouth Docks has strong local labour supply linkages and as such multiplier effects are assumed to be high both at a local and regional level. Arup (2008) have estimated the local multiplier to be 50% and the regional multiplier to be 60%. This is the proportion of extra indirect and induced employment which is generated further up the supply chain within the areas due to the extra direct employment.

The gross direct employment of A&P Falmouth is currently 470 jobs. After the project is completed this is projected to increase to 600 with additional jobs supported by the increase ship calls and increase repair contracts. Table 21-11 shows the assumptions to convert this base increase in jobs into estimated impacts on employment for both Falmouth and Cornwall.

Table 21-11 Employment Impact Assumptions

Assumption	Description	Falmouth	Cornwall
Leakage	Proportion of employee that live outside the area	20%	0%
Displacement	Market share taken from local competing businesses	10%	10%
Multiplier	Additional work supported by increased activity and local wages	50%	60%
Gross Value Added	GVA added per employee	£25,900	£25,900

The magnitude of employment impacts are shown in Table 21-12. In essence, there will be employment increases within Falmouth and Cornwall, with gross direct employment rising from 470 to 600 jobs.

The assessment of additional employment supported by expanded port activities with the proposed project in place uses the current situation as the baseline for assessment. However if the proposed project does not proceed, it is expected that Falmouth's importance as a cruise port and ship repair facility may decline. As such the "do nothing" scenario would likely see economic activity and employment fall from its current position. The proposed project therefore safeguards existing jobs. Since a declining baseline has not been estimated it is not possible to assess the significance of this effect, however, in the long-term the port may not be sustainable without improvements and dredging.

Table 21-12 Employment Impacts

	Baseline Conditions		With Project	
	Falmouth	Cornwall	Falmouth	Cornwall
Gross Direct Effects	470	470	600	600
Leakage	94	0	120	0
Gross Local Direct Effects	376	470	480	600
Displacement	38	47	48	60
Net Local Direct Effects	338	423	432	540
Multiplier Effects	169	254	216	324
Total Net Local Effects	508	677	648	864
GVA	£13.2m	£17.5m	£16.8m	£22.4m

The project is expected to provide a long-term increase in port business as well as safeguarding existing jobs. Recognising the major role the docks have in the local and Cornish economy, the additional and secured employment provided by the proposed project will have a long-term moderate beneficial impact to the local economy. The significance of this impact would be greater if the "do nothing" scenario were to lead to a fall in employment over baseline conditions.

Mitigation and Residual Impact

No mitigation measures are recommended and there will be a long-term moderate beneficial residual impact.