



Ilfracombe Harbour Regeneration: Economic Impact Assessment

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Ilfracombe Harbour Regeneration:
Economic Impact Assessment
North Devon+

A final report submitted by GHK

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EXECUTIVE SUMMARY

INTRODUCTION

GHK was commissioned by North Devon Plus to undertake an economic impact assessment of the proposed options for the development of Ilfracombe Harbour. The study assessed the economic benefits of two alternative development options for the harbour against a 'Do Nothing' option to decide whether they justify the costs.

METHODOLOGY

The study was based around three core tasks:

- Information gathering (comprising stakeholder consultation and a review of key documents and data);
- Baseline assessment (comprising an assessment of: the need for regeneration in Ilfracombe and the rationale for harbour development; current harbour activities and limitations; the economic impact of current activities and the 'Do Nothing' option);
- A detailed appraisal of the development options (defining each option, before undertaking a robust economic impact assessment including temporary construction impacts and consideration of additionality, risks and probabilities to generate expected net impacts and make comparisons against estimated costs).

CONTEXT

The Local Economy

Ilfracombe has a current population of approximately 11,000, which has been relatively stable over time but is projected to increase significantly to 15,000 by 2026 as a result of regeneration plans to be delivered through housing and employment growth. However, economic inactivity rates are relatively high, and particularly the number of benefit claimants which is more than 20% of the local working age population. There are also some pockets of high level deprivation within the town.

Tourism is the dominant sector in Ilfracombe, with wholesale, retail, accommodation and food service activities accounting for around one in three jobs and more than 40% of businesses in the town. This high dependence upon the tourism sector is also reflected in the high levels of part-time and low wage employment. There is a need for Ilfracombe to modernise its tourism offer by providing higher value activities, attracting higher value visitors and encouraging more year-round activity. These changes could be driven by developing the harbour to attract more leisure boaters, provide new ferry links and increase the offer of land and water-based leisure activities.

Given the underperformance of the local economy, Ilfracombe has been identified as a priority area for regeneration by Devon County Council, which identifies all three of the Ilfracombe wards as amongst the 28 wards in Devon which are among the 25% most deprived nationally. The County Council's Strategic Plan and Regeneration Action Plan both state the aim that none of these wards will be in the first quartile for multiple deprivation by 2013.

The Vision for Ilfracombe and the Harbour

A vision for Ilfracombe, defined in the North Devon and Torridge Joint Core Strategy, states that *"Ilfracombe will be regenerated through sustainable housing and employment growth, new ferry links serving the town and northern Devon, a revitalised tourism industry and improved access to key services and facilities. Design led regeneration of the town centre and enhancement of the harbour and sea front will capitalise on the town's built heritage, cultural assets, high quality landscape and coastal setting whilst safeguarding the harbour and seafront from rising sea levels and facilitating its continued use as an operational port."*

This vision makes a number of references to the harbour and clearly views it as a key driver of the regeneration of Ilfracombe, with the potential to revitalise the tourism industry, attract additional visitors, deliver housing and employment growth, as well as capitalising on the town's built heritage, cultural assets and high quality, coastal setting. Other regeneration studies have described the harbour as a *"natural magnet for visitors"* with the potential to further increase its economic contribution by increasing its capacity and ability to receive more leisure boats and cruise ships. This fits with the Harbour Board's own vision for the harbour, which aims to deliver regeneration by providing *"new opportunities for marine and tourism based business to establish Ilfracombe as a new 'Maritime Gateway' to the South West"* including the provision of *"deep water moorings for cross channel ferries, cruise liners and renewable energy support services"*.

The Rationale for Development

The rationale for developing the harbour is therefore based on the underperforming local economy and the need to regenerate the town. The harbour provides regeneration opportunities of sufficient scale to deliver the step-change required to ensure economic success in Ilfracombe. As a key focal point, transport gateway and centre of maritime economic and leisure activity it is recognised as a natural target for regeneration activity and a catalyst for regeneration of the town as a whole. Experience demonstrates that, while beneficial, the necessary regeneration will not be delivered by market forces alone, necessitating public sector support to tackle inequalities of opportunity between Ilfracombe and other areas.

EXISTING HARBOUR ACTIVITIES

The harbour has historically been of great importance to the town and the local economy as a trading and fishing port and continues to be a key source of income. It acts as the main focal point for the town and currently accommodates: the Harbour Authority; commercial fishing activities; moorings for visiting and resident leisure boats; excursion, fishing and diving charter boats; ferries (the Oldenburg, Waverley and Balmoral); the RNLI; and other marine and tourism businesses.

Economic Impact of Existing Activities

The estimated impacts of the current harbour activities are included in Table 1 below, taking account of all direct, indirect and induced effects associated with these activities, their expenditures and the expenditures of the visitors that they attract. The wider tourism impacts are significant and account for the fact that the harbour is a key attraction for many people to visit and stay in Ilfracombe and spend money on accommodation, food and drink and other goods and services. The harbour is currently estimated to support 277 full time equivalent jobs and value added of £8.2

million in the local economy; there are additional benefits in the sub-region and region as a result of multiplier effects.

Table 1: Total Impact of Current Harbour Activities in Ilfracombe

	Employment (FTE Jobs)	GVA (£)
Harbour Authority	3.5	34,000
Commercial Fishing	28.5	1,013,000
Ferry Activities*	15.6	353,000
Leisure Boating	4.1	127,000
Excursion/Charter Boats	23.8	619,000
RNLI Activities	1.5	53,000
Wider Tourism Impact	200	5,989,000
Total Harbour Impact	277	8,187,000

Note(s): Impacts are defined in terms of full time equivalent (FTE) jobs and gross value added (GVA)

* Ferries include the Oldenburg, Waverley and Balmoral but exclude the proposed Severn Link Ferry

Issues and Limitations

The above impacts are significant, although there are a number of issues and limitations with the current layout and facilities in the harbour including:

- Conflicting uses of the harbour-side with commercial fishing activities, passenger transport vessels, shore storage for boats, car parking, a pedestrian coastpath and a through route for vehicles sharing the same space.
- Limited protection to vessels moored in the harbour.
- Not being able to provide full tide access, which restricts boat movements and the size and type of vessel that can be accommodated in the harbour.
- Expected capacity constraints at busy times for berthing larger vessels, particularly with the proposed Severn Link ferry service to South Wales.
- Limited boating related facilities and services in the harbour as well as a lack of quality tourism and leisure facilities.

Opportunities to Develop the Harbour

Developing the harbour to address these limitations will help it fulfil its potential as a maritime gateway and focus for marine business and leisure activity. It will: improve the productivity, turnover and prospects of the existing businesses in the harbour; attract new businesses and opportunities; and attract additional visitors to spend money in the harbour and the wider Ilfracombe, North Devon and South West economies.

In order to justify the significant investment costs, the harbour development needs to deliver a step-change in its use and economic impact. The key opportunities to deliver the required scale of impact relate to:

- Developing the leisure marine offer (to attract additional leisure boaters and facilitate the growth of excursions and charter boat activities);
- Developing sea transport services (including ferry services, cruise ships and opportunities to service offshore renewable energy developments);
- Increasing and improving the quality of the tourism offer through targeted developments to attract harbour users, other visitors and local residents.

FUTURE OPTIONS FOR HARBOUR DEVELOPMENT

There have been several iterations of development options for the harbour, the most recent of which (Option 1b East and the Northern Breakwater Option: 3a [f]) have been the subject of detailed design and costing work¹. It is the economic impacts of these options that have been assessed in this study and compared to a ‘Do Nothing’ option.

‘Do Nothing’ Option

The ‘Do Nothing’ option represents the baseline against which to compare the additional impacts of the alternative development options. It provides estimates of the impacts of the harbour in the absence of any interventions to develop the harbour. It assumes most harbour activities are unchanged from the existing situation, except for:

- The introduction of the proposed Severn Link ferry, which will attract additional visitors even in the absence of any harbour developments, although some of the passengers are expected to have been displaced from other ferry services.
- The inclusion of additional impacts from cruise ship visits (assumed to be one visit per annum under this option).
- Increased income for the Harbour Authority as a result of the increased ferry and cruise ship activity.

Although this option does nothing to address any of the above issues and limitations with the harbour, these changes are expected to increase the total economic impact of the harbour to the levels shown in Table 2 below.

Table 2: Total Impact of Harbour Activities in Ilfracombe – Do Nothing Option

	Employment (FTE Jobs)	GVA (£)
Harbour Authority	3.9	34,000
Commercial Fishing	28.5	1,013,000
Ferry Activities	32.8	858,000
Leisure Boating	4.1	127,000
Excursion/Charter Boats	23.8	619,000
Cruise Ship Activities	0.7	20,000
RNLI Activities	1.5	53,000
Wider Tourism	200	5,989,000
Total Harbour Impact	295	8,713,000

Option 1b East

Option 1b East involves the construction of a southern breakwater and commercial quay providing more and deeper berths for the commercial fishing fleet, thereby freeing up space in the Inner Harbour for a small number of additional leisure boats. It also includes provision of improved access to the new quay and an area of reclamation to the south of the harbour, providing additional land for development.

This option is very much focused on the land-based development of residential, hotel and employment floorspace around the harbour. These developments provide opportunities to deliver an improved tourism and leisure offer through good quality accommodation, cafes and restaurants, boutique shops and galleries, perhaps building on the retro, quirky charm of the town. The new wet fish shop provides an example of how the harbourside can link better with the other harbour activities and retain more

¹ Scott Wilson, Ilfracombe Regeneration Harbour Northern Quay / Breakwater, October 2009

value within the local area. The inclusion of residential developments also helps contribute towards the Ilfracombe vision of housing-led regeneration, while encouraging a greater year-round presence at the harbour, generating demand for the harbourside businesses throughout the year.

The impacts for the existing harbour businesses are less significant, although it is expected that an increase in visitors to the newly developed harbourside will deliver additional demand for ferry services, excursions and charter boats and attract additional leisure boaters and a small number of cruise ships each year. However, it is the commercial fishing fleet that is expected to be the greatest beneficiary under this option since the relocated moorings will extend the time that can be spent at sea, thereby increasing productivity and turnover. There will be strong demand for the small number of additional leisure moorings within the more vibrant, better protected and better equipped harbour, while the Harbour Authority will benefit from increased mooring fees, harbour dues and fuel sales. In summary, this option delivers a number of benefits including:

- Improved harbourside leisure and tourism facilities,
- Increased protection for vessels in the harbour,
- Reduced conflict between harbour activities by relocating the fishing fleet,
- Improved sea access for any vessels using the southern breakwater.

The main risks with this option concern demand for the new floorspace and for the goods and services of the new businesses. In the absence of any significant increase in harbour activities and user numbers, there will be greater uncertainty about whether these new businesses can attract sufficient expenditures from existing harbour users, local residents and increased numbers of 'land-based' tourists. These risks have been taken into account, together with a full assessment of additionality in generating the expected net impacts, which are additional, over and above the 'Do Nothing' option.

Table 3: Expected Net Economic Impact – Option 1b East

	Ilfracombe		North Devon		South West	
	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Harbour Authority	0.6	4,000	1.1	20,000	1.1	20,000
Commercial Fishing	5.7	203,000	7.3	256,000	8.6	304,000
Ferry Activities	-	-	-	-	-	-
Atlantic Array	-	-	-	-	-	-
Leisure Boating	1.8	55,000	2.0	64,000	2.0	65,000
Excursion / Charter Boats	1.5	101,000	1.6	108,000	1.7	110,000
Cruise Ships	0.6	19,000	0.8	25,000	1.0	31,000
RNLI Activities	-	-	-	-	-	-
Harbourside Development	81	2,507,000	52	1,619,000	44	1,352,000
Wider Tourism Impacts	20	599,000	14.4	467,000	6.0	192,000
TOTAL NET ECONOMIC IMPACT	112	3,487,000	79	2,559,000	64	2,073,000

The expected impact of this option is to create an additional 112 jobs and to increase gross value added by £3.5 million in the local economy. Most of this additional activity is in retail and leisure developments around the harbour.

Northern Breakwater Option

The Northern Breakwater Option (as defined by Scott Wilson²) involves a breakwater structure of approximately 250 metres in length. The tip of the breakwater points in a south easterly direction to provide greater protection and enable vessels to use deep water berths on the inner face of the breakwater. It also includes reclaimed land at the tip of the existing Northern Quay for leisure, retail and/or office development, 'afloat' pontoon moorings for the RNLI and commercial boats and a land-based RNLI station.

By providing deep water berths for commercial vessels outside of the existing harbour structure and providing the necessary protection, the Northern Breakwater Option also provides the opportunity to free the inner and outer harbours of the commercial vessels that require the maximum possible access to the sea, and create space for a 280 berth marina. However, the extent to which any public sector investment in the Northern Breakwater is likely to lever additional private sector funds to develop the southern side of the harbour, and the breakwater and sill that would be necessary for the development of a marina is uncertain. Therefore the analysis has assessed two different scenarios for this option: one which assumes only the Northern Breakwater is constructed and therefore has a greater commercial focus; and one which assumes the full development of the harbour, including the additional development of a marina and harbourside development on reclaimed land to the south of the harbour.

Northern Breakwater Option: 'Commercial Maritime Gateway' Scenario

This scenario assumes only the construction of the Northern Breakwater, with no additional infrastructure. It provides 40 additional trot moorings for leisure boats in the outer harbour as well as many of the harbourside developments described under Option 1b East. However, since it has a greater focus on commercial activities and particularly sea transport activities (i.e. cruise ships, ferries and potentially Atlantic Array support vessels) it is described as the 'Commercial Maritime Gateway' scenario. The Northern Breakwater provides significantly increased functionality for the harbour, providing a large amount of berthing space on the inner face of the breakwater, with sea access at all times. These 'afloat' berths would have the capacity to accommodate:

- the RNLI lifeboats (thereby reducing response times and the costs of maintaining the previous tractor launch system),
- the excursion and charter boats (thereby increasing the time that these vessels can spend at sea delivering productivity and turnover benefits),
- the ferry services (reducing berthing capacity constraints, enabling vessels to berth overnight and benefit from increased visitors to the harbour),
- regular visits by cruise ships (it is expected that up to 15 per annum will be attracted by the increased leisure and tourism offer as well as the ability to berth alongside the breakwater rather than drop anchor out in the Bristol Channel),
- the Atlantic Array emergency response vessels and the associated 30-40 high value engineering jobs (the emergency response service requires full tidal access and Ilfracombe would be an appropriate location as the closest harbour).

² Scott Wilson (for North Devon Council, Devon County Council and SWRDA), Ilfracombe Regeneration: Harbour Northern Quay / Breakwater, October 2009

The development land also has a more commercial focus, providing some office space, significantly less residential and reduced retail floorspace compared to Option 1b East. A similar amount of floorspace is allocated to hotel and cafe/restaurant developments under this scenario, which is also expected to deliver an increased and improved tourism and leisure offer, as described above, that will help to attract additional numbers of cruise ships, and visiting and resident leisure boaters.

This scenario helps to overcome many of the limitations of the current harbour layout to deliver considerable benefits for harbour users, while the harbourside developments will provide a good choice of quality accommodation, bars, cafes and restaurants to enhance the overall appeal of the harbour for boaters, local residents and tourists and hence support the improvements to the infrastructure, that will deliver:

- Increased protection for vessels in the harbour,
- Full sea access at all tides for vessels berthed on the Northern Breakwater,
- Considerable berthing capacity to relieve pressures and constraints,
- Increased segregation between different types of harbour users and activities – with most commercial users moved to the Northern Breakwater.

The main risks associated with this option include: competition from other locations to accommodate the Atlantic Array emergency response vessels and the risk of failing to complete the breakwater in time; and the uncertainty over demand from cruise ships to visit Ilfracombe with a Northern Breakwater and improved visitor offer. The expected net additional impacts of this scenario over the 'Do Nothing' option are presented below, having again taken account of the risks and additionality. The impacts are on average around 40% higher under this scenario and are also spread across a greater number of different harbour activities.

Table 4: Expected Net Economic Impact: 'Commercial Maritime Gateway'

	Ilfracombe		North Devon		South West	
	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Harbour Authority	2.0	249,000	2.4	258,000	2.3	244,000
Commercial Fishing	2.1	76,000	2.7	96,000	3.2	114,000
Ferry Activities	8.0	249,000	9.4	315,000	8.6	284,000
Atlantic Array	21.6	859,000	15.6	616,000	15.2	597,000
Leisure Boating	3.3	100,000	3.6	116,000	3.7	117,000
Excursion / Charter Boats	4.7	264,000	5.0	281,000	5.2	284,000
Cruise Ships	3.5	106,000	4.3	138,000	5.3	170,000
RNLI Activities	1.1	40,000	1.0	35,000	0.9	34,000
Harbourside Development	70	2,355,000	45	1,527,000	38	1,281,000
Wider Tourism Impacts	20	599,000	14.4	467,000	6.0	192,000
TOTAL NET ECONOMIC IMPACT	136	4,897,000	104	3,850,000	89	3,317,000

Northern Breakwater Option: 'Full Harbour Development' Scenario

This scenario involves the construction of the Northern Breakwater but also includes the reclaimed development land described under Option 1b East as well as a southern breakwater and sill to 'close' the inner and outer harbour areas. This would accommodate the commercial fishing fleet on the outside of the basin, so not to impede their access to the sea, and enable the development of a marina.

This scenario best meets the vision for the harbour in delivering a high quality tourist offer while becoming a key 'Maritime Gateway' for leisure and commercial vessels. It combines and builds on the benefits of each of the previous options by delivering the same functionality as the 'Commercial Maritime Gateway' scenario along the Northern Breakwater (for the RNLI, ferries, excursion and charter boats and potentially for cruise ships and the Atlantic Array vessels), and providing new, deep water moorings for the commercial fishing fleet (as under Option 1b East). However the largest differences relate to the provision of a 280 berth marina, and harbourside development that delivers more floorspace than either of the previous options. In summary, this scenario is expected to attract the greatest number of:

- harbour users (leisure boaters and ferry, excursion, charter boat and cruise ship passengers), visiting the high quality shops, cafes and restaurants around the marina, while also making use of the water-based activities.
- residents (given the proposed scale of residential floorspace) attracted by properties overlooking a marina and willing to pay the price premium that this can deliver.
- non-boating leisure visitors (including local residents of Ilfracombe spending time at the harbour, and visitors to Ilfracombe wanting to shop, eat and drink in the relaxed, attractive harbourside environment, overlooking the boats).

It delivers the widest range of different activities and the most significant expected benefits and impacts but consequently faces the greatest number of different risks including: the competition and timing issues relating to the Atlantic Array; the likely levels of demand from cruise ships; whether the RNLI and all commercial users are willing to vacate the Inner Harbour. However, increasing the breadth of activities can reduce risk as there is a greater probability that overall visitor numbers will increase than with a smaller number of activities. The key benefits offered by this scenario include:

- Complete segregation between harbour users and activities, with sufficient capacity to accommodate: all ferries, excursion and charter boats, the RNLI and potentially cruise ships and Atlantic Array vessels on the Northern Breakwater; the fishing fleet on the outer side of a southern breakwater; and leisure boats within the marina.
- Marina berths with full protection from the sea, which will attract additional visitor and resident boaters and remove the need to provide shore storage for boats in the winter, thereby freeing up additional harbourside space for development.
- Boating-related services required to meet the needs of the additional leisure boats (i.e. chandler, brokerage and repair services).
- A significant increase in the retail and tourism offer of the harbour, focusing particularly on high quality experiences and services that will attract and meet the demands of high value marina customers.
- Full sea access at all tides on the Northern Breakwater and at most times for the fishing fleet on the southern breakwater.

Taking account of these activities, risks, potential benefits and additionality factors, this scenario delivers the most significant impacts, some 90% higher than the 'Commercial Maritime Gateway' scenario and 160% higher than Option 1b East.

Table 5: Expected Net Economic Impact: 'Full Harbour Development'

	Ilfracombe		North Devon		South West	
	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Harbour Authority	2.3	237,000	3.1	259,000	2.9	246,000
Commercial Fishing	5.7	203,000	7.3	256,000	8.6	304,000
Ferry Activities	13.1	413,000	15.5	522,000	14.2	472,000
Atlantic Array	21.6	859,000	15.6	616,000	15.2	597,000
Leisure Boating	17.3	537,000	18.9	609,000	18.9	604,000
Excursion / Charter Boats	9.5	416,000	9.9	444,000	10.2	450,000
Cruise Ships	6.4	191,000	7.6	248,000	9.5	305,000
RNLI Activities	1.1	40,000	1.0	35,000	0.9	34,000
Harbourside Development	147	4,650,000	95	3,015,000	80	2,529,000
Wider Tourism Impacts	40	1,198,000	29	934,000	12	383,000
TOTAL NET ECONOMIC IMPACT	264	8,742,000	203	6,939,000	172	5,923,000

COST BENEFIT ANALYSIS

The cost benefit analysis shows that all development options deliver a positive Net Present Value (NPV) over a 15 year period. Option 1b East delivers a NPV of £25 million in the local Ilfracombe economy over 15 years. This represents the lowest NPV and benefit cost ratio despite having the lowest construction costs.

All scenarios associated with the Northern Breakwater option are estimated to deliver greater NPVs and, in most cases, benefit cost ratios. Even developing the Northern Breakwater alone, with no additional infrastructure on the south side of the harbour and no marina, is expected to deliver NPVs of around 50% higher than those associated with Option 1b East.

However, it is the 'Full Harbour Development' scenario that delivers the greatest NPVs and benefit cost ratios. Even if the public sector was to fund all of the harbour infrastructure required under this scenario, it delivers a positive NPV over 15 years. Alternatively, if the scheme is able to lever additional private sector investment to develop the south side of the harbour and install the sill and marina pontoons, then the estimated NPVs increase significantly to £76 million in Ilfracombe, £56 million in North Devon and £44 million in the South West. These figures deliver benefit cost ratios of 4.5 in Ilfracombe, 3.6 in North Devon and 3.0 in the South West.

Table 6: Cost Benefit Analysis of Development Options

Option 1b East	Ilfracombe	North Devon	South West
	£	£	£
Present Value of Benefits (15 Years)	38.8m	28.5m	23.1m
Total Public Sector Cost	13.7m	13.7m	13.7m
Net Present Value (15 years)	25.1m	14.8m	9.4m
Benefit Cost Ratio	2.8	2.1	1.7
Northern Breakwater Option	Ilfracombe	North Devon	South West
'Commercial Maritime Gateway' Scenario	£	£	£
Present Value of Benefits (15 Years)	54.5m	42.8m	36.9m
Total Public Sector Cost	21.7m	21.7m	21.7m
Net Present Value (15 years)	32.8m	21.1m	15.2m
Benefit Cost Ratio	2.5	2.0	1.7

Northern Breakwater Option	Ilfracombe	North Devon	South West
'Full Harbour Development' Scenario – All Public Sector Costs	£	£	£
Present Value of Benefits (15 Years)	97.3m	77.2m	65.9m
Total Public Sector Cost (Assumes public sector pays all harbour infrastructure costs)	35m	35m	35m
Net Present Value (15 years)	62.3m	42.2m	30.9m
Benefit Cost Ratio	2.8	2.2	1.9
Northern Breakwater Option	Ilfracombe	North Devon	South West
'Full Harbour Development' Scenario – Levering Private Investment	£	£	£
Present Value of Benefits (15 Years)	97.3m	77.2m	65.9m
Total Public Sector Cost (Assumes private sector invests in infrastructure on southern side of the harbour)	21.7m	21.7m	21.7m
Net Present Value (15 years)	75.6m	55.5m	44.2m
Benefit Cost Ratio	4.5	3.6	3.0

CONCLUSIONS

This study has identified a strong case for developing Ilfracombe Harbour to deliver regeneration impacts of a sufficient scale to drive change and act as a catalyst for growth in the local economy. Without the proposed developments, the town is likely to continue to underperform, without achieving its economic aspirations and potential.

This economic impact assessment has identified potential for significant additional employment and GVA under each of the development options, particularly through the development of harbourside residential, employment and retail and leisure floorspace, but also through the development and enhancement of the specific harbour activities. The estimated GVA impacts of each option would have to fall by at least 60% to make the project unviable at the local level, 50% at the sub-regional level and 40% at the regional level.

There is potential for considerable growth, particularly by developing a marina and associated facilities, and using the Northern Breakwater to provide additional marine transport services for passengers, by increasing ferry services, and potentially through serving offshore energy developments. Excursions and charter boats, cruise ships and commercial fishing activities are also expected to generate additional benefits as a result of improvements to the harbour layout and infrastructure.

However, it is the combination of activities that is most likely to generate the levels of demand, expenditures and the associated economic impacts that are required to deliver the economic aims for the harbour and the town. The harbour developments are estimated to be most viable and deliver the greatest impacts when they include the construction of the Northern Breakwater and marina and the harbourside developments that can attract and serve the additional visitors. It is when all of these components come together that the required step change can be delivered, while the leverage of private investment to develop the marina and southern side of the harbour would make the proposals more competitive and deliver better value for money for public sector funders.

1 INTRODUCTION

GHK was commissioned by North Devon Plus to undertake an economic impact assessment of the proposed options for the development of Ilfracombe Harbour.

The study assessed the economic benefits of two alternative development options for the Harbour against a 'Do Nothing' option to decide whether they justify the costs. Additional objectives include assessments of:

- Whether the regeneration options have the scale to accommodate more value added and sustainable businesses and jobs in priority sectors such as the environmental technologies sector and help deliver the growth identified in the North Devon LDF.
- Whether market failure exists and can be addressed by the proposed interventions capturing public and merit good benefits, internalising externalities through social and environmental benefits, and delivering long-term regional benefits.
- Whether sub-regional productivity can be raised by increasing innovation, skills and access by: attracting high value businesses and jobs; developing spatial, intellectual or industrial links to other areas in the sub-region; or acting as a catalyst for other developments (delivering strategic added value).
- The viability and sustainability of development options against the 'Do Nothing' option, considering additionality and making comparisons against alternative options.

The remainder of this report comprises:

- Section 2, which describes the study methodology.
- Section 3, which provides some context to the study.
- Section 4, which describes the existing harbour activities and estimates its current economic impact.
- Section 5, which presents the options and scenarios for the regeneration of the harbour in terms of expected functionality, capacity and impacts.
- Section 6, which assesses additionality and estimates net impacts for the local, sub-regional and regional economies.
- Section 7, which describes additional impacts.
- Section 8, which presents the overall analysis and conclusions.
- Annex I, which provides a list of consultees.
- Annex II, which describes some of the standard assumptions used in the economic impact assessment.
- Annex III, which provides a more detailed assessment of the economic impact of the different options.
- Annex IV, which presents an analysis of the local economy.
- Annex V, which provides a comparison with other similar proposed developments in the South West.

2 METHODOLOGY

The study was based around three core tasks:

- Information gathering;
- Baseline assessment;
- Options appraisal.

2.1 Information Gathering

A large amount of work had already been undertaken relating to the future of Ilfracombe and the harbour. Relevant data and documentation regarding the existing harbour operations, the proposed development options, and the role of the harbour in the wider regeneration of Ilfracombe and North Devon, were reviewed to ensure this study took account of, and built upon, this earlier work.

The document and data review was complemented by a series of interviews with key stakeholders associated with the harbour and the regeneration of Ilfracombe (a list of consultees is included in Annex I). These interviews explored the rationale for developing the harbour, the proposed options, the interests of individual stakeholders, links with other initiatives, the markets for the proposed developments, the expected economic and social impacts, additionality, key risks and success factors.

2.2 Baseline Assessment

The above information was used to analyse the local economy and the need for regeneration in Ilfracombe, as well as defining the rationale for developing the harbour. The existing harbour activities were identified and assessed in terms of their economic impact. This helped to define a 'Do Nothing' option for the harbour, which was largely based on the existing situation with some additional activities that are expected to commence, even in the absence of any harbour developments. The baseline assessment also assessed the current issues and limitations with the existing harbour layout and infrastructure.

2.3 Options Appraisal

The final core task involved a detailed appraisal of each of the development options for the harbour. This initially involved defining each option in terms of the new infrastructure, layout, and additional activities, visitors and expenditures that are expected to be attracted to the harbour, as well as assessing the ability of each to provide solutions to the issues and limitations with the existing harbour. A robust economic impact assessment was then undertaken, including temporary construction impacts and consideration of additionality, risks and probabilities to generate expected net impacts. Comparisons were made against the estimated costs of development as part of a cost benefit analysis, which also enabled comparison between the different development proposals, including the 'Do Nothing' option, to identify a 'preferred' option for the harbour.

3 STUDY CONTEXT

3.1 The Local Economy

Ilfracombe has a current population of approximately 11,000, which has been relatively stable over time but is projected to increase significantly to 15,000 by 2026 as a result of regeneration plans to be delivered through housing and employment growth. However, economic inactivity rates are relatively high, and particularly the number of benefit claimants which is more than 20% of the local working age population. There are also some pockets of high level deprivation within the town.

Tourism is the dominant sector in Ilfracombe, with wholesale, retail, accommodation and food service activities accounting for around one in three jobs and more than 40% of businesses in the town. This high dependence upon the tourism sector is also reflected in the high levels of part-time and low wage employment and highlights an opportunity for Ilfracombe to modernise its tourism offer by providing higher value activities, attracting higher value visitors and encouraging more year-round activity. These changes could be driven by developing the harbour to attract more leisure boaters, provide new ferry links and increase the offer of land and water-based leisure activities.

Given the underperformance of the local economy, Ilfracombe has been identified as a priority area for regeneration by Devon County Council, which identifies all three of the Ilfracombe wards as amongst the 28 wards in Devon included within the 25% most deprived wards in the country. The County Council's Strategic Plan and Regeneration Action Plan both state Devon County Council's aim that none of these wards will be in the top quartile by 2013.

3.2 The Vision for Ilfracombe and the Harbour

A vision for Ilfracombe, defined in the North Devon and Torrington Joint Core Strategy, states that *"Ilfracombe will be regenerated through sustainable housing and employment growth, new ferry links serving the town and northern Devon, a revitalised tourism industry and improved access to key services and facilities. Design led regeneration of the town centre and enhancement of the harbour and sea front will capitalise on the town's built heritage, cultural assets, high quality landscape and coastal setting whilst safeguarding the harbour and seafront from rising sea levels and facilitating its continued use as an operational port."*

This vision makes a number of references to the harbour and clearly views it as an integral part of the regeneration of Ilfracombe. Other studies have also identified the importance of the harbour to the local economy, including the 2005 Town Centre Study undertaken by Terence O'Rourke, which describes the harbour as a *"natural magnet for visitors"*, *"an important selling point"* and *"the town's hidden gem"*. It also identified potential to further increase its contribution to the local economy by increasing its capacity and ability to receive more leisure boats and cruise ships.

The Harbour Board has its own specific vision for the harbour and aims to deliver regeneration by providing *"new opportunities for marine and tourism based business to establish Ilfracombe as a new 'Maritime Gateway' to the South West"* including the provision of *"deep water moorings for cross channel ferries, cruise liners and renewable energy support services"*.

There are high levels of consensus amongst all of these visions and amongst local stakeholders in terms of the importance of the harbour to the Ilfracombe economy, the

potential to enhance the harbour and increase its economic contribution, and agreement that the harbour is the most significant and best opportunity for delivering regeneration in Ilfracombe as a whole.

The development of the harbour is perceived as having the potential to deliver much of the vision for Ilfracombe as outlined in the Core Strategy, including revitalising the tourism industry and attracting additional visitors, improving access to key services and facilities, delivering housing and employment growth, as well as capitalising on the town's built heritage, cultural assets and high quality, coastal setting.

3.3 The Rationale for Development

The rationale for developing the harbour is therefore based on the underperforming local economy and the need to regenerate the town. Ilfracombe is suffering from a narrow economic base with dependence on low value added, low skilled sectors. This raises issues in terms of high levels of part-time and seasonal employment, low wages and some high levels of deprivation in the town. There is a need to support the existing sectors in the local economy, particularly the tourism sector, in order to build capacity and develop higher value added activities, as it is unlikely that the town economy will experience a sudden change in sectoral structure in the short term.

The harbour provides an opportunity to deliver the required increase in the scale and quality of the local tourism sector, delivering significant regeneration opportunities of sufficient scale to deliver the step-change required to ensure economic success in Ilfracombe. As a key focal point, transport gateway and centre of maritime economic and leisure activity, the harbour is recognised as a natural target for regeneration activity and a catalyst for regeneration of the town as a whole.

The regeneration of the harbour is a clear example of a 'public good' market failure, where market forces alone would not invest in the infrastructure required to deliver the potential benefits identified by this study for the harbour, the town and the wider area. This is evident since the plans for a Northern Breakwater are still being discussed in Ilfracombe, more than 100 years after the development was first considered. This experience demonstrates that, while beneficial, the necessary regeneration will not be delivered by market forces alone, necessitating public sector support to tackle inequalities of opportunity between Ilfracombe and other areas.

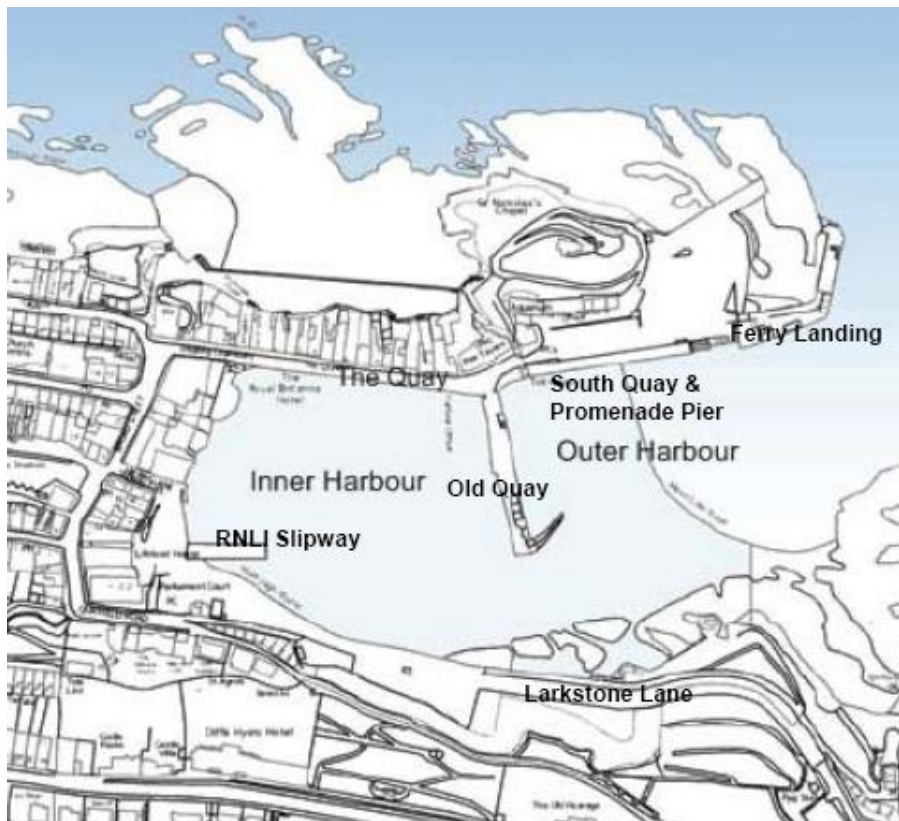
4 EXISTING HARBOUR ACTIVITIES

4.1 Introduction

The harbour has historically been of great importance to the town and the local economy as a trading and fishing port and continues to be a key source of income. It acts as the main focal point for the town and currently accommodates:

- The Harbour Authority
- Commercial fishing activities
- Ferries (the Oldenburg, Waverley and Balmoral)
- Moorings for visiting and resident leisure boats
- Excursion, fishing and diving charter boats
- The RNLI
- Other marine and tourism businesses.

Figure 4.1: Existing Harbour Layout



Source: Scott Wilson, Ilfracombe Regeneration: Harbour Northern Quay / Breakwater, October 2009

This section describes the activities of these current ‘users’ of Ilfracombe Harbour and provides a summary of estimates of their existing economic impact in terms of employment, measured in terms of full time equivalent (FTE) jobs and gross value added (GVA). A more detailed description of the approach, assumptions and the economic impact assessment itself is included as Annexes.

4.2 Economic Impact Assessment of Existing Harbour Activities

4.2.1 Harbour Authority

The Harbour Authority employs two people and is responsible for managing and operating the harbour. It generates income through mooring fees, harbour dues, rent for harbourside properties and selling fuel to the leisure and commercial users of the harbour. Expenditures on goods and services are significant, at almost £500,000 per annum, and currently exceed income. More than half of this expenditure is spent on fuel supplies and only 15% is estimated to be spent in the local Ilfracombe economy.

These activities and local expenditures are estimated to support 3.5 FTE jobs and GVA of £34,000 in Ilfracombe, including direct, indirect and induced effects. As the Harbour Authority earns income from the other harbour activities, there is a risk of double-counting impacts. To overcome this issue, the estimated income for the Harbour Authority has been subtracted from the expenditures of the other activities before assessing their impact.

4.2.2 Commercial Fishing

Ilfracombe has a current fishing fleet of seven vessels, comprising five potters and two trawlers. While much of the fish landed by the Ilfracombe fleet is processed and sold outside the local area, there is also some land-based fishing-related activity in Ilfracombe with the recent addition of a wet fish shop and associated wholesale and retail activities.

Marine and Fisheries Agency (MFA) data suggest around 930 tonnes of fish were landed into Ilfracombe in 2009, as presented in Table 4.1 below. This is more than double the weight of total landings in 2006 and has been driven by strong growth in demersal fish and particularly molluscs. The value of fish landings in Ilfracombe has also been increasing, albeit less significantly, to £1.125 million in 2009. However, this does not include fish landed elsewhere or the value of harbourside activities, and interviews with sector representatives suggest the total turnover of the sector in Ilfracombe is around £1.6 million.

Table 4.1: Volume and Value of Fish Landed in Ilfracombe

Live Weight (tonnes)	2006	2007	2008	2009
Crustacean	90.02	99.76	54.19	68.28
Demersal	275.31	264.99	426.44	391.08
Mollusc	78.11	155.89	419.40	469.15
Pelagic	0.03	0.00	0.00	0.06
TOTAL	443.48	520.64	900.03	928.57
Value (£)	2006	2007	2008	2009
Crustacean	291,093	284,709	206,199	211,574
Demersal	550,960	468,166	632,647	547,053
Mollusc	77,535	307,635	292,313	366,133
Pelagic	22	2	1	12
TOTAL	919,610	1,060,511	1,131,160	1,124,772

Source: Marine Fisheries Agency (2010)

The seven fishing vessels and land-based activities are estimated to support 20 full time fishing jobs, with the vast majority of employees living in Ilfracombe. Expenditures on fuel, moorings, fishing gear, maintenance, ice, etc. are estimated to total £875,000 per annum, with a large proportion (around 60%) purchased locally in Ilfracombe. In

total the sector and its expenditures are estimated to support 28.5 FTE jobs and £1 million of GVA in Ilfracombe each year.

4.2.3 Ferry Services

There are several different 'ferry' services currently operating from Ilfracombe Harbour. These include the Oldenburg ferry to Lundy Island and the summer ferry/excursion services operated around the Bristol Channel and beyond by the Waverley and Balmoral vessels, operated by Waverley Excursions. The proposed Severn Link ferry service, providing a regular and year round ferry service between Ilfracombe and South Wales, has not been included as an existing harbour activity since it is not due to commence until June 2010.

The MS Oldenburg is owned and operated by the Lundy Island Company and provides the main transport route to Lundy for passengers and island supplies. Although Bideford is the Oldenburg's official 'home' port, 80% of trips depart from Ilfracombe because it offers improved sea access and a larger tourist catchment. The Lundy Island Company estimates that 12,200 passengers travel from Ilfracombe each year, generating turnover of more than £500,000. 12 FTE jobs are estimated to be associated with services from Ilfracombe, half of whom live in the town. Local businesses also benefit from the tourism expenditures of passengers boarding the Oldenburg in Ilfracombe, the local expenditures associated with running the service and the local purchases of supplies for Lundy Island, all of which are estimated to total more than £400,000 per annum.

Harbour Authority data suggest the Waverley and Balmoral made 33 visits to Ilfracombe in 2008/09, involving an estimated 9,200 passengers boarding or disembarking in the harbour. Local purchases made by the Waverley and Balmoral and their passengers are estimated to total more than £100,000 per annum.

In total, the existing ferry services are estimated to support 16 FTE jobs and generate GVA of £350,000 of GVA in Ilfracombe, as a result of the expenditures of the ferries and their passengers, and indirect and induced effects.

4.2.4 Leisure Boaters

There are currently 89 resident leisure boats in Ilfracombe and the harbour is at full capacity with a waiting list comprising another 40 to 45 boats. The harbour also receives visiting leisure boats and around 950 boats stay overnight in Ilfracombe each year, with a much smaller number of day visitors estimated to total around 30. These leisure boaters spend money on specialist boating goods and services such as moorings, fuel, maintenance, insurance, etc. (estimated to total £140,000 per annum in Ilfracombe although much of this is income for the Harbour Authority) and also spend money on tourism-related goods and services (estimated to total more than £160,000 per annum). In total, these expenditures are estimated to support 4.1 FTE jobs and £127,000 of GVA in Ilfracombe.

4.2.5 Excursions, Fishing and Diving Charters

There are currently five boats operating from Ilfracombe Harbour delivering excursions, fishing and diving charter services. The largest of these boats is the Ilfracombe Princess, which operates sea and wildlife cruises up to five times per day in the summer. The other boats offer a range of wildlife, sightseeing, fishing and diving trips. There are 12 FTE jobs employed working on these boats, which generate total sales of an estimated £350,000 per annum. Local purchases of goods and services are

relatively low at around £80,000 (or £25,000 excluding money paid to the Harbour Authority for moorings, fuel, etc.).

However, these boats attract many people to the harbour, with a combined customer base estimated to total more than 30,000 people per annum, many of whom are visitors to Ilfracombe. The expenditures of people visiting from outside Ilfracombe are estimated to be more than £500,000 per annum. In total, these activities and expenditures are estimated to support 24 FTE jobs and more than £600,000 of GVA in Ilfracombe each year.

4.2.6 Cruise Ships

Cruise ships are not included under current harbour activities as the last cruise ship visit was in 2006 and the next is not expected until 2011.

4.2.7 RNLI

The RNLI operates two lifeboats from Ilfracombe Harbour:

- a 12m Mersey class lifeboat – an all-weather boat, launched and recovered by tractor using the launch ramp,
- a smaller 16ft inflatable lifeboat launched and recovered using a smaller tractor and the launch ramp in the harbour.

RNLI operations in Ilfracombe involve around 30 people, including crew and shore helpers, all of whom need to be available at short notice for emergencies and therefore live and work locally in Ilfracombe. Most of the team are volunteers, although there is one full time individual employed as a cox and mechanic in the harbour.

The cost of operating and maintaining the vessels and launch systems is significant, although most goods and services are supplied centrally and only a small proportion are purchased locally. This results in a relatively low local impact of RNLI activities of 1.5 FTE jobs and £53,000 of GVA per annum, including direct, indirect and induced effects.

4.2.8 Other Marine Businesses

There are a small number of marine businesses currently operating in Ilfracombe. The Harbour Information Guide lists eight businesses offering marine-related services, including chandlers, marine engineers and marine electronics specialists, boat haulage and crane services and a marine survey business. Five of these businesses are based in Ilfracombe although only the chandler/photographic shop is located in the immediate harbour area. The other businesses come to the harbour as required to provide marine services for the commercial and leisure boats.

The previous harbour impact study³ found that these marine businesses attributed only around 20% of their turnover to activities in and around Ilfracombe Harbour. It is therefore considered more appropriate to estimate the impact of the marine businesses from the specific boating-related expenditures of the harbour activities described above, which also prevents double counting issues.

4.2.9 Wider Tourism Impact

The above sections have described the tourism expenditures associated with visitors actually using each of the activities described above. However, this excludes a

³ Roger Tym and Partners, Ilfracombe Harbour Development Economic Impact Study, May 2007

significant additional impact of the harbour in attracting non-boating, leisure tourists to Ilfracombe. These are visitors who do not use the harbour facilities but are attracted by the boats, the commercial activities and the sea and will spend money in the local economy as a result.

North Devon is estimated to receive 918,000 staying visitors per annum, spending 4.1 million nights and £209 million⁴ (2007 prices). The proportion of bed spaces in Ilfracombe can be used as a proxy to estimate that there are 155,000 staying visitors in Ilfracombe per annum, staying for more than 700,000 nights and spending £37.5 million per annum (inflated to 2009 prices). North Devon also receives 1.9 million day visitors per annum, spending £82.6 million per annum (2007 prices). Applying a ratio of visitor days to visitor nights (from the North Devon data) provides an estimate of 326,000 day visitors to Ilfracombe spending £14.8 million per annum (inflated to 2009 prices). Using a conservative assumption that 25% of these visits and expenditures are associated with, and attributable to, the harbour, suggests that the harbour attracts visitor expenditures of £13.1 million spent in Ilfracombe each year. Subtracting the visitor expenditures described above, associated with the other harbour activities, to avoid double counting, suggests that these wider tourism expenditures support an additional 200 FTE jobs and GVA of £6 million in the local Ilfracombe economy.

4.2.10 Total Harbour Impact

The total estimated impact of the harbour can be estimated by drawing together all of the above activities and impacts, as shown in Table 4.2. The data suggest that the specific harbour activities support 77 FTE jobs and GVA of £2.2 million per annum in Ilfracombe, which increases to 277 FTE jobs and £8.2 million with the inclusion of the wider tourism impacts.

Table 4.2: Total Impact of Current Harbour Activities in Ilfracombe

	Employment (FTE Jobs)	GVA (£)
Harbour Authority	3.5	34,000
Commercial Fishing	28.5	1,013,000
Ferry Activities*	15.6	353,000
Leisure Boating	4.1	127,000
Excursion/Charter Boats	23.8	619,000
RNLI Activities	1.5	53,000
Wider Tourism	200	5,989,000
Total Harbour Impact	277	8,187,000

* Excludes the proposed Severn Link Ferry

^ Currently assumed to be zero

4.3 Limitations and Issues with the Current Harbour

The above impacts are significant, although there are a number of issues and limitations with the current layout and facilities in the harbour including:

- There are significant conflicting uses of the harbour-side with commercial fishing activities, passenger transport vessels, shore storage for boats, car parking, pedestrian coastpath and a through route for vehicles all sharing the same space around the harbour. This causes considerable health and safety issues and restricts the activities and movements of commercial and leisure users of the harbour, which would benefit from clearer separation between different uses.

⁴ South West Tourism, Value of Tourism 2007: Devon Districts

- The current harbour infrastructure offers limited protection to vessels moored in the harbour. North-Easterly winds can send large waves into the harbour causing frequent damage to commercial and leisure boats.
- The harbour is unable to provide full tide access, even at the ferry landing (the most seaward point of the harbour). This restricts boat movements, which limits the productivity and turnover potential of commercial vessels, and restricts the size and type of vessel that can be accommodated in the harbour.
- As described above, the ferry landing can be accessed most of the tide but is also quite exposed which can cause berthing issues. There is already much demand for the berth from the Lundy ferry and Balmoral and Waverley excursion steamers. The introduction of the Severn Link ferry will significantly increase demand for the berth and is likely to cause capacity issues at busy times.
- There are limited boating related facilities and services in the harbour and Ilfracombe in terms of chandlers, boat repair, marine engineers, etc. These facilities are already considered insufficient given the size of the harbour and the scale of existing commercial and leisure boating activities in Ilfracombe. Additional boating related services are therefore required, and particularly under the future options that are expected to increase the number of commercial and leisure boats in the harbour, which will generate additional demand.
- There are also limited leisure facilities in the harbour. Any increase and/or improvement in the retail, leisure and food and drink offer of the harbour would generate benefits for the local tourism economy under any of the future options for the harbour, including the 'Do Nothing' option. This is also likely to represent significant opportunities for the development options in terms of providing the facilities and services to both attract and serve additional leisure boaters, users of the other harbour activities and general visitors to the harbour.

4.4 Opportunities to Develop the Harbour

Developing the harbour to address these limitations will help it fulfil its potential as a maritime gateway and focus for marine and leisure activities. It will: improve the productivity, turnover and prospects of the existing businesses in the harbour; attract new businesses and opportunities; and attract additional visitors to spend money in the harbour and the wider Ilfracombe, North Devon and South West economies.

In order to justify the significant investment costs, the harbour development needs to deliver a step-change in its use and economic impact. The main opportunities to deliver the required scale of impact relate to three broad areas:

- Developing the leisure marine offer (to attract additional leisure boaters and facilitate the growth of excursions and charter boat activities);
- Developing sea transport services (including ferry services, cruise ships and opportunities to service offshore renewable energy developments);
- Increasing and improving the quality of the tourism offer through targeted developments to attract harbour users, other visitors and local residents.

The following section introduces the potential options for developing the harbour and increasing its ability to attract, enhance and serve these activities within the harbour. These opportunities aim to diversify and improve the harbour facilities and activities, and increase the throughput of the harbour in terms of commercial, passenger and leisure craft and visitors.

5 FUTURE OPTIONS AND SCENARIOS

5.1 Introduction

There have been several iterations of development options for the harbour, the most recent of which (Option 1b East and the Northern Breakwater Option: 3a [f]) have been the subject of detailed design and costing work⁵. The primary aim of this study is to assess and compare the economic impacts of each option against a 'Do Nothing' option to determine the additional economic impacts that would be delivered by public sector investment in the harbour.

This chapter describes the future development options and provides a summary of the economic impact assessment, which is described in greater detail in Annex III. These future development options comprise:

- A 'Do Nothing' option
- Option 1b East
- Northern Breakwater Option:
 - 'Commercial Maritime Gateway' Scenario – Assuming no additional harbour infrastructure beyond the Northern Breakwater
 - 'Full Harbour Development' Scenario – Assuming the development of the Northern Breakwater, a marina and the south side of the harbour.

5.2 'Do Nothing' Option

The first of the future options for the harbour is the 'Do Nothing' option, which represents the baseline against which to compare the additional impacts of the alternative development options. It provides estimates of impacts in the absence of any interventions to develop the harbour. Most harbour activities are assumed to remain unchanged from the existing situation, except for:

- The introduction of the proposed Severn Link ferry, which is expected to commence in 2010 and is therefore not dependent upon the development of the harbour.
- The inclusion of additional impacts from cruise ship visits. While previous cruise ships visits have been rare, Ilfracombe is becoming more proactive and expects to receive three cruise ships in 2011.
- Increased income for the Harbour Authority as a result of the increased ferry and cruise ship activity.

5.2.1 Ferries

The proposed Severn Link ferry is expected to become operational in June 2010 providing regular, year-round services between Ilfracombe and Swansea. This does not require any development of the harbour although there is likely to be increased pressure for ferry berths with the Severn Link ferry, Oldenburg, Balmoral and Waverley all sharing the same berths, which could cause issues at low tides and busy times.

The projected ferry crossings and passenger numbers for the new service are estimated to comprise 700 crossings per annum under this option, based on three

⁵ Scott Wilson, Ilfracombe Regeneration Harbour Northern Quay / Breakwater, October 2009

'rotations' per day between April and September and one 'rotation' per day between October and March. This generates an estimated 62,000 passengers, based on 33% of capacity. However, given the uncertainty of projecting passenger numbers for a new service, it has been assumed that there is a 75% likelihood that this level of demand exists and will be achieved (and a 25% probability that the service does not commence or is not sustainable and passenger numbers fall to zero). These probabilities reduce the potential number of passengers to around 47,000 passengers per annum.

Consultations with the ferry operators suggested limited concerns over competition for passengers, but there is likely to be some displacement as passengers that would have taken a trip to Lundy or excursion on the Balmoral or Waverley, instead take the ferry to Swansea, and passenger numbers on these other vessels are estimated to fall from 40% to 35% of capacity.

Severn Link passengers are considered equally likely to travel in each direction but all will spend money in Ilfracombe, even if only on car parking. The majority of visitors to Ilfracombe will be day visitors, although overnight and weekly stays will be more popular in the summer. Total visitor expenditures associated with ferry passengers are estimated to increase by £1 million with the introduction of the Severn Link ferry, which will itself spend around £100,000 per annum in Ilfracombe, half of which will be harbour fees. In total the introduction of the Severn Link ferry is expected to support an additional 17 FTE jobs and £500,000 of GVA in Ilfracombe, increasing the total impact of all ferry services to 33 FTE jobs and £858,000 of GVA.

5.2.2 *Cruise Ships*

Ilfracombe last received a cruise ship visit in 2006 but the Harbour Authority has since been working closely with Destination South West (a marketing alliance for ports in Devon and Cornwall) to raise the profile of Ilfracombe and attract cruise ships and three are now expected to visit in 2011. Given this wide variance in the number of cruise ships visiting and expected to visit, the 'Do Nothing' option assumes Ilfracombe receives one cruise ship visit per annum, since this is considered to be the best estimate of 'current' levels of activity.

The characteristics of the cruise ship are assumed as the average of the three vessels expected to visit in 2011. The impacts will include additional harbour charges at an average of £2,060 per vessel, and the expenditures of passengers and crew. A recent economic impact study in Falmouth⁶ suggests that 15% of crew and 75% of cruise passengers go ashore during cruise ship visits. The crew are estimated to spend an average of £40 per head, while the 75% of passengers include:

- 35% spending an average of £65 per person,
- 35% going on an excursion and spending £75 per person,
- 5% using taxis or hire cars and spending £85 per person.

The average expenditure estimate across the three cruise ships expected in 2011 is around £40,000 per vessel and each vessel is estimated to support 0.7 FTE jobs and GVA of £20,000 in the local Ilfracombe economy.

⁶ Arup, Economic Impact Study and Assessment of the Port of Falmouth, 2008

5.2.3 Harbour Authority

The Harbour Authority will benefit from around £64,000 of additional income per annum from harbour fees associated with the Severn Link ferry and cruise ship activities under the 'Do Nothing' option. This will support an additional 0.4 FTE jobs (based on current levels of income per job), and have a marginal impact on GVA.

5.2.4 Total Harbour Impact

The 'Do Nothing' option is estimated to support 295 FTE jobs and £8.7 million of GVA in Ilfracombe. The introduction of the Severn Link ferry and the cruise ship visit are therefore estimated to support an additional 18 FTE jobs and £525,000 of GVA in the local economy, over and above current harbour activities.

Table 5.1: Total Impact of Harbour Activities in Ilfracombe – Do Nothing Option

	Employment (FTE Jobs)	GVA (£)
Harbour Authority	3.9	34,000
Commercial Fishing	28.5	1,013,000
Ferry Activities	32.8	858,000
Leisure Boating	4.1	127,000
Excursion/Charter Boats	23.8	619,000
Cruise Ship Activities	0.7	20,000
RNLI Activities	1.5	53,000
Wider Tourism	200	5,989,000
Total Harbour Impact	295	8,713,000

However, this option does not overcome any of the issues and limitations with the harbour and is therefore likely to be restricted from achieving any significant growth in harbour activities and visitors without changing the facilities and layout of the harbour.

5.3 Option 1b East

Option 1b East involves the construction of a southern breakwater and commercial quay, as shown in Figure 5.1 below. It includes an area of reclamation to the south of the harbour (currently a rocky cove), providing additional land for development, and provision of improved access to the new quay, which will accommodate the commercial fishing fleet, freeing up space in the Inner Harbour for an additional 10-12 leisure boats.

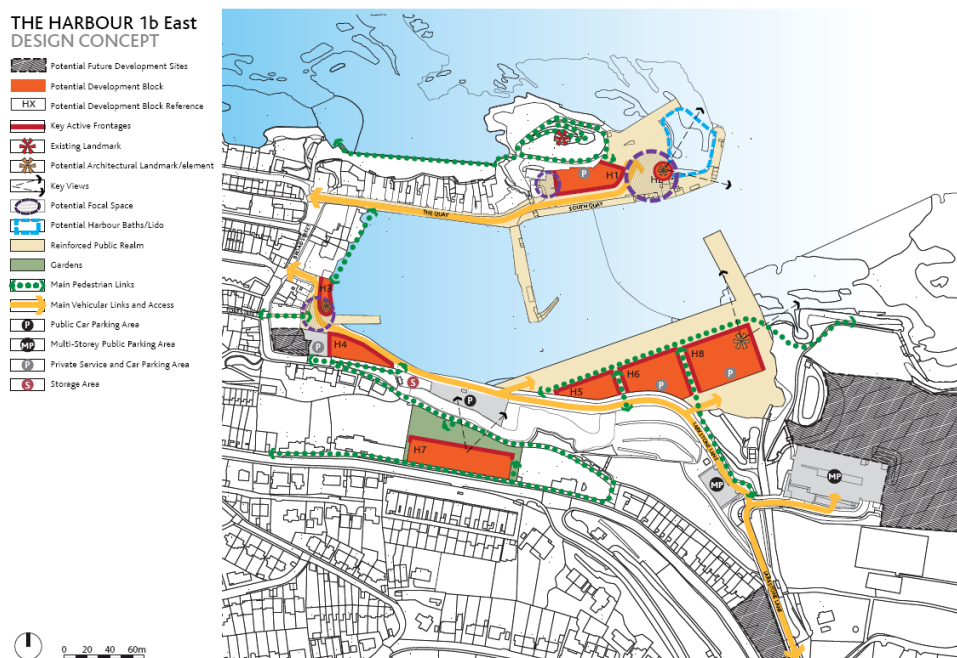
This option is very much focused on the land-based development of residential, hotel and employment floorspace around the harbour. These developments provide opportunities to deliver an improved tourism and leisure offer through good quality accommodation, cafes and restaurants, boutique shops and galleries, perhaps building on the retro, quirky charm of the town. The new wet fish shop provides an example of how the harbourside can improve links with the other harbour activities and retain more value within the local area. The inclusion of residential developments also helps contribute towards the Ilfracombe vision of housing-led regeneration, while encouraging a greater year-round presence at the harbour, generating demand for the harbourside businesses throughout the year.

The impacts for the existing harbour businesses are less significant, although it is expected that an increase in visitors to the newly developed harbourside will deliver additional demand for ferry services, excursions and charter boats and attract additional leisure boaters and a small number of cruise ships each year. However, it is the commercial fishing fleet that is expected to be the greatest beneficiary under this option since the relocated moorings will extend the time that can be spent at sea,

thereby increasing productivity and turnover. There will be strong demand for the small number of additional leisure moorings within the more vibrant, better protected and better equipped harbour, while the Harbour Authority will benefit from increased mooring fees, harbour dues and fuel sales. In summary, this option delivers a number of benefits including:

- Improved harbourside leisure and tourism facilities,
- Increased protection for vessels in the harbour,
- Reduced conflict between harbour activities by relocating the fishing fleet,
- Improved sea access for any vessels using the southern breakwater.

Figure 5.1: Proposed Design of Option 1b East



Source: Alder King, Ilfracombe Regeneration Areas: Baseline Report, October 2009

5.3.1 Commercial Fishing

All operations, facilities and berths for the commercial fishing fleet move to the new quay on the southern side of the harbour. This provides a dedicated area of the harbour for commercial fishing operations and reduces conflict between commercial fishing operations and other harbour users. It also provides moorings in deeper water that provide sea access at most states of the tide, resulting in more time at sea and increased productivity of the existing fleet. This is estimated to deliver a 20% increase in time at sea, turnover (to £1.9 million per annum), and employment (to 24 FTE jobs).

Purchases of fuel, fishing gear, maintenance, ice and consumables can all be expected to increase in line with time at sea and turnover. Harbour charges would also be expected to increase, given the improved quality of the quay and moorings with greater sea access, resulting in overall expenditures exceeding £1 million, with £630,000 spent in Ilfracombe (almost half of which would provide additional income for the Harbour Authority).

These changes are estimated to increase the impact of the commercial fishing activities in Ilfracombe by almost six FTEs and more than £200,000 of GVA, increasing the total impact to 34 FTE jobs and £1.2 million of GVA.

5.3.2 Leisure Boaters

The movement of the commercial fishing fleet moorings creates space for between 10 and 12 additional leisure boats in the Inner Harbour, while there is likely to be increased demand for permanent and overnight moorings attracted by the new harbourside developments and new retail and leisure facilities. The additional 11 leisure moorings are expected to be filled by the boats currently waiting for moorings in Ilfracombe, which would increase the number of leisure boats kept in Ilfracombe to 100. Occupancy of the 20 existing visitor moorings is also expected to increase, to 75% occupancy between June and August and 25% in April, May and September, resulting in 1,835 visiting boats per annum.

Boating related expenditures are expected to increase slightly, as a result of the Harbour Authority being able to charge a slight premium due to the increased protection offered to boats and the improved harbourside facilities. These expenditures are expected to increase to £220,000 per annum (£180,000 of which is spent in Ilfracombe, including £64,000 spent on fuel and moorings provided by the Harbour Authority).

Tourism expenditures of leisure boaters staying overnight in Ilfracombe are estimated to increase as a result of the improved leisure and tourism facilities on the harbourside. The increased boats and expenditures suggest that the overall tourism expenditures associated with leisure boaters in Ilfracombe increases to more than £250,000 per annum. These additional expenditures are estimated to increase the overall impact of leisure boating to support six FTE jobs and more than £180,000 of GVA in Ilfracombe, representing a small increase of almost 2 FTE jobs and £55,000 of GVA over the 'Do Nothing' option.

5.3.3 Excursions, Fishing and Diving Charters

Other tourism and leisure services are expected to benefit under Option 1b East, due to the additional visitors attracted to the harbour by the new layout and the improved harbourside offer increasing demand for services. The excursions and charter boats are assumed to benefit from the increased visitors as well as potentially being able to use the new quay to increase sea access at low tide (i.e. when the commercial fishing fleet are out).

This option assumes the turnover of the sector increases by 20% to £420,000 per annum (in line with passenger numbers, which increase by 6,500 per annum) with a corresponding 20% increase in expenditures of fuel, consumables and boat repair and maintenance (although mooring fees are assumed to remain unchanged since these vessels do not relocate under this option). The additional output of the sector, combined with increased commercial and visitor expenditures in the local economy, and indirect and induced effects are estimated to support more than 25 FTE jobs and GVA of £745,000 in Ilfracombe, representing an increase of almost two FTE jobs and £125,000 of GVA over the 'Do Nothing' option.

5.3.4 Cruise Ships

Cruise ship activity is expected to increase slightly under Option 1b East, with more cruise ships attracted by the harbourside developments and the increased and improved leisure facilities available for their passengers. This option assumes

Ilfracombe could attract three cruise ships per annum (based on the three cruise ships expected to visit in 2011) in the absence of berthing facilities for cruise ships within the harbour.

However, cruise ship visits are subject to the weather conditions in the Bristol Channel and it is necessary to take account of the probability of all three ships being able to disembark passengers at Ilfracombe in this option that would require cruise ships to drop anchor outside the harbour. It is assumed that these visits and associated expenditures are 65% likely under this option, with a 35% probability that the weather prevents the visits from taking place. This reduces the overall impact of the expenditures associated with the three cruise ships to support 1.3 FTE jobs and almost £40,000 of GVA in the Ilfracombe economy, approximately double the impacts of the 'Do Nothing' option.

5.3.5 Harbour Authority

The Harbour Authority is expected to benefit from increased berthing fees and fuel sales from leisure boaters, increased fuel sales from increased commercial fishing and excursion/charter boat activities, and increased harbour dues from cruise ships. This is expected to generate additional income for the harbour in the region of £74,000 over the 'Do Nothing' option, which is expected to support an additional 0.6 FTE and a slight increase in GVA in the local economy.

5.3.6 Harbourside Developments

The development land for Option 1b East is based in the 2009 Alder King Ilfracombe Regeneration Areas: Baseline Report⁷, which identifies eight different 'development blocks' covering a range of proposed uses including residential, office, leisure, retail, hotel, and live-work units. However, the consultations undertaken as part of this study suggest that the block 'H1' (shown on Figure 5.1) would not be possible under this option as the car park site would still be required for parking and shore storage for boats during the winter.

Much of the ground floor area of each development block is proposed to deliver the retail or food and drink outlets that will help to raise the quality of the tourism offer in Ilfracombe and attract additional visitors to the harbour. In total, Option 1b East is estimated to deliver 23,160 sq m of floorspace comprising approximately:

- 16,400 sq m of residential floorspace,
- 3,650 sq m of hotel floorspace (assumed to be a 100 bed hotel),
- 1,400 sq m of retail floorspace,
- 1,000 sq m of cafe/restaurant floorspace,
- 580 sq m of live/work units,
- 100 sq m of museum floorspace.

Using standard employment density assumptions⁸ this floorspace is estimated to provide 188 jobs comprising 69 retail jobs, 50 hotel jobs, 46 cafe/restaurant jobs, 3 museum jobs and 20 jobs in live/work units. Applying standard sector ratios of

⁷ Alder King (for North Devon Council, Devon County Council & SWRDA), Ilfracombe Regeneration Areas: Baseline Report, October 2009

⁸ Arup, Employment Densities: A Full Guide, 2001

turnover and GVA per employee, this additional employment floorspace could generate GVA of £5.8 million comprising: £2 million of GVA from retail floorspace; £1.8 million of GVA from the proposed hotel development; £1.2 million of GVA from cafes and restaurants; £656,000 of GVA from live/work units and £97,000 of GVA from the proposed RNLI museum.

However, the demand for this scale of employment floorspace (particularly in retail outlets and cafes/restaurants) and for the goods and services of the new businesses is questionable under this option, in the absence of any significant increase in harbour activities and user numbers. The impacts of Option 1b East are much more dependent upon the harbourside developments to deliver the increased visitors and expenditures to support the impacts required to justify the harbour investment. This increases the need for occupant businesses to attract their own expenditures from existing harbour users, local residents and increased numbers of ‘land-based’ tourists. It is therefore assumed that only 67% of these impacts are likely to occur under this option, with a corresponding 33% probability that these benefits do not occur.

It is also necessary to allow for an element of double counting as many of the expenditures of the other harbour activities are likely to take place in these new developments. It is assumed that 50% of these expenditures take place amongst the new harbour businesses. Applying these above factors, with estimated local expenditures and indirect and induced effects suggests that the harbourside developments would support an additional 136 jobs and GVA of more than £4 million in the local Ilfracombe economy.

5.3.7 **Wider Tourism Impact**

The above sections have accounted for the increased expenditures associated with visitors engaging with harbour facilities and activities, in terms of water-based activities such as ferries, or land-based activities such as harbourside restaurants. However, it is expected that the development of the harbour will have an additional impact on tourist numbers and expenditures that is greater than the sum of its parts. It is therefore estimated that the wider tourism expenditures and impacts associated with Option 1b East, will increase by 10% to £14.4 million of visitor expenditures supporting approximately 220 FTE jobs and £6.6 million of GVA.

5.3.8 **Total Harbour Impact**

Option 1b East is estimated to support a total of 461 FTE jobs and £13.9 million of GVA in Ilfracombe. This suggests an increased gross impact of 166 FTE jobs and GVA of £5.2 million over the ‘Do Nothing’ option. Most of this increase relates to harbourside developments, especially in retail, leisure and catering businesses.

Table 5.2: Total Impact of Harbour Activities in Ilfracombe – Option 1b East

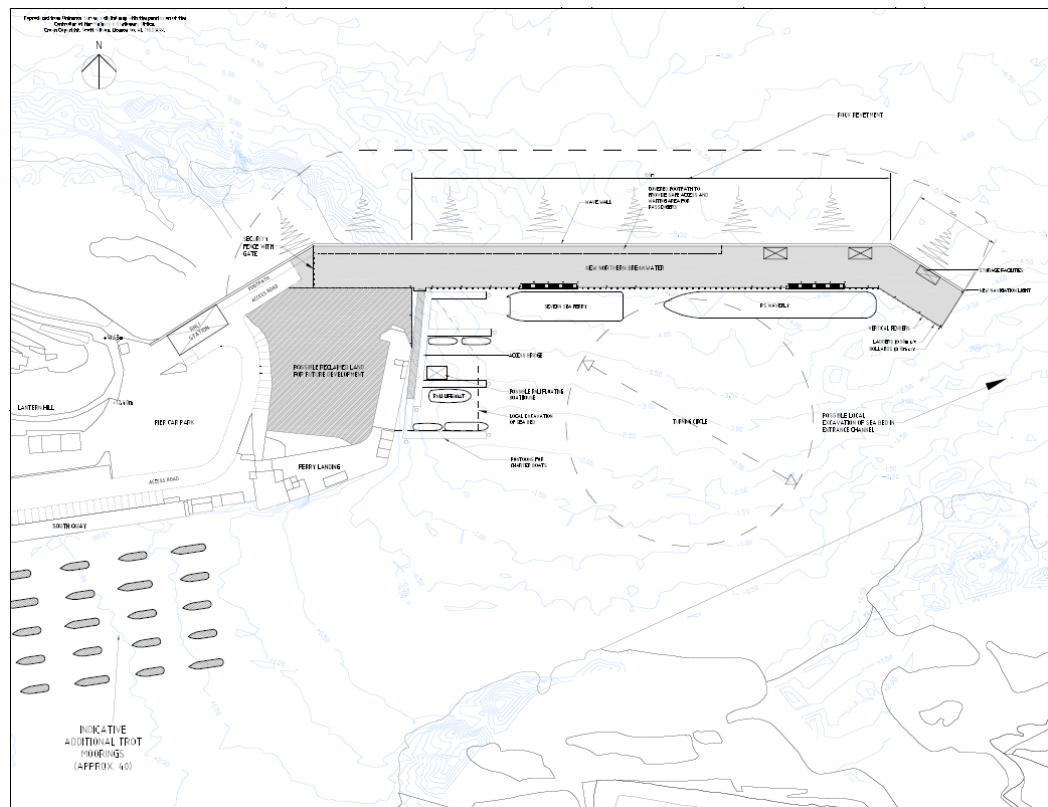
	Employment (FTE Jobs)	GVA (£)
Harbour Authority	4.5	37,000
Commercial Fishing	34.2	1,215,000
Ferry Activities	32.8	858,000
Leisure Boating	6.0	183,000
Excursion/Charter Boats	25.7	745,000
Cruise Ship Activities	1.3	39,000
RNLI Activities	1.5	53,000
Harbourside Developments	136	4,178,000
Wider Tourism Impact	220	6,588,000
Total Harbour Impact	461	13,896,000

5.4 Northern Breakwater Option

The Northern Breakwater Option (as defined by Scott Wilson⁹ and presented in Figure 5.2 below) involves a breakwater structure of approximately 250 metres in length. The tip of the breakwater points in a south easterly direction to provide greater protection and enable vessels to use 165 metres of deep water berths on the inner face of the breakwater. It also includes reclaimed land at the tip of the existing Northern Quay for leisure, retail and/or office development, ‘afloat’ pontoon moorings for the RNLI and commercial boats and a land-based RNLI station.

By providing deep water berths for commercial vessels outside of the existing harbour structure and providing the necessary protection, the Northern Breakwater Option also provides the opportunity to free the inner and outer harbours of the commercial vessels that require the maximum possible access to the sea, and create space for a 280 berth marina. However, the extent to which any public sector investment in the Northern Breakwater is likely to lever additional private sector funds to develop the southern side of the harbour, and the breakwater and sill that would be necessary for the development of a marina is uncertain. Therefore the analysis has assessed two different scenarios for this option: one which assumes only the Northern Breakwater is constructed and therefore has a greater commercial focus; and one which assumes the full development of the harbour, including the additional development of a marina and harbourside development on reclaimed land to the south of the harbour.

Figure 5.2: Proposed Plan of Northern Breakwater Option



Source: Scott Wilson, Iffracombe Regeneration: Harbour Northern Quay / Breakwater, October 2009

⁹ Scott Wilson (for North Devon Council, Devon County Council and SWRDA), Iffracombe Regeneration: Harbour Northern Quay / Breakwater, October 2009

5.4.1 **Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario**

This scenario assumes only the construction of the Northern Breakwater, with no additional infrastructure. It provides 40 additional trot moorings for leisure boats in the outer harbour as well as many of the harbourside developments described under Option 1b East. However, since it has a greater focus on commercial activities and particularly sea transport activities (i.e. cruise ships, ferries and potentially Atlantic Array support vessels) it is described as the ‘Commercial Maritime Gateway’ scenario. The Northern Breakwater provides significantly increased functionality for the harbour, providing a large amount of berthing space on the inner face of the breakwater, with sea access at all times. These ‘afloat’ berths would have the capacity to accommodate:

- the RNLI lifeboats (thereby reducing response times and the costs of maintaining the previous tractor launch system),
- the excursion and charter boats (thereby increasing the time that these vessels can spend at sea delivering productivity and turnover benefits),
- the ferry services (reducing berthing capacity constraints, enabling vessels to berth overnight and benefit from increased visitors to the harbour),
- regular visits by cruise ships (it is expected that up to 15 per annum will be attracted by the increased leisure and tourism offer as well as the ability to berth alongside the breakwater rather than drop anchor out in the Bristol Channel),
- the Atlantic Array emergency response vessels and the associated 30-40 high value engineering jobs (the emergency response service requires full tidal access and Ilfracombe would be an appropriate location as the closest harbour).

The development land also has a more commercial focus, providing some office space, significantly less residential and reduced retail floorspace compared to Option 1b East. A similar amount of floorspace is allocated to hotel and cafe/restaurant developments under this scenario, which is also expected to deliver an increased and improved tourism and leisure offer, as described above, that will help to attract additional numbers of cruise ships, and visiting and resident leisure boaters.

This scenario helps to overcome many of the limitations of the current harbour layout to deliver considerable benefits for harbour users, while the harbourside developments will provide a good choice of quality accommodation, bars, cafes and restaurants to enhance the overall appeal of the harbour for boaters, local residents and tourists and hence support the improvements to the infrastructure, that will deliver:

- Increased protection for vessels in the harbour,
- Full sea access at all tides for vessels berthed on the Northern Breakwater,
- Considerable berthing capacity to relieve pressures and constraints,
- Increased segregation between different types of harbour users and activities – with most commercial users moved to the Northern Breakwater.

Commercial Fishing

The commercial fishing fleet does not relocate under this option but is assumed to benefit from part-time use of the Northern Breakwater to increase time at sea and therefore productivity. This is assumed to increase turnover, employment and expenditures of commercial fishing activities by 10% rather than the 20% assumed with the relocation to new moorings under alternative options. However, since this is

dependent upon other there being sufficient space to use the Northern Breakwater, it is assumed to have a probability of 75%, with a 25% likelihood that there will be no increase in commercial fishing activity. The overall effect of the Northern Breakwater is to provide an additional 2.1 FTE jobs and £76,000 of GVA over the 'Do Nothing' option, to a total of 30.6 FTE jobs and £1.1 million of GVA.

Ferries

Passenger numbers on the Oldenburg, Waverley and Balmoral are assumed to return to current levels as a result of the expected increase in demand for excursions from additional visitors to the harbour, as well as the increased berthing capacity and ability to stay overnight alongside the Northern Breakwater, offsetting the increased competition from the Severn Link ferry. Furthermore, the Severn Link ferry is expected to increase the number of peak summer rotations from three to four per day under this scenario (with no change at other times), thereby providing a total of 900 rotations per annum and increasing the total number of ferry passengers to more than 100,000 per annum.

The Northern Breakwater also increases the likelihood of success for the ferry businesses, by providing additional space and full tide access, although there is still uncertainty about passenger numbers relating to the proposed Severn Link ferry service. It is estimated that the probability of achieving the Severn Link passenger numbers increases to 90% under the Northern Breakwater options (while the probability that the service does not commence or is not sustainable falls to 10%), resulting in total expected ferry passenger numbers of around 94,000 per annum.

This would increase the impact of the expenditures of the ferry companies in Ilfracombe, as well as attracting more visitors to Ilfracombe. The overall impact of these increased services is to support an additional 10 FTE jobs and £300,000 of GVA in Ilfracombe compared to the 'Do Nothing' option, increasing the total impact of ferry activities in Ilfracombe to 43 FTE jobs and GVA of £1.2 million.

Atlantic Array

The construction of the Northern Breakwater would make Ilfracombe well placed to accommodate the two 'emergency response vessels' for the Atlantic Array offshore wind farm. Ilfracombe is the closest harbour to the offshore site and would therefore be the most appropriate location for the emergency response vessels if it could also provide full tide access to the sea. Under the Northern Breakwater option, it is therefore assumed that the two vessels could be provided with berths on the inner face of the breakwater structure. The emergency response service is expected to comprise between 30 and 40 (assumed to be 35) high value engineering jobs, all of which can be expected to be filled by staff living in close proximity in order to provide the fast response, 'emergency' service. The potential impact of the service would be 43 FTE jobs and GVA of £1.7 million based on average wages of £40,000¹⁰, and estimated expenditures on goods and services of £300,000, particularly through harbour dues and fuel sales.

However, Ilfracombe faces competition from other sites such as Yelland and South Wales, and the Atlantic Array operator, RWE npower, is expected to make a decision

¹⁰ Wage estimates are based on an internet search of offshore wind jobs and ABI data for SIC 28.11 – the manufacture of turbines sector. Profits and rents have been excluded from the calculation of GVA and are not considered relevant for Ilfracombe since these will not provide local benefits, but will instead benefit the international operator of the offshore wind farm.

on the location of the various services associated with the construction, maintenance and operation of the wind farm before any decision is likely to be reached regarding the construction of the Northern Breakwater. It is therefore considered likely that Ilfracombe has a 50% probability of accommodating the Atlantic Array emergency response vessels and benefiting from these potential impacts, with a corresponding 50% probability that the service will be located elsewhere and these impacts will be lost to Ilfracombe. This reduces the expected impacts to 22 FTE jobs and GVA of £860,000 per annum in Ilfracombe.

Leisure Boaters

The Northern Breakwater 'Commercial Maritime Gateway' scenario assumes the provision of 40 additional trot moorings in the outer harbour and protected by the proposed breakwater structure. This would increase the number of berths and moorings in the harbour to 149, of which 124 are assumed to be used by boats kept in the harbour, with 25 reserved for visiting leisure boats. It is again assumed that the additional permanent leisure moorings (35) would be filled by the 40 to 45 boat owners currently waiting for a mooring in Ilfracombe and others attracted by the increased harbourside leisure offer.

The increased number of visitor berths is assumed to share the same occupancy patterns as described previously, resulting in a total of 2,300 visiting boat days/nights per annum. The additional resident and visiting boaters are estimated to increase annual boating related expenditures in Ilfracombe to £225,000 (including £79,000 in fees and fuel purchased from the Harbour Authority). The associated visitor expenditures are forecast to increase to almost £315,000 per annum. In total these expenditures are estimated to support around 7.5 FTE jobs and £230,000 of GVA.

Excursions, Fishing and Diving Charters

The excursion and charter boats are expected to relocate to berths on the inner face of the breakwater under the Northern Breakwater Option, thereby increasing sea access, time spent at sea and passenger numbers. The additional throughput of visitors delivered by the ferries and attracted by the harbourside developments is also expected to further increase demand in this growing sector. It is therefore expected that the turnover of the sector will increase to more than £560,000, which supports additional local purchases, employment and GVA. The total number of visitors using the excursion and charter boat services is expected to increase to around 46,000 per annum, which also generates tourism expenditures in the wider Ilfracombe economy. The total impact of the sector is expected to increase to 30 FTE jobs and £950,000 of GVA in Ilfracombe.

Cruise Ships

Cruise ship visits are assumed to increase under the 'Commercial Maritime Gateway' scenario, attracted by the ability to berth alongside the breakwater and the improved leisure offer in the harbour. Cruise ships of around 140 metres, 15,000 tonnes, with 600 passengers and 300 crew are expected to be able to berth alongside the breakwater.

Ilfracombe Harbour is also working proactively with Destination South West to increase awareness of the town as a destination for cruise ships and secure the commitment of cruise ships to visit. There would also be opportunities for Ilfracombe Harbour to work with 'Cruise Wales' to jointly increase awareness and attractiveness of the Bristol Channel as a destination for cruise ships. However, there is uncertainty around the numbers of cruise ships that could be attracted. Consultations with industry

representatives suggest that Ilfracombe could attract around 25 cruise ships per annum with a Northern Breakwater, based on the experiences of Falmouth, which receives 38 cruise ships per year, and the Isles of Scilly, which receive 40 cruise ships per year.

In the absence of the full harbour development, the maximum number of cruise ships that could be attracted under this option is assumed to be 15, with a 50% probability that this will be achieved (and a 50% probability that these cruise ships will not visit). This estimates the overall impact of these cruise ships to support 4.2 FTE jobs and £127,000 of GVA in the local economy.

RNLI

Consultation with the RNLI as part of this study suggests that the opportunity of having an afloat berth with full tidal access is attractive to the RNLI in principle and “worthy of further investigation”. The benefits of an afloat berth on the Northern Breakwater would be reduced emergency response times, an additional full-time employee and lower operational costs since the tractors and launch ramp would no longer be required. However, the current tractor launch system is considered totally acceptable and the above benefits of an afloat berth would have to be considered by the RNLI alongside any additional investment requirements.

This scenario does assume that RNLI activities move to the Northern Breakwater, although the implications in terms of economic impact are relatively small, with the benefits of an additional full-time employee offset, to some degree, by a slight reduction in the local purchases of goods and services without the need to maintain and operate the tractors and launch ramp.

Harbour Authority

The ‘Commercial Maritime Gateway’ scenario is projected to generate additional income for the Harbour Authority through increased harbour fees and fuel sales from: leisure boaters using the additional trot moorings; the offshore energy support vessels; and the excursion and charter boats that will have relocated to new berths on the Northern Breakwater and increase time at sea. The Harbour Authority is also expected to benefit from increased fuel from the commercial fishing fleet using the Northern Breakwater to increase time at sea, and increased harbour dues from the additional cruise ship visits and Severn Link ferry rotations, made possible by the Northern Breakwater.

This represents a significant increase in income for the Harbour Authority, which would exceed expenditures under this scenario and support 5.9 FTE jobs and GVA of £283,000 in the local economy.

Harbourside Development

The development land under the ‘Commercial Maritime Gateway’ scenario of the Northern Breakwater Option comprises a smaller selection of the proposed development blocks from the 2009 Alder King report as this scenario does not include the reclaimed land to the south of the harbour, which provides much of the residential land in the other options and scenarios. This scenario includes the development of the mixed use blocks H2, H3 and H4 as well as the proposed hotel (H7), and a mixed use development (comprising office, retail and food and drink uses) on the reclaimed land at the base of the proposed Northern Breakwater.

In total, this ‘Commercial Maritime Gateway’ Scenario is estimated to deliver around 7,400 sq m of floorspace for development the following floorspace by use type:

- 1,200 sq m of residential floorspace,
- 580 sq m of live/work units,
- 470 sq m of office space,
- 3,650 sq m of hotel floorspace (assumed to be a 100 bed hotel),
- 630 sq m of retail floorspace,
- 790 sq m of cafe/restaurant floorspace,
- 100 sq m of museum floorspace.

The total on-site employment impact is estimated to be 158 jobs comprising: 50 hotel jobs; 36 cafe/restaurant jobs; 25 office jobs; 24 retail jobs; 3 museum jobs; and 20 jobs in live/work units. It is estimated that this additional employment floorspace could generate GVA of £5.2 million comprising: £1.8 million of GVA from the proposed hotel development; £1 million of GVA from cafes and restaurants; £0.9 million of GVA from retail floorspace; £0.8 million of GVA from office space; £656,000 of GVA from live/work units and £97,000 of GVA from the proposed RNLI museum.

The likelihood of success of the harbourside developments is expected to be higher under this option, given the smaller development areas and floorspaces and the significant increase in visitors attracted to the harbour by the other harbour activities. It is therefore assumed that there is a 75% probability that all of this development will go ahead and achieve these impacts, against a 25% probability that these impacts will not be achieved. Accounting for this probability and removing the double counting of expenditures of harbour users, as before, suggests that this development land is expected to support an additional 116 FTE jobs and GVA of £3.9 million per annum.

Wider Tourism Impact

The development of the harbour under the ‘Commercial Maritime Gateway’ scenario is also expected to increase the wider visitor expenditures and impacts by 10% over the ‘Do Nothing’ option. This is the same as Option 1b East, due to the slightly reduced harbourside development being offset by the additional attraction of the Northern Breakwater. It is therefore estimated that the wider tourism expenditures and impacts associated with the ‘Commercial Maritime Gateway’ scenario will also increase by 10% to £14.4 million of visitor expenditures supporting approximately 220 FTE jobs and £6.6 million of GVA.

Total Harbour Impact

The ‘Commercial Maritime Gateway’ scenario is estimated to support a total of 481 FTE jobs and £15.3 million of annual GVA in Ilfracombe. This suggests an increased gross impact of 186 FTE jobs and GVA of £6.6 million over the ‘Do Nothing’ option.

Table 5.2: Total Impact of Harbour Activities in Ilfracombe – ‘Commercial Maritime Gateway’ Scenario

	Employment (FTE Jobs)	GVA (£)
Harbour Authority	5.9	283,000
Commercial Fishing	30.6	1,089,000
Ferry Activities	43.4	1,190,000
Atlantic Array	21.6	859,000
Leisure Boating	7.4	227,000
Excursion/Charter Boats	29.7	949,000
Cruise Ship Activities	4.2	127,000
RNLI Activities	2.7	92,000
Harbourside Developments	116	3,925,000
Wider Tourism Impact	220	6,588,000
Total Harbour Impact	481	15,329,000

5.4.2 Northern Breakwater Option: ‘Full Harbour Development’ Scenario

This scenario involves the construction of the Northern Breakwater but also includes the reclaimed development land described under Option 1b East as well as a southern breakwater and sill to ‘close’ the inner and outer harbour areas. This would accommodate the commercial fishing fleet on the outside of the basin, so as not to impede its access to the sea, and enable the development of a marina.

This scenario best meets the vision for the harbour in delivering a high quality tourist offer while becoming a key ‘Maritime Gateway’ for leisure and commercial vessels. It combines and builds on the benefits of each of the previous options by delivering the same functionality as the ‘Commercial Maritime Gateway’ scenario along the Northern Breakwater (for the RNLI, ferries, excursion and charter boats and potentially for cruise ships and the Atlantic Array vessels), and providing new, deep water moorings for the commercial fishing fleet (as under Option 1b East). However the largest differences relate to the provision of a 280 berth marina, and harbourside development that delivers more floorspace than either of the previous options. In summary, this scenario is expected to attract the greatest number of:

- harbour users (leisure boaters and ferry, excursion, charter boat and cruise ship passengers), visiting the high quality shops, cafes and restaurants around the marina, while also making use of the water-based activities.
- residents (given the proposed scale of residential floorspace) attracted by properties overlooking a marina and willing to pay the price premium that this can deliver.
- non-boating leisure visitors (including local residents of Ilfracombe spending time at the harbour, and visitors to Ilfracombe wanting to shop, eat and drink in the relaxed, attractive harbourside environment, overlooking the boats).

It delivers the widest range of different activities and the most significant expected benefits and impacts but consequently faces the greatest number of different risks including: the competition and timing issues relating to the Atlantic Array; the demand for cruise ship visits; whether the RNLI and all commercial users are willing to vacate the Inner Harbour. However, increasing the breadth of activities can reduce risk as there is a greater probability that overall visitor numbers will increase than with a smaller number of activities. The key benefits offered by this scenario include:

- Complete segregation between harbour users and activities, with sufficient capacity to accommodate: all ferries, excursion and charter boats, the RNLI and potentially cruise ships and Atlantic Array vessels on the Northern Breakwater; the fishing fleet on the outer side of a southern breakwater; and leisure boats within the marina.
- Marina berths with full protection from the sea, which will attract additional visitor and resident boaters and remove the need to provide shore storage for boats in the winter, thereby freeing up additional harbourside space for development.
- Boating-related services required to meet the needs of the additional leisure boats (i.e. chandler, brokerage and repair services).
- A significant increase in the retail and tourism offer of the harbour, focusing particularly on high quality experiences and services that will attract and meet the demands of high value marina customers.
- Full sea access at all tides on the Northern Breakwater and at most times for the fishing fleet on the southern breakwater.

Commercial Fishing

The commercial fishing activities are assumed to be identical to those assumed under Option 1b East, since both involve the movement of the fishing fleet to new moorings on the southern side of the harbour and closer to the sea, thereby increasing time at sea and the productivity of the fleet.

Ferries

Under the full harbour development scenario, passenger numbers on the Oldenburg, Waverley and Balmoral are expected to increase above existing levels (to 45% of passenger capacity) due to the expected large increase in the number of visitors to the harbour, as well as the increased functionality and benefits provided by the Northern Breakwater. The number of rotations provided by the Severn Link ferry is expected to remain unchanged from the 'Commercial Maritime Gateway' scenario, although passenger numbers are expected to increase to 40% of capacity, based on the same probability assumption of 90% (with a 10% likelihood that the new service does not commence or is not sustainable). This suggests total expected ferry passengers of 112,000 per annum under the 'Full Harbour Development' scenario.

The ferry activities, locally purchased goods, visitor expenditures and associated indirect and induced effects are estimated to support a total of 50 FTE jobs and £1.4 million of GVA per annum in the Ilfracombe economy.

Atlantic Array

The Atlantic Array impacts are unchanged under this scenario and are common across both scenarios of the Northern Breakwater option.

Leisure Boaters

The Northern Breakwater 'Full Harbour Development' scenario has a much greater focus and more significant impact on leisure boating and related expenditures since it allows the development of a 280 berth marina in the harbour. It is expected that the marina would provide 240 berths for boat owners wanting permanent berths in Ilfracombe and 40 berths for visiting boaters. Applying the same occupancy ratios to this increased number of visitor berths, suggests that the harbour could attract around 3,700 visiting boats per annum.

Demand for the permanent marina berths is expected to be strong. The harbour already has 89 resident leisure boats with another 40 to 45 waiting for a mooring, which suggests that there is existing demand for more than half of the proposed 240 berths for resident boats. Furthermore, it is likely that there will be sufficient demand to fill the remaining berths based on:

- the success of Watchet in filling the vast majority of its 180 permanent berths, despite not having the associated leisure facilities that Ilfracombe already possesses and that would be significantly improved around the harbour under this scenario;
- interviews with representatives of the leisure boating sector, which have suggested there would be additional demand from leisure boaters wanting a berth close to the challenging waters of the Bristol Channel but with good quality local leisure facilities; and
- the current limited supply of berths on the north coast, which would make Ilfracombe the closest marina for a large number of boat owners residing along the north coasts of Cornwall and Devon.

It is therefore realistic to expect that Ilfracombe would attract a sufficient number of boats to fill 240 permanent berths. However, it is also important to note that this will not happen overnight and it takes time for new marinas to reach capacity. A potential issue for the marina development is if commercial harbour users are unwilling to move seawards. While the marina development is likely to go ahead the probability is assumed to be around 75%, with a corresponding 25% probability that the marina is not constructed and the harbour instead provides the 40 additional trot moorings as described under the 'Commercial Maritime Gateway' scenario.

Assuming the marina goes ahead, it is assumed that Ilfracombe could achieve at least the same berthing fees as Watchet Marina given the increased leisure offer in Ilfracombe. This scenario would deliver a significant increase in boating related and tourism-related expenditures of leisure boaters, which are estimated to support 21.5 FTE jobs and £665,000 of GVA in Ilfracombe per annum.

Excursions, Fishing and Diving Charters

The 'Full Harbour Development' scenario makes the same assumptions as the 'Commercial Maritime Gateway' scenario in terms of time at sea and passenger capacities but also assumes an additional vessel, increasing the total to six vessels. This is possible as a result of, and to meet the additional demand from, the additional visitors expected to be attracted to the harbour under this scenario. This is expected to increase employment, turnover, visitors, expenditures and GVA and the total impact of the sector is estimated to support 36 FTE jobs and GVA of £1.1 million in Ilfracombe.

Cruise Ships

As described above, the maximum potential number of cruise ship visits is assumed to be 25 per annum, attracted by the increased quality of the tourism offer around the harbour. However, similar probabilities have been applied under this scenario which estimates total expected impacts associated with the cruise ships of 7 FTE jobs and more than £200,000 of GVA.

RNLI

As above, it is assumed that RNLI activities do move to the Northern Breakwater, generating a slightly increased economic impact. More significantly, this would enable the development of a marina in the harbour without impeding sea access for the RNLI.

Harbour Authority

The 'Full Harbour Development' scenario is projected to generate even higher levels of income for the harbour Authority primarily as a result of harbour dues from increased numbers of visiting cruise ships, increased fuel sales from the relocated commercial fishing fleet, the more productive and larger fleet of excursion and charter boats and increased leisure boats, which are expected to offset the lower income from mooring fees with the introduction of a private marina operator. The overall impact of the Harbour Authority is estimated to support 6.2 FTE jobs and GVA of £270,000.

Harbourside Development

The 'Full Harbour Development' Scenario of the Northern Breakwater Option includes the most development land of all options and scenarios. It includes all of the floorspace described in the 2009 Alder King report, including the car park site (H1) which could become available if a marina was developed as the space would no longer be required as shore storage for boats during the winter. As with the previous scenario, it also includes a mixed use development (comprising office, retail and food and drink uses) on the reclaimed land at the base of the proposed Northern Breakwater. In total, this 'Full Harbour Development' Scenario is estimated to deliver 26,280 sq m of floorspace, including:

- 17,000 sq m of residential floorspace,
- 3,650 sq m of hotel floorspace,
- 2,400 sq m of retail floorspace,
- 1,600 sq m of cafe/restaurant floorspace,
- 580 sq m of live/work units,
- 1,000 sq m of office space,
- 104 sq m of museum floorspace.

The above floorspace has the potential to provide 306 jobs comprising: 106 retail jobs; 75 cafe/restaurant jobs; 52 office jobs; 50 hotel jobs; 3 museum jobs; and 20 jobs in live/work units. It is also estimated that this additional employment floorspace could generate GVA of £9.6 million comprising: £3.4 million of GVA from retail floorspace; £2 million of GVA from cafes and restaurants; £1.8 million of GVA from the proposed hotel development; £1.7 million of GVA from office space; £656,000 of GVA from live/work units and £97,000 of GVA from the proposed RNLI museum.

As with the other Northern Breakwater scenario, the likelihood of success of the harbourside developments is expected to be 75%, with a 25% probability that these impacts will not be achieved. The number and scale of developments is more significant, but so are the expected visitor numbers attracted by the other harbour users, while the marina development is expected to provide a significant visitor attraction in its own right, for boating and non-boating visitors. Accounting for this probability and removing the double counting of expenditures of harbour users, as before, suggests that the development land is expected to support an additional 245 FTE jobs and GVA of more than £7.75 million per annum.

Wider Tourism Impact

The 'Full Harbour Development' scenario is expected to generate the most significant additional impact on wider tourism expenditures in the local economy, over and above those impacts already described above. The considerable increase in the scale and

quality of the harbourside retail and leisure offer, as well as the development of the Northern Breakwater and a marina is expected to increase the wider visitor expenditures and impacts by 20% over those estimated under the 'Do Nothing' option. This is estimated to generate wider tourism expenditures and impacts associated with the 'Full Harbour Development' scenario of £15.7 million of visitor expenditure per annum, supporting approximately 240 FTE jobs and £7.2 million of GVA.

Total Harbour Impact

The 'Full Harbour Development' scenario is therefore estimated to support a total of 664 FTE jobs and £20.8 million of GVA in Ilfracombe. This suggests an increased gross impact of 369 FTE jobs and GVA of £12.1 million over the 'Do Nothing' option.

Table 5.2: Total Impact of Harbour Activities in Ilfracombe – 'Full Harbour Development' Scenario

	Employment (FTE Jobs)	GVA (£)
Harbour Authority	6.2	270,000
Commercial Fishing	34.2	1,215,000
Ferry Activities	50.3	1,408,000
Atlantic Array	21.6	859,000
Leisure Boating	21.5	665,000
Excursion/Charter Boats	35.6	1,138,000
Cruise Ship Activities	7.0	211,000
RNLI Activities	2.7	92,000
Harbourside Developments	245	7,749,000
Wider Tourism Impacts	240	7,187,000
Total Harbour Impact	664	20,797,000

6 ASSESSMENT OF ADDITIONALITY

The analysis of the economic impacts of the proposed options also requires an assessment of additionality, in order to determine the extent to which the gross economic impacts described above are translated into net impacts on the local, sub-regional and regional economies, in accordance with the RDA impact evaluation framework. This needs to take account of:

- Deadweight – the likelihood that the options, or aspects of them, would proceed even in the absence of public sector investment;
- Displacement – the degree to which economic benefits are offset by reductions in activity elsewhere in the sub-regional or regional economies.
- Leakage – the extent to which economic benefits occur outside the sub-region or region, for example benefiting external suppliers or commuters.
- Economic multipliers – the extent to which the development options are expected to increase activity in the wider economy by enhancing the revenues of suppliers of goods and services (indirect effects) and through re-spending of income by employees (induced effects).

The other aspect of additionality is substitution; the degree to which the availability of public funding causes the development to substitute one economic activity for another, again reducing the net impact of the scheme. However, substitution effects are not relevant here and can be assessed to be zero since the development options have not been designed to attract specific areas of public funding and there is no evidence of substituting one activity for another in order to benefit from public funding. The development options are focused on providing the infrastructure to increase the productivity of existing harbour businesses attract additional businesses and visitors and thereby maximise the operational benefits and economic impacts of the harbour to assist the regeneration of the harbour and of Ilfracombe as a whole.

6.1 Deadweight

The assessment of economic impacts needs to consider 'deadweight'; what would happen in the absence of the proposed development of the harbour. For the purposes of this assessment, this is defined as the 'Do Nothing' option, which shows what is expected to happen in the future with the existing harbour infrastructure. As described above, this assumes that most harbour activities continue at current levels, with the addition of the proposed Severn Link ferry service (as this is expected to commence imminently) and the visit of a cruise ship per annum (as activity in this area is already increasing, with three cruise ships expected in 2011).

To take account of deadweight, the estimated impacts of the 'Do Nothing' option need to be subtracted from the alternative development options and scenarios to provide an estimate of the net additional benefits from developing the harbour infrastructure.

6.2 Displacement

Displacement concerns the extent to which the economic impacts generated by the harbour developments are offset by reductions in activity elsewhere in the local, sub-regional or regional economies. For example, the additional visitors and expenditures attracted to Ilfracombe as a result of the Severn Link Ferry, will not all be additional expenditures, as some of the passengers from Wales are likely to already visit

Ilfracombe, North Devon and/or the South West and for these people the operation of the ferry has simply led them to displace travelling by car or train, to travelling by ferry and does not therefore generate additional visitor expenditures in the area.

Displacement has been considered for each of the harbour activities included in the above analysis and at each of the three spatial levels (local, sub-regional and regional) and the assumed displacement factors are presented in Table 6.1 below.

Table 6.1: Displacement Factors used to Estimate the Net Additional Impacts of Each Activity and Option

	Ilfracombe	North Devon	South West
Harbour Authority Activities	0%	15%	30%
Commercial Fishing Activities	0%	0%	0%
Ferry Activities	25%	30%	50%
Atlantic Array Activities	0%	40%	50%
Leisure Boating Activities	0%	10%	25%
Excursion and Charter Boat Activities	20%	30%	40%
Cruise Ship Activities	0%	0%	0%
RNLI Activities	0%	0%	0%
Development Land Activities	40%	70%	80%
Wider Tourism Impacts	0%	40%	80%

The above displacement factors have been selected based on consultations with appropriate stakeholders and the knowledge and previous experience of the consultants. A brief explanation for the selected displacement factors of each activity is included below:

- Commercial Fishing – Assumes no displacement in Ilfracombe, North Devon or the South West as the growth included in the development options is a result of increasing the productivity of the existing Ilfracombe fishing fleet.
- Ferries – A 25% displacement factor is assumed for Ilfracombe as some of the additional ferry passengers are likely to travel on the ferries and spend money that would otherwise have been spent elsewhere in Ilfracombe. It is also assumed that some of the visitors from South Wales would have visited Ilfracombe in the absence of the ferry and have simply been displaced from using other modes of transport, thereby potentially reducing road congestion and delivering environmental benefits. The displacement factors are assumed to be higher for North Devon (30%) and the South West (50%) for similar reasons (i.e. some ferry passengers boarding at Ilfracombe would have spent money elsewhere in North Devon and the South West rather than accessing the ferry, while some visitors from South Wales would have travelled by other means in the absence of the ferry).
- Atlantic Array – Assumes no displacement in Ilfracombe as this would be completely additional activity for the town. However, Ilfracombe does face competition from Yelland in securing the vessels. There is therefore a reasonable likelihood that this service and these jobs would have come to North Devon anyway and have just been displaced from Yelland to Ilfracombe, so a 40% displacement factor has been assumed. This increases to 50% for the South West (as Bideford and Appledore are also potential sites for the service, while all of these locations are competing against harbours and ports in South Wales).

- Leisure Boating – Assumes no displacement in Ilfracombe as additional leisure boaters will not have been displaced from elsewhere in Ilfracombe. A relatively low displacement assumption of 10% has been applied in North Devon as some of the additional leisure boating activity in Ilfracombe might be displaced from other boat moorings in North Devon although there are very few alternative mooring sites. A slightly higher figure of 25% is assumed for the South West as a whole as some of the additional leisure boaters in Ilfracombe are likely to be displaced from elsewhere in the region to visit or permanently moor their boat in Ilfracombe.
- Excursion and charter boats – Assumes 20% displacement in Ilfracombe, since some of the additional visitors going on excursions and charter boats are likely to have been displaced from making other expenditures in Ilfracombe. For similar reasons, this is assumed to increase to 30% in North Devon and 40% in South Devon as a whole.
- Cruise Ships – Displacement factors are assumed to be zero given the limited alternative cruise ship destination in North Devon, while cruise ships visiting Ilfracombe are considered unlikely to be doing so in place of other locations elsewhere in the South West. Furthermore, developing another harbour in the South West capable of accommodating cruise ships could attract more cruise ships to the region as a whole.
- RNLI – Assumes no displacement as the development options do not affect RNLI operations except for potentially relocating activities to the Northern Breakwater, which would not generate any displacement effects.
- Harbour Authority – The additional impact of Harbour Authority activities is primarily due to increases in harbour-related expenditures of the other activities described above (i.e. on mooring fees, fuel sales, etc.). The displacement factors applied for Harbour Authority activities are therefore assumed to represent approximate averages of the displacement factors applied to these other harbour activities.
- Development Land – Displacement factors for the businesses and employees accommodated on the new harbourside developments are likely to be relatively high for the region and sub-region as much of the new retail, leisure, food and drink, live work units and office space would be likely to be developed elsewhere in North Devon or the wider South West in the absence of the harbour developments. However, in Ilfracombe it would be much less likely that this scale of development would take place elsewhere in the town in the absence of the harbour developments. Therefore the analysis has applied displacement factors of 40% for Ilfracombe, 70% for North Devon and 80% for the South West.
- Wider Tourism Impacts – The wider tourism impacts describe the additional tourism jobs and incomes supported by the expenditures of additional visitors to Ilfracombe (attributable to the harbour developments) over and above those associated with the specific harbour activities described above. As these are additional visitors to Ilfracombe, there is no displacement at the local level. However, displacement is expected to be significant within North Devon and the South West as a result of tourists choosing to visit Ilfracombe rather than other locations in the sub-region and region, and displacement factors of 40% and 80% have been applied respectively.

6.3 Leakage

Leakage issues have been included in the analysis as part of the spatial analysis of the activities and expenditures of the different harbour users. For each harbour activity, employment, GVA and expenditures have been assessed spatially to determine the level of direct impacts for Ilfracombe, North Devon and the South West, and identify those providing benefits outside of the region, which has provided an assessment of leakage.

6.4 Economic Multipliers

Economic multipliers have also been considered as part of the above analysis to provide estimates of how the expenditures of the harbour businesses, their suppliers and employees will support further incomes and employment as a result of expenditures by their respective supply chains (indirect effects) and employees (induced effects).

Appropriate multipliers have been selected, for the economy as a whole and specifically for visitor expenditures in the tourism economy, based on information included in the English Partnerships Additionality Guide, the South West Regional Accounts. This is described in greater detail in Annex II.

6.5 Net Economic Impacts

Applying the above additionality factors to the outputs described in the previous chapter, and subtracting the impacts of the 'Do Nothing' option to take account of deadweight, provides estimates of the net economic impacts of the proposed development options. These net economic impacts are presented in Table 6.2 below.

Table 6.2: Net Economic Impact by Option

Option 1b East	Ilfracombe		North Devon		South West	
	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Harbour Authority	0.6	4,000	1.1	20,000	1.1	20,000
Commercial Fishing	5.7	203,000	7.3	256,000	8.6	304,000
Ferry Activities	-	-	-	-	-	-
Atlantic Array	-	-	-	-	-	-
Leisure Boating	1.8	55,000	2.0	64,000	2.0	65,000
Excursion / Charter Boats	1.5	101,000	1.6	108,000	1.7	110,000
Cruise Ships	0.6	19,000	0.8	25,000	1.0	31,000
RNLI Activities	-	-	-	-	-	-
Harbourside Development	81	2,507,000	52	1,619,000	44	1,352,000
Wider Tourism Impacts	20	599,000	14.4	467,000	6.0	192,000
TOTAL NET ECONOMIC IMPACT	112	3,487,000	79	2,559,000	64	2,073,000

Northern Breakwater Option	Ilfracombe		North Devon		South West	
'Commercial Maritime Gateway' Scenario	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Harbour Authority	2.0	249,000	2.4	258,000	2.3	244,000
Commercial Fishing	2.1	76,000	2.7	96,000	3.2	114,000
Ferry Activities	8.0	249,000	9.4	315,000	8.6	284,000
Atlantic Array	21.6	859,000	15.6	616,000	15.2	597,000
Leisure Boating	3.3	100,000	3.6	116,000	3.7	117,000
Excursion / Charter Boats	4.7	264,000	5.0	281,000	5.2	284,000
Cruise Ships	3.5	106,000	4.3	138,000	5.3	170,000
RNLI Activities	1.1	40,000	1.0	35,000	0.9	34,000
Harbourside Development	70	2,355,000	45	1,527,000	38	1,281,000
Wider Tourism Impacts	20	599,000	14.4	467,000	6.0	192,000
TOTAL NET ECONOMIC IMPACT	136	4,897,000	104	3,850,000	89	3,317,000
Northern Breakwater Option	Ilfracombe		North Devon		South West	
'Full Harbour Development' Scenario	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Harbour Authority	2.3	237,000	3.1	259,000	2.9	246,000
Commercial Fishing	5.7	203,000	7.3	256,000	8.6	304,000
Ferry Activities	13.1	413,000	15.5	522,000	14.2	472,000
Atlantic Array	21.6	859,000	15.6	616,000	15.2	597,000
Leisure Boating	17.3	537,000	18.9	609,000	18.9	604,000
Excursion / Charter Boats	9.5	416,000	9.9	444,000	10.2	450,000
Cruise Ships	6.4	191,000	7.6	248,000	9.5	305,000
RNLI Activities	1.1	40,000	1.0	35,000	0.9	34,000
Harbourside Development	147	4,650,000	95	3,015,000	80	2,529,000
Wider Tourism Impacts	40	1,198,000	29	934,000	12	383,000
TOTAL NET ECONOMIC IMPACT	264	8,742,000	203	6,939,000	172	5,923,000

The above net impact estimates suggest that the Full Harbour Development option generates by far the most significant economic impacts, after taking account of risks and the probabilities of success associated with each activity, and the different aspects of additionality.

The full development of the harbour is estimated to support employment of 264 FTE jobs and £8.7 million of GVA per annum in Ilfracombe. These impacts are lower at the sub-regional and regional levels because of some significant displacement factors, and particularly those associated with the harbourside developments and wider tourism impacts, although these effects are also offset by economic multiplier effects (which are greater in the wider sub-regional and regional economies).

The alternative, smaller scale Northern Breakwater scenario generates the second highest net impact, although these are only around half the levels achieved with the full harbour development. Option 1b East delivers the lowest impacts of the three alternatives and is estimated to support 112 FTE jobs and almost £3.5 million of GVA in the local economy each year.

7 ADDITIONAL IMPACTS

7.1 Temporary Construction Impacts

The construction costs of the development options for Ilfracombe Harbour have been estimated in a recent (October 2009) report produced by Scott Wilson¹¹. The report estimates that Option 1b East will cost £13.68 million based on Option A1, which comprises:

- a breakwater on the southern side of the harbour with a dog leg end to provide additional protection from the sea,
- a solid structure and an area of reclamation on the southern side of the harbour to provide additional land for development.

The Northern Breakwater Option is estimated to cost £21.71 million, which includes:

- a £300,000 cost of constructing a new RNLI station at the base of the Northern Breakwater structure,
- the £610,000 cost of installing mooring pontoons (including the access bridge and piles).

A total construction cost of the 'full harbour development' scenario, comprising the Northern Breakwater, reclaimed land on the south side of the harbour, a southern breakwater, a sill and pontoons for the marina has not been estimated. However, this can be estimated by summing these two options, which suggests the construction cost is likely to be in the region of £35 million.

An analysis of figures in the Government's National Accounts (the Blue Book) 2009 suggests that £110,000 of gross output is required to support each FTE job in the construction sector. Applying this ratio to the estimated construction costs provides estimates of the construction jobs associated with each option including:

- 124 construction job years for Option 1b East,
- 197 construction job years for the Northern Breakwater Option: 'Commercial Maritime Gateway' Scenario,
- 322 construction job years for the Northern Breakwater Option: 'Full Harbour Development' Scenario.

Taking into account the expected duration of the construction process provides comparable estimates in terms of FTE jobs. Each option is expected to involve a construction period of around two years, which suggests the following FTE temporary construction jobs of:

- 62 FTE construction jobs for Option 1b East (over two years)
- 99 FTE construction jobs for the Northern Breakwater Option 'Commercial Maritime Gateway' Scenario (over two years)
- 161 FTE construction jobs for the 'Full Harbour Development' Scenario (over two years).

¹¹ Scott Wilson (for North Devon Council, Devon County Council and SWRDA), Ilfracombe Regeneration: Harbour Northern Quay / Breakwater (Report No. D121542/016), October 2009

The temporary GVA generated by the construction process can also be estimated using ratios from the Blue Book 2009, which suggests that each £1 of additional turnover in the construction sector will generate £0.38 of GVA. It is therefore estimated that:

- Option 1b East will generate one-off GVA of £5.2 million, or £2.6 million per year for two years,
- The Northern Breakwater Option – ‘Commercial Maritime Gateway’ Scenario will generate one-off GVA of £8.25 million, or £4.12 million per year for two years,
- The ‘Full Harbour Development’ Scenario will generate one-off GVA of £13.45 million, or £6.7 million per year for two years.

The calculation of total net additional local construction jobs, taking account of leakage, deadweight, displacement and multiplier effects, is provided in the table below.

In terms of leakage, it is considered reasonable to assume that most of the contractors will be employed from within the South West, assumed to be 80%, with 50% employed from within North Devon and 20% from within Ilfracombe itself. The estimated leakage assumptions of 80% at the local level, 50% at the sub-regional level and 20% at the regional have been assumed across the three options/scenarios.

It is assumed that there is no deadweight associated with the construction of the different options for the harbour since none of the above construction outputs are expected to occur in the absence of any development of the harbour.

A displacement factor of 25% has also been applied at the local, sub-regional and regional level to cover the construction outputs that would have been achieved through other local development projects that has been displaced to deliver the harbour developments.

The analysis also assumes the same composite multiplier effects as have been used throughout this assessment of 1.2 for the local area of Ilfracombe, 1.4 for the sub-region of North Devon and 1.6 for the South West region to represent the effect of the development on local incomes and local supplier purchases.

Table 7.1: Temporary Construction Impacts for Each Option

Option 1b East	Ilfracombe		North Devon		South West	
	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Gross impact	62	2.6m	62	2.6m	62	2.6m
<i>less Estimated Leakage</i>	80%	80%	50%	50%	20%	20%
Gross local direct effects	12.4	0.52m	31	1.3m	50	2.1m
<i>less Deadweight</i>	0%	0%	0%	0%	0%	0%
Gross additional local direct effects	12.4	0.52m	31	1.3m	50	2.1m
<i>less Estimated displacement</i>	25%	25%	25%	25%	25%	25%
Net additional local direct effects	9.3	0.39m	23.3	1m	37.3	1.6m
<i>plus Multiplier effects</i>	1.2	1.2	1.4	1.4	1.6	1.6
Total net additional impact	11.2	0.47m	32.6	1.36m	59.7	2.5m

Northern Breakwater Option	Ilfracombe		North Devon		South West	
'Commercial Maritime Gateway' Scenario	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Gross impact	99	4.1m	99	4.1m	99	4.1m
<i>less Estimated Leakage</i>	80%	80%	50%	50%	20%	20%
Gross local direct effects	19.8	0.8m	49.5	2.05m	79.2	3.3m
<i>less Deadweight</i>	0%	0%	0%	0%	0%	0%
Gross additional local direct effects	19.8	0.8m	49.5	2.05m	79.2	3.3m
<i>less Estimated displacement</i>	25%	25%	25%	25%	25%	25%
Net additional local direct effects	14.9	0.6m	37.1	1.5m	59.4	2.5m
<i>plus Multiplier effects</i>	1.2	1.2	1.4	1.4	1.6	1.6
Total net additional impact	17.8	0.7m	52.0	2.2m	95.0	3.9m
Northern Breakwater Option	Ilfracombe		North Devon		South West	
'Full Harbour Development' Scenario	FTEs	GVA (£)	FTEs	GVA (£)	FTEs	GVA (£)
Gross impact	161	6.7m	161	6.7m	161	6.7m
<i>less Estimated Leakage</i>	80%	80%	50%	50%	20%	20%
Gross local direct effects	32.2	1.3m	80.5	3.4m	128.8	5.4m
<i>less Deadweight</i>	0%	0%	0%	0%	0%	0%
Gross additional local direct effects	32.2	1.3m	80.5	3.4m	128.8	5.4m
<i>less Estimated displacement</i>	25%	25%	25%	25%	25%	25%
Net additional local direct effects	24.2	1.0m	60.4	2.5m	96.6	4.0m
<i>plus Multiplier effects</i>	1.2	1.2	1.4	1.4	1.6	1.6
Total net additional impact	29.0	1.2m	84.5	3.5m	154.6	6.4m

The above table shows the estimated construction impacts in terms of FTE jobs and annual GVA over the duration of the construction period of two years for each of the three development options.

It shows that after taking account of leakage, displacement, deadweight and multiplier effects:

- Option 1b East is estimated to support:
 - 11.2 FTE jobs and GVA of £470,000 in Ilfracombe for two years,
 - 32.6 FTE jobs and GVA of £1.36 million in North Devon for two years,
 - 60 FTE jobs and GVA of £2.5 million in the South West for two years.
- The Northern Breakwater Option – ‘Commercial Maritime Gateway’ Scenario is estimated to support:
 - 17.8 FTE jobs and GVA of £0.7 million in Ilfracombe for two years,
 - 52 FTE jobs and GVA of £2.2 million in North Devon for two years,
 - 95 FTE jobs and GVA of £3.9 million in the South West for two years.
- The Northern Breakwater Option – ‘Full Harbour Development’ Scenario is estimated to support:
 - 29 FTE jobs and GVA of £1.2 million in Ilfracombe for two years,
 - 84.5 FTE jobs and GVA of £3.5 million in North Devon for two years,
 - 155 FTE jobs and GVA of £6.4 million in the South West for two years.

7.2 Potential Car Ferry Impacts

7.2.1 *The Opportunity*

An additional impact associated with the Northern Breakwater option is the potential to add a car ferry service in the future. This would require a terminal on the south side of the harbour and is dependent upon the Northern Breakwater in order to provide the necessary protection to berth such a vessel¹². This would clearly require additional investment to develop the ferry terminal and access on the southern side of the harbour, using Larkstone Lane to provide access to the major routes in and out of Ilfracombe.

The Severn Link Ferry company has expressed an interest in operating such a service in tandem with the proposed passenger ferry between Swansea and Ilfracombe. This would provide a new route between the South West and Wales, while the renewed car ferry links between Swansea and Cork, re-established by Fastnet Line in March 2010, would make it possible to travel between the South West and Ireland via Ilfracombe. This would significantly enhance the role of Ilfracombe Harbour and the achievement of its vision as a maritime gateway to the South West.

The Severn Link Ferry company intends to launch with only the foot passenger ferry service, and establish levels of demand before any further exploration of car ferry options. As a result of these uncertainties, the potential impacts of such a service have been excluded from the main analysis above, and are instead described below as potential additional impacts of the Northern Breakwater option.

7.2.2 *Potential Impacts*

Turnover and Employment

The assumptions included as part of this impact assessment are based on consultations with representatives of Ilfracombe Harbour and the Severn Link Ferry company, and estimates of the consultants. It is expected that a Swansea to Ilfracombe car ferry would make an average of two crossings per day, resulting in around 730 rotations per annum.

Given the lack of information relating to potential vessel sizes and passenger capacities, the following impacts are based on a passenger capacity of 270 (i.e. the same as the proposed Severn Link passenger ferry) and actual passenger numbers of 40% of capacity (i.e. the same as the Severn Link passenger ferry under the 'Full Harbour Development' scenario). This provides an estimate of potential passenger numbers of almost 80,000 per annum.

These passenger numbers can be used to produce an estimate of the total turnover of the service at more than £4 million per annum, based on an average passenger expenditure of £52 (double the expenditure assumed for Severn Link foot passengers). However, if the car ferry service is introduced it currently appears most likely to be operated by the Severn Link ferry company and the impacts of this turnover are therefore not expected to benefit Ilfracombe, except through the local expenditures of the ferry company and the passengers.

Most employees are also likely to be based in Wales, although it is assumed that a small number of employees (two FTE jobs) would need to be based in Ilfracombe to

¹² Such a facility would not be possible on the northern side of the harbour due to the lack of space and inadequate road access.

operate the Ilfracombe ferry terminal. The GVA associated with these two FTE jobs can be estimated, based on an average salary of ferry employees of £20,000 as used elsewhere in the report¹³.

Expenditure on goods and services

As with the foot passenger ferry service, expenditures on goods and services for the car ferry have been estimated using a ratio from the ABI for the ‘sea and coastal passenger water transport sector’ which suggests these expenditures account for 67.5% of turnover (£2.75 million). It is again expected that the vast majority of these expenditures (80%) will involve suppliers outside the South West (primarily in Wales), with only 10% spent in Ilfracombe, 5% spent elsewhere in North Devon and a further 5% spent elsewhere in the South West.

The new ferry service is therefore expected to spend around £275,000 per annum in Ilfracombe on goods and services, supporting a further 3.5 FTE jobs and £110,000 of GVA in the local Ilfracombe economy. Adding these impacts to those associated with the operation of the Ilfracombe ferry terminal, suggests overall direct impacts of 5.5 FTE jobs and more than £150,000 of GVA in the local economy.

Indirect and induced effects are also expected to support a further 1 (5.5 x 0.2) FTE jobs and £30,000 (£150,000 x 0.2) GVA in Ilfracombe.

Visitor Expenditures

The potential visitor expenditures associated with a car ferry service are expected to be more significant, encouraging longer trips and holidays in Ilfracombe, the wider South West and Wales, and potentially involving visitors to and from Ireland.

It is still expected that 50% of passengers will travel from Ilfracombe to Swansea with minimal spending in Ilfracombe of £10 per passenger. However, the number of day visitors to Ilfracombe is expected to fall slightly to 35% for the car ferry, with a corresponding increase in passengers staying overnight in Ilfracombe (10%) and staying for a week (5%). The expenditure assumptions remain unchanged from the foot passenger ferries, resulting in total visitor expenditures (associated with the car ferry) of almost £2.6 million per annum, which are estimated to support 43 FTE jobs and GVA of £1.3 million in the local tourism economy.

Potential Impact of a Car Ferry Service

The above analysis suggests that a car ferry service between Ilfracombe and Swansea could potentially support a total of almost 50 FTE jobs and £1.5 million of GVA in Ilfracombe. However, the addition of a car ferry service is expected to result in some displacement of passengers, particularly those using the Severn Link foot passenger ferry. This displacement is expected to be significant at around 50%, which will reduce potential net impacts to around 25 FTE jobs and £730,000 of GVA in the local economy.

¹³ Profits and rents are excluded from the estimation of GVA since they are unlikely to be relevant for the impact of the service in Ilfracombe, and will instead deliver benefits in Wales.

8 ANALYSIS AND CONCLUSIONS

8.1 Cost Benefit Analysis

The cost benefit analysis has discounted the net benefits of each option over a 15 year period to provide the present value of benefits presented in Table 8.1 alongside the relevant estimate of public sector cost, the net present value (NPV) and the benefit cost ratio to allow comparison between options. The public sector costs do not include any ongoing costs because all options are expected to reduce overall maintenance costs as a result of providing additional protection to Old Quay Head, the Grade II* listed harbour wall, which is currently exposed to the sea and costs around £100,000 per annum to maintain.

Table 8.1: Cost Benefit Analysis of Development Options (2009 prices)

Option 1b East	Ilfracombe	North Devon	South West
	£	£	£
Present Value of Benefits (15 Years)	38.8m	28.5m	23.1m
Total Public Sector Cost	13.7m	13.7m	13.7m
Net Present Value (15 years)	25.1m	14.8m	9.4m
Benefit Cost Ratio	2.8	2.1	1.7
Northern Breakwater Option	Ilfracombe	North Devon	South West
'Commercial Maritime Gateway' Scenario	£	£	£
Present Value of Benefits (15 Years)	54.5m	42.8m	36.9m
Total Public Sector Cost	21.7m	21.7m	21.7m
Net Present Value (15 years)	32.8m	21.1m	15.2m
Benefit Cost Ratio	2.5	2.0	1.7
Northern Breakwater Option	Ilfracombe	North Devon	South West
'Full Harbour Development' Scenario – All Public Sector Costs	£	£	£
Present Value of Benefits (15 Years)	97.3m	77.2m	65.9m
Total Public Sector Cost (Assumes public sector pays all harbour infrastructure costs)	35m	35m	35m
Net Present Value (15 years)	62.3m	42.2m	30.9m
Benefit Cost Ratio	2.8	2.2	1.9
Northern Breakwater Option	Ilfracombe	North Devon	South West
'Full Harbour Development' Scenario – Levering Private Investment	£	£	£
Present Value of Benefits (15 Years)	97.3m	77.2m	65.9m
Total Public Sector Cost (Assumes private sector invests in infrastructure on southern side of the harbour)	21.7m	21.7m	21.7m
Net Present Value (15 years)	75.6m	55.5m	44.2m
Benefit Cost Ratio	4.5	3.6	3.0

The above table shows that Option 1b East is estimated to deliver the lowest NPV over a 15 year period of £25 million for Ilfracombe, £15 million for North Devon and £9.4 million for the South West. Option 1b East is also estimated to deliver benefit cost ratios of 2.8 in Ilfracombe, 2.1 in North Devon and 1.7 in the South West.

All of the scenarios associated with the Northern Breakwater option are estimated to deliver greater NPVs and, in most cases, benefit cost ratios. Even developing the Northern Breakwater alone, with no additional infrastructure on the south side of the harbour and no marina, is expected to deliver NPVs of between 30% and 60% higher than those associated with Option 1b East. This 'Commercial Maritime Gateway'

scenario is estimated to deliver NPVs of £33 million in Ilfracombe, £21 million in North Devon and £15 million in the South West.

However, it is the 'Full Harbour Development' scenario that delivers the greatest NPV and benefit cost ratios. Even if the public sector was to fund all of the harbour infrastructure required under this scenario (at an estimated cost of £35 million), this scenario would deliver NPVs of £62 million in Ilfracombe, £42 million in North Devon and £31 million for the South West, at a slightly higher benefit cost ratio of 2.8 in Ilfracombe, 2.2 in North Devon and 1.9 in the South West.

If the scheme is able to lever additional private sector investment to develop the south side of the harbour and install the sill and marina pontoons, then the estimated NPVs increase significantly to £76 million in Ilfracombe, £56 million in North Devon and £44 million in the South West. These figures equate to benefit cost ratios of 4.5 in Ilfracombe, 3.6 in North Devon and 3.0 in the South West.

8.2 Sensitivity Analysis

Sensitivity analysis is an important part of the economic appraisal of options, in order to test their vulnerability to future uncertainties. The specific activities associated with each option have already taken account of their individual risks by using probabilities to calculate expected net impacts. However, each option includes a combination of different activities and the overall impacts and NPVs are dependent upon the combined benefits of these activities, which also introduces an element of uncertainty.

There is a risk that there will be insufficient demand and/or expenditures under each option to generate these estimated impacts and actual impacts might therefore be lower than those presented above. However, the above benefits and impacts of each option are presented as conservative estimates, given the uncertainty surrounding many of the activities (e.g. likelihood of accommodating the emergency response vessels for the offshore wind farm), and the actual impacts of the scheme could also be higher than those projected above. It is therefore considered that the above impacts represent the best possible estimates, based on the available information.

The HM Treasury Green Book recommends the calculation of switching values to show by how much the benefits of each option would have to fall or the costs rise to make it not worth undertaking. The costs of each option have been determined by previous studies and consultations undertaken during this study suggest that these figures represent maximum costs of developing the harbour, and make adequate provision for contingency costs, so that it is highly unlikely that these costs would increase. This analysis therefore needs to consider how much benefits would need to fall to reduce the NPV of each option to zero. The table below shows the percentage rate at which the annual GVA benefits would need to fall in order for the NPV to fall to zero and the project no longer being worthwhile (assuming everything else remains unchanged).

Table 8.2: Sensitivity Analysis of Development Options

	Ilfracombe	North Devon	South West
Option 1b East	-65%	-52%	-41%
Northern Breakwater Option			
'Commercial Maritime Gateway' Scenario	-60%	-49%	-41%
'Full Harbour Development' – All Public Sector Costs	-64%	-55%	-47%
'Full Harbour Development' – Levering Private Investment	-78%	-72%	-67%

Note: The figures show the % fall in annual GVA benefits that would generate a zero NPV and make the project unviable.

The figures in Table 8.2 show that the estimated annual GVA impacts would have to fall significantly to make the project unviable in terms of NPV. This analysis suggests that the 'Commercial Maritime Gateway' scenario of the Northern Breakwater option is the most at risk of not being viable, although the estimated GVA impacts would still have to fall by 60% to make the project unviable at the local level, 50% at the sub-regional level and 40% at the regional level.

Again, this analysis suggests that the 'Full Harbour Development' scenario is the strongest option, and particularly if private investment can be levered to develop the marina and the south of the harbour. In this case, the estimated GVA impacts would have to fall by almost 80% at the local level to make the project unviable in terms of NPV, and by around 70% at the sub-regional and regional levels.

8.3 Comparisons with Similar Projects

Public sector support for investments made during a period of economic downturn and public sector financial constraint is likely to be difficult and the public sector is increasingly likely to make funding decisions based on assessments of value for money, i.e. which investments will maximise potential benefits. A number of other harbour and port developments have been proposed in the South West in recent years, including the development of Falmouth Docks and the harbours at Watchet and Brixham, which can be used to offer some indicative comparisons against the above economic impact and cost benefit analysis for the development of Ilfracombe Harbour.

Table 8.3: Comparisons with Similar Projects

Spatial Level	Variable	Option 1b East	Commercial Maritime Gateway	Full Harbour Dev't	Full Harbour Dev't (Private Investment Levered)	Falmouth Docks	Watchet	Brixham
	Public Sector Cost (£m)	13.7m	21.7m	35m	21.7m	20m	12m	20m
Local	Employment (FTE)	112	136	264	264	220	82	360
	Public Sector Cost per FTE (£)	122,000	160,000	133,000	82,000	91,000	146,000	56,000
	GVA per annum (£m)	3.5m	4.9m	8.7m	8.7m	6m	2.6m	15.3m
	NPV (£m)	25.1m	32.8m	62.3m	75.6m	31m	17m	135.7m
	Benefit Cost Ratio	2.8	2.5	2.8	4.5	2.6	2.4	7.8
Sub-Regional	Employment (FTE)	80	104	203	203	280	68	
	Public Sector Cost per FTE (£)	172,000	209,000	173,000	107,000	71,000	176,000	
	GVA per annum (£m)	2.6m	3.8m	6.9m	6.9m	8m	2.2m	
	NPV (£m)	14.8m	21.1m	42.2m	55.5m	48m	12.7m	
	Benefit Cost Ratio	2.1	2.0	2.2	3.6	3.4	2.1	
Regional	Employment (FTE)	64	89	172	172	300	71	
	Public Sector Cost per FTE (£)	214,000	245,000	203,000	126,000	66,000	169,000	
	GVA per annum (£m)	2.1m	3.3m	5.9m	5.9m	8.6m	2.3m	
	NPV (£m)	9.4m	15.2m	30.9m	44.2m	52m	13.4m	
	Benefit Cost Ratio	1.7	1.7	1.9	3.0	3.6	2.1	

The data in Table 8.3 presents a comparison between these projects in terms of ‘value for money’ statistics, although it is important to note that these comparisons are only indicative, since the respective findings are taken from different studies, undertaken at different times and are likely to be based on a number of different assumptions and expectations.

This analysis suggests that the development options for Ilfracombe Harbour are competitive with the similar proposed developments at Falmouth Docks and East Wharf in Watchet in terms of value for money, based on the estimated public sector cost per FTE, NPVs and benefit cost ratios. The Brixham Regeneration Scheme appears to offer the best value for money of all schemes, primarily because of the significant leverage of private sector investment as part of the project.

The ‘Full Harbour Development’ scenario (which assumes private sector investment is levered to develop the marina and southern harbour) is the most competitive option for Ilfracombe Harbour and is estimated to deliver significantly greater value for money than the proposed East Wharf development in Watchet at all spatial levels. Also, although the proposed development of Falmouth Docks is expected to deliver greater regional benefits (due to the lower expected displacement effects), the ‘Full Harbour Development’ scenario is expected to deliver greater benefits and better value for money at the local and sub-regional levels.

8.4 Conclusions

This study has identified a strong case for developing Ilfracombe Harbour to deliver regeneration impacts of a sufficient scale to drive change and act as a catalyst for growth in the local economy. Without the proposed developments, the town is likely to continue to underperform, without achieving its economic aspirations and potential.

This economic impact assessment has identified potential for significant additional employment and GVA, particularly through the development of harbourside residential, employment and retail and leisure floorspace, but also through the development and enhancement of the specific harbour activities. There is potential for considerable growth, particularly by developing a marina and associated facilities, and using the Northern Breakwater to provide additional marine transport services for passengers, by increasing ferry services, and potentially through serving offshore energy developments. Excursions and charter boats, cruise ships and commercial fishing activities are also expected to generate additional benefits as a result of improvements to the harbour layout and infrastructure.

However, it is the combination of activities that is most likely to generate the levels of demand, expenditures and the associated economic impacts that are required to deliver the economic aims for the harbour and the town. The harbour developments are estimated to be most viable and deliver the greatest impacts when they include the construction of the Northern Breakwater and marina and the harbourside developments that can attract and serve the additional visitors. It is when all of these components come together that the required step change can be delivered, while the leverage of private investment to develop the marina and southern side of the harbour would make the proposals more competitive and deliver better value for money for public sector funders.

ANNEX I: LIST OF CONSULTEES

Name	Position	Organisation
Sally Nelson	Project Manager	North Devon Plus
Peter Quincey	Project Manager	North Devon Plus
Ellen Vernon	Economic Regeneration Officer	North Devon District Council
Lieutenant Commander Rob Lawson	Iffracombe Harbour Master	North Devon District Council
Jon Triggs	Senior Accountant	North Devon District Council
Paul Robertshaw	Senior Engineer	North Devon District Council
James Wilson	Operations Manager	SWRDA
Paul Yabsley	Councillor Chair	North Devon District Council Iffracombe Harbour Board
Geoff Fowler	County Councillor (Iffracombe) Councillor Board Member	Devon County Council Iffracombe Town Council North Devon & Torrridge Local Strategic Partnership Iffracombe Harbour Forum Iffracombe Regeneration Board
Ron Ley	Councillor Director	Iffracombe Town Council Charterwell Homes
Bob Harrison	Director of Cruise Operations	Destination South West
Alan Kift		Iffracombe Harbour Forum
Stephen Renfree	Fishery Officer	Marine Fisheries Agency
John Butterwith	Chief Executive	North Devon Fishermen's Association
Sam Bourne	Chairman	The Yacht Harbour Association (TYHA)
Chris Marrow	Chairman	Severn Link Ferry
Derek Green	Lundy Island Manager	Oldenburg Ferry and Lundy Island
Adrian Carey	RNLI Divisional Inspector for the South West	RNLI
Peter Hunter	Architect and Development Consultant	
Marie Mason	Iffracombe Tourist Information Manager	Iffracombe Tourist Information

ANNEX II: ASSESSING ECONOMIC IMPACTS

II.1 Measuring Economic Impact

In measuring the economic impact of the existing and potential future activities relating to the harbour, the study was concerned with the extent to which these support and create jobs and incomes in the local, sub-regional and regional economies. The two key indicators used in this assessment are:

- **Employment** – the overall effect of harbour activities in supporting jobs directly and indirectly through supplier businesses. This is expressed in terms of full time equivalent (FTE) jobs.
- **Gross Value Added (GVA)** – the overall effect of harbour activities on the value of goods and services produced in the economy. GVA measures the contribution to the economy of individual producers, industries or sectors, and is equivalent to their gross output less their purchased inputs.

Because GVA is net of purchased inputs, it can be aggregated across all firms and, unlike turnover or gross output, provides a measure of the overall output in the economy that is not affected by double counting. The analysis therefore concentrates on employment and GVA as key indicators of economic impact, using estimates of expenditure and turnover only as a means to calculate these.

II.2 Assessing the Impact of Expenditures

Impacts have been assessed using a variety of sources and using local information wherever possible. Much of the information has been collected by consulting the harbour users or using existing evidence relating to harbour businesses and users in Ilfracombe. Where specific data is not readily available or appropriate, it is necessary to use relevant assumptions and ratios, which are described below.

II.2.1 Relating Turnover, GVA and Employment

The effects of expenditures on employment and GVA in supplier firms can be assessed using standard ratios linking gross output (turnover), employment and GVA.

However, these ratios can vary significantly between different locations and it is important in a study such as this, to consider data at the most appropriate and relevant level possible. The Office for National Statistics (ONS) publishes data from the Inter-Departmental Business Register (IDBR), which provides useful information on business turnover and employment at local authority level. The data suggest that the 4,700 businesses in North Devon generate a combined turnover of almost £2.6 billion and employ more than 32,000 people (2009 data). This suggests an average of £80,000 turnover per FTE job.

Unfortunately GVA data is not available at such a local level, however GVA per FTE in Devon is estimated to be £33,000 according to the latest ONS data¹⁴. These statistics can be used to estimate a ratio of turnover to GVA of 0.4. This suggests that every additional £1 of expenditure in North Devon will generate GVA of £0.40.

¹⁴ As presented in the South West Observatory's 'State of the South West 2010'

II.2.2 **Multiplier Effects**

Expenditures by harbour-related businesses, their suppliers and employees will support further incomes and employment as a result of expenditures by their respective supply chains (indirect effects) and employees (induced effects). The overall value of these indirect and induced effects can be estimated by applying a simple multiplier.

Standardised economic multipliers for the local and regional level are provided by the English Partnerships *Additionality Guide*. This referred to a *supply linkage multiplier* (Type I multiplier) and an *income multiplier* (induced multiplier), combining to give a composite (Type II) multiplier. Reviewing evidence from a range of studies, this concluded that appropriate composite multipliers for the majority of projects would be 1.1 at the neighbourhood level and 1.5 at the regional level. A review of multipliers from the South West Economy Model suggests slightly higher estimates of Type II multipliers of around 1.6. The latest version of the regional accounts has an online tool which allows the initial and total effects on GVA and employment of increases in different types of spending and demand in different sectors. This suggests Type II multipliers ranging from 1.2 to 1.4 at the local level and 1.4 to 2.0 at the regional level.

Therefore, in order to assess indirect and induced effects, this study has used a standard Type II multiplier of 1.2 at the local Ilfracombe level, 1.4 at the sub-regional (North Devon) level and 1.6 at the regional level, based on the above review. This implies that, for each additional £1 of GVA supported by in harbour-related businesses, an additional £0.20 of output in the local economy, £0.40 of output in the sub-regional economy and £0.60 of output in the regional economy is supported by supplier and employee expenditures. Similarly, for each extra person employed, an additional 0.2 jobs are created at the local level, 0.4 jobs at the sub-regional level, and 0.6 jobs at the regional level.

II.2.3 **Assessing the Impact of Visitor Expenditures**

The South West Regional accounts indicate that each £1 million of tourism spending can be expected to increase employment by 25.1 FTE jobs and GVA by £0.79 million, taking account of direct, indirect and induced effects. This suggests that tourism spend of £40,000 is required to support 1 FTE job and that each £1 of spending increases regional GVA by £0.79.

An analysis of recent studies of economic impacts of tourism expenditure at the local level indicates that average visitor expenditure of between £50,000 and £73,000 is required to support 1 FTE job at the local level at 2009 prices, with an arithmetic average of £60,000 per FTE.

Based on this analysis, the following multipliers have been used to assess the impact of visitor spending, taking account of direct, indirect and induced effects:

- At the local level, expenditure of £60,000 is required to support 1 FTE job, while each £1 of expenditure enhances local GVA by £0.50;
- At the sub-regional level, expenditure of £50,000 is required to support 1 FTE job, while each £1 of expenditure enhances sub-regional GVA by £0.65;
- At the regional level, expenditure of £40,000 is required to support 1 FTE job, while each £1 of expenditure enhances regional GVA by £0.80.

II.3 Assessing the Additionality of Impacts

A number of factors can influence the impact of expenditures on local, sub-regional and regional economies. These include:

- **Deadweight** – the extent to which impacts would have been achieved in the absence of any harbour development. In this study ‘deadweight’ is effectively the ‘do nothing’ option as this represents what could be achieved without additional investment in the harbour;
- **Displacement** – the extent to which the impacts of expenditures are offset by reductions in activity elsewhere in the economy, for example where the harbour developments are expected to attract businesses or expenditures from elsewhere in Ilfracombe, North Devon or the South West;
- **Economic Leakage** – the extent to which expenditure leaks out of the local, sub-regional and regional economies and therefore benefits other areas outside the study area.
- **Economic Multipliers** – the extent to which suppliers and employees re-spend money locally, thus supporting additional activity in the local, sub-regional and regional economies.

As a result the net impacts of the options to develop the harbour are likely to differ from the gross effects. The study has therefore sought to distinguish between the gross and the net effects, and to quantify these as far as possible, drawing on guidelines provided by English Partnerships’ Additionality Guide and the HM Treasury Green Book. The relationship between gross outputs and net impacts of economic development activity has come under increasing scrutiny by the RDAs and other economic development interests, so is an important component of the study.

Economic leakages and multipliers form an integral part of the economic analysis. They are addressed by identifying the proportion of harbour-related expenditures that benefit local, sub-regional and regional firms, and estimating the impacts on local, sub-regional and regional economies by using appropriate multipliers. These multipliers aim to reflect the degree to which money circulates within, and leaks from, local and regional economies – with leakage being a key factor in determining the size of the multiplier.

Displacement effects have been estimated through the consultation and analysis processes to provide estimates of the proportion of impacts that are likely to be generated as a result of activities relocating from elsewhere within that specific spatial level.

Finally, as described above, ‘deadweight’ is represented by the ‘do nothing’ option and the net additional impact can be measured as the difference between the specific development option and the ‘do nothing’ option.

II.4 Defining the Local, Sub-Regional and Regional Economies

For the purposes of this study, the local economy is defined as Ilfracombe (or more specifically the area covered by the Ilfracombe East, Central and West wards.

The sub-regional economy is defined as the North Devon District and the regional economy is defined as the South West Government Office Region.

ANNEX III: DETAILED ECONOMIC IMPACT ASSESSMENT

III.1 Existing Harbour Activities

III.1.1 Harbour Authority

The Harbour Authority is responsible for managing and operating the harbour and providing a range of services to harbour users. It currently employs two members of staff, both of whom live locally, and pays total wage costs of approximately £62,000.

Income

The Harbour Authority currently receives income from sales of fuel, rental income from harbourside land and properties, small craft dues (harbour dues and mooring fees), additional harbour dues from visiting steam ships, and some other income streams. Table III.1 shows that fuel sales are the significant source of income, followed by harbour dues and mooring fees, rental income and other income.

Table III.1: Harbour Authority Income (2008/09)

Income Category	Income	% of Total
Sales of Gas Oil	£258,000	73%
Small Craft Dues	£42,800	12%
Visiting Steamships	£11,400	3%
Rental Income	£22,700	6%
Miscellaneous and Other Income	£19,900	6%
Total Income	£354,800	

Source: North Devon District Council Accounts, 2008/09

A more detailed analysis of Harbour Authority income provides useful ratios that can be applied to the future development options for the harbour. For example, the fuel sales of £258,000 approximately comprise:

- £217,000 from commercial fishing boats at an average of £31,000 per vessel (based on seven boats),
- £28,500 from excursion and angling/diving charter boats at an average of £3,600 per vessel (based on eight boats),
- £5,000 from leisure boats resident in Ilfracombe Harbour at an average of £70 per boat (based on 72 leisure boats),
- £2,500 from visiting leisure boats at an average of £2.50 per visiting boat day/night (based on 980 visiting boat nights and day visits),
- £2,500 from visiting commercial boats at an average of £250 per visiting boat night (based on 10 nights, although this excludes commercial boat day visitors),
- £2,500 from the RNLI.

The rental income of £22,700 comprises:

- £16,000 from leisure and tourism users (e.g. aquarium, cafe, yacht club, etc.)
- £4,450 from commercial fishing operations for harbourside stores, etc.
- £2,250 from excursion and angling/diving charter operations for harbourside kiosks, etc.

The small craft dues of £42,800 approximately comprise:

- £5,200 from commercial fishing boats at an average of £870 per vessel (based on six boats),
- £4,900 from excursion and angling/diving charter boats at an average of £610 per vessel (based on eight boats),
- £22,600 from resident leisure boats at an average of £315 per boat (based on 72 resident leisure boats),
- £10,100 from visiting boats. Ilfracombe receives approximately 960 visiting boat nights per annum, only 1% of which (around 10 nights) are thought to be commercial boats. Commercial boats are typically longer than leisure craft and are assumed to account for 2% of small craft dues for visiting boats. Therefore:
 - £9,900 is received from visiting leisure boats at an average of £10.45 per visiting leisure boat night.
 - £200 is received from visiting commercial boats at an average of £20 per visiting commercial boat night.

The income received from visiting steamships of £11,400 comprises:

- £8,700 received from the Oldenburg, which includes harbour dues, cargo fees, etc. at an average of £72.50 per visit (based on 120 visits per annum),
- £2,700 received from the Balmoral and Waverley, which includes harbour dues and other fees at an average of £82 per visit (based on 33 visits per annum).

Expenditures on Goods and Services

The Harbour Authority currently spends around £467,000 per annum on goods and services (2008/09), as shown in Table III.2. The most significant expenditure, accounting for more than half of all expenditures, is purchases of fuel supplies which are then sold to harbour users. Approximately £100,000 per annum is also spent repairing the harbour wall, Old Quay Head (a grade II* listed structure).

Table III.2: Harbour Authority Expenditures (2008/09)

Expenditure Category	Expenditure	% of Total
Harbour and Premises	£51,100	11%
Transport	£6,500	1.4%
Supplies and Services	£263,100	56%
Support Services	£35,200	7.5%
Capital Financing	£111,000	24%
Total Expenditure	£466,900	

Source: North Devon District Council Accounts, 2008/09

A more detailed analysis of Harbour Authority expenditures, together with consultations with the Harbour Authority and North Devon District Council, suggest that:

- Around 15% (£70,000) is spent in Ilfracombe,
- Around 70% (£327,000) is spent in the rest of North Devon,
- Around 5% (£23,000) is spent in the rest of the South West,
- Around 10% (£47,000) is spent outside the South West.

Direct GVA Estimates

Using income and expenditure to estimate GVA by subtracting the above expenditures on goods and services (£467,000) from total income (£355,000) provides a negative estimate of GVA for the Harbour Authority, so this is instead assumed to be zero. However, the Harbour Authority's purchase of goods and services will support additional GVA and employment within supplier businesses in Ilfracombe. The effects of these expenditures on supplier firms can be assessed using the standard ratios described above (i.e. £80,000 turnover per FTE job and £1 of turnover generates GVA of £0.40). This suggests that these local purchases will directly support 0.9 FTE jobs and GVA of £28,000 in the Ilfracombe economy,

Indirect and Induced Effects

Indirect and induced effects can be estimated by applying multipliers to the direct employment and GVA estimates. The standard multiplier assumption of 1.2 at the local Ilfracombe level suggests that indirect and induced effects support a further 0.6 (2.9 x 0.2) FTE jobs and £6,000 (£28,000 x 0.2) GVA in Ilfracombe.

Overall Impact of Existing Harbour Authority Activities

Table III.3 shows that the current Harbour Authority activities are estimated to support 3.5 FTE jobs and £34,000 of GVA in Ilfracombe.

Table III.3: Current Impact of the Harbour Authority in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority Operations	2	0
Purchases from Local Suppliers	0.9	28,000
Indirect & Induced Effects	0.6	6,000
Total Economic Impact of the Harbour Authority	3.5	34,000

III.1.2 Commercial Fishing

Ilfracombe has a current fishing fleet of seven vessels, comprising five potters and two trawlers. Much of the fish landed by the Ilfracombe fleet is processed and sold outside the local area, but there is also some land-based fishing-related activity in Ilfracombe with a wet fish shop and associated wholesale and retail activities. These activities are estimated to support 20 local FTE jobs (typically employing Ilfracombe residents).

Turnover

There are five potters (each of around 12 metres in length) and two trawlers (each of around 15 metres in length) registered in, and operating out of, Ilfracombe. Marine and Fisheries Agency (MFA) data suggest around 930 tonnes of fish were landed into Ilfracombe in 2009, as presented in Table III.4 below. This is more than double the weight of total landings in 2006. There has been significant growth in shellfish landings, which represent the majority of landed fish with molluscs accounting for more than 50% of the 2009 landings alone. Demersal fish have also seen strong growth.

Table III.4: Current Impact of the Harbour Authority

Live Weight (tonnes)	2006	2007	2008	2009
Crustacean	90.02	99.76	54.19	68.28
Demersal	275.31	264.99	426.44	391.08
Mollusc	78.11	155.89	419.40	469.15
Pelagic	0.03	0.00	0.00	0.06
TOTAL	443.48	520.64	900.03	928.57

Value (£)	2006	2007	2008	2009
Crustacean	291,093	284,709	206,199	211,574
Demersal	550,960	468,166	632,647	547,053
Mollusc	77,535	307,635	292,313	366,133
Pelagic	22	2	1	12
TOTAL	919,610	1,060,511	1,131,160	1,124,772

Source: Marine Fisheries Agency (2010)

The value of fish landings in Ilfracombe has also been increasing, albeit less significantly, to £1.125 million, split fairly evenly between demersal and shellfish. However, this does not show the total value of the Ilfracombe commercial fishing fleet, which also lands fish into other ports, such as Bideford¹⁵. Representatives of the commercial fishing sector in Ilfracombe have suggested that the total value of fish landed by the Ilfracombe fleet is around £1.6 million per annum.

Expenditures on goods and services

The Harbour Authority data suggests that the Ilfracombe fishing fleet spent £217,000 on fuel in 2008/09, at an average of £31,000 per boat, although the two trawlers accounted for the vast majority. The fishing fleet also paid another £10,000 to the Harbour Authority for mooring fees (£5,200), rent and utilities for stores, etc (£4,500).

The other main expenditures will include fishing gear, maintenance, ice and other consumables. Inflating figures from the survey evidence included in the earlier (2007) economic impact study of the harbour¹⁶ to 2009 prices suggests that the average fishing vessel in Ilfracombe spends the following amounts per annum:

- £20,400 per boat on fishing gear (£142,800 for the whole fleet),
- £26,800 per boat on boat repair and maintenance (£187,600 for the whole fleet),
- £3.175 per boat on ice (£22,225 for the whole fleet),
- £13,750 per boat on other consumables (£96,250 for the whole fleet).

The total expenditures of the Ilfracombe commercial fishing fleet are therefore estimated to total £675,000 per annum, or around £96,500 per vessel, and £875,000 including the estimated expenditures of the associated land-based activities.

Representatives of commercial fishing in Ilfracombe suggest that around 60% of these expenditures are likely to involve local suppliers in Ilfracombe (particularly for fuel, parts, maintenance and other consumables). The remainder is likely to include 20% spent in North Devon, 10% in the rest of the South West and 10% outside the region.

Direct GVA Estimates

Subtracting the expenditures on goods and services (£875,000) from total turnover (£1,600,000) provides an estimate of GVA for the Ilfracombe commercial fishing sector of £725,000 per annum. Additionally, the purchases from local suppliers will support a further 3.75 FTE jobs and GVA of £120,000 in the local Ilfracombe economy¹⁷.

¹⁵ It is considered unlikely that other vessels will land fish in Ilfracombe on any significant scale, given the current limited range of facilities in the harbour and restricted sea access.

¹⁶ Roger Tym & Partners, Ilfracombe Harbour Economic Impact Study, May 2007

¹⁷ This excludes purchases from the Harbour Authority to avoid double counting.

Indirect and Induced Effects

Using the standard multipliers, indirect and induced effects are estimated to support a further 4.75 (23.75 x 0.2) FTE jobs and £169,000 (£844,000 x 0.2) GVA in Ilfracombe.

Overall Impact of Commercial Fishing Activities

Table III.5 presents the overall impact of the current commercial fishing activities in Ilfracombe, which is estimated to support 28.5 FTE jobs and £1 million of GVA locally.

Table III.5: Current Impact of Commercial Fishing Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Commercial Fishing Activities	20	725,000
Purchases from Local Suppliers	3.75	120,000
Indirect & Induced Effects	4.75	169,000
Total Economic Impact of Commercial Fishing	28.5	1,013,000

III.1.3 Ferries

Several ‘ferry’ services currently operate from Ilfracombe Harbour, including the Oldenburg ferry to Lundy Island and the summer ferry/excursion services operated around the Bristol Channel and beyond by Waverley Excursions with the Waverley and Balmoral vessels. These services are considered separately in the following sections, and are then combined to generate a total impact for all ‘ferry’ activities¹⁸.

Oldenburg

The MS Oldenburg is owned and operated by the Lundy Island Company and provides the main transport route to Lundy for passengers and island supplies. The Oldenburg is 43 metres in length, can transport 267 passengers, and operates 100 scheduled sailings to Lundy each year, between March and October. Although Bideford is the Oldenburg’s official ‘home’ port, 80 of the 100 scheduled sailings depart from Ilfracombe Harbour because it offers greater sea access and a larger tourist catchment. However, Ilfracombe is less able to deal with heavier cargo, such as skips or machinery, which is unloaded in Bideford.

In addition to the scheduled sailings, the Oldenburg also offers occasional evening and coastal cruises. It is estimated that the Oldenburg undertakes around 120 trips from Ilfracombe each year, representing 80% of all trips. The Lundy Island Company suggested that 11,500 day trippers and 3,750 staying visitors travelled to Lundy on the Oldenburg in 2009. 80% of these passengers (12,200) are estimated to have travelled from Ilfracombe at an average of 102 passengers per trip (approximately 40% of passenger capacity).

The total turnover of the Oldenburg is estimated to be £650,000, 80% of which (£520,000) is estimated to involve trips from Ilfracombe Harbour. This suggests average sales of just over £40 per passenger trip on tickets, food and drink, etc.

The Lundy Island Company employs a total of 45 people, including management, administration and support staff, people working on Lundy Island, and the Oldenburg crew. It is estimated that 15 FTE jobs are involved in operating the Oldenburg (crew, ticketing, management, admin, etc). Again 80% of these jobs (12 FTEs) are estimated to be associated with the provision of services from Ilfracombe, with half of these jobs

¹⁸ The proposed Severn Link ferry service is not included as an existing activity since it is not due to commence until June 2010. However, it is included under the future ‘Do Nothing’ option.

(six FTEs) employing Ilfracombe residents, and the other six FTEs living elsewhere in North Devon and Torridge. The average wage for the Oldenburg crew is £20,000.

Balmoral and Waverley

The Balmoral and Waverley offer summer cruises around the Bristol Channel, the Irish Sea, West Scotland, the South Coast and the Thames. The Waverley provides cruises all over the country and has a capacity of 740 passengers, while the Balmoral spends more time in the Bristol Channel and has a capacity of 684 passengers.

Harbour Authority data suggests these vessels made 33 visits to Ilfracombe in 2008/09. The 2010 timetable shows that the Balmoral is scheduled to visit Ilfracombe 29 times between July and September, while the Waverley is scheduled to visit eight times, all in June. Applying this ratio to the 2008/09 visit data suggests the Balmoral made 26 visits to Ilfracombe and the Waverley visited seven times. Using the same passenger capacity assumption as the Oldenburg (40% of capacity) suggests that 7,100 passengers boarded/disembarked the Balmoral and 2,100 boarded/disembarked the Waverley at Ilfracombe in 2008/09, totalling 9,200 people.

The average passenger is estimated to spend in the region of £25 per head on tickets and food and drink whilst on board, suggesting Ilfracombe-related expenditures of around £230,000 per annum (£25 x 9,200 Ilfracombe passenger trips) on trips on the Waverley and Balmoral. The earlier harbour impact study reported that 42 people are employed on the Waverley and Balmoral, although none are believed to live in Ilfracombe. Therefore, since these boats travel to many different locations around the UK, it is not possible to attribute any of these jobs or turnover to Ilfracombe.

Expenditures on goods and services

The Oldenburg spends a total of £550,000 on goods and services, 80% of which (£440,000) is estimated to be associated services from Ilfracombe. These purchases are considered to be fairly evenly distributed between the different spatial levels with:

- 30% (£132,000) spent in Ilfracombe, particularly ferry supplies (e.g. food and drink for passengers and crew) and harbour dues.
- 30% (£132,000) spent elsewhere in North Devon, particularly fuel, other ferry supplies and maintenance services.
- 20% (£88,000) spent elsewhere in the South West on other goods and services, including winter maintenance and servicing at Sharpness Docks.
- 20% (£88,000) spent outside the South West, particularly on insurance and specialist goods and services.

Inflating the findings of the earlier harbour impact study to 2009 prices suggests that the Waverley and Balmoral spend around £31,000 in North Devon per annum on harbour dues, coach hire, advertising, fees and other minor purchases. It is estimated that 50% is spent in Ilfracombe and 50% elsewhere in North Devon.

Direct GVA Estimates

The GVA of the Oldenburg (associated with Ilfracombe) is estimated to be £80,000 per annum by subtracting the expenditures on goods and services (£440,000) from the total turnover (£520,000) associated with services from Ilfracombe. The purchases from local suppliers (excluding the Harbour Authority to avoid double counting) are estimated to support a further 1.5 FTE jobs and GVA of £49,000 in the local Ilfracombe economy.

It is not appropriate to attribute any GVA from the operation of the Balmoral and Waverley to Ilfracombe Harbour since these services neither employ any local people, nor is the business based in Ilfracombe or even the South West. However, it does purchase local goods and services, which are estimated to support 0.2 FTE jobs and GVA of £6,000 in the local economy (excluding purchases from the Harbour Authority).

Indirect and Induced Effects

The standard multipliers estimate the indirect and induced effects associated with the Oldenburg to support a further 1.5 (7.5 x 0.2) FTE jobs and £26,000 (£129,000 x 0.2) GVA in Ilfracombe. The indirect and induced effects for the Waverley and Balmoral are minimal, based on the expenditures of these vessels in the local economy.

Other Expenditures (Passenger Expenditures and Lundy Island Supplies)

The Oldenburg is the major supply vessel for the businesses, residents and visitors on Lundy. The Lundy Island Company suggests that around £320,000 is spent on the mainland to purchase supplies for the island. As most trips leave Ilfracombe, it is assumed that 50% of these goods and services are purchased in Ilfracombe, with 10% purchased in North Devon, 30% from elsewhere in the South West (particularly Torridge), and 10% from outside of the South West. The Lundy Island Company also suggests that the 12,200 passengers travelling from Ilfracombe to Lundy are likely to spend an average of at least £10 per head in Ilfracombe on car parking, food, drink and other tourism-related purchases, totalling £122,000 per annum. These additional expenditures are estimated to total £282,000 in Ilfracombe, which supports a further 4.8 FTE tourism jobs and GVA of £144,000 in the local economy based on the standard tourism multipliers described above.

The visitor expenditures, associated with Waverley and Balmoral passengers in Ilfracombe, were also estimated by the earlier harbour impact study. Inflating this figure to 2009 prices suggests a figure of £9.64, and for consistency with the Oldenburg estimates above, this has been rounded to £10 per visitor. This suggests total annual visitor expenditure, associated with the Waverley and Balmoral, of £92,000, which is estimated to support 1.5 FTE tourism jobs and GVA of £46,000 in the local Ilfracombe economy.

Overall Current Impact of Ferry Activities

The current ferry activities in the harbour are therefore estimated to support 16 FTE jobs and £350,000 of GVA in Ilfracombe, as presented in Table III.6 below.

Table III.6: Current Impact of Ferry Activities Associated with Ilfracombe Harbour

	Ilfracombe	
	FTE Jobs	GVA (£)
Oldenburg's Ilfracombe Activities	6	80,000
Balmoral & Waverley Ilfracombe Activities	-	-
Purchases from Local Suppliers (Oldenburg)	1.5	49,000
Purchases from Local Suppliers (Balmoral & Waverley)	0.2	6,000
Indirect & Induced Effects (Oldenburg)	1.5	26,000
Indirect & Induced Effects (Balmoral & Waverley)	-	1,000
Other Passenger / Supply Expenditures (Oldenburg)	4.8	144,000
Other Passenger / Supply Expenditures (Balmoral & Waverley)	1.5	46,000
Total Economic Impact of Ferry Activities (Oldenburg)	13.9	299,000
Total Economic Impact of Ferry Activities (Balmoral & Waverley)	1.7	53,000
Total Economic Impact of Ferry Activities (TOTAL)	15.6	353,000

III.1.4 *Leisure Boaters*

There are currently 89 leisure boats resident in Ilfracombe. The harbour is at full capacity and there are another 40 to 45 boats on a waiting list for moorings. The harbour is also estimated to have received around 980 visiting leisure boats in 2008/09, 950 of which stayed overnight.

Expenditures on boating goods and services

The earlier harbour impact study surveyed boat-owners in Ilfracombe and suggested that leisure boaters spent an average of £1,800 per boat in 2007 on harbour fees, fuel, maintenance, insurance and other boat-related expenses. This figure appears realistic and in line with other studies of boating expenditures, such as the study of sailing in the Clyde Estuary¹⁹, which identified expenditures of £7,000 per boat comprising £2,000 spent on tourism-related goods and services, £3,500 spent on mooring fees and £1,500 spent on fuel, boat parts, repair, maintenance, etc. The Harbour Authority data suggests much lower mooring fees in Ilfracombe of £315 per boat, which helps verify the 2007 estimate of £1,800 boating related expenditures in Ilfracombe. Inflating this figure to 2009 prices (£1,905) and then multiplying by the 89 resident leisure boats suggests total expenditure on boating goods and services of £170,000 (or £135,000 excluding expenditures from the Harbour Authority). The survey also collected information on the spatial distribution of these boating-related expenditures. The survey findings suggested that around 76% was spent in Ilfracombe, 7.5% was spent elsewhere in North Devon, 1% was spent elsewhere in the South West and 15.5% was spent outside the region²⁰.

For visiting leisure boats, the Harbour Authority data identifies expenditures of £9,900 on mooring fees and £2,500 on fuel in Ilfracombe per annum. However, this has already been included as income for the Harbour Authority and is excluded from this analysis to avoid double-counting. Additional boating-related expenditures in Ilfracombe are likely to be minimal and have not been included as these are more likely to take place close to their 'home' moorings.

Direct GVA Estimates

These boating-related expenditures will support GVA and employment in local providers of boating goods and services and it is estimated, using the standard assumptions, that these purchases will directly support 1.2 FTE jobs and GVA of £38,000 in the local Ilfracombe economy.

Indirect and Induced Effects

The indirect and induced effects of these expenditures are estimated to support 0.2 (1.2 x 0.2) FTE jobs and £7,500 (£38,000 x 0.2) GVA in Ilfracombe.

Visitor Expenditures

Owners of boats kept in Ilfracombe Harbour also have an impact on the local tourism sector as a result of expenditures on tourism-related goods and services in the local economy. Most owners of boats kept in Ilfracombe Harbour are relatively local people as priority is currently given to local boat-owners, since the limited protection of boats in the harbour causes frequent damage to vessels and it is easier if owners are based

¹⁹ McKenzie Wilson Partnership, Sailing in the Clyde Estuary, 2006

²⁰ The 'unaccounted' expenditure has been excluded from this analysis and the figures for Ilfracombe, North Devon, the South West and elsewhere have been adjusted proportionately.

locally to make or arrange the necessary repairs. It has therefore been assumed that the 89 boat-owners are equally likely to live in Ilfracombe, the rest of North Devon and the rest of the South West, with none living outside the region. This estimates that:

- 30 boat-owners live in Ilfracombe, although their expenditures are unlikely to have any additional impact for Ilfracombe and have not been included.
- 30 boat-owners live elsewhere in North Devon. These are likely to be frequent visitors to the harbour, but for relatively short visits. It has therefore been assumed that the average boat-owner living in North Devon visits their boat 30 times per annum, with one other person, but only ever for day visits. This suggests 1,800 individual day visits to Ilfracombe Harbour per annum (30 boats x 2 people x 30 day visits). It is estimated that two-thirds are sail boats and one-third are motor boats, such that these visitors are expected to account for 1,200 day visits to sail boats and 600 visits to motor boats. The 2003 Great Britain Day Visits Survey still provides the best estimates of tourism expenditures for day visits on a boat with an engine (£10.39 or £11,90 in 2009 prices) and a boat without an engine (£13.64 or £15.60 in 2009 prices). In conclusion, these visitors are estimated to spend £26,000 in the local tourism economy each year.
- 30 boat-owners live elsewhere in the South West and are assumed to visit their boats half as frequently (15 times per annum), also with one other person, but stay for a weekend each time. This suggests 1,800 days in Ilfracombe visiting their boat per annum (30 boats x 2 people x 15 visits per annum x 2 days). The 2007 South West Value of Tourism report²¹ suggests that visitors staying on boat moorings in North Devon spend an average of £28 per day in terms of tourism related expenditure. Inflating this figure to 2009 prices (£29.60) and multiplying by the 1,800 days in Ilfracombe suggests that these visitors spend approximately £53,000 in the local tourism economy per annum.

Visiting boats are estimated to have spent 950 nights in Ilfracombe in 2009, with an additional 30 day visiting boats. Assuming an average of three people per boat, there were estimated to be 2,940 individual day visits to Ilfracombe Harbour (including 2,850 overnight visits and 90 day visits: 30 on motor boats and 60 on sail boats), and visitor expenditures of £86,000 per annum based on the same expenditure assumptions.

In total, it is estimated that Ilfracombe currently attracts additional tourism expenditures of £164,000 per annum from all leisure boaters, which supports 2.7 FTE jobs and GVA of £82,000 in the local Ilfracombe economy.

Overall Current Impact of Leisure Boating Activities in Ilfracombe

Table III.7 presents the overall impact of the current leisure boating activities, which are estimated to support 4 FTE jobs and £127,000 of GVA in Ilfracombe.

Table III.7: Current Impact of Leisure Boating Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Leisure Boating Activities	-	-
Purchases from Local Suppliers	1.2	38,000
Indirect & Induced Effects	0.2	7,500
Other Visitor Expenditures	2.7	82,000
Total Economic Impact of Leisure Boating	4.1	127,000

²¹ South West Tourism, Value of Tourism 2007

III.1.5 Excursions, Fishing and Diving Charters

There are currently five boats delivering excursions, fishing and diving charter services from Ilfracombe Harbour. The largest of these boats is the Ilfracombe Princess, which operates sea and wildlife cruises up to five times per day in the summer. The other boats offer a range of wildlife, sightseeing, fishing and diving trips. These boats are listed in Table III.8, alongside information gathered on trip and passenger capacities to estimate a total sales potential of £1.4 million per annum. However, the best estimate of turnover for the sector is 25% of the maximum potential turnover, equating to £350,000 per annum.

Table III.8: Maximum Potential Turnover of Ilfracombe Excursion/Charter Boats

Vessel	Price per person	Duration	Trips per day	Capacity	Days per year	Maximum Potential Income
Ilfracombe Princess	£10 average (£12 adult, £6 child)	1.5 hours	5	100 people	190	£950,000
Kingfisher	£12.50	2 hours	4	12 people	190	£114,000
Osprey	£12.50	2 hours	4	12 people	190	£114,000
Obsession	£12.50	2 hours	4	12 people	190	£114,000
Obsession II	£12.50	2 hours	4	12 people	190	£114,000
TOTAL						£1.4 million

Source: Excursion and fishing/diving charter boats and their respective websites, and the Ilfracombe Harbour Development Economic Impact Study (Roger Tym & Partners, 2007)

Consultations undertaken as part of this study suggest that an average of three people are employed per vessel as crew and onshore assistants, all of whom live in Ilfracombe. The boats are estimated to spend an average of 190 days at sea per annum, which represents 80% of a typical working year of 240 days, and suggests that the 15 Ilfracombe residents employed on the boats equates to 12 FTE jobs.

Expenditure on goods and services

The Harbour Authority data suggests that excursion, fishing and diving charter boats spent £28,500 on fuel, £5,000 on mooring fees and £2,250 renting kiosks in 2008/09. The other major expenditures of these vessels are consumables (i.e. food and drink, fishing bait, fishing gear, etc.) and boat repair and maintenance. The survey undertaken as part of the previous harbour impact assessment identified expenditures of £33 per vessel per day on consumables and £1,000 per vessel on boat repair and maintenance. Inflating to 2009 prices and calculating totals for five vessels at sea for 190 days per annum, suggests total expenditure of £33,250 on consumables and £5,300 on boat repair and maintenance.

Total expenditures are therefore estimated to total £74,200 per annum, or approximately £15,000 per boat, although subtracting the purchases of Harbour Authority goods and services (to avoid double counting) reduces this figure to £39,000. The survey findings also suggest 80% is spent within Ilfracombe, while the remainder is estimated to be split evenly between the rest of North Devon (10%) and elsewhere in the South West (10%).

Direct GVA Estimates

GVA for the sector is estimated to be £277,000 per annum, calculated by subtracting the expenditures on goods and services (£74,200) from total turnover (£351,500). The expenditures from local suppliers (excluding the Harbour Authority) are then estimated to directly support a further 0.3 FTE jobs and GVA of £9,500 in the local economy.

Indirect and Induced Effects

The indirect and induced effects are estimated to support an additional 2.4 (12.3 x 0.2) FTE jobs and £57,000 (£287,000 x 0.2) GVA in Ilfracombe.

Visitor Expenditures

The excursion and charter boats are estimated to provide services to around 33,000 people per annum (based on 25% of their total capacity). This includes local people and people from further afield, many of whom are likely to be visiting Ilfracombe in order to access the excursions and charter boats and will make additional expenditures on car parking, food and drink, etc. and, in some cases, on accommodation. For this analysis, it is estimated that:

- 20% are Ilfracombe residents and do not deliver additional visitor expenditures.
- 60% are from outside of Ilfracombe and spend a small amount in the local economy (on car parking, food and drink, etc) as a result of using the excursion and charter boat services (assumed to be £10 per head for consistency with the local expenditures of the ferry passengers). This generates additional visitor expenditures of £200,000 in Ilfracombe (33,000 x 60% x £10).
- 20% are from outside of the local area and stay overnight for one night as a result of using the excursion and charter boat services. Expenditures are assumed to be £53.60 per person per night (based on the average expenditure of all North Devon overnight visitors of £50.65, inflated to 2009 prices²²), which generates additional visitor expenditure of £350,000 (33,000 x 20% x £53.60).

It is therefore estimated that the users of excursion and charter boat services spend an additional £550,000 in the local Ilfracombe economy per annum, which supports 9.2 FTE jobs and GVA of £275,000 in the local Ilfracombe economy.

Overall Current Impact of Excursion and Charter Boat Activities in Ilfracombe

The overall impact of the current excursion and charter boat activities is presented below and is estimated to support 24 FTE jobs and £619,000 of GVA in Ilfracombe.

Table III.9: Current Impact of Excursion and Charter Boat Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Excursion and Charter Boat Activities	12	277,000
Purchases from Local Suppliers	0.3	9,500
Indirect & Induced Effects	2.4	57,000
Other Visitor Expenditures	9.2	275,000
Total Economic Impact of Excursion and Charter Boats	24	619,000

III.1.6 Cruise Ships

Ilfracombe has received one cruise ship in recent history, the Hanseatic from the German cruise line company Hapag-Lloyd Cruises, in 2006. The cruise sector works with long lead times and preparation for this cruise visit to Ilfracombe took around three years. However, no cruise ships have visited Ilfracombe since 2006, and cruise ship activities have therefore not been included as part of the existing harbour activities.

²² South West Tourism, Value of Tourism 2007 (Inflated to 2009 prices)

III.1.7 **RNLI**

The RNLI operates two lifeboats from Ilfracombe Harbour:

- a 12m Mersey class lifeboat – an all-weather boat, launched and recovered by tractor using the launch ramp,
- a smaller 16ft inflatable lifeboat launched and recovered using a smaller tractor and the launch ramp.

RNLI operations in Ilfracombe involve around 30 people, including crew and shore helpers, all of whom deliver the emergency service and therefore live and work locally in Ilfracombe. Most of the team are volunteers, although there is one full time individual employed as a cox and mechanic by the RNLI in Ilfracombe Harbour, and total wage costs are estimated to be in the region of £35,000 per annum.

Expenditures on Goods and Services

Nationally, the RNLI has an active fleet of more than 300 lifeboats and a relief fleet of another 100 lifeboats²³. Total running costs are estimated to total £138 million per annum²⁴ at an average of £345,000 for each of the 400 boats. Running costs in Ilfracombe are therefore estimated to be around £690,000, based on the two lifeboats.

Most of the goods and services purchased by the RNLI are supplied centrally and are therefore unlikely to use local suppliers. However, some items will be purchased locally, such as fuel and some smaller parts and equipment. Harbour Authority data suggests that the RNLI purchased around £2,500 of fuel in 2008/09, although this is only a small proportion of the total fuel purchased, since the RNLI has its own fuel tank which is filled by local suppliers (assumed to be purchased from elsewhere in North Devon – as is the case for the Harbour Authority). It is therefore estimated that the total RNLI expenditure in Ilfracombe is only likely to be in the region of £25,000, with £100,000 spent elsewhere in North Devon, and £50,000 spent elsewhere in the South West, leaving more than £0.5 million spent centrally outside of the region.

Direct GVA Estimates

The local GVA generated by the RNLI in Ilfracombe is minimal, since much of the service is operated by volunteers. GVA can be estimated using the income method of summing wages, rents and profits. Since the RNLI is a non-profit organisation and does not pay rent in Ilfracombe, GVA is estimated using the wage estimates of £35,000 per annum, while the purchases of local goods and services (excluding purchases from the Harbour Authority) will support a further 0.3 FTE jobs and GVA of £9,000 in the local Ilfracombe economy.

Indirect and Induced Effects

The indirect and induced effects of RNLI activities are estimated to support an additional 0.25 (1.3 x 0.2) FTE jobs and £9,000 (£44,000 x 0.2) GVA in Ilfracombe.

Overall Current Impact of RNLI Activities in Ilfracombe

Table III.10 shows that the current RNLI activities are estimated to support 1.5 FTE jobs and £53,000 of GVA in Ilfracombe.

²³ http://www.rnli.org.uk/what_we_do/lifeboats/current_lifeboats

²⁴ http://www.rnli.org.uk/what_we_do/lifeboats/running_costs

Table III.10: Current Impact of RNLI Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
RNLI Activities	1	35,000
Purchases from Local Suppliers	0.3	9,000
Indirect & Induced Effects	0.25	9,000
Total Economic Impact of RNLI Activities	1.5	53,000

III.1.8 Other Marine Businesses

There are a small number of marine businesses currently operating in Ilfracombe. The Ilfracombe Harbour Information Guide lists eight businesses offering marine-related services, including chandlers, marine engineers and marine electronics specialists, boat haulage and crane services and a marine survey business. Five of these businesses are based in Ilfracombe although only the chandler/photographic shop is located in the immediate harbour area. The other businesses come to the harbour as required to provide marine services to the commercial and leisure boats.

The previous harbour impact study found that these marine businesses attributed only around 20% of their turnover to activities in and around Ilfracombe Harbour. It is therefore considered more appropriate to estimate the impact of the marine businesses from the specific boating-related expenditures of the leisure and commercial activities described above. This also overcomes any issues of double counting impacts.

III.1.9 Wider Tourism Impact

The above sections have described the tourism expenditures associated with visitors using each of the harbour activities described above. However, this excludes a significant additional impact of the harbour in attracting non-boating, leisure tourists to Ilfracombe. These are visitors who do not use the harbour facilities but are attracted by the boats, the commercial activities, and the sea and will spend money in the local economy as a result.

An analysis of the tourism economy in Ilfracombe has suggested that North Devon receives 918,000 staying visitors per annum, spending 4.1 million nights and £209 million (2007 prices). Using the proportion of bed spaces as a proxy, Ilfracombe is estimated to receive 155,000 staying visitors per annum, staying for more than 700,000 nights and spending £37.5 million per annum (inflated to 2009 prices). North Devon also receives 1.9 million day visitors per annum, spending £82.6 million per annum (2007 prices). Applying a ratio of visitor days to visitor nights taken from the North Devon data, suggests that Ilfracombe receives 326,000 day visitors and £14.8 million of tourism expenditure per annum (inflated to 2009 prices).

Using a conservative assumption that 25% of these visits and expenditures are associated with, and attributable to, the harbour, suggests that the harbour attracts visitor expenditures of £13.1 million for Ilfracombe each year. However, this will double count the expenditures already described above. Therefore subtracting the visitor expenditures associated with the other harbour activities suggests that these wider tourism expenditures support an additional 200 FTE jobs and GVA of £6 million in the local Ilfracombe economy.

III.1.10 Total Harbour Impact

The total estimated impact of the harbour can be estimated by drawing together all of the above activities and impacts, as shown in Table III.11. The data suggest that the specific harbour activities support 77 FTE jobs and GVA of £2.2 million per annum in

Ilfracombe. The harbour also plays an important role in attracting other visitors to Ilfracombe to spend money in the local economy and including these wider visitor impacts suggests that the harbour currently supports a total of 277 FTE jobs and GVA of £8.2 million in the local Ilfracombe economy.

Table III.11: Total Impact of Current Harbour Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority	3.5	34,000
Commercial Fishing	28.5	1,013,000
Ferry Activities*	15.6	353,000
Leisure Boating	4.1	127,000
Excursion/Charter Boats	24	619,000
Cruise Ship Activities^	-	-
RNLI Activities	1.5	53,000
Wider Tourism	200	5,989,000
Total Harbour Impact	277	8,187,000

* Excludes the proposed Severn Link Ferry

^ Currently assumed to be zero

III.2 'Do Nothing' Option

The first future option for the harbour is the 'Do Nothing' option, which represents the baseline against which to compare the additional impacts of the alternative development options. It provides estimates of the impacts of the harbour in the absence of any interventions to develop the harbour. Therefore, many of the harbour activities are assumed to remain unchanged from the existing situation, except for:

- The introduction of the proposed Severn Link ferry service as this is expected to commence in the near future and is not dependent upon harbour developments.
- The inclusion of additional impacts as a result of cruise ship visits to Ilfracombe. Ilfracombe is showing signs of increased cruise ship activity, even in the absence of harbour developments, and the 'Do Nothing' option should therefore include some consideration of the impacts of cruise ships on the local economy.
- The increased ferry and cruise ship activity will have knock-on effects for the income received by the Harbour Authority, in terms of harbour dues and other fees, and this also needs to be accounted for in the 'Do Nothing' scenario.

III.2.1 Severn Link Ferry Service

The proposed Severn Link ferry service is expected to commence in June 2010, delivering regular year-round ferry services between Ilfracombe and Swansea. This is possible without any additional harbour development, although there is likely to be increased pressure for ferry berths with the Severn Link ferry, Lundy ferry and Balmoral and Waverley all sharing the same berths.

The 'Do Nothing' option is based on relatively conservative assumptions compared to the proposed figures, assuming 700 crossings per annum, based broadly on three 'rotations' per day between April and September and one per day between October and March. The ferry will have a passenger capacity of 270, and the 'Do Nothing' option assumes the service achieves passenger numbers averaging 33% of capacity, totalling more than 62,000 passengers per annum. However, given the uncertainty of projecting passenger numbers for a new service, it has been assumed that there is a 75% likelihood that this is achieved (and a 25% probability that the service does not commence or is not sustainable and passenger numbers fall to zero). This reduces the potential number of passengers to around 47,000 passengers per annum.

The total turnover of the service can be estimated using an average passenger expenditure of £26 (a £22 return ticket and £4 on food and drink), which would generate total turnover of more than £1.2 million per annum. However, since the service is based in Wales and is only expected to employ Wales residents, it is not appropriate to attribute any of the direct employment and GVA impacts of the ferry service to Ilfracombe Harbour. The impacts will instead focus on the Ilfracombe expenditures of the ferry operator and the visitors it attracts.

Consultations with ferry operators have suggested that concerns over increased competition for passengers are limited. However, it is likely that the new service will result in some displacement as passengers that would have taken a day trip to Lundy or taken an excursion on the Balmoral or Waverley, will instead take a trip to Swansea. The 'Do Nothing' option therefore assumes that there will be some displacement, with passenger numbers on the Oldenburg, Waverley and Balmoral falling from 40% to 35% of their respective capacities.

Expenditure on goods and services

It is difficult to determine the expenditure of the new ferry service as it has not yet commenced. This has been estimated using a ratio from the Annual Business Inquiry (ABI) for the 'sea and coastal passenger water transport sector' which suggests 67.5% of turnover (£820,000) is spent on goods and services across the sector. The vast majority of these expenditures (80%) are expected to involve suppliers outside the South West (primarily in Wales), with only 10% spent in Ilfracombe, 5% spent elsewhere in North Devon and a further 5% spent elsewhere in the South West.

The new ferry service will generate significant income for the Harbour Authority, which has been estimated at £72.50 per visit (the same as for the similar-sized Oldenburg). The 700 'visits' to Ilfracombe each year will therefore generate additional income for the Harbour Authority of more than £50,000. The other expenditures in Ilfracombe are expected to be minimal and are estimated to total £31,000 per annum.

Direct GVA Estimates

Excluding the additional income for the Harbour Authority to avoid double counting suggests that this additional expenditure of £31,000 will support 0.4 FTE jobs and GVA of £12,500 in the local Ilfracombe economy.

Indirect and Induced Effects

The indirect and induced effects are also relatively small and are estimated to support a further 0.1 (0.4 x 0.2) FTE jobs and £2,500 (£12,500 x 0.2) GVA in Ilfracombe.

Visitor Expenditures

However, the visitor expenditures associated with the new ferry service are expected to be more significant. The Severn Link ferry company is expecting an equal number of passengers to travel from Ilfracombe to South Wales, as from South Wales to Ilfracombe. Those travelling to Wales are expected to spend an average of £10 per head in Ilfracombe on car parking, food and drink, etc. (the same assumption as for the other ferry services). Additionally, of the 50% of passengers visiting Ilfracombe:

- 40% are expected to be day visitors, also spending £10 per head.
- 7.5% are expected to stay overnight, spending £53.60 per person per night²⁵.
- 2.5% are expected to stay in Ilfracombe for a week, spending £375 per person (£53.60 x 7 nights).

This estimates visitor expenditures in Ilfracombe, associated with the Severn Link ferry, to total just over £1 million, which is estimated to support 17.5 FTE jobs and GVA of £525,000 in the local tourism economy.

Overall Impact of Total Ferry Activities – Do Nothing Option

The above analysis suggests that the new Severn Link ferry service is estimated to support a total of 18 FTE jobs and £540,000 of GVA in Ilfracombe. However, as described above, the impacts of the new Severn Link ferry service are not all assumed to be additional and some displacement of passengers from the Oldenburg, Waverley and Balmoral is expected under the 'Do Nothing' scenario. The lower expectations for passenger numbers on these other vessels will offset some of the additional impacts generated by the Severn Link ferry. The new total impact of ferry services under the

²⁵ South West Tourism, Value of Tourism 2007 - Average overnight expenditure of North Devon visitors (Inflated to 2009 prices)

'Do Nothing' option is presented in Table III.12, taking account of this displacement, and is expected to support a total of 33 FTE jobs and £858,000 of GVA in Ilfracombe. This represents an additional 17 FTE jobs and £500,000 of GVA over and above the impact of existing ferry activities in Ilfracombe.

Table III.12: Overall Impact of Ilfracombe Ferry Services – Do Nothing Option

	Ilfracombe	
	FTE Jobs	GVA (£)
Total Ferry Activities	6	70,000
Purchases from Local Suppliers	1.9	61,000
Indirect & Induced Effects	1.6	26,000
Visitor Expenditures	23	700,000
Total Economic Impact of Ilfracombe Ferry Activities	33	858,000

III.2.2 Cruise Ships

As described above, Ilfracombe has limited experience of cruise ship visits, although there are indications that this is changing. The last cruise ship visit to Ilfracombe occurred in 2006 but the Harbour Authority has since been working closely with Destination South West (a marketing alliance for ports in Devon and Cornwall) to raise the profile of Ilfracombe and attract cruise ships and three are now expected in 2011. The 'Do Nothing' option assumes Ilfracombe receives one cruise ship visit per annum, since this is considered to be the best estimate of what might be achieved in the absence of harbour development.

Consultations with Destination South West and the Harbour Authority have provided details of the three cruise ships expected to visit in 2011 and these have been used to calculate an average per vessel to be used for the 'Do Nothing' approach. The three cruise ships include two large ships from the Holland America line and a smaller boat of high value visitors that will be staying overnight. More specifically, the ships include:

- The Rotterdam (Holland America line), which is expected on the Spring Bank Holiday Monday, May 30, 2011. The 60,000 tonne liner is 780 feet in length, has a crew of 600 and a passenger capacity of 1,300. Passengers will be mainly from the Americas, particularly the US, but also from mainland Europe.
- The Prinsendam (Holland America line), which is expected on Friday July 22 2011. The 38,000 tonne liner is 670 feet in length, has a passenger capacity of 800 and a crew of 470. Passengers will be similar to those on the Rotterdam.
- The Hebridean Princess, which is expected to stay overnight in Ilfracombe in the summer of 2011. The smaller 2,000 tonne ship is 235 feet in length and can carry 49 passengers, who are typically 50+, wealthy and mostly British.

The two larger liners will drop anchor out in deep water, because they cannot be accommodated in the harbour, with passengers ferried ashore by tender. However, this is to some extent weather dependent, and strong winds in the Bristol Channel would create significant issues for anchoring and transferring passengers to the shore and could prevent the ships from stopping at Ilfracombe. The Hebridean Princess is a smaller vessel and can berth alongside the harbour at most states of the tide, using the ferry berth, and is expected to stay overnight. Although visitors will sleep on board the ship, they will be able to spend more time and money in the local Ilfracombe economy.

While it is not realistic to attribute any of the turnover and employment of the cruise ships to Ilfracombe Harbour, there will be significant impacts for the local economy through the expenditures of the passengers, staff and the cruise ships themselves.

Expenditure on goods and services

The Harbour Authority will benefit from additional harbour dues received from the cruise ships. In 2008/09 these charges were £3.20 per passenger landed for cruise ships anchored outside the harbour, and £0.54 per GRT for cruise ships berthing alongside the harbour. A recent economic impact study of the Port of Falmouth²⁶ assumes that 75% of cruise passengers typically go ashore during cruise ship visits. Assuming that the cruise ships will be at full capacity, which is expected to be the case, 975 visitors from the Rotterdam and 600 from the Prinsendam are expected to come ashore, resulting in harbour charges of more than £5,000. The Hebridean Princess will berth alongside and incur harbour charges of £1,140 (£0.54 x 2,112 tonnes). These harbour charges total £6,180, and average £2,060 per vessel based on the assumption that Ilfracombe attracts one cruise ship per annum under the ‘Do Nothing Scenario’.

These expenditures relate to Harbour Authority fees and are included as income for the Harbour Authority. The cruise ships are not expected to make any other purchases from local suppliers although there could potentially be opportunities for local businesses to provide supplies to the cruise ships. Therefore all impacts of the cruise ship expenditures are included under the Harbour Authority section.

Other Visitor Expenditures in the Local Economy

The other visitor expenditures associated with cruise ships fall into two separate groups: passenger expenditures and crew expenditures. There is typically one crew member for every two passengers so the expenditures of crew members can also be very significant. As discussed above, the 2008 Falmouth Port impact study assumes that 75% of cruise passengers go ashore during cruise ship visits including:

- 35% spending an average of £65 per person,
- 35% going on an excursion, increasing passenger spend to £75 per person,
- 5% using taxis or hire cars and spend £85 per person.

The study also assumes 15% of the crew go ashore during day visits and spend £40 per head. Applying these assumptions to the passenger and crew capacities expected in Ilfracombe, estimates expenditures of £72,825 on the Rotterdam, £45,420 on the Prinsendam and £2,759 on the Hebridean Princess, totalling £121,000. Assuming one cruise ship visit per annum, the average visitor expenditure of £40,000 per vessel is estimated to support 0.7 FTE jobs and GVA of £20,000 in the local economy.

Overall Impact of Ilfracombe’s Cruise Ship Activities – Do Nothing Option

The impact of expected cruise ship activities under the ‘Do Nothing’ option is presented below and is estimated to support 24 FTE jobs and £619,000 of GVA in Ilfracombe.

Table III.13: Estimated Impact of Cruise Ship Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Cruise Ship Activities	-	-
Purchases from Local Suppliers	-	-
Indirect & Induced Effects	-	-
Visitor Expenditures	0.7	20,000
Total Economic Impact of Cruise Ship Activities	0.7	20,000

²⁶ Arup, Economic Impact Study and Assessment of the Port of Falmouth, 2008

III.2.3 Harbour Authority

As described above, the Harbour Authority will benefit from additional income from harbour fees charged to the Severn Link ferry and the visiting cruise ship under the 'Do Nothing' option. This additional income is estimated to close the gap with expenditures but is still not expected to generate any positive GVA (calculated as turnover less expenditures on goods and services). However, the additional income is expected to support greater employment within the Harbour Authority (increasing from 2 to 2.4 FTE jobs – based on the current ratio of turnover per FTE).

There is also expected to be a minimal increase in local purchases of goods and services and in the FTE jobs and GVA that this supports in the local economy, which will also deliver slightly increased indirect and induced effects. Table III.14 presents the estimated impact of the Harbour Authority under the 'Do Nothing' option and suggests that it would support 3.9 FTE jobs and £34,000 of GVA in Ilfracombe.

Table III.14: Estimated Impact of the Harbour Authority – Do Nothing Option

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority Operations	2.4	0
Purchases from Local Suppliers	0.9	28,000
Indirect & Induced Effects	0.6	6,000
Total Economic Impact of the Harbour Authority	3.9	34,000

III.2.4 Total Harbour Impact

The total estimated impact of the harbour under the 'Do Nothing' option is shown in Table III.15. The data suggest that the specific harbour activities support 95 FTE jobs and GVA of £2.7 million per annum in Ilfracombe. This represents an increase of 18 FTE jobs and GVA of £525,000 over the existing situation.

The wider visitor impacts are assumed to be unchanged from the existing situation since the additional visitors attracted to Ilfracombe by the cruise ships and Severn Link ferry are likely to be additional, particularly as displacement from the other ferries has also been considered. Therefore the overall impact of the 'Do Nothing' option is estimated to support a total of 295 FTE jobs and GVA of £8.7 million per annum in the local Ilfracombe economy.

Table III.15: Total Impact of Harbour Activities in Ilfracombe – Do Nothing Option

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority	3.9	34,000
Commercial Fishing	28.5	1,013,000
Ferry Activities	33	858,000
Leisure Boating	4.1	127,000
Excursion/Charter Boats	24	619,000
Cruise Ship Activities	0.7	20,000
RNLI Activities	1.5	53,000
Wider Tourism	200	5,989,000
Total Harbour Impact	295	8,713,000

III.3 Option 1b East

Option 1b East involves the construction of a southern breakwater and commercial quay. It includes an area of reclamation to the south of the harbour (currently a rocky cove), which would provide land for development and employment purposes as detailed in the Baseline Report of Ilfracombe Regeneration Areas²⁷. The new quay will benefit from improved access and will accommodate the commercial fishing fleet, which is expected to increase the productivity of the existing fleet by allowing more time to be spent at sea. The movement of the fishing fleet will also create additional space for leisure moorings in the Inner Harbour.

The harbour developments are also expected to attract additional cruise ship visits compared to the 'Do Nothing' option, while the excursion and charter boats are likely to benefit from the increased visitors and activity at the harbour as a result of the developments. The Harbour Authority is therefore expected to benefit from increased income from additional leisure boaters and cruise ships as well as increased fuel sales to supply the more productive commercial fishing and excursion and charter boats.

The RNLI activities are assumed to be unchanged from the existing situation and the 'Do Nothing' option as the southern breakwater and new quay would not affect RNLI operations. The ferry services are also expected to be unchanged, although there may be benefit if the new southern breakwater can help reduce expected capacity issues. There are not expected to be any additional services associated with the proposed offshore wind farm, since the harbour is still unable to offer the full tidal access that would be required for the emergency response vessels to be located at Ilfracombe.

III.3.1 Commercial Fishing

It is expected that all operations, facilities and berths for the commercial fishing fleet move to the new quay on the southern side of the harbour, thereby providing: improved sea access and increased productivity of the existing fleet; and reduced harbourside conflict by having a dedicated area of the harbour for commercial fishing operations. It is expected that the improved sea access would increase the number of days that the fleet spends at sea by 20% from 200 to 240 and thereby increase the turnover and employment of the commercial fishing activities by 20% to £1.9 million per annum and 24 FTE jobs respectively.

There would also be potential to generate additional benefits by providing improved harbourside facilities for the commercial fishing fleet (such as a large cold store, ice making facility and improved fuelling facilities). This would reduce the need for the Ilfracombe fleet to purchase ice and land fish elsewhere, and could potentially attract fishing vessels from elsewhere to land fish, purchase ice and fuel, seek refuge, etc. For example, trawlers from South Wales fish in waters off Cornwall and would therefore make significant fuel savings and increase their own productivity by landing fish in Ilfracombe and heading back out to fishing waters. However, views on the likelihood of this have been mixed and as this would be likely to require additional public sector investment, it has not been included as part of this analysis.

Expenditure on goods and services

Purchases of fuel, fishing gear, maintenance, ice and consumables are all expected to increase in line with turnover, since these will increase with the additional time spent at

²⁷ Alder King (for North Devon Council, Devon County Council & SWRDA), Ilfracombe Regeneration Areas: Baseline Report, October 2009

sea. Expenditures on mooring fees and harbourside rents would not be expected to increase with the additional time at sea, but have also been assumed to increase by 20% due to the improved harbourside and mooring facilities under this option. The total expenditures of commercial fishing activities under Option 1b East are therefore estimated to exceed £1 million, £630,000 of which would be spent in Ilfracombe (based on the same spatial distribution as the existing activities).

Direct GVA Estimates

Subtracting the expenditures on goods and services (£1.05 million) from total turnover (£1.92 million) provides an estimate of GVA for the commercial fishing sector in Ilfracombe of £869,000 per annum.

Expenditures from the Harbour Authority are estimated to increase to £272,000 under Option 1b East. Subtracting this from the local purchases to avoid double counting, suggests that these expenditures will directly support a further 4.5 FTE jobs and GVA of £143,000 in the local Ilfracombe economy.

Indirect and Induced Effects

Using the standard multipliers, indirect and induced effects are expected to increase to 5.7 (28.5 x 0.2) FTE jobs and £203,000 (£1.01 million x 0.2) GVA in Ilfracombe.

Overall Impact of Commercial Fishing Activities – Option 1b East

Table III.16 presents the overall impact of the commercial fishing activities in Ilfracombe under Option 1b East and estimates that it would support 34 FTE jobs and £1.2 million of GVA in Ilfracombe.

Table III.16: Impact of Commercial Fishing Activities – Option 1b East

	Ilfracombe	
	FTE Jobs	GVA (£)
Commercial Fishing Activities	24	869,000
Purchases from Local Suppliers	4.5	143,000
Indirect & Induced Effects	5.7	203,000
Total Economic Impact of Commercial Fishing	34	1,215,000

III.3.2 Leisure Boaters

Leisure boating activity in Ilfracombe Harbour is expected to increase slightly under Option 1b East as a result of relocating the fishing fleet. This is expected to create additional space in the Inner Harbour for between 10 and 12 leisure boats, while visiting boats are expected to increase due to the greater protection offered to boats in the harbour and the improved retail and leisure offer around the harbour.

It is assumed that an additional 11 moorings in the Inner Harbour are taken up by boat owners currently waiting for a mooring in Ilfracombe, thereby increasing the number of leisure boats resident in Ilfracombe to 100. The 20 visitor moorings are assumed to achieve 75% occupancy between June and August and 25% occupancy in April, May and September, resulting in 1,835 visiting boats per annum. Given the current high proportion of overnight visitors and the limited number of berths in close proximity to Ilfracombe, it is assumed that 90% of these visitors stay overnight.

Expenditures on boating goods and services

The boating related expenditures of Ilfracombe boat-owners are expected to increase slightly from the current estimate of £1,905 per annum to £1,950, due to the Harbour Authority being able to charge a slight premium for moorings as a result of the increased protection offered to boats and the improved harbourside facilities. For

similar reasons, the harbour charges for visitor boats are expected to increase by 10%. The additional boats and higher mooring fees are estimated to increase boating related expenditures to £220,000 per annum. While visiting boats continue to spend 100% of their boating-related expenditures in Ilfracombe, it is assumed that a greater proportion of the boating-related expenditures associated with resident boats (80%) is spent in Ilfracombe due to the higher harbour charges and increased marine services.

Direct GVA Estimates

After subtracting the expenditures made to the Harbour Authority, leisure boaters are estimated to spend £117,500 in Ilfracombe under Option 1b East. These expenditures are estimated to support 1.5 FTE jobs and GVA of £47,000 in the local economy.

Indirect and Induced Effects

The indirect and induced effects of these expenditures are estimated to support 0.3 (1.5 x 0.2) FTE jobs and £9,000 (£47,000 x 0.2) GVA in Ilfracombe

Tourism Expenditures

The overnight expenditures of leisure boaters are expected to increase under Option 1b East. Under the ‘Do Nothing’ option, staying visitors were estimated to spend £29.60 per visitor night based on the average expenditure information relating to visitors staying on boat moorings in North Devon. Under Option 1b East, this is assumed to increase to £31, which is in line with the average across Devon as a whole for overnight expenditures of visitors staying on boat moorings (inflated to 2009 prices). This increase is due to the harbour developments and the increased and improved retail and leisure facilities around the harbour providing greater spending opportunities.

The total tourism expenditures of all leisure boaters are estimated to increase to £252,000 under Option 1b East, which in turn is estimated to support 4.2 FTE jobs and GVA of £126,000 in the local Ilfracombe economy.

Overall Impact of Leisure Boating Activities in Ilfracombe – Option 1b East

Table III.17 presents the overall impact of leisure boating activities in Ilfracombe under Option 1b East (excluding the impacts of mooring fees and fuel purchases which are included under the Harbour Authority section below). It estimates that expenditures associated with leisure boating support 6 FTE jobs and £182,000 of GVA in Ilfracombe.

Table III.17: Impact of Leisure Boating Activities in Ilfracombe – Option 1b East

	Ilfracombe	
	FTE Jobs	GVA (£)
Leisure Boating Activities	-	-
Purchases from Local Suppliers	1.5	47,000
Indirect & Induced Effects	0.3	9,000
Other Visitor Expenditures	4.2	126,000
Total Economic Impact of Leisure Boating	6	183,000

III.3.3 Excursions, Fishing and Diving Charters

Under Option 1b East, the excursions and charter boats are assumed to benefit from:

- increased visitors to the harbour as a result of the harbourside developments, and;
- the increased flexibility of potentially being able to use the new quay to increase sea access at low tide (i.e. when the commercial fishing fleet are out).

This option assumes the same number of vessels (five) and days at sea (190) but estimates that productivity increases so that these vessels achieve 30% of their maximum potential income (up from 25% in the 'Do Nothing' option). This increases the turnover of the sector by 20% to £422,000 per annum, with a corresponding 20% increase in expenditures of fuel, consumables and boat repair and maintenance. Mooring fees and harbour rents are assumed to remain unchanged since these vessels are not expected to relocate within the harbour.

These changes generate increased GVA for the sector of £334,000 and increased purchases of goods and services, indirect and induced effects and visitor expenditures, although the relevant assumptions remain unchanged.

Overall Impact of Excursion and Charter Boats in Ilfracombe – Option 1b East

Table III.18 presents the overall impact of excursion and charter boat activities in Ilfracombe under Option 1b East (excluding the expenditures on goods and services provided by the Harbour Authority). It suggests that these activities support 26 FTE jobs and £745,000 of GVA in the local Ilfracombe economy.

Table III.18: Impact of Excursion and Charter Boats – Option 1b East

	Ilfracombe	
	FTE Jobs	GVA (£)
Excursion & Charter Boat Activities	12	334,000
Purchases from Local Suppliers	0.4	11,500
Indirect & Induced Effects	2.4	69,000
Other Visitor Expenditures	11	330,000
Total Economic Impact of Excursion & Charter Boat Activities	26	745,000

III.3.4 Cruise Ships

Cruise ship activity is assumed to increase slightly under Option 1b East, with more cruise ships attracted by the improved harbourside facilities. It is assumed that Ilfracombe could attract three cruise ships per annum under this option (based on the three vessels that are expected in 2011). These details are described in detail above, under the 'Do Nothing' option, which assumed one cruise ship visit per annum by dividing each impact by three.

However, as described above, cruise ship visits are subject to the weather conditions in the Bristol Channel. It is therefore assumed that these visits and associated expenditures are 65% likely under this option (with a 35% probability that these impacts will not occur). This reduces the overall impact of the expenditures associated with the three cruise ships to support 1.3 FTE jobs and almost £40,000 of GVA in the Ilfracombe economy, approximately double the impacts of the 'Do Nothing' option. This is presented in Table III.19, while the impact of the additional harbour dues is included under the Harbour Authority section below.

Table III.19: Estimated Impact of Cruise Ship Activities in Ilfracombe

	Ilfracombe	
	FTE Jobs	GVA (£)
Cruise Ship Activities	-	-
Purchases from Local Suppliers	-	-
Indirect & Induced Effects	-	-
Visitor Expenditures	1.3	39,000
Total Economic Impact of Cruise Ship Activities	1.3	39,000

III.3.5 Harbour Authority

Under Option 1b East, the Harbour Authority is expected to benefit from increased mooring fees and fuel sales from leisure boaters, commercial fishing and excursion/charter boat activities and cruise ships. This additional income is still not expected to generate a positive GVA (calculated as turnover less expenditures on goods and services), although there is now very little difference between expected income and expenditures. However, the additional income is expected to support even greater employment within the Harbour Authority (increasing to 2.8 FTE jobs).

The increased income and expenditures will also support additional jobs and incomes and deliver increased indirect and induced effects, as presented in Table III.20. This shows that the estimated impact of the Harbour Authority under Option 1b East is expected to support 4.5 FTE jobs and £37,000 of GVA in the Ilfracombe economy.

Table III.20: Estimated Impact of the Harbour Authority – Option 1b East

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority Operations	2.8	0
Purchases from Local Suppliers	1	31,000
Indirect & Induced Effects	0.75	6,000
Total Economic Impact of the Harbour Authority	4.5	37,000

III.3.6 Development Land

In the absence of a Masterplan for the harbour, the expected development land for Option 1b East is based on the recent (2009) Alder King report²⁸. This identifies eight different ‘development blocks’ covering a range of proposed uses including residential, office, leisure, retail, hotel, and live-work units. However, consultations with harbour representatives suggest that block ‘H1’ would not be possible under this option as the car park site would still be required for parking and shore storage for boats in winter.

Much of the ground floor area of each development block is proposed to deliver the retail or food and drink outlets that will help to raise the quality of the tourism offer in Ilfracombe and attract additional visitors to the harbour, with upper floors delivering residential space. In total, Option 1b East is estimated to deliver 23,160 sq m of floorspace for development comprising: 16,440 sq m of residential floorspace; 580 sq m of live/work units; 3,650 sq m of hotel floorspace (assumed to be a 100 bed hotel); 1,400 sq m of retail floorspace; 990 sq m of cafe/restaurant floorspace; and 100 sq m of museum floorspace. The impact of these developments of employment floorspace can be estimated using employment density assumptions²⁹ of:

- Retail – 1 job per 20 sq m of net sales area (75% of the total area),
- Office – 1 job per 19 sq m,
- Cafe/Restaurant – 1 job per 13 sq m of net sales area (60% of the total area),
- Museum (Cultural Activities) – 1 job per 36 sq m,
- Live/Work Units – 1 job per 28.5 sq m (50% higher than standard office figure),
- Hotel – 1 job per 2 rooms.

²⁸ Alder King, Ilfracombe Regeneration Areas: Baseline Report, October 2009

²⁹ Arup, Employment Densities: A Full Guide, 2001

The on-site employment impact is estimated to total 188 jobs comprising 69 retail jobs, 50 hotel jobs, 46 cafe/restaurant jobs, 3 museum jobs and 20 jobs in live/work units.

It is also possible to estimate GVA from this employment based on the following ratios calculated from an analysis of the latest UK national accounts (the Blue Book 2009):

- £80,000 turnover per FTE and GVA of 40% of turnover in the whole economy,
- £72,000 turnover per FTE and GVA of 50% of turnover in distribution, hotels and catering and transport sectors,
- £61,000 turnover per FTE and GVA of 55% of turnover in other services sectors,
- Retail turnover has been estimated using a standard assumption of £350 per sq ft of net retail floorspace (£3,767 per sq m).

Applying these ratios suggests this additional employment floorspace could generate GVA of £5.8 million comprising: £2 million of GVA from retail floorspace; £1.8 million from the proposed hotel development; £1.2 million from cafes and restaurants; £656,000 from live/work units and £97,000 of GVA from the proposed RNLI museum.

However, the demand for this scale of employment floorspace and for the goods and services of the new businesses is questionable under this option, in the absence of any significant increase in harbour activities and user numbers. The impacts of Option 1b East are the most dependent upon the harbourside developments to deliver the increased visitors and expenditures to support the impacts required to justify the harbour investment. This increases the need for occupant businesses to attract their own expenditures from existing harbour users, local residents and increased numbers of 'land-based' tourists. It is therefore assumed that only 67% of these impacts are likely to occur under this option, with a 33% probability that these benefits do not occur.

It is also necessary to allow for an element of double counting as many of the expenditures of the other harbour activities and their users are likely to take place in these new developments. Under Option 1b East, these expenditures have totalled £3.15 million and have already been estimated to support 49 FTE jobs and £1.5m of GVA in Ilfracombe. It is assumed that 50% of these expenditures take place amongst the new harbour businesses and need to be subtracted to avoid double-counting.

Applying these probabilities and taking account of double-counting, reduces the direct additional impacts of the new harbourside floorspace to 101 FTE jobs and £3.1 million of GVA.

Expenditures on goods and services made by the businesses occupying the new floorspace have also been estimated using the above ratios (since turnover less GVA will provide an estimate of these expenditures). These expenditures are considered equally likely to involve suppliers in Ilfracombe, North Devon, the South West, and elsewhere. Therefore the new employment floorspace is estimated to support a total of 136 additional FTE jobs and additional GVA of £4.2 million in Ilfracombe, including the impacts of local purchases and indirect and induced effects.

III.3.7 Wider Tourism Impacts

The above sections have accounted for the increased expenditures associated with visitors engaging with harbour facilities and activities, in terms of water-based activities such as ferries, or land-based activities such as harbourside restaurants. However, it is likely that the development of the harbour will have an additional impact on tourist numbers and expenditures that is greater than the sum of its parts. It is therefore estimated that the wider tourism expenditures and impacts associated with Option 1b

East, will increase by 10% to £14.4 million of visitor expenditure supporting approximately 220 FTE jobs and £6.6 million of GVA.

III.3.8 **Total Harbour Impact**

The total estimated impact of the harbour under Option 1b East is shown in Table III.21. The data suggest that the specific harbour activities (excluding development land and wider visitor impacts) support 106 FTE jobs and GVA of £3.1 million per annum in Ilfracombe, which has increased over the ‘Do Nothing’ option by an additional 11 FTE jobs and GVA of £400,000 million in the local Ilfracombe economy.

The overall impact of Option 1b East (including development land and wider tourism impacts) is estimated to support a total of 461 FTE jobs and GVA of £13.9 million in the local Ilfracombe economy.

Table III.21: Total Impact of Harbour Activities in Ilfracombe – Option 1b East

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority	4.5	37,000
Commercial Fishing	34	1,215,000
Ferry Activities	33	858,000
Leisure Boating	6	183,000
Excursion/Charter Boats	26	745,000
Cruise Ship Activities	1.3	53,000
RNLI Activities	1.5	47,000
Development Land	136	4,178,000
Wider Tourism	220	6,588,000
Total Harbour Impact	461	13,896,000

III.4 Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

The Northern Breakwater Option (as defined by Scott Wilson³⁰) involves a breakwater structure of approximately 250 metres in length. The final 30 metres of the eastern tip of the breakwater points in a south easterly direction to provide greater protection to the harbour. This would enable vessels to use deep water berths on the inner face of the breakwater (approximately 165 metres in length). The option also includes:

- the potential for reclaimed land (2,100 sq m) at the tip of the existing Northern Quay, adjacent to the ferry landing,
- provision of ‘afloat’ pontoon moorings for the RNLI and commercial boats (on the inner side of the breakwater structure),
- provision of a (150 sq m) land-based RNLI station,
- the provision of trot moorings in the outer harbour for leisure boats (approximately 40).

This reflects the first of two scenarios for the Northern Breakwater Option. It assumes only the construction of the Northern Breakwater, with no additional infrastructure development on the south side of the harbour. This scenario therefore has a much greater impact on commercial harbour operations and is described as the ‘Commercial Maritime Gateway’ scenario. The key assumptions include:

- Accommodating two emergency call-out vessels for the Atlantic Array wind farm on the inner face of the Northern Breakwater.
- The RNLI moving to an afloat berth on the Northern Breakwater with a new land-based RNLI station at the base of the Northern Breakwater structure.
- Leisure boating activity increases due to the provision of an additional 40 trot moorings inside the breakwater structure, increasing the number of resident and visiting leisure boats.
- The excursion and charter boats also move to the inner face of the Northern Breakwater and benefit from full tide access to the sea.
- Additional cruise ship visits, attracted by the ability to berth overnight alongside the Northern Breakwater.
- Potential benefits for the commercial fishing fleet in terms of being able to use the Northern Breakwater to increase sea access.
- Increasing ferry services due to the increased berthing capacity, the ability to berth overnight and increased demand from additional visitors to the harbour.
- In the absence of reclaimed land to the south of the harbour, this scenario excludes some of the developments described in the Baseline Regeneration report³¹, although this is offset to some degree by the provision of additional reclaimed land at the base of the breakwater structure.

³⁰ Scott Wilson (for North Devon Council, Devon County Council and SWRDA), Ilfracombe Regeneration: Harbour Northern Quay / Breakwater, October 2009

³¹ Alder King, Ilfracombe Regeneration Areas: Baseline Report, October 2009

III.4.1 Commercial Fishing

The commercial fishing fleet is expected to be able to increase time spent at sea by 10% compared to the 'Do Nothing' option based on the assumption that the fishing fleet will occasionally be able to use the Northern Breakwater to provide improved sea access. This is expected to generate a corresponding 10% increase in turnover, employment and expenditures of the commercial fishing operations in Ilfracombe. However, since this is dependent upon other there being sufficient space to use the Northern Breakwater, it is assumed to have a probability of 75%, with a 25% likelihood that there will be no increase in commercial fishing activity.

It is therefore expected that the commercial fishing activities increase under the 'Commercial Maritime Gateway' scenario to generate total turnover of £1.76 million, employment of 21.5 FTE jobs, and expenditures on goods and services of more than £940,000 per annum. Harbour Authority income would also increase, to almost £250,000 per annum from increased harbour fees and fuel sales.

The spatial distribution of expenditures is assumed to be unchanged and, after subtracting the expenditures from the Harbour Authority, the additional expenditures in Ilfracombe are estimated to be £321,000, which is estimated to support 4 FTE jobs and GVA of £128,000 in the local Ilfracombe economy. The indirect and induced effects of these expenditures are estimated to support a further 5.1 (25.5 x 0.2) FTE jobs and £181,000 (£907,000 x 0.2) of GVA in Ilfracombe.

Table III.22 presents the overall impact of the commercial fishing activities in Ilfracombe under this scenario and suggests that it supports 31 FTE jobs and £1.1 million of GVA in the local Ilfracombe economy.

Table III.22: Impact of Commercial Fishing Activities – Northern Breakwater Option – 'Commercial Maritime Gateway' Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Commercial Fishing Activities	21.5	779,000
Purchases from Local Suppliers	4	128,000
Indirect & Induced Effects	5.1	181,000
Total Economic Impact of Commercial Fishing	31	1,089,000

III.4.2 Ferries

Passenger numbers on the Oldenburg, Waverley and Balmoral are expected to return to existing levels as the increased competition from the Severn Link ferry service is offset by increasing harbour visitors and demand for ferry services. The increased berthing capacity and ability to stay overnight alongside the Northern Breakwater provides additional benefits for the ferry operators.

The Severn Link ferry is also expected to increase the number of daily rotations in the summer season from three to four under this scenario (with no change between October and March), thereby providing a total of 900 rotations per annum and 80,000 passengers (using the previous assumption that passenger numbers total 33% of capacity). While the Northern Breakwater increases the likelihood of the Severn Link ferry service being successful and delivering these passenger numbers, there is still some uncertainty about the proposed service. It is therefore estimated that the probability of achieving these passenger numbers increases to 90% under the Northern Breakwater options (while the probability that the service does not commence or is not sustainable falls to 10%).

Expenditures on local goods and services are expected to increase accordingly to around £275,000 per annum across all ferry activities (or almost £200,000 after excluding purchases from the Harbour Authority). The increasing ferry activity is also estimated to increase the number of ferry passengers to around 94,000 per annum. Applying the same passenger expenditure assumptions suggests that overall visitor expenditures associated with the Severn Link ferry would increase to £2 million per annum, supporting 33 FTE jobs and GVA of almost £1 million in the local Ilfracombe economy.

Taking all of this into account, the total impact of ferry services under this scenario is estimated to support 43 FTE jobs and £1.2 million of GVA in Ilfracombe.

Table III.23: Impact of Ferry Services in Ilfracombe – Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Ferry Activities	6	80,000
Purchases from Local Suppliers	2.5	80,000
Indirect & Induced Effects	1.7	32,000
Other Visitor Expenditures	33	998,000
Total Economic Impact of Ferry Activities	43	1,190,000

III.4.3 *Atlantic Array*

The Northern Breakwater would make Ilfracombe well placed to accommodate the two ‘emergency response vessels’ that will service the Atlantic Array offshore wind farm. Ilfracombe is the closest harbour to the offshore site and would therefore be the most appropriate location for the emergency response vessels if it could provide full tide access to the sea. Under the Northern Breakwater option, it is assumed that the two vessels would berth on the inner face of the breakwater structure.

The proposed Atlantic Array is to be operated by international company RWE npower and it is therefore not appropriate to attribute any of the turnover or profits of the Atlantic Array operation to Ilfracombe Harbour, even if it was to provide berths for the emergency response service. However, the emergency response service is expected to comprise between 30 and 40 high value engineering jobs (assumed to be 35 for this analysis), all of whom are expected to live in close proximity to the harbour in order to provide the fast response, ‘emergency’ service. These jobs would provide high value employment for Ilfracombe with average wages expected to be around £40,000³².

Expenditure on goods and services

Interviewees have suggested that these vessels are likely to generate harbour dues of £30,000 per annum, while expenditures on fuel, boat repairs and maintenance and other goods and services are expected to result in total expenditures of £440,000. Half of this expenditure is expected to take place in Ilfracombe (concentrated on harbour dues and fuel) with 20% spent elsewhere in North Devon, 15% spent elsewhere in the South West and 15% spent outside the region. After subtracting the expenditures that are accounted for as income for the Harbour Authority, it is estimated that the remaining expenditures total approximately £80,000 in Ilfracombe.

³² Based on an internet search of offshore wind jobs and ABI data for SIC 28.11 – the manufacture of turbines sector

Potential Employment and GVA Impacts

GVA can be estimated using the income method of summing wages, rents and profits. Since the emergency response service is expected to be a remote operation of the much larger, international operator it is not appropriate to attribute profits to Ilfracombe Harbour. The local GVA of the emergency response service can therefore be estimated as the total wages earned by the 35 engineers of £1.4 million per annum. The additional expenditures in the local economy will also directly support a further 1 FTE job and GVA of £32,000 in the local Ilfracombe economy.

Using the standard multipliers, the indirect and induced effects will support a further 7.2 (36 x 0.2) FTE jobs and £286,000 (£1.43 million x 0.2) GVA in Ilfracombe.

Overall Impact of Atlantic Array Transport Activities – Northern Breakwater Option

However, Ilfracombe faces competition from other sites (particularly Yelland and South Wales) and the wind farm operator is expected to make a decision on the location of the associated services before any decision is likely to be reached regarding the Northern Breakwater. Ilfracombe is therefore considered to have a 50% probability of securing the Atlantic Array emergency response vessels and benefiting from these potential impacts, with a corresponding 50% probability that the service will be located elsewhere and these impacts will be lost to Ilfracombe. The figures in Table III.24 have therefore been reduced by 50% to take account of this uncertainty. It shows that the expected impact of the emergency response service for the offshore wind farm supports 21.5 FTE jobs and £859,000 of GVA in the local economy.

Table III.24: Expected Impact of the Emergency Response Service for the Offshore Wind Farm – Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Atlantic Array Activities	17.5	700,000
Purchases from Local Suppliers	0.5	16,000
Indirect & Induced Effects	3.6	143,000
Total Economic Impact of Atlantic Array	21.5	859,000

III.4.4 Leisure Boaters

This scenario assumes the provision of 40 additional trot moorings in the Outer Harbour, protected by the breakwater structure, thereby increasing the number of leisure moorings to 149. 124 of these moorings are assumed to be used by leisure boats kept in the harbour, with 25 reserved for visiting boats. It is assumed that the additional permanent leisure moorings (35) would be filled by the 40 to 45 boat owners currently waiting for a mooring in Ilfracombe, particularly with the greater protection offered by the Northern Breakwater and the improved harbourside leisure offer. The same factors are assumed to attract additional visiting leisure boats and the occupancy assumptions under this scenario remain unchanged from Option 1b East³³. This would provide approximately 2,300 visiting boat days/nights per annum, 90% of which are expected to be overnight visits.

Expenditures on boating goods and services

Boating related expenditures are expected to be unchanged from Option 1b East at £1,950 per annum for resident boats and £13.65 for visiting boats, although the

³³ 75% occupancy between June and August and 25% in April, May and September.

additional boats are expected to increase these expenditures to £273,000 per annum (£79,000 of which is included as Harbour Authority income for mooring fees and fuel).

Subtracting the expenditures made to the Harbour Authority, and taking account of the spatial distribution of expenditures (unchanged from Option 1b East), suggests that leisure boaters are estimated to spend a total of £146,000 per annum on boating-related goods and services in Ilfracombe, which is estimated to support 1.8 FTE jobs and GVA of £58,000 in the local Ilfracombe economy. Indirect and induced effects are estimated to support a further 0.4 (1.8 x 0.2) FTE jobs and £12,000 (£58,000 x 0.2) GVA in Ilfracombe.

Tourism Expenditures

The expenditure assumptions of leisure boaters are unchanged from Option 1b East, although the increased number of berth-holders and visitors are estimated to increase tourism-related expenditures to £314,000 per annum under this scenario, which is estimated to support 5.2 FTE jobs and GVA of £157,000 in the Ilfracombe economy.

Overall Impact of Leisure Boating Activities in Ilfracombe – Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

Table III.25 presents the overall impact of leisure boating activities in Ilfracombe under the Northern Breakwater option – ‘Commercial Maritime Gateway’ scenario. It estimates that expenditures associated with leisure boating support 7.4 FTE jobs and £227,000 of GVA in Ilfracombe.

Table III.25: Impact of Leisure Boating Activities in Ilfracombe – Option 1b East

	Ilfracombe	
	FTE Jobs	GVA (£)
Leisure Boating Activities	-	-
Purchases from Local Suppliers	1.8	58,000
Indirect & Induced Effects	0.4	12,000
Other Visitor Expenditures	5.2	157,000
Total Economic Impact of Leisure Boating	7.4	227,000

III.4.5 Excursions, Fishing and Diving Charters

The excursion and charter boats are assumed to relocate to berths on the inner face of the breakwater. The survey undertaken as part of the previous harbour impact study identified that the number of days each vessel could spend at sea would increase by 27 per annum, to total 217 per annum. This represents 90% of an equivalent full time job of 240 days per annum, suggesting that the sector would support 13.5 FTE jobs (15 x 90%) under this scenario. This scenario also assumes the productivity of these vessels increases to 35% of the maximum potential income as a result of the full tide access, and the additional demand from increased numbers of harbour visitors.

These changes are expected to increase the turnover of the sector to £562,000 per annum, with a corresponding increase in expenditures on goods and services, providing an increased estimate of GVA for the sector of £454,000. The assumptions used to calculate the additional purchases of goods and services, indirect and induced effects and visitor expenditures, remain unchanged and the relevant impacts are presented in Table III.26 below. In summary, the excursion and charter boat activities under this scenario are estimated to support a total of 30 FTE jobs and £949,000 of GVA in the local Ilfracombe economy.

Table III.26: Impact of Excursion and Charter Boats – Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Excursion & Charter Boat Activities	13.6	454,000
Purchases from Local Suppliers	0.5	16,000
Indirect & Induced Effects	2.8	94,000
Other Visitor Expenditures	12.8	385,000
Total Economic Impact of Excursion & Charter Boat Activities	30	949,000

III.4.6 Cruise Ships

Cruise ship visits are expected to increase under the ‘Commercial Maritime Gateway Scenario’ of the Northern Breakwater Option, attracted by the ability to berth alongside the breakwater and the harbourside developments. These cruise ships are estimated to average 140 metres in length, 15,000 tonnes, with 600 passengers and 300 crew.

However, there is uncertainty around the numbers of cruise ships that would be attracted. Consultations with industry representatives suggest that Ilfracombe could potentially attract around 25 cruise ships per annum with a Northern Breakwater, based on the experiences of Falmouth, which receives 38 cruise ships per year, and the Isles of Scilly, which receive 40 per year. In the absence of the full harbour development, the maximum number of cruise ships that could be attracted under this option is expected to be 15, with a 50% probability that this will be achieved (and a corresponding 50% probability that these cruise ships will not visit Ilfracombe).

The combined tonnage of the expected number of visiting cruise ships under this scenario would generate £61,000 of additional income for the Harbour Authority (based on current charges of £0.54 per GRT for cruise ships berthing alongside the harbour).

Taking account of the 50% probability, these cruise ships are estimated to transport 4,500 passengers and 2,250 crew members to Ilfracombe, 3,375 (75%) and 338 (15%) of whom are assumed to come ashore respectively. Applying the cruise passenger and crew expenditures, as described previously, estimates total expenditures in Ilfracombe of more than £250,000 per annum, which is expected to support 4.2 FTE jobs and GVA of £127,000 in the local Ilfracombe economy. Since the impact of the increased harbour charges is included below this is also estimated to represent the overall impact of Ilfracombe’s cruise ship activities.

III.4.7 RNLI

Consultation with the RNLI suggests that the opportunity of having an afloat berth with full tidal access is attractive in principle and “worthy of further investigation”. The benefits of an afloat berth would be reduced emergency response times and lower operational costs since the tractors and launch ramp would not be required. However, the current tractor launch operations are considered totally acceptable and the above benefits of an afloat berth would have to be considered by the RNLI alongside any additional investment requirements.

This scenario does assume that RNLI activities move to the Northern Breakwater, although the implications in terms of economic impact are relatively small, with the benefits of an additional full-time employee offset, to some degree, by a slight reduction in the local purchases of goods and services without the need to maintain and operate the tractors and launch ramp.

III.4.8 Harbour Authority

The ‘Commercial Maritime Gateway’ scenario is expected to generate additional income for the Harbour Authority through increased harbour fees and fuel sales from: leisure boaters using the additional trot moorings; the excursion and charter boats that have relocated to new berths on the Northern Breakwater; and the Atlantic Array emergency response vessels. The Harbour Authority is also expected to benefit from increased fuel from the commercial fishing fleet and increased harbour dues from the additional cruise ship visits and Severn Link ferry rotations, made possible by the Northern Breakwater. While some of this increased activity will increase the expenditures of the harbour Authority (most notably for fuel purchases to meet demand), it is expected that the Harbour Authority income would exceed expenditures under this scenario, generating GVA of £205,000 and supporting 4 FTE jobs.

The increased expenditures will also support additional jobs and incomes and deliver increased indirect and induced effects, as presented in Table III.27. This suggests that the estimated impact of the Harbour Authority under the ‘Commercial Maritime Gateway’ Scenario will support 5.9 FTE jobs and £283,000 of GVA in Ilfracombe.

Table III.27: Estimated Impact of the Harbour Authority – Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority Operations	4	205,000
Purchases from Local Suppliers	0.9	30,000
Indirect & Induced Effects	1	47,000
Total Economic Impact of the Harbour Authority	5.9	283,000

III.4.9 Development Land

The development land under this scenario comprises a smaller selection of the proposed development blocks than Option 1b East as this scenario does not include the reclaimed land to the south of the harbour. However, this scenario includes the development of the mixed use blocks H2, H3 and H4 as well as the proposed hotel (H7)³⁴, and a mixed use development (comprising office, retail and food and drink uses) on the reclaimed land at the base of the proposed Northern Breakwater. This is estimated to deliver a total of 7,390 sq m of floorspace, comprising: 1,170 sq m of residential floorspace; 580 sq m of live/work units; 3,650 sq m of hotel floorspace (assumed to be a 100 bed hotel); 790 sq m of cafe/restaurant floorspace; 630 sq m of retail floorspace; 470 sq m of office space; and 100 sq m of museum floorspace.

The total on-site employment impact is estimated to be 158 jobs comprising 50 hotel jobs, 36 cafe/restaurant jobs, 24 retail jobs, 25 office jobs, 3 museum jobs and 20 jobs in live/work units. It is estimated that this additional employment floorspace could potentially generate GVA of £5.2 million comprising: £1.8 million of GVA from the proposed hotel development; £1 million of GVA from cafes and restaurants; £0.9 million of GVA from retail floorspace; £0.8 million of GVA from office space; £656,000 of GVA from live/work units and £97,000 of GVA from the proposed RNLI museum.

The likelihood of success of the harbourside developments is expected to be higher under this option, given the smaller development areas and floorspaces and the significant increase in visitors attracted to the harbour by the other harbour activities. It

³⁴ Alder King, Ilfracombe Regeneration Areas: Baseline Report, October 2009

is therefore assumed that there is a 75% probability that all of this development will go ahead and achieve these impacts, against a 25% probability that these impacts will not be achieved. Accounting for this probability as well as removing the double counting of expenditures of harbour users, and adding the impacts arising from purchases from local suppliers and indirect and induced effects, estimates that the new employment floorspace included under this scenario will support an additional 116 FTE jobs and GVA of £3.9 million in the local Ilfracombe economy.

III.4.10 Wider Tourism Impacts

As with Option 1b East, the development of the harbour under the ‘Commercial Maritime Gateway’ scenario is also expected to increase the wider visitor expenditures and impacts by 10% over the ‘Do Nothing’ option. This is similar to Option 1b East, since the harbourside developments are on a slightly smaller scale and are therefore expected to have a slightly smaller impact over and above those included above, while the Northern Breakwater is expected to attract additional visitors to Ilfracombe, resulting in a similar impact to Option 1b East. It is therefore estimated that the wider tourism expenditures and impacts associated with the ‘Commercial Maritime Gateway’ scenario will also increase by 10% to £14.4 million of visitor expenditure supporting approximately 220 FTE jobs and £6.6 million of GVA.

III.4.11 Total Harbour Impact

The total estimated impact of the harbour under the Northern Breakwater Option – ‘Commercial Maritime Gateway’ Scenario is shown in Table III.28. This shows that the specific harbour activities (excluding development land and wider visitor impacts) are estimated to support 146 FTE jobs and GVA of £4.8 million per annum in Ilfracombe, which represents an increase of 50 FTE jobs and GVA of £2.1 million over the ‘Do Nothing’ option.

The overall impact of the ‘Commercial Maritime Gateway’ scenario (including development land and wider tourism impacts) is estimated to support a total of 481 FTE jobs and GVA of £15.3 million in the local Ilfracombe economy.

Table III.28: Total Impact of Harbour Activities in Ilfracombe – Northern Breakwater Option: ‘Commercial Maritime Gateway’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority	5.9	283,000
Commercial Fishing	31	1,089,000
Ferry Activities	43	1,190,000
Atlantic Array	22	859,000
Leisure Boating	7.4	227,000
Excursion/Charter Boats	30	949,000
Cruise Ship Activities	4.2	127,000
RNLI Activities	2.7	92,000
Development Land	116	3,925,000
Wider Tourism	220	6,588,000
Total Harbour Impact	481	15,329,000

III.5 Northern Breakwater Option: 'Full Harbour Development' Scenario

This scenario involves the construction of the Northern Breakwater structure, as described above, but also assumes that the development of the Northern Breakwater acts as a catalyst to attract additional private sector investment to develop the southern side of the harbour. This is assumed to provide the reclaimed land described under Option 1b East as well as a southern breakwater and sill to 'close' the inner and outer harbour areas. This would then be able to accommodate the commercial fishing fleet on the outside of the basin, so not to impede their access to the sea, and enable the harbour to focus on providing marina berths to leisure boaters.

This scenario best meets the vision for the harbour in delivering a high quality tourist offer in and around the harbour while becoming a Maritime Gateway to the South West for all types of commercial and leisure vessels. The main assumptions include:

- The provision of a 280 berth marina in the inner and outer harbour.
- Accommodating the emergency call-out vessels for the Atlantic Array wind farm.
- The RNLI moving to an afloat berth with a new land-based RNLI station at the base of the Northern Breakwater structure.
- The excursion and charter boats moving to afloat berths on the breakwater.
- Additional cruise ship visits, attracted by the improved leisure and retail offer as well as the ability to berth overnight alongside the Northern Breakwater.
- The commercial fishing fleet relocating to new, deeper berths on the south side of the harbour, outside of the proposed marina development.
- Increasing passenger numbers on the Oldenburg, Waverley, Balmoral and Severn Link ferry services.
- The largest amount of development land of all options.
- The potential to add a car ferry service in the future with a terminal on the south side of the harbour, outside of the marina development and protected by the Northern Breakwater (as described in the 'Additional Impacts' chapter).

III.5.1 Commercial Fishing

The commercial fishing activities are assumed to be identical to those assumed under Option 1b East, since both involve the movement of the fishing fleet to new moorings on the southern side of the harbour and closer to the sea, thereby increasing time at sea and productivity. The overall impact of the commercial fishing activities in Ilfracombe under this scenario are therefore estimated to support 34 FTE jobs and £1.2 million of GVA in the local economy.

III.5.2 Ferries

Under the full harbour development scenario, passenger numbers on the Oldenburg, Waverley and Balmoral are assumed to increase above existing levels, to 45% of capacity, due to the large expected increase in harbour visitors, as well as the increased berthing capacity and ability to berth alongside the Breakwater overnight. This is expected to increase Oldenburg passenger numbers to 14,400 per annum and Waverley and Balmoral passengers to around 10,300 per annum.

The number of rotations provided by the Severn Link ferry is expected to remain unchanged from the 'Commercial Maritime Gateway' scenario, although passenger numbers are expected to increase to 40% of capacity. The likelihood of the Severn

Link ferry service being successful and delivering these passenger numbers is also assumed to share the same probability as the other Northern Breakwater option (of 90% with a 10% likelihood that the service does not commence or is not sustainable). In total, 112,000 passengers are expected to use ferry services under this scenario.

Estimates of turnover and local expenditures on goods and services are also assumed to increase in relation to these higher passenger numbers. Income for the Harbour Authority is expected to increase to £77,000 per annum, while additional expenditures in the local economy are estimated to support 3 FTE jobs and £97,000 of GVA. Applying the same passenger expenditure assumptions, suggests that overall ferry visitor expenditures would increase to £2.4 million per annum, supporting 39.5 FTE jobs and GVA of £1.2 million in the local Ilfracombe economy.

The total impact of all ferry services under this scenario, as presented in Table III.29, would increase to 50 FTE jobs and £1.4 million of GVA in the Ilfracombe economy.

Table III.29: Impact of Ferry Services in Ilfracombe – Northern Breakwater Option: ‘Full Harbour Development’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Ferry Activities	6.0	90,000
Purchases from Local Suppliers	3.0	97,000
Indirect & Induced Effects	1.8	37,000
Other Visitor Expenditures	39.5	1,184,000
Total Economic Impact of Ferry Activities	50	1,408,000

III.5.3 *Atlantic Array*

The Atlantic Array impacts are unchanged under this scenario and are common across both scenarios of the Northern Breakwater option.

III.5.4 *Leisure Boaters*

The ‘Full Harbour Development’ scenario has a much greater focus and more significant impact on leisure boating, based on the development of a 280 berth marina. This is dependent upon moving commercial boats outside of the marina basin so that their access to the sea is not restricted by the half tide sill that would need to be installed to create the marina basin and maintain a minimum level of water at all times. The marina would offer complete protection to boats, while the improved harbourside tourism offer will also help to attract additional berth-holders and visiting boaters.

The 280 berth marina is expected to comprise 240 permanent berths and 40 visitor berths. The fact that 89 leisure boats are already kept in the harbour, with another 40 to 45 boats already waiting for a berth, suggests that there is existing demand for more than half of the proposed 240 berths for resident boats. It is also realistic to assume that Ilfracombe could attract sufficient demand to fill all 240 berths based on:

- the success of nearby Watchet Marina in filling the majority of its 180 permanent berths, despite providing minimal leisure facilities relative to Ilfracombe,
- interviews with leisure boating representatives, which have suggested there would be additional demand from boaters wanting good quality leisure facilities and access to the challenging waters of the Bristol Channel,
- the current limited supply of berths on the north coast of Devon, Cornwall and Somerset, which would make Ilfracombe the closest marina for many existing and potential boat owners residing in these areas.

The marina and harbourside developments are also expected to make Ilfracombe significantly more attractive for visiting boaters, the majority of which are likely to sail across the Bristol Channel from the numerous marinas and moorings on the South Wales coast. The same visitor berth occupancy assumptions have been applied to the 40 dedicated visitor berths provided under this scenario³⁵. This estimates 3,670 visiting boat days/nights per annum, 90% of which are expected to stay overnight).

Expenditures on boating goods and services

It is expected that a marina in Ilfracombe could charge berthing fees of at least the same as those in Watchet Marina of £220 per metre. For an average boat of 10 metres, this would equate to fees of £2,200 per annum. Adding this to the previous estimates of boating related expenditures of £1,600 (excluding mooring fees), suggests total boating expenditures of £3,800 per resident boat per annum. Similarly, it is expected that overnight harbour charges equivalent to those in Watchet (£2.07 per metre) could be applied in Ilfracombe. Based on an average boat length of 10 metres suggests mooring fees of £20.70 per boat, which when added to estimated fuel costs of £2.55 per boat, provide an estimated expenditure per visiting boat of £23.25 per day.

The total boating-related expenditures of resident and visiting boats are assumed to be almost £1 million. The only Harbour Authority income under this scenario is expected to be the estimated fuel sales of £26,000, as a private marina operator is expected to run the marina and benefit from the mooring fees.

The harbour would also need to provide additional boating-related services such as chandlers, brokers and repair and maintenance facilities, etc., to service the additional boats and boaters. It has therefore been estimated that an even larger proportion of boating-related expenditure (85%) would be spent in Ilfracombe under this scenario, with 5% spent elsewhere in North Devon and 0.5% spent elsewhere in the South West.

This suggests that, excluding Harbour Authority income, the additional boating-related expenditures would total £861,000 in Ilfracombe, which is estimated to support 10.4 FTE jobs and GVA of £334,000 in the local Ilfracombe economy, and generate indirect and induced effects of a further 2.1 (10.4 x 0.2) FTE jobs and £67,000 (£334,000 x 0.2) GVA in Ilfracombe.

Tourism Expenditures

Marinas typically attract boaters with higher expenditure patterns than other types of boat moorings. GHK's previous assessment of the Economic Benefits of Coastal Marinas³⁶ identified average boater expenditures of around £50 per night, and this has been used to estimate the expenditures of overnight leisure boaters under this scenario, due to the increased and improved retail and leisure offer. The expenditure assumptions of day visitors are unchanged from the other scenarios, although there would clearly be greater expenditure opportunities for day visitors as well. The total tourism expenditures of the leisure boaters under the 'full harbour development' scenario are therefore estimated to total £820,000, which is estimated to support 13.7 FTE jobs and GVA of £410,000 in the local Ilfracombe economy.

³⁵ 75% occupancy between June and August and 25% occupancy in April, May and September.

³⁶ GHK (for BMF and partners), Economic Benefits of Coastal Marinas in the UK and Channel Islands, 2007

Overall Impact of Leisure Boating Activities in Ilfracombe – Northern Breakwater Option: ‘Full Harbour Development’ Scenario

However, there are potential risks to the marina development if commercial harbour users are unwilling to move seawards. These risks are accounted for applying a probability of 75% that the marina development will go ahead, with a corresponding 25% probability that the marina cannot be constructed and the harbour instead provides the 40 additional trot moorings as described under the ‘Commercial Maritime Gateway’ scenario.

Taking all of these factors into account suggests that the expected impact of the marina development would be to support 21.5 FTE jobs and £665,000 of GVA in the local Ilfracombe economy.

III.5.5 Excursions, Fishing and Diving Charters

The ‘Full Harbour Development’ scenario makes the same assumptions as the ‘Commercial Maritime Gateway’ scenario for the excursion and charter boats, but also assumes an additional vessel, increasing the total to six. This is expected to be possible as a result of, and to meet the additional demand from, the additional visitors attracted to the harbour under the ‘Full Harbour Development’ scenario.

This is expected to increase employment in the sector to 16.3 FTE jobs and increase turnover to an estimated £674,000 per annum, with a corresponding increase in expenditures of goods and services, the overall effect of which is to increase estimated GVA to £545,000 per annum. The additional purchases of goods and services, indirect and induced effects and visitor expenditures have been calculated using the same standard assumptions and are presented in Table III.30 below. In total, the excursion and charter boat activities are estimated to support 36 FTE jobs and £1.1 million of GVA in the local Ilfracombe economy.

Table III.30: Impact of Excursion and Charter Boats – Northern Breakwater Option: ‘Full Harbour Development’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Excursion & Charter Boat Activities	16.3	545,000
Purchases from Local Suppliers	0.6	19,000
Indirect & Induced Effects	3.4	113,000
Other Visitor Expenditures	15.4	462,000
Total Economic Impact of Excursion & Charter Boat Activities	36	1,138,000

III.5.6 Cruise Ships

With the full development scenario, cruise ship visits are assumed to increase to 25 per annum, as suggested by Destination South West, but with the same 50% probability that this will be achieved as assumed under the ‘Commercial Maritime Gateway’ scenario. A larger number of cruise ships are expected to visit under this scenario because of the increased and improved marine, retail and leisure offer. These cruise ships are expected to generate more than £100,000 of additional income for the Harbour Authority through the payment of harbour dues (included in the Harbour Authority section to avoid double counting).

The numbers of cruise ship visitors and crew coming ashore are expected to increase to 5,625 and 563 respectively under this scenario, taking account of the probabilities and the assumed proportions of passengers and crew coming ashore. These visitors

are expected to spend £422,000 per annum in local economy, supporting 7 FTE jobs and GVA of £211,000.

III.5.7 RNLI

It is assumed that RNLI activities move to the Northern Breakwater, as under the ‘Commercial Maritime Gateway’ scenario, which would enable the marina to be developed without impeding sea access for the RNLI. However, it is important to note that if the RNLI decided that the additional investment required to move to the Northern Breakwater was not warranted, then RNLI operations would present a constraint to developing a marina in the inner harbour.

III.5.8 Harbour Authority

The ‘Full Harbour Development’ scenario is projected to generate even higher levels of income for the Harbour Authority primarily as a result of: increased harbour dues from cruise ships; increased fuel sales from the commercial fishing fleet, excursion and charter boats and leisure boats, which are expected to more than offset the lower income from mooring fees with the introduction of a private marina operator. Under this scenario the Harbour Authority is estimated to generate GVA of £193,000 per annum and provide 4.1 FTE jobs, while the total impact, including local purchases and indirect and induced effects, is estimated to support 6.2 FTE jobs and £270,000 of GVA in Ilfracombe.

Table III.31: Estimated Impact of the Harbour Authority – Northern Breakwater Option: ‘Full Harbour Development’ Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority Operations	4.1	193,000
Purchases from Local Suppliers	1	32,500
Indirect & Induced Effects	1	45,000
Total Economic Impact of the Harbour Authority	6.2	270,000

III.5.9 Development Land

The ‘Full Harbour Development’ scenario includes the largest amount of development land of all options and scenarios. It includes all of the floorspace described in the 2009 Alder King report³⁷, including the car park site (H1) which could become available if a marina was developed as the space would no longer be required as shore storage for boats during the winter. As with the ‘Commercial Maritime Gateway’ scenario, it also includes a mixed use development (comprising office, retail and food and drink uses) on the reclaimed land at the base of the proposed Northern Breakwater. In total, this ‘Full Harbour Development’ Scenario is estimated to deliver 26,280 sq m of floorspace, comprising: 16,950 sq m of residential floorspace; 3,650 sq m of hotel floorspace; 2,390 sq m of retail floorspace; 1,620 sq m of cafe/restaurant floorspace; 990 sq m of office space; 580 sq m of live/work units; and 104 sq m of museum floorspace.

The potential on-site employment impact is estimated to total 306 jobs, comprising 106 retail jobs, 75 cafe/restaurant jobs, 52 office jobs, 50 hotel jobs, 3 museum jobs and 20 jobs in live/work units. It is also estimated that this additional employment floorspace could generate GVA of £9.6 million comprising: £3.4 million of GVA from retail floorspace; £2 million of GVA from cafes and restaurants; £1.8 million of GVA from the

³⁷ Alder King, Ilfracombe Regeneration Areas: Baseline Report, October 2009

proposed hotel development; £1.7 million of GVA from office space; £656,000 of GVA from live/work units and £97,000 of GVA from the proposed RNLI museum.

As under the 'Commercial Maritime Gateway' scenario, the harbourside developments are considered to have a 75% probability that all of this development will go ahead and achieve these impacts, against a 25% probability that these impacts will not be achieved. Accounting for this probability as well as removing the double counting of expenditures of harbour users, and adding the impacts arising from purchases from local suppliers and indirect and induced effects, estimates that the new employment floorspace included under the 'Full Harbour Development' scenario will support an additional 245 FTE jobs and GVA of £7.7 million in the local Ilfracombe economy.

III.5.10 Wider Tourism Impacts

The 'Full Harbour Development' scenario is expected to generate the most significant additional impact on wider tourism expenditures in the local Ilfracombe economy, over and above those impacts already described and accounted for. The considerable increase in the scale and quality of the harbourside retail and leisure offer, as well as the development of the Northern Breakwater and a marina is expected to increase the wider visitor expenditures and impacts by 20% over those estimated under the 'Do Nothing' option.

This is estimated to generate wider tourism expenditures and impacts associated with the 'Full Harbour Development' scenario of £15.7 million of visitor expenditure per annum, supporting approximately 240 FTE jobs and £7.2 million of GVA.

III.5.11 Total Harbour Impact

The total estimated impact of the harbour under the 'Full Harbour Development' Scenario is shown in Table III.32. This estimates that the specific harbour activities (excluding development land and wider visitor impacts) support 179 FTE jobs and GVA of £5.9 million per annum in Ilfracombe, which has increased over the 'Do Nothing' option by an additional 84 FTE jobs and GVA of £3.1 million.

The overall impact of the 'Full Harbour Development' scenario (including development land and wider tourism impacts) is estimated to support a total of 664 FTE jobs and GVA of £20.8 million in the local Ilfracombe economy.

Table III.32: Total Impact of Harbour Activities in Ilfracombe – Northern Breakwater Option: 'Full Harbour Development' Scenario

	Ilfracombe	
	FTE Jobs	GVA (£)
Harbour Authority	6.2	270,000
Commercial Fishing	34	1,215,000
Ferry Activities	50	1,408,000
Atlantic Array	21.5	859,000
Leisure Boating	21.5	665,000
Excursion/Charter Boats	36	1,138,000
Cruise Ship Activities	7	211,000
RNLI Activities	2.7	92,000
Development Land	245	7,749,000
Wider Tourism	240	7,187,000
Total Harbour Impact	664	20,797,000

ANNEX IV: ILFRACOMBE SOCIO-ECONOMIC REVIEW

Population and Households

Ilfracombe is located on the north coast of Devon in the south west of England. Latest estimates suggest that Ilfracombe has a current population of around 11,400 (4,300 in the Ilfracombe Central ward, 2,500 in the East ward, and 4,600 in the West ward), representing approximately 12% of the total population in the wider North Devon district. The town and wider district also have relatively small working age populations and large numbers of retired individuals compared to regional and national averages.

Table IV.1: Population Estimates and Projections

	Ilfracombe	North Devon	Devon	South West	England
2008	11,400	92,300	754,700	5,209,200	51,446,200
2026	15,000	112,500	925,600	6,138,900	58,682,400
Projected Growth (% per annum)	1.5%	1.1%	1.1%	0.9%	0.7%

Source: ONS Mid-year population estimates, 2008; ONS (2008 projections based on 2006 mid-year population estimates), Ilfracombe 2026 population projection based on figures in draft Core Strategy

Significant population growth of 1.5% per annum is projected for Ilfracombe, driven by strong housing and employment growth targets to 2026³⁸. Table IV.2 shows that 1,750 new households are planned for Ilfracombe between 2006 and 2026, representing an increase of almost 33%. This is similar to the growth expected across Devon as a whole, and higher than that projected at district, regional and national levels.

Table IV.2: Households Estimates and Projections

	Ilfracombe	North Devon	Devon	South West	England
2006	5,500	39,000	320,000	2,211,000	21,515,000
2026	7,250	51,000	429,000	2,854,000	26,674,000

Source: DCLG household estimates and projections. Ilfracombe data uses DCLG ward-level dwelling stock data and draft Core Strategy housing requirement for 1,750 new dwellings between 2006 and 2026

Structure of the Local Economy

Annual Business Inquiry (ABI) data suggest that there are approximately 450 workplaces in Ilfracombe, the vast majority of which are small businesses employing up to 10 people. The size distribution of these businesses is presented in Table IV.3.

Table IV.3: Business Size Distribution by Number of Employees

Business Size (Employees)	Ilfracombe	North Devon	Devon	South West	England
1-10	87.0%	86.5%	86.2%	85.5%	85.3%
11-49	10.8%	10.8%	11.2%	11.4%	11.2%
50-199	1.6%	2.4%	2.1%	2.5%	2.8%
200 or more	0.7%	0.4%	0.4%	0.5%	0.6%
TOTAL	100%	100%	100%	100%	100%

Source: Annual Business Inquiry, 2008

³⁸ North Devon and Torridge Joint Core Strategy: Pre-Publication January 2010

Table IV.3 shows that Ilfracombe has a relatively high number of micro and small businesses and a relatively small number of medium sized businesses. However, the data also suggests that there are three large businesses in the town, each employing more than 200 people and each located in the Ilfracombe West ward.

Table IV.4 shows the distribution of employment by industrial sector for each area. The data show that the local Ilfracombe economy has a relatively strong and narrow focus on manufacturing and tourism sectors. The manufacturing employment is focused on the manufacture of electronic components and other general purpose machinery, while Ilfracombe also has relatively high employment in hotels and restaurants and arts, entertainment and recreation sectors.

Table IV.4: Employment by Sector (%)

Industry (SIC 2007)	Ilfracombe	North Devon	Devon	South West	England
Agriculture, forestry & fishing	0.1	2.4	0.4	1.4	0.7
Mining & quarrying	0.0	0.0	0.2	0.2	0.1
Manufacturing	24.8	13.5	8.9	10.2	9.4
Electricity & gas	0.0	0.2	0.5	0.4	0.3
Water & sewerage	0.1	0.6	0.7	0.7	0.6
Construction	2.7	4.4	5.6	4.7	4.9
Wholesale & Retail	17.2	19.6	18.9	17.4	16.7
Transport & storage	1.8	2.7	4.3	3.9	4.8
Hotels & Catering	14.7	12.8	9.0	7.7	6.7
Information & communication	0.6	1.2	2.8	2.8	4.0
Financial services	0.9	1.3	1.9	3.6	4.1
Real estate	0.9	1.2	1.6	1.4	1.4
Professional/scientific/technical activities	2.8	4.2	5.7	6.0	7.1
Administrative & support services	3.7	4.1	5.5	7.0	8.4
Public administration & defence	1.8	3.5	7.2	5.6	5.2
Education	8.2	10.5	9.2	9.9	9.5
Health & social work	13.3	14.1	13.1	13.0	11.7
Arts, entertainment & recreation	4.7	2.0	2.2	2.2	2.4
Other services	1.6	1.6	2.3	2.1	2.1
TOTAL	100%	100%	100%	100%	100%

Source: Annual Business Inquiry, 2008

Labour Market

Ilfracombe shares similar characteristics with the wider district and county areas in terms of its working age population which is relatively small compared to regional and national averages, due to the relatively high retired populations. Self-employment is also relatively high in Ilfracombe, which is another indicator of the small size of local businesses.

However, economic inactivity is a much more significant issue in Ilfracombe compared to the other areas included in Table IV.5. More than 25% of the working age population in Ilfracombe is economically inactive, compared to between 15% and 20% elsewhere. The vast majority of these economically inactive people are claiming benefits, resulting in more than one in five people of working age in Ilfracombe claiming

some form of benefit. This includes a relatively high rate of unemployment with 4.5% of the working age population claiming Jobseeker's Allowance in March 2010.

Table IV.5: Summary of Labour Market Statistics

Labour Market Indicator	Ilfracombe	North Devon	Devon	South West	England
Working Age Population (% of total population)	58.6%	57.0%	58.1%	59.8%	62.1%
Economically Active (% of working age population)	74.7%	84.5%	83.2%	81.6%	79.0%
Self-Employment (% of working age population)	14.0%	9.5%	13.0%	11.0%	9.3%
Total Benefit Claimants (% of working age population) – Aug 2009	20.8%	13.6%	11.9%	13.2%	15.5%
Unemployment: Claimant Count (% of working age population) – March 2010	4.5%	2.6%	2.4%	3.0%	4.2%

Sources: Census of Population, 2001; ONS Mid-Year Population Estimates - 2008; ONS Annual Population Survey - Oct 2008 to Sept 2009; JSA Claimant Count - Mar 2010; DWP Longitudinal Study - August 2009; Annual Business Inquiry, 2008.

Incomes and Deprivation

Information on incomes is not available at ward level, although weekly pay levels in the wider North Devon district are low compared to the county, regional and national averages and it is likely that wages in Ilfracombe are also relatively low. Census 2001 data also suggest that qualification levels are relatively low in Ilfracombe, with a significantly larger proportion of the population without any qualifications and a lower proportion qualified to Level 4 and above.

The 2007 Index of Multiple Deprivation (IMD) suggests that North Devon is ranked as the 146th (out of 354) most deprived local authority in England. Ilfracombe, however, has some pockets of high-level deprivation and all three of the Ilfracombe wards are included within the 28 wards in Devon that are amongst the 25% most deprived nationally.

Entrepreneurship

The Department for Business Enterprise and Regulatory Reform (BERR) data on VAT registrations and deregistrations provide estimates of business start-ups and closures, although data is not available at ward level. However, the data suggest that North Devon has a relatively high stock of VAT registered businesses per 10,000 of the adult population compared to the county, regional and national averages. It also has a relatively high number of VAT registrations and deregistrations in 2007, which suggests that there are relatively high levels of entrepreneurship within the North Devon district.

The Visitor Economy

The visitor economy is significant in the South West, Devon and North Devon, and is particularly significant in Ilfracombe. Devon receives more visitors, visitor nights and expenditures than any other county in the South West, representing more than 25% of the regional totals³⁹. North Devon accounts for approximately 15% of the total visitors and expenditures in Devon, attracting some 2.8 million visitors and associated expenditures of more than £300 million per annum.

³⁹ South West Tourism; The Value of Tourism, 2007

Detailed information relating to the visitor economy in Ilfracombe is unavailable but can be estimated using appropriate ratios and these estimates are presented in Table IV.6. Ilfracombe has more than 7,000⁴⁰ bed spaces, which represents around 17% of the overall capacity in North Devon. Applying this ratio to the number of staying visitor nights and expenditures provides estimates for Ilfracombe, suggesting that it attracts more than 700,000 staying visitor nights per annum, spending £35 million.

Applying a ratio of visitor days to visitor nights taken from the North Devon data, suggests that Ilfracombe receives 326,000 day visitors and £14 million of tourism expenditure per annum. Therefore, Ilfracombe is estimated to receive a total of almost 500,000 visitors per annum, staying for more than 700,000 nights and spending a total of almost £50 million per annum, at an average expenditure of £48 per head.

Table IV.6: Visitor Numbers and Expenditures, 2007

	Total bed space capacity ⁴¹	Total Visitor Trips ⁴²	Total Staying Visitor Nights	Total Visitor Related Spend	Total Staying Visitor Spend	Expenditure per person per day ⁴³
Ilfracombe ⁴⁴	7,190	0.5m	0.7m	£49.4m	£35.4m	£48.06
North Devon	42,450	2.8m	4.1m	£300.3m	£208.9m	£48.06
Devon	197,150	26.0m	26.1m	£2.3bn	£1.3bn	£47.24
South West		120m	98.7m	£9.3bn	£4.6bn	£45.29

Source(s): Tourism Trends in Devon, 2007; Value of Tourism, 2007

⁴⁰ South West Tourism; Tourism Trends in Devon, 2007

⁴¹ Including serviced accommodation, flats and houses, holiday park units, and touring pitches.

⁴² This includes both day trips and staying trips.

⁴³ This includes both day trips and staying trips.

⁴⁴ The Ilfracombe data is indicative and has been calculated based on the proportion of North Devon bed spaces in Ilfracombe. The numbers of day visitors and associated expenditures in Ilfracombe have been estimated using the ratio of day visits to overnight visits in North Devon.

ANNEX V: COMPARISONS WITH SIMILAR PROJECTS

Public sector support for investments made during a period of economic downturn and public sector financial constraint is likely to be difficult and the public sector is increasingly likely to make funding decisions based on assessments of value for money, i.e. which investments will maximise potential benefits. A number of other harbour and port developments have been proposed in the South West in recent years, including the development of Falmouth Docks and the harbours at Watchet and Brixham, which can be used to offer some indicative comparisons against the above economic impact and cost benefit analysis for the development of Ilfracombe Harbour. However, it is important to note that these comparisons are only indicative, since the respective findings are taken from different studies, undertaken at different times and are likely to be based on a number of different assumptions and expectations.

Falmouth Docks

There are plans to develop Falmouth Docks and improve the port facilities by building a new jetty and cruise terminal and dredging the deep water channel to enable larger cruise ships to berth alongside the harbour. This is expected to deliver additional benefits for the other port activities as well as for the visitor economy. An economic impact assessment was undertaken in 2008⁴⁵, which formed part of the 2009 environmental statement⁴⁶ for the proposed development. The total cost of the developments is expected to be in the region of £30 to £40 million (the economic impact assessment assumes capital costs of £39 million). Public sector costs are expected to account for around £20 million, which is comparable with the estimated costs of constructing the Northern Breakwater, although the Falmouth scheme also includes significant additional levels of private investment. This is a key difference to the Ilfracombe figures, where only the final 'Full Harbour Development' scenario assumes any leverage of private sector investment.

The economic impact assessment assumes increasing cruise ship visits over time, as a result of the proposed development of Falmouth Docks, thereby also increasing visitor expenditures and the expenditures of the cruise ships on harbour dues, berthing fees, etc. over time. These are expected to increase rapidly to 2015 before increasing more steadily thereafter, to deliver additional cruise ship expenditures of almost £300,000 per annum and additional visitor expenditures of £4.5 million per annum by 2020. Applying the same estimates of leakage, displacement and economic multipliers as those used in this study suggests that these expenditures would support: around 80 FTE jobs and £2.4 million of GVA in the local Falmouth economy; 95 FTE jobs and more than £3 million of GVA in the Cornwall sub-region; and 117 FTE jobs and GVA of more than £3.7 million in the regional economy.

Employment within A&P Falmouth and other port related businesses is expected to increase by 140 FTE jobs in Falmouth and 187 FTE jobs in the wider Cornwall area, taking account of leakage, displacement and economic multipliers, while GVA is expected to increase by £3.6 million and £4.9 million per annum respectively. Since the Cornwall figures assume no leakage, very low displacement and relatively high economic multipliers, these impact estimates are likely to be the same in the wider South West region.

⁴⁵ Arup, Economic Impact Study and Assessment of the Port of Falmouth, 2008

⁴⁶ Royal Haskoning, Port of Falmouth Development Initiative: Environmental Statement, 2009

By 2020, based on data from the Falmouth Docks economic impact assessment, the developments are estimated to support approximately:

- 220 FTE jobs and £6 million of GVA per annum in Falmouth;
- 280 FTE jobs and £8 million of GVA per annum in Cornwall;
- 300 FTE jobs and £8.6 million of GVA per annum in the South West.

These impacts are expected to increase over time, although these 2020 figures are similar in scale to the employment and GVA impacts identified for the 'Full Harbour Development' scenario for Ilfracombe Harbour. The increasing GVA estimates for Falmouth Docks have also been discounted over a similar 15 year period, using the same discount factor of 3.5%, which suggests NPVs of approximately £31 million in Falmouth, £48 million in Cornwall and £52 million in the South West. These NPV estimates generate respective benefit cost ratios of 2.6, 3.4 and 3.6.

Generally, the estimated NPVs and benefit cost ratios for Ilfracombe Harbour are typically higher than those for Falmouth Docks at the local level, while the 'Full Harbour Development' scenario is also estimated to generate a higher NPV and benefit cost ratio at the sub-regional level. However, the Falmouth Docks economic impact assessment does estimate a larger NPV and benefit cost ratio at the regional level, primarily as a result of lower displacement assumptions.

Watchet East Wharf Development

Following the development of Watchet Harbour Marina and the Esplanade Enhancement, there are proposals to develop the East Wharf in Watchet to provide residential and commercial space around the harbour. An economic impact assessment⁴⁷ of the proposed development estimated the total development costs to be £12 million, which is broadly similar to the estimates for Option 1b East in Ilfracombe. The Watchet study estimates the impacts of the proposed East Wharf development in terms of the jobs employed in the new floorspace, the additional visitor expenditure attracted by the development, and the expenditures of new residents, although there is likely to be considerable overlap and double-counting of impacts.

The additional East Wharf floorspace is estimated to support 68.5 additional FTE jobs in retail, restaurant and workshop units. In the absence of specific GVA estimates for Watchet, the average GVA per FTE of £33,126 from this study has been applied in order to generate a GVA estimate of £2.3 million per annum. Applying the same estimates of leakage, displacement and economic multipliers as those used in this study suggests that the new floorspace would support an additional: 49 FTE jobs and £1.6 million of GVA in the local economy; 29 FTE jobs and £950,000 of GVA in the sub-region; and 22 FTE jobs and GVA of £725,000 in the regional economy.

The expenditures of new residents have been excluded from the analysis for consistency with the Ilfracombe estimates and to avoid double-counting with the above. The Watchet study estimates visitor expenditures under a series of scenarios, based on the uplifts achieved in Torquay, Whitby and Padstow following similar developments. The lowest impacts, based on evidence from Torquay, were excluded from the final figures in the Watchet study, which suggests that the East Wharf developments would generate additional visitor expenditures of between £2.3 million and £5.5 million. However, these estimates appear optimistic with the lower figure

⁴⁷ Roger Tym & Partners, East Wharf, Watchet – Economic Impact Assessment, 2008

based on a 35% uplift in visitors to Watchet (based on the Whitby experience), and the higher figure based on Watchet attracting 25% of all visitors to West Somerset (based on the Padstow experience). For comparison purposes, the following analysis is based on the mid-point of £3.9 million.

However, these expenditures will overlap with the employment and GVA impacts included above and it is therefore assumed that a maximum of 50% of these visitor expenditures will be additional to the impacts already included. This suggests that the overall net additional impact of the East Wharf development in Watchet is likely to support up to: 82 FTE jobs and £2.6 million of GVA in the local economy; 68 FTE jobs and £2.2 million of GVA in the sub-region; and 71 FTE jobs and GVA of £2.3 million in the regional economy.

Discounting the Watchet GVA impacts over an equivalent 15 years and allowing for a two year construction period, provides NPV estimates of £17 million in the local economy, £12.7 million in the sub-region and £13.4 million in the South West as a whole. These are significantly lower than the NPV estimates relating to all development options in Ilfracombe despite the Watchet figures using optimistic assumptions. The corresponding benefit cost ratios of 2.4 in the local area and 2.1 in the sub-region and wider region are also generally lower than the Ilfracombe estimates.

Brixham Regeneration Scheme

The Brixham Regeneration Scheme is already underway and involves the development of the harbour, marina, fish market, and the provision of additional residential and employment space. The project is expected to involve a total public sector cost of approximately £20 million. An economic impact assessment of the Regeneration Scheme⁴⁸ was undertaken in 2006, which states that the scheme was expected to lever an additional £60 million of private sector funds. The Brixham regeneration scheme therefore shares similar public sector cost estimates to the Falmouth Docks project and the Northern Breakwater option in Ilfracombe. However, the overall cost and scale of the project is significantly larger, based on these estimates of additional private sector investment.

In total, the scheme is estimated to support an additional 360 FTE jobs and £38.3 million of additional sales per annum in the local Torbay economy. Applying the same local assumption as used in this study, that GVA in Devon equates to around 40% of turnover, suggests that the scheme would support additional GVA in Torbay of £15.3 million per annum. As stated above, these employment and GVA estimates are significantly larger than the estimates in Ilfracombe, Falmouth and Watchet.

These estimates have also been discounted over the same 15 year period, although the expected construction period of the Brixham Regeneration scheme has been increased to three years. This provides an equivalent NPV estimate for Torbay of £136 million and a corresponding benefit cost ratio of 7.8. These impact estimates are significantly larger than the Falmouth and Ilfracombe projects as a result of the much larger expectations of private sector investment leveraged by the project and the more significant scale of the project overall.

⁴⁸ GHK (for Torbay Development Agency), Brixham Regeneration: Economic Impact Assessment, 2006

Overall Comparisons

The data in Table V.1 presents the key statistics described above. It suggests that the development options for Ilfracombe Harbour are competitive with the similar proposed developments at Falmouth Docks and East Wharf in Watchet in terms of value for money based on the estimated public sector cost per FTE, NPVs and benefit cost ratios. The Brixham Regeneration Scheme appears to offer the best value for money of all schemes, primarily because of the significant leverage of private sector investment as part of the project.

The 'Full Harbour Development' scenario (which assumes private sector investment is levered to develop the marina and southern harbour) is the most competitive option for Ilfracombe Harbour and is estimated to deliver significantly greater value for money than the proposed East Wharf development in Watchet at all spatial levels. Also, although the proposed development of Falmouth Docks is expected to deliver greater regional benefits (due to the lower expected displacement effects), the 'Full Harbour Development' scenario is expected to deliver greater benefits and better value for money at the local and sub-regional levels.

Table V.1: Comparisons with Similar Projects

Spatial Level	Variable	Option 1b East	Commercial Maritime Gateway	Full Harbour Dev't	Full Harbour Dev't (Private Investment Levered)	Falmouth Docks	Watchet	Brixham
	Public Sector Cost (£m)	13.7m	21.7m	35m	21.7m	20m	12m	20m
Local	Employment (FTE)	112	136	264	264	220	82	360
	Public Sector Cost per FTE (£)	122,000	160,000	133,000	82,000	91,000	146,000	56,000
	GVA per annum (£m)	3.5m	4.9m	8.7m	8.7m	6m	2.6m	15.3m
	NPV (£m)	25.1m	32.8m	62.3m	75.6m	31m	17m	135.7m
	Benefit Cost Ratio	2.8	2.5	2.8	4.5	2.6	2.4	7.8
Sub-Regional	Employment (FTE)	80	104	203	203	280	68	
	Public Sector Cost per FTE (£)	172,000	209,000	173,000	107,000	71,000	176,000	
	GVA per annum (£m)	2.6m	3.8m	6.9m	6.9m	8m	2.2m	
	NPV (£m)	14.8m	21.1m	42.2m	55.5m	48m	12.7m	
	Benefit Cost Ratio	2.1	2.0	2.2	3.6	3.4	2.1	
Regional	Employment (FTE)	64	89	172	172	300	71	
	Public Sector Cost per FTE (£)	214,000	245,000	203,000	126,000	66,000	169,000	
	GVA per annum (£m)	2.1m	3.3m	5.9m	5.9m	8.6m	2.3m	
	NPV (£m)	9.4m	15.2m	30.9m	44.2m	52m	13.4m	
	Benefit Cost Ratio	1.7	1.7	1.9	3.0	3.6	2.1	