September 2017

Warrenpoint Harbour Authority Economic Impact Statement



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1. Key Findings

This report details the economic (direct, indirect and induced effects) and social impacts of Warrenpoint Harbour from 2006-2016. Some of the key findings from the research are:

Warrenpoint Harbour's economic impact is significant, employing 65 workers who each contributed £57,325 worth of productivity, for total earnings of £1.74 million and a total company GVA contribution of £3.7 million in 2016. The Harbour has generated more than £7 million worth of taxes since 2006. The Port processed 3.48 million tonnes of freight in 2016, which was valued at £6.2 billion.

1.1 Impressive GVA and Productivity Growth

2016 represented a record year for GVA in Warrenpoint Harbour at £3.7 million. As a result, the Harbour has also seen its productivity levels soar above the national, district council and sectoral averages to a height of £57,325 per employee.

1.2 Business across the British Isles bringing local benefits

The Harbour has strengthened its business links with partners both across the channel and south of the border. This is evident both in the destination of outgoing vessels, and in its supply chain. Over the last 10 years, 80% of freight throughput in the Harbour has been cross-channel, while over **95% of the company's supply chain were UK-based companies**.

Goods exiting the Harbour have important, though undocumented, **international reach**. This comes most prominently in the shape of Ro-Ro cargo moving on to international destinations, following its initial journey from Warrenpoint. It is estimated that Warrenpoint throughput in 2016 was worth £6.2 billion in value, £164 million of which is attributed to direct international trade. In addition, it is estimated by the Harbour that up to 30% of throughput begins or ends its journey in the Republic of Ireland.

However, the strongest impacts of the Harbour are felt in the local community. The average journey to work for the Harbour's employees is just over 3 miles, while the median is less than 2 miles. **97% of employees live in the Newry, Mourne and Down District Council Area**. As a result, the employees are likely to spend a large proportion of their wages in the local area.

1.3 Downstream Economic Impacts

When the wider economic effects are considered, it is estimated that for every £1 of GVA generated in the Harbour, £2.10 of GVA is generated, while every 1 worker employed by the Harbour creates 2.5 jobs in the wider NI economy.

This goes without including a significant number of Warrenpoint-based companies using the Harbour, with **58% of the company's turnover** accruing from companies with a branch in the local Newry, Mourne and Down area.

1.4 Significant Social Impacts

The Harbour Authority have been committed to going above and beyond their social responsibilities to become a focal point of the local community. Engagement with **local schools, sports clubs and entrepreneurial projects**, in addition to the hiring of a local workforce and heightened awareness of the environmental implications of port activities, have all contributed to an influential social position.

1.5 Summary of Key Findings

Warrenpoint Harbour has significant economic and social impacts, both at a national and local level. GVA contributions have grown in line with the Harbours freight tonnage throughput, with 2016 representing record years for both these figures. The Harbour's strongest indirect impacts were felt in the period prior to the economic downturn, most notably in the shape of a large investment drive between 2006 and 2009. However, productivity, GVA, freight throughput and employment have risen year-on-year since the turn of the decade, resulting in Warrenpoint Harbour becoming the second biggest port in Northern Ireland in 2013. The total

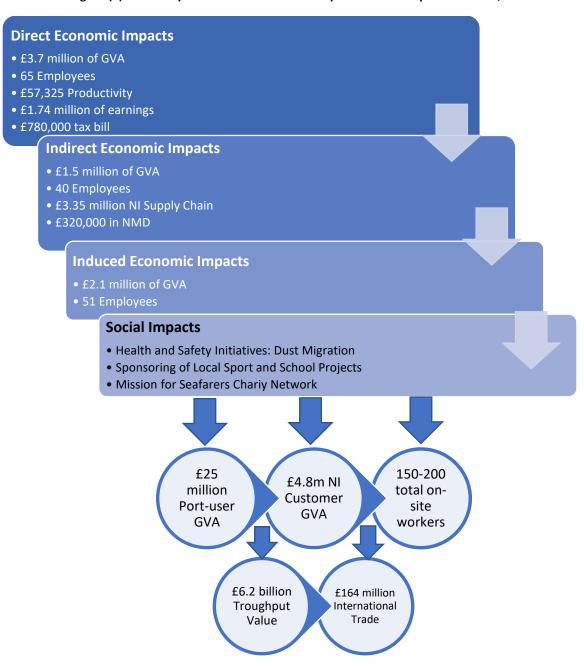
employment and GVA multipliers are 2.5 and 2.1 respectively, showcasing the significant downstream impacts of the Harbour.

Warrenpoint Harbour also facilitates the business of a number of large transport and storage companies, with Warrenpoint-based companies responsible for more than 60% of the Harbour's turnover. This is in addition to an estimated £170 million of international trade passing through the Harbour, contributing to a total throughput value of £6.2 billion in 2016.

The Harbour has a proud history of local social engagement, and has invested time and money in local sporting, educational and environmental projects over the last decade.

Figure (1) demonstrates the total economic and social impacts of the Harbour in 2016, in the process drawing together the main topics discussed within this report.

Figure (1) -Summary of Economic and Social Impacts of Warrenpoint Harbour, 2016



2. Introduction

This paper aims to concisely lay out the economic and social contributions of Warrenpoint Harbour over the last 10 years. This will encompass Warrenpoint Harbour's impact on both the Northern Ireland Economy and on the Newry, Mourne and Down District Council, where it is based. From this, the paper will hope to conclude on the main challenges and opportunities facing the Harbour in the short-term.

3. The Approach

The study assesses three key channels through which economic activity is generated by Warrenpoint Harbour. These are direct, indirect and induced economic effects:

- Direct: The direct economic impact of Warrenpoint Harbour is obtained by analysing the value-added that the Harbour directly contributes to GDP through EBITDA and Wages, in addition to direct tax contributions resulting from port activities.
- Indirect: Indirect economic impacts are obtained through analysis of supply chain expenditures for the company in NI.
- Induced: Induced economic impacts occur when those employed by the Harbour and by companies
 within the Harbour's supply chain spend their wages in the wider economy, often in the shape of
 retail, entertainment, travel etc.

Warrenpoint Harbour Authority have provided supply chain data, which allows a calculation of the indirect and induced economic effects of the Harbour, obtained using NISRA input-output tables and the Ulster University Economic Policy Centre methodology.

The paper will also give a non-additive economic assessment of the value of freight throughput in the Harbour, as well as of Warrenpoint's biggest customers, most of which are based in Northern Ireland. Throughout, the study will reference cross-channel imports and cross-channel exports in addition to imports and exports. The former refers to trade between UK ports and Warrenpoint, with imports and exports reflecting the trade between non-UK ports and Warrenpoint.

4. Background and economic context

4.1 NI Economic Context

Following the recession caused by the financial crisis of 2007/08, the Northern Ireland economy has been experiencing growth in every year since 2010. The NI economy is now valued at just over £35bn, having grown at an average of 1.1% per annum from 2010 – 2016.

Headline economic indicators remain positive overall for NI, however reduced and even negative growth in some sectors points to inflationary pressures impacting on the consumption patterns of households as well as businesses.

The latest labour market data shows that employment reduced slightly to 824,000

Figure (2) - NI GVA and Growth, 1998-2014 8% £36 6% £34 £32 2% £30 £28 -4% £24 -6% £22 1998 2000 2002 2004 2006 2008 2010 2012 2014

Source: ONS Regional Accounts

while claimant unemployment continued to reduce to 30,500. The economic inactivity rate (those who are not actively seeking work) remained unchanged over the quarter at 27.4%.¹

4.2 Local Economic Context – Newry, Mourne and Down District Council

There are 176,000 inhabitants in the Newry, Mourne and Down District Council area, 9.5% of the NI total. Of these, 110,000 (or 63% are of working age).

The latest figures show that there are 65,000 jobs (7.6% of the NI total) in the council area and a proportion of those living in the council area also commute to work in other council areas. 2,500 people are unemployed at present, resulting in a claimant count unemployment rate of 3.0%, which is lower than the NI average of 3.8%.

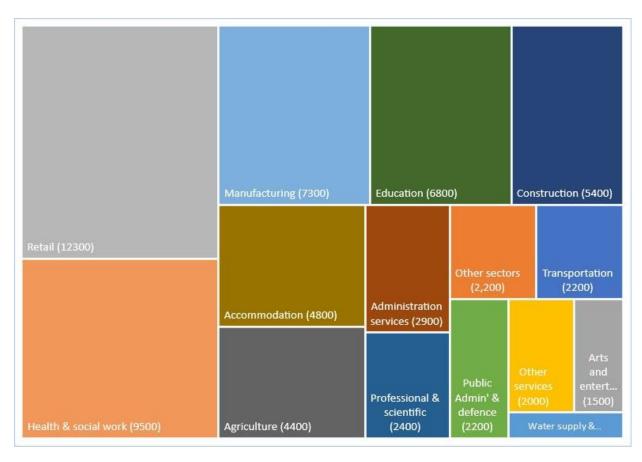


Figure 3: Employee jobs in Newry, Mourne and Down District Council area, 2016

Source: Department for the Economy & UUEPC

The five most important sectors in the Newry, Mourne and Down District Council area are retail, health and social care, manufacturing, accommodation (or tourism) and agriculture. The private sector generates 72% of all employment, which compares favourably to the NI average of 70%.

Employment within the council area is one per cent higher in 2016 than it was in 2008, demonstrating that the local economy has just regained the ground lost since the recession. The construction sector has not yet recovered, with employment remaining one third lower than in 2008. Notable rates of growth have been

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¹ NISRA Labour Market Report, July 2017

recorded in Professional Services (+50%), Administrative services (+38%) and accommodation (+33%) since the recession, confirming that there are some bright spots in the local economy.

4.3 Republic of Ireland – Trade and the Local Economy

Separated only by a land border, the significance of a strong trading relationship with the south is immensely important to the prosperity of the NI economy. NI sales to the Republic of Ireland account for more than 60% of total EU sales³, while the Harbour Authority have estimated that 40% of Ro-Ro imports are destined for southern locations. It is here where Warrenpoint boasts an advantage over its competitors as the most accessible British trading location for business in the south.

This relationship naturally emphasises the importance of counties in direct proximity to the border, particularly Co. Meath and Co. Louth, the latter being home to a Warrenpoint employee. The total population of these two counties in 2016 was 310,000. There are a total of 135,000 jobs in Co. Louth and Co. Meath (50,000 in Co. Louth and 85,000 in Co. Meath), with an average unemployment rate of 10% (12% in Co. Louth and 7% in Co. Meath). Co. Louth was above the national unemployment rate of 8%, whilst Meath was below it.

Co. Louth and Co. Meath's combined 5 biggest sectors are Wholesale and Retail Trade, Health and Social Work, Manufacturing, Transport and Storage and Real Estate. Transport and Storage employment makes up 11% (15,000) of the combined employment in the counties, and is the second biggest sector by employment in County Meath, compared with the fourth biggest in Co. Louth. Real estate rounds off the top 5 sectoral employers, hiring 8% (11,000) of the total workforce.

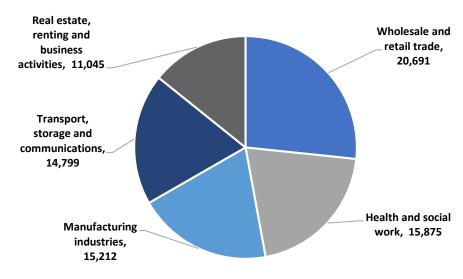


Figure (4) - Co. Louth and Co. Meath Top 5 Sectors by Employment

Source: CSO Census Data, 2011; UUEPC Forecasts

Employment in County Louth is 4% lower than it was in 2006, whereas in Meath it is almost unchanged over this time. In Louth, this reflects a notable drop in construction employment (50% fall) and manufacturing (25% fall). In its place, the Hotel and Restaurant sector (22%) and the Health and Social Work sector (20%) have seen the biggest employment rises over the period. In Co. Meath, similar drops in construction and manufacturing have occurred (46% drop and 19% drop respectively), with increases occurring in areas akin to Louth. Importantly, transport and storage sectoral employment grew by 30% over the period.

4.4 Strategic Importance of Harbours

Port activity in the United Kingdom has seen steady growth over the past 10 years, which was somewhat offset by the global economic downturn following the financial crisis of 2007/2008. In recent years recovery appears to have been accomplished as the industry moves back to pre-crisis trend.

As a country separated from the rest of the UK by a body of water, the importance of trading ports to the Northern Ireland economy cannot be understated. Sales beyond the island of Ireland account for 28% of total Northern Irish sales, and thus the requirement for a strong system of competing ports is paramount. The top 5 Harbours in Northern Ireland make up 97% of Northern Irish freight throughput, which in turn was on average 5% of total UK throughput from 2005-2016. Increased trade in the South is reflected in Warrenpoint Harbour's success in overtaking Larne and Londonderry to become the second biggest port by tonnage traffic behind Belfast. Recent investment in Warrenpoint in assets including cement silos, cranes and improved docking facilities have helped to boost efficiency, whilst a euro strengthening against the pound has likely encouraged businesses south of the Border to import goods via the Harbour.

The vote to leave the European Union puts UK trade in a precarious position, with the potential for damaging tariffs forcing national businesses to reassess their operational strategies. Such adjustments may impact on the profitability of Harbours, and Warrenpoint's proximity to the border is likely to enhance its significance in a post-Brexit Northern Ireland, for better or worse.

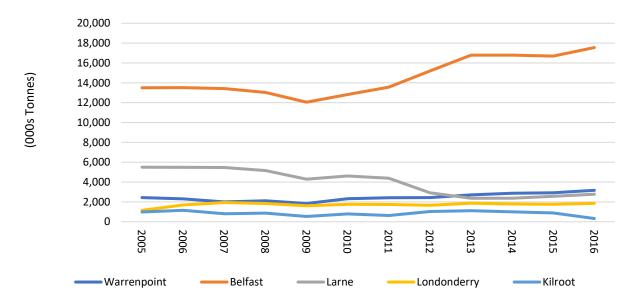


Figure (5) - Northern Ireland Net Freight Tonnage, 2005-2016

Source: Department for Transport, 2016

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^{2,3} NISRA Broad Economy Sales and Export Statistics, May 2017

5. Economic Impact of Warrenpoint Harbour

The economic impact statement assesses the direct economic impacts of Warrenpoint's activities and estimates the wider economic benefits of the company's supply chain expenditure (indirect effects) and of the expenditure of employees in both sectors (induced effects). The indirect and induced effects are modelled using NI Statistics and Research Agency's Input-Output tables and multiplier matrices that were developed at the Ulster University Economic Policy Centre. This approach is used in a wide range of economic research studies and is considered robust and credible.

5.1 Direct Economic Impacts

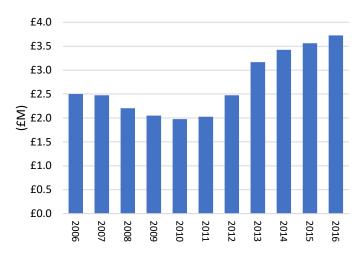
5.1.1 Sustained Growth in Gross-Value Added (GVA)

Gross Value Added (GVA) is the total value of goods and/or services produced by an economy or an enterprise within that economy. In this respect, GVA is the measure of Warrenpoint Harbour's total contribution to the local and NI economy.

Warrenpoint Harbour has seen significant recent growth following stutters in the last decade, generating £3.72 million of GVA in 2016. This represented record levels of GVA for the harbour.

GVA grew at a compound rate of 4.1% from 2006-2016, higher than both Newry, Mourne and Down (1.28%) and NI (0.27%). Including the period of economic downturn highlights the relative robustness of Warrenpoint Harbour to respond to shocks.

Figure (6) - Warrenpoint Harbour GVA, 2006-2016



Source: Warrenpoint Harbour Authority

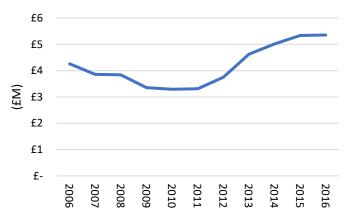
5.1.2 Record Turnover reflects profitable diversity

2016 also represented a record year for turnover in the Harbour, at £5.35 million. Turnover is closely allied to freight throughput, and so it is unsurprising to see their fortunes move in tandem following the economic downturn.

Warrenpoint Harbour's most impressive period of turnover growth began in 2011, increasing at a compound rate of 10% until 2016. Between 2006 and 2016, Warrenpoint generated a total of £46 million in Turnover.

The Harbour's main sources of income are generated through shipping charges to freight transport companies, charges on the temporary storage of freight and on rent charges to companies located in the Harbour.

Figure (7) - Warrenpoint Harbour Turnover, 2006-2016



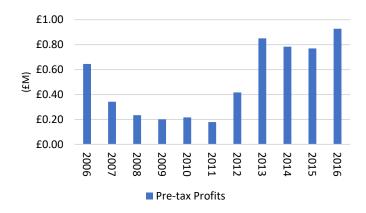
5.1.3 Large, sustained profits in recent years

Warrenpoint's growth in turnover has in recent years converted into strong levels of profitability. Pre-tax profits grew by 44% between 2006 and 2016, for compound growth of 3.7%, a rate closely aligned to throughput growth.

High profitability levels in the last 4 years, and are another indicator that full recovery has been achieved following the economic downturn. Most strikingly, the Harbour's pre-tax profits have grown by 420% since 2011, representing compounded annual growth of 39% over that time.

The Harbour's profit margin was close to its 2013 height of 18%, reaching 17% in 2016. All profits are reinvested in the Harbour to encourage continued strong growth.

Figure (8) - Warrenpoint Harbour Profits, 2006-2016



Source: Warrenpoint Harbour Authority

5.1.4 Increased freight traffic – Harbour capitalises on Economic Corridor

Freight Throughput is a good indicator of Market Share in the port industry. Growth implies improved competitiveness; the entry into new, global markets and an attractiveness of the port's location. Warrenpoint Harbour clearly held all these traits over the last decade.

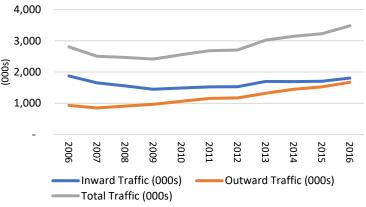
In 2016 Warrenpoint Harbour solidified its position as the second largest port in Northern Ireland, generating 3.48 million tonnes of throughput over the year. Between 2006 and 2016, Warrenpoint Harbour processed more than 10,000 vessels for a total weight in excess of 29 million tonnes. In this time freight tonnage grew at 2% annually.

The majority of freight through Warrenpoint travelled to and from British ports (82.7%) from 2006-2016. Most importantly, freight exiting Warrenpoint Harbour is almost exclusively bound for GB locations, accounting for 97% of total outgoing traffic in 2016.

Imports to the Harbour are much more varied in their origin, with direct imports accounting for 29% of total freight entering the Harbour in 2016. Of this, grain was the largest good to be imported, and has grown at a compound rate of 11% over the last 5 years. Demand for grain is a good indicator of the overall health of the agri-food sector, with the majority of incoming grain categorised as 'Animal Feed'.

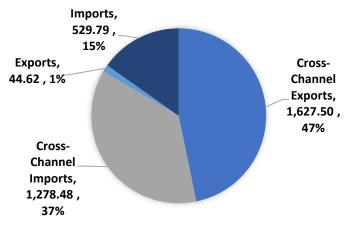
At nearly 300,000 tonnes, a 23% rise from 2015, grain inflows through the harbour are at their highest levels

Figure (9) - Warrenpoint Harbour Gross Tonnage Throughput, 2006-2016



Source: Warrenpoint Harbour Authority

Figure (10) - Warrenpoint Harbour Import/Export Breakdown (000s Tonnes), 2016



since before the global economic downturn, implying a confident sector. Closer analysis reveals this rise has come at the expense of Grain imports from UK suppliers. The share of UK based grain entering the Harbour has fallen from about 49% of total Grain imports in 2006 to just 7% in 2016. Brexit will test the resolve of such a trend, with Northern Irish farmers potentially forced to look closer to home for supplies.

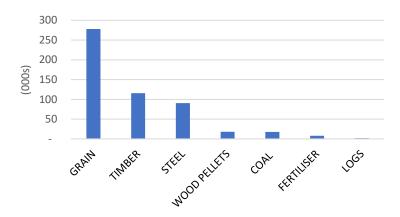
30% of lorry traffic is estimated to enter Warrenpoint Harbour and drive south of the border. This is a significant sum, likely due to a strengthening of the Euro in recent years, and solidifies assumptions made about Warrenpoint's southern linkages due to its location. Furthermore, Warrenpoint Harbour estimates that 60% of timber imports, 50% of steel imports and 40% of grain imports were transported to Rol customers in 2016.

Warrenpoint Harbour has helped act as a gateway to Northern Ireland's external sales market. More recently the port has seen a rise in cement leaving the harbour, which has increased in tonnage exported by more than 2500% since 2012. Cement leaving Warrenpoint is destined for London, where it is used in wider UK infrastructure projects, which in turn boosts the UK economy. The vast majority of this cement is supplied by the Quinn group, a NI-based firm.

The Harbour's reach in terms of exported goods goes well beyond scrap to Sweden and Ro-Ro/Containers to the UK. Donnell & Ellis Heavy Haulage ship aircraft parts to Canada via Liverpool, and crushers/screeners to multiple international locations in North and South America, and North Africa³. HMT, an indirect Harbour customer through Seatruck, have transported goods for major projects across the channel, including precast concrete for football stadia. Figure (14) illustrates the movement of goods exiting the harbour in 2016, beyond their official recorded destination of British Ports.

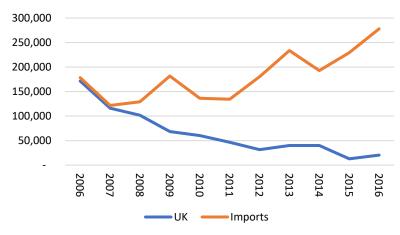
Ultimately, the Harbour's reach is primarily focussed around the British Isles, with its future growth mainly dependent on cross-channel and cross-border growth and trading patterns.

Figure (11) - Imports to Warrenpoint Harbour, 2016



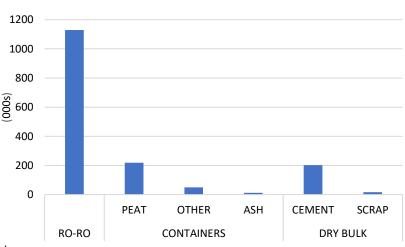
Source: Warrenpoint Harbour Authority

Figure (12) - Grain Inflows to Warrenpoint Harbour, 2006-2016

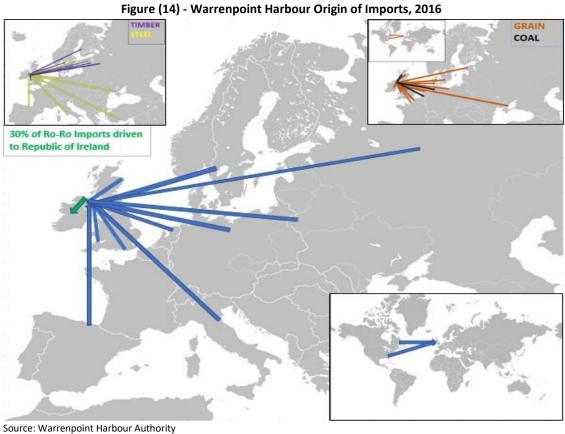


Source: Warrenpoint Harbour Authority

Figure (13) - Cross-Channel Exports from Warrenpoint Harbour, 2016

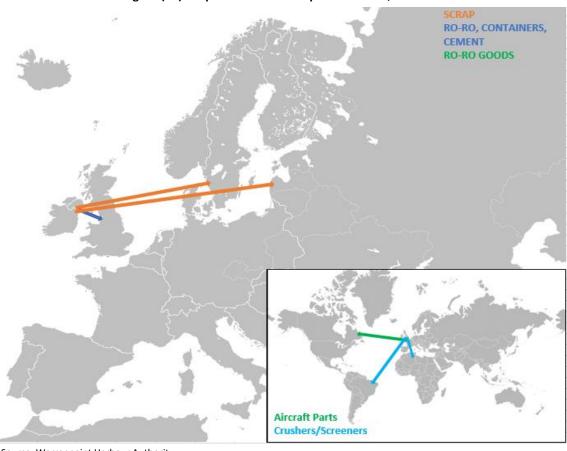


 $^{^{\}rm 3}$ Oral Evidence from Willie Donnell of Donnell & Ellis Heavy Haulage Ltd, 23/08/2017



our Authority

Figure (15) - Exports from Warrenpoint Harbour, 2016



5.1.5 Massive Throughput Value

While the freight throughput levels have served as a strong base for analysis of the port's GVA-generating business activities, an understanding of the wider impact of these activities requires a clearer view of the goods in transit through the Harbour. MDS Transmodal have provided a valuation of the goods moving through Warrenpoint Harbour using their own methodology and in-house World Cargo Database.

It was estimated that over £164 million of direct International Trade passed through Warrenpoint Harbour in 2016, £140 million of which was with the EU. Of these, the imports of Timber, Steel and Grain were the most significant, carrying total values of £75 million, £58 million and £25 million respectively. When the level of goods driven to and from the Republic of Ireland via the Harbour is considered, this number is even bigger.

Significantly, the majority of Timber (80% in 2016), Steel (90%) and Grain (85%) is imported from EU member states, with Russia (Timber), the US (Grain) and Ukraine (Grain and Steel) the exceptions. This naturally heightens the susceptibility of these goods to fluctuations in NI consumer demand, with their prices almost certain to have increased in the years surrounding Brexit. More than 60% of non-unitised freight was shipped to/from EU ports.

Figure (16) highlights the susceptibility of these goods to fluctuations in global supply and demand, with their frequency through the port much more temperamental than cross-channel Ro-Ro and containers. Timber and Steel, for example, are yet to be imported in their pre-crisis levels.

When including cross-channel trade, the increase in the value of goods through the Harbour is significant. Unitised Ro-Ro and containers carried an estimated £6 billion between NI and GB, with the total value of goods moving between Warrenpoint and Great Britain estimated at £6.03 billion. Cement was, as expected, the most valuable non-unitised cross-channel export in 2016, with an estimated value of over £15 million, the gains of which mostly accrued to Quinn's cement, a NI/RoI business.

300,000 250,000 150,000 100,000 50,000

Timber

Figure (16) - Warrenpoint Harbour Major Imports by Tonnage, 2016

Source: Warrenpoint Harbour Authority

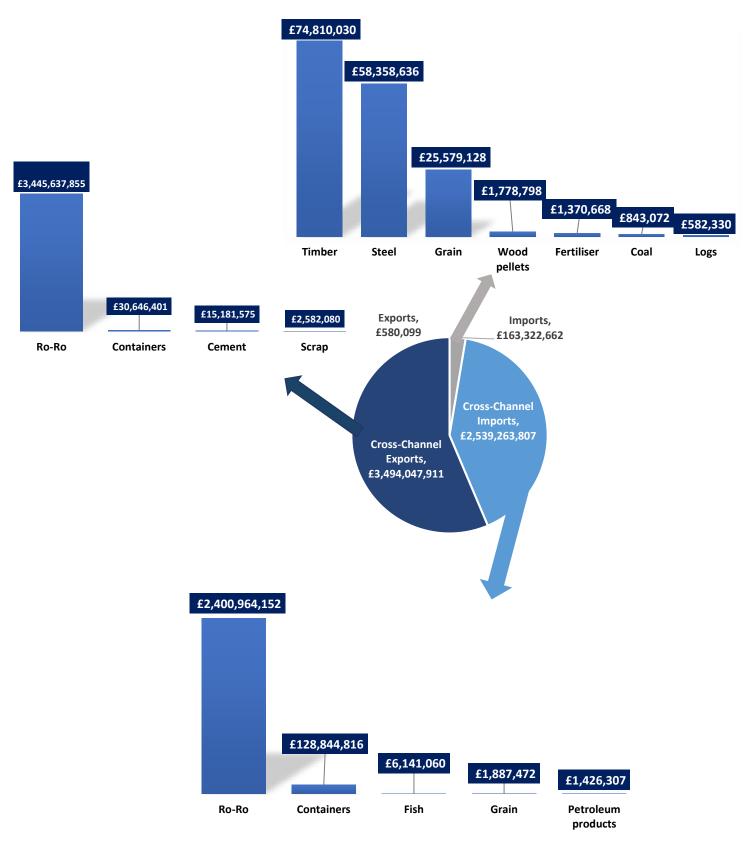
The importing of fish from Great Britain in 2016 was the most valuable non-unitised commodity in this category, at a valuation of over £6 million. A portion of this could be attributed to the local community. Fish caught by Warrenpoint fishers is often shipped overseas for processing, before being imported back into

Grain

Northern Ireland. Again, this indicates that investment by the Harbour Authority – in this case the Mussel Harbour project – is carried out with the benefits to the local community at the forefront of their decision making. It should be noted that imports of this variety are classified as liquid bulk, as opposed to fish.

The estimated value of goods highlights the point that the Harbour processes a number of goods which travel to and from various global locations, such is the difficulty of attributing the figure of £6.03 billion solely to British and Irish businesses.

Figure (17)- Value of Warrenpoint Throughput, 2016



Source: Tonnage provided by Warrenpoint Harbour Authority, Valuations calculated by MDS Tranmodal

5.1.6 Employment recovering to higher level

Employment levels suffered a dip in the Harbour following the economic crash in 2008, one which Warrenpoint has only recovered from in recent years.

Since 2006, employment in Warrenpoint Harbour has grown at a compound rate of 0.64%, above both NI (-0.06%) and Newry, Mourne and Down (0.19%).

The company now employs approximately 0.1% of the total Newry, Mourne and Down workforce.

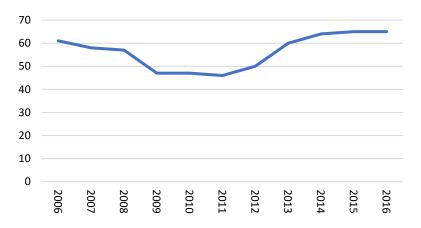
5.1.7 Wages above Council and National averages

Warrenpoint Harbour has established itself as a company that pays a strong average wage to its employees which, at nearly £27,000 in 2016, was £4,800 above the Newry, Mourne and Down average and almost £7000 above the national average.

Ports require high-skilled, streamlined labour to run operations, ensuring a high premium for Warrenpoint Harbour employees.

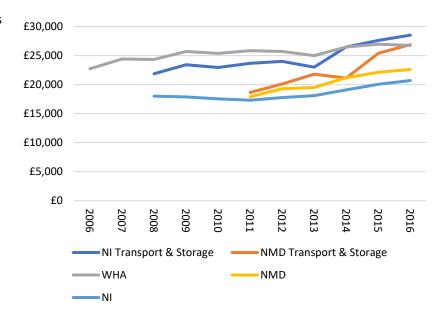
Despite this, 2016 represented a slight dip in their average wage from the previous year, and as a result has seen it fall slightly below the NI Transport and Storage Sectoral Average, in contrast to a 8-year average where Warrenpoint wages were 5% higher.

Figure (18) - Warrenpoint Harbour FTE Employment



Source: Warrenpoint Harbour Authority

Figure (19) - Warrenpoint Harbour Average Wage Relative to National, Regional & Sectoral Average



Source: Warrenpoint Harbour Authority

Note: Data for some variables available for limited number of years; included for comparison

5.1.8 Excellent levels of Productivity

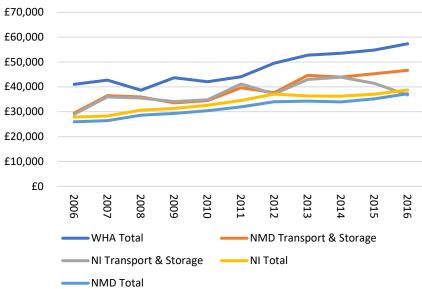
Productivity, or the amount of wages and profit generated per employee, is a key area of focus for firms and governments alike, and is strongly positively correlated with living standards.

One needs only to look at Warrenpoint Harbour's productivity levels for an explanation of their high average wage. Warrenpoint's GVA-per-employee, at £57,325 is more than £20,000 above Newry, Mourne and Down levels, and almost £19,000 above the Northern Irish average. Furthermore, Warrenpoint's productivity exceeds NMD and NI Transport and Storage Sector averages by £10,000 and £20,000 per employee respectively. Between 2006 and 2016, Warrenpoint Productivity was on average 35% higher than the comparative measures.

Productivity growth is used as a key indicator for whether businesses and wider economies are on

track for growth targets. The measure has been of

Figure (20) - Warrenpoint Harbour GVA-Per-Employee relative to National, Regional & Sectoral Averages



Source: Warrenpoint Harbour Authority, ONS Workforce jobs, Regional Accounts and UUFPC

Note: Productivity is measured as GVA-per-employee and is presented in nominal terms (not adjusted for inflation)

particular concern to the UK economy in recent years, making the Harbour's levels all the more impressive.

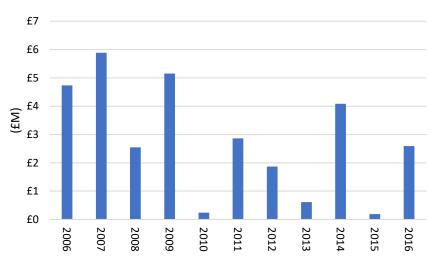
5.1.9 Sporadic investment

Following several years of investmentconstraining recovery, Warrenpoint Harbour has seen a promising increase in its fixed asset additions in 2016 - up to £2.59m from a 2015 low of £191,000. This, however, is still well off the frequently high investment exhibited from 2006-2009.

Additions have included new cranes and cement silos, as well as the development of Deep Water Quay and Ro-Ro projects, all of which have improved efficiency and freight throughput in the Harbour. Investment of this kind helps the Harbour adjust to wider changes in the NI export and import markets.

Such investment should help safeguard Warrenpoint against future economic

Figure (21) - Warrenpoint Harbour Fixed Capital Expenditure, 2006-2016



Source: Warrenpoint Harbour Authority

uncertainty, and strengthen its position as the second biggest port in Northern Ireland.

5.1.10 Cruise Tourism brings local and national benefits

Warrenpoint Harbour has played a key role in the development of tourism in the local community, most importantly by facilitating the entry of the first cruise ship to the Harbour, the Saga Pearl II, in 2014. Cruise Ships have been a boon to Belfast Harbour and the wider Belfast City Council in recent years, and Warrenpoint's movements in this area could be of great benefit to the Newry, Mourne and Down council area.

In addition to the charges the Harbour itself can levy on cruise ships, the wider economic benefits of passenger and crew disembarkation and expenditure come in the nature of shopping, planned tours and extra transport. These figures allow an estimate that the entrance of one small cruise ship to the Harbour results in £46,000 of expenditure and £18,000 of GVA to the NI economy.

These figures help explain the higher levels of growth in 2014 and 2016, and should encourage the Harbour to promote Warrenpoint as a viable alternative to Belfast in the cruise tourism market.



The Saga Pearl II (above) has docked twice in Warrenpoint Harbour in the past few years

5.1.11 Fiscal Impacts recovering

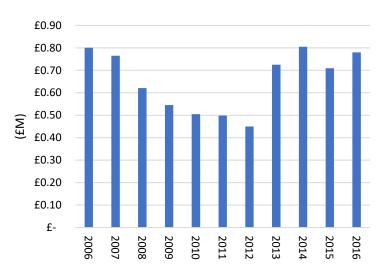
Warrenpoint Harbour has also provided significant direct contribution to the wider economy through taxation, which reached £780,000 in 2016, close to the 2014 height of £805,000.

Over the last decade, Warrenpoint Harbour has generated £7.2 million worth of taxes. Rates payments accruing to the NI Executive made up £260,000 (4%) of this total, with the remainder paid to HMRC. Such payments can be pumped back into the Northern Ireland economy to stimulate growth.

The ways in which tax was collected from Warrenpoint Harbour Authority can be split into:

- Corporation Tax
- Income Tax
- Employees' NIC
- Employers' NIC
- Rates
- Crown Estate

Figure (22) - Warrenpoint Harbour Tax Revenues, 2006-2016



Source: Warrenpoint Harbour Authority

Potential cuts to corporation tax in Northern Ireland may see Warrenpoint Harbour's contribution to the economy fall in this area. It is estimated that had Corporation tax been at the proposed 12.5% over the last 10 years, the Harbour would have saved more than £700,000, money which in the future could be freed up for extra capital investment, the hiring of more workers or subsidies for big, new business.

5.1.12 Local Labour Market Impacts

Warrenpoint Harbour provides employment opportunities to residents of varying skill levels in the local community. By growing a business that relies heavily on a local workforce, Warrenpoint Harbour can enjoy the ensuing benefits of social and economic development in Warrenpoint and Newry in the shape of increased direct and indirect GVA, income generation and community regeneration.

Of the 69 Full-Time Equivalent employees of WHA:

- 67 employees (97% of the total) live and work in the Newry, Mourne and Down District Council area (53 or 77% of them in Newry and Warrenpoint);
- 1 employee lives in Banbridge (1.5% of the total);
- 1 employee lives in Co. Louth, in the Republic of Ireland (1.5% of the total).

Among these employees, the average distance to work is just over 3 miles. It is therefore reasonable to conclude that the majority of wages Warrenpoint Harbour pays it employees are being spent in the local community. Such proximity of the workforce may also help to explain Warrenpoint Harbour's stellar productivity levels, as market failures including congestion are displaced.

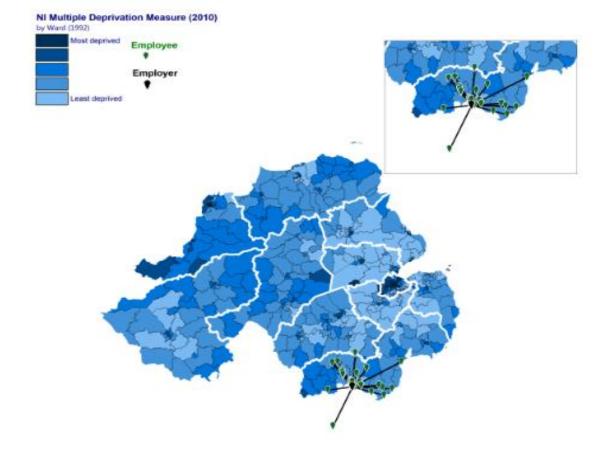


Figure (23) - Commute Distance for Warrenpoint Harbour Employees

5.1.13 Competitive Advantages of the Harbour

The impressive Direct Economic Impacts of the Harbour point to a series of competitive and strategic advantages that the port holds over rival ports, both North and South of the Border. The most obvious is the Harbour's ideal location on the Irish border along the thriving corridor between Dublin and Belfast. Acting as the preferred port to accommodate trade between the Republic of Ireland and Northern Ireland, and the rest of the UK, the Harbour is the first to benefit from exchange rate fluctuations which encourage trade in either direction, on either side of the border.

Investment by Quinn Cement in the Harbour's cement storage facilities has given Warrenpoint an added edge in this industry, and in the future, this may help it open up to the South's large manufacturing export economy.

5.1.14 Summary of direct economic impacts

Warrenpoint Harbour has a **significant direct economic impact**, generating £3.7 million of GVA, 65 full-time equivalent jobs, and £1.7 million of earnings in 2016. It made £5.3 million worth of turnover from its activities, while it has recently moved to increase its asset base through added investment.

Warrenpoint Harbour has continued to grow since the economic downturn of 2008/09, and 2016 exhibited a **record year for GVA, turnover, employment, productivity and freight traffic.** Over the last decade, the Harbour generated £29.6 million of GVA and created 620 years of employment.

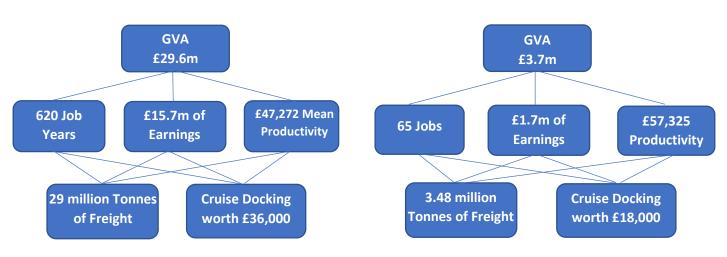
The Harbour's **trade linkages** are **mostly with the British Isles**, with outgoing freight mainly bound for GB locations. While this should provide some encouragement of a buffer against international trade shocks, the level of Ro-Ro in transit south of the border must be better understood following the UK's exit from the European Union.

The Harbour has displayed the potential economic impact of cruise tourism to the area, with each cruise ship estimated to generate a **potential £18,000** of **GVA** to the **NI** economy.

Whilst as a Harbour the company strives for an outward-looking approach to business, **the majority of their economic impacts are local**, with 97% of wages accruing to employees who both live and work in the Newry, Mourne and Down area.

Figure (25) - Warrenpoint Harbour Direct Economic Impacts, 2006-2016

Figure (25) - Warrenpoint Harbour Direct Economic Impacts, 2016



5.2 Indirect and Induced Effects

Warrenpoint Harbour also contributes to the local and national economy through expenditure on inputs of goods and services. Such purchases generate economic activity in the Harbour Authority's supply chain both through direct GVA contribution and job creation. Induced economic effects measure the jobs and GVA supported when those employed directly or indirectly through the Harbour's supply chain spend their wages on other goods and services. Using fiscal multiplier formulae adopted by the UUEPC, a figure can be obtained which shows the number of jobs and level of GVA generated indirectly from Warrenpoint Harbour's economic activity.

5.2.1 Strong National Supply Chains

Warrenpoint Harbour contributes a significant amount indirectly to the Northern Ireland economy through well-established supply chains, with £32.7 million (72%) of purchases coming from Northern Ireland from 2006-2016.

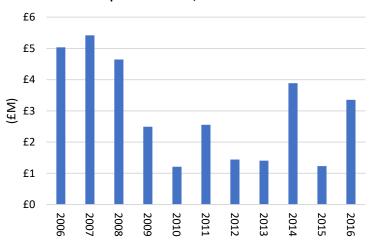
Great Britain has been the next largest beneficiary of economic activity in Warrenpoint Harbour, with a supply chain worth £10.9 million (24%). In addition to a trend of Irish companies passing freight through the Harbour, the Republic of Ireland also has the third largest supply chain expenditure by Warrenpoint (£1.12m or 3%). Germany, Denmark and Holland made up the remainder of the port's supply chain between 2006 and 2016 (1%).

It is evident that Warrenpoint's levels of capital expenditure and supply chain expenditure moved in tandem over the last decade. Such a relationship points to the fact that a significant sum of Warrenpoint's expenditure is on Harbour Investment.

Beneficiaries of this investment have included Ballynahinch-based Dawson Wam, who in 2014 worked to supply the Port with a 20,000-tonne capacity grain storage facility - a project worth in excess of £2 million. This was in addition to completion of a new mussel Harbour, helping the local community capitalise on what has proven to be a highly valuable fishing sector.

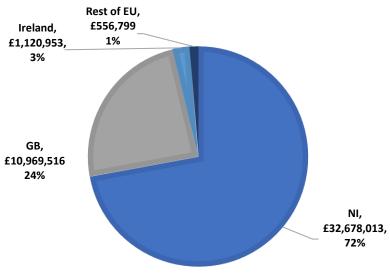
Evidently, the importance in engaging with and investing in local business is not lost on Warrenpoint Harbour, who have established themselves as an important cog in the NMD economy.

Figure (26) -Warrenpoint Harbour Supply Chain Expenditure in NI, 2006-2016



Source: Warrenpoint Harbour Authority

Figure (27) - Warrenpoint Harbour Total Supply Chain, 2006-2016



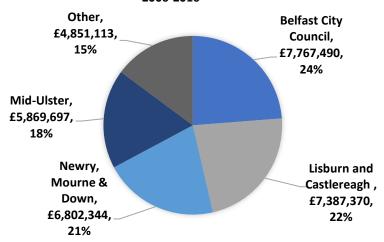
5.2.2 Diverse Local Supply Chains

Warrenpoint Harbour's national Supply Chain comprises an even distribution of Eastern Councils. This reinforces their importance as a middle ground between the Irish capitals.

Of these, Belfast City Council has the largest estimated supply chain link with Warrenpoint at a value of £7.8 million (24%) between 2006-2016.

Lisburn is the second largest contributor at £7.4 million (22%), while the Harbour contributed £6.8 million (21%) to the local Newry, Mourne and Down Council between 2012 and 2016. Mid-Ulster was responsible for £5.9 million (18%) of the supply chain, while the rest of the country's councils made up the final £4.8 million (15%).

Figure (28) - Warrenpoint Harbour NI Council Supply Chain, 2006-2016



Source: Warrenpoint Harbour Authority

5.2.3 Summary of Supply Chain Impacts

Overall, the impact of Warrenpoint's NI supply chain from 2006-2016 was to generate £15m of GVA and create 420 years of employment (equivalent to £1.5m of GVA and 42 jobs annually). The indirect multiplier effects are calculated as **1.7 for employment and 1.5 for GVA**.

This means that for every 10 jobs created at Warrenpoint, another 7 were created and for every £10 of GVA, another £5 was generated in the wider NI economy.

5.2.4 Downstream Wage Impacts

The downstream wage impacts (also known as induced economic impacts) measure the employment created and GVA generated when employees in the Harbour and in the Harbour's supply chain spend their wages in the wider economy.

The **overall employment multiplier is 2.5**, which means for every 10 jobs created by Warrenpoint, another 15 are created from employees of Warrenpoint and its supply chain spending their wages in the wider NI economy (Total of 25 = 10 direct, 7 indirect and 8 induced).

The **overall GVA multiplier is 2.1**, which means for every £10 of GVA generated by Warrenpoint, another £11 is created in the wider NI economy (Total of £22 = £10 direct, £5 indirect and £6 induced).

It should be noted that there are a great deal more than 65 workers operating in the Harbour each day. Lorry drivers, part-time staff – who generally fluctuate with demand – and employees of on-site businesses accrue their own wages which are also spent in the local and NI economy. While these figures cannot be added to the induced economic impact value, they are of relevance when understanding the economic reach of wider activity in the port. The Port's economic multipliers are all the more impressive given their relatively small direct economic impacts. This showcases the substantial wider economic impacts the Harbour produces, with its economies of scale, local and national influence, and high productivity levels allowing it to punch above its weight in relation to the NI and NMD economy.

5.2.5 Summary of indirect and induced economic impacts

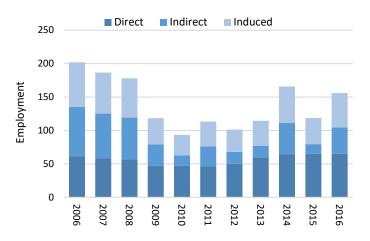
The overall economic impact of Warrenpoint Harbour is to create 2.5 jobs for every job created in the Harbour, and £2.10 of GVA for every £1 of GVA generated in the company.

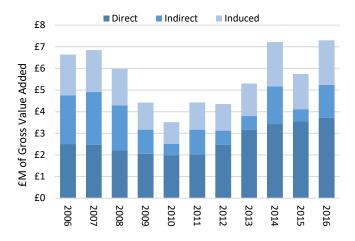
Since 2006, the company has generated £29.6m of GVA and created 620 years of employment in direct terms, which is estimated to have created a total impact of £61.7 million of GVA and 1550 years of employment in the wider NI economy.

Supply chain expenditure and capital investment, and in turn fiscal multipliers, were highest in the pre-crisis period. However, recent rises in turnover, employment and GVA should see Warrenpoint's national economic contribution improve going forward.

Figure (29) - Warrenpoint Harbour Direct, Indirect & Induced Employment, 2006-2016

Figure (30) - Warrenpoint Harbour Direct, Indirect and Induced GVA, 2006-2016





Source: Warrenpoint Harbour Authority

5.2.6 Harbour users and on-site companies

The harbour's economic importance extends beyond annual turnover and even beyond its direct and indirect effects on GVA and employment. As a facilitator of trade, the harbour plays a pivotal role for businesses in the local economy, and for those external parties entering the NI market.

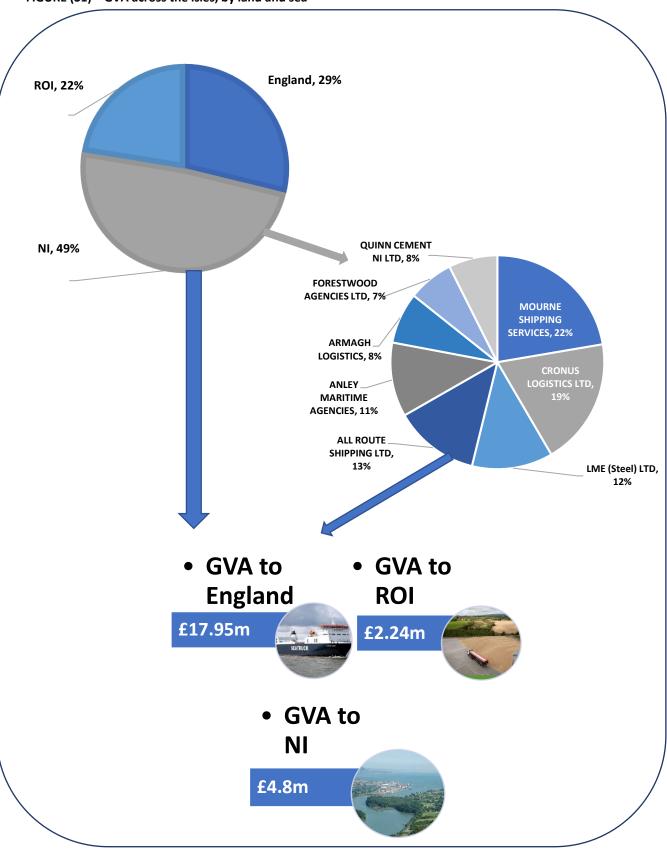
Warrenpoint Harbour encompasses 60 acres of land which, in addition to storing cargo, it leases for other companies to conduct their business. Cronus Logistics and Seatruck are among these companies, whose shipping businesses benefit directly from the convenience of their location on the Harbour. Seatruck in turn hire 42 employees in Warrenpoint, the majority of which also come from the local area, while Cronus have 28 staff members operating daily in the Harbour.⁴

Warrenpoint Harbour's top 10 customers in 2016 made up 89% (£4.75m) of their total business. The Harbour's top two companies – Seatruck and Comex McKinnon – are principally based in England and the Republic of Ireland respectively. In turn, the GVA contributions of these companies, totalling over £20 million, are accrued outside NI. The 8 NI-based customers in this list are mostly made up of shipping agents, contributing an estimated £4.8 million of GVA between them in 2016. They too act as facilitators of trade, whose GVA contribution, like Warrenpoint, lies more in indirect channels than indirect. In addition, HMT, a direct customer of Warrenpoint's biggest, Seatruck, have their base in Warrenpoint, a direct result of both the location of the Harbour and the placement of Warrenpoint half-way between Dublin and Belfast. Their activities required the employment of 40 workers in 2016. These considerations bring an estimate that there are between 150 and 200 people working in the Harbour on a day-to-day basis, most of whom are contributing to the NI economy through their own wage expenditure and tax contributions.

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⁴ Oral Evidence from Damien McGrath, 14th August 2017

FIGURE (31) – GVA across the isles, by land and sea



Source - Warrenpoint Harbour Authority, Seatruck Ferries, Comex Mckinnon, Companies House
Note - In absence of raw wage data, GVA contribution for some companies estimated using average

Note - In absence of raw wage data, GVA contribution for some companies estimated using average NI and NMD Transport and Storage wage data. Medium Sized companies operating under parent companies had their GVA estimated using wage data of the latter

5.3 Total Economic Impacts

The total economic impact of the Harbour was calculated by adding together the direct, indirect and induced impacts of the activity of the Harbour.

The total economic impact of Warrenpoint Harbour was to generate £3.7 million Of GVA and 156 jobs in 2016. Assessed over a 10-year period, these figures increase to £61.7 million Of GVA and 1550 jobs. These impacts are generated through supply chain purchases and as employees of Warrenpoint Harbour and its supply chain spend their wages in the wider NI economy.

Figure (27) illustrates the direct, indirect and induced effects of Warrenpoint Harbour's economic activity between 2006 and 2016. Figure (28) details the direct, indirect and induced economic impacts of Warrenpoint Harbour in 2016, in addition to a non-additive summary of goods passing through the Harbour, and of the Port's on-site customers, in 2016. As can be seen in section 5.2.5, the multiplier contributions to employment for Warrenpoint were highest when Supply chain expenditure was highest, while GVA multiplier effects appear to be growing with Warrenpoint's own substantial levels of GVA.

Figure (32) - Direct, Indirect and Induced Economic Impact of Warrenpoint Harbour, 2006-2016

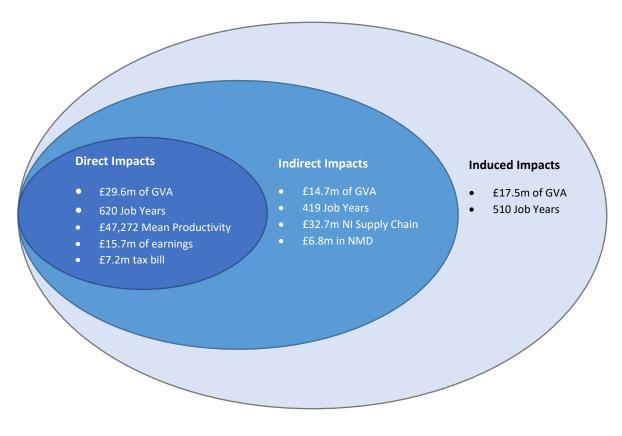
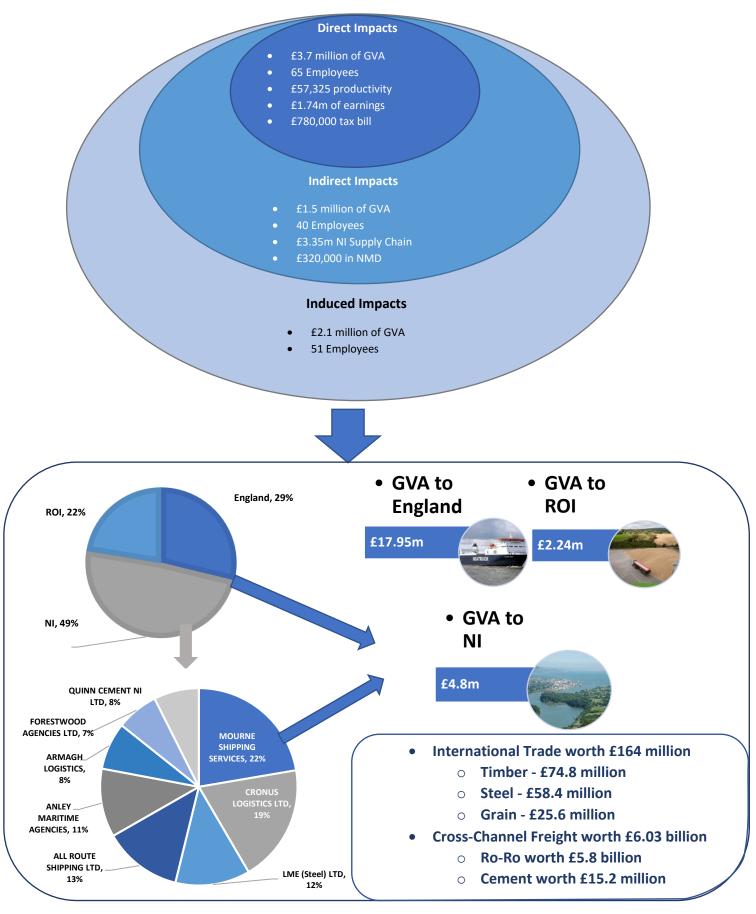


Figure (33) - Total Economic Impacts of Warrenpoint Harbour, 2016



5.4 The Future of Warrenpoint Harbour: Growth and Challenges

The years ahead in the Harbour generally reflect the outlook of the NI and UK economy as a whole. Much is dependent on the outcome of Brexit, with the importance of strong trading arrangements being established between the UK and the EU, and with other countries, important in order for both the NI Economy and Warrenpoint to thrive. Based on the UUEPC 'Central Scenario' – slower growth in the short-term as the UK exits the EU single market, followed by recovery in the early 2020s as new trading arrangements are put in place – NI external sales are projected to reach £37.4 billion by 2025. For the Harbour to keep pace with this growth, there must be a movement towards expansion in the port to deal with increased volumes of goods passing through the Harbour. Brexit will likely affect the planning of such operations, and an upcoming report assessing the impact of Brexit on the Port will aim to succinctly address these concerns.

Another challenge for Warrenpoint comes in the form of staying competitive against rival NI ports in the future. To achieve this, innovation is crucial. This should come most pressingly in the shape of a Southern Relief Road linking the A2 to the A1, in turn providing a more direct route for Freight entering and exiting the Harbour.

The nature of global economic cycles must also be considered by the Harbour, such is the cyclical nature of, for example, imports to the Harbour. These economic cycles impact on Warrenpoint's throughput, and subsequently their profitability and GVA contributions. Based on historical analysis, it would appear the Harbour is approaching a peak in its throughput cycle.

6. Social Impacts of Warrenpoint Harbour

Operating as a significant aspect of the local Newry, Mourne and Down economy, Warrenpoint Harbour carries important social responsibilities, which it has duly committed to and grown over the last decade. These responsibilities represent a broad base, encompassing commitment to preserving the local environment, investing in local schools and clubs, and providing support to local and national charities.

6.1 Health, Safety and the Environment

Harbours tend to bring negative environmental externalities to a community, with a broad belief that the boost they bring to the local economy – significant regarding Warrenpoint – outweighs these impacts. In spite of this, Warrenpoint Harbour Authority has continually strived for a well-maintained environment in the port, for the benefit of local residents.

6.1.1 Dust Migration

Warrenpoint Harbour Authority have been at the forefront of health and safety initiatives, most recently addressing local concerns about dust migration from port debris with the introduction of dust suppression and monitoring equipment. This was only achieved through the Harbour Authority carefully considering the needs of the local community.

6.1.2 Mitigation of Environmental Crises

Recent years have shown the port's commitment and readiness in responding to emergencies which may also affect the local community, namely an oil leak from a docking vessel in 2014, which was excellently handled by WHA employees.



Warrenpoint Oil Spill Cleanup, 2014

6.1.3 Fishing for Litter

Sea pollution is a growing problem and threatens not just the cleanliness of the Harbour Waters, but also the health of the local community and the profitability of the Harbour Authority. Warrenpoint Harbour are accordingly taking steps to address such an endemic problem in the port through the adoption of the 'Fishing for Litter' Scheme in the Spring of 2017.

This scheme has proved successful in Scotland and South-West England, where over 1000 tonnes has been collected by 380 participating vessels.⁵ Rubbish that would otherwise pollute the ocean can be quickly sorted and recycled where possible, ensuring a healthier Lough, higher-welfare fish and cleaner beaches.



6.2 Engagement in the Local Community

6.2.1 Schools and Clubs

The Harbour has engaged further with the local community through the hosting of school visits, of which there were 6 in 2016. In addition to local supply chain impacts, managers within the Harbour Authority have been key players in both the Young Enterprise Scheme with St Mark's High School and with Sentinus, a programme dedicated to enhancing the supply of STEM workers to the NI economy, demonstrating Warrenpoint's commitment to investing in the future supply chain of the local area.

Warrenpoint Harbour understands how the success of local sporting endeavours can lift a community and improve its national awareness. It has in turn provided strong sponsorship to the Warrenpoint Golf, GAA and football clubs.



St. Mark's High School Visit, 2016



Warrenpoint Football, GAA and Golf Clubs

-

⁵ Fishing For Litter, 2017

6.2.2 Tourist Activities

As well as the economic boost cruise ships have been found to bring to the area, Warrenpoint Harbour has encouraged the docking of tall ships, a direct benefit to the local community who can freely board and explore the vessels during their stay. In 2016, four tall ships docked in the port.

The Harbour has also played a role in boosting the popularity of local festivals, including Maiden of the Mournes and the Blues on the Bay music festival.



Stravos S Niarchos Docking, 2016

6.3 Strong charitable arm

Charitable causes form an important aspect of Warrenpoint Harbour's ethos, and present an opportunity for the port to exert its influence for a more egalitarian conclusion.

6.3.1 Mission for Seafarers

Warrenpoint has sought to accommodate the irregular working patterns of the employees of companies using the Harbour. These are felt most significantly by those returning from long journeys, notably Russia and the US. The Mission for Seafarers initiative has sought to provide a welcoming environment to these workers, who can get in touch with family members, sometimes for the first time in a number of weeks. This reflects the compassionate nature of those making decisions in the Harbour.



Mission to Seafarers Warrenpoint Centre

6.3.2 Carlingford Lough Sailability

The Port has a designated area for the Carlingford Lough Sailability Project, which seeks to provide those with disabilities in the local community with a recreational outlet that would otherwise be unavailable.

6.3.3 Numerous Donations

Where the Port itself cannot be used to aid causes, the Harbour instead has a fine record of charitable donations. Charities benefitting from such donations in 2016 included MacMillan Cancer, Cabbage Patchers, SAHS and the Warrenpoint Panto club, among many others.



Carlingford Lough Sailability

7. Summary of the Impact of Warrenpoint Harbour on NI

Warrenpoint Harbour has significant social and economic impacts, with a large local workforce bringing strong induced impacts to the Newry, Mourne and Down district council area. The company has exhibited strong growth in recent years to become the second biggest Harbour by freight traffic in Northern Ireland.

Figure (30) illustrates the total impact of the company during 2016. This illustration details the current economic and social contribution of the harbour, as well as the economic contribution of companies operating in the harbour.

FIGURE (34) - Economic and Social Impacts of Warrenpoint Harbour, 2016

Direct Impacts Indirect Impacts Induced Impacts £3.7 million of GVA **On-Site Business** £1.5 million of GVA 65 Employees **Social Impacts** £2.1 million of £57,325 productivity 40 Employees Total **GVA** £3.35m NI Supply Sponsoring local £1.74m of earnings Throughput 51 Employees Chain sport and school £780,000 tax bill worth £6.2 billion projects One Cruise Docking Environmental worth £18,000 International **Awareness** Trade worth Health and Safety £164 million Initiatives Harbour's top Mission for Seafarers customers **Charity Network** generate £25 million GVA

Source: Warrenpoint Harbour Authority

Warrenpoint Harbour Authority is a medium-sized company, which has worked tirelessly to increase the clout of Warrenpoint Harbour in relation to other Northern Irish ports over the last decade. In more recent years, this has been rewarded with consistent growth in baseline indicators, with **2016 representing a record year** for GVA, productivity, turnover, pre-tax profits and freight throughput. The value of Goods passing through Warrenpoint Harbour was estimated to be **£6.2 billion in 2016.**

Warrenpoint Harbour has a **significant economic impact**, particularly when its fiscal multipliers are considered. It employed 65 workers and generated £3.7 million of GVA in 2016. Taking the indirect and induced impacts into account, 1 job creates 2.5 jobs, and £1 of GVA generates £2.10 of GVA in the wider economy. In addition, the docking of cruise ships is a large direct boost to the local economy, while businesses on the Harbour contribute their own sums to NI employment and GVA figures.

The Harbour also provides **strong social contributions to the local community**. This occurs through several channels, from their sponsoring of local sport clubs, to the hosting of school trips and conscientious awareness of their environmental footprint. These contributions occur in addition to charitable work in the shape of the Mission for Seafarers, as well as health and safety initiatives.

Figure (31) expands the time analysis to 2006-2016, illustrating the total economic and social impacts over that time.

Figure (35) - Total impact of Warrenpoint Harbour, 2006-2016

Direct Impacts Indirect Impacts £29.6m of GVA **Induced Impacts** £14.7m of GVA **Social Impacts** 620 Job Years £17.5m of 419 Job Years £47,272 Mean Productivity Sponsoring local £32.7m NI GVA £15.7m of earnings sport and school 510 Job Years Supply Chain £7.2m tax bill projects £6.8m in NMD Cruises worth £18,000 per Environmental docking Awareness Health and Safety Initiatives Mission for Seafarers **Charity Network**

8. Glossary

- Gross Value Added (GVA) The contributions of a region or enterprise within that region to a
 country's overall GVA growth. National GVA is thus calculated by adding together the GVA
 contributions of said enterprises in that economy. In this case, Warrenpoint Harbour's GVA was
 calculated by adding Operating Profits and Depreciation (EBITDA) to gross wages.
- Productivity Productivity is calculated by dividing the total GVA of a company by its number of
 employees. Accordingly, another way of expressing productivity is by referring to it as GVA-peremployee.
- Cross-channel exports/Cross-channel imports Imports and Exports that are cross-channel in nature refer to trade that passes between Warrenpoint Harbour and Great Britain ports. This is a term used by WHA to distinguish between imports and exports as calculated by official statistics (eg. NISRA). It should be noted, however, that cross-channel trade encompasses trade between a number of nations, and not only between Northern Ireland and Great Britain.
- Transport & Storage Sector Throughout, local and National Transport & Storage data is used for
 comparative measures. This is because Warrenpoint Harbour Authority is listed under the Transport
 & Storage Sector, which gives the best broad comparative measure of Warrenpoint's headline figures,
 such as average wages and productivity.
- Fiscal Multipliers The total economic multipliers for the Harbour (2.1 for GVA and 2.5 for Employment) are calculated using a UUEPC methodology and NISRA input-output tables. Fiscal multipliers can vary depending on the research method, however the UUEPC's approach is considered the strongest under scrutiny. For example, the Knowledge Economy, a high-tech, high-wage sector, generates multipliers below 2. This therefore accurately depicts the wider economic impact of the Harbour.
- On-site business as 'additional impacts' On-site business describes the economic activity of companies using the Harbour, as well as those with premises there. While previous studies have included this business in the fiscal multiplier calculations, it is not possible to determine which if any business is dependent on the existent of the port. The research has accordingly differentiated the business the port facilitates from the business it creates.
- Ro-Ro and Lo-Lo Ro-Ro describes roll-on/roll-off freight, which is freight transported on lorries, while Lo-Lo refers to load-on/load-off freight. Both encompass various commodities, and are categorised as 'unitised traffic'. This type of traffic has the biggest difference between gross and net tonnage, such is the weight of accompanying containers or lorries, and is the most difficult to analyse due to the confidentiality with which shipping agents treat this cargo.
- Value of Goods MDS Transmodal independently carried out a valuation of cargo through the
 Harbour in 2016. For non-unitised cargo this was broadly dependent on world commodity prices,
 while unitised freight contained different values based on whether it was exiting or entering the
 Harbour, with incoming freight valued according to customs data of UK-ROI trade and outbound
 freight attributed partly to customs data and partly to specified commodities listed by Westland
 Horticulture.