

# THE LIVERPOOL - HUMBER OPTIMISATION OF FREIGHT TRANSPORT PROJECT



**The LHOFT (Liverpool-Humber Optimisation of Freight Transport) project is an ambitious, Innovate UK funded project that uniquely brings together key stakeholders in the unitised freight industries with the aim of establishing an East-West freight transport corridor in the north of the UK. This corridor will link Liverpool in the West to the Humber port complex in the East. This will deliver several anticipated advantages from a cost, environmental and resilience perspective for businesses operating in the north of the UK. It will also contribute to alleviating congestion in the southern UK ports and the North-South transport corridors.**

The current dominance of North-South traffic flows in the UK is underpinned by the capacity and frequency of the south eastern services. Both ships and Eurotunnel provide a “safe option” which drives existing North-South flows; although this routing implies more cost and delays for Northern businesses and contributes to the sustained congestion in the southern regions.

To change this requires a paradigm shift achieved through investment and collaboration; there is an increasing necessity to share an agenda among freight generators and movers, across all modes, in parallel to an informed political narrative, predicated on a detailed understanding of the current challenges, opportunities and their impact on the UK economy.

The collaboration through the LHOFT consortium, deploying freight owners, port operators, service providers, technical consultants and academic institutions has created a unique mechanism to engage key industry stakeholders, political leaders and statutory bodies to outline a detailed picture of the current state of play while developing entrepreneurial, cross-sector and cost effective solutions. The partnership has positioned itself to capture both current freight flow data of manufacturing industry leaders and sector insight into the modal specific challenges. This capacity, and with the ability to synthesise existing freight data through its academic resource are producing a detailed picture of the potential within a developed East-West axis in England's North.

Increasing demand and diminishing capacity within the UK intermodal infrastructure necessitates significant change. The requirement for equitability is now paramount, reinforcing the need for a focussed East-West strategy. Transport network capacity is identified as a prevalent issue, the saturation of the M62 is emerging as a significant threat to business resilience for those utilising the corridor as a land bridge between Ireland and Continental Europe. Rail network capacity represents an equally fractured transport infrastructure in the North, compounded by competing demands of passenger and freight transport.

Current bottlenecks within rail infrastructure in major city regions represent a significant challenge to intermodal operations, compounded further by inconsistencies across the network; the absence of diversionary routes in Greater Manchester that are present in Leeds and an inability to move modern high cube containers beyond Doncaster (on a westerly routing) shape planning decisions to route freight via congested roads to the south and midlands. Additional pressures of driver shortages compound the already fragile nature of optimising freight movement.

While the LHOFT suite of products intends to provide tangible resources for cargo movers and owners alike, it offers a cohesive narrative to support decision making and strategy behind future investment. Its current understanding of the rail specific challenges in an efficient East-West axis can support the thinking of the Williams Rail Review in balancing passenger-freight priorities and the TfN reforms for improved corridor connectivity. The LHOFT insight has the capacity currently for evidence led infrastructure development and an opportunity to expedite a critical mass of early adopters/ users.

Supporting the freight infrastructure knowledge the LHOFT consortium is developing are industry led, cross-sector designed solutions for cargo owners and movers. The LHOFT platform, in response to industry data represents a safe and iterative process to facilitate collaboration. The current climate is understandably one of caution, predicated on the uncertainty of Brexit. The output is strategy based on an anticipated heightened risk; commissioning of logistics support through a short-term lens and operating in isolation. The Brexit factor is significantly motivating an interest in an alternative to existing and dominant North-South freight flows, while a climate of risk aversion impacts on ability to actualise this.

The LHOFT platform offers a forum through which cargo owners can visualise and share freight flow data, encouraging collaboration to optimise the movement of cargo. As an iterative platform, manufacturers retain control of their data, increasing the extent to which it is revealed with potential collaborators when the opportunity for synergistic working is identified. Its effectiveness is built on the granular data that powers the platform, offering real time freight routes and exponentially growing in value as the user uptake increases. The capacity for commercially effective collaboration is front and centre of the platforms design, representing in industry specific response to de-risking logistics planning and the absence of a current market-leading tactical tool.

For cargo movers, in a heavily legislated industry and operating within a constricting marketplace, it represents an opportunity to benefit from their clients longer-term position, challenging the trend of short-term commissioning cycles. The increasing requirement for hauliers to invest in their fleets to ensure ‘clean air zone’ compliance can be offset through mid and long-term contracting. The increasing focus on green logistics both legislatively and by manufacturers reinforces the challenges hauliers must increasingly navigate.

A fundamental departure point for the project is that shorter land-based (road) journeys and longer sea bound journeys are beneficial from an environmental, cost and congestion perspective. Therefore it is preferable for northern based suppliers and consumers of goods to import and export through northern ports which are closer to them, even though this may result in longer sea journeys. Shippers are clear that there is a preceding requirement for capacity to deliver and reload vehicles efficiently, utilising a robust East-West land bridge with strong intermodal options prior to the significant capital investment of additional maritime routes.

The LHOFT project acknowledges, through a demonstrable evidence base, the challenges facing all stakeholders within the unitised freight industry. Despite the many shared obstacles, there is an appetite to develop the East-West corridor and establish “another way” of undertaking business. The absolutes which caveat this ambition are to ensure “no reduced service, no increased costs and reduced CO2 footprints”. The shadow being cast by Brexit and the anxiety of the unknown and “almost certain Customs bottlenecks” reinforces further the value of rebalancing intermodal traffic flows. Through industry insight, integrated with political influence, LHOFT is developing the road map for the required infrastructure developments, reformed maritime routes and the platform to connect industry stakeholders for future economic and environmental success.



The LHOFT Project - Liverpool - Humber Optimisation of Freight Transport uniquely brings together the combined strength of major cargo owners, major shippers and key port operators to combine with technical experts and academic institutions to develop an end-to-end journey model that promotes the diversion of trade from long distance North-South road routes to ports on the East and West of the country. This project is driven at identifying the most efficient route for cargo travelling through UK ports by examining Northern ports, the associated rail, road and canal and maritime routes and the cargo requirements.

The ambition is to reduce UK land transport of 100 million miles of freight transport annually, reducing congestion and Co2 emissions and increasing congestion at southern ports and across the existing East-West freight corridor. The unique collaboration, supported by Innovate UK is led by P&O Ferries and includes a wider consortium of:

DB Cargo UK  
GBRail Freight  
Kraft Heinz  
Lancaster University  
Nestlé  
Oxford Rail Strategies  
PRB Associates  
SMSR Ltd.  
Unipart  
University of Hull  
ZipAbout

Additionally, the consortium benefits from on-going and specialist industry insight through an active Reference Group of circa thirty unitised freight stakeholders; comprehensively representing the industry and its associated supply chain. The LHOFT consortium draws on their independence, experience and expertise of logistics, shipping, port operations and haulage.