



### Industrial, Freight and Logistics

INNOVATIVE SOLUTIONS FOR POLICY,
DESIGN, PLANNING AND MANAGEMENT OF
COMMERCIAL LOGISTICS



### Freight and Logistics underpin everything that we do

We understand that the success of the UK is dependent on the efficient movement of goods, services and people. The UK economy relies on freight and logistics to construct, supply and service our towns and cities in a sustainable way. At Stantec, our knowledge, skills and experience cover all modes of freight transport (road, rail, water and air) and we are at the forefront of the latest thinking on key issues, such as consolidation, kerbside management, construction logistics and last-mile logistics.

There are a wealth of potential factors that will influence supply chains and urban logistics in the future. The scale of influence and what this means for the industry will be borne out in time. However, several key factors appear to be almost certain demand for goods and services will increase associated with increased population, urbanisation and more e-commerce. Competition, within retail and changing consumer behaviours post pandemic, is in turn pushing suppliers and hauliers to continuously review their proposition and provide more delivery options and higher service levels to customers. Technology across all areas, the use of data and machine learning will continue to improve, proliferate and disrupt the industry and open the door to less traditional and more innovative forms of delivery.

Operating models and supply chains will change and adapt and there will be a greater need or requirement for collaboration and consolidation in all its forms. Plus demand for logistics space in urban areas will continue to increase and require innovation solutions.

The scale of impact will vary from sector to sector. Business to business (b2b), business to customer (b2c), couriers, manufacturing, construction, and others will all be influenced in one way or another by one or more of the factors and the pace of change has never been higher due to technology. A few perhaps lesser-knowns at the moment would be just how easily and quickly autonomous zero emission delivery vehicles will materialise—human input may still be necessary to complete final delivery and how well can different land uses such as residential and logistics be mixed and be accepted by the public.

One thing that will remain consistent no matter what is that freight and logistics and the movement of goods and services will continue to underpin the economy and support how the UK functions. Through our freight and logistics work at Stantec we are working with our clients to develop plans and strategies to prepare, provide for and pro-actively manage all types of delivery, servicing and construction logistics activity. In turn helping them rise to the challenges of this fast changing and critically important industry.

### Our services

### Commercial land development

We help to develop land for commercial use and provide multi-disciplinary advice and design, supporting mixed-use developments especially in urban regeneration and strategic urban extensions. Our experience in the delivery of commercial and industrial development in cities and regions where the government is investing coupled with our indepth knowledge makes us a market leader in this sector. Advances in technology are continually transforming the way we work which calls for a more innovative approach to creating flexible office space. From our work on the Colindale Office in Barnet to the award-winning Green Park business park in Reading, our commercial projects include the refurbishment of office buildings on prominent sites, expanding

usable space, and optimising site opportunities to maximise value.

### Planning and consents

We provide advice and support in the delivery and implementation of consent for commercial and

industrial infrastructure projects.

Our team provides support across all project phases for a range of consenting regimes including TCPA, Hybrid Bills, TWA and DCO. Services include project management, planning, environmental and transport impact assessment, public and technical stakeholder engagement.

### Buildings

We were founded on providing consulting and engineering services within the built environment. Our approach has developed to focus on creating sustainable, profitable and resilient schemes for our industrial and logistics clients. We understand the importance of building performance, its impact on whole-life cost and its contribution towards sustainability objectives.

### Freight and Logistics

The UK is dependent on the efficient movement of goods, services and people. The UK economy relies on freight and logistics to construct, supply and service our towns and cities in a sustainable way.

Our knowledge, skills and experience cover all modes

of freight transport (road, rail, water and air) and we are at the forefront of the latest thinking on key issues, such as consolidation, kerbside management, construction logistics and last-mile logistics.

### Policy and Strategy

We understand the complexity of supply chains, and the delivery, servicing and waste management needs of different land uses. Safe and efficient construction logistics practices are also a key priority for us. We develop and implement freight and logistics policies, strategies and plans as well as deliver specific initiatives and schemes.

We are well connected with the freight and logistics industry and work closely with them during our projects. Our freight and logistics team are recognised as experts and we help our clients, both public and private, understand and solve their freight and logistics issues.

We have worked with clients to help develop and implement freight and logistics policies, strategies and plans ranging from strategic regional reviews through to assessing specific interventions and

actions.

### **Deliveries and Servicing**

Building on our policy and strategy work, Stantec has considerable experience and knowledge of delivery, servicing and waste management requirements for all land uses and business types and regularly produce Delivery and Servicing Plans (DSPs) for clients.

We are also at the forefront of the development and implementation of the latest initiatives including consolidation (in all its forms), retiming deliveries and utilising data to help vehicle routeing and efficiency.

### **Freight Consolidation**

Freight consolidation is a concept that has existed within the freight and logistics industry for a long time and means the action or process of combining a number of goods into a single more effective or coherent whole. It has then evolved to become an initiative that primarily looks to improve delivery

efficiency in an urban context.

The ways in which consolidation can occur are numerous and Stantec has in-depth experience and knowledge of consolidation in all its forms. This ranges from dedicated consolidation centres to procurement based solutions to virtual consolidation between carriers and implementing locker banks. We carried out a pan-London freight consolidation feasibility study Transport for London (TfL) considering different consolidation models and how they could be delivered.

The findings shaped policy development for the TfL Freight and Servicing Action Plan and the London Plan.

### **Construction Logistics**

We are industry leading construction logistics consultants with experience of projects ranging from major infrastructure schemes such as Tideway – developing and implementing logistics strategies, through to undertaking research into industry practices and producing Construction Logistics Plans (CLPs) – both area wide and site specific.

We are well connected and work alongside the construction industry to ensure our work reflects the latest thinking, but also the day-to-day reality of the sector and gives our clients the best possible outcomes.

### Consolidation in all of its forms

Consolidation Centre (CC)	Receiver Led Consolidation	Operator Led Consolidation	Delivery Point Consolidation
High street CC	Upstream consolidation between suppliers / retailers  Procurement-based consolidation  Storage-based consolidation  Out-of-hours deliveries	In-house consolidation operations Virtual consolidation between carriers	Locker banks
Shopping centre CC			Collection points Unattended delivery boxes Waste / recycling consolidation
Micro-CC			
Construction CC		Primary distribution consolidation	
Hospital CC			
Office CC		Freight exchange systems	

### Our industry networks

### **Professional organisations**

We are members of and contribute extensively to professional organisations such as the Institution of Civil Engineers, the Transport Planning Society, the Chartered Institution of Highway and Transportation, The Design Review Panel, CIHT, ACE and the Clean Growth Network.

### Contributing to local networks

Our people are active members of a wide network of regional organisations in your local commercial markets such as local Chambers of Commerce, property forums and the Forum for the Built Environment.

### Supporting the commercial and logistics industry

Stantec deliver master planning, buildings, transport and environmental solutions that deliver sustainable project outcomes and make a positive impact our clients in the industrial and logistics sector.

### CPD Events

We partner with fellow professionals and institutions to host webinars, masterclasses and Continued Professional Development (CPD) sessions, both online and in person.





### Who we are

Stantec is a top tier global consultancy. We have worked with our clients and communities in the UK for over 150 years.

We are consistently been at the forefont of planning, design and delivery of infrastructure and development in the UK.

With offices across the UK, Stantec has a strong reputation for its work with public and private sector clients on a diverse range of high-profile infrastructure and development projects.

### Global reach. Local presence.



### Stantec in the UK

**OUR PEOPLE IN NUMBERS** 

1700

INFRASTRUCTURE, BUILDINGS, WATER and ENERGY

**250** 

ENVIRONMENT and SUSTAINABILITY SERVICES

160

TRANSPORT PLANNING

40

**PLANNING SERVICES** 

200

**CIVIL ENGINEERING** 

**95** 

BUILDING STRUCTURES and UTILITY SERVICES

### Who we are

### Communities are Fundamental

Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

The Stantec community unites approximately 25,000 employees working in more than 350 locations across six continents. We collaborate across disciplines and industries to bring buildings, energy and resources, environmental, and infrastructure projects to life.

We're designers, planners, engineers, scientists, transport specialists and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

#### Our Core Values

Our core values unite us as a firm: we put people first, we do what is right, we are better together, and we are driven to achieve.

Our commitment to the health and safety of our people and to being ethical underpins our values and strengthens everything we do. We truly are better together; great things happen when smart people get together and are guided by their imaginations and ambitions to achieve real-world goals. We aim to support our clients at every stage their energy transition.

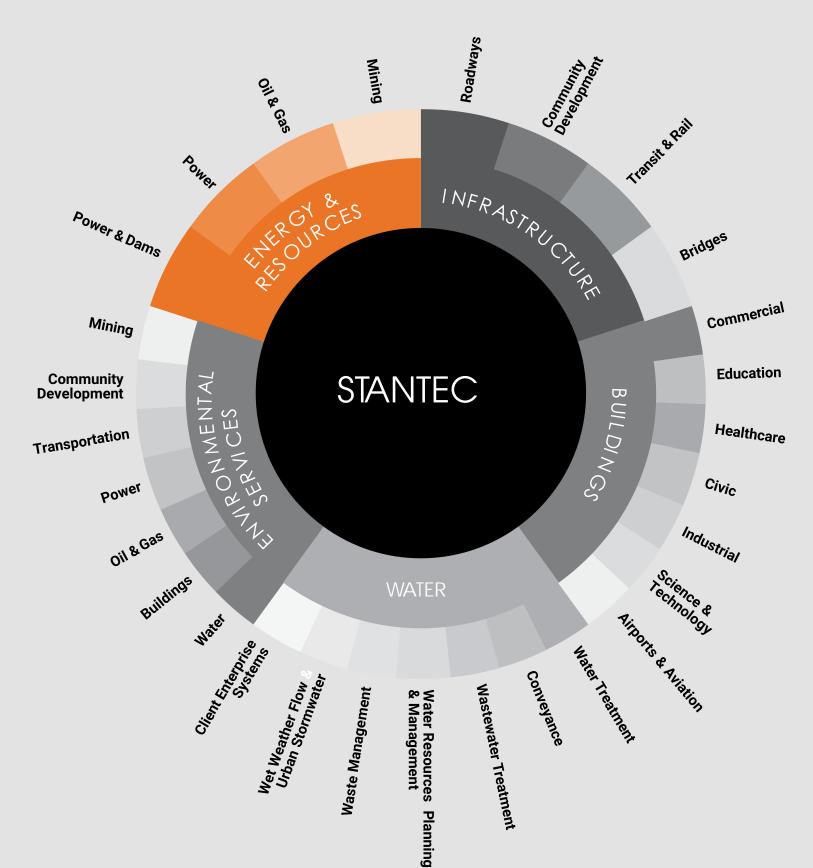
Reducing air pollution by increasing the use of electronic vehicles requires a significant increase in charging infrastructure. Stantec is at the forefront of planning and designing for the zero- emission vehicles. Our approach involves using digital tools and space more effectively, reducing costs, and optimising production flows.

### Local Delivery, Global Expertise

At Stantec, we strive to exceed your expectations by fully comprehending your needs, interpreting them in creative and cost-effective ways, and by providing superb service and responsive follow-up regardless of location. How do we achieve this?

We start by bringing in the right staff at the right locations—driving lower-cost, higher quality, and more timely reporting to deliver best value services.

Our integrated team will provide the best of both worlds: global knowledge and understanding coupled with a local appreciation for your unique needs, resources, and constraints—informing the project's agenda from the start and delivering the advantage of local solutions.



### Our experience

# Daventry International Rail and Freight Terminal

STANTEC WERE COMMISSIONED BY PROLOGIS UK LTD TO HELP SECURE DEVELOPMENT CONSENT ORDER APPROVAL AND TAKE THE PROJECT TO EXTEND THE EXISTING DIRFT WAREHOUSE AND DISTRIBUTION PARK THROUGH TO CONSTRUCTION PHASE.

Daventry International Rail and Freight Terminal (DIRFT III) will have over 8million square feet of rail served distribution space and is located just of J18 of the M1, just 4 miles from the M1/M6/A14 interchange with access to the National motorway network. DIFRT III has been categorised as a Nationally Significant Infrastructure project with a projected employment of over 9,000 people and projected value of £1 billion. The site will be served

by 32 trains per day and have the capacity to handle over 500,000 containers p.a.

Stantec is involved in the design and development of the key strategic infrastructure works (A5 rail bridge, infrastructure works on the A5 and the A5 weir works which include the CBT flood attenuation scheme). The A5 Weir Works form part of the critical works which allow the rest of the development to go ahead. Within Lilbourne Meadows Stantec have been involved in the regrading of the Clifton Brook Tributary along with the design of an 875m flood mitigation bund which forms part of the wider flood mitigation scheme. Our Geotechnical, Hydro, Utilities, Civils and Structures team collaborated to design and provided support for the Weir Works phase of the project. This comprises of the realignment and regrading of the Clifton Brook, replacement and realignment of two concrete culverts and accommodation works for private foul water rising main. The Utilities team also provided further support new gas, electric and telecoms installations. Stantec had a major role in obtaining technical approval from HE / Aone+ on the structural, Geo and Civil elements of the scheme as well as flood defence consents. We managed the project with emphasis on communication and liaising between all the key external project team stakeholders and parties involved including Aone+ and Highways England; The Environment Agency; Lead Local Flood Authority (Bedford Group of IDBs); Northamptonshire County Council and other designers and consultancy firms. Stantec have taken care and consideration when looking at the lighting, ecology, waste reduction, community engagement and heritage of the site. Examples include LED auto control and movement sensors to creation of new habitats for local wildlife to preservation and re-instalment of the Queens Inauguration stone marking her visit 60 years ago.





### Data Centre, Slough Trading Estate

STANTEC HELPED SECURE TWO SEPARATE FULL PLANNING CONSENTS FOR TWO DATA CENTRES WITH PRE-LET AGREEMENTS IN PLACE WITH A UNITED STATES DATA CENTRE COMPANY WHO ARE MAKING A SIGNIFICANT INVESTMENT IN SLOUGH AS IT OFFERS KEY LOCATIONAL ADVANTAGES INCLUDING POWER AVAILABILITY, FIBRE BROADBAND AVAILABILITY AND SECURITY ALL OF WHICH HAVE RESULTED IN THE SLOUGH TRADING ESTATE BECOMING THE SECOND LARGEST CLUSTER OF DATA CENTRES IN THE WORLD.

The permissions delivered two purpose-built Data Centres totalling in excess of 29,000m² of floorspace Both developments involve the reuse of brownfield land and will provide employment and economic benefits during the construction and operational phases, including a total of 136 operational jobs and the generation of a total of £1.7 million of Business Rates per annum. Stantec were commissioned to provide transport, air quality and civil engineering services in the project.



### SEGRO V-Park Leigh Road

STANTEC WORKED WITH OUR CLIENT ON THE NEXT PHASE OF THE EVOLUTION OF THE SLOUGH TRADING ESTATE TO ACCOMMODATE AN ANTICIPATED 50 – 70 SME OCCUPIERS AND ALMOST 400 JOBS. LOCATED ON A REGENERATED BROWNFIELD SITE AT THE CENTRE OF THE SLOUGH TRADING ESTATE AND TRANSFORMING INTO WHAT WILL BECOME THE TALLEST BUILDING AT THE TRADING ESTATE.

SEGRO V-Park Leigh Road will provide over 117,000 sq ft of high-quality workshop and studio space. The building will feature meeting rooms, co-working areas as well as a wide range of amenities, including a café and welfare facilities for showering and changing. The building will feature a green roof, solar panels to generate power, more than 10 per cent of car parking spaces with electric vehicle charging, rainwater harvesting, green living walls and the Trading Estate's first micro forest. Stantec were commissioned to provide transport, air quality, noise and civil engineering services in the project.

# A1(M) SOUTH LONDON A1139 EAST A1(M) NORTH

### Peterborough Gateway

THE PETERBOROUGH GATEWAY
DEVELOPMENT COMPRISES OF 4M FT2 OF
WAREHOUSE AND DISTRIBUTION FLOOR
SPACE, WHICH IS NOW FULLY OCCUPIED
BY A NUMBER OF HIGH PROFILE MULTINATIONAL COMPANIES.

Stantec has undertaken transport modelling and assessment work, preliminary and detailed design of strategy highway and drainage infrastructure, and the detail design of offsite highways works at Fletton Parkway Junction 1 and A1(M) Junction 17.





STANTEC PROVIDED TRANSPORT PLANNING GUIDANCE TO THURROCK COUNCIL, WORKING COLLABORATIVELY WITH NATIONAL HIGHWAYS AND THE PORT OF TILBURY AND LONDON GATEWAY TO AID THE DEVELOPMENT OF THE OPTIMAL PROPOSALS FOR THE LOWER THAMES CROSSING.

Our planning team ensured the project met the objectives of National Highways and the Department for Transport whilst reflecting the needs of the local authority and helping to preserve the aspirations of the ports and freeport.

In parallel, we advised on the transport aspects of the emerging Local Plan and the co-ordination with the proposed Lower Thames Crossings and the implications of the construction process for the new route. We also considered the wider freight and logistics needs of the hinterland in particular focusing on future requirements including logistics land development, fuels and traction (electric and hydrogen) and technology trends such as 5G roll out and connected and autonomous vehicles.



# Aston Martin warehouse and logistics

STANTEC WAS APPOINTED TO DELIVER A NEW WAREHOUSE AND LOGISTICS FACILITY FOR LUXURY CAR MANUFACTURER, ASTON MARTIN.

Stantec provided CAT B Fit Out, External Lighting Design, Energy Appraisal and Energy & Thermal Modelling. The new facility is the company's largest storage and distribution base in its 102-year history. Located in Wellesbourne, Warwickshire, it has created 40 jobs and will support the future expansion of the business. Running to almost a quarter of a million square feet of storage, operations and office space, the facility functions as a centralised warehouse for supplier deliveries and provides a steady stream of production critical materials for use in Aston Martin's global manufacturing base at Gaydon. The warehouse space is 225,000 sq ft including 3,600 sq ft of staff accommodation at ground floor. Offices of 3,529 sq ft at first floor with 154 parking spaces. The site has secured a 'Very Good' BREEAM rating.



## IPECO Holdings Ltd

STANTEC PROVIDED CONCEPT DESIGN FOR BUILDING SERVICES AND DUE DILIGENCE FOR THE STRUCTURE ELEMENT OF IPC'S NEW MANUFACTURING HALL.

The site is located adjacent to Southend Airport

– the fastest growing airport in Europe – and just
moments from major road and rail connections, the
scheme is unmatched in terms of connectivity.

IPECO is the world's leading aircraft crew seating manufacturer and a growing supplier of aircraft galley inserts to many of the world's top airlines. The Company also holds a significant market share in supplying executive jet cabin seating to the business aviation sector.

IPECO employs nearly 800 staff of which approximately 600 are based on the Ipeco campus in Southend on Sea, comprising six buildings in Aviation Way. The new facility will allow IPECO to amalgamate its extensive manufacturing operations under one roof and to restructure other activities to generate more efficiencies. The new manufacturing unit is to be occupied by local employer IPECO, a leading manufacturer in cabin crew and executive passenger seating for commercial airlines. The building provides approximately 12.000m2 of manufacturing space.



## Theale Distribution Centre

STANTEC ARE A MEMBER OF THE TEAM CURRENTLY DEVELOPING THE PROPOSED SPECULATIVE DISTRIBUTION CENTRE FOR MCKAY SECURITIES ON A "BROWNFIELD SITE" IN THEALE, WEST BERKSHIRE, CLOSE TO JUNCTION 12 ON THE M4 MOTORWAY.

The development comprises a large (121,440ft2) distribution warehouse with offices (12,990ft2) and plant room to the front elevation and loading docks (standard and double height) and service yard to the eastern elevation. The building structure is a three-

span portal frame steel structure with curved rafters spanning 32m and intermediate internal columns at 16m centre. Clear height within the building is a minimum of 14m so as to provide maximum flexibility for internal use for any prospective tenants while the ground floor slab has been designed for an institutionally accepted imposed load of 50kN/ m2. Due to the difficult ground conditions (soft fill and alluvium over gravel deposits on top of chalk) in combination with a high water table and a flood zone from the nearby River Kennet, both the superstructure and internal ground slab will be piled, the ground slab being traditionally reinforced for quality reasons. External paving will largely be reinforced concrete construction graded to provide the required onsite flood compensation volume but also built over underground tanks required for attenuation of surface water run-off from the almost totally impermeably surfaced site. The project achieved an "Excellent" BREEAM rating.

# Infinium Logistics Hyperlocal Logistics Hubs

STANTEC IS SUPPORTING INFINIUM LOGISTICS, A GLOBAL LOGISTICS SOLUTIONS BUSINESS, TO BRING TO MARKET HYPERLOCAL LOGISTICS HUBS IN CENTRAL LONDON LOCATIONS WITH THE AIM TO ROLL OUT THE CONCEPT ACROSS THE UK.

The hyperlocal logistics hubs are multi-functional and situated in urban areas including ultra-low emission and clean air zones. They can offer cargobike parking and charging, e-bike and mobility charging, dark stores (e-fulfilment operations) and first/last mile exchange points.

Each hub can be shared multi-user or client-specific and are designed to get users closer to their customers, giving greater flexibility and making deliveries more sustainable. Which is key given the ever-increasing parcel volumes, faster delivery time expectations and additional vehicle requirements the logistics industry is facing. Our team supported Infinium Logistics through the planning process helping to secure permission for several central London logistics hubs. This included locations within a number of underutilised retail real estate facilities providing 1,000-4,500sqft of logistics space.

Unlocking the potential of these sites helps address the on-going issue of the lack of available land for logistics operations and helps achieve the policy aims of the GLA, TfL and the London Boroughs.





# Grid Smarter Cities Kerbside Appraisal

STANTEC WERE COMMISSIONED BY
GRID SMARTER CITIES TO UNDERTAKE A
BENEFITS APPRAISAL OF THEIR SUITE
OF DIGITAL KERBSIDE MANAGEMENT
PRODUCTS – KERB CONTROL, KERB
DELIVERY AND KERB CONSTRUCTION.

The goal? To understand how these products can create a dynamic manageable asset for the benefit of both kerb users (service and delivery companies) and kerb owners (local authorities).

Stantec assessed the kerb products using the Department of Transport's Transport Appraisal Guidance. As part of the assessment a range of parameters and metrics were defined such as delivery slot duration, kerbside capacity and kerbside demand. These assumptions were then used to examine the performance of the products in different urban settings and to compare costs.

Our research demonstrated that better management of the kerbside could bring a wide range of economic and financial benefits to delivery operators and road users by reducing the need for vehicles to circulate whilst looking for a safe space to make a delivery – which in turn helps reduce causes of congestion and emissions and makes delivery operations more efficient.

#### **FINDINGS INCLUDED:**

- Kerbside management helps to ease congestion, reduce impact on the environment and air quality, and improve safety on the capital's roads
- A kerbside management scheme in London has the potential to reduce CO2 emissions by 15,000 tonnes per annum - equivalent to removing 12,600 cars off the road
- 21 per cent more deliveries could be enabled with improved operational efficiency for freight operators
- Drivers would not face the hassle of finding safe and suitable kerbside locations to park - saving 3 million hours in wasted delivery driver time per annum across London
- A kerbside management scheme could reduce freight, servicing and delivery kilometres by 20 million per annum in London
- London boroughs could introduce Electric Vehicle charging infrastructure at locations for 'graze' charging
- A kerbside management scheme could generate up to £140 million in revenue for London per annum



# Ayrshire Freight Strategy Business Case

### DEVELOPING A BUSINESS CASE FOR THE FUNDING DELIVERY OF THE AYRSHIRE FREIGHT STRATEGY ACTION PLAN

Following approval of the Ayrshire Growth Deal Prospectus, the Ayrshire Councils required a strategic business case (SBC) to provide a case for funding delivery of the Ayrshire Freight Strategy Action Plan—they commissioned Stantec to develop it.

Our team was brought on to examine aspects related to movement and management of freight in and through Ayrshire and developed a regional freight strategy to efficiently guide freight around and to and from the area. We considered project constraints that would require careful monitoring and management throughout the lifespan of the scheme. We then defined a series of investment objectives and specified a range of benefits associated with the implementation of the Action Plan.

The Economic Case considered a range of scenarios and examined the benefits and impacts of each before appraising them against the investment objectives. We then set out an indicative timescale for the action plan to measure implementation and considered funding options and economic and fiscal outcomes, before recommending options considered worthy for further appraisal and evaluation.

We delivered an SBC in accordance with the Ayrshire Growth Deal Strategic Business Case: Five Case Model template as well as the HM Treasury Green Book principles and methodology.

We provided a concise and evidence-based case demonstrating the economic benefits associated with more efficient freight operations delivered as part of the Strategy.



### Water Freight Planning

IMPROVING AWARENESS OF THE BENEFITS OF WATER FREIGHT OUR TEAM HAS BEEN AT THE FOREFRONT OF THE RESEARCH, PLANNING, AND DELIVERY OF PROJECTS THAT PROMOTE WATERBORNE FREIGHT TRANSPORT FOR OVER 10 YEARS.

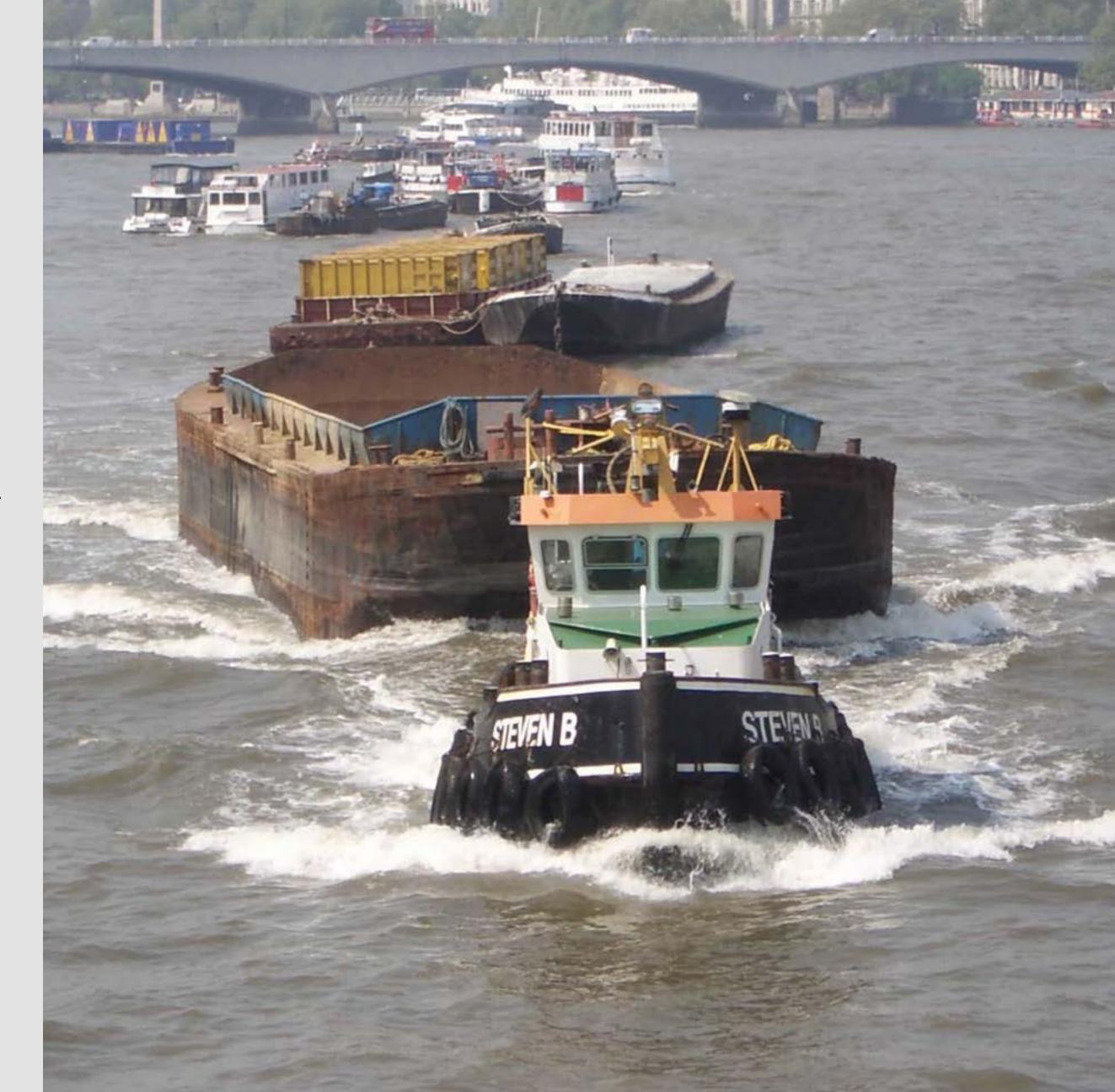
We are regularly called upon to provide advice to developers, contractors, and planning authorities seeking to promote or assess the movement of goods including construction materials to and from development sites by water.

The Thames Tideway Tunnel is a major new sewer for London. The width of three London buses, the 25 kilometre interception, storage and transfer tunnel will be up to 67 metres below ground. It will be the largest sewer upgrade since Victorian times. Stantec is proud to be working on this Nationally Significant Infrastructure Project.

During the eight-year construction period some eight million tonnes of spoil and materials will require transportation on and off-site. It involves 24 construction sites across London, 11 of which are located along the river bank. The project requires

that the potential impacts on the transport network, users, the environment and local residents are minimised. Stantec were central to developing the project's overall Sustainable Transport Strategy, Freight Strategy and River Freight Strategy. This included analysing the costs and benefits of using the River Thames for moving materials by water.

To date the project has successfully transport over five million tonnes of material by river which has resulted in some 500,000 fewer lorries movements on London's road network with associated benefits in road safety and air quality and helping achieve the aims of climate change and decarbonisation agenda.



# Airbus Wings - Priority system

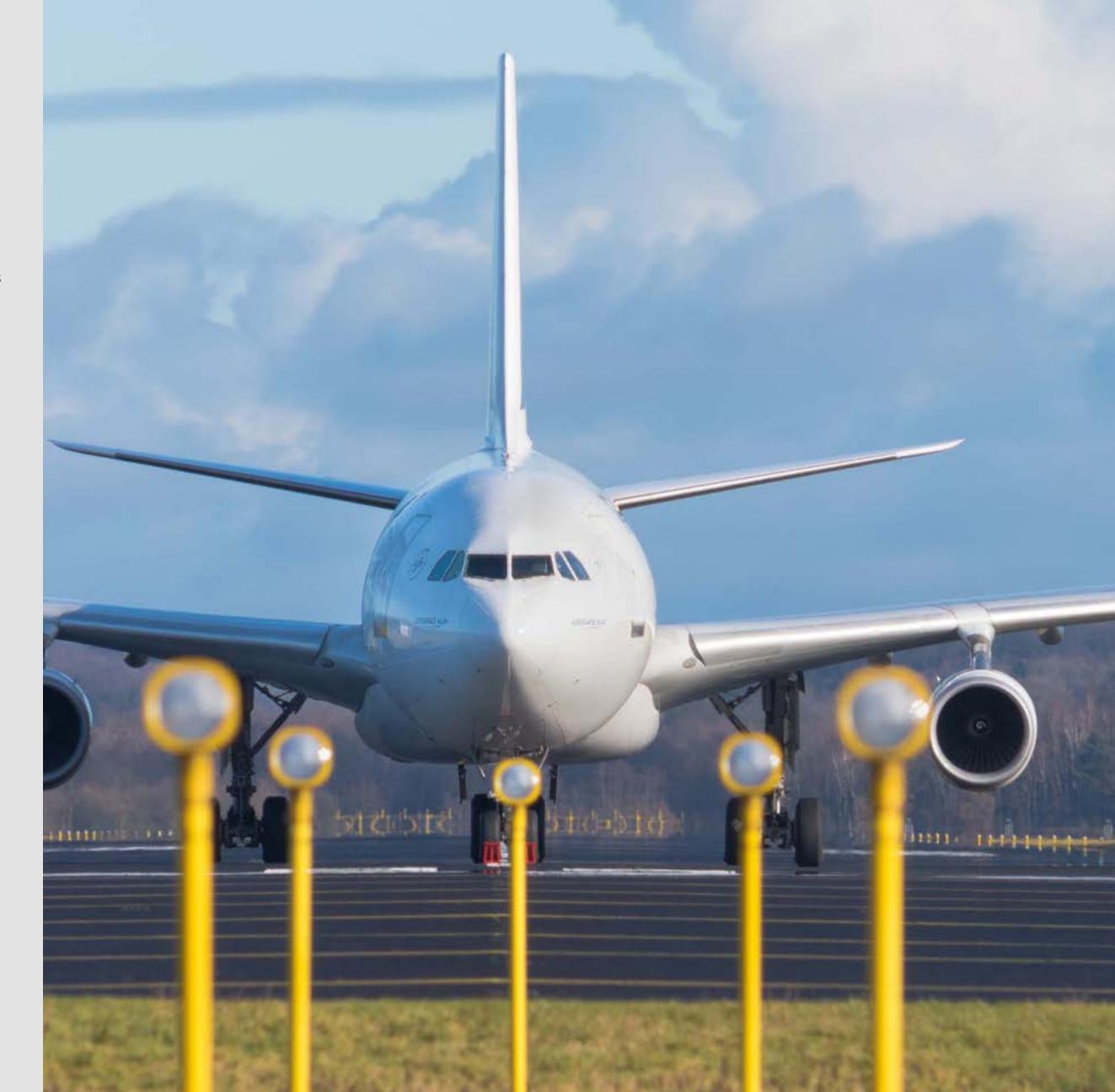
### AN INNOVATIVE TRAFFIC SIGNAL PRIORITY SYSTEM AND OPERATIONAL PROTOCOL

How do you move Airbus A400M wings—6 metres (20 feet) by 30 metres (98 feet)—from a manufacturing plant in Filton to the Portbury docks in Avonmouth? It might only be a 15 minute drive for most people, but it's a lot more complicated with the considerable length of the transport vehicles and the security requirements around the very high value loads. The large convoy had to remain moving and together at all times through a significant number of traffic signal intersections, which would require very long green signal times.

We took an innovative approach from the start, using lidar scanning to map the route and identify required infrastructure changes. We worked with the client and local authority to understand each stakeholder's needs before developing a specification, and we collaborated with the technology supplier to develop the preferred solution.

That solution? Active RFID tags in each of the vehicles in the convoy which connected to smart roadside sensors to hold the green light until all convoy vehicles had passed through.

Between the RFID tags and our operational protocols for the haulage team, we helped ensure that the plan would get the convey where it needed to go efficiently and securely. We produced a detailed design package and functional specification, and we were involved in tweaking the solution onsite to calibrate the desktop study findings.



# Industrial Land and Transport Study

### ANALYSING HOW THE RELEASE OF INDUSTRIAL LAND FOR HOUSING AFFECTS LONDON'S TRANSPORT NETWORKS, IN THE CONTEXT OF THE LONDON PLAN

In recent years, industrial land in London has been increasingly re-allocated for housing development, given the demand for housing in the capital. This has potential impacts on London's transport networks as economic activity is displaced to other locations in and around London, creating a potential cause for concern. As a result, Stantec was commissioned to study issues surrounding transport and industrial land sites and how they could be addressed.

The study consisted of analysis of the economic activity taking place at London's industrial land sites, the transport intensity of these activities, and the relocation behaviour of those who have moved from industrial sites.

It also examined connectivity to determine where these industries could best be located and the potential impacts of different land use allocations on London's key transport corridors—the purpose being to provide a commentary around the many issues raised by this land use policy.

This desk-based analysis used a combination of GIS and model outputs from the London transport models and was supplemented with consultation with the freight sector to determine the key issues as seen from those operating out of industrial land sites.

The resulting report was published on the Greater London Authority website as part of the London Plan (a key strategic planning document) evidence base.



# Research and Analysis of Options for Ferry Freight Fares

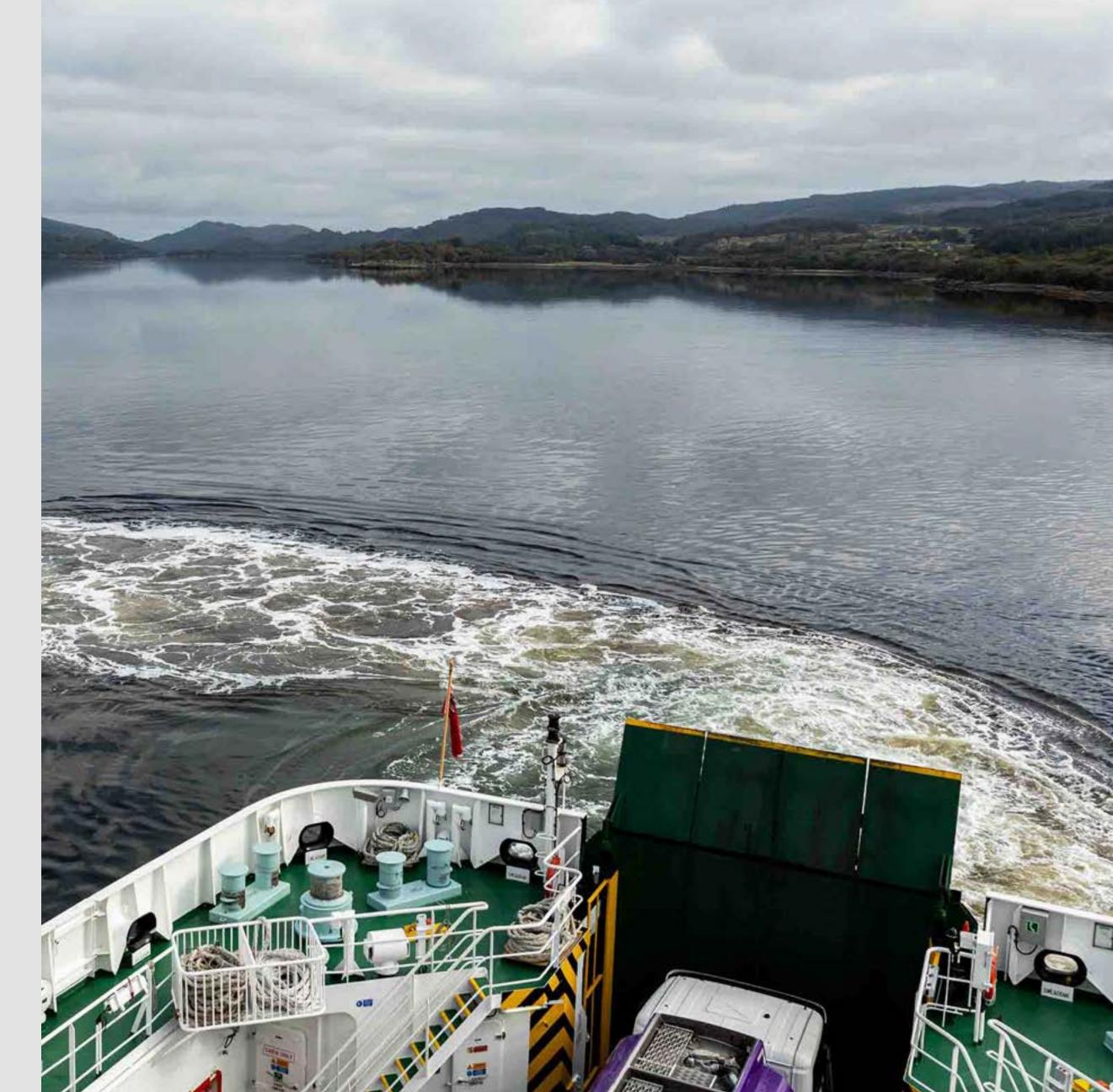
### REVIEWING FREIGHT FARES ACROSS SCOTLAND'S LIFELINE FERRY NETWORK

Fares for commercial vehicles carried on Scotland's lifeline ferry services are set by operators or through contracts tendered by Scottish Government. The range of fares, discounts, and surcharges has developed over time and are not consistent. We were appointed to review of these fares and assess the impact of adopting a range of more consistent regimes across the country.

The goal? To deliver a new fare structure that is simple, transparent and does not advantage one part of the network over any other part—it also needs to balance the wellbeing of communities against the public sector cost. We reviewed current practice in Scotland and internationally to learn lessons from elsewhere.

Transport Scotland then set a range of appraisal criteria as follows: acceptability, affordability, consistency, sustainability, and transparency and simplicity. Several options were developed based on fixed and distance-based fare elements, and for each island the implied current and future fare was derived.

We consulted operators, stakeholders and industry bodies and a shortlist of options emerged. The findings fed into an ongoing review being undertaken by Scottish Ministers and a final decision on the future arrangement for freight fares.



# A40 St Clears to Haverfordwest Economic Activity & Location Impacts Study

SETTING OUT IMPROVED ROAD TRANSPORT CONNECTIVITY COULD BENEFIT THE PEMBROKESHIRE ECONOMY IN THE WAKE OF A MAJOR LOCAL ECONOMIC SHOCK

We were appointed by the Welsh Government to analyse the case for improvements to the A40 between St. Clears and Haverfordwest in west Wales, where the road reduces from dual to single carriageway. This study followed the announcement of the closure of the Murco oil refinery in Milford Haven and the need to provide an economic stimulus for the area.

Our study included connectivity analysis, a baselining exercise, consultation with key stakeholders and a business survey, the outcomes of which were used to assess the likely economic and employment impacts of road improvements on Pembrokeshire. This included analysis of the distribution of economic impacts and of net additional impacts at the Welsh level generated in part by addressing a perception that Pembrokeshire is 'far away'.

These impacts were framed within a set of transmission mechanisms which set out the logic of how improving transport connections to the area could bring benefits. Although Welsh Government appraisal guidance (WelTAG) based, the study drew on the Economic Activity and Location Impacts analysis developed in Scotland.

Our study findings were used by Welsh Government to progress road proposals in this corridor, improving connectivity to this part of south west Wales.

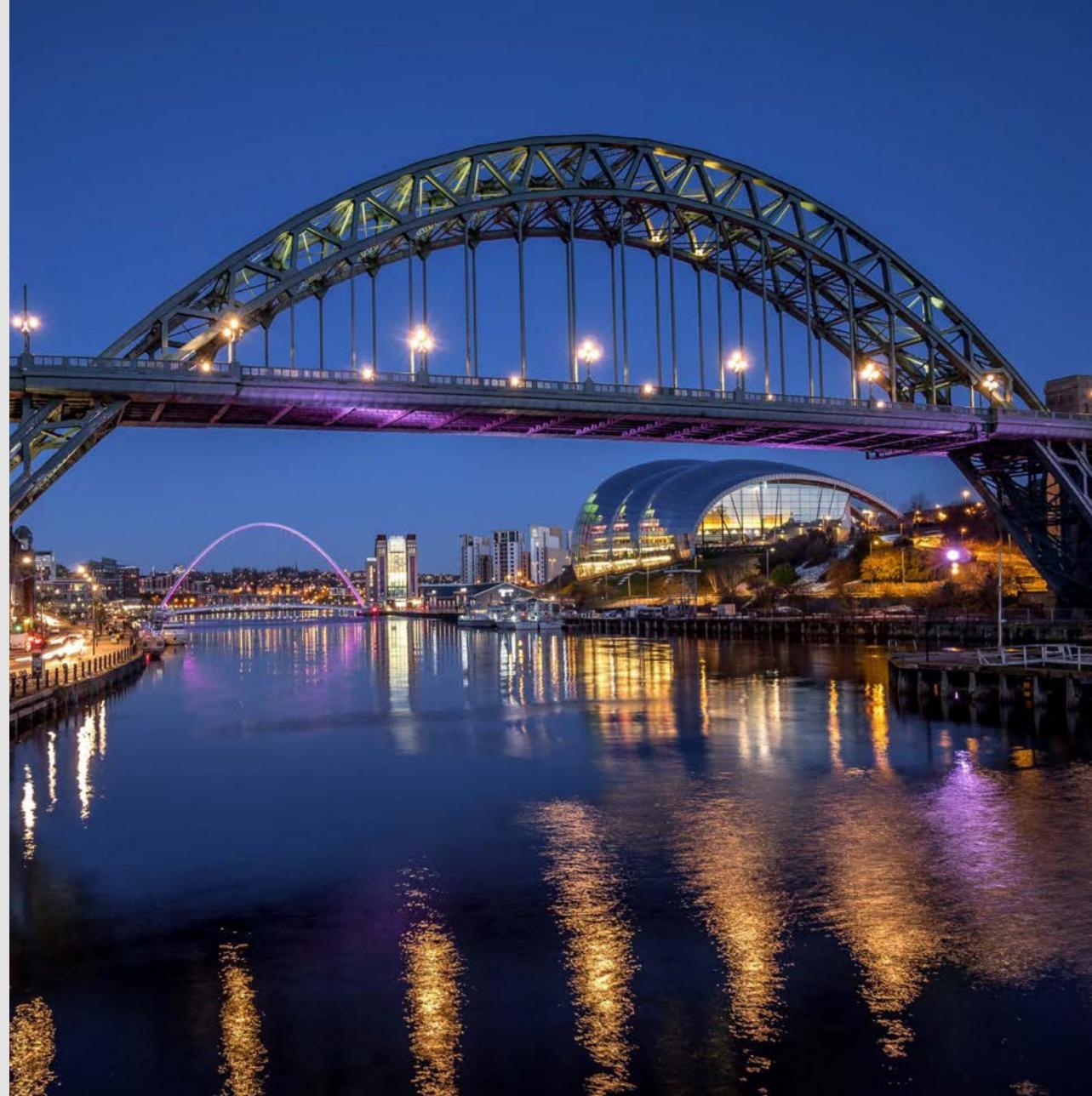


### River Tyne North Bank Study

THE NORTH BANK OF THE TYNE IN NORTHEAST ENGLAND IS A VITAL TRADING GATEWAY TO NATIONAL AND GLOBAL MARKETS. OFFSHORE WIND, OIL AND GAS.

Stantec, with Knight Frank, Ryder Architecture, Location Connections, and Investment Monitor, was commissioned by North Tyneside Council (NTC), Newcastle City Council (NCC), and the North of Tyne Combined Authority (NTCA) to develop an Economic Prospectus for the area, developing a detailed evidence base, strategic narrative and supporting infrastructure, skills and other development actions to support investment along the North Bank of the River Tyne. To understand the North Bank's current and emerging opportunities, Stantec's team analysed relevant industrial and property markets and their prospects (energy, offshore wind, oil & gas, related manufacturing, waterfront leisure etc).Our engineers examined the area's transport, utilities and river infrastructure to make sure proposals and prospects were set in a practical context for delivering improvements, in each case examining prospective demand against infrastructure capacity. Throughout, we worked closely with the North of Tyne's key authorities, the Port of Tyne, the area's main businesses as well as its key skills and education providers.

Altogether involving some 35 organisations, Stakeholders discussed four strategic themes (Innovation, People & Enterprise, Growth Infrastructure, and Place) in collaborative working sessions to develop and agree objectives and priorities for investment. Three related Economic Conversations were hosted by Stantec and the team. The work assessed the potential of some 22 different projects and actions to promote and enhance the River Tyne's position as an international hub for innovation for energy transition and create at least 4,000 new jobs, supported by a portfolio of new investment sites while also creating opportunities for local people to access training, re-skilling and new, higher value employment along the river. It identified opportunities to improve the North Bank offer. Infrastructure works to improve river and quayside facilities and accessibility are core interventions to unlock future economic opportunity along the Tyne. The availability of accessible riverside sites with quayside frontage will underpin the River Tyne's strong and competitive investment proposition, at the same time helping maintain the offer for existing businesses. Physical works will be complemented by strengthened skills, promotion and investment support to enable the growth of existing businesses and attract new business investment to the cluster. The Economic Prospectus is a working and readily updateable tool our clients can use to help attract investment, deliver infrastructure which anticipated changing technology and the move to Net Zero, and which encourages the North Bank's continuing economic growth to take forward the identified projects and actions. Our work has already resulted in the establishment of the Tyne Taskforce covering all four Tyneside authorities as well as the Port of Tyne and other stakeholders.



#### **SUSTAINABILITY**

We envision a world where infrastructure gives back, water is protected, natural systems are valued, biodiversity is prioritised, nothing gets wasted, development is responsible, everyone can access renewable energy, and society is just. By living our corporate values—we put people first, do what is right, are better together, and are driven to achieve—Stantec plays an active role in creating sustainable communities.

Though our efforts to provide a sustainable operation are significant, we recognise that our greatest influence on sustainability comes from the services we provide to clients and communities. We help them address challenges by identifying and capturing ways to make projects more sustainable through architecture, engineering, planning, and environmental services. Stantec works hard to balance environmental, social, cultural, and economic needs. We see the big picture in the context of a changing climate, shifting demographic trends, and evolving economic realities, and we anticipate and address the long-term influences of our decisions.

#### **OUR PLEDGES**

- Pledge to Net Zero
- ICE 13 Point Pledge
- Carbon neutral by 2022
- 50% reduction GHG in the UK by 2030
- Terra Carta signatory





### CONSTRUCTION LOGISTICS AND COMMUNITY SAFETY (CLOCS) CHAMPION

We have joined CLOCS which is a national standard in construction to take health and safety beyond the hoardings of a construction site. As a Champion, we will work and communicate with clients, principal contractors, and vehicle operators to minimise the impact of construction projects and eliminate harm to communities. We are alive to the challenges that construction brings to more vulnerable road users and we can work to eliminate those problems and raise the standards of our industries.



#### STANTEC.10

Our subject matter experts are working with digital practice teams to develop creative, technology-forward approaches that accelerate and improve our ability to solve the most difficult challenges facing our clients, communities, and industries.

Know more →

#### **FUNDING OPPORTUNITIES TOOLKIT**

The infrastructure funding landscape can be complex for developers to navigate. At Stantec, we have a solid history of identifying and securing Government grant or loan funding for our clients—supporting the delivery of their development and infrastructure projects

Our geographic information system (GIS) enabled Funding Opportunities Toolkit helps you identify and unlock funding opportunities by detailing available sources, matching your project against the eligibility criteria, keeping you up to date with application deadlines, and sharing valuable intel on fund administrators and successful projects. The goal? Helping you make a successful submission.

Know more →







#### **HSSE**

At Stantec, we believe in being SaferTogether™— looking out for the health and safety of ourselves and those around us, whether we're at work, at home, or in our communities. We have proactive discussions on the prevention of injuries and loss, equip our people with the knowledge they need to work safely, promote trust and cooperation, and recognise that safety is crucial everywhere, not just at work. Stantec UK awards include the Order of Distinction from the Royal Society for the Prevention of Accidents (RoSPA), and an International Safety Award with Distinction from the British Safety Council

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#### **FRAMEWORKS**

For clients in the public and regulated sectors, our services can be appointed through a number of national framework contracts. Using a framework can save significant time and money, while still delivering a first-class service specific to project requirements.

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