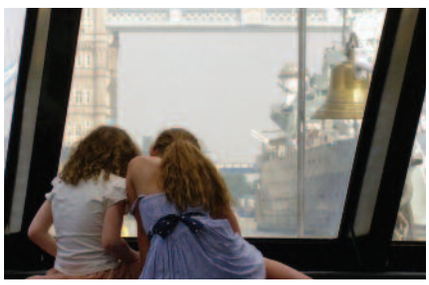
Thames Vision



Consultation on goals and priority actions

December 2015

THAMES 2035

Contents

1. Developing the Vision for the Thames
page 1

2. Thames Vision 2035: emerging goals and priority actions
page 6

Summary of emerging goals and priority actions
page 7

2.1 Port of London – More trade, more jobs
page 8

2.2 Inland freight – More goods off roads onto the river
page 12

2.3 Passenger transport – More journeys
page 15

2.4 Sport and recreation – More participants
page 17

2.5 Environment and heritage – Improved tidal Thames environment
page 19

2.6 Community and culture – More people coming to enjoy the Thames and its banks
page 22

3. Next steps
page 25

Annex: organisations who contributed to the Vision
page 26

References
page 28

1. Developing the Vision for the Thames

Introduction

The Thames Vision is the first project of its kind: a 20-year framework for the busiest tidal river in the UK, running 95 miles through London to the North Sea. A river that is as iconic as the global city it runs through. The Vision has been developed by the Port of London Authority (PLA), and is a product of considerable participation from a wide cross-section of Thames stakeholders, including the public (see Annex). We are very grateful for their continuing input.

The Vision is that the Thames plays an increasing part in the sustainable development of this growing world city, the counties of Essex and Kent and the wider UK. London is recognised as one of the two top cities globally (with New York)[1], strongly linked to its quality of life. The Thames is the reason London came into being where it is, and the river continues to be at the centre of the capital's life, economy and imagination.

The Vision considers all Thames uses together: trade, travel, leisure and pleasure. It sets growing river use in its context as a great natural asset, which must be conserved and improved – in terms of its water quality, wildlife and attractiveness as open space.

This consultation document is an important milestone in the Vision's development. It sets out what we have learnt so far, the scope for growth in all types of river use and a proposed set of goals and actions to deliver it. Its purpose is to stimulate discussion as we develop the Thames Vision for consultation in Spring 2016.

Context

The Thames Vision comes at a time of London growing ever bigger. The capital is expected to grow, on current projections, from today's 8.6 million to 10 million people by 2035, and to 11 million people by 2050. The Mayor's 'City in the East'[2] has set out how that demand could be met. It envisions that the majority of the 200,000 homes to be delivered will lie along the River Thames, from London Bridge to the Isle of Dogs and Greenwich Peninsula. These opportunities for such significant new housing, as well as commercial space, infrastructure and other development, frame how the Thames and its banks will develop over the next two decades. Accordingly, it is essential that the Thames responds to the needs of growing London and the wider South East. The growing city will need increasing volumes of goods and waste transported.

A second significant context for the Thames Vision is the Thames Tideway Tunnel project. This is the biggest single investment in water and sewerage infrastructure in London since Bazalgette's Victorian scheme created the London embankments in the nineteenth century. Like the Victorian scheme, the £4 billion Thames Tideway Tunnel will have a transformative effect on the cleanliness of the river. With the tunnel in operation, the Thames will be the cleanest it has been since the Industrial Revolution. At the same time, the river will provide the artery for transporting up to eight million tonnes of spoil and material for this project. This is a very visible demonstration of the strategic importance of the tidal Thames in supporting infrastructure. Part of the development of the Vision has focussed on the new opportunities that this could create in the 2020s and 2030s. In short, how can we get the most benefit from a cleaner river?

A third context is climate change; in particular flood risk through London and the Thames Estuary. Environment Agency data shows that sea level rise is tracking below the low trajectory in the Thames Estuary 2100 work on flood risk management. Consequently a decision will not need to be taken on any Thames Barrier replacement before 2035. The existing Thames Barrier will continue to provide protection from flooding and rainfall in the non-tidal Thames catchment for London throughout the period of this Vision.

Fourth, and an underlying assumption throughout this Vision document, is that growing river use has to be achieved with at least current high levels of safety. The PLA, Maritime and Coastguard Agency (MCA), RNLI and Police work together to provide services to maintain and improve river safety. These include working with operators to raise safety issues, providing improved safety guidance, promoting continuous improvement in vessel standards and encouraging improved reporting of incidents to the PLA and MCA, including 'near miss' reporting. Interpretation of this data has already assisted in identifying new safety initiatives, including improving the collective response to river incidents. There has been a significant decrease in serious or very serious incidents[3] on the tidal Thames in recent years.

The process so far

The Thames Vision is led by the PLA, based on a collaborative approach, for a shared Vision for the Thames. The project was launched on 25 March 2015, when the public and users of the River Thames were invited to 'Have Your Say' on its future. There were 226 responses to the initial 'call for evidence', nearly half of which were from the public. Three

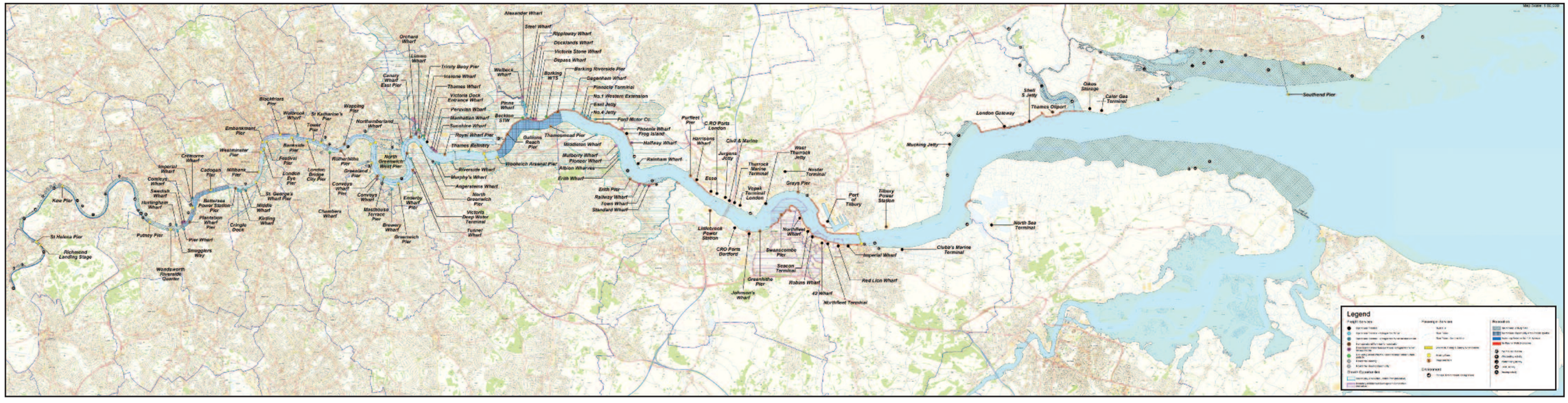
public meetings – in Putney, the Southbank and Orsett in Essex – held in May and June, attracted over 200 participants. A summary of the responses is published at www.pla.co.uk/About-Us/The-Thames-Vision/Evidence-Base.

The responses overwhelmingly welcomed the creation of a Vision for the Thames, recognising the multiple uses of the river. This is depicted in the 'word cloud' below in the language used in Have Your Say, 2015 in reply to the question "What do you value most about the tidal River Thames?":

Word cloud: Most used words in response to the question: "What do you value most about the Thames?"

PORT OF LONDON AUTHORITY: THAMES VISION 2035

Thames Vision Opportunity Map to 2035 (a large version of this map is at the back of this publication)



The most recurrent themes in the responses were: the protection or improvement of the natural environment; more commercial activities on the river; improved water quality; increased leisure and recreational opportunities; and river access. Overall, the most compelling single message was that people wanted to see more use of the river.

Following the initial 'call for evidence', we held roundtable discussions in September and October covering the breadth of current uses for the Thames:

- Port and infrastructure;
- Inland freight;
- Passenger transport;
- Sport and recreation;
- Houseboats;
- Environment and heritage; and
- Culture and community

Over 75 organisations were involved, exploring the potential for, and barriers to growth, and the priorities for achieving that growth in the next 20 years.

Alongside this engagement, the PLA commissioned four external studies (in one case in partnership with Transport for London) to provide a strong evidence base for the Thames Vision.

The studies, copies of which are being made available on the Vision section of the PLA website, were on:

- River Thames economic prosperity, carried out by SQW, 2015: this estimates the economic value of maritime and port operations on the Thames.
- River Thames public amenity, carried out by Oxford Economics, 2015: this estimates the amenity value of the tidal Thames, considering tourism benefits, sport and health implications and the value of living near the River Thames.
- River capacity in central London, carried out by Marico Marine, 2015: this identifies how capacity in central London could be optimised to support the growth of vessel traffic. The executive summary will be published in early 2016.
- Forecast growth in port trade, carried out by Stamford, 2015: a combination of econometric and market intelligence was used to derive forecasts for cargo handled in the Port of London to 2035. A summary of the report, including the assumptions used, is on the Vision section of the website: because of commercial confidentiality, the full report is not being published.

Next steps in the process

This consultation is the next phase of the Thames Vision Project. We are seeking your views on the emerging goals and priority actions, as we develop the Thames Vision for consultation in Spring 2016. The actions are for a range of stakeholders: some are for the PLA; many are for other organisations to lead or participate in delivering over the next two decades. We thank everyone who has contributed so far.

Comments among the Have Your Say responses included:

"The upper river is the leisure river with pleasure craft and rowing, lovely walks along the banks."

"It is the commercial river, exporting and importing goods for 9 million people in London and 25 million people in the South East."

"A route through the heart of the City with all passenger boats and smaller commercial craft. And in my opinion, the best way to view the City."

"The fact that it functions both as an internally important commercial waterway, and an internationally important place for wildlife. With wise stewardship, these functions are entirely compatible. A habitat for wildlife, both within the water and on the river banks. A place where people can relax and enjoy a connection to the environment".

"The Thames is the jewel in London's crown. For centuries, the historic gateway between Britain and the world, and the setting for national celebrations from Tudor ice fairs to the 2012 Torch relay. It continues to have enormous potential to contribute to the health and wellbeing of its users, the city, its inhabitants and visitors".

2. Thames Vision 2035: emerging goals and priority actions

What is emerging is huge potential for all types of river use to grow further over the next 20 years, in a safe and sustainable way. By 2035 we can see greater use of the Thames in all aspects: from port trade to passenger transport, sport and recreation to cultural enjoyment.

Achieving this will require long-term thinking and strong partnerships across public, private and voluntary sectors. The more that river and wider stakeholders unite behind common goals, the more likely we are to realise our collective ambitions for the Thames.

The emerging goals are:

- The busiest ever Port of London, handling 60 – 80 million tonnes of cargo each year, on the doorstep of Europe's biggest metropolitan consumer market
- More goods and materials moved between wharves on the river – every year sustaining the record level of 5.5 million tonnes carried by water in 2014 – taking 550,000 lorry trips off the region's roads
- Double the number of people travelling by river – reaching 20 million commuter and tourist trips every year
- Greater participation in sport and recreation on the water
- The cleanest Thames since the Industrial Revolution, with improved habitats in the water and on adjoining land
- A riverside which is a magnet for ramblers, historians, artists and others, whether living nearby, on the river or travelling from further afield

These goals apply to the whole length of the river. At the same time, we have to be realistic and recognise that growth in every aspect of river use is not always possible at the same time in the same place. Our experience and research shows that some parts of the river in central London are already at capacity in terms of numbers of vessels at some peak times in the Summer. Increasing river traffic in these areas is possible, but requires effective leadership from the PLA, with input from stakeholders. In some cases this means looking at ways to improve the efficiency of how the river is used. We also have to recognise that some river uses are simply not compatible in the same stretch of water at the same time.

Alongside developing goals, we have also looked at where these goals can best be realised on the length of the tidal river from Teddington to the North Sea. The new 'opportunity map' (see large fold out map held in back cover) for the tidal Thames summarises current and potential river uses and infrastructure. These new opportunity zones, for example for more water sports and new residential moorings, set out clearly where we think the best areas are for growth, taking account of other uses of the river. The zones should encourage investment and interest in new river activity.

We set out in more detail over the next pages the nature of the goals, and the priority actions to deliver them. We also set out how working together over the next two decades we can turn Vision into reality.

PORT OF LONDON AUTHORITY: THAMES VISION 2035

Summary of emerging goals and priority actions

Thames Vision 2035: Planning for the Thames' future: making the most of its potential for the benefit of all	
Port of London: More trade, more jobs The busiest ever Port of London, handling 60 – 80 million tonnes of cargo each year, on the doorstep of Europe's biggest metropolitan consumer market	- Sustained private sector investment - Continued improvements to the main navigation channels - Lower Thames crossing downstream of Tilbury, by 2025 - Widening of A13, by the end of 2018 - Electrification of the Barking to Gospel Oak line, by Summer 2017 - At least three Thames crossings east of Tower Bridge, that allow continuation of river trade; the first by 2022 - Closure of level crossings affecting operational terminals, by 2020
Inland freight: More goods off roads onto the river More goods and materials moved between wharves on the river – every year sustaining the record level of 5.5 million tonnes carried by water in 2014 – taking 550,000 lorry trips off the region's roads	- Establish the Thames as the default choice for transport of waste and construction materials; and increasingly containerised goods - Protect and reactivate safeguarded wharves with at least Peruvian, Orchard and Hurlingham wharves brought into operation over the next decade - Work with Transport for London and the Greater London Authority to extend the River Concordat to promote freight movements by water - Establish a Thames Skills Academy by Autumn 2016, to provide a sustainable model for skills development on the Thames
Passenger transport: More journeys Double the number of people travelling by river – reaching 20 million commuter and tourist trips every year	- Make more efficient use of piers and river space, including new timetabling to manage peaks in traffic - Encourage more use at current low peak times - Long-term pier strategy, going beyond the existing River Action Plan: new piers at Thamesmead, Erith, Greenhithe, Swanscombe, Grays and Tilbury by 2025
Sport and recreation: More participants Greater participation in sport and recreation on the water	- Sport opportunity zones from Kew Bridge to Richmond, Putney Bridge to Chelsea, and east of Greenwich - Establish and work towards a target for sport participation on the Thames - More visitor moorings in appropriate locations on a busier river
Environment and heritage: Improved tidal Thames environment The cleanest Thames since the Industrial Revolution, with improved habitats in the water and on adjoining land	- Tideway to build and bring into operation the Thames Tideway Tunnel by 2023 - Water quality improves to 'good' - Joined-up Thames Path running from Teddington to the sea - Improve biodiversity of nature reserves: wherever practicable, all Sites of Special Scientific Interest along the river brought into 'favourable' condition
Community and culture: More people coming to enjoy the Thames and its banks A riverside which is a magnet for ramblers, historians, artists and others,whether living nearby, on the river or travelling from further afield	- New residential moorings in appropriate locations on a busier river - Ensure that houseboats are moored appropriately and find innovative solutions to reduce the impact of wash - Explore development of a Thames brand for culture, heritage and quality of life, including support for Totally Thames

2.1 Port of London – More trade, more jobs

Today, 2015

The River Thames is home to the second biggest port in the UK, on the doorstep of London and the South East, the biggest markets in the UK. With 96% of UK imports/exports by volume coming in or leaving by sea, it is an essential part of the UK's infrastructure[4].

There are over 70 independently run terminals and wharves along the tidal Thames from Wandsworth to the sea. The port handled 44.5 million tonnes of goods and materials in 2014 and provided employment for 43,000 people, of whom 27,000 were directly employed in port operations. A further 16,000 jobs were in the supply chains that support the port and other indirect impacts. In total, the overall Gross Value Added of the Port of London in 2015 was £4 billion[5].

The port comprises a wide range of terminals, including:

- the multi-purpose Port of Tilbury handling containerised, roll-on/roll-off and bulk commodities
- the new London Gateway, a specialised container handling facility
- several oil storage terminals, including Vopak
- the Port of London is, by far, the most important port – serving the most important market – in the UK. Research by London Aggregates Working Party (LAWP) notes that over half of all the aggregates sold in London had been handled at a wharf on the River Thames. Numerous aggregates terminals are pivotal to the local construction industry, including Cemex, Tarmac and Brett Aggregates, as well as to more local businesses, such as J Clubb.
- specialist terminals, including:
    - Europe's largest cane sugar refinery, Tate & Lyle at Silvertown, which imports raw sugar which they process into 30-40% of UK's refined sugar
    - Ford who import around 300,000 vehicles and export 700,000 diesel engines each year, manufactured at the centre of all of Ford UK logistics at Dagenham

PORT OF LONDON

Forecast demand

The Port of London is on the doorstep of Europe's biggest metropolitan consumer market, with consumer spending in Greater London forecast to grow from £129 billion in 2014 to £199 billion in 2035. London alone accounts for approximately 22.6% of UK GVA, and as part of the wider South East that figure increases to 38%[6]. The Port of London is strategically placed to best serve this already huge and growing market.

The PLA commissioned Stamford Research Group to undertake forecasts of trade until 2035. The forecasts are a combination of:
(i) econometric forecasts (from estimates of future traffic and economic activity in the UK, based on the relationship between traffic and economic activity) and (ii) market intelligence (from market research interviewing the port terminals). This market research was applied and forecasts were produced for all types of cargo handled in the Port of London, including intra-port traffic.

Forecasts for unitised trade, petroleum, aggregates/cement, other cargoes, total intra-port and inter-port traffic are shown on page 11, for three scenarios (high, central and low). The assumptions behind these forecasts are published on the PLA's website[7].

Stamford Research Group forecasts that total inter-port trade will increase to between 56 and 93 million tonnes in 2035, depending upon low or high assumptions (see graph below). For comparison, the largest tonnage ever in the Port of London was 61.6 million tonnes in 1964.

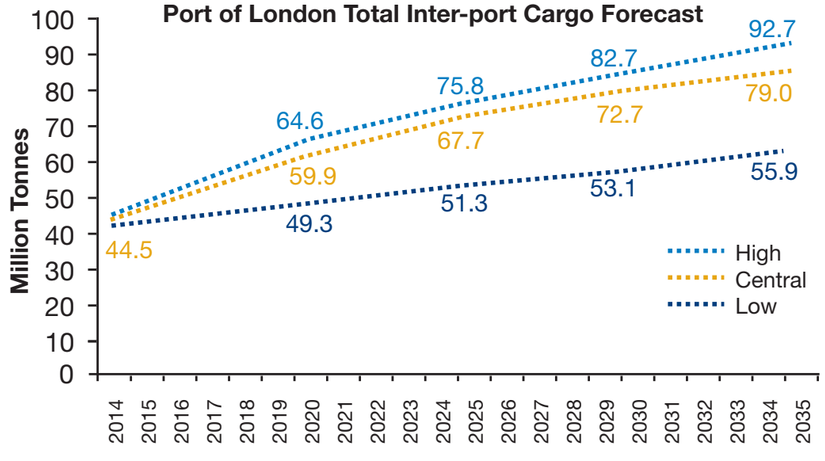
Vision, 2035

We are setting the goal: **the 20-year Vision can see the busiest ever Port of London, handling 60 – 80 million tonnes of cargo each year, on the doorstep of Europe's biggest metropolitan consumer market.**

What is needed to achieve this goal in a safe and sustainable way? This consultation is proposing the following priority actions:

- **Sustained private sector investment.** Growth will be driven primarily by the private sector and, as shown in our research, £2.5 billion of port investment is already happening or planned over the next five years alone. Sustaining these levels of investment requires a business-friendly framework of public policy and for the PLA, as statutory harbour authority,

Forecast total Port of London trade to 2035 [8]



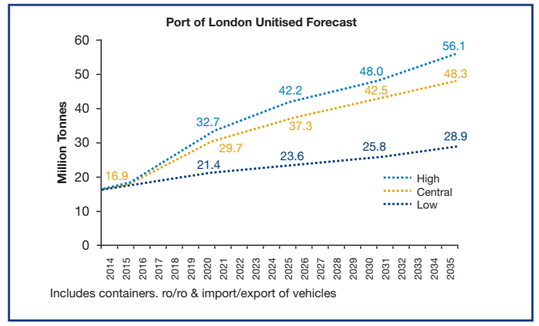
to support a commercially attractive port. As part of the development of this Vision, a 'Port & Infrastructure' group met, comprising some of the major terminal operators and key public bodies. We plan to make this group into a regular forum, to focus on influencing public spending decisions on major infrastructure projects and, more generally, making the port as commercially attractive as it can be.

- **Continued improvements to the main navigational channels.** The wider Thames Estuary contains the main approach channels that provide access to the River Thames and the commercial port. This area is a very dynamic natural environment where sand banks and shoals are constantly moving, dissolving and reforming. The PLA is responsible for the conservancy of the tidal Thames, which includes maintaining safe and open access to the port, through ensuring navigational channels are clear and deep enough to meet the future commercial needs of the port. We will ensure that we respond to changing market demands on both capital and maintenance dredging, whilst maintaining the highest standards of environmental protection.
- **Lower Thames crossing downstream of Tilbury, by 2025.** There is a pressing case for a new lower Thames crossing. The consensus view from port operators is that the most strategic option is downstream from Tilbury. The reasons for this are:
    - reducing pressure on M25 and the existing Dartford Crossings

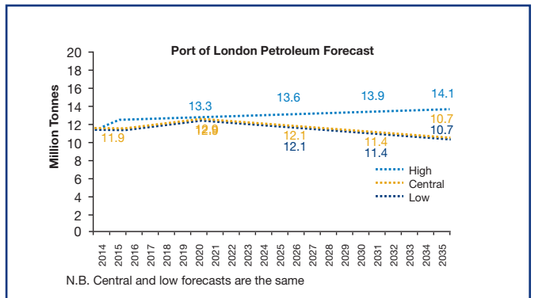
    - creating new routes linking A13 and A2
    - the new logistics parks at London Gateway and the Port of Tilbury
    - freight traffic demands a long-term view
- **Widening of A13, by the end of 2018.** Increasing the capacity of the A13, especially at, and adjacent to, the M25 interchanges and Dartford Crossings, will reduce congestion and potential for knock-on effects. The current arrangement is unsustainable, since incidents quickly have consequences and introduce inward and outward delays for cargo handling facilities in the port. All port facilities in the area would benefit from such an improvement in the local road infrastructure and its links to the motorway network.
- **Electrification of the Barking to Gospel Oak line, by Summer 2017.** Electrification and gauge enhancement scheme between Thames Haven/Tilbury Docks and the Midland Main Line via Barking and Gospel Oak is positive.
- **At least three further Thames crossings east of Tower Bridge, that allow continuation of river trade; the first by 2022.** Many assume that crossings are exclusively bridges; but other types of crossings – tunnels and ferries – need to be considered too. The first proposed new crossing is the Silvertown Tunnel. This has potential to bring much needed relief to the congested Blackwall Tunnel which was last expanded in 1967. It will bring significant economic benefits to both sides of the river.
- For the second and third crossings, various locations have been proposed including Gallions Reach and Halfway Reach (Belvedere/Dagenham). From the port's perspective, there is a pressing need for better river crossing infrastructure to enable transport of freight, and improve connectivity. These need to be sited and designed so that they allow the full range of river uses to continue, especially the passage of large sea-going vessels. In this way we will enable both growth in port trade as well as growth in the transport of goods and people on the river.
- **Closure of level crossings affecting operational terminals, by 2020.** Providing more freight paths to port facilities. This will be 24-hour free access, thus avoiding the attendant delays associated with railway level crossings, which will be very beneficial for cargo handling facilities.

Do you think these are the right goals and priority actions for the next 20 years? Are there others you would like to see included instead?

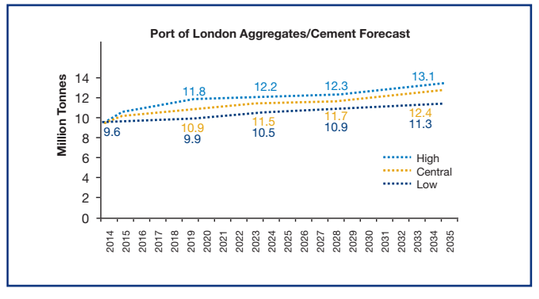
Port of London trade forecasts to 2035

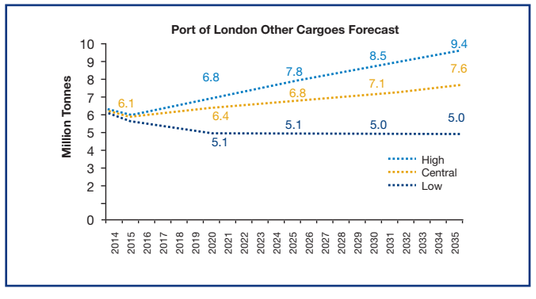


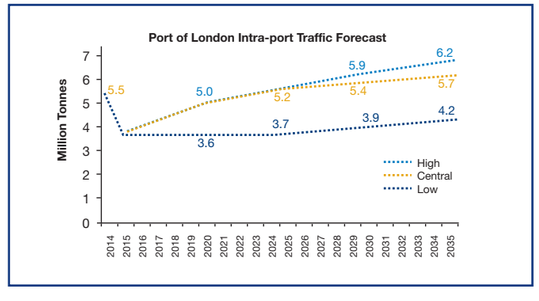
Includes containers. ro/ro & import/export of vehicles



N.B. Central and low forecasts are the same







2.2 Inland freight – More goods off roads onto the river

Today, 2015

The River Thames is a critical piece of the capital's transport infrastructure, as it is for Kent and Essex. It is by far the UK's busiest inland waterway, and volumes moved have increased to the record level of 5.5 million tonnes carried by river in 2014 as a series of strategic projects moved ahead.

There is a strong strategic case for using the tidal river for transport of freight. For every 1,000 tonne barge on the river, there are 100 fewer lorry movements required on the roads. This delivers a number of wider benefits. First, it reduces congestion on the roads with benefits for road safety, particularly for cyclists and pedestrians, which is a key priority in the London Plan. Second, it's the most environmentally sustainable option. Transport by barge is estimated to produce about one third of the greenhouse gas emissions compared to the equivalent journey by lorry[9]. Third, as numerous projects have shown, river transport can be the most economic option.

Movement of construction materials, spoil, household refuse and vegetable oils are made by river to numerous terminals. Efficient handling of building materials and spoil is essential for both large construction projects and general building in the region now and to meet the forecast construction demand in the future.

The construction projects – Crossrail and Thames Water's Lea Tunnel – have shown what is possible in terms of moving out tunnelling spoil and bringing in construction material by river. The recently started excavation works for the Northern Line extension at Battersea will use the Thames to transport 600,000 tonnes of waste to Tilbury in Essex. This will remove over 40,000 lorry journeys and prevent 2,000 tonnes of carbon emissions.

In order to maintain inland freight traffic, it is essential that wharves are available throughout the capital to get goods and material on and off the river and to maximise the benefit of the river's east to west link. Between 1987 and 1994, over 20 operational wharves were redeveloped with a resultant and permanent loss in cargo handling capacity. Since 1997 wharves in the capital have been safeguarded (i.e. protected) under planning legislation and policy.

Forecast demand

With strong demand for new development and the resultant pressure on land in London, it is more important than ever to bring into use the remaining wharves. These will serve the needs of the construction and other sectors, and provide new opportunities to transport a wider range of goods by river. Respondents to our 'call for evidence' believe there is potential to transport more and a greater range of these materials and new goods by river over the next 20 years.

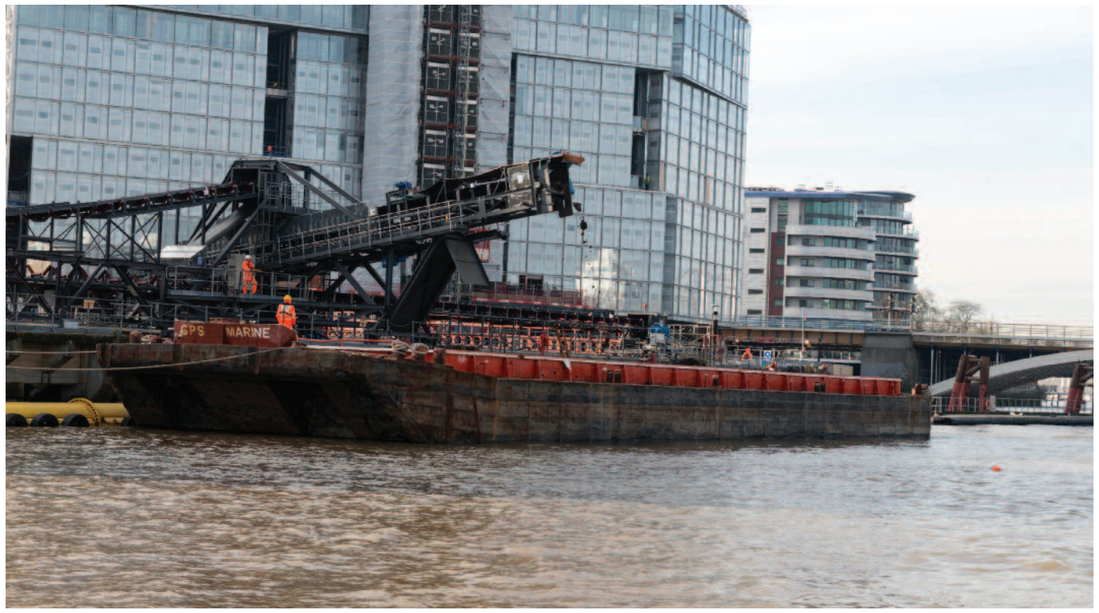
As London grows to the east, there is potential to transport more household and containerised goods by river too. This would reduce congestion, cut carbon emissions and improve road safety, especially for cyclists. With the large concentration of container ports' capacity of about four million TEUs (twenty foot equivalent unit) at Tilbury and London Gateway and the growth of logistic parks and Regional Distribution Centres (RDCs) on the banks of the Thames, it makes sense to look at the potential for transporting more of the goods that have come in by sea, along the river for the largest consumer market in the UK. Within the 20 year time period we are considering, this could potentially include consolidation for construction, supermarkets and home deliveries.

Vision, 2035

We are setting the goal: **the 20-year Vision can see more goods and materials moved between wharves on the river – every year sustaining the record level of 5.5 million tonnes carried by water in 2014 – taking 550,000 lorry trips off the region's roads.**

What is needed to achieve this goal in a safe and sustainable way? This consultation is proposing the following priority actions:

- **Establish the Thames as the default choice for transport of waste and construction materials; and increasingly containerised goods.** The challenges are to make the most of the potential of the river, for example by raising awareness and sharing best practice; incorporating water transport into riparian boroughs' transport plans and wider planning policies; encouraging waste contracts to use the river; and encouraging trials of new services to existing wharves, for example in West London.



- **Protect and reactivate safeguarded wharves with at least Peruvian, Orchard and Hurlingham wharves brought into operation over the next decade.** Having exit and entry points to the river is fundamental for freight and cargo transported by river. Strategically-placed operational wharves are needed to link with road and rail communications. Continuation of London's safeguarded wharves policy – which protects 50 wharves along the tidal Thames for the transport of goods and materials – is vital. Equally so, reactivating safeguarded wharves that are lying dormant, with developers sitting tight, hoping that they can be turned instead into riverside housing developments contrary to established policy.
- **Work with Transport for London and the Greater London Authority to extend the River Concordat to promote freight movements by water.** By setting a target we can gain momentum to make this change in the same way that a target for passenger transport on the river was very effective. By having a freight target, we can encourage the modal shift from road to rail, looking at timing of freight, financial incentives (where appropriate) and having the right infrastructure in place.
- **Establish a Thames Skills Academy by Autumn 2016, to provide a sustainable model for skills development on the Thames.** With sustained increases in passenger and freight movements on the Thames, and major infrastructure projects such as the Thames Tideway Tunnel, there are immediate needs to improve training provision (including Boatmaster's Licence qualifications), raise standards and enhance skills on the river. The Thames Skills Academy is being established to meet these immediate needs as well as to ensure a long-term skills supply for future passenger and freight movement on the river after the Thames Tideway Tunnel is completed. It is intended that the Thames Skills Academy will be established as a Group Training Association. This long-established

concept of a learning partnership of marine-based employers is well-placed to make the most of Government training systems and associated funding.

Do you think these are the right goals and priority actions for the next 20 years? Are there others you would like to see included instead?

2.3 Passenger transport – More journeys

Today, 2015

The River Thames is an iconic piece of the capital's passenger transport infrastructure. The Thames adds much needed transport capacity, particularly in locations ill-served by other public transport. Boat trips are an attractive part of the tourist offer and services provide access to the 35 Thames riverside attractions[10]. These are increasingly important with the limited coach parking available in central London.

In 2014 there were 9.8 million passenger journeys on the Thames. This is an increase of 22.5% since 2013 and 150% over the last decade. We are well on the way to reaching the target set out in the Mayor's River Action Plan of 12 million passenger journeys by 2020. The breadth of what is on offer is increasing, from commuter services to 23 piers from Putney to Woolwich Arsenal; dinner cruise and leisure boats; and fast RIB experiences.

The PLA's study into the 'amenity value' of the Thames demonstrated how much the river contributes to the wider economy. Over £2 billion of GDP is generated by tourism in the wards immediately adjacent to the Thames' banks. In total there were 23.4 million visitor trips to attractions beside the Thames, of which 4.7 million have a direct maritime connection – such as the Cutty Sark at Greenwich or HMS Belfast at Tower Bridge.

Forecast demand

Demand for river commuter travel is set to grow. This will be driven by population growth in East London, close to the river. There is also increasing demand for leisure services, for example new destinations close to the Thames (e.g. the proposed Paramount Theme Park on the Swanscombe Peninsula in Kent), as well as from increasing the leisure offer of the Thames itself. The cruise market is also growing, with cruise terminals already in central London and Greenwich, and a further one planned to open at

Enderby Wharf in 2017. Some £68 million investment in passenger and cruise-related services is planned over the next five years[5].

Jointly with the Transport for London, the PLA commissioned Marico Marine to ascertain the capacity of the river to accommodate passenger and freight transport in central London. The evidence showed that there is considerable capacity for more transport on the river – passengers and freight – with management, especially if we create more navigable space and look to increase passenger journeys in the early morning and evenings, and outside of Summer school holidays.

Vision, 2035

We are setting the goal: **the 20-year Vision can see double the number of people travelling by river – reaching 20 million commuter and tourist trips every year.**

What is needed to achieve this goal in a safe and sustainable way? This consultation is proposing the following priority actions:

- **Make more efficient use of piers and river space, including new timetabling to manage peaks in traffic.** There is potential to manage timetables to avoid the current situation where the river reaches peak capacity at a small number of very short periods of time in the vicinity of Tower, Westminster and Embankment Piers. New timetables will be set for Summer 2016 by London River Services, the operators and the PLA. These will be scheduled to achieve better berth availability and more effective management of passenger piers. We will also look to see the scope for these timetables to have regard for other users of the river, for example people sailing in East London. Looking forward to future years, timetabling should be routinely reviewed to make sure we are making most efficient use of piers and river space for the overall benefit of customers. We will also look at other options to better utilise river capacity in central London.
- **Encourage more use at current low peak times.** There is enormous capacity for increased passenger transport outside of peak times (i.e. 11:00 – 18:00 during Easter to the end of September in central London). Operators want to look at creating new opportunities to attract people to the river outside of these peak times and places. Ideas include attracting more of the high numbers of people on the Southbank onto the river; more dining experiences; boat tours to see nature on the river; park-and-glide (i.e. park further down the river and come into London by river). Ideas also included adding excitement to the river at night with, for example, the Mayor's proposed bridges lighting project (with bridges lit from Tower Bridge to Albert Bridge).
- **Long-term pier strategy, going beyond the existing River Action Plan: new piers at Thamesmead, Erith, Greenhithe, Swanscombe, Grays and Tilbury by 2025.** With Local Authorities, London River Services, commercial boat operators and the PLA working together, we will look strategically at the current use of existing piers and potential siting of future piers and pier extensions for the next 10-20 years. This will form the basis for continuing work with riparian boroughs within and outside London to identify new opportunities.

Do you think these are the right goals and priority actions for the next 20 years? Are there others you would like to see included instead?

2.4 Sport and recreation – More participants

Today, 2015

The tidal Thames is home to a wide range of sports and recreation. There are more than 100 sport and recreation clubs along the Thames: rowing clubs, that are predominantly (but not only) up river of Putney; and paddling clubs and water-sport centres offering canoeing, stand up paddle boarding and windsurfing up river of Putney, below Tower Bridge and out towards the estuary. There are also cruising, yacht and sailing clubs along the length of the Thames, as well as a number of scout groups and sea cadet units.

The Thames plays host to 83 major sporting events, including the University Boat Race, the race for Doggett's Coat and Badge (run every year since 1715) and the Great River Race. An estimated 5,800 people row on the tidal stretch of the Thames each year[10]. A conservative estimate suggests the value of people participating in sport and recreation on the Thames or its towpath is £132 million a year in terms of health and wellbeing benefits[10].

Growing river use has to be supported by at least the current high level of safety. The PLA works closely with all the recreational clubs, and their representative bodies, to provide accessible safety information for participants and to support a strong safety culture along the river.

Swimming is currently permitted by PLA Byelaws upriver from Putney. However, the tidal Thames is not a benign environment. Open swimming organisations, including the Outdoor Swimming Society and the Wild Swimming Magazine, advise people not to swim in streams/tidal flows that exceed their swimming speed (which is approximately 0.8 metres per second for a good swimmer). The tidal flow to the Thames often exceeds 3 knots (1.5 metres per second) so is nearly twice the speed that a capable swimmer is able to achieve. Over 100 swimmers have got into difficulties in the tidal Thames in the last five

years, requiring rescue. With the river becoming cleaner, there may be more demand for swimming. We will continue to work with swimming event organisers, as well as the RNLI, the Maritime and Coastguard Agency and others to ensure safety and appropriate facilities. There are also a number of proposals for lidos in the tidal Thames. If these are appropriately located they would enable people to swim if not in the river itself, then at least on the river, as we see in a number of other global cities.

During the 'Have Your Say' consultation, there were a lot of requests to increase the availability of accessible visitor moorings and to make them reasonably priced.

Forecast demand

With a growing London over the next 20 years, and new investment in boat yards and recreational craft planned over the next five years, there is potential for growth. Given the projected increase of the river for more transport of people and goods too, we are proposing opportunity zones for sport and recreation in which to focus growth.

data on current and projected sport participation as well as more accessibility to information about sports provision on the Thames will help deliver this. As will close working with the sport and recreation clubs along the Thames. There is scope to work closely with Sport England, who support rowing, sailing and canoeing activity on the Thames. It will be vital to work closely with riparian boroughs and the Greater London Authority, so that the required infrastructure along the banks, including access points, is prioritised in local plans and wider strategies.

Vision, 2035

We are setting the goal: **the 20-year Vision can see greater participation in sport and recreation on the water.**

What is needed to achieve this goal in a safe and sustainable way? This consultation is proposing the following priority actions:

- **Sport opportunity zones from Kew Bridge to Richmond, Putney Bridge to Chelsea, and east of Greenwich.** There is potential for the growth of water sports: more rowing, kayaking, canoeing and stand up paddle boarding at Kew – Teddington; more kayaking at Putney – Chelsea; and more kayaking as well as sailing at Greenwich – Crossness, particularly in Gallions and Barking reaches. Further east, there are opportunities for more yacht clubs serving sailing and motor boating as well as kayaking, and for rowing and paddle boarding in Benfleet Creek.
- **Establish and work towards a target for sport participation on the Thames.** More
- **More visitor moorings in appropriate locations on a busier river.** We will examine the potential for further visitor moorings on the tidal Thames. At the moment, there are up to 40 alongside visitor moorings at Town Pier, Gallions Point Marina, South Dock Marina, Hermitage Wharf, Oyster Pier, Plantation Wharf Pier, Dove Pier, Chiswick Pier and Brentford Dock. Depending upon availability, there are also visitor moorings at Limehouse, St Katharine's Dock and Imperial Wharf. Most of these sites require the negotiation of a lock or are tidally restricted.

Do you think these are the right goals and priority actions for the next 20 years? Are there others you would like to see included instead?

2.5 Environment and heritage – Improved tidal Thames environment

Today, 2015

The tidal Thames provides a range of diverse, thriving habitats for many different species of fish, birds, seals and other wildlife. It is home to nine Sites of Special Scientific Interest (SSSIs), mainly inter-tidal habitats. Many of these have further international environmental designations such as RAMSAR Convention wetland sites or European designations such as Special Protection Areas or Special Areas of Conservation. Over 95% of the PLA's area is covered by a designation. The latest surveys found over 900 seals and visits from 300,000 overwintering birds every year. Many thousands of people enjoy the Thames-side environment and wildlife at visitor centres, including those at Rainham and Mucking. There are at least 10 million walkers or cyclists on the Thames towpath each year[10].

Against that, there are a number of major challenges to improve the Thames environment. Most significantly, at present there are around 50 major discharges of untreated sewage into the tidal Thames each year as a result of the inadequate capacity of the Victorian infrastructure. Despite Bazalgette's foresight in building a sewerage system that could meet the demands of a much bigger London, nearly 150 years on, the system no longer has the capacity it needs.

A second major challenge has been highlighted by the PLA's current Cleaner Thames campaign. Up to 300 tonnes of rubbish is recovered from the Thames each year, with the number of plastic bottles growing year on year. A study by researchers at Royal Holloway, part of the University of London, has shown that up to 70% of bottom feeding fish in the Thames has plastic fibres in their guts, which can then get into the human food chain.

Third, there is potential for further improvement in the Thames Estuary designated habitats.

Opportunities

The Thames Tideway Tunnel will make the river through central London the cleanest it has been since the Industrial Revolution. With more stable and higher water quality will come more biodiversity. There are already 125 fish species feeding on the abundant invertebrates to be found in the river.

The waste water treatment improvements to discharges into the Thames that are being provided by investments by Tideway, Thames Water and other operators provide a great platform for cleaner water and a more sustainable river.

The Thames already has a number of environmental improvement projects like the Nature Improvement Area, Catchment Plans and Futurescape, led by an increasing number of non-profit organisations and charities such as the Wildlife Trusts, RSPB and the Thames Estuary Partnership. Projects are driven and resourced by enthusiastic volunteers up and down the Thames. For example, the Thames 21 team's work on clean ups and partnering in the Cleaner Thames campaign. These extremely valuable volunteer contributions help to improve the Thames environment and general amenity.

Thames Estuary 2100 will be providing improved flood defences across the Estuary to protect the increasing population to growing risk of flooding due to the effects of climate change. During their works, flood defences will need to be repaired and raised. Predicted changes in the frequency of extreme weather events as a result of climate change are expected.

Vision, 2035

We are setting the goal: **the 20-year Vision can see the cleanest Thames since the Industrial Revolution, with improved habitats in the water and on adjoining land.**

What is needed to achieve this goal in a safe and sustainable way? This consultation is proposing the following priority actions:

- **Tideway to build and bring into operation the Thames Tideway Tunnel by 2023.** The completion of this project, extending from Acton in the west to Abbey Mills in the east, together with the Lea Tunnel and the substantial investments in capacity at Thames Water's existing Sewage Treatment Works, will dramatically reduce both the number and total volume of sewage discharged into the Thames and its tidal tributaries. Cumulatively, this will act as the largest improvement in the water quality of the River Thames within London in a generation.
- **Water quality improves to 'good'[11].** As well as through delivery of the tunnel, this will be achieved by all parties working on improvements and best practice through the Tidal Thames Catchment Plan and the wider Thames River Basin Management Plan. We want to see a reduction in litter falling into the river too, which is being targeted through the awareness building 'Cleaner Thames' campaign. We are also consulting on changes to the Byelaws to ensure Class V passenger vessels don't discharge into the Thames from 2023. Any improvements in water quality will benefit the ecology, which in turn means the Thames is able to provide improved ecosystem services. These include amenity (e.g. angling) and livelihoods (e.g. commercial fisheries).
- **Joined-up Thames Path running from Teddington to the sea.** Joining up the Path will require innovative thinking and a wide range of organisations working together. There is the task of 'closing the gaps' on the existing Thames Path above Woolwich, particularly where new developments provide the chance to create access alongside the river that has previously not been possible. There can be particular challenges in finding the best route near wharves and terminals, which requires pragmatic solutions that achieve the best public access that is also safe for the public and takes into account safety, regulatory and operational requirements of the operator. There is also scope to support Natural England in its work to create a coastal path around the whole of England, with the Thames area scheduled for work to begin in 2017.

- **Improve biodiversity of nature reserves: wherever practicable, all Sites of Special Scientific Interests along the river brought into 'favourable' condition[12].** There are nine SSSIs along the tidal River Thames, all within the PLA's jurisdiction. The first priority is to get the sites into 'favourable' condition, where practicable, so they support more wildlife. The condition of the sites will benefit from enabling more connectivity of habitats across the Thames, for example by looking at new stepping stone sites and managing a group of sites in a coherent way. It is also beneficial to continue to encourage communities to identify with local reserves and sites to protect and improve the access by wildlife.

Do you think these are the right goals and priority actions for the next 20 years? Are there others you would like to see included instead?

2.6 Community and culture – More people coming to enjoy the Thames and its banks

Today, 2015

The River Thames offers a place to enjoy the water, a place to enjoy the sights of a historic world city, and is in places a haven of peace in a bustling region. The city grew from the river and its history is weaved into the development of London, Kent and Essex. Uniquely in the world, there are four UNESCO World Heritage Sites on the banks of one river: Kew Gardens, Palace of Westminster, Tower of London and Maritime Greenwich. The Thames is inseparable from the cultural heritage and artistic landscape of London, Essex and Kent, with people enjoying archaeological explorations on the foreshore along the Thames, and visiting the National Trust property at Ham and the historic forts protecting the river at Tilbury, Gravesend and further downstream.

Some 4.7 million people visit the Thames or its maritime related attractions annually. On top of this, there are many one-off national and regional events on the river, such as the Queen's Diamond Jubilee River Pageant, and annual events including the University Boat Race, New Year's Eve fireworks display, Heads of the River Races and the Great River Race. At least 23.4 million people visit the attractions located by the side of the Thames. Some 99,000 people are employed in the tourism industry in wards adjacent to the Thames, estimated to produce a £2.4 billion Gross Value Added contribution to GDP[10].

The river connects its adjacent communities – along the Thames Path and, with crossings, across the water. Many stakeholders are keen to see more local river crossings. There is strong feeling among stakeholders that access for vessels has been possible since Roman times along the full stretch of the tidal Thames. Upstream from London Bridge, the issues are more straightforward. When considering river crossings downstream, we take full regard to the importance of the river as a navigational waterway, enshrined as such in common law.

Totally Thames takes place every September celebrating the river through a season of art, cultural and river events along the Thames in London. A total of 2.6 million people experienced 215 events in September 2015.

The river is home to many residential moorings, located at 24 sites along the full length of the tidal Thames, with by far the majority located upstream of Vauxhall Bridge in West London. These moorings add to the vibrancy of the Thames and meet the desire of people to live on the river.

Opportunities

The growth in London's population, combined with forecasts showing increased numbers of tourists coming to London, Kent and Essex, brings the potential for a lot more visitors to enjoy the Thames and further boost its attraction and economy. Visit England predicts compound annual growth rates in nominal spending of 7.9% for in bound tourism, 7.1% for domestic tourism and 5.3% for day visits between 2013 and 2020. In real terms, this amounts to an annual growth rate of 4.3% in total tourism spending, with predictions indicating a faster real growth per annum in London, compared to the rest of England[13]. There is a lot of activity already in the river and on its banks. There could be potential for more by providing information about what's on offer and generating greater interest through a well-recognised Thames brand for environment, culture, heritage and community. An interactive map might be one way of delivering that.

The residential mooring community, who have been represented through their contributions to the public consultation and a roundtable discussion hosted by the PLA, make the case for increasing the number of residential moorings. This poses questions about where these are best located on an ever busier river. Turbulent waters – wash – from passing boats does create issues for residential moorings, depending on the amount of wash, the nature of the residential vessel and location and type of mooring. Progressively low wash vessels are being developed and brought into use – including the PLA's harbour launches. Houseboats need to be suitable for the conditions in which they are moored and to have proper moorings. Whilst there will always be wash – the Maritime and Coastguard Agency classify the tidal Thames as Category C/D where wave heights of up to 1 metre may be expected – further improvements can be made.

Vision, 2035

We are setting the goal: **the 20-year Vision can see a riverside which is a magnet for ramblers, historians, artists and others, whether living nearby, on the river or travelling from further afield.**

What is needed to achieve this goal in a safe and sustainable way? This consultation is proposing the following priority actions:

- **New residential moorings in appropriate locations on a busier river.** We consider that there is potential for more, by locating them in appropriate opportunity zones, such as above Wandsworth and areas of Kent and Essex where existing and forecast use of the river make such moorings viable (see map at the back of this publication).
- **Ensure that houseboats are moored appropriately and find innovative solutions to reduce the impact of wash.** Innovative

solutions will include having the right moorings and the right vessels for the river, and having informed river use that complies with PLA Byelaws and Directions. There is also a role for developers to find solutions that allow vessels to be moored on the water. These can be developed by sharing best practice along the Thames. We will evaluate the performance of new forms of wash mitigation measures, for example the approach being trialled from late 2015 at the new Plantation Pier in Wandsworth.

- **Explore development of a Thames brand for culture, heritage and quality of life, including support for Totally Thames.** We will explore the potential for this with a range of organisations (such as London & Partners, Visit Britain and the Greater London Authority). A lot more could be made of the global asset of the Thames, its cultural, heritage and environmental offer. Activities and destinations on the Thames are located by the land, rather than the river. By joining up the offer – tying in culture and heritage, environment, community and transport – of the Thames for residents and visitors alike and providing a strong brand for new initiatives, more commercial, voluntary and statutory bodies will be able to work together to promote the Thames.

An interactive, accessible map of the offer along the whole Thames might be one way to achieve this. There is already a lot of public information about recreational opportunities on the river, through the Recreational Users Guide on the PLA website. There is scope to do more for a wider public audience. Whilst some destinations are well known along the Thames, many are not. There is no one place that shows what is on offer, e.g. taking a boat to see one of the World Heritage Sites; going for lunch at the RSPB's Greater Thames Marshes at Rainham; taking part in a community arts project at Southend.

Do you think these are the right goals and priority actions for the next 20 years? Are there others you would like to see included instead?

3. Next Steps

We welcome comments by **Monday, 15 February 2016.** In particular we are looking to hear your feedback on these questions:

- Are these the right goals for the Thames Vision?
- Are these the right priority actions to achieve the Vision?
- Are there other goals and priority actions you think are needed in the Thames Vision?

We are also keen to understand which section(s) of the river your views relate to:

- Teddington Lock – Putney Bridge
- Putney Bridge – Thames Barrier
- Thames Barrier to Southend

We would like to make responses to the consultation available on our website and use some quotes/extracts when we publish the Vision next year. If you do not want your response to be publically available, please indicate so in your response.

You can share your feedback via:

- online form on the website (www.pla.co.uk/ThamesVision)
- email to thames.vision@pla.co.uk
- post to Katherine Riggs, Vision Project Director, Port of London Authority, London River House, Royal Pier Road, Gravesend, Kent DA12 2BG

Thank you for your involvement so far. We want to continue to hear from as many people as possible. We look forward to hearing your views.

Annex: Organisations who have contributed to the Vision

Active 360
Ahoy Centre
Angling Trust
Arup
Association of Thames Yacht Club
Avery Associates Architects

Beckett Rankine
Berkeley Group
Big Stick Advertising
Biodiversity by Design
BJ Wood and Sons Ltd
British Canoeing

Canal and River Trust
Canoe Wild
Castlekeep Ltd
CH2M HILL TEAM2100
Chas Newens Marine
Chelsea Kayak Club
Chiswick Pier Trust
City Cruises
City of London
Clipper Ventures
CMA CGM
Commercial Boat Owners Association
Corporate Risk Associates Ltd
Cory Environmental
Crown Estate

DEFRA
Department for Transport
Devonport Marine
Duck Tours

Emanuel School
English Heritage
Environment Agency
Ernst & Young
Essex Chambers of Commerce
Essex County Council
Euromix Concrete

Farrells
Fishmongers

Gasworks Dock Partnership
Globe Rowing Club
GPS Marine
Gravesend Museum
Gravesend Rowing Club
Gravesham Council
Greater London Authority
Greenergy
Greenwich Council
Greenwich Yacht Club

H.W. Wilson ltd
Hanson
Havering Council
Heatherwick Studio
Hermitage Community Moorings
Heybridge Parish Council
Historic England
Houses of Parliament
HR Wallingford (Dredging Liaison Group)
HSBC Rowing Club

Institute of Civil Engineers
Industrial Chemicals
Inland Waterways Association
Institute for Sustainability
ISM Shipping Solutions

J Clubb Ltd

Keltbray Group Holdings
Kent County Council
Kent Invicta Chamber of Commerce
Key Fasteners
Kotug

Lafarge Tarmac
Little Ship Club
Livett Group
London Assembly Labour Group
London City Cruise Port
London Concrete
London Corinthians Sailing Club
London Councils
London Gateway
London Nautical School
London RIB Voyages
London Riverside BID
London Rowing Club
London Transport Museum
London Wildlife Trust

MacAndrews
Marico
Marine Conservation Society
Mayor of London
Metal Culture
Marine Management Organisation
Museum of London Group

National Maritime Development Group
National Trust
Natural England
Newham Borough Council
Nine Elms Pier
Norfolk Broads Yachting Company
North Kent Yachting Association
Nymph Limited (Lady Daphne)

Old Chiswick Protection Society
OPLAC

Palmer's College
Parr's Priory Rowing Club
Perca Consulting
Poplar, Blackwall and District Rowing Club
Port of London Authority
Port of Tilbury
Putney Town Centre

QRB Gloriana
Queen Victoria Seamen's Rest

Ramblers Association
Reagents Network
Realising Your Future
Richmond Bridge Boat Club
River Thames Alliance Co. Ltd
River Thames Society
RNLI
Rolfe Judd Planning
Rowdy Boat Co
Royal Borough of Greenwich
Royal HaskoningDHV
Royal Yachting Association
RSPB
RWE Generation UK

S. Walsh & Sons L
SCA Logistics
Shadwell Basin Outdoor Activity Centre
Shell
Shoebury Watermen’s Association
Shoreline Environments/Super Yachts Club
SKA
Southbank Sailing Club
Southend Coastal Rowing Club
Southwark Cathedral
St Pancras Cruising Club
Stema Shipping
Sustrans

Transport for London
Thames 21
Thames Anglers Conservancy
Thames Clippers
Thames Discovery Programme (MOLA)
Thames Estuary Partnership
Thames Explorer Trust
Thames Motor Yacht Club
Thames Regional Rowing Council
Thames Shipping
Tideway
Thames Traditional Rowing Association
Thames Water
Thamesbank
The Boat Race Company Ltd
The Fishmongers’ Company
The Lenox Project
The Wildlife Trust
Thurrock Council
Thurrock Yacht club
Tide Line Art
Totally Thames
Tower Bridge Yacht and Boat Club
Twickenham Yacht Club

UCL
University College London Boat Club
University of Greenwich
Upnor Sailing Club
Upper Thames, Association of Thames Yacht Clubs
Urban Space Management
Urban Strategies

Viking River Cruises
Vopak

Wandsworth Borough Council
Watermen and Lightermen of the Thames
West London River Group
Westminster City Council
Westminster School
Wild Capital

PORT OF LONDON AUTHORITY: THAMES VISION 2035

References:

1. Kearney, A.T. 2014 Global Cities Index and Emerging Cities Outlook. 2014
2. Mayor of London. City in the East. 2015
3. Serious Incident – slight/significant injury to persons + up to moderate cost implication (>£50K). Very Serious Incident – serious injury or fatality to persons + serious/major cost implication (>£2M)
4. UK Trade & Investment. The UK Ports Sector: A showcase of world class expertise. 2013
5. Port of London Authority. River Thames Economic Impact Report Summary 2015
6. Harari, D. Regional and local economic growth statistics. House of Commons library. 2014
7. Intra-port: Cargo moving between terminals on the River Thames and cargo from Medway and Brightlingsea. This includes spoil, aggregates, construction materials, household waste and vegetable oils
8. Unitised trade includes containers, roll on/roll off traffic and the import/export of vehicles
9. McKinnon, A. CO_2 emissions from freight transport: an analysis of UK data. Logist. Res. Netw. 2007
10. Port of London Authority. Adding Value: The River Thames Public Amenity 2015
11. 'Good' water quality: slight change from natural conditions as a result of human activity. No restriction on the beneficial uses of the water body. No impact on amenity or fisheries. Protects all but the most sensitive wildlife
12. 'Favourable' condition: SSSI is being adequately conserved and is meeting its 'conservation objectives', however there is scope for enhancement of these sites
13. www.visitengland.com/biz/tourism-england/refreshing-growth-strategy-englands-tourism-industry/performance-and-outlook