

Canal Freight in Old Oak Common

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1. Introduction.

This report aims to encourage a thorough and objective review of the potential role for waterborne freight within proposed developments around Old Oak Common. The Mayor plans to oversee the creation of “an entirely new city quarter for London” (Johnson, in Garlick, 2014); the construction of which is set to pose significant adverse affects for local residents. This report recognises canal freight may provide a compelling method of alleviating such disturbances, helping to reduce congestion, pollution and other negative impacts. Further, this report identifies many broader strategic issues which could be mitigated by a modal shift to waterborne freight.

After interviews with Del Brenner, chief of the Regents Network, our work aimed to marry his interests with that of JustSpace and encourage developers, planners and local authorities to recognise the potential for canal freight in this area. It is hoped our work will benefit relevant organisations and local groups, and will be circulated accordingly, with presentation of our findings to local community groups in person.

An intimidating amount of literature is available, which this report attempts to briefly summarise (See. Fig. 1 - attached). Overall, this report provides a positive overview of the climate for canal freight in this area, and it is strongly advised that TFL and the MDC work to ensure a thorough and fair examination of the possibility for canal freight as construction goes ahead, consulting with all relevant organisations and community groups.

Another UCL masters student is likely to progress with a more detailed study.

2. Old Oak Common Opportunity area.

In July 2013, the Mayor proposed a ‘vision’ for Old Oak Common, an area of land which sits within the larger Park Royal Opportunity area (see image one), and looks set to become a “super hub between London and the rest of the UK” in the coming decades (GLA, 2013). With drastically expanded transport connections from HS2, Crossrail and the London Overground, 24,000 new homes and 55,000 new jobs are planned for the area (Investment PB, 2014). The proposed site “comprises 155 hectares of land” (GLA, 2013: 10), mostly industrial, with several residential pockets, and, to the east,

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Wormwood Scrubs. The area is shared between Brent, Ealing and Hammersmith and Fulham local authorities. A Mayoral Development Corporation is currently in formulation, viewed “necessary and appropriate” to alleviate the complexities of cross-borough planning in an area of “strategic London importance” (Investment PB, 2014)
The Grand Union Canal lies to the north, calmly observing its crowded surroundings.

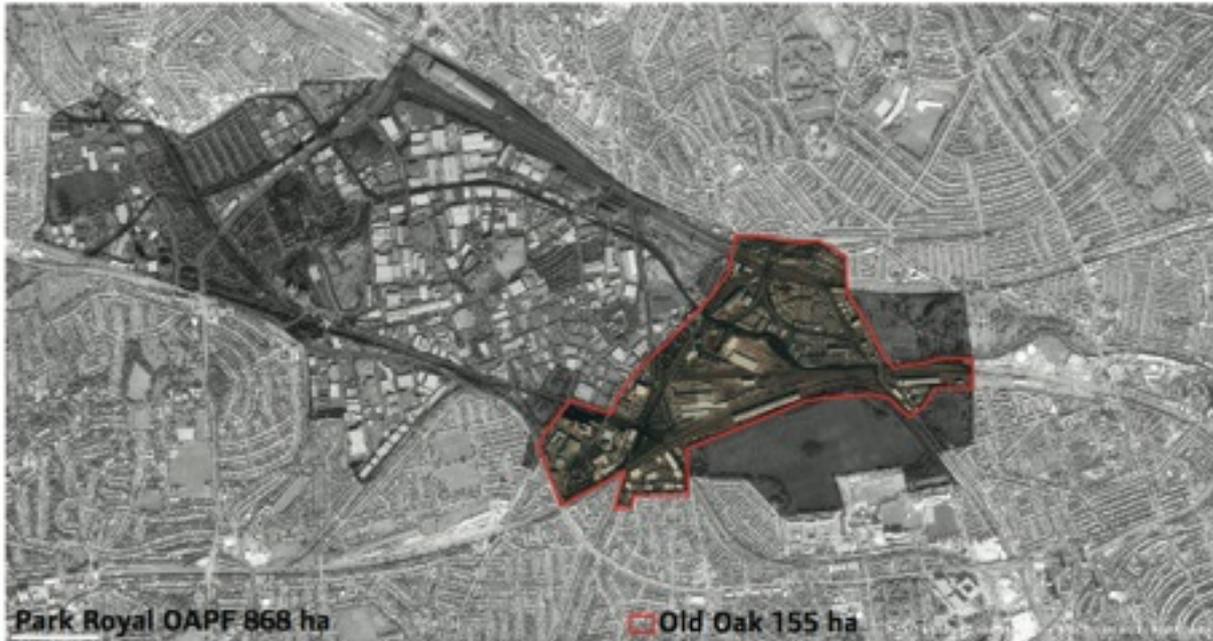


Image one: map of proposed Old Oak Opportunity area (GLA, 2013: 12).

3. Introduction to canal freight.

Multiple benefits of waterborne freight have been identified (DEFRA, 2000; Freight Study Group, 2002; DFT, 2007; TFL, 2007; GLA, 2008). Its capacity to remove HGV freight from the roads is notable, as “one single 600 tonne barge can move the equivalent of twenty-four 25 tonne lorry loads” (British Waterways, 2012: 2). The environmental benefits of waterborne freight have been highlighted (ASD Metal, 2011). The future of inland canal freight looked promising in TFL’s 2025 Transport Vision, which claimed that “where appropriate, modal shift to rail and water will be encouraged” (2006: 39). Yet in practice, there has been a lack of canal freight. The Olympics provided an optimal opportunity for a “showcase sustainable project” (British Waterways, 2005: 4), and looked able to ensure “500,000 lorry journeys saved, 15,600 tonnes of CO2 saved (the equivalent of taking 15,600 cars off the roads), £10,000,000

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environmental benefit, and 160,000KWh hydro power per annum through restored tidal mill” (British Waterways, 2005: 4). However, these measures were largely under-utilised, and the majority of freight was transported via rail from Stratford (TFL Interview, 26/03/2014).

The treatment of canal freight during the Olympics is emblematic of general ambivalence towards inland waterborne freight. After extensive canal building in the eighteenth and nineteenth centuries (Lowe, 2005), canal freight began to diminish following the railway’s expansion towards the end of the nineteenth century. Today, this competition is emphasised by the prevalence of HGV freight, which carried 89.3% of loads “to, from and within London” during 2010 (TFL, 2012). The main barrier observed in interviews was that of speed: canal freight is perceived to be slow in comparison to HGV. However, average traffic speeds across London mean this perception is somewhat unjust: at 17mph and 8.8mph in greater and central London between 7:00 - 17:00 respectively (TFL, 2010), the 3mph average speed of a barge does not seem so inefficient. Further, its reliability has been widely acknowledged.

A further key barrier to freight seems to be ambiguity in responsibility. A number of overlapping bodies are involved, and there is no clear authority from which to seek advice and guidance. Before becoming a trust in 2012, British Waterways produced a number of studies that encouraged use of canal freight. However, their commitment to waterborne freight was questioned, with evidence presented to the House of Commons claiming they “have a habit of claiming credit for freight initiatives that have nothing to do with them, indeed, that they have been working behind the scenes to disrupt” (Defra, 2007: 161). After their transition to a trust, British Waterways’ influence changed. The current confusion with regards to official guidance will be addressed in the second report.

4. Treatment of canal freight in planning documents.

i. London Plan

The London Plan adopts a positive approach to canal freight. Detailed in Chapter 7, “London’s Living Places and Spaces” (London Plan, 2011), the Grand Union Canal forms part of the “Blue Ribbon Network”, a system of waterways which should

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“contribute to the overall quality and sustainability of London...in particular for passenger and freight transport” (241). The Plan links these policies to national planning, “in particular PPG13, which aims to deliver a modal shift in freight transport to more sustainable modes”, and recognises water freight as among “most sustainable modes, particularly for low value, non time- critical bulk movements” (243).

The language of the plan is clear but soft. The “Mayor *wishes*” to make provisions for freight; policy 7.26 increasing the use of the BRN for freight transport, “*should* protect existing facilities”; within LDFs, “boroughs *should* identify locations... suitable for additional waterborne freight” (243). This weakness is emphasised by the absence of these policies in Chapter 8 of the plan - no provisions for monitoring canal freight policies are included.

ii. Old Oak Vision

This ambivalence is reflected in strategic documents for Old Oak. The Old Oak Common vision document adopts critical differences in tone, posing the canal as “a barrier to north-south movement” (GLA, 2013: 32). No longer viewed as an asset, the canal is viewed as either cumbersome, or an asset to be exploited in commercial developments.

iii. Park Royal Opportunity Area Planning Framework

However, some gestures to waterborne freight are evident in the earlier *Park Royal Opportunity Area Planning Framework* (GLA, 2011), which mentions efforts should be made to “promote the use of...canal to encourage sustainable freight transport” (GLA, 2011: 3). This document references the *West London Canal Network Survey* (2004), which concludes “Park Royal has great potential to take advantage of the canal due to...its position on a 27-mile lock-free section” (41).

iv. Local authorities

Local planning documents pay little attention to the canal, save general comments on “design and appearance” (Hammersmith, 2013: 7). However, Ealing Core Strategy does reference developing waterborne freight in the Park Royal area, but calls for feasibility studies of “where this is possible” (Ealing, 2012: 50). The canal falls outside Brent’s

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boundary within the OOC area. Elsewhere, while freight is acknowledged, the canal is viewed as “an attractive environment for waterside regeneration” (Brent, 2010: 36)

Overall, the ambivalent language of the London Plan has generally been translated into weak or absent policies in local planning documents.

5. April 2014 and moving forward.

i. MDC and TFL

The proposed MDC brings with it the possibility for mayoral influence through local boroughs and TFL. Further, the OOC MDC could be encouraged to adopt neglected freight policies within the London Plan. TFL will be responsible for lobbying Crossrail and HS2 to ensure they follow the London Plan and guidance provided by the Mayor.

ii. Powerday Wharf

TFL have previously committed to waterborne freight around OOC, funding Powerday’s wharf in 2006. At this time there seemed great potential for “West London businesses to consider transporting waste by barge on the Grand Union Canal” (Halfie, 2010). The event’s press release details how

”the £450,000 wharf is part of a package of measures to revive canal freight on west London 's canals. Studies have indicated that the 26-mile, lock-free stretch of waterway could accommodate 500,000 tonnes of material each year and offer a cleaner and, in some instances, cheaper alternative to road haulage” (Halfie, 2010).

Common sense implies this funding would have required convincing feasibility studies which classed the canal suitable for freight transportation. Further, there is evidence of “olympic class barges...docking at Powerday” during the construction phases of the London Olympics (CBOA, 2009: 1) - a scheme TFL part-funded (Interview with TFL, 26/03). It is uncertain why, given Powerday’s proximity to the proposed developments, the viability of waterborne freight in this area is now questioned.

Powerday highlight their “sustainable transport options” (Powerday, 2010), stating how they “can take three 90ft barges at any one time, carrying up to 80 tonnes of waste each”. They also advertise their position upon “a 26 mile lock free section of the Grand

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Union Canal” (Powerday, 2012). In 2010, former British Waterways Director Mark Bensted joined Powerday as Managing Director, where he recognised the value of sustainability in waste handling (Powerday, 2010 “Powerday Appoints”). Attempts to contact Powerday by phone and email have thus far proved unsuccessful.

iii. Recommendations

Communication with TFL has revealed their commitment to ensuring the sustainable use of transport within developments, falling in line with the Mayor’s recommendations. Individuals within TFL are overseeing the development of a advisory website. As well as the aforementioned freight advisory website, TFL’s current website is also extremely detailed (TFL, 2014).

This report recommends that those seeking to implement waterborne freight in this area communicate further with TFL to

- capitalise on their power to lobby HS2 and Crossrail
- maximise the potential of their planned website
- recognise the capacity of Powerday’s wharf;

And collaborate with relevant individuals in local authorities and TFL to

- encourage the MDC to assess canal freight and follow relevant London Plan policies.

6. HS2 Environmental Assessment.

HS2 could develop modal shift ventures initiated by Crossrail, who currently avoid waterborne freight for “operational rather than financial” issues (TFL interview, 26/03). Crossrail’s spoil is removed by rail from Westbourne Park, and then loops around to North Fleet, where it is transferred to Wallasea island - a “1,500 acre RSPB nature reserve” (Crossrail, ‘First’ 2012) via the Thames. Constructed solely from “excavated material” (Crossrail, ‘Wallasea’, 2012), Crossrail will provide only half the necessary amount (TFL interview, 26/03). HS2 are well-placed to help complete this venture.

The HS2 environmental assessment identifies notable challenges for OOC:

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“In 2026, it is forecast that there will be demand from over 3,000 HS2 passengers and



nearly 18,000 rail passengers in total to use the new Old Oak Common station in the morning peak hour, either to change trains or to start or finish their journeys. By 2041, this total will reach 34,000, of which 5,000 will be using HS2.” (HS2, 2013: 7)

The construction required will be notable, and many surrounding areas are predicted to suffer major adverse effects. The document recognises the canal as a “linear corridor” (HS2, 2013: 12), but does not refer to the possibility of canal freight. Mitigation techniques include construction of new HGV specific routes, and aerial conveyors that will link the development’s satellite compounds. These will cross the canal by the Old Oak Interchange Station. Image 2 shows the proposed site at Atlas road in Orange, connecting to the Willensden Euroterminal main compound in yellow¹.

Image 2: proposed construction around Willensden Euroterminal (HS2, 2013).

Communication with HS2’s interface manager for the area revealed HS2

“have not totally discounted the potential but our main concern at this location was the volume of material (tunnel arisings) that has to be removed and the most efficient method is rail. As I recall the location of wharfage, the size, availability and speed of canal barges together with the consequent multiple handling of materials and

¹For more details, see (HS2, 2013)

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the land required to do so were factors in the assessment. When the project moves to its implementation phase the potential benefits or barriers to using canal freight will no doubt be re-assessed” (HS2 Email, 19/03).

When prompted about specific origins and destinations of construction material and spoil, it was mentioned that “the detail of the construction elements are still to be established. The works are not intended to commence until sometime around 2017... and we need to have gone through the parliamentary process first” (HS2 Email 2, 19/03).

ii. Recommendations

- Feedback be compiled to feed into HS2’s Hybrid Bill by May 23rd
- A strong case for waterborne freight could feed into HS2’s parliamentary process
- Those interested collaborate with TFL to lobby HS2 to build on Crossrail’s Wallasea Island

7. Atlas Road - HS2 Satellite Compound.

Atlas Road - one of HS2’s proposed satellite compounds - appears to provide an appropriate and convincing example of potential modal shifts. The site runs parallel to the canal, southwest of Old Oak Lane.



Image 3: Atlas Road - proposed HS2 Satellite Compound

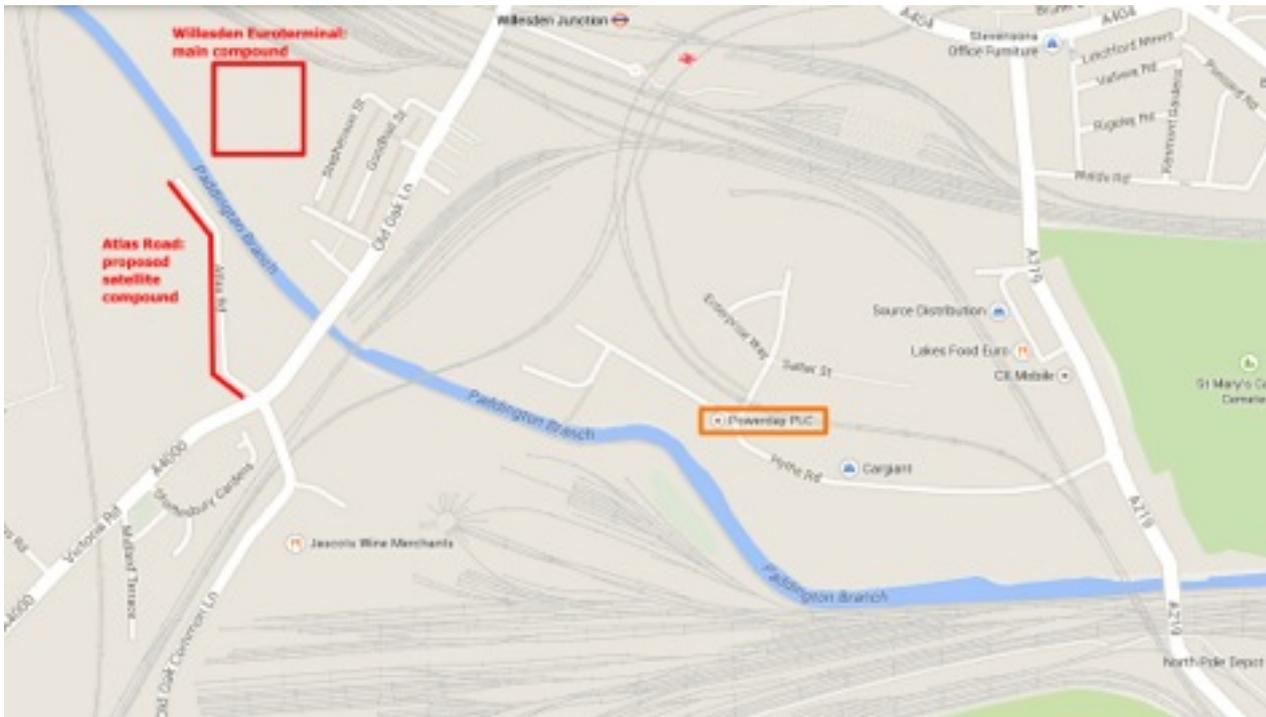


Image 4: Atlas Road and Willesden Euroterminal main compound - proposed HS2 developments and their proximity to Powerday's wharf.

This site will be operational for over three years (HS2, 2013: 41), and many demolitions of existing industrial buildings are planned (42). An estimated 270-360 two-way HGV trips are required here, commencing 2018 and ongoing for 3 to 5 years (183). These will contribute to the multiple “major adverse effects” highlighted by the report. Those deemed to be most severely affected are identified as “key issues” (75). These include residents of Wells House Road, Shaftsbury Gardens, Midland Terrace and Old Oak Common Lane - all lying proximate to Atlas Road.

i. Recommendations

There seems to be a strong case for the alleviation of these issues by making use of the canal at Atlas Road.

- By reducing HGV journeys, HS2 could dramatically mitigate the anticipated severe detrimental impacts on local residents
- Powerday's wharf lies less than 0.2miles from the proposed satellite compound, indicating there is strong evidence to encourage use of waterborne freight in this area

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- Further feasibility studies are needed, as other sites may be viable

8. Canal freight and broader strategic issues.

In tandem with alleviating localised congestion, use of waterborne freight in the OOC developments would relate to a number of broader strategic issues.

i. EU pollution sanctions

In February 2014, the E.U commission launched legal proceedings against the UK government for its “failure to cut excessive levels of nitrogen dioxide” (EU Commission, 2014). In 2013, 29,000 people are thought to have died prematurely in the UK as a result of air pollution; 4,300 of these in London (Vidal, 2014). As well as posing major health risks for humans, nitrogen dioxide has been shown to compromise crop growth and agricultural yields (Rodrigue, 2013). Road transport is the main cause of excessive nitrogen dioxide emissions, with 38% of this stemming from HGV and LGVs (TFL, 2012: 9). Water freight emits much less nitrogen dioxide (Colvile, 2000: 16), and figures demonstrate its carbon dioxide emissions are 94% beneath LGV and 60% beneath HGV levels (TFL, 2007: 20).

ii. HGV safety

In 2010, over 300 people were either killed or seriously injured by road transport in London; 99 of which due to HGV freight (TFL, 2012: 8).

iii. Net costs of road freight

Many studies have evaluated the sizeable net cost of road freight (Maddison, 1996; Piecyk and McKinnon, 2007; Defra, 2009), placing it between £7.1-7.6 billion in 2006 (Piecyk and McKinnon, 2007: 2). The UK government has recently implemented an HGV levy - a mandatory financial contribution applicable to vehicles weighing over 12 tonnes.

iv. Grants for waterborne freight

Further, the UK government has recognised multiple benefits of water freight, and established a series of funding opportunities to encourage a modal shift accordingly. These include the Waterborne Freight Grant (WFG) and the Mode Shift Revenue

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Support (MSRS) - together allocated over £18 million for the 2013-2014 period.

Presently, WFG is not applicable for inland freight, but MSRS remains viable.

9. Conclusion

This report presents an overview of the potential use of waterborne freight in the proposed developments around Old Oak Common. As a newly-proposed “sustainable and successful part of London” (GLA, 2013), Old Oak Common presents an excellent opportunity for the expansion of canal freight in London, which could feed into local and national strategic issues. Use of waterborne freight in these proposals would build on identified environmental and social benefits and provide a catalyst for further waterborne freight development. HS2 may well provide an ideal catalyst for this, with sites running adjacent to the Grand Union canal. These developments could capitalise on the success of Crossrail, and help to complete the newly-constructed Wallasea island with demolition spoil. A modal shift to waterborne freight would drastically aid mitigation strategies, which currently leave many residents of the area likely to suffer from prolonged major adverse effects. By reducing the number of HGV journeys coming in and out of compounds, use of the grand union canal for freight would help overcome negative perceptions of the canal as a barrier to development, and grant local residents some relief from the anticipated effects of excess vehicles. Whilst alleviating localised issues, the increase of waterborne freight in this area would relate more broadly to national issues, helping to reduce pollution and restore confidence in UK environmental policy. It is hoped that further feasibility studies can build on the findings of this report, and go on to influence HS2 and the proposed MDC in the forthcoming developments.

Figure 1: Overview of relevant literature

Report Title	Date Published	Intended Audience	Key Findings
White Paper: A New Deal for Transport: Better for Everyone	1998	Policy makers and local authorities	Scope for using water based freight; government to promote use of inland waterways where economically viable
DTLR: Sustainable Distribution: A Strategy	1999	Policy makers and local authorities	Sets out government's strategy for integrated sustainable freight
DEFRA: Waterways for Tomorrow	2000	Local authorities, construction companies	Overview of government's freight policies; reaffirms positive outlook of 1998 white paper and announces establishment of freight advisory group
Freight Study Group - Freight on Water: A New Perspective	2002	Policy Makers, contractors, local authorities	Government should provide more support to freight on inland waterways; use DTLR and DEFRA to organise a national seminar for waterborne freight
BW: Freight On Our Waterways	2003	Relevant business organisations seeking to transport waste and materials sustainably	Positive overview of use of canals for freight; sets out BW strategies for encouraging freight
TFL: West London Canal Network Survey	2004	Local authorities, canal users, local industries	West London businesses could make greater use of Grand Union Canal for transportation of freight

Report Title	Date Published	Intended Audience	Key Findings
British Waterways' Strategy on Freight on the London Canal Network	2005	British Waterways, connected organisations such as Port of London Authority	Low demand for waterborne freight, but can be a costly and environmentally viable alternative to road freight; BW will continue to support inland waterborne freight
TFL Transport 2025 Vision	2006	Transport planners, local authorities, policy makers	If predictions from London Plan are accurate, there is an urgent need to reduce road transport to alleviate pollution and congestion.
DFT: Local Authority Freight Management Guides	2007	Local authorities, freight organisations	Most large waterways have untapped potential for freight; protection of existing wharves and promotion of new facilities
TFL MMRCV Loading and Unloading	2007	Local authorities, freight organisations	Views canal freight as viable and makes specific recommendations for which type of machinery to be used
TFL London Freight Plan	2007	Policy Makers, local authorities, public	Produce new opportunities for transport of freight using London's waterways; liaise with Port of London Authority and British Waterways; secure extra funding; design and produce more efficient barges; alleviate skills gap and equip workers with necessary expertise

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Report Title	Date Published	Intended Audience	Key Findings
GLA: Water Freight - Breaking through the Barriers	2008	Policy makers and local authorities	Identifies many opportunities for development of water freight in London; recommends various measures to these ends
DEFRA: Mode Shift Benefit Values: Technical Report	2009	Policy makers and government	Similar marginal external costs to modal shift to rail and water
ASD Metal Services: Environmental Assessment	2011	Commercial Boat Operators Association, other freight operators, policy makers	Finds notable environmental benefits to using inland waterborne freight over other road-based freight devices
GLA London Plan	2011	Public, policy makers, local authorities, TFL, construction companies, businesses	Policies set out potential for waterborne freight and encourage developers to make use of it
GLA Park Royal Opportunity Area Planning Framework	2011	Public, policy makers, local authorities	Sets out use of canal for sustainable freight transport
TFL London Freight Data Report: 2012 Update	2012	TFL Staff, policy makers	Continued drop in waterborne freight within London
FFT Domestic Waterborne Freight	2012		Finds drop in waterborne freight during 2011-12, 7th year in a row. Biggest - Thames and Kent, liquid loads
GLA Vision for Old Oak Common	2013	Local authorities, the public, businesses	Views canal as a barrier to proposed developments
Safeguarded Wharves Review	2013	Organisations with wharves, policy makers and local authorities	Very pessimistic outlook on viability of inland waterborne freight

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