

Logistics Report

2018



Freight
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Association



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**Freight
Transport
Association**

We support, shape and stand-up for efficient logistics

FTA is one of the biggest business groups in the UK, supporting, shaping and standing up for efficient logistics. We are the only organisation in the UK that represents all of logistics, with members from the road, rail, sea and air industries, as well as the buyers of freight services such as retailers and manufacturers whose businesses depend on the efficient movement of goods.

An effective supply chain is vital to Keep Britain Trading, directly impacting over seven million people employed in making, selling and moving the goods that affect everyone everywhere.

With Brexit, technology and other disruptive forces driving changes in the way goods move across borders and through the supply chain, logistics has never been more important to UK plc.

As champions and challengers, FTA speaks to government with one voice on behalf of the whole sector, greatly increasing the impact of our messages and achieving amazing results for members.

FTA's foreword



Once again it is my pleasure to welcome readers to the Logistics Report 2018, sponsored by Santander. The report contains the findings from our annual Logistics Industry Survey, as well as data from an array of respected sources, bespoke analysis commissioned by FTA, and insights from our policy experts.

When FTA speaks on behalf of logistics, to government, the media and other stakeholders, we are acutely aware of the range of different types of industries and needs that we represent. There are 195,000 logistics enterprises in the UK and 2.5 million individuals working in wider logistics roles. Logistics enables nearly every part of people's daily lives – from stocking supermarkets and online warehouses to ensuring that power gets to homes and businesses.

This year's Logistics Report reflects on the principal events and trends of the past year. The uncertainty engendered by the ongoing negotiation process between government and the EU27 over the UK's withdrawal casts its shadow across many of the issues explored in the report. From the need for investment to improve our competitiveness and access to markets after Brexit, to concerns over the future labour market and access to EU and non-EU workers, the effects of the change in the UK's relationship with the EU will be profound.

But there are also detailed, workable solutions that need to be identified because of Brexit, not least in terms of the island of Ireland and fluidity of movement of goods across the Strait of Dover. FTA has been at the forefront in educating politicians and officials about the issues that need to be addressed and potential solutions.

I met with Number 10 recently following the adoption of our 'Keep Britain Trading' agenda at our UK Council in February. This plan sets out eight practical measures for the planned transition period and beyond to ensure there is no 'cliff edge' for supply chains. We will continue to take this message to key decision makers and to inform debate on the UK's withdrawal from the EU every step of the way.

FTA acts to champion the interests of logistics and to challenge policies and assumptions that would be detrimental to its members' interests. We speak to government with one voice on behalf of the whole sector, with members from the road, rail, sea and air industries, as well as the buyers of freight services such as retailers and manufacturers.

I hope that you find the information and analysis in our latest Logistics Report an informative and thought-provoking read.

A handwritten signature in black ink, appearing to read "David Wells".

David Wells
Chief Executive
Freight Transport Association

Sponsor's message



Santander is delighted to be once again associated with the FTA Logistics Report as part of our continuing and highly productive partnership with Britain's transport and logistics businesses.

The UK's logistics sector is poised at what seems likely to be a crucial turning point. The past 12 months have thrown up a significant number of challenges for the country's logistics providers, and it is our view that the way in which businesses rise to meet these challenges over the rest of 2018 will play a decisive role in ensuring the industry's future success.

UK economic growth fell to its lowest rate in five years during 2017, but while growth in 2018 is also now expected to be slower than previously anticipated, there are some grounds for optimism. The fall in the value of sterling following the 2016 EU referendum appears to have had a positive impact on international trade. Export volumes increased by 14 per cent last year, which means that, while Britain remains a net importer, the trade gap is narrowing.

The potential for international growth presents a fantastic opportunity for logistics providers: it is their expertise and knowledge of overseas markets that British businesses so desperately need to make their global expansion plans a reality.

There are, of course, a number of headwinds facing transport and logistics businesses. Retailers are increasingly introducing multi-channel marketing strategies in order to meet consumer demands for faster and cheaper deliveries: this means logistics firms are under ever greater pressure to reduce costs and improve efficiency while maintaining exceptional levels of service.

Meanwhile, new legislation – including recently proposed air quality and vision standards – means firms must shoulder a greater regulatory burden, while the need to protect businesses against the threat of debilitating cyberattacks is ever-increasing.

Finally, the next 12 months will be especially crucial for the whole UK economy as the country nears its departure from the European Union in March 2019. For transport and logistics firms in particular, the details of our future trading relationship with the remaining 27 EU member states cannot come too soon.

UK logistics businesses will play a vital role in ensuring Britain is able to make a smooth transition to its post-Brexit future: as such, the industry's needs must be at the forefront of politicians' minds as negotiations continue.

Santander is proud to partner with the FTA and its annual Logistics Report as part of its commitment to supporting UK transport and logistics businesses with their domestic and international growth.

John Simkins
Head of Transport & Logistics
Santander Corporate & Commercial Banking

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FTA's review of the year

Any review of a year in which the UK activated Article 50 of the Treaty of Lisbon in March to begin the process of leaving the EU and in which the Prime Minister called a snap General Election and lost the government majority in June would contain enough political excitement for one year.

But 2017 was about much more than that and, although Brexit dominated national debate, particularly in the lead up to the EU27 giving the go-ahead for trade talks in December, other events and announcements had a fundamental impact on logistics as well.

Strategic investment

Painfully slow progress on the construction of a third runway at Heathrow, on increasing the capability of the rail network for freight and on improving the road network and access to ports was evidenced by the continuing relatively low placing of the UK's position on key infrastructure measures in the World Economic Forum's Global Competitiveness Index.

FTA scrutinised plans from the UK government and devolved institutions for infrastructure improvements; we emphasised the need for timely delivery of key enhancements. These included Highways England and the government's interim thoughts on the second Road Investment Strategy and a consultation on the planned Major Road Network. We also continued to make the case for an additional runway at the UK's global aviation hub, Heathrow Airport.

Clean air

With the government forced to act on air quality in UK towns and cities because of legal action, and unclear

messages on diesel regulation and taxation, operators were left with a disturbing lack of clarity to guide their business planning and investments. This issue was compounded in London, where there was evidence that continued delays in providing suitable guidance on the Mayor's planned Direct Vision Standard was impeding the purchase of newer, cleaner vehicles.

Euro VI HGVs represent a substantial advance in engine emissions standards. FTA is working with local authorities, the Local Government Association and the Department for Environment, Food and Rural Affairs to inform their plans for Clean Air Zones and seek workable solutions.

Devolved powers

Not only has FTA's regional policy team made sure it has expert knowledge on towns' and cities' plans for Clean Air Zones but it has also been actively seeking to inform the work plans of the new combined authority structure and the 'metro' mayors that were elected in May. FTA is engaging with these devolved institutions to ensure that it understands how the new mayors plan to use their

powers and is there to make certain they are educated on the policy options and their consequences.

Fuel

During 2016, the price of fuel had significantly increased on the previous year because of the fall in the value of sterling. The fuel price was slightly higher again at the end

of 2017 as the weak pound and rise in the price of crude oil continued to bite.

FTA urged the Chancellor of the Exchequer not to increase fuel duty and welcomed his decision to freeze the rate in both Budgets. Logistics has been facing increased costs due to inflation and FTA's research shows that operators have not been able to pass these on in full to their customers, leaving them with less margin to invest in their businesses and people.

Key themes for FTA in 2018

The Logistics Report 2018 considers the immense and diverse array of topics that FTA, as an association dedicated to serving its members' interests, is engaged in. Four key themes stand out in the report.

Safety

Data is showing improvements on this key metric for the boards of logistics businesses and the issue is at the heart of effective compliance. The Logistics Report 2018 finds that the HGV accident rate (all severities) per billion vehicle miles has fallen by 44 per cent since 2006; the number of fatal accidents per billion lorry miles fell by 8.2 per cent in 2016 compared to 2015 (latest figures available).

Brexit

The FTA Logistics Industry Survey shows the impact of uncertainty following the EU referendum. The survey found that market uncertainties caused by Brexit were the biggest external challenge to growing internationally, with 56.9 per cent of respondents

saying it was a problem. Brexit did not appear in the top three suggested actions for government last year but it is now third as the UK moves closer to the March 2019 deadline.

Infrastructure and facilities investment

Once again, investment in road improvements was the top priority for government to address, according to respondents to the FTA Logistics Industry Survey who ranked the key issues for their businesses. Investing in infrastructure across all modes and facilities was again in the top three suggestions for government.

Skills and availability of workers

Logistics is still hampered by a shortage of key skilled workers. When asked whether restricting freedom of movement of people from the EU would harm business, 34.7 per cent said it would. The figure rose to 42.6 per cent for businesses engaged in manufacturing, while 45 per cent indicated that the availability of skilled British workers was also a concern.

A champion and challenger, FTA speaks to government with one voice on behalf of the whole sector, with members from the road, rail, sea and air industries, as well as the buyers of freight services such as retailers and manufacturers. FTA's strong team of policy experts, consisting of national and regional policy managers, research analysts and compliance advisors means that we are best placed to campaign on behalf of UK logistics at all levels of government on these key themes and the other issues raised in the report.

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Executive summary

The FTA Logistics Report 2018 examines the challenges and key trends the logistics industry has faced during the last year and how it has responded to them.

Logistics performance

Many sectors of the UK economy were less buoyant in 2017, with uncertainty over Britain's future trading relationship with Europe and increasing inflation affecting investment and consumer spending. Logistics' activity levels were resilient, if not robust.

Respondents to the FTA Logistics Industry Survey rated the impact of external factors on their businesses over the next year, margin erosion was a particular concern.

ROAD

Performance of domestic and international road freight was positive and the expectation that this will continue through 2018 reflects the recent strength in the manufacturing sector, a continued increase in goods lifted and buoyant export trade.

For HGV, van and trailer fleets, 2017 saw investment increase on balance, according to the FTA Logistics Industry Survey. However, UK HGV and van registrations fell overall in 2017, amid concerns that uncertainty is holding back investment. Expected fleet investment for 2018 was broadly the same as last year for HGVs and trailers but van investment was anticipated to be more modest. Large-scale investment intentions for 2018 remain somewhat subdued but are better than the situation a year ago.

Four of the five top road freight sectors indicated there was a positive outlook for business expectations

in 2018 compared to 2017 although again the public authority sector expressed a strong decrease in business expectation.

RAIL

Respondents indicated a rebound in activity for intermodal services in 2017 and anticipated a substantial increase in intermodal activity into 2018 (strongly linked to deep sea container shipping outside the EU).

Bulk freight moved by rail fell again in 2017 by 1 per cent compared to 2016. This is due to another fall in the amount of coal moved for thermal power generation.

AIR

There was mixed sentiment for import and export activity in air freight although overall there was an improvement on 2016. In 2017, air freight imports and exports showed growth or remained the same except for the Middle East, which declined. The outlook for 2018 is less positive, with respondents expecting a decline on some key routes.

SEA

International sea freight customers reported the strongest trade lane growth in 2017 to and from the Far East. Respondents predicted that 2018 should be a good year for international shipping, with growth expected on all routes apart from South American exports.

FUEL

Bulk fuel prices at the end of 2017 were slightly higher compared to a year earlier due to the weak pound and the continuing rise of the price of crude oil. There were year-on-year increases of 3.2 per cent for bulk diesel prices, at the same time the price of Brent Crude rose by 16.7 per cent to a monthly average of \$64.09 a barrel in December 2017.

International trade and connectivity

During 2017, the scale of the challenge of ensuring 'frictionless trade' between the UK, the EU and the rest of the world after Brexit came into sharper focus. A deepening appreciation is emerging of the role of connectivity in enabling competitiveness.

Respondents to the FTA Logistics Industry Survey said investment in road improvements was the most important thing politicians could do to support efficient logistics. The top three actions they would like government to take were to cut fuel duty, invest in roads, infrastructure and facilities and resolve the Brexit situation.

INTERNATIONAL TRADE

Responses indicated a small decline in competitiveness globally and within the EU compared to 2016.

Of respondents to the FTA Logistics Industry Survey, 14 per cent had deferred investment decisions since the vote to leave the EU whilst 86 per cent had not.

Asked whether restricting free movement of people from the EU would harm business, 35 per cent said it would and 65 per cent that it would not. Manufacturing and distribution and haulage were the most affected.

The biggest internal challenge to international growth was "Maintaining profitability" (67 per cent of responses).

When asked "What do you believe are the biggest external obstacles to growing internationally?" participants considered "Market uncertainties caused by Brexit" to be the biggest external challenge (57 per cent of responses) with "Time to research new market opportunities" seen as less of an issue (22 per cent).

PORTS AND SEABORNE TRADE

In 2016, 484 million tonnes were handled by UK ports overall, down by 2.6 per cent on the previous year. Unitised traffic grew steadily for the fourth consecutive year; 24.1 million units of traffic passed through UK ports in 2016, a rise of 1.8 per cent.

The FTA Logistics Industry Survey found that port congestion and capacity worsened in 2017. The balance of opinion was that there had been the largest deterioration in availability of road inland haulage for containers; the capacity of rail links to ports was only slightly worse than the previous year.

UK AIR FREIGHT

UK airports handled 2.41 million tonnes of air freight in 2016, 4.8 per cent more than in 2015 and exceeding the former peak of 2.37 million tonnes in 2004. Heathrow was the largest by volume, handling 1.54 million tonnes in 2016, which is 63.9 per cent of the total and over five times more than the next largest airport, East Midlands International.

Respondents to the FTA Logistics Industry Survey stated that there was a substantial deterioration in congestion at UK international airports last year.

National and local logistics

The movement of goods within the UK is undergoing fundamental change with new thinking on planning the urban environment, air quality, access charging and infrastructure investment as well as safety.

AIR QUALITY

Increased restrictions are planned on goods vehicle access in the UK for air quality reasons. FTA's Logistics Industry Survey asked participants about diesel vehicles and emissions. The majority agreed that improving air quality and reducing emissions was a priority for their business. A third were worried about the cost of scrapping non-conforming vehicles but most had not reduced their fleet because of concerns about emissions.

ROAD RELIABILITY, TOLLS AND CHARGING

Government has made progress in infrastructure planning with the publication of the initial report from Highways England on its spending plans for Road Investment Strategy 2, covering the period between 2020 and 2025.

According to the FTA Logistics Industry Survey, the perceived rate of deterioration in reliability on the road network improved slightly for urban and city roads in 2017 but was the same as the previous year for motorway and trunk roads.

The case for road charging is gaining greater traction but is not universally accepted, especially in Scotland where there are concerns over distance-based charging.

The government has been exploring ways of making the HGV Road User Levy a more fully-fledged road user charging scheme for HGVs and will flex the charge to take account of Euro engine emissions standards.

RAIL FREIGHT INVESTMENT

Record levels of intermodal rail freight movements from deep sea ports and construction sector usage are welcome indicators of ways in which supporting this mode can help secure further growth to the benefit of logistics. But this brings new challenges, as freight operates across institutional boundaries. This is one of the reasons why the new Freight and National Passenger Operators (FNPO) route organisational structure was established by Network Rail in April 2017.

New rail freight strategies from the UK and Scottish governments support rail freight growth and existing operations on the rail network. In Control Period 6 (covering the period 2019-2024), FNPO will have its own revenue requirement to assist in making the case for freight improvements and capacity.

The FTA Logistics Industry Survey found that while the level of reliability of roads overall was still below that of rail, the gap between them had narrowed.

WATER FREIGHT

Britain's canals and rivers could be playing a bigger role in logistics but changes in local and central government policy and planning approaches would be needed to make this happen.

In 2016, the total amount of goods moved by all domestic waterborne freight declined by 3 per cent to 30.4 billion tonne kilometres. There has been a decline in one-port and coastwise traffic.

SAFETY

The UK compares positively to the EU average for fatality rates per million population in accidents involving HGVs. This is 7.7 per million population, with the UK averaging 4.3 per million population.

London has been developing its own plans for a Direct Vision Standard which would apply to all N3 category vehicles (goods vehicles over 12 tonnes). A permit scheme and a safe system, which recognises investment in other forms of safety equipment, will now apply to vehicles which do not meet the one-star Direct Vision Standard rating when the scheme is introduced in 2020.

In 2016, the HGV accident rate (for all severities) per billion vehicle miles had fallen by 44 per cent since 2006 and the number of HGV fatal accidents per billion vehicle miles was 35 per cent lower. Van accident rates followed a similar trajectory, with a reduction of 32 per cent and 45 per cent for accidents of all severities and fatal accidents per billion vehicle miles.

Image, innovation and skills

The logistics industry suffers from negative perceptions in terms of image and career opportunities, which has led to skills gaps and a lack of diversity. But it is also an activity that seeks continuous improvement, where exciting innovations in technology and practices are taking place.

IMAGE

The FTA Logistics Industry Survey asked participants to rate their perception of government and public understanding of the logistics industry. The level of public understanding was rated as similar to 2016, at 0.93, showing no improvement. Respondents also indicated that they believed government understanding had deteriorated (from 1.97 last year to 1.82 this year).

WORKFORCE, STAFFING AND LABOUR

There is a stark lack of gender and ethnic diversity in the logistics industry, which is dominated by male workers (87 per cent) and people who describe themselves as ethnically white (91 per cent).

According to the FTA Logistics Industry Survey, the logistics vocation with the largest proportion of EU workers was warehouse staff, where they represent one in six, followed by HGV drivers where they are one in seven.

Respondents were asked to rate their anticipation of staff shortages in 2018 across key logistics vocations. Over 10 per cent anticipated an inability to fill HGV driver vacancies. Of the key logistics vocations, fitter, mechanic and technician roles are anticipated to be the hardest to fill. Overall, forklift driver jobs are expected to be the easiest to recruit.

The most popular measures to address and improve recruitment and retention of new staff were investment in new vehicles and improved driver facilities, followed by promotion of driving and other logistics professions to young people.

SAFER, CLEANER AND MORE PRODUCTIVE LOGISTICS

The government's Industrial Strategy sets out a long-term plan to boost the productivity and earning power of people throughout the UK. For logistics, autonomous and platooning technologies have particularly caught public and media attention.

ROAD

Even though empty running increased (measured by weight rather than volume), shorter journeys and better loading factors meant HGVs moved 11.8 per cent more goods in 2016 compared to 2015. The total of 170 billion tonne kilometres is the highest level recorded since comparable records began in 1990.

In the longer term, automation could unlock significant efficiencies in the road freight sector. The biggest opportunities are likely to come when the point is reached where vehicles can move unaccompanied (ie with no human occupant).

The Department for Transport has been working on a Road to Zero document, which is expected to include a carbon reduction target for HGVs; it is anticipated this will be published in 2018.

SEA

The UK is a maritime-dependent nation, meaning disruptions to the maritime freight transport network can have rapid and wide-ranging effects on the economy. The UK's overall maritime freight volumes are relatively static, but this masks underlying trends, such as the continued rise of containerised traffic, directional imbalances due to more trade in imports than exports, the importance of unitised freight, declining bulk energy product flows and the emergence of new, niche trades such as biomass. Shipping needs to adopt new processes and technologies to keep up with others in the supply-chain.

AIR

Shippers have long campaigned for greater transparency and improvements in the air cargo product. The Global Shippers' Forum and Cargo iQ have been making progress in enhancing transparency in air cargo performance, most notably in establishing commonly agreed air cargo industry key performance indicators.

RAIL

Digitalisation could provide key improvements for rail freight, including additional capacity through enhanced signalling system capability; getting more from the nodal yard concept to align train paths by optimising live network timetable data; creating a wider traffic management network connecting cross-London freight flows to the key radial intermodal corridors from the ports of Felixstowe, Southampton and London Gateway across London to the Midlands, North and Wales.

Logistics dashboard

KPI						
 Economic indicators		2013	2014	2015	2016	2017
UK ECONOMIC ACTIVITY						
1	GDP (annual percentage change)	2.1%	3.1%	2.3%	1.9%	1.8%
2	Average weekly online retail sales (£ million)	£639.61	£725.38	£816.26	£988.57	£1,146.93
UK EXPORTS						
3	Volume of goods exported to the EU (annual percentage change)	-2.0%	+8.8%	+5.2%	-0.6%	+7.3%
4	Volume of goods exported to the rest of the world (annual percentage change)	-0.3%	-0.3%	+5.5%	-1.9%	+5.5%
UK IMPORTS						
5	Volume of goods imported from the EU (annual percentage change)	+5.5%	+10.5%	+2.2%	+5.1%	+4.0%
6	Volume of goods imported from the rest of the world (annual percentage change)	+2.8%	-2.6%	+2.6%	+5.2%	+4.7%
UK INFLATION AND CURRENCY						
7	Retail Prices Index (annual inflation in December)	2.7%	1.6%	1.2%	2.5%	4.1%
8	Consumer Prices Index (annual inflation in December)	2.0%	0.5%	0.2%	1.6%	3.0%
9	£/\$ exchange rate (average for December)	\$1.6384	\$1.5642	\$1.4982	\$1.2486	\$1.3409
10	£/€ exchange rate (average for December)	€ 1.1956	€ 1.2685	€ 1.3777	€ 1.1843	€ 1.1328
COSTS						
11	Wage settlements (annual change in basic pay)	+2.2%	+2.4%	+2.6%	+2.2%	+2.8%
12	Total HGV operating costs (annual change for 44t GVW artic)	+0.9%	-5.1%	-3.0%	+7.0%	+2.2%
FUEL						
13	Bulk diesel (average pence per litre in December ex VAT)	109.62	94.18	81.61	94.04	97.09
14	Bulk gas oil (average pence per litre in December 2017)	63.36	47.95	35.66	47.52	50.62
15	North West European Diesel (average per tonne in December)	\$962.92	\$606.15	\$352.05	\$490.36	\$574.35
16	Brent Crude (Futures) (average per barrel in December)	\$110.70	\$63.46	\$38.90	\$54.92	\$64.09
17	Jet fuel (average per tonne in December)	\$1,009.06	\$644.54	\$384.65	\$513.15	\$612.96
18	Rotterdam Gas Oil (average per tonne in December)	\$943.20	\$581.39	\$337.43	\$478.73	\$566.49
 Road transport industry		2013	2014	2015	2016	2017
						Most recent year-on-year change
19	Reported profit margin of Top 100 road hauliers	3%	3%	4%	4%	
20	Number of Goods Vehicle Operator Licences	77,732	75,595	77,002	73,458	no data available
21	Population of HGVs licensed	385,795	389,787	396,870	404,804	no data available
22	Population of vans licensed	3,388,077	3,499,832	3,659,720	3,804,457	no data available
23	Population of HGV trailers (based on number tested)	222,737	228,286	236,047	245,919	no data available
24	HGV registrations	56,218	41,469	51,899	53,916	52,120
25	Van registrations	271,073	321,686	371,830	375,687	362,149
26	Number of HGV drivers in employment (thousands)	259	285	299	315	302
27	Claimant count (HGV drivers for December)	2,875	1,300	720	500	390
28	HGVs laid up (SORN)	71,877	75,072	89,767	104,933	no data available

KPI

		2013	2014	2015	2016	2017	Most recent year-on-year change
	Safety						
29	HGV motor vehicle test pass rate initial (>3.5tonnes GVW)	78.4%	80.1%	82.8%	82.8%	no data available	
30	Van test pass rate initial (class 7)	49.7%	51.1%	53.2%	54.6%	no data available	
31	HGV roadside encounter prohibition rate percentage – mechanical checks (UK drivers only)	31.1%	30.7%	30.1%	27.8%	no data available	
32	HGV roadside encounter failure rate percentage – drivers' hours checks (UK drivers only)	7.5%	7.3%	7.1%	5.1%	no data available	
33	HGV roadside encounter failure rate percentage – weight checks (UK drivers only)	51.1%	49.6%	45.5%	39.1%	no data available	
34	RIDDOR reportable workplace accidents for transport	10,835	10,809	10,421	9,985	no data available	
35	Road casualties linked to HGVs (number killed or seriously injured)	1,354	1,319	1,353	1,284	no data available	
	Efficiency	2013	2014	2015	2016	2017	Most recent year-on-year change
36	Percentage of HGVs empty running	28.6%	28.8%	28.6%	30.2%	no data available	
37	Percentage of inland freight moved by rail (billion net tonne kilometres)	12.0%	12.0%	10.0%	8.0%	no data available	
38	Lading factor percentage for HGVs (>3.5 tonnes GVW)	63.0%	62.0%	64.0%	68.0%	no data available	
39	HGV fuel consumption (mpg) (articulated vehicles)	7.8	7.9	8.0	8.0	no data available	
40	Use of alternative fuels in HGVs	1.1 mt of oil equivalent	1.0 mt of oil equivalent	1.0 mt of oil equivalent	1.0 mt of oil equivalent	no data available	
41	Average HGV payload capacity (tonnes)	8.1	8.0	8.3	8.8	no data available	
	Traffic flows	2013	2014	2015	2016	2017	Most recent year-on-year change
42	Containers handled by major UK ports (thousand TEUs)	8,244	9,511	9,772	10,200	no data available	
43	Freight handled by air (tonnes)	2,262,386	2,304,487	2,299,343	2,409,934	no data available	
44	Goods moved by HGVs (>3.5 tonnes GVW) (billion tonne kilometres)	139	136	152	170	no data available	
45	Van kilometres (billion vehicle kilometres)	68.5	72.4	75.5	79.0	no data available	
46	Cabotage within the UK (million tonne kilometres)	1,050	1,400	1,458	no data available	no data available	
47	Goods moved by rail (billion tonne kilometres)	22.40	22.14	19.34	17.05	17.17	
48	Goods moved by domestic intermodal rail (billion tonne kilometres)	6.20	6.41	6.46	6.67	6.79	
49	Channel Tunnel rail freight volumes (tonnes)	1,363,834	1,648,047	1,420,826	1,041,294	1,219,364	
50	Number of rail freight train movements	288,371	282,304	236,290	223,751	no data available	
51	Rail Freight Delivery Metric (percentage of freight trains arriving at their destination within 15 minutes of scheduled time)	N/A	93.9%	94.1%	94.2%	94.1%	
52	Percentage penetration of cross-Channel market by UK HGVs	17.5%	16.2%	14.7%	14.0%	14.1%	
53	HGV movements to Europe (unaccompanied trailers only)	826,133	866,037	927,913	965,590	1,043,798	
54	HGV movements to Europe (all powered vehicles)	2,222,242	2,399,812	2,458,538	2,466,676	2,447,048	

Main Sources

Department for Transport (DfT): *Transport Statistics GB, Road Freight Statistics, Reported Road Casualties GB*
 Freight Transport Association (FTA): *Manager's Guide to Distribution Costs (MGDC)*
 Office for National Statistics (ONS): *UK Trade, UK Retail Sales, GDP, Inflation*
 Society of Motor Manufacturers & Traders (SMMT)



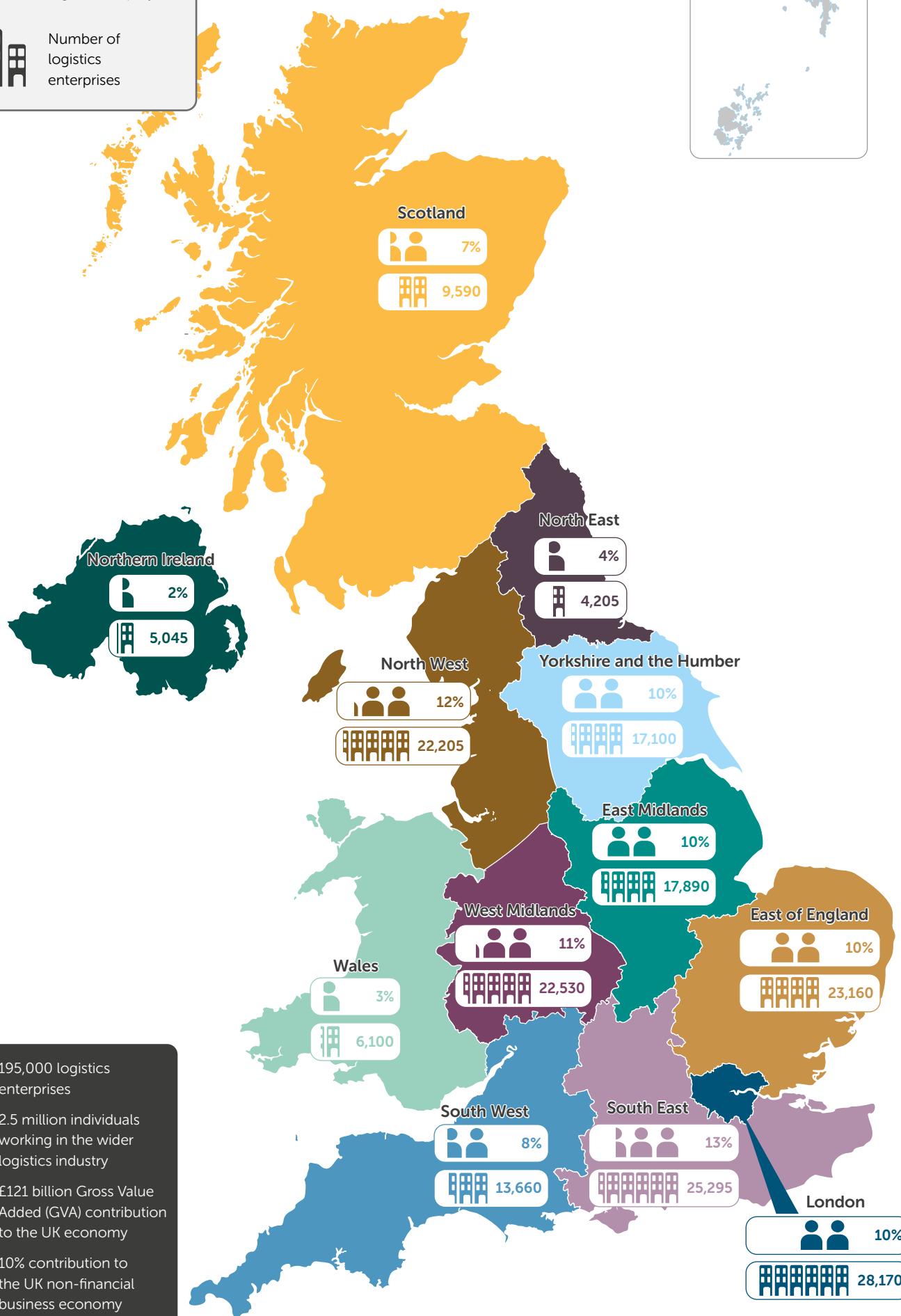
Logistics performance

THE UK LOGISTICS SECTOR

KEY



The Northern Isles



- 195,000 logistics enterprises
- 2.5 million individuals working in the wider logistics industry
- £121 billion Gross Value Added (GVA) contribution to the UK economy
- 10% contribution to the UK non-financial business economy

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Sources: Business activity, Size and Location, 2017/Annual Business Survey, ONS, 2016

Logistics performance

Many sectors of the UK economy were less buoyant in 2017, with uncertainty over Britain's future trading relationship with Europe and increasing inflation affecting investment and consumer spending. The picture was not universally bleak, as some exports were helped by the weakened pound. However, as a consequence, logistics' activity levels were resilient, if not robust, in the face of conflicting economic forces.

UK economy

Uncertainty weighs on the economy

The performance of the UK economy in 2017 was slightly stronger than the Office for Budget Responsibility (OBR) had predicted at the time of the Autumn Budget. OBR had downgraded its forecast for 2017 from 2 per cent to 1.5 per cent in its report published on the day of the Budget¹, citing a squeeze on consumer spending caused by rising inflation and weaker productivity growth. In the end, according to the third estimate, published by the Office for National Statistics (ONS)², the UK economy grew by 1.8 per cent in 2017 – the lowest annual growth since 2012.

UK Gross Domestic Product (GDP) growth is expected to slow further in 2018, as threats to stability such as public spending cuts, a slowdown in job creation and Brexit-related uncertainty weigh on the economy, leading some businesses to delay much-needed investment that would boost productivity.

The UK remains heavily reliant on consumer spending to drive the economy, with the service sector dominating growth in GDP. However, household incomes are being squeezed by rising prices and below-inflation pay increases. UK Consumer Price Index (CPI) annual inflation stood at 3 per cent in December 2017, compared to 1.6 per cent in December 2016. Food prices rose 4.1 per cent and prices of motor fuels rose by 4.7 per cent in the year³. Historically, price movements for these two groups have been among the main causes of inflation.

Inflation is forecast to fall towards the Bank of England's 2 per cent target over the next year, easing the squeeze on household finances, and house price inflation is expected to average just over 3 per cent⁴. In addition, business investment and exports may be supported by the pickup in global growth. Interest rates are set to rise slowly.

Average weekly earnings for employees in Great Britain rose in the three months to December 2017 by 2.5 per cent including bonuses and also by 2.5 per cent excluding bonuses, compared to a year ago. However,

1 Economic and fiscal outlook, November 2017, OBR, 22 November 2017

2 Quarterly National Accounts: October to December 2017, ONS, 29 March 2018

3 UK Consumer Price Inflation: December 2017, ONS, 16 January 2018

4 United Kingdom – Economic Forecasts – 2018–2020 Outlook, tradingeconomics.com

allowing for inflation, they both fell by 0.3 per cent⁵. The UK is forecast to be the worst of 32 OECD (Organisation for Economic Co-operation and Development) wealthy nations in terms of wage performance in 2018 but wage growth is anticipated to improve by the end of the year.

There were 1.47 million unemployed people in the three months to December 2017, 46,000 more than in the three months to September 2017 but 123,000 fewer compared to a year ago. The unemployment rate was 4.4 per cent, down from 4.8 per cent a year ago⁶.

The unemployment rate is expected to remain close to its equilibrium rate of around 4.5 per cent in the near term although wage growth is likely to remain low, resulting in falling real wages. The number of people in work in the UK rose and the number of unemployed people also rose in the three months to December 2017, possibly due to seasonal fluctuations. There were 32.15 million

5 UK Labour Market: February 2018, ONS, 21 February 2018

6 UK Labour Market: February 2018, ONS, 21 February 2018

people in work, 88,000 more than in the three months to September 2017 and 321,000 more compared to a year ago. The employment rate was 75.2 per cent, up from 74.6 per cent a year ago.

The impact of sterling's rapid devaluation in 2016/17 is gradually subsiding. It recovered some ground during 2017, but was still around 10 per cent lower at the end of the year than before the EU referendum. Exporters broadly welcome a weaker sterling although the boost to exports from the low exchange rate and acceleration in global growth has been counterbalanced by an increase in the cost of imported raw materials and goods as well as the uncertainty surrounding the UK's future trading position with the EU. This has led to rising prices in the shops.

In summary, while the UK economy is expected to continue to grow in 2018, political and trading uncertainty will have an effect. These unclear conditions are likely to influence UK economic growth and investment and consequently domestic demand and the need for logistics services.



Forecast

The UK's economic performance over the course of 2017 turned out to be better than expected. The economy grew faster than anticipated in the final three months of the year, buoyed in particular by a revival in the manufacturing sector, which continued to benefit from sterling's weakness and an upturn in global demand.

The transport and logistics companies which play such a crucial role in enabling our manufacturers to serve markets around the globe should continue to benefit from these trading conditions well into 2018. But in other areas of the economy, the picture remains mixed.

Above-target inflation was a problem for much of 2017, and the issue has continued into this year. But the price increases seen over the past 18 months should soon start to level out and inflation is expected to return to near the 2 per cent target level in the medium term.

The ongoing lack of UK productivity growth is still a major concern, as are the recent falls in real earnings – although the latter problem should ease as inflation slows. But employment remains strong and the fact that the joblessness rate is close to historic lows is particularly welcome.

Clearly, the lack of clarity surrounding the outcome of Brexit negotiations, including the nature of any transitional

arrangements, has caused many businesses to delay making spending decisions. But given that the status quo in terms of international trade is unlikely to be maintained, exporters, importers and logistics firms will soon be forced to start investing in preparation for the possibility of dealing with a new set of tariffs and non-tariff barriers.

The uncertainty of this outlook means that UK firms have even more incentive to take advantage of the fall in the pound and growing international demand to expand into new overseas markets. This is likely to provide businesses in the transport and logistics sector with excellent growth opportunities, regardless of any economic difficulties that arise domestically.



UK logistics market

Stronger manufacturing boosts logistics

Logistics performs an essential role in enabling the UK's prosperity, growth and standard of living. It is also an important contributor to national wealth in its own right (fig 1.1).

FTA conducted its annual Logistics Industry Survey in January 2018 and found that activity sentiment indicators across all transport modes showed a largely positive picture for 2017; the only notable exception being Middle Eastern sea routes. The performance of domestic and international road freight was positive and the expectation that this will continue through 2018 is a reflection of the recent strength in manufacturing sector, the continued increase in goods lifted⁷ and buoyant export trade.

1.1 Contribution by mode to the UK economy (aGVA)¹



⁷ Road Freight Statistics 2016 Table RFS0101, DfT

BUSINESS EXPECTATIONS

Respondents rated the impact of five different external factors, from Brexit uncertainties to margin erosion, on their businesses over the next year. All these external factors were expected to have an impact on the negative side, with the average rating for margin erosion, at 2.21, indicating that this is a particular concern for logistics businesses (fig 1.2).

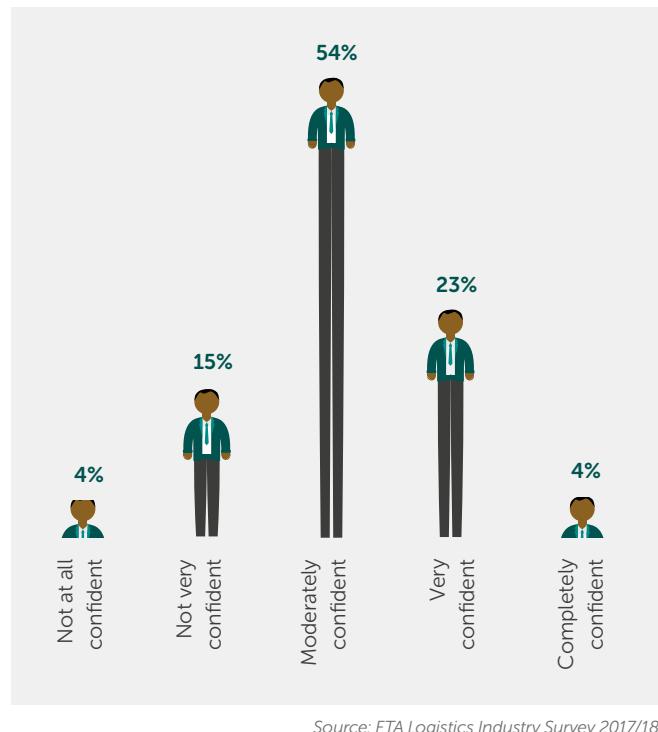
1.2 Impact of external factors on business



Confidence in business growth over the next three years was rated. Results indicated that on average those surveyed were moderately to very confident that their business would grow (fig 1.3).

With most economists predicting slower than planned growth for the UK economy, respondents outlined the plans their organisations have in place to mitigate this. The answers were grouped into nine categories (fig 1.4). Reducing costs and investment were the top plans to mitigate the possibility of slower than planned UK economic growth.

1.3 Confidence in business growth in the next three years



Slower growth in the UK's economy in 2017 may be reflected in overall levels of HGV⁸ and van registrations, which fell compared to the previous year. Commercial

⁸ The term heavy goods vehicle (or HGV) is used to describe goods vehicles in excess of 3.5 tonnes gross vehicle weight (gvw)

1.4 Categories for plans to mitigate slower growth

Category	Percentage	Examples of mitigations by respondents
Reduce costs	19.1%	"Reducing overhead costs and reducing growth expectations"
Investment or expansion	17%	"Grow our European business" "Investing and expanding new market alternatives"
Diversification	13.5%	Diversify and grow in different markets
None/unknown	12.8%	No plans
Improve efficiency	7.1%	"Understanding inefficiencies within the company and improving them"
Increase customer focus	7%	"Continue with excellent customer service to keep existing customers"
Review of the business	5%	"Continuous business review and improvement"
Consolidation	4.3%	"To specialise in technical aspects of our business that set us apart from competitors"
Other	14.2%	"Much of the business is long-term contracts"

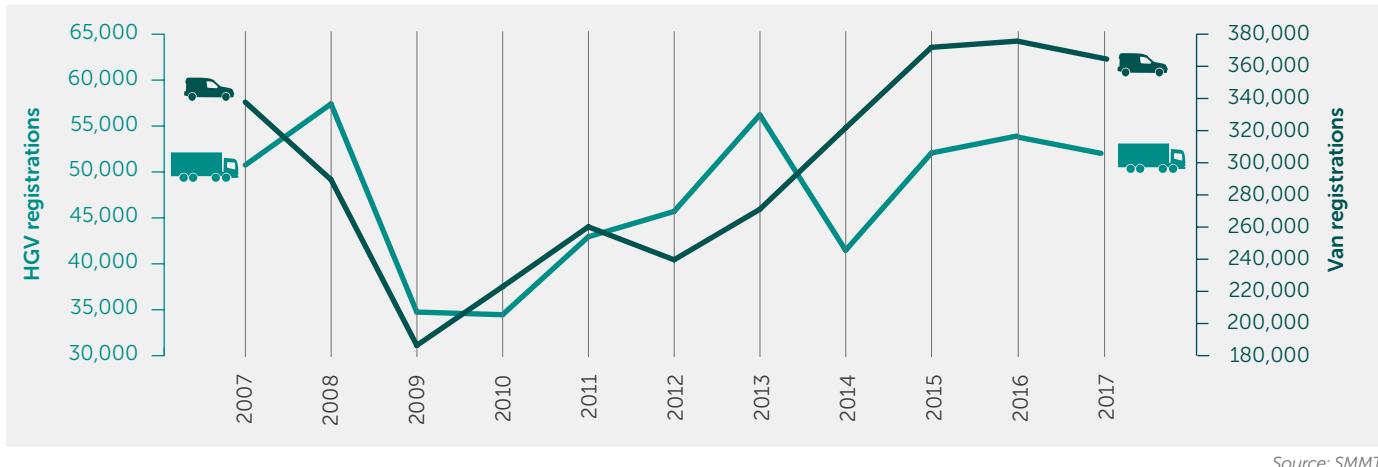
vehicle purchasing is mostly cyclical but uncertainty over the future economic and regulatory environment continued to influence the market. HGV registrations fell by 3.3 per cent compared to 2016 and vans by 3.6 per cent (fig 1.5).

Despite the reduction in national registrations, fleet investment intentions from respondents remained positive across the board according to the FTA Logistics Industry Survey (fig 1.6). This divergence may be due to purchase of used vehicles and characteristics of the sample group itself.

For HGV, van and trailer fleets, 2017 saw investment increase on balance, in line with the trend from last year. Expected fleet investment for 2018 is broadly the same as last year for HGVs and trailers but van investment is anticipated to be more modest than in 2017.

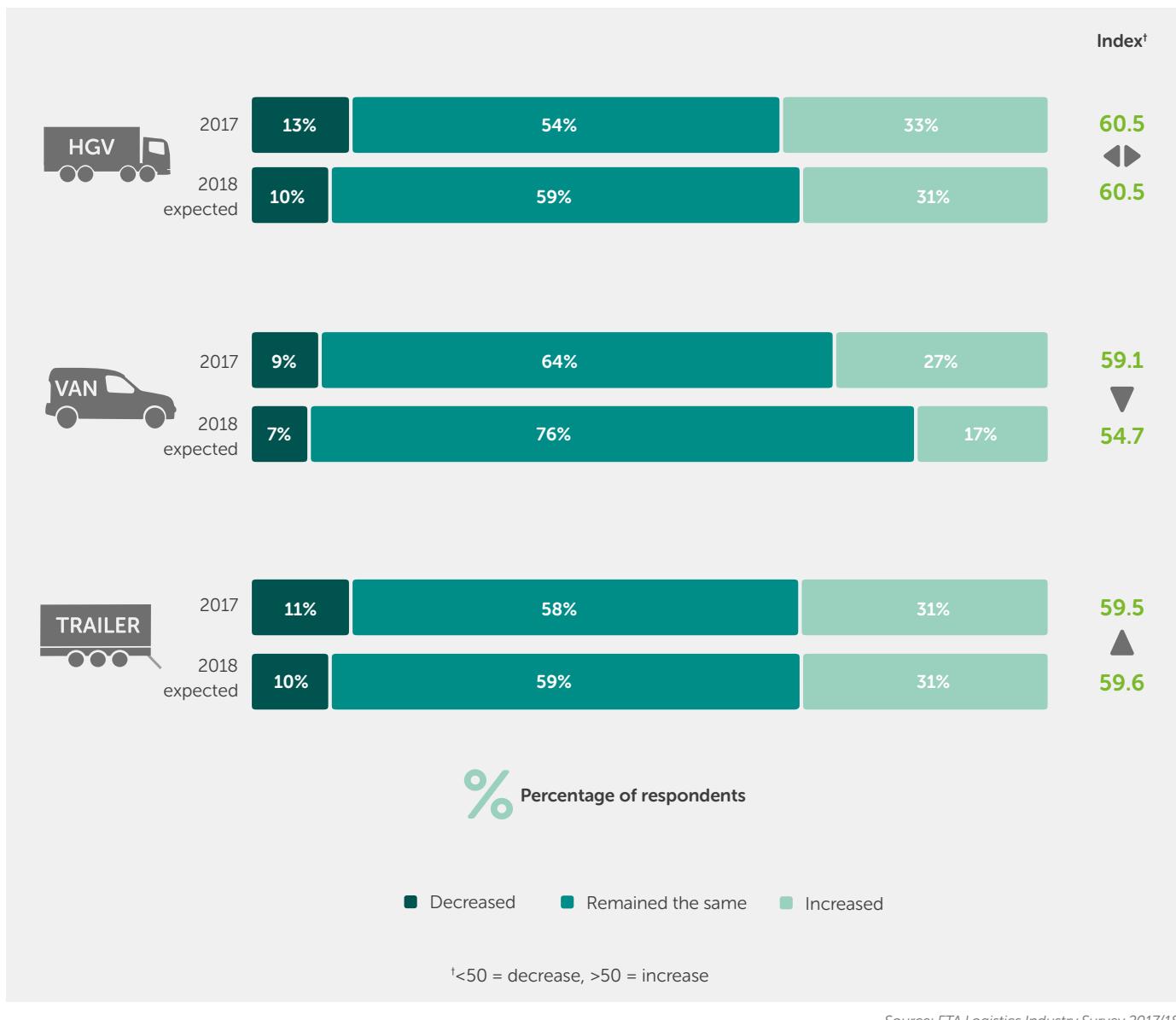
Large-scale investment intentions for 2018 remain somewhat subdued but are nonetheless better than the situation a year ago, when all large-scale business investment measures were down on the previous year (fig 1.7). Whilst intentions to acquire other businesses and rent additional distribution premises are both lower for 2018 compared to 2017, purchase of additional distribution premises is marginally higher, along with plans to relocate business premises.

1.5 Commercial vehicle registrations 2007-2017



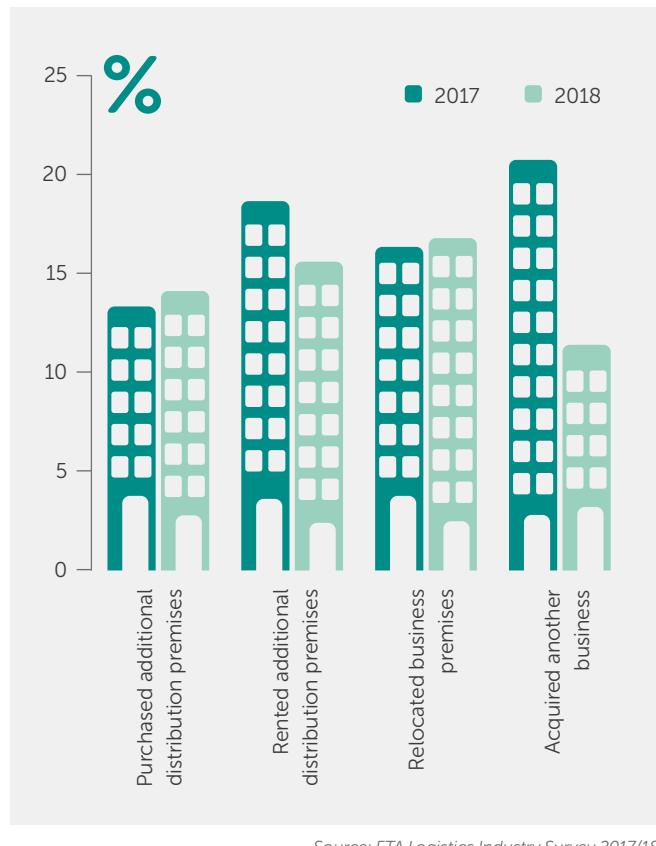
Source: SMMT

1.6 Fleet investment intentions



Source: FTA Logistics Industry Survey 2017/18

1.7 Large-scale business investment plans in 2017 and 2018



ROAD FREIGHT

Domestic road freight activity experienced a year-on-year increase and there is anticipation that the expansion

will continue in the year ahead (fig 1.8). The anticipated growth rate for 2018 is similar to that predicted by respondents in 2017. The continued positive sentiment reflects national road freight statistics, which showed that goods lifted in 2016 exceeded the previous highest tonnage levels last seen in 2007.

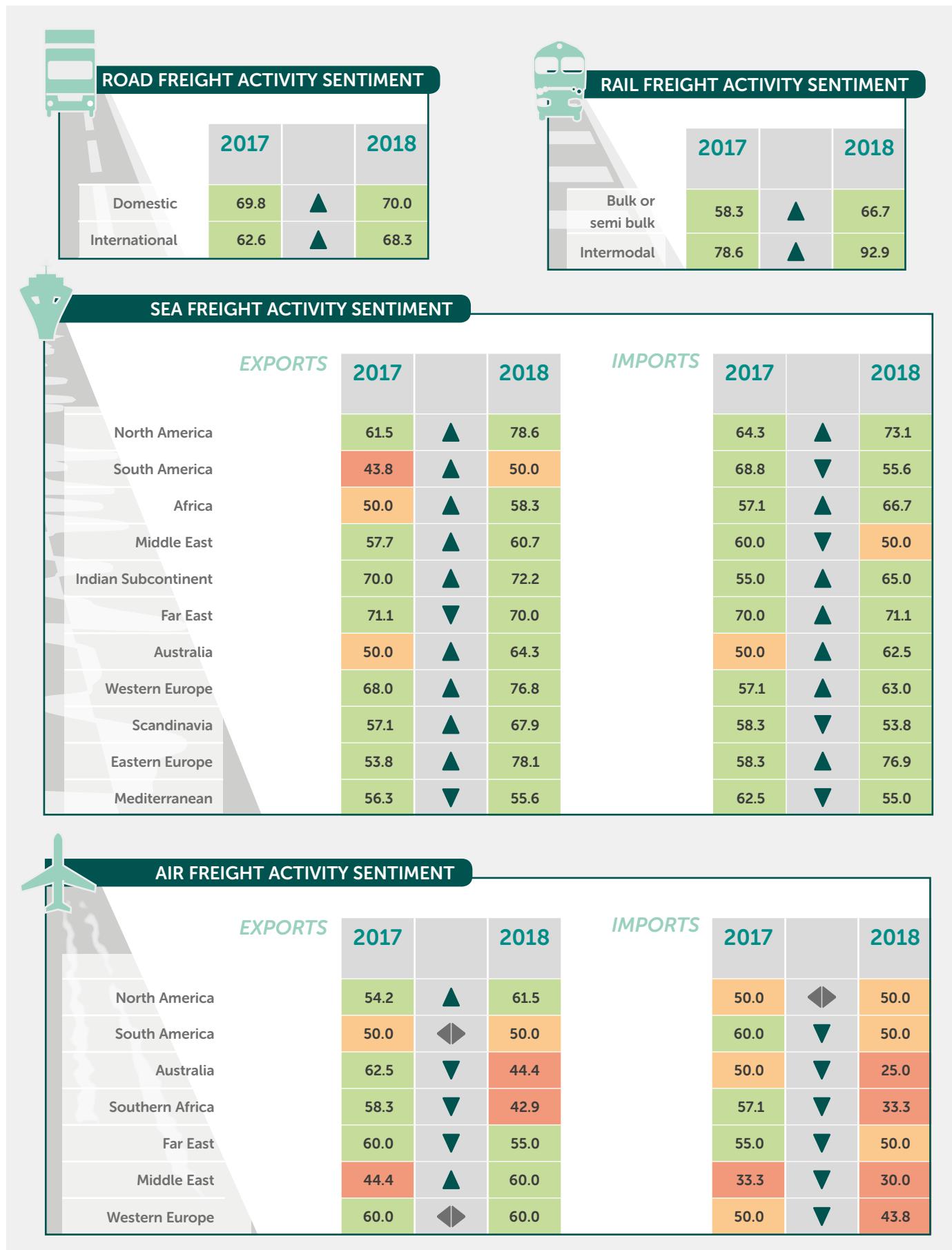
International road freight sentiment remained positive in 2017, with further improvement anticipated in 2018. This is aided by continued strength in manufacturing exports and resilient growth in Europe.

Four of the five top road freight sectors indicated there was a positive outlook for business expectations in 2018 compared to 2017 although as last year, the public authority sector expressed a strong decrease in business expectation (fig 1.9).

In contrast, figures from the Insolvency Service reveal that the number of road freight operators declaring insolvency rose to the highest level in Q3 2017 since comparable records began in 2007. The number of road freight operators declaring insolvency was up 57.6 per cent in Q3 2017 compared to Q2 2017 and was 210 per cent higher than the same period the year before. The long-term trend since the end of 2011 had generally been downwards but the number of road freight operators declaring insolvency in Q3 2017 was 9.4 per cent higher than that seen at the peak of the economic downturn.



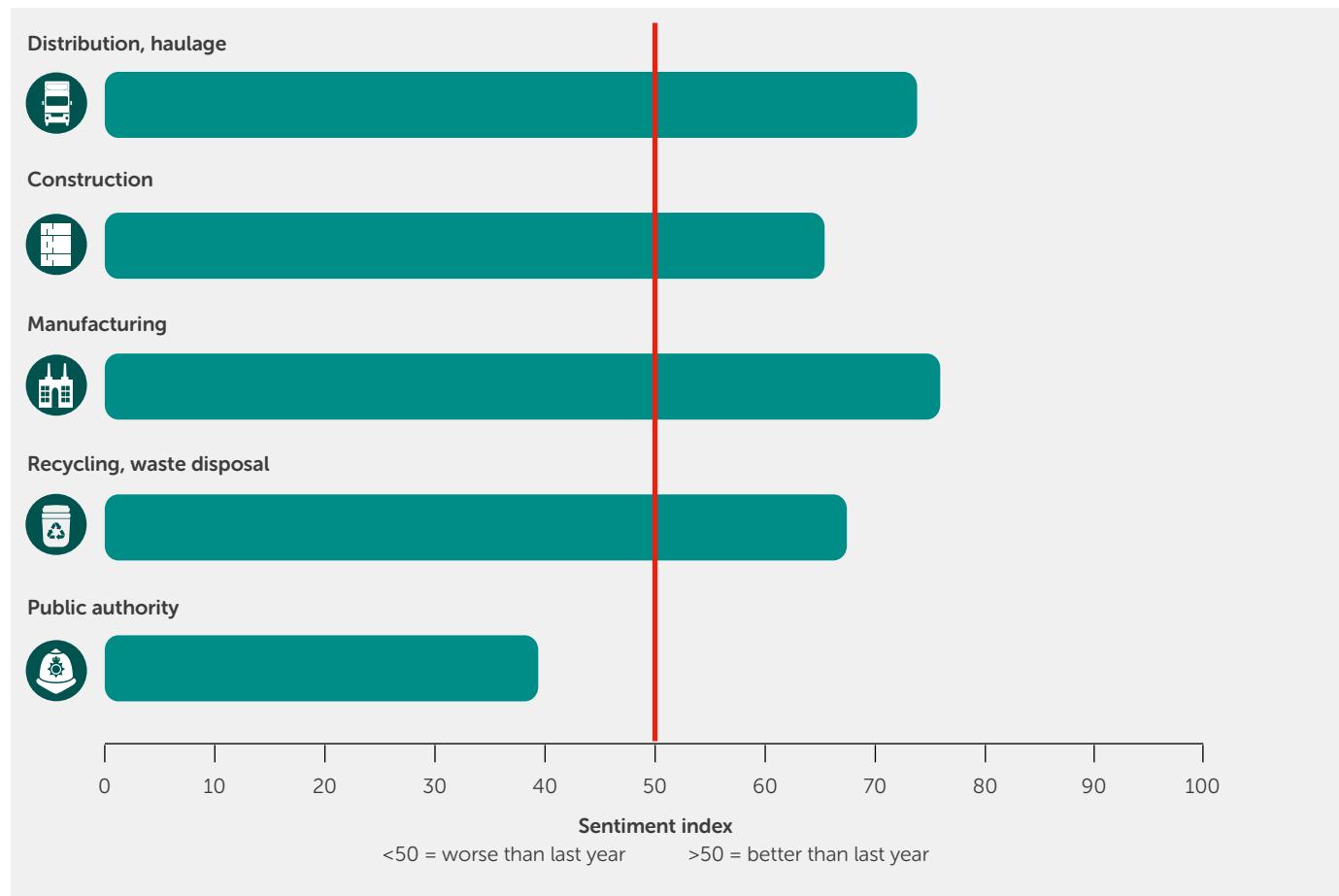
1.8 UK logistics market activity sentiment for 2017 and expectations for 2018⁹



Source: FTA Logistics Industry Survey 2017/18

⁹ Index values over 50 indicate a positive outlook for activity whilst values below 50 signify a negative outlook for activity

1.9 Business expectations for top 5 sectors for 2018 compared to 2017



Source: FTA Logistics Industry Survey 2017/18

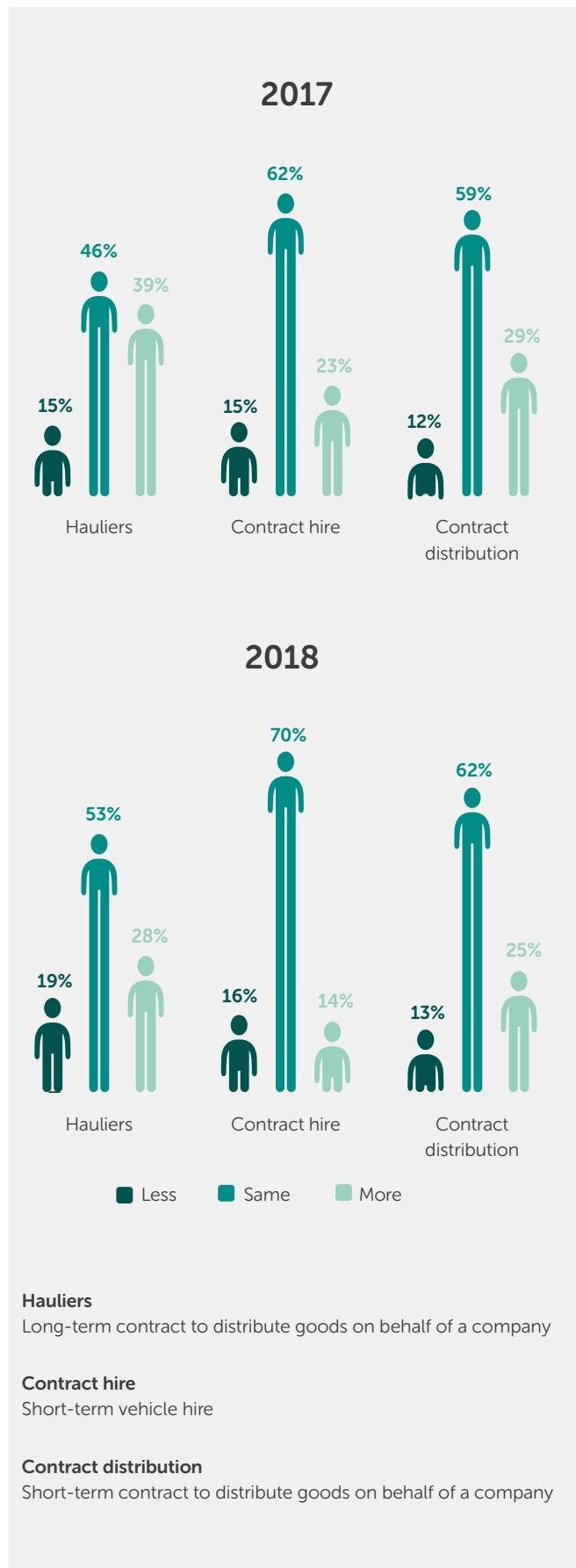


The manufacturing sector exhibited the highest level of optimism, perhaps due to stronger recent growth. The IHS Markit/CIPS UK Manufacturing PMI was 56.2 in December 2017, up slightly from 56.1 in December 2016, but below market expectations of growth (a figure above 50 indicates growth). Growth in manufacturing has now been recorded for 17 consecutive months, led by new work and the launch of new product lines. Part of the rise in new business is due to the increase in new export sales, no doubt influenced by the fall in the value of sterling after the EU referendum.

Positive manufacturing sector business expectation was closely followed by distribution and haulage. Recycling and waste disposal were also positive, as was construction, despite the difficult year experienced by this sector. Public authority respondents expressed negative business expectations for the second year, due to the continued tight budgets available to UK public services.

The majority of respondents to the FTA Logistics Industry Survey indicated that their expectation in 2018 is for no

1.10 Demand for third-party services



1.11 Decline in the number of goods vehicle operator licences in Great Britain

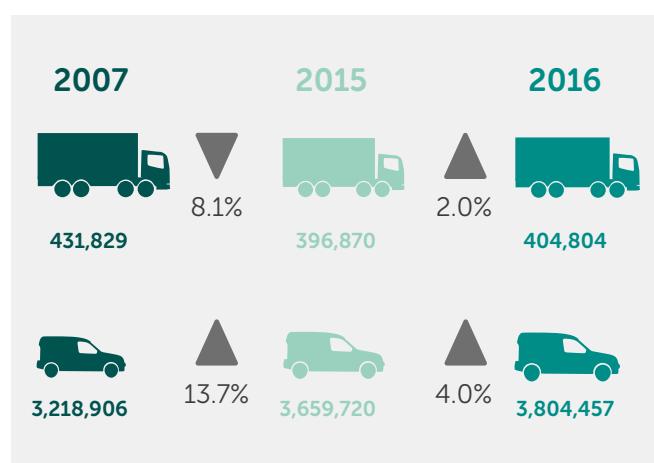


change in the level of use of third-party services across the board, compared to 2017. Within this, the balance for utilisation of third-party hauliers and contract distribution in 2018 are nonetheless both biased towards more use but the use of contract hire is expected to shrink very slightly (fig 1.10).

In 2016/17 the number of goods vehicle operator licences reduced by 4.6 per cent when compared to 2015/16. The number of operator licences was 73,458 in 2016/17 which is down 25.3 per cent in relation to pre-recession levels (fig 1.11).

The number of HGVs licensed in Great Britain rose slightly (by 2 per cent) in 2016 compared to 2015 but is still 6.3 per cent below pre-recession levels (2007). Van numbers increased by 4 per cent in the same period but are still 18.2 per cent below pre-recession levels (fig 1.12). This is a reflection of the pace of growth in the UK economy in general.

1.12 Number of heavy goods vehicles and vans in use (Great Britain)



In 2016, the population of trailers increased by 3.4 per cent (based on the number tested), while the number of HGVs laid up (SORN) increased by 17 per cent compared to 2015.

RAIL FREIGHT

In 2017, bulk and semi-bulk rail freight sentiment indicated marginal growth, possibly influenced by a subdued output from the construction sector (fig 1.8). However, sentiment for 2018 is more positive, this reflects the improvement in construction sector sentiment measures towards the end of 2017. The IHS Markit/CIPS UK Construction PMI was 52.2 in December 2017, down from 54.2 in December 2016, below market expectations of growth (a figure above 50 indicates growth). However, this was still the third consecutive month of growth. Growth has been led by residential building, tempered by a fall in commercial construction projects. New orders and job creation have continued to rise but supply chain pressures and input cost inflation continue to affect the sector.

Respondents indicated a rebound in activity for intermodal services in 2017, influenced by improved UK trade volumes and continued competitiveness of UK exports. With the positive trade climate persisting into 2018, respondents are anticipating a substantial increase in intermodal activity (fig 1.8).

Growth of freight flows to international markets outside the EU is evidenced by continuing improvement in domestic intermodal services; these are strongly linked to deep sea container shipping outside the EU.

These services showed a 1.8 per cent increase in 2017 compared to 2016, reflecting the modest growth of the UK economy. Bulk rail services fell again in 2017 by 1 per cent compared to 2016 (fig 1.13). This is due to another fall in the amount of coal moved for thermal power generation for the fourth year in a row, caused by the closure of coal-fired power stations. The number of tonnes of coal lifted has been in rapid decline in recent years, from a high of 52.9 million tonnes in 2013 to just 9.9 million tonnes in 2017, a drop of 81.3 per cent.

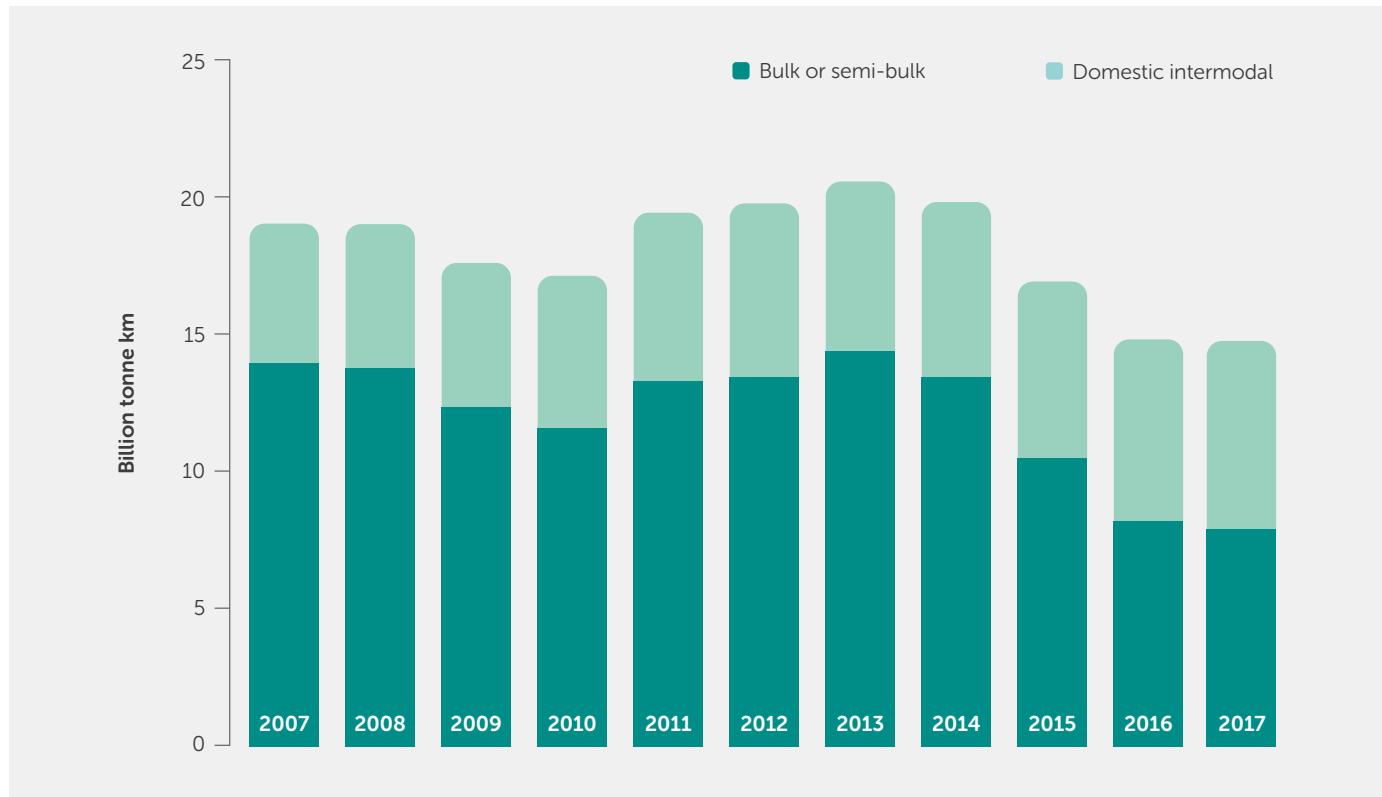
AIR AND SEA FREIGHT

Respondents to the FTA Logistics Industry Survey indicated mixed sentiment to import and export activity in air freight although the overall picture represented an improvement on the sentiments expressed for 2016 (fig 1.8). In 2017, air freight imports and exports showed growth or remained the same with the exception of the Middle East, which demonstrated a decline. This represents an improvement on 2016, when sentiment showed slowing or declining growth on all routes except for Western Europe. It is broadly in agreement with respondents' expectations a year ago when they predicted a rise for all routes except Western Europe. But the outlook for 2018 is less positive. Respondents indicated that for the year ahead, they are expecting a decline in routes to Australia, Southern Africa, the Middle East for both imports and exports and a decline in import activity from Western Europe.

Global air freight tonne kilometres (FTK) grew strongly in 2017 with the second quarter seeing seven year highs,



1.13 Rail freight moved by market segment 2007-2017



Source: Office of Rail and Road (ORR)

only weakening slightly at the end of the year. Surveys of global heads of cargo indicate that on a worldwide basis, they are expressing confidence about growth and yields into 2018¹⁰.

International sea freight customers who responded to the FTA Logistics Industry Survey reported the strongest trade lane growth in 2017 to and from the Far East, amid diminished concern about a Chinese slowdown and stronger global growth (fig 1.8). Overall, sentiment was weakest for South America, where export activity contracted. Respondents predicted that 2018 should be a good year for international shipping, with growth expected on all routes with the exception of South American exports, where the balance of sentiment nonetheless indicates neutral growth for the year ahead.

The Baltic Dry Index, an assessment of the price of moving major raw materials by sea, fell at the start of 2017, reaching a low of 685 on 14 February 2017, before recovering some ground. It has risen steadily since

the start of June 2017 reaching a high of 1,743 on 12 December, before easing to 1,366 at the end of the year, still well below the pre-recession high of 11,793 (on 20 May 2008).

FUEL PRICES

Bulk fuel prices at the end of 2017 were slightly higher compared to a year earlier due to the weak pound and the continuing rise of the price of crude oil. From a UK perspective, sterling is significantly weakened on the foreign exchange markets since the vote to leave the EU. Sterling was trading at 30-year lows against the US dollar at the end of 2017 and around 10 per cent lower than before the referendum vote. Oil is priced in US dollars, so the increase in the price per barrel has been exacerbated for UK importers by the fall in the value of sterling, which has also affected diesel prices. There were year-on-year increases of 3.2 per cent for bulk diesel prices, while at the same time the price of Brent Crude rose by 16.7 per cent to a monthly average of \$64.09 a barrel (bbl) in December 2017 (fig 1.14).

10 Cargo Chartbook Q4 2017, International Air Transport Association (IATA)

1.14 Change in principal transport fuel prices in 2017

Product	Application	December 2016 price	December 2017 price	% change
Diesel*	HGVs, vans	94.04ppl	97.09ppl	3.2%
Gas oil*	Rail freight	47.52ppl	50.62ppl	6.5%
Marine bunker fuel**	Deep sea freight	758 (index)	868 (index)	14.5%
Heavy fuel oil***	Deep sea freight	\$285.45/tonne	\$337.69/tonne	18.3%
Jet fuel (kerosene)***	Air freight	\$513.15/tonne	\$612.96/tonne	19.5%

*Portland Analytics Ltd (bulk prices) **S&P Global Platts (bunkerworld.com) *** Morningstar published by Financial Times (ft.com)

Outlook: Fuel prices 2018

Oil prices experienced a bullish run at the end of 2017 into January 2018 which saw Brent Crude rise above \$70 per barrel (bbl) for the first time in over three years. However, the effects of this on the UK downstream market were somewhat mitigated due to a strengthened pound. This was a result of glimmers of EU support for a 'soft' Brexit, meaning UK pence per litre prices felt a lessened impact.

Portland's outlook for 2018 is that the rise in crude oil prices is set to continue for three primary reasons. Firstly, back in November 2017 OPEC (Organization of the Petroleum Exporting Countries) voted to extend its output cap to the end of 2018. This agreement has so far seen uncharacteristic compliance (107 per cent in 2017) – should this continue, prices are expected to rise further as a consequence of diminished global supply.

Secondly, interest rate hikes in the US could begin to take effect. Significant US lending figures between 2014 and 2015 indicate Shale Oil producers survived a sustained period of low prices through substantial borrowing. The US Federal Reserve increased interest rates three times in 2017 alone, meaning repayments have already more than doubled. Rates are expected to be revised again in 2018, which could tip more fragile producers into bankruptcy, removing further supply from the market.

Finally, any curtailment in supply is set against a backdrop of increasing demand. World oil consumption is set to continue rising in 2018, with the IEA (International Energy Agency) forecasting demand increasing by 1.4 million barrels per day. As a result, diminution in supply in such a landscape will cause prices to rise.

Overall, a fair assessment would be that prices look more likely to lie at \$75/bbl than \$55/bbl by the end of the year, though should sterling continue to strengthen, the effects of this on UK refined product prices will be tempered.

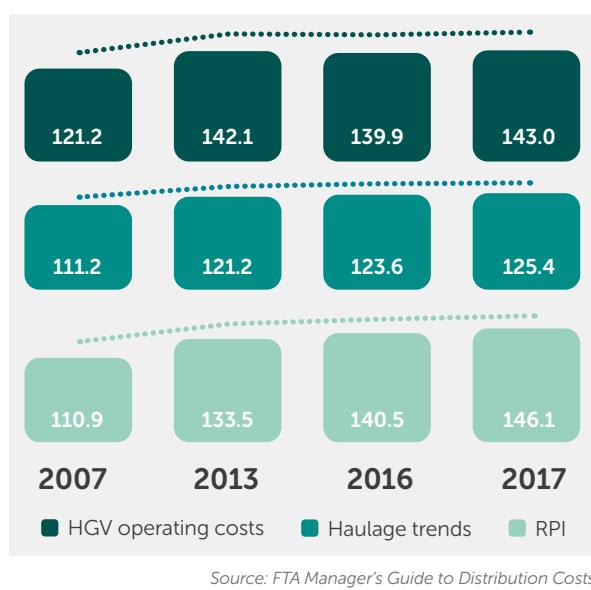
Source: Portland Analytics Ltd



OPERATING COSTS

According to FTA's Manager's Guide to Distribution Costs, total operating costs for a 44-tonne articulated truck rose by 2.2 per cent in 2017. This compares to a 4.1 per cent increase in the RPI (Retail Prices Index) inflation rate in the year to December 2017 and is a result of most input costs increasing, notably fuel costs which rose 2.8 per cent during the year (fig 1.15). HGV operating costs movements have risen for two years, mainly due to rising fuel costs. The gap with haulage rate movements has widened further, as shown by the sample of domestic haulage rates given by contributors which rose by just 1.5 per cent in 2017. Given that only 32.7 per cent of the sample rates increased during 2017, this shows that many hauliers have not been passing the increase in vehicle operating costs on to their customers.

1.15 Index of trends in operating costs and haulage rates 2007-2017



The FTA Logistics Industry Survey found that input costs in 2017, compared to 2016, saw increases across the board (fig 1.16). Repair and maintenance, wage rates and vehicle asset costs all saw levels of increase similar to the previous year. However, fuel prices and insurance costs increased by a larger proportion than seen in 2016.

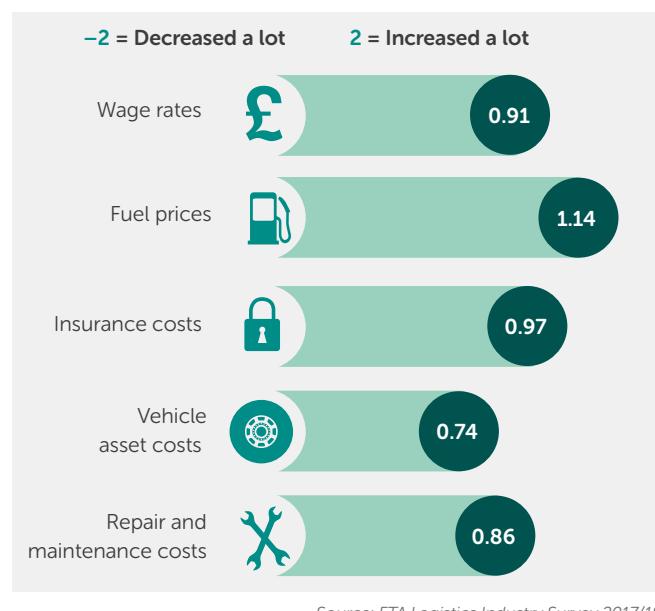
FREIGHT COSTS

The FTA Logistics Industry Survey asked respondents about changes in freight rate costs across all modes (fig 1.17). The balance of opinion was that costs had increased for road, rail, air and sea. Respondents indicated that as was the case in 2016, air freight rates increased the most.

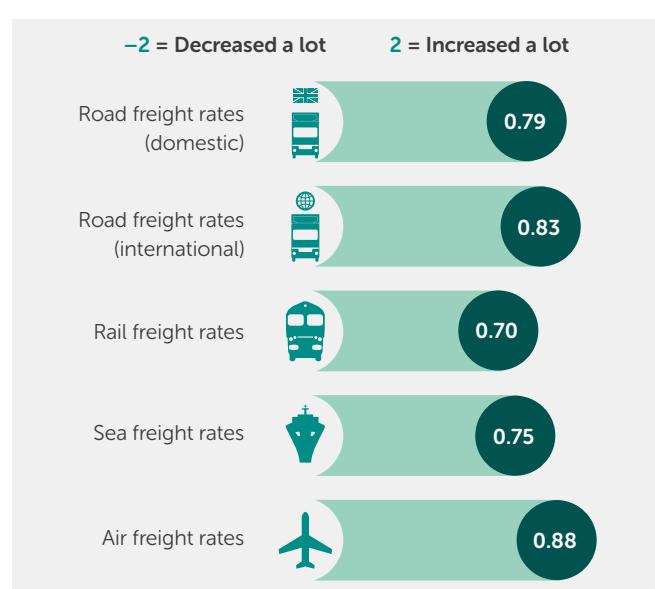
This was followed by international road freight, perhaps influenced by weaker sterling and higher fuel costs.

The increase in air freight rates may be attributable to more favourable supply and demand conditions which are driving the air freight carriers' yields upwards because of global growth, inventory re-stocking and less new capacity coming into service; IATA reported a 13.11 per cent increase in air freight yields in the third quarter of 2017¹¹.

1.16 Changes in input costs in 2017 compared to 2016



1.17 Changes In freight rate costs in 2017 compared to 2016



¹¹ Ibid

Logistics performance

FTA IS CAMPAIGNING FOR...

FTA campaigns to support the efficiency of the UK economy by promoting policies that will enable UK logistics to be more competitive and by ensuring politicians and the public understand its needs better. In the run up to the UK's withdrawal from the EU, it is more important than ever that the UK's economy is efficient and competitive internationally. Action in these three areas would help deliver that, whilst also aiding the government's environmental agenda as well.

For more information contact:

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Christopher Snelling Head of UK Policy, csnelling@fta.co.uk

WHAT FTA IS DOING...

...FTA regularly engages with HM Treasury, Department for Transport (DfT) and Department for Environment, Food and Rural Affairs (Defra), as well as MPs and select committees for national parliaments and assemblies.



We are calling for...

ISSUE

FTA'S PROPOSALS

OUTCOME SO FAR

FUEL TAXATION

High fuel duties make UK logistics less competitive and reduce companies' ability to invest; they also add to the cost base of all UK businesses

A reduction in fuel duty on diesel by 3 pence per litre
(In the absence of a reduction) government to keep fuel duty frozen at 2010 levels

A commensurate or larger reduction in duty on red diesel (and track access charges) for rail transport and alternative fuels

In the latest Budget – fuel duty was frozen for the eighth year

The Chancellor's planned review of diesel duty (announced in the Spring Budget) did not result in changes to duty in the Autumn Budget

INFRASTRUCTURE INVESTMENT

Efficient and effective transport infrastructure networks are crucial for the logistics industry to be able to support the needs of UK businesses

Congestion and unreliable journey times add cost to living and doing business in the UK, and cause avoidable emissions

Government to reconfirm commitment to rail and road infrastructure improvements into the 2020s, protect the role of freight-related improvements in rail spending, and provide more funds for maintenance of the existing road network

Supporting the construction of a third runway at Britain's air global cargo hub – Heathrow

Highways England's interim report on its plans for Road Investment Strategy 2 contains key improvement schemes

Department for Transport consultation on the Major Roads Network (key routes in local authority control) could result in protection of investment through the National Road Fund

SKILLS

There is increasing concern surrounding skills and labour shortages within logistics

Essential roles – HGV drivers and mechanics – are becoming increasingly hard to recruit

The age demographic, specifically within the HGV driver population, is significantly older than the national average and the workforce lacks diversity

Because of these factors and the reliance on labour from the EU, the sector is facing serious skills shortages over the next five years

The government to reform the Apprenticeship Levy to make it a training levy – open to more forms of vocational training and workers – as this would ensure the upskilling of the UK's workforce is as wide as possible and suits all business needs

The removal of the 20 per cent off-the-job training restriction for apprenticeships within England

Government to trust businesses' judgement with regards to their skills needs and ability to design training that is fit for purpose

Better driver facilities to encourage more to join the industry and stay

Raising awareness of the logistics sector and encourage members to work together to promote logistics and engage with the public

FTA is in its third year of sponsorship of Think Logistics, the volunteer-led programme, run by Career Ready. It works to promote logistics careers within schools and colleges. It engages students in workshops and explains what logistics is

To promote logistics careers to young people, FTA has exhibited at the Skills Show, visited by over 80,000 students, teachers and parents. A bespoke careers brochure has also been developed called Careers that deliver

After two years of hard work, the Transport and Warehouse Operator Apprenticeship has been approved



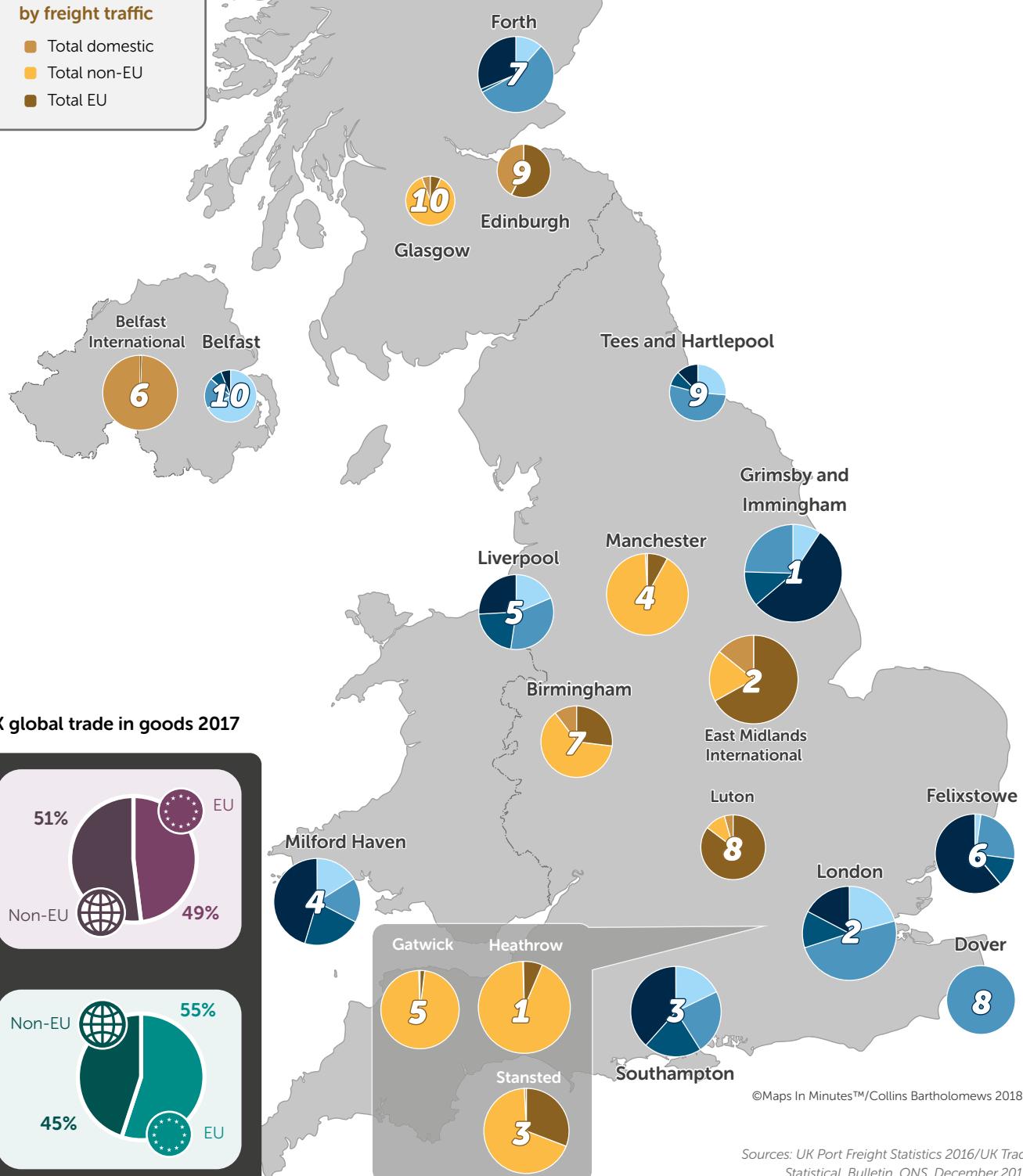
	CHG	%CHG	BID
1.00	-4.00	-1.20%	328.00
2.20	-0.10	-0.81%	12.20
17.30	0.60	3.59%	17.30
22.50	-0.50	-2.17%	22.40
25.50	0.50	2.00%	25.40
112.00	-3.00	-2.61%	112.00
4.84	0.10	2.11%	4.84
235.00	-1.00	-0.42%	234.00
239.00	-5.00	-2.05%	239.00
14.60	0.60	4.29%	14.50
54.00	0.50	0.93%	54.00
2.48	0.14	5.98%	2.48
7.40	-0.20	-2.63%	7.40
3.08	-0.04	-1.28%	3.07
11.70	0.40	2.31%	11.60
4.50	-0.50	-0.26%	4.50
			194.50 195.00

International trade and connectivity

International trade and connectivity

UK TRADE

KEY



©Maps In Minutes™/Collins Bartholomew 2018

Sources: UK Port Freight Statistics 2016/UK Trade Statistical Bulletin, ONS, December 2017/Civil Aviation Authority (CAA) Statistics/Aviation Statistics, DfT, 2016

International trade and connectivity

During 2017 the scale of the challenge of ensuring ‘frictionless trade’ between the UK, the EU and the rest of the world after Brexit came into sharper focus. Even though vital questions about arrangements after the UK leaves the EU remain unanswered, a deepening appreciation is emerging of the role of connectivity in enabling competitiveness.

The ongoing negotiations on the UK’s withdrawal from the EU have dominated the headlines. Despite the complexity of the issues, logistics and the connections vital for trade with other countries have moved towards centre stage as politicians and commentators have begun to reach a greater understanding of the importance of getting transitional and future arrangements right and the price of failing to do so.

But although of the greatest significance, Brexit is not the only game changing factor influencing our international trade; there are new possibilities and new challenges for the UK in terms of the way global trade is organised, methods of working and trade facilitation.

Policy actions for government

Road investment tops priorities again

Once again, we asked respondents to the FTA Logistics Industry Survey to give their view on the priorities among a range of policy actions for government (fig 2.1). As was the case last year, investment in road improvements was



2.1 Policy actions for government



Source: FTA Logistics Industry Survey 2017/18

considered to be the most important thing politicians could do to support efficient logistics. Cuts in fuel duty were considered a higher priority than the previous year (when they were ranked fourth), highlighting how the increase in fuel costs experienced in 2017 has fed through to higher input costs for logistics operators. Also considered a higher priority this year was the promotion of 'freight-friendly' policies in towns and cities, along with reduction of regulatory and cost burdens. Improvement of truck parking and driver roadside facilities was ranked fifth for the second year in a row. Respondents to the FTA Logistics Industry Survey indicated policy action priorities for government, industry and FTA. They rated cutting fuel duty, investment in roads, infrastructure and facilities and resolving the Brexit situation as the top three actions that they would like government to take (fig 2.2).

Competitiveness

Effect of weaker pound on exports continues

Levels of competitiveness were measured as part of the FTA Logistics Industry Survey (fig 2.3). Responses indicated a small decline in competitiveness both globally and within the EU compared to 2016. But the figures were still substantially higher than two years ago, when they were 1.43 for global competitiveness and 1.46 for the EU, indicating the ongoing advantage of continued weaker sterling and growth in exports.

The UK ranked eighth in the Global Competitiveness Index for 2017/18, falling one place since 2016/17. Covering 137 economies, the Global Competitiveness Index 2017–2018 measures national competitiveness—defined as the set of institutions, policies and factors that determine the level of productivity (fig 2.4)¹.

The UK's competitors continue to invest in their road, rail, air and port infrastructure. Improving the UK's transport infrastructure, by reducing congestion and unreliability, enhancing access to all modes of transport and ensuring that we can trade with the rest of Europe and the world without delays and other burdens being imposed is vital for economic prosperity.

Quality of infrastructure is also a key priority for those investing in the UK. Research conducted by Ernst & Young reveals that 26 per cent regard it as a key

¹ Global Competitiveness Report 2017-18, World Economic Forum

2.2 Top 3 suggestions for government, industry and FTA

Government	Industry	FTA
Cut fuel duty	Promote itself better	Lobby government more
Invest in roads, infrastructure and facilities	Invest more in training apprenticeships	Keep doing what we are doing
Resolve Brexit situation	Lobby government more	Keep raising awareness

Source: FTA Logistics Industry Survey 2017/18

2.3 Average rating of level of competitiveness with EU and globally in 2017



2.4 UK competitiveness global ranking



investment criteria, second only to skills (28 per cent) as a consideration for investing in a UK region². The research also revealed that the UK's transport and logistics infrastructure was less attractive to foreign investors in 2017 than it was in 2016 (63 per cent found it attractive in 2017 compared to 75 per cent in 2016).

Research for the CBI also underlines how sensitive UK businesses are to prospects for infrastructure investment. In a survey conducted just after the 2017 General Election, 96 per cent of businesses saw infrastructure as an important priority for the government with 55 per cent regarding it as critical. However, only 20 per cent of businesses are satisfied with the pace of infrastructure delivery, whilst almost three-quarters (74 per cent) are not confident that infrastructure will improve overall during this Parliament. Worryingly, 62 per cent of businesses are not confident that the UK's competitiveness will increase by 2030, with the skills shortage seen as the most critical issue to be tackled to improve this position. It should be noted that the survey states that businesses want to work in partnership with the government to deliver the infrastructure that the UK needs to compete globally and raise productivity and living standards at home³.

Withdrawal of the UK from the EU

Facing up to the realities of 'no deal'

The Prime Minister, Theresa May, formally invoked Article 50 on Wednesday 29 March 2017, starting the clock on the two-year period of negotiations on the withdrawal of the UK from the EU. This means that in principle the UK leaves the EU on 29 March 2019.

² Attractiveness Survey 2017: Time to act, EY UK, May 2017

³ CBI/AECOM Infrastructure Survey 2017: Foundations for Growth, CBI, November 2017

The possibility of a ‘no deal’ Brexit – and all the consequences that would have for UK supply chains – loomed large during the year, as phase 1 of the withdrawal negotiations made at times painfully slow progress. Instead of delivering the more secure bargaining position the Prime Minister had hoped for, the snap General Election resulted in a hung Parliament and a weakened political leadership with more uncertainty for businesses.

The Prime Minister had already signalled in January that the UK intended to withdraw from the Single Market and Customs Union on departure from the EU, and that instead would seek a comprehensive Free Trade Agreement with the EU and a new customs agreement.

If neither of these new trading arrangements are in place when the UK leaves the EU then businesses will face trade barriers including tariffs (customs duties) and non-tariff barriers, such as the need to make customs declarations; the need to demonstrate compliance with EU trade rules; and to provide details of how goods

are being transported to border authorities. Businesses voiced their serious concerns that these non-tariff barriers will give rise to delays on busy ro-ro trade routes, particularly Dover-Calais, where delays of even a few more minutes per HGV would create major delays and threaten supply chains.

The European Union Committee of the House of Lords published a report outlining the potential impact on the UK of leaving the EU without a deal, and examined the feasibility of a transition period immediately after Brexit. It noted that: “The UK is leaving the EU, so a substantial change in UK-EU relations is unavoidable. Against this backdrop, the government’s assertion that ‘no deal is better than a bad deal’ is not helpful. It is difficult to envisage a worse outcome for the United Kingdom than ‘no deal’”⁴.

The European Commission issued its own notes on the implications of Brexit on aviation, road transport and seafarer qualifications in the absence of new agreements or of transitional arrangements.

The note on aviation confirmed that operating licences issued by UK authorities would no longer be valid in the EU at the point of exit, and that certain rules will have to be met (for instance on ownership) for airlines to keep their EU licence. The consequences of Brexit would go beyond UK-EU air links, and also cover links between the UK and the rest of the world, when existing aviation movements rely on agreements between the EU and a third country (eg EU/US agreement). The default situation in the absence of new agreements is for all carriers to be unable to provide air connections between the UK and these external markets.

The road transport note referred to the impact of Brexit on mutual recognition of certificates and qualifications in the absence of an agreement or transitional measures. It confirmed that certificates of professional competence for transport managers delivered by UK authorities would no longer be recognised in the EU after Brexit, and that the situation would be the same with the Driver Certificate of Professional Competence although it did not spell out what alternative arrangements could be considered. In terms of market access, the note confirmed that hauliers established in the UK would no longer have access to the internal road haulage market



⁴ Brexit: deal or no deal, Final Report, House of Lords European Union Committee, December 2017

in the EU by default and would have to rely on ECMT⁵ permits instead in the absence of a new agreement. This ECMT system could cover less than five per cent of the country's needs.

The head of the European Commission task force, the EU's negotiating team on Brexit, Michel Barnier, said that his goal was to finalise the withdrawal agreement, focused among other things on citizens' rights and the Irish border, in October 2018. There would also be a political declaration on the future relationship between the EU and the UK (with a free trade agreement only being concluded after Brexit). This would include agreement on a transition period.

Impact of the EU referendum vote

Nearly 14 per cent of respondents to the FTA Logistics Industry Survey stated that they had deferred investment decisions since the vote to leave the European Union whilst 86 per cent had not. Those surveyed were divided on whether frictionless trade will continue once the UK leaves the EU, with 48 per cent stating that it will continue

⁵ ECMT – European Conference of Ministers of Transport

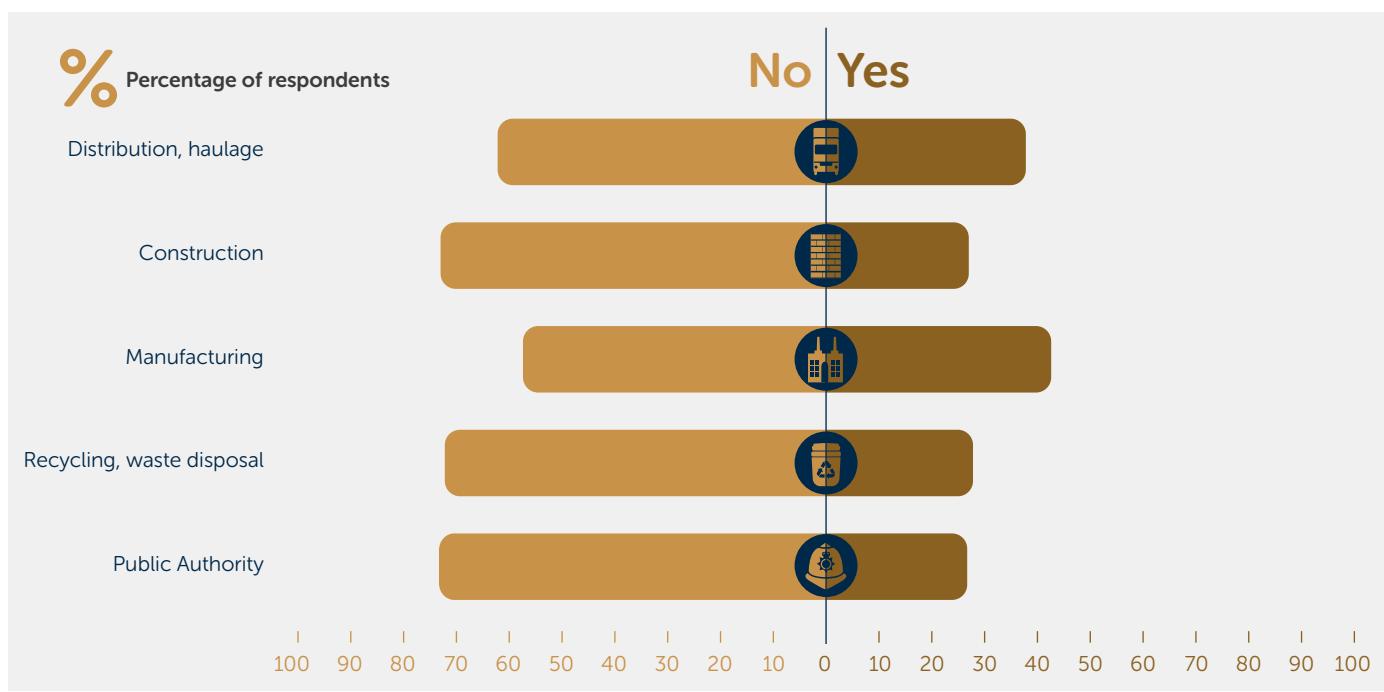
and 52 per cent indicating that it will not. On the question of whether restricting free movement of people from the EU would harm business, 35 per cent said it would whilst 65 per cent indicated that it would not. Further analysis revealed sectoral differences (fig 2.5) with manufacturing and distribution and haulage the most affected. This is likely a reflection of the skills shortages in these areas.

Business volumes

Stable optimism for growth

The UK's trade deficit (goods and services) with the rest of the world narrowed by £7 billion to £33.7 billion in 2017. Respondents to the FTA Logistics Industry Survey expressed slightly increased levels of optimism for economic growth in 2018, compared with the previous year. Almost half (49 per cent) expected the coming year to be better than 2017, up from 46 per cent a year previously (fig 2.6) and only 11 per cent expected it to be worse, compared to 14 per cent in 2017. An uptick in economic activity worldwide has improved business confidence but this is somewhat dampened by the continued uncertainty surrounding the withdrawal negotiations with the EU and how this will affect investment and the UK economy.

2.5 Will restricting freedom of movement of people from the EU harm your business (responses by sector)?





Thought piece: International trade

The importance of international trade for the UK economy has risen significantly since the 2016 EU referendum, and with the March 2019 Brexit deadline approaching, British businesses are looking to broaden their horizons. The transport and logistics sector has a critical role to play in securing the UK's further export success.

Despite a slowdown in economic growth in 2017, the total value of exports from the UK rose by 14 per cent to £345 billion, thanks in part to the post-referendum fall in sterling. But this does not tell the whole story – imports into this country also grew last year, by 6.1 per cent.



Whatever the outcome of the ongoing Brexit negotiations, Europe will remain a key trading partner: at present, four of the UK's top five export markets – as well as three major import markets – lie within the EU.

But at the same time, opportunities are opening up farther afield, in particular in emerging markets where growing middle-class populations with increasing incomes are driving demand for high-quality international brands.

Take India, for example, where the government is investing heavily in the development of food parks: this has created a fantastic opportunity for British food and drink businesses, as well as logistics companies operating in areas like cold-chain supply.

Elsewhere, UK firms see the potential to expand into China and the Far East as well as the Middle East and Latin America.

Research carried out for the new edition of the Santander Trade Barometer suggests that businesses which intend to grow internationally are generally more ambitious about their future plans – and this includes their approach to domestic expansion.

As technological advances such as the fourth industrial revolution (4IR) help us make the transition to a new digital global marketplace, businesses in the UK's transport and logistics sector are ideally placed – both to help British firms trade overseas, as well as to offer their expertise and insight to foreign companies looking to sell into the UK market.

Challenges to international business growth

Respondents were asked what were the biggest internal challenges to growing their business internationally. "Maintaining profitability" was considered to be the biggest internal challenge to growing internationally (67 per cent of responses) with "Cost of research into new markets" seen as less of an issue (22 per cent) (fig 2.7).

In answer to the question "what do you believe are the biggest external obstacles to growing internationally?" Participants considered "Market uncertainties caused by Brexit" to be the biggest external challenge to growing internationally (57 per cent of responses) with "Time to research new market opportunities" seen as less of an issue (22 per cent) (fig 2.8).

UK-EU trade

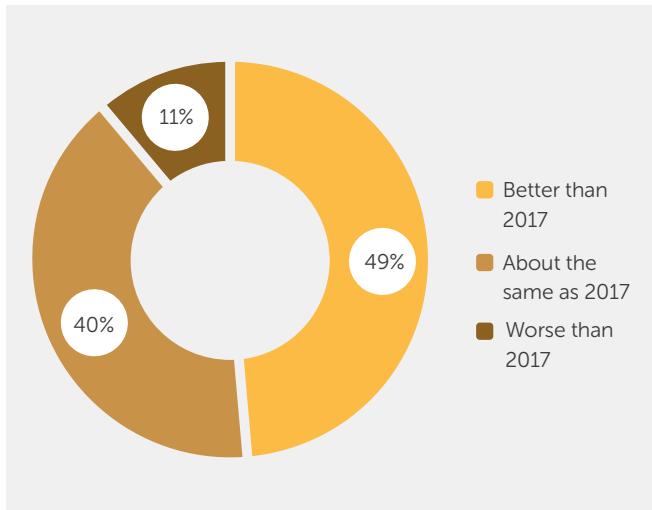
The EU is a major trading partner with the UK

- 48.8 per cent of the goods we exported in 2017 went to the EU whilst 54.6 per cent of the goods we imported came from the EU
- The EU economy was worth around £14 trillion⁶ with a 512 million person market in 2017⁷
- In 2017, exports of goods to the EU from the UK rose 15 per cent from £145.5 billion to £167.2 billion. At the same time, imports of goods from the EU to the

⁶ World Economic Outlook database, IMF, October 2017

⁷ tradingeconomics.com

2.6 Economic expectations for 2018



Source: FTA Logistics Industry Survey 2017/18

UK rose by 8.5 per cent from £241.9 billion in 2016 to £262.5 billion in 2017

- Seven of the UK's top 10 trading partners are in the EU
- Of the £310.8 billion of imports from the UK's top 10 import trading partners, £208.6 billion comes from EU members
- Of the £214.6 billion of goods exported to the top 10 export trading partners, £136.4 billion goes to EU members

UK-non-EU trade

At the end of December 2017, the top trading partner for UK exports was the US and the top trading partner for imports into the UK was Germany; this has been the same since 2013 (figs 2.9 and 2.10).

Cross-Channel trade

In 2017, almost 3.5 million road goods vehicles travelled from Great Britain to Europe⁸, comprising almost 2.5 million powered vehicles⁹ and just over 1 million unaccompanied trailers¹⁰ (fig 2.13). Overall, this was 1.7

⁸ Road goods vehicles travelling to mainland Europe, DfT, 2017

⁹ Powered vehicles are HGVs over 3.5t GVW (rigids, tractor units and trailers attached, and tractor units with no trailer)

¹⁰ Unaccompanied trailers are tow-bar trailers and artic semi-trailers not accompanied by a tractor unit

2.7 Internal challenges to growing internationally



Source: FTA Logistics Industry Survey 2017/18

2.8 External challenges to growing internationally



Source: FTA Logistics Industry Survey 2017/18

per cent higher than 2016 and 15.6 per cent higher than 2004, when comparable records began.

In 2004 the European Union (EU) expanded significantly with 10 new members, eight of which were from Eastern Europe, notably Poland, giving them greater access to EU member states. Since then, the number of UK-registered powered vehicles has been falling gradually and the number of foreign-registered powered vehicles has been steadily increasing. In 2017, just 14.1 per cent of powered vehicles travelling from Great Britain to Europe were UK-registered compared to 23.7 per cent in 2004.

In contrast, the proportion of Polish-registered powered vehicles has risen from 2.9 per cent in 2004 to 19.6 per

2.9 UK top 10 trading partners – imports

Rank	2007	2017
1	Germany £43,412 million	Germany £68,278 million
2	USA £28,302 million	China £41,640 million
3	Netherlands £22,234 million	USA £41,348 million
4	France £21,281 million	Netherlands £39,881 million
5	China £18,893 million	France £26,781 million
6	Norway £14,598 million	Belgium £24,819 million
7	Belgium £14,576 million	Norway £19,201 million
8	Italy £12,618 million	Italy £18,686 million
9	Irish Republic £10,870 million	Spain £15,575 million
10	Spain £9,903 million	Irish Republic £14,582 million

**2.10 UK top 10 trading partners – exports**

Rank	2007	2017
1	USA £32,147 million	USA £45,804 million
2	Germany £24,046 million	Germany £36,030 million
3	France £17,563 million	France £25,460 million
4	Irish Republic £16,399 million	Netherlands £21,215 million
5	Netherlands £14,637 million	Irish Republic £19,374 million
6	Belgium £11,588 million	China £16,674 million
7	Spain £9,771 million	Switzerland £15,724 million
8	Italy £8,897 million	Belgium £13,679 million
9	Switzerland £4,847 million	Spain £10,394 million
10	Sweden £4,745 million	Italy £10,216 million



Source: Overseas Trade Statistics, HMRC, December, 2017

cent in 2017, more than any other country. Similarly, since Romania joined the EU in 2007, the proportion of Romanian-registered vehicles has risen from 1.1 per cent that year to 10.3 per cent in 2017, making it the third largest country of registration behind Poland and the UK.

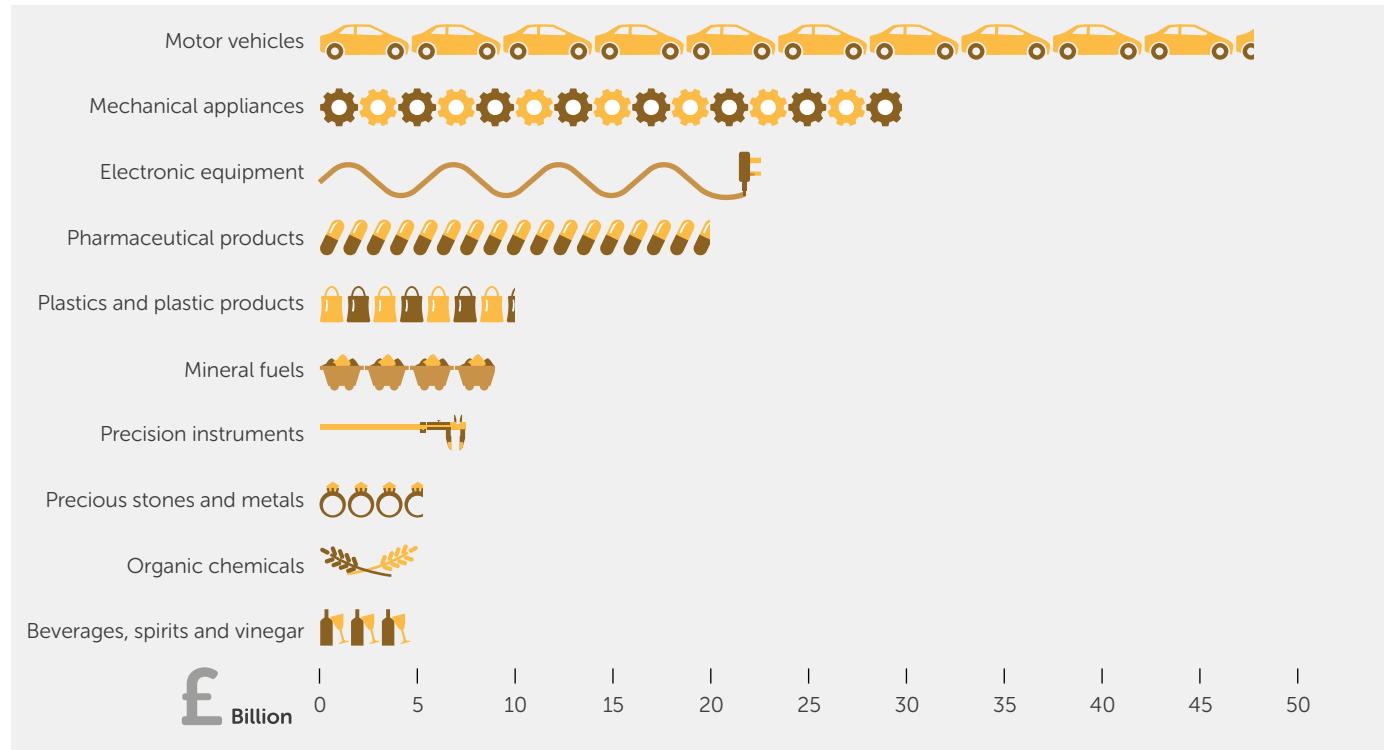
clandestine migrant action – Operation Stack is put in place. This involves the emergency use of large stretches of the M20 motorway in Kent to park freight traffic bound for the Channel Tunnel or Dover. Operation Stack causes significant delays and congestion on the road network through Kent.

Operation Stack and the Dover-Calais route

In cases of severe disruption on the route between Dover and Calais – whether because of bad weather, operational problems, industrial action or, more recently,

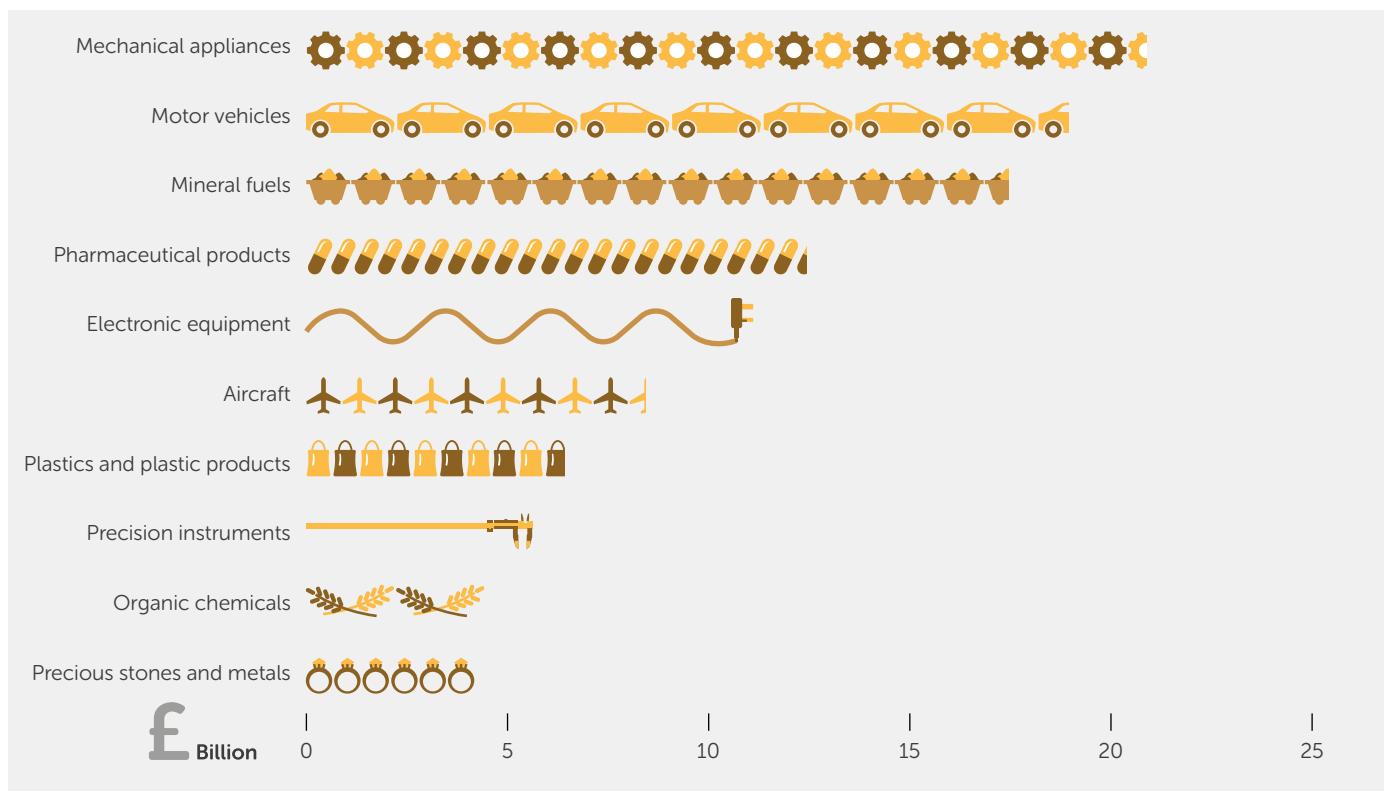
The impact of Operation Stack was significant when it was implemented for a record 32 days in the summer of 2015. International road freight and rail freight services that used the Channel Tunnel were massively affected and although road freight services quickly recovered, international rail freight – the tunnel access charges

2.11 Top 10 imports from EU to UK in 2017



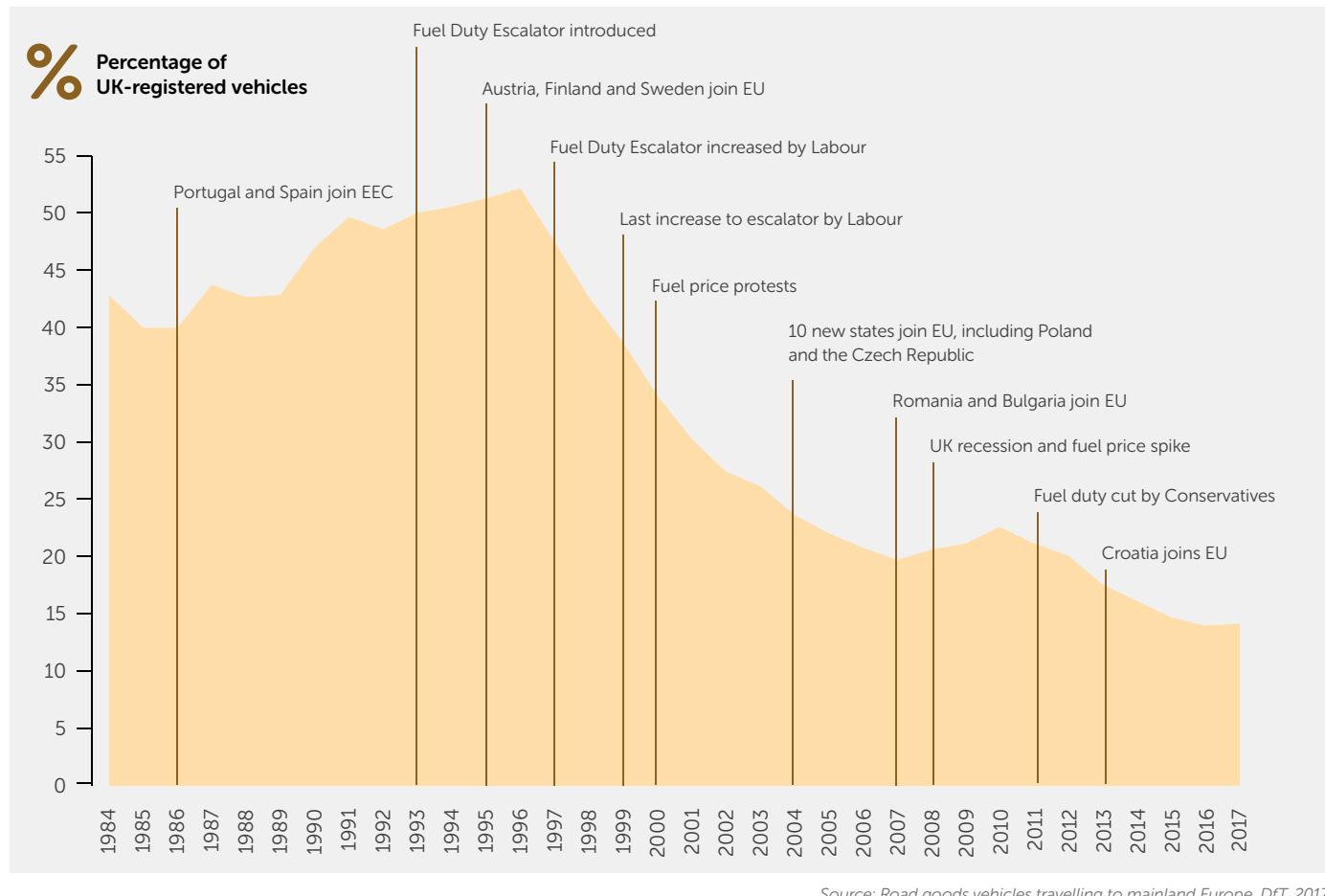
Source: Overseas Trade Statistics, HMRC, December 2017

2.12 Top 10 exports from UK to EU in 2017



Source: Overseas Trade Statistics, HMRC, December 2017

2.13 UK-registered vehicles as a proportion of total vehicles travelling to mainland Europe 1984-2017



for which have been criticised by user groups – has struggled to win back lost businesses.

In 2016, the government announced plans for a lorry park at Stanford West, close to junction 11 of the M20, which would act as an alternative to using Operation Stack. Development was halted in October 2016 by an application for a judicial review. In November 2017, the Secretary of State for Transport announced that he was withdrawing the planning application for the site at Stanford West. A consultation will be launched by Highways England in 2018 with the intention of submitting a fresh planning application in early 2019. Meanwhile, Highways England has been tasked with finding an interim solution by March 2019.

many businesses operate on an ‘island of Ireland’ basis. In 2017, 867,000 road goods vehicles travelled from Great Britain to the ‘island of Ireland’, up 4.6 per cent compared to 2016. Of these:

- 373,000 were powered vehicles with 219,000 disembarking in Ireland and 154,000 disembarking in Northern Ireland
- 494,000 were unaccompanied trailers, with 249,000 disembarking in Ireland and 246,000 disembarking in Northern Ireland

Ireland is one of the top 10 trading partners with the UK and this is reflected in the volume of UK-registered powered vehicles that travelled to Ireland, accounting for 24.2 per cent of all UK-registered powered vehicles travelling to Europe in 2017.

The majority (80.1 per cent) of powered vehicles travelling from Great Britain to the ‘island of Ireland’ were either UK or Irish-registered. The total number of powered vehicles ultimately travelling to Ireland after

Trade with the Republic of Ireland

The Republic of Ireland is the only EU member state to share a land border with the UK. This land border means

disembarking in Northern Ireland has not been recorded. However, in 2016, it was estimated that 1 million HGVs, or 2,700 a day crossed the land border to enter Ireland¹¹.

Most Irish road haulage traffic to and from mainland Europe transits the UK, via Irish Sea ferry services. As such, Ireland will be much more vulnerable to Brexit than other EU countries, and the implications could be felt more deeply in Northern Ireland than any other part of the UK. The UK government is under pressure from Northern Ireland and the EU to resolve the border issue before Brexit happens, so that there is minimal disruption to business practices and logistics after Brexit.

Port freight

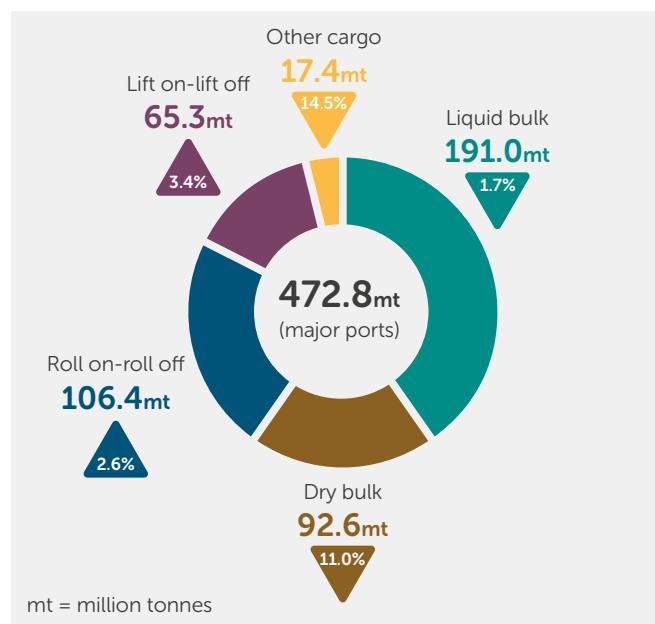
In 2016, 484 million tonnes were handled by UK ports, down by 2.6 per cent on the previous year. The majority of this freight was handled by the major ports (fig 2.14). Major port coal tonnage handled fell 52.6 per cent, to 12 million tonnes in 2016, reflecting reduced demand.

However, unitised traffic grew steadily for the fourth consecutive year, 24.1 million units of traffic passed through UK ports in 2016 a rise of 1.8 per cent. Container traffic rose by 3.2 per cent to a record high of 5.9 million units (or 10.2 million twenty-foot equivalent units, TEUs) and roll on–roll off traffic rose by 1.4 per cent to 18.2 million units passing through UK ports in 2016.

UK air freight

UK airports handled 2.41 million tonnes of air freight in 2016, which is 4.8 per cent more than in 2015 and exceeds the former peak of 2.37 million tonnes in 2004. Heathrow is by far the largest by volume, handling 1.54 million tonnes in 2016, which is 63.9 per cent of the total and over five times more than the next largest airport, East Midlands International. Nearly all (93.2 per cent) of the air freight handled by Heathrow comes from or is flown to outside of the EU, mainly North America, the Middle East and Central Asia and the Far East .

2.14 Freight handled by UK major ports in 2016 compared to 2015^t



^tFigures are rounded

Source: UK Port Freight Statistics, DfT, 2016

Heathrow is an essential component of worldwide time-sensitive and high value supply chains.

The total value of air cargo night flying in the whole night period at Heathrow is around £1.7 billion, in terms of Gross Value Added. Government has been urged to balance the economic value of early morning arrivals against environmental considerations and to evaluate whether reductions at source and other measures could deliver noise reductions without the need for further operational restrictions.

The government has issued a revised draft Airports National Policy Statement in light of: updated noise analysis; the new air quality plan; and, changes in government policy. The statement sets out the planning policy framework that the applicant for a north west runway at Heathrow Airport would have to comply with in order to get development consent. There is due to be a Parliamentary vote on this in 2018.

The House of Commons Transport Committee announced an inquiry into the draft Statement in November 2017. Reporting in March 2018, the inquiry accepted the need for an additional hub airport, that this should be at Heathrow and that the proposed north west

¹¹ *Ireland and the UK – Tax and Customs Links*, Irish Tax & Customs Statistics & Economic Research Branch, published July 2017

runway was the right approach. However, it expressed concerns over surface access impacts and night flights¹².

Airport capacity and world freight traffic

Respondents to the FTA Logistics Industry Survey who use air to transport freight stated that there was a substantial deterioration in airport congestion at UK international airports last year. For regional airports, the balance of opinion was that congestion had also worsened although to a far lesser extent.

Cargo owners are seeking greater efficiency in air freight supply chains. With air typically used for high-value, time-sensitive cargoes, sectors such as pharmaceuticals are seeking to reduce the length of their global supply chains, in terms of cargo preparation time through to restocking, for example, from 12 days to six.

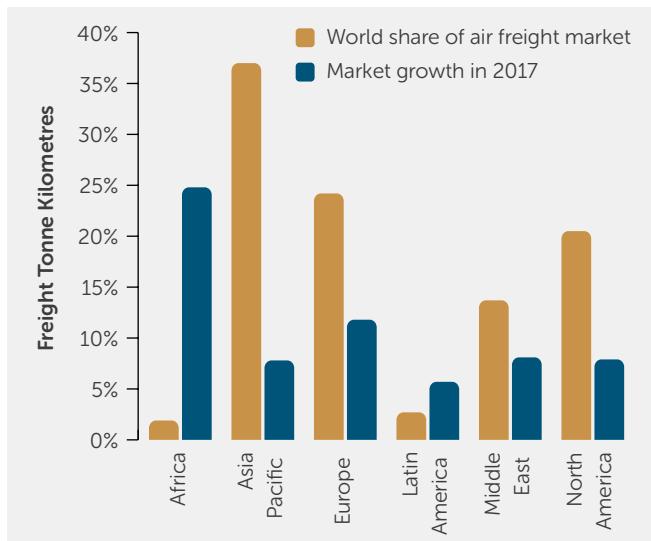
According to the International Air Transport Association (IATA), global air freight tonne kilometres (FTKs) grew by 9 per cent year-on-year in 2017 up from 3.6 per cent in 2016 and the strongest year of growth since 2010. The annual growth was in part due to improved world trade conditions since the second half of 2016.

FTKs grew more than twice as fast as global trade volumes during 2017 which reflects the increased demand for manufacturing businesses' exports linked to the global restocking cycle and increased investment¹³. The J.P.Morgan Global Manufacturing Purchasing Managers' Index (PMI) – a composite index produced by J.P.Morgan and IHS Markit in association with ISM and IFPSM – rose to a near seven-year high of 54.5 in December 2017. IATA suggests that the new export orders component of the global manufacturing PMI correlates with annual air freight growth and this explains around half of air freight's outperformance relative to global goods trade in 2017. Several factors are likely to be contributing to the remainder of the outperformance, including recent strong increases in consumer confidence, along with the impact that growing sectors such as e-commerce and pharmaceuticals are having on air freight growth.

¹² Airports National Policy Statement, House of Commons Transport Committee, 23 March 2018

¹³ Air Freight Market Analysis December 2017, International Air Transport Association (IATA), 2017

2.15 Air freight market share and growth in 2017



Source: Freight Market Analysis, IATA, December 2017

African airlines exhibited the most growth in 2017, although they only account for just under 2 per cent of the total world market (fig 2.15). FTK growth reached 24.8 per cent in 2017 up from 3.1 per cent the previous year. A strong upward trend in traffic between Africa and Asia was the main contributor African airlines' increased freight volumes.

Sea – world seaborne trade

Over 80 per cent of global trade by volume and more than 70 per cent of its value is carried on ships and handled by seaports worldwide¹⁴. The performance of the global economy impacts on the success of world seaborne trade. Despite a divergence in the dependency between seaborne trade and GDP over recent years, demand for shipping services still relies heavily on the fortunes of the global economy.

For the last decade, the spectacular growth in the Chinese economy has been the mainstay behind global GDP growth. The shipping industry has hugely benefited from this, and this growth is the main factor behind the substantial increase in containership capacity, particularly investment in ultra-large container ships over 18,000 TEUs. While the Chinese economy is holding up, mainly due to huge investment in infrastructure initiatives such as One Road and One Belt, OECD estimates GDP growth

¹⁴ UNCTAD Review of Maritime Shipping, 2017

of 6-7 per cent in 2017 and 2018, rather than the 10-15 per cent relied on by the container ship operators to fill their mega container vessels.

This means that the longer-term position looks equally challenging for the container industry and other shipping sectors. While there has been an enhanced rate of scrapping of ageing and redundant capacity and a slowdown in orders for new ships, underutilised shipyards and the prospect of competitively priced new tonnage is likely to ensure that capacity will outstrip demand for those new vessels for the foreseeable future. The outcome has been an unprecedented restructuring of the industry. This has resulted in an acceleration of consolidation in the sector, with intensive mergers and acquisitions activity with a number of the top container shipping groups either acquired or forced into bankruptcy.

As discussed in previous Logistics Reports, the consequences of market concentration for shippers are fewer services to choose from and reduced competition. This is leading to pressure for a review of international competition laws from shippers (owners of the cargo).

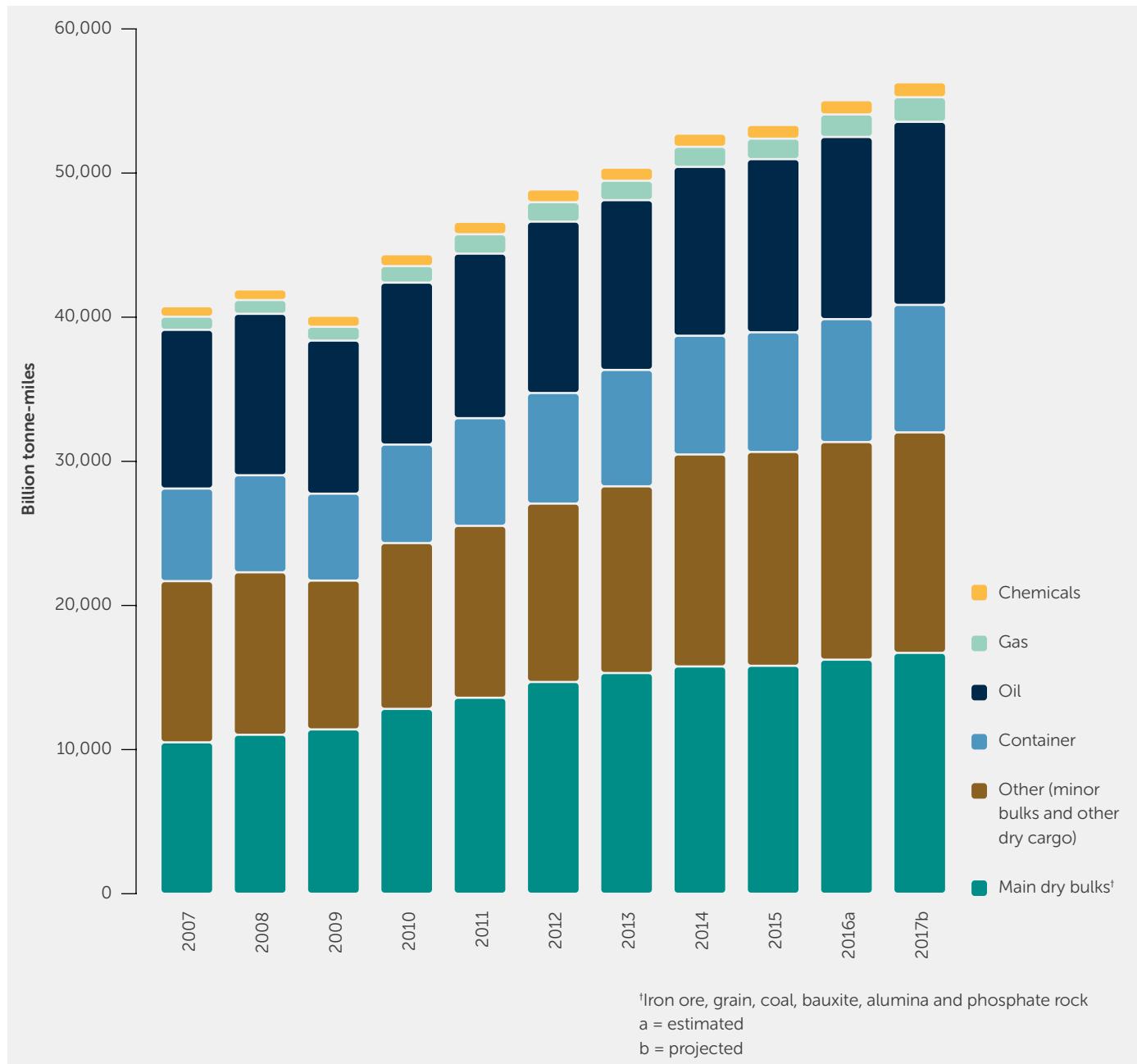
The world fleet rate of growth has been decreasing over the past five years, rising by just 3.15 per cent in 2016. There continues to be global overcapacity as the supply of ship-carrying volume has grown faster than demand, exerting a downward pressure on freight rates and earnings.

According to the United Nations Conference on Trade and Development (UNCTAD), world seaborne trade volumes reached 10.3 billion tonnes in 2016, growing by 2.6 per cent, up from 1.8 per cent in 2015. While this moderate increase is positive it is still, nonetheless, below the historical average of 3 per cent recorded over the past four decades. The tanker trade accounted for about half of the additional 260 million tonnes of cargo which was added in 2016. There was strong import demand in China in 2016 but overall growth was offset by slow expansion in the import demand of other developing regions.

UNCTAD forecasts that in the medium term, world seaborne trade volumes will grow at an annual compound rate of 3.2 per cent between 2017 and 2022. All cargo flows are expected to grow and containerised and major dry bulk commodities will expand fastest. In the near term it is expected that volumes will have reached 10.6 billion tonnes in 2017 (up 2.8 per cent).



2.16 World seaborne trade in cargo (tonne-miles) by type of cargo, 2007-2017



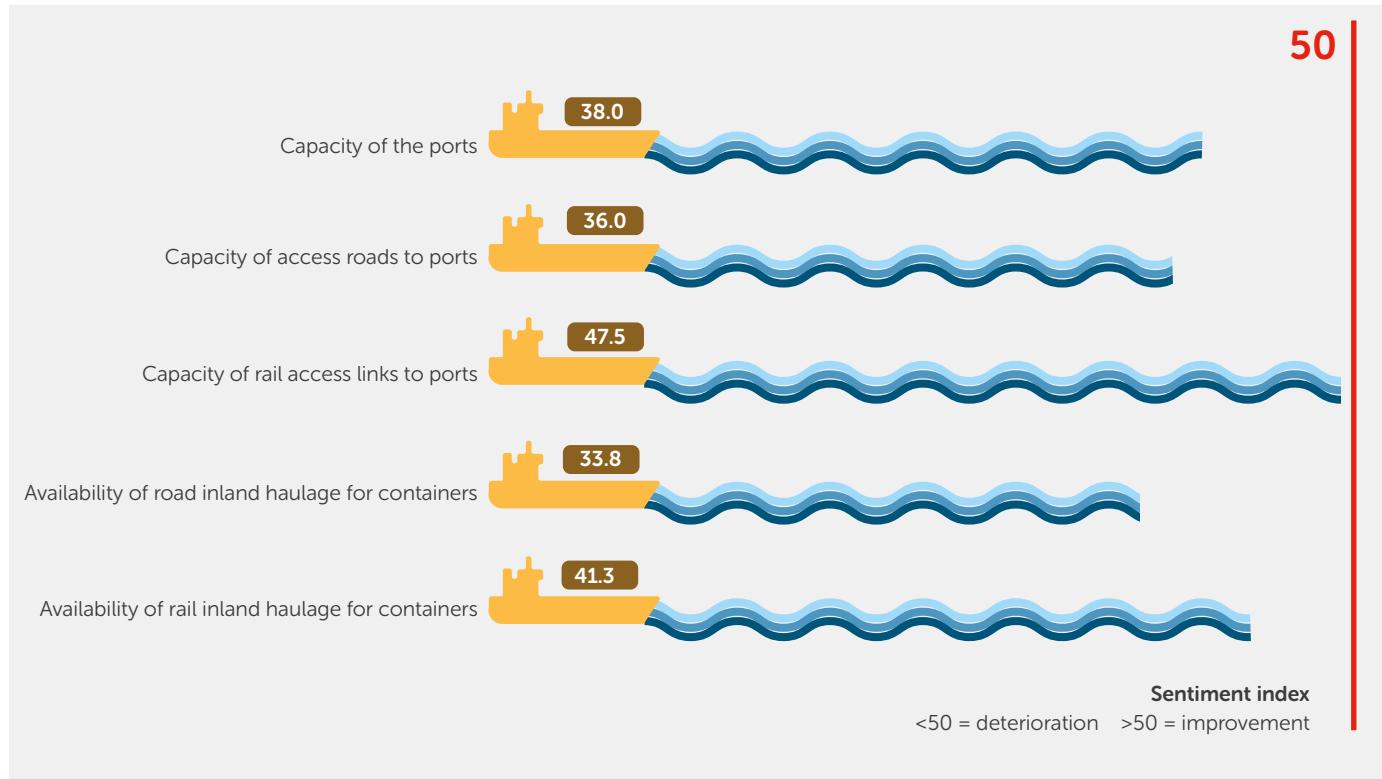
The overall port industry, including the container sector, has experienced significant reductions in growth in recent years. UNCTAD estimates that world container port traffic increased by 1.7 per cent in 2015 and 1.9 per cent in 2016 but these growth rates are the lowest in 16 years, except for 2009, when there was a decrease of 8.1 per cent¹⁵ at the height of the global financial crisis. In 2016, very few ports (21) had growth in volumes handled

15 Container Forecaster, Drewry Maritime Research, 2017

of over 1 per cent. The following ports had the highest increases: Piraeus (14.1 per cent); Kelang (10.7 per cent); Colombo (10.6 per cent); and Cat Lai (Ho Chi Minh City) (10 per cent).

Distance-adjusted seaborne trade grew but at a slightly faster rate than seaborne trade in tonnes in 2016. Global shipping tonne-miles increased by 3.2 per cent in 2016 compared to 2015 to reach an estimated 55,057 billion tonne-miles (fig 2.16).

2.17 Factors in UK port congestion in 2017



Source: FTA Logistics Industry Survey 2017/18

In 2016, container spot freight rates were generally low, experiencing a decline in the first part of the year but recovering in the second half. The positive change in the second half of 2016 was partly due to improved world trade conditions but more likely attributable to management of supply by shipping lines who implemented measures such as network optimisation, scrapping and a considered approach to vessel deployment around the peak season¹⁶. The total operating loss reported by the container-shipping market in 2016 was around \$3.5 billion.

Sea – factors affecting port congestion

The FTA Logistics Industry Survey asked respondents to share their views on improvement or deterioration of port congestion. Those who use the UK's seaports indicated that congestion and capacity had worsened in 2017 (fig 2.17). The balance of opinion indicated that there had been the largest deterioration in availability of road inland

haulage for containers, whereas the capacity of rail links to ports was considered to be only slightly worse than the previous year (as was the case for 2016).

In October 2017, the UK government approved the latest upgrades to the Port of Felixstowe's rail connections. The £60.4 million project, jointly funded by Network Rail and Hutchison Ports, will allow up to 47 freight trains to run in each direction per day between Felixstowe and Ipswich. This is an increase of around 50 per cent compared to the current capacity. Network Rail will deliver the project as part of its Railway Upgrade Plan.

The Port of Felixstowe is the UK's largest and busiest container port. It has three rail terminals which also makes it the UK's largest and busiest intermodal rail freight facility. The most recent phase of development in the port, berths 8 and 9, provides additional capacity for the world's largest container ships.

All these developments underline the economic case for improvements in infrastructure and facilities; the UK's own networks will need investment in ports, airports and road and rail links to them, as well as skills, to ensure that the economy can respond to these new challenges.

¹⁶ Container Shipping, Baltic and International Maritime Council, 2017

International connectivity and trade

FTA IS CAMPAIGNING FOR...

Improvements to the UK's transport infrastructure connections to ports and airports, by reducing congestion and unreliability, enhancing access to all modes of transport and ensuring that we can trade with the rest of Europe and the world without delays and other burdens being imposed. This is essential for our economic future. The withdrawal of the UK from the EU will have important consequences for businesses across supply chains, whether they operate globally, at European level or domestically. FTA is actively engaged in campaigning to ensure that members' needs are understood and to secure a positive post-Brexit environment for trade and logistics.

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WHAT FTA IS DOING...

...FTA regularly engages with HM Treasury, Department for Transport (DfT) and Department for Environment, Food and Rural Affairs (Defra), as well as MPs and select committees for national parliaments and assemblies.

We are calling for...

ISSUE

FTA'S PROPOSALS

OUTCOME SO FAR

CONNECTIVITY

Improving the UK's transport infrastructure, by reducing congestion and unreliability, enhancing access to all modes of transport and ensuring that we can trade with the rest of Europe and the world without delays and other burdens being imposed is essential for our economic future

A third runway at Heathrow
Protection of early-morning arrivals into Heathrow, which carry crucial cargo items required for the same working day
Deep sea shipping competition and service level issues to be addressed (through the Global Shippers' Forum - GSF)
Investment in rail and road links to/from ports, around the UK
Mode shift revenue support to be available for coastal shipping services in the same fashion as rail
Planning and grant support for port developments where needed
A long-term, sustainable alternative to Operation Stack that minimises supply chain dislocation and mitigates the impact on local traffic
A frictionless solution to customs and trade post-Brexit to minimise delays

Government has accepted the case for a third runway at Heathrow which is currently going through the planning process

Established maritime platform with the OECD (through GSF) to bring together international traders, shipping lines and ports to identify ways to improve performance

Seeking international reviews of competition framework for international shipping

Developed air cargo KPIs with IATA (International Air Transport Association) interest group Cargo iQ (through GSF)

Input to road and rail investment strategies published by UK's national governments to encourage investment in multimodal interchanges

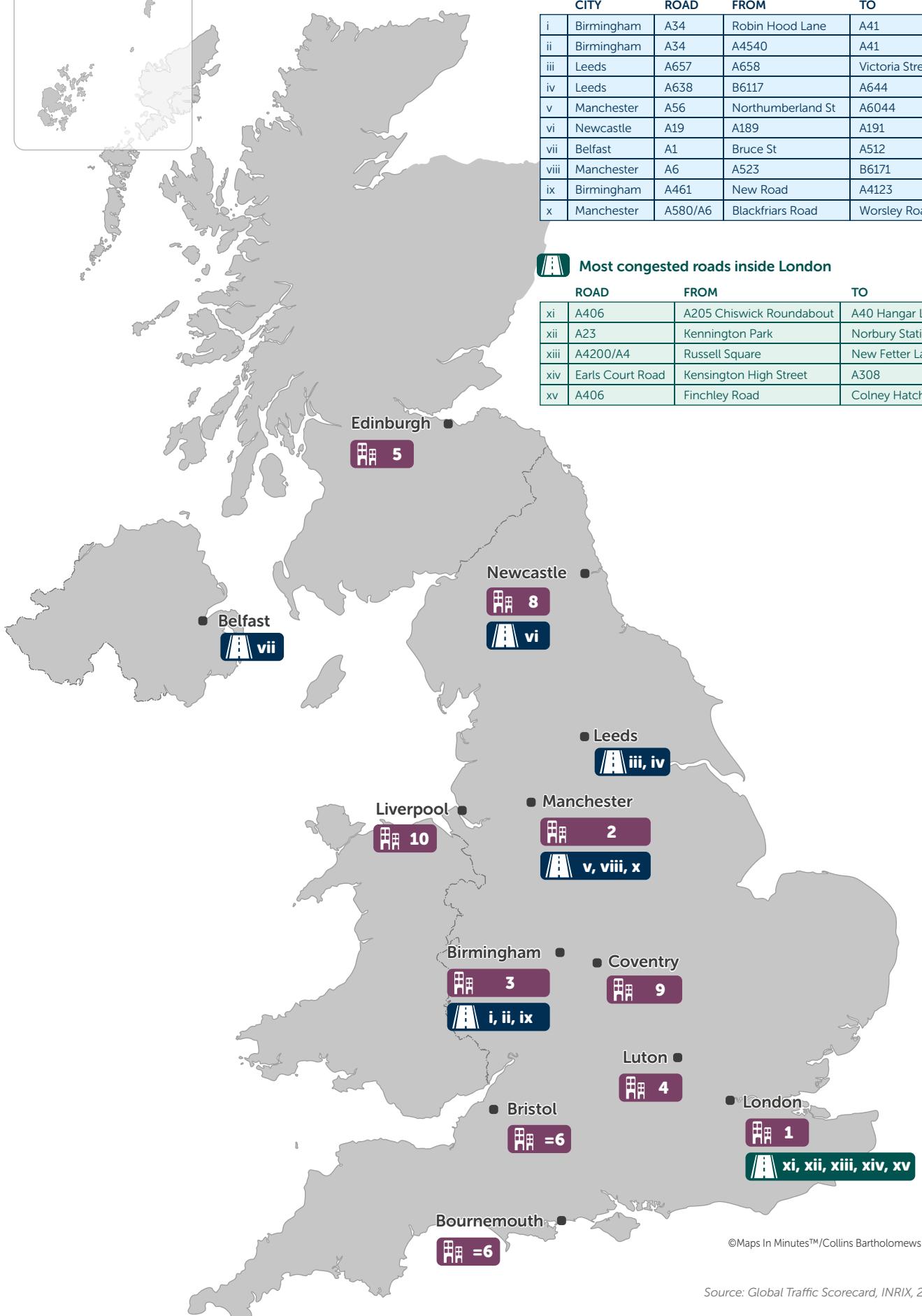
We are calling for...





National and local logistics

MOST CONGESTED CITIES AND ROADS IN THE UK



©Maps In Minutes™/Collins Bartholomews 2018

Source: Global Traffic Scorecard, INRIX, 2017

National and local logistics

The movement of goods within the UK is undergoing fundamental change. A buoyant construction sector is stimulating talking points over the uses of rail freight, the safety of road vehicles in urban environments and acknowledgment of the indispensable contribution of logistics in delivering much-needed new housing. At the other end of the consignment size spectrum, the persistent increase in online shopping is changing the way distribution is organised, the vehicles we see on our streets and the way that we shop and live.

At a time of great uncertainty for politics, industry and society, the challenge of balancing and managing the complex, inter-related requirements of people, vehicles and commerce has rarely been greater.

Urban

'Powerhouses', 'engines' and logistics

The top 10 UK cities with the highest input in terms of Gross Value Added (GVA), contributed £617 billion to the economy in 2016, or 35.7 per cent of total UK GVA. London alone accounted for £408 billion which is 23.6 per cent of UK GVA and nearly twice the amount of the other nine cities combined (fig. 3.1).

According to EY UK Regional Economic Forecast (Winter 2017/18), the economic divide between the North and South of the UK will continue to expand over the next three years and smaller cities and towns will fall further behind the largest cities.

London and the South East will continue to outperform all other UK regions through to 2020, while Manchester is forecast to be the strongest performing city in terms of both GVA and employment growth, with annual increases of 2.4 per cent and 1.2 per cent per year respectively between 2017 and 2020.

Regional devolution

In the push to geographically re-balance the economy, much has been said of concepts such as the Northern Powerhouse and the Midlands Engine as politicians supporting these principles seek to fire the collective imagination, or at least achieve some societal and investor buy-in to their plans for regional devolution. At its heart, this process is about giving local people – and those that represent them – a greater say in local policies and it takes several forms.

For example, in 2017 there was increasing activity and media comment from the new regional transport

3.1 Top 10 UK cities contribution to the economy, 2016



Source: Regional GVA (balanced) by local authority, ONS, December 2017

bodies that are forming in several regions of England. These bodies, such as Transport for the North (TfN) and Midlands Connect, are known officially as Sub-national Transport Bodies (STBs).

They are voluntary groupings that local authorities may decide to bring together and propose to government that they are created. Their role is focused on assessing and making recommendations on transport infrastructure and making some spending decisions where a pooled approach is best – the main example being put forward is smart ticketing for railways.

When legally established, the bodies will receive funds for their operating costs, research, analysis and small projects. In the main they will be consultative bodies without powers. However, it seems unlikely that they will

have as significant an impact on logistics' interests as the new combined authorities with elected Mayors, such as Greater Manchester or the West Midlands.

Elections for so-called 'metro mayors' took place in May – for Cambridgeshire and Peterborough, Greater Manchester, Liverpool City Region, Tees Valley, West of England and the West Midlands. These elected mayors are responsible for setting out a strategy for growing the city region economy and will have certain powers over issues such as housing, transport and skills. A number of other groupings of local authorities are considering whether this is a route they wish to pursue.

London, which has had an elected mayor since 2000, is in the process of adopting the second London Plan – the spatial development strategy for London over the next 25 years.

The plan contains a principle of 'no net loss of industrial floor-space capacity'; some commentators feel that given the growth in London's population and the associated increase in delivery and servicing needs, this does not go far enough in preventing further loss of logistics and industrial land. It also considers an 'agent of change' principle, whereby developers would be responsible for ameliorating nuisance to residents from pre-existing commercial and industrial activities. It also has the ambition of assisting fleets with shifting to alternatively-fuelled vehicles.

Seven statutory strategies sit under the plan, including the Mayor's Transport Strategy, the latest iteration of which was published in March 2018. This follows a 'healthy streets' agenda and includes a target to reduce freight traffic in the central London morning peak by 10 per cent on current levels by 2026, and to reduce total London traffic by 10-15 per cent by 2041. This would imply that vehicle movements are to be reduced, rather than the total amount of freight delivered – in turn suggesting better planning of demand, retiming and consolidation. This will entail influencing those who receive freight – the customers – to change behaviour.

The London Retiming Deliveries Consortium exceeded its target of showing how deliveries to 530 sites in the capital could be retimed – to the less busy hours of the day – in a partnership between Transport for London, London boroughs and logistics. This equates to over 160,000 deliveries. The aim: to promote retiming to

reduce congestion at peak times, improve air quality and make roads safer.

Air Quality

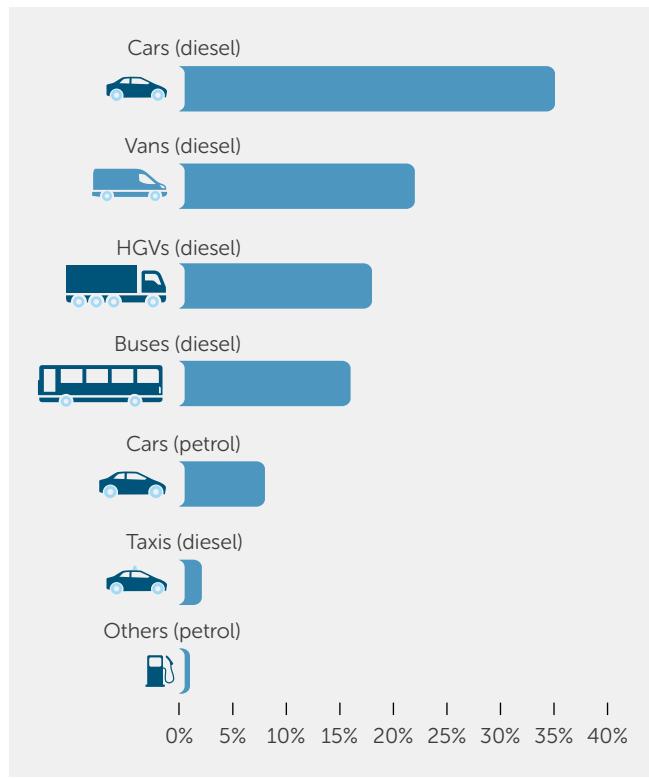
Increased restrictions on goods vehicle access

As part of the government's obligation to stick to the targets under the Paris climate accord and reduce emissions to zero by 2050, Roads Minister, Jesse Norman MP, has confirmed that adhering to the Conservative's manifesto commitment would "necessitate all new cars and vans being zero emission vehicles by 2040".

Looking at the nearer term, the next few years will see a step change in how vehicles are restricted in UK cities. The 30+ English local authorities identified in government's Plan for Tackling Roadside Nitrogen Dioxide Concentrations in 2017, and effectively required to introduce a Clean Air Zone (CAZ), are due to complete their feasibility studies by the end of March 2018, and must identify their preferred option by the end of 2018.

¹ Motor Vehicles: Fuels: Written question – 3680, Hansard, 14 July 2017

3.2 Contributors to roadside nitrogen oxide levels



Source: Defra National modelling 2017/Defra Air quality plan for nitrogen dioxide (NO_2) in UK technical report, 2017

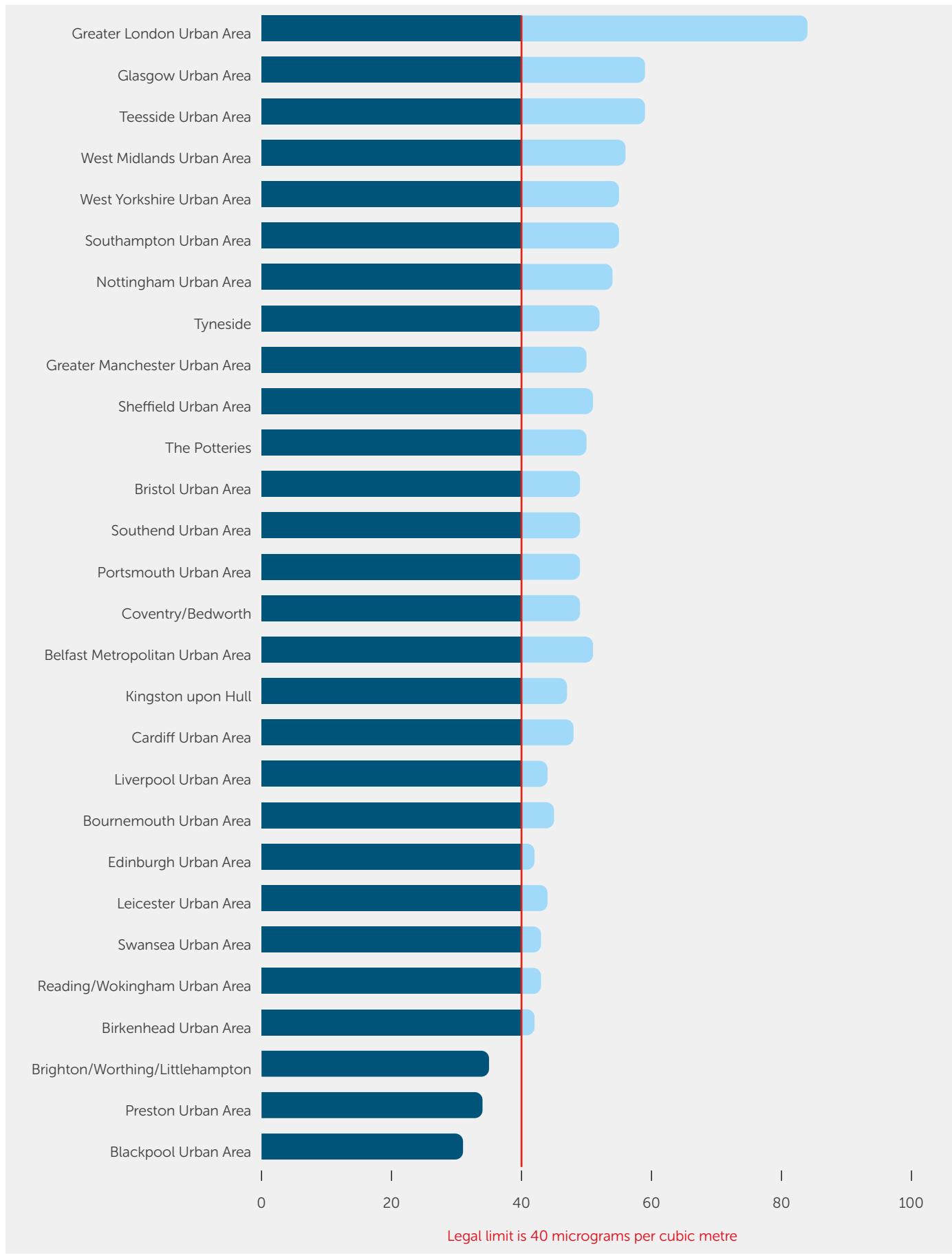
A similar process is also taking place in Scotland – with schemes planned in Glasgow and anticipated in Edinburgh, Dundee and Aberdeen, future measures are possible in Cardiff and Belfast.

The engine emission standards for entering the zones will be Euro VI/6 for diesel and Euro IV/4 for petrol vehicles, with any non-compliant vehicles charged upon entry to the zone (or issued with a penalty charge notice in Scotland). These charges are anticipated to be £10-£20 for vans per day and around £100 per day for HGVs.

Logistics has been working to improve its impact on air quality since the first Euro standard was introduced, but increasing health evidence and EU air quality requirements that were meant to have been met in 2010 mean this issue has been forced up the political agenda. Following a number of Supreme Court judgements, the UK government and therefore the affected local authorities, have little room to manoeuvre.



3.3 Urban areas with highest nitrogen dioxide levels: Defra forecast for 2018



Source: Air quality plan for nitrogen dioxide (NO₂) in UK technical report, Defra, 2017

However, not all CAZs would charge all vehicles and there is a hierarchy of types of CAZ which start essentially with just buses and taxis, then include HGVs, then vans and minibuses, and finally cars as well.

Air quality and fleets

Around 85 per cent of respondents to FTA's Logistics Industry Survey transport freight by road and altogether this cohort operates 41,628 HGVs (goods vehicles over 3.5 tonnes) and 502,148 vans (at or below 3.5 tonnes) whilst employing 54,063 HGV drivers and 107,919 van drivers. These survey participants were asked three questions about diesel vehicles and emissions (fig 3.4). The majority agreed that improving air quality and reducing emissions was a priority for their business. A third were worried about the cost of scrapping non-conforming vehicles but most had not reduced their fleet because of concerns about emissions.

Rail freight emissions

The ongoing development of low emission and electric road vehicles means the gap between road and rail is decreasing: the previously generally accepted

environmental advantages of rail freight could diminish over the next decades, while the prominence of rail emissions, particularly in key local settings, will rise. Meaningful comparisons are also something that rail freight customers are increasingly requiring to fully understand the impact of their operations on emissions throughout the supply chain. Good quality emissions data will be a crucial foundation for effective future investment and policy decisions that will address the rail freight industry's impact on air quality.

Congestion and reliability

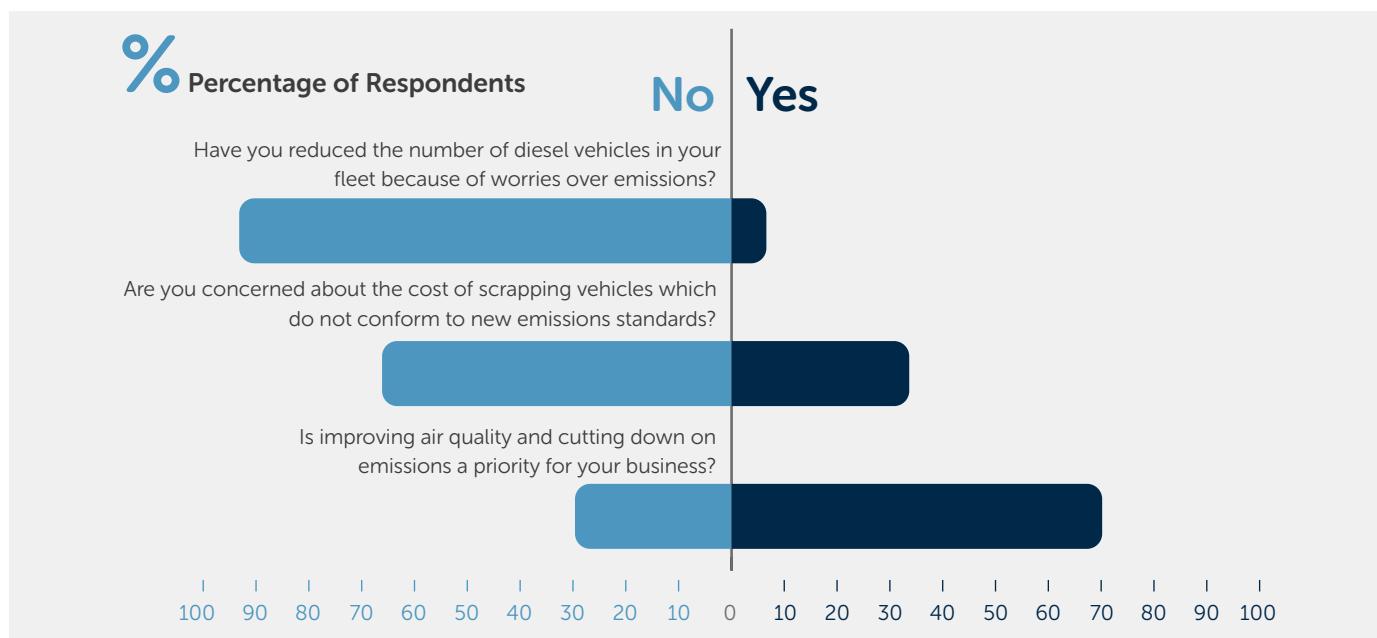
Increased concern over congestion

The effects of congestion

Congestion on the road network has a massive effect on the productivity of logistics. FTA estimates that it costs around £1 a minute² for an HGV to be idling in traffic, meaning congestion is a costly factor in servicing urban areas; adding to the cost of road freight also increases the cost of living or operating a business. Stop-start traffic also has a significant impact on fuel consumption,

² FTA's Manager's Guide to Distribution Costs 2017

3.4 Air quality and fleet



Source: FTA Logistics Industry Survey 2017/18

emissions and air quality. According to information supplied to FTA by manufacturers, a comparison of an HGV travelling at 30mph that stops three times in a mile and then gets back up to speed, and one that cruises at 30mph, shows a tripling of emissions. Reducing congestion would also reduce emissions.

Reliability of logistics by road

In the largest ever study of congestion, analysing data from 1,360 cities across 38 countries, conducted by INRIX³, the UK was ranked as the tenth most congested country in the world and the third most congested in Europe. The analysis estimates that UK motorists spend an average of 31 hours a year in congestion during peak hours.

Looking specifically at the UK, INRIX analysed congestion in 111 towns and cities. London was the UK's most congested major city for the tenth year in a row, followed by Manchester and Birmingham. It is estimated that drivers in London spend an average of 74 hours a year in gridlock during peak hours – or 13 per cent of their journey time. This ranked London as the second worst congested city in Europe after Moscow and seventh in the world overall. The study found that congestion cost each London driver £2,430 a year and the capital

as a whole £9.5 billion as a result of direct and indirect costs. Direct costs relate to the value of fuel and time wasted, while indirect costs relate to freight transport and business fees from company vehicles idling in traffic that are passed on to household bills through higher prices.

Highlighting the impact congestion has on freight deliveries, INRIX estimates that traffic speeds fell by 81 per cent to just under 4mph in the centre of London during daytime hours when congestion was at its worst. Travelling in and out of cities at peak hours is also affected by congestion. It is estimated that drivers travelling in and out of London and Manchester during peak hours can spend 16 per cent of their time in congestion at an average speed of just 12.8mph.

Public attitudes to congestion on roads

In 2016, the general public perceived motorway congestion as much less of a problem than congestion in towns and cities⁴, with only 31 per cent of respondents to the British Social Attitudes Survey considering it as a serious or very serious problem, compared with 50 per

³ <http://inrix.com/press-releases/scorecard-2017-uk/>

⁴ *British Social Attitudes Survey 2016: Public attitudes towards transport*, DfT

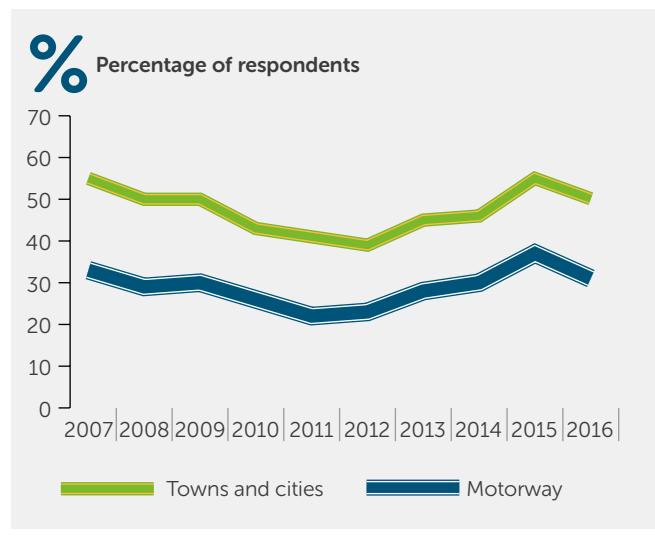
3.5 Worst 10 UK cities/urban areas for traffic congestion

Rank	City	Peak hours spent in congestion per year	Average congestion rate [†]	Total cost per driver per year	Total cost to the city per year
1	London	74	13%	£2,430	£9.5bn
2	Manchester	39	10%	£1,403	£345m
3	Birmingham	36	9%	£1,281	£632m
4	Luton	29	11%	£1,143	£102m
5	Edinburgh	28	9%	£1,155	£309m
6=	Bournemouth	27	11%	£1,225	£121m
6=	Bristol	27	9%	£1,028	£225m
8	Newcastle	24	7%	£991	£139m
9	Coventry	23	7%	£905	£140m
10	Liverpool	20	9%	£1,101	£273m

[†]Proportion of total drive time spent in congestion

Source: *Global Traffic Scorecard*, INRIX, 2017

3.6 Proportions perceiving traffic congestion in towns and cities as a serious/very serious problem



cent who thought congestion in towns and cities was as serious (fig 3.6).

The survey suggests that there was a sharp drop in concern over both types of congestion between 2015

and 2016, but it is difficult to tell if this reflects a real change in the population, or sampling variation from one year to another.

Online retail and van use

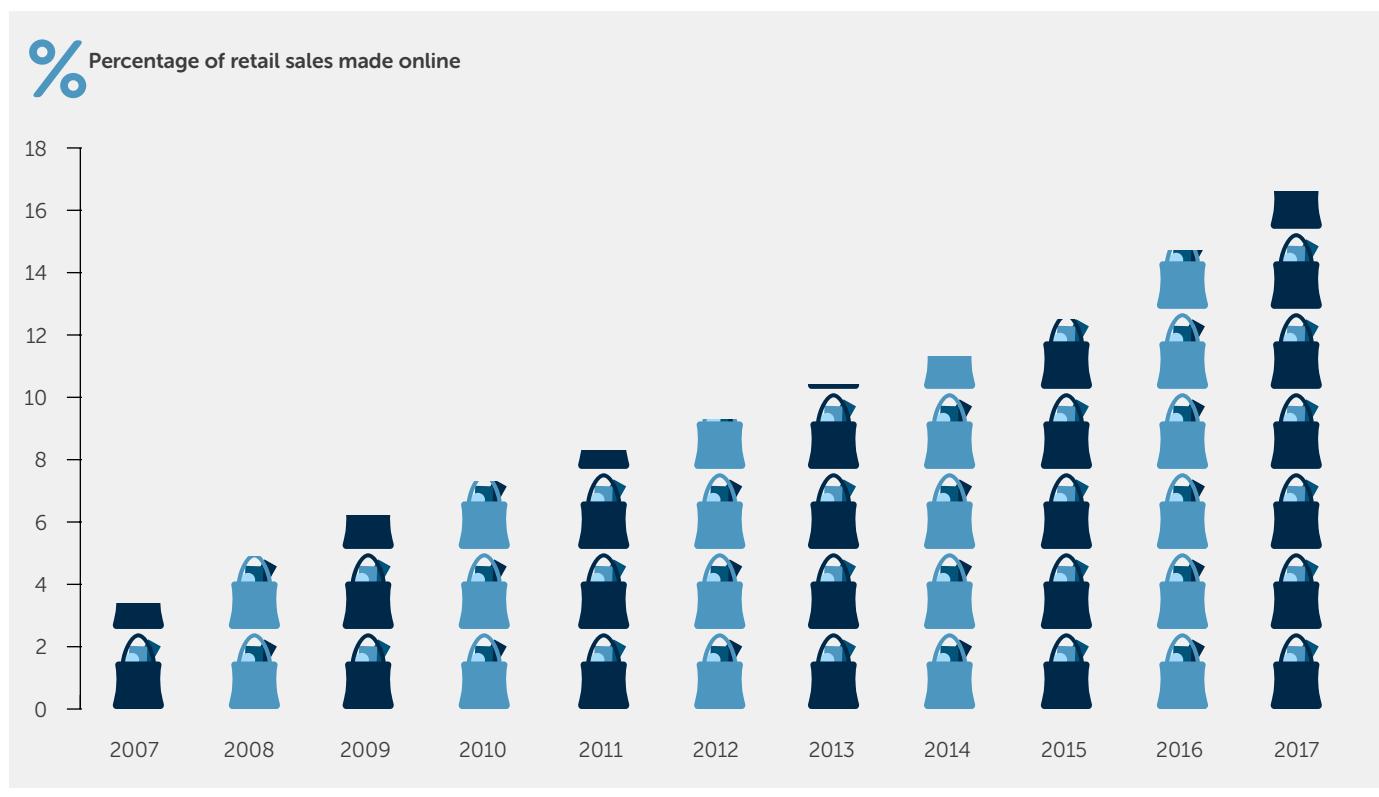
The growth in the number of new vans far outstrips that of the economy. Since the last recession, the number of vans on the road has increased by 19 per cent, while annual growth in GDP has been much weaker by comparison. In most years it has been under 2 per cent and no more than 3.1 per cent.

Many vans rarely approach their full payload capacity, suggesting that other factors, such as convenience and flexibility, are driving the increase in numbers.

Part of the significant growth in the use of vans is often thought to be the result of ever-increasing consumer demand for online purchasing (see fig 3.7). However, detailed analysis for the RAC Foundation⁵ shows that

⁵ *The Implications of Internet Shopping Growth on the Van Fleet and Traffic Activity*, RAC Foundation, May 2017

3.7 Proportion of retail sales made online 2007-2017 (seasonally adjusted)

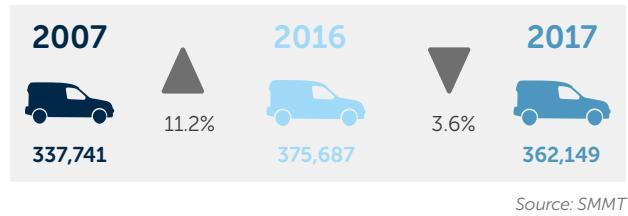


online shopping alone does not account for the increase in the number of vans on our roads. Its primary research on the van parc as a whole, and on home delivery fleets, as well as secondary sources, does not substantiate such claims.

It is also worth considering that there is also a benefit from the use of vans to deliver groceries and other goods for multiple numbers of shoppers, especially where this removes cars from congested traffic.

There were around 4 million vans on the road in 2017. According to the Society of Motor Manufacturers and Traders, new light commercial vehicle registrations fell by 3.6 per cent to 362,149 units in 2017 – the first decline since 2012, but the market is still third highest in a decade (fig 3.8).

3.8 New van registrations

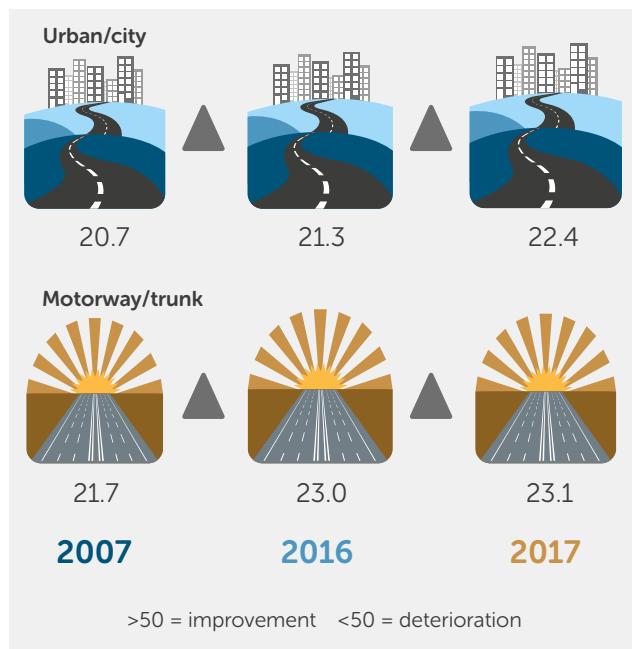


Online shopping continues to grow, although there is a general slowdown in retail sales as a whole. In December 2017, online retail volumes (excluding automotive fuel) increased year-on-year by 9.5 per cent and by 2.7 per cent compared to the previous month. Online sales accounted for approximately 16.4 per cent of all retail spending in 2017.

Road reliability

According to the FTA Logistics Industry Survey, the perceived rate of deterioration in reliability on the road network improved slightly for urban and city roads in 2017 but was the same as the previous year for motorway and trunk roads (fig 3.9; a value over 50 indicates improvement in reliability while a value below 50 signifies worsening reliability). Overall sentiment is in line with pre-recession levels, a reflection of the increase in domestic road freight activity in recent years. Reducing congestion through improvements to the road network remains vital to freight operators on both local and national roads.

3.9 Reliability of the road network index



The role of tolls and charges

Fresh debate started

At present, there are relatively few vehicles on the roads that do not use conventional fossil fuels. However, government policy and environmental concerns would indicate that at a future point Treasury income from fuel duty on conventional fuels will reduce. In this scenario, government will be seeking to replace lost income. Traffic levels are also rising and in cities such as London solutions are being proposed, including a new form of charging to replace the congestion charge.

It is against this background that calls for road charging are gaining greater traction. Even though the case for it is not universally accepted, especially in Scotland where there are concerns that a charge based on distance could be economically damaging because of its geographical peripherality. However, the case has also been made that a distance based charge would bring road transport onto a more equal charging basis with rail.

Fuel duty was expected to be under more public scrutiny in 2017, as the Chancellor took the opportunity of the March Budget Statement to say the government was committed to exploring "appropriate tax treatment for diesels" and making an announcement in the Autumn Budget. This announcement did not come and fuel duty continued to be frozen when the Budget moved to the Autumn. At current rates, fuel duty costs logistics around £6 billion a year, or £101.5 million per penny of duty. The UK's high level of duty affects the competitiveness of the UK logistics sector, particularly against foreign based operators who have a significant cost advantage over British operators due to much lower rates of diesel in mainland Europe.

3.10 Traffic volumes and revenue for some of the UK's other major road tolls*

Toll name	Crossings per annum	Annual revenue	Other information
Severn Crossing	14 million (2016)	£103.7 million (2016)	1.57 million HGV crossings (2016)
Tyne Tunnels	18 million (2016)	£28 million (2016)**	1 million crossings by vehicles over 3m in height (2016)
Mersey Tunnels	27 million (2016)	£44 million (2016)	0.5 million crossings by HGVs with 3 or more axles (2016)

*Freedom of Information requests to individual toll operators, October 2017 **NECA Chief Finance Officer's Narrative Report for the Year ended 31 March 2017

However, in November it was announced that VED for new cars would be changed to favour those meeting the latest emissions standards and in March 2018's Spring Statement, the Chancellor pledged to "help the Great British White Van driver go green with a consultation on reduced VED rates for the cleanest vans."

Analysis of HGVs and road tolls

There are currently 23 tolls or toll roads in the UK, of which 18 are river crossings and two are congestion charge zones (London and Durham). The Dartford Crossing is by far the busiest toll road for all forms of traffic, attracting the largest revenue of all.

Based on traffic count data, approximately 18 per cent of the traffic on the Dartford Crossing is made up of HGVs, equating to 28,000 HGVs per day⁶. This increases to 31 per cent if 2-axle goods vehicles are included. These vehicles include those connecting ports and distribution centres in the South East to the Midlands and the North. In the 2015/16 financial year, Highways England recorded nearly 5.5 million crossings through Dartford by HGVs during charging hours⁷. Of these, non-UK registered HGVs represented 1.5 million crossings. For this period overall, £28.8 million in tolls was collected from payments made for HGVs.

Figure 3.10 summarises information (where available) for some of the UK's other tolls. The volume of HGV traffic as a proportion of all crossings varies from around two per cent for the Mersey Tunnels (Kingsway and Queensway)

⁶ Lower Thames Crossing Post-Consultation Scheme Assessment Report Volume 2, Highways England, April 2017

⁷ Response to Freedom of information request by Highways England, November 2017

to 11 per cent for Severn Crossing (approximately the same as the proportion of HGV traffic on all motorways).

Road User Levy revenue

The government has been exploring ways of making the HGV Road User Levy (RUL) a more fully-fledged road user charging scheme for HGVs. It wanted to see if it could be used to change times of day/week, routes used and the environmental (ie Euro engine emissions) standard of vehicles used by logistics operators and held a consultation considering possible changes. In practice, the outcome was a flexing of the charge to take account of the Euro emissions standard but any increase in logistics costs from the Levy will be strongly resisted as it was originally introduced as a revenue neutral measure.

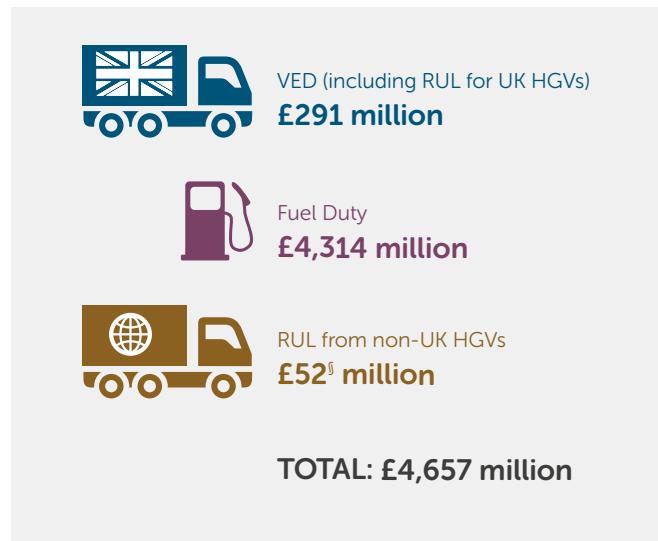
Since 1 April 2014, all HGVs at or above 12 tonnes gross vehicle weight using UK roads have been required to pay the Levy. The Levy ensures all such HGVs contribute to the costs of UK road maintenance and removes some of the inequality UK hauliers felt when paying to use many roads abroad. The Levy costs up to £10 per day, or £1,000 per year.

For most UK-registered HGVs, vehicle excise duty (VED) was reduced by the same amount as the Levy, and is conveniently paid alongside vehicle excise duty (VED) to keep administrative costs to a minimum.

The Levy is rolled into the VED estimates (excluding the tax take from non-UK HGVs). HGV VED and the Road User Levy were frozen from 1 April 2017.

In 2015-16, the Levy raised £198 million (£52 million from foreign-registered HGVs, the balance from UK registered HGVs). This is far beyond estimates the government made when the bill was going through Parliament, of approximately £50 million per year.⁸ In 2016/17 VED (including UK RUL) from HGVs raised £291 million (fig 3.11).

3.11 Government tax revenue arising from HGVs, 2016/17



Sources: DfT, Transport Statistics GB 2017
¹FOI request, March 2018

Investment in roads

The emerging approach to funding

In England, government took an important step towards the next stage of roads investment with the publication of the initial report from Highways England on its spending plans for Road Investment Strategy 2 (RIS2), covering the period between 2020 and 2025.

Over the next road period, Highways England aspires to:

- **focus on operations, maintenance and renewals** – recognising that these areas are essential to customers and provide the foundation for a safe, reliable, and resilient network. Highways England will need to ensure that this is done in a way that minimise disruption to road users and the economy.
- **build the smart motorway spine of the network** – enhancing capacity between major cities through a stable, continued smart motorway programme
- **roll-out expressways** – driving forward the ambition from the first Road Investment Strategy to develop an expressway network
- **undertake transformational investments** – implementing the next generation of transformational schemes, following on from the A303 and Lower Thames Crossing, and prioritising the areas with greatest need

⁸ House of Commons Library Briefing Paper: Vehicle Excise Duty (VED), Number SN01482, 12 June 2017

- **deliver a balanced programme** – ensuring sufficient funding for medium-sized schemes, for example, junction and capacity improvements
- **renew focus on small schemes** – ensuring dedicated funding for small, regional schemes to address safety and congestion hotspots
- **deliver through refined designated funds** – continuing to invest, with an increased focus on roadside facilities, more flexibility, and new ways of working with partners
- **prepare for the future** – responding to longer-term developments that could transform our roads, such as electrification and autonomous vehicles, and enabling this through pilots and appropriate investment

A major evolution planned in Road Investment Strategy 2 (RIS2) will create a four-tier road system, developing a spinal network of smart motorways to enhance the standard motorway network. They also plan to upgrade a significant proportion of all-purpose trunk roads to expressway standards.

Strategic studies

In the first Road Investment Strategy, government announced six strategic studies to investigate potential options for solving some of the most significant and complex challenges on the Strategic Road Network, providing long-term solutions to capacity challenges and improving connectivity. Highways England has started to develop options for addressing the problems.

Given their scale, cost and the complexity of delivery, Highways England advises that these should form a long-term programme of delivery over successive road periods. The six strategic studies are:

- Oxford to Cambridge Corridor
- Northern Trans-Pennine
- Manchester North West Quadrant
- Trans-Pennine Tunnel
- A1 East of England
- M25 South West Quadrant

Schemes to be developed for the next road period

The government has asked Highways England to identify and design solutions for 15 locations announced in the first Road Investment Strategy, with the aim that they could be ready to enter the planning process and start construction in the next road period if an appropriate solution can be identified which offers good value for money. These locations are:

- A64 Hopgrove Junction
- M1/M62 Lofthouse Interchange
- A1 Redhouse to Darrington
- M1 junctions 35A-39 – smart motorways
- A1(M) Doncaster Bypass
- M60 Simister Island Interchange
- A46 Newark Northern Bypass
- M1 junctions 19-23A
- M5/M42 Birmingham Box Phase 4
- A45 Stanwick to Thrapston
- A12 Colchester Bypass widening
- A12 M25 to Chelmsford
- A3 Guildford
- Lower Thames Crossing
- A417 'missing link' at Air Balloon Roundabout

Construction of any scheme option will be subject to its inclusion in Road Investment Strategy 2 and obtaining necessary statutory permissions.

Major road network

Not all roads in England that are important for logistics are part of the Strategic Road Network; other key routes are under the control of local authorities and concerns have been voiced over the way in which some of these routes are maintained. Government has announced plans for a new Major Road Network for England, to provide ring-fenced funding for some of the nation's busiest and

most important local authority routes⁹. The Major Road Network will allow dedicated funding from the National Roads Fund to be used to improve the middle tier of the busiest and most economically important local authority 'A' roads; the National Roads Fund consists of income from Vehicle Excise Duty.

Spending on roads

The Strategic Road Network represents only 2.4 per cent of the road network length but carries a third of all of traffic, with HGVs in particular depending on it and comprising 11.4 per cent of traffic on motorways. The remaining 97.6 per cent are managed by local highways authorities. These local roads carry two thirds of all motorised traffic on the network.

The government spent around £9.3 billion on Britain's roads in 2016-17 and spending on Northern Ireland's roads was estimated at £0.4 billion (fig 3.12).

3.12 Government Spending on roads in the UK 2016-17

Great Britain	National roads	£4.1bn
	Local roads	£5.2bn
Northern Ireland	All roads	£0.4bn
UK total		£9.7bn

• National roads refer to motorways and trunk roads
 • Local roads are managed by local authorities

Sources: Transport Statistics GB, DfT, 2017,
 Northern Ireland Transport Statistics, 2017

Maintenance

In December 2017, Transport Minister, Jesse Norman MP, announced almost £200 million of investment to help improve the local road network. The funding included £46 million to help repair 1 million more potholes in England, which is on top of the £75 million Pothole Action Fund for 2017/18. Mr Norman also announced that £151 million would be available for the local highways maintenance incentive fund which would reward councils for efficiently planning road maintenance. This

9 Proposals for the creation of a new Major Road Network, Department for Transport, 23 December 2017

is part of the government's commitment to £6 billion of funding for local road maintenance between 2015 and 2021.

Maintenance of the existing road network is essential. The Asphalt Industry Alliance (AIA) 2018 ALARM Survey of local highways departments in England and Wales found that "you could drive almost around the world on the length of local authority roads that could fail if they are not fixed in the next 12 months"¹⁰. More than 24,400 miles of local roads were classed as needing repairs in the next year and a fifth of local roads are in poor condition, with less than five years of life remaining. The AIA also indicated that a one-time catch up to bring the local road network into a reasonable state would take 14 years to complete and cost highways departments £9.31 billion.

The 2018 ALARM survey reported that over 1.5 million potholes were filled last year, which is the equivalent of one repair every 21 seconds. Whilst this is a lower number than in recent years, the RAC reported in March 2018 that it had attended 11 per cent more breakdowns in Q4 2017, compared to a year earlier, that were due to pothole damage. The RAC also indicated that the "Beast from the East" in late February 2018 would lead to more potholes appearing and causing damage to vehicles¹¹.

Maintenance expenditure on UK roads

Overall in 2016-17, £4.8 billion was spent on structural and routine maintenance of roads in the UK (fig 3.13). It should be noted that this included expenditure on bridges and other highway structure elements, unplanned patching of roads and items not directly related to wear and tear of the road surface (eg footpaths, retaining walls, culverts etc). A total of £1.8 billion was spent on UK routine road, and £2.9 billion on structural, maintenance.

Research for FTA shows that HGV taxes alone almost pay for the whole of the UK's spending on road maintenance¹².

10 ALARM survey, Asphalt Industry Alliance, 2018

11 rac.co.uk/press-centre#/pressreleases/rac-fears-extreme-cold-snap-will-lead-to-a-spring-pothole-plague-2439980

12 Heavy Goods Vehicles: do they pay their way? Impacts on Road Surfaces. A briefing note prepared by RepGraph for FTA, 2017

3.13 Maintenance expenditure on UK roads 2016-17

Country		Routine total	Structural maintenance total
England	Motorways, trunk roads, A roads (Highways England)	£259.6 million	£636.3 million
	Local authorities (all roads)	£1,065.6 million	£2,229.6 million
Scotland	All roads	£314.2 million	£9.2 million
Wales	All roads	£59.4 million	£43.8 million
Northern Ireland	All roads	£82.2 million	£28.6 million
Total		£1,781.0 million	£2,947.5 million

Source: Road conditions in England: 2017 report, DfT, 2018.

Roads and transport revenue expenditure, by service StatWales 2016/17/Scottish Transport Statistics No 36, 2017/Northern Ireland Transport Statistics, 2017

Rail freight investment

Essential investment for resilience

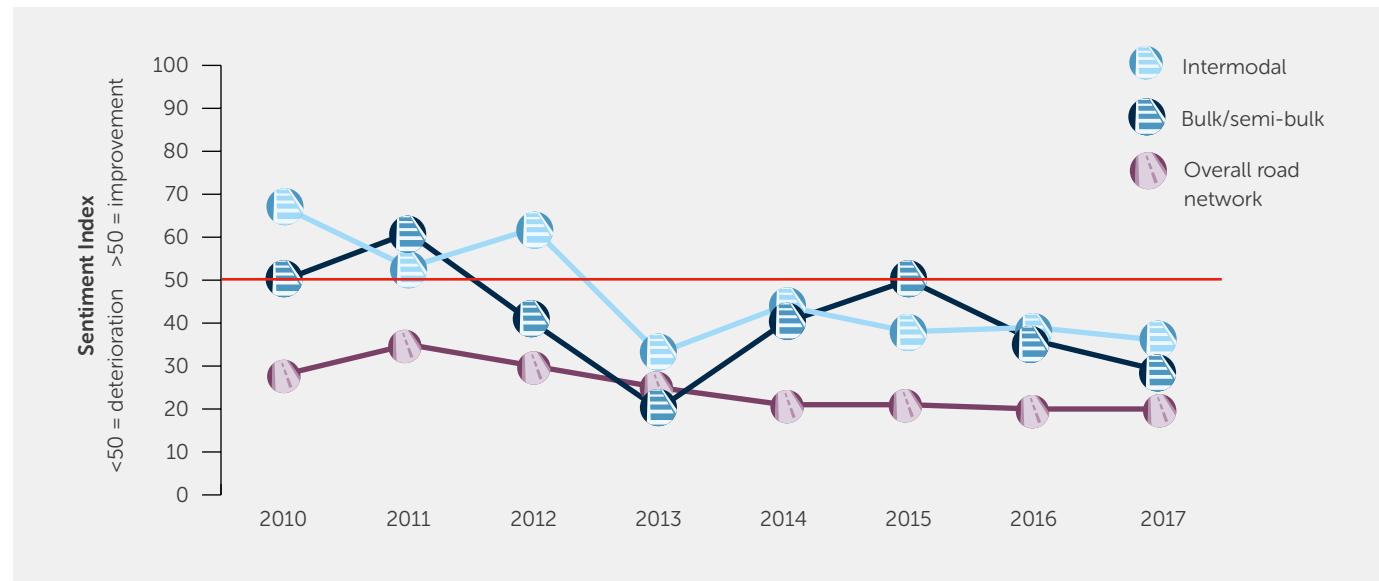
Rail freight is important to supply chains because of the congestion and environmental benefits it can bring. By moving large volumes over trunk hauls, economies of scale can also be achieved, especially where consignors and road and rail freight businesses work in partnership. Record levels of intermodal rail freight movements and construction sector moves are welcome indicators of ways in which the supporting this mode can help secure further growth to the benefit of logistics.

A mixture of increasing quantities of containerised freight to be moved from deep sea ports – such as Felixstowe and Southampton – and improvements to rail freight capacity and capability from those ports, has allowed rail freight to take-up additional and latent demand. For example, improvements to the route linking Felixstowe to the West Coast Main Line at Nuneaton have allowed freight trains to use a more flexible route that has greater availability of paths.

These factors have the effect of moving the 'centre of gravity' for rail further south, onto more congested parts of the network. This will bring new challenges, especially as the rest of the railways undergo increased regional devolution, where freight by contrast will be operating



3.14 Road and rail network reliability



Source: FTA Logistics Industry Survey 2017/18

across many organisational boundaries. This is one of the reasons why the new Freight and National Passenger Operators (FNPO) route organisational structure was established by Network Rail in April 2017.

The FNPO, as Network Rail's ninth operational route (or 'virtual' route), is different to its other routes: it does not directly manage assets or control train operations, but deliver these working with and through the geographic routes, the System Operator and other parts of Network Rail.

The new rail freight strategies of both the UK and Scottish governments support additional rail freight growth and operations on the rail network. Network Rail's planning and scoping work to date – supported by work on freight forecasting by MDS Transmodal – indicates that around £2 billion will be needed over a 15 year horizon to fund the infrastructure necessary to underpin step changes in rail freight growth¹³.

In Control Period 6 (covering the period 2019-2024), FNPO will have its own revenue requirement, which it is hoped will assist in making the case for freight projects and ensure that the case for freight improvements

and capacity is able to better compete with that for passenger services.

Network Rail's 15-year freight plan anticipates a focus on five key strategic corridors:

- Felixstowe to the Midlands/North/Scotland
- Solent to the Midlands/North/Scotland
- cross-London
- northern ports and Trans-Pennine capacity
- development of additional nodal yards (to support train regulation and capacity management)

Rail freight reliability

The importance of improving rail freight services to provide a viable alternative to road is highlighted by the changing perceptions of the reliability of road and rail. The FTA Logistics Industry Survey found that while neither road nor rail network reliability has improved, rail reliability was perceived to be deteriorating at a greater rate than road (fig 3.14). As was the case for the previous year, respondents indicated that while the level of reliability of roads overall was still below that of rail, the gap between them had narrowed, with the situation on roads not viewed as worsening.

¹³ Freight and National Passenger Operators Route Strategic Plan, Network Rail, February 2018

Water freight in the UK

Protection of facilities to meet future needs

Using water freight allows companies to have a system in place to prevent adverse consequences if future issues should make traditional networks less viable. Britain's canals and rivers could be playing a bigger role in our freight network, but changes in local and central government policy and planning approaches would be needed to make this happen.

Waterborne freight transport within the UK refers to freight carried on inland waters and around the coast of the United Kingdom.

There are three main elements to waterborne freight transport in the UK:

- inland waters traffic: traffic carried by both barges and seagoing vessels along inland waters. Inland waters traffic can be further categorised into non-seagoing traffic (internal traffic) which is wholly within inland waters and seagoing traffic which crosses into inland

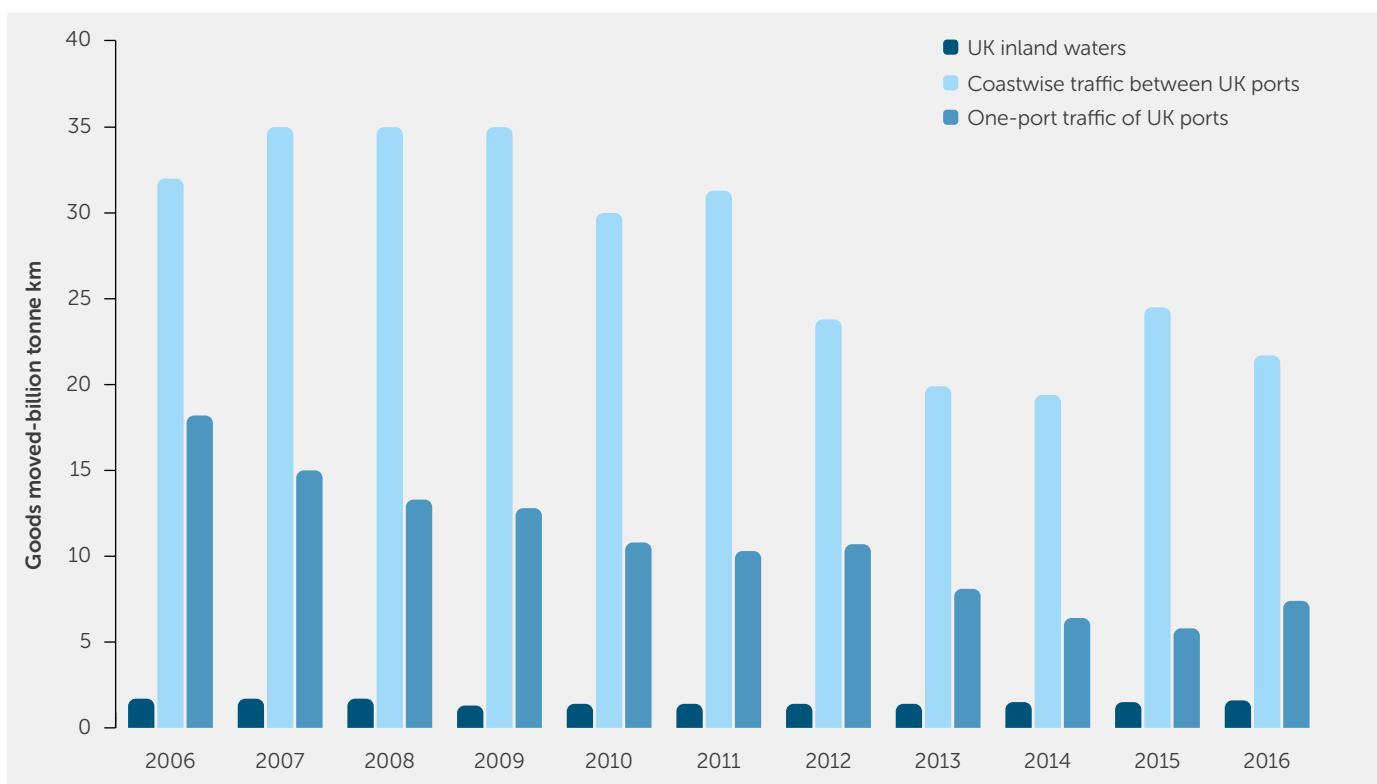
waterways from the sea (and which can be further classified as coastwise, foreign or one port traffic)

- coastwise traffic: traffic carried around the UK coast
- one-port traffic: traffic to and from UK offshore installations and sea dredging/dumping

Domestic traffic (between UK ports or one-port traffic) accounted for 21 per cent (103 million tonnes) of all UK maritime freight traffic in 2016. This domestic traffic comprised 'one-port traffic' (20 per cent) and coastwise traffic between UK ports (80 per cent). Inland waters traffic accounts for a relatively small proportion of domestic waterborne freight traffic and increased from 1.5 billion tonne kilometres to 1.6 billion tonne kilometres between 2015 and 2016.

In 2016, the total amount of goods moved for all domestic waterborne freight declined by 3 per cent, to 30.4 billion tonne kilometres. The decline in the distance of goods moved occurred despite a 4 per cent increase in the total amount of goods lifted to 102 million tonnes (mt). The total volume of goods moved has declined by 41 per cent since 2006, and was largely driven by

3.15 Goods moved by waterborne transport within the UK by type



the decline of one-port and coastwise traffic. However, goods moved to and from one-port locations has increased by 27 per cent since 2015 (fig 3.15).

The Thames handled the most domestic traffic in the UK, accounting for 56 per cent of all goods moved and lifted, around 25.8 million tonnes of freight (over half of all total traffic on UK waterways).

Safety

At the heart of compliance

Britain's roads are used more intensively than in any other country in western Europe. Despite this Britain has the second safest roads in Europe by miles travelled, according to the European Transport Safety Council, with only Sweden having fewer deaths than the UK per billion miles travelled in the EU.

The total number of fatalities involving HGVs in the EU fell by almost 50 per cent in a decade. The UK compares positively to the EU average for fatality rates per million population in accidents involving HGVs, which is 7.7 per million population, with the UK averaging 4.3 per million population¹⁴.

In terms of vehicle design, this has been achieved using internationally agreed standards – made at EU or United Nations level – to design-in safety features to protect drivers and other road users. However, concerns have been voiced over the effect of more regulation from multiple sources, with London setting its own standards for HGVs and their operation.

London has been developing its own plans for a Direct Vision Standard which would apply to all N3 category vehicles (goods vehicles over 12 tonnes); originally, the plans would have seen two thirds of HGVs banned from London for not meeting the Mayor's standard for driver vision from the cab, without reference to any other forms of safety device.

The scheme has now been modified to recognise the investment that many companies have already made in safety equipment, such as cameras and sensors. A permit scheme and a safe system will apply to vehicles which do

¹⁴ Heavy Goods Vehicle and Buses, *Traffic Safety Basic Facts 2016*, European Road Safety Observatory

not meet the one-star Direct Vision Standard rating when the scheme is introduced in 2020. Concerns have been voiced that the introduction of the Direct Vision Standard will create a niche market for manufacturers which will increase prices of trucks in London.

This section of the report brings together key data to explain the latest trends and issues in safety and compliance. Accidents in rail, sea and air transport are very rare compared to road and where data is available this primarily relates to passenger transport.

Accident rates involving HGVs

There is now 10 times more traffic on the roads than in 1950 and 38 per cent more vehicles than there were 20 years ago. Vans made up 15 per cent of all traffic in Great Britain in 2016 and travelled 49.1 billion miles, a rise of 23 per cent compared with 2006, at the same time HGVs accounted for 5.1 per cent of overall traffic (16.6 billion vehicle miles). The Strategic Road Network represents only 2.4 per cent of the road network length but carries a third of all of traffic¹⁵, with HGVs in particular depending on it, comprising 11.4 per cent of traffic on motorways¹⁶. Despite this growth in usage, road traffic accidents involving commercial vehicles have decreased dramatically on all roads.

Reported Road Casualties Great Britain¹⁷ recorded that for 2016, the HGV accident rate (for all severities) per billion vehicle miles fell by 44 per cent since 2006 and the number of HGV fatal accidents per billion vehicle miles was 35 per cent lower. The number of fatal accidents per billion lorry miles fell by 8.2 per cent in 2016 compared to 2015 although the previous year had seen an 8.5 per cent increase (fig 3.16).

Van accident rates followed a similar trajectory, with a reduction of 32 per cent and 45 per cent for accidents of all severities and fatal accidents per billion vehicle miles.

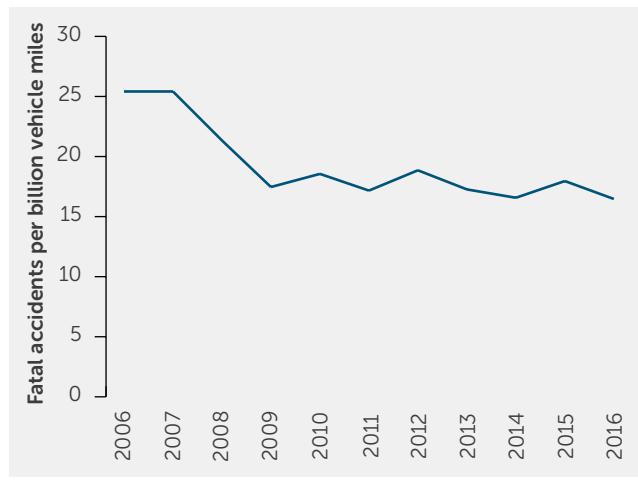
Accidents of all severities involving HGVs per billion vehicle miles were down by 9.9 per cent in 2016 compared to 2015 (fig 3.16), somewhat better than the total accident rate for all severities, which fell by 4.2 per cent at the same time.

¹⁵ Road Traffic Statistics, 2016, DfT

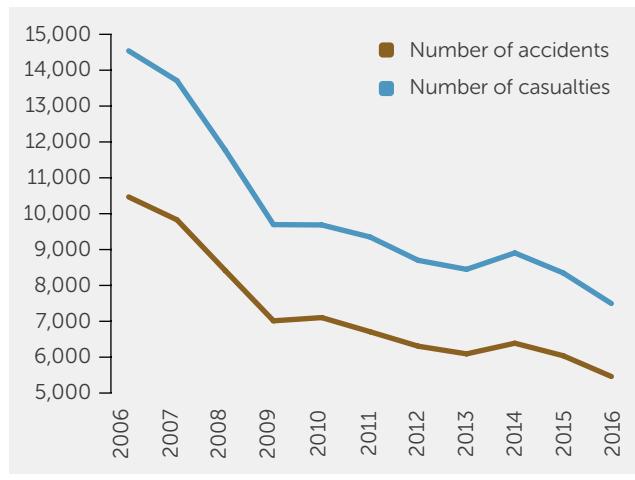
¹⁶ Road Traffic Statistics, 2016, DfT

¹⁷ Reported Road Casualties GB, 2016, DfT

3.16 HGV fatal accidents per billion vehicle miles



3.17 Number of accidents and casualties involving HGVs



3.18 Accidents involving vulnerable road users in London

Year	Pedestrian fatalities [†]			Cyclist fatalities			Motorcyclist fatalities [‡]		
	Casualty count	HGV count	Other vehicle count	Casualty count	HGV count	Other vehicle count	Casualty count	HGV count	Other vehicle count
2013	65	13	56	14	5	10	9	1	8
2014	64	12	52	13	2	11	12	1	14
2015	66	10	66	9	7	2	8	2	7
2016	61	14	52	8	4	5	16	2	17

[†]Collisions with pedestrians involving only one vehicle. [‡]Where at least one other vehicle was involved

Source: STATS19

The accident rate of HGVs and vans is lower when compared with cars; in 2016 there were 350 accidents, of all severities, per billion vehicle miles for HGVs which is nearly half that for cars, at 734 accidents per billion vehicle miles. This means that a road user twice as likely to be involved in an accident with a car as with an HGV. There are more cars on the road but a direct comparison can be made with HGVs as the accident rate is normalised by the number of miles travelled. The figures are even lower for vans, with a rate of 267 accidents, of all severities, per billion vehicle miles.

Overall traffic (in England) is forecast to grow by 42 per cent between 2010 and 2040¹⁸, which will bring new challenges for road safety.

¹⁸ National Transport Model (NTM) Road Transport Forecasts (2015), Department for Transport

Focus on London

With growing traffic volumes, the interaction between commercial vehicles and other road users, particularly cyclists in urban areas, presents a considerable challenge to the road freight logistics sector.

Figure 3.18 details accidents involving vulnerable road users in London. Pedestrian fatalities have been consistently above 60 per annum for the last four years of available records. The proportion involving HGVs has also been relatively consistent, with the majority of pedestrian fatalities arising from collisions with cars.

Motorcyclist fatalities have varied greatly from year to year but the proportion involving HGVs has been consistently low from 2013 onwards. As with pedestrians, the majority

of motorcyclist fatalities involve cars. It should also be noted that a handful of fatalities do not involve a second vehicle (these accidents are not included here).

CONSTRUCTION HGVS AND CYCLISTS

HGVs have low accident involvement rates compared with other vehicles, but their size and inertia means that collisions involving cyclists generally have more serious consequences, even at slow speeds. Although cyclist fatalities have fallen somewhat in recent years, a worrying trend of deaths involving HGVs, and construction vehicles in particular, was developing. This reached a peak in 2015 when all but two cyclist deaths in London arose from a collision with an HGV. In 2016, initial indicators are that following a concerted safety campaign focussing on the hazards posed to cyclists by HGVs (and especially construction vehicles) there has been a reduction in the number of cyclist deaths involving construction vehicles. However, the numbers are too small to draw a statistically significant conclusion.

Figure 3.19 provides a breakdown of the vehicles involved in fatal accidents with cyclists in London. Whilst the total number of fatalities has fallen consistently in recent years, it should be emphasised that the small numbers involved reduce the statistical significance and it is therefore not possible to draw any meaningful conclusions. Due to their size and nature, HGVs consistently represent a large proportion of the vehicles involved in these fatal cycling accidents. Recent safety campaigns and the introduction

of safety features do appear to be making a positive difference. As the volume of cycle traffic in the capital continues to increase, the challenge to HGV drivers and cyclists remains to drive down the number of these accidents and consequent fatalities.

Figure 3.20 summarises the types of HGVs involved in accidents with cyclists. There are several striking aspects to these results. Firstly, 71 per cent of the identifiable HGVs were construction-related (including tippers and skip loaders, as well as one rigid dropside and one rigid flat truck¹⁹). Tipper lorries represented by far the largest proportion of HGV vehicle types. Secondly, only seven of the identifiable vehicles were goods carriers and just two of them were articulated (at the time of the accident).

There were four vehicles that could not be identified by the Department for Transport, since their vehicle registrations were not recorded in the STATS19 database records and two of them were recorded as vehicle type 'Other' in STATS19 records. It should be noted that it is not safe to assume that vehicles recorded as 'Other' are definitely HGVs because although the Other category includes some HGVs, it also covers other types of vehicle which are non-HGV²⁰.

¹⁹ Both these vehicles are assumed to be construction-related based on their gross vehicle weight of 26 tonnes. By contrast, dray trucks typically have a maximum gvw of 18 tonnes

²⁰ The STATS19 'Other' vehicle type category covers several HGV vehicle types (such as emergency service vehicles and tanks) but also includes non-HGV classes, such as motor caravans, quad bikes and pedestrian-controlled vehicles with a motor. 'Other' vehicles are not therefore guaranteed to be HGVs

3.19 Vehicle involvement in cyclist fatalities for the last four reported years

Year	Cars	Taxis	Buses/ Coaches	Vans	HGVs	Other cycle	Other vehicle type	Vehicle Total	Number of cyclist fatalities
2013	3	0	3	0	5	0	4	15	14
2014	8	0	0	0	2	0	3	13	13
2015	1	0	0	0	7	1	0	9	9
2016	3	0	1	0	4	0	1	9	8

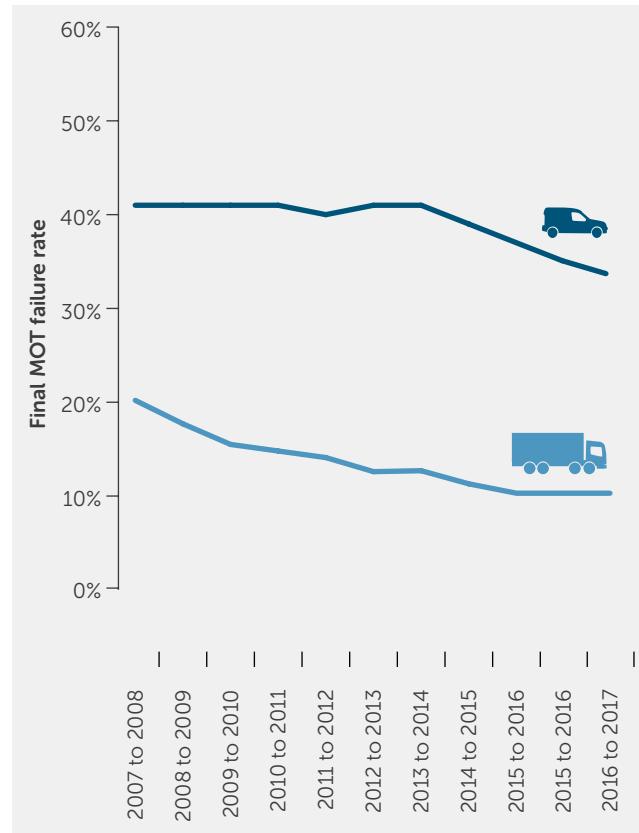
Source: STATS19

3.20 Specific goods vehicle types (>3.5 tonnes gvw) for cyclist fatalities in London for 2011-2016

Vehicle type	Vehicle count
Tipper	18
Skip loader	5
Flat lorry	1
Rigid dropside	1
Bin lorry	2
Rigid curtain-sided	2
Artic goods	2
Refrigerated van	1
HGV tractor unit only	1
Other light goods	2
Unknown	4
Total	39

Source: STATS19

3.21 HGV and Van MOT failure rates 2007/08 to 2016/17



Source: Commercial Vehicle Testing Statistics, DVSA, 2017

Roadside encounters (HGVs and vans)

Enforcement and testing data published by the Driver and Vehicle Standards Agency (DVSA) shows that Class 3 and 4 vehicles, which include cars and light vans up to 3 tonnes, had an initial MOT failure rate of 35.4 per cent and a final fail rate of 26.8 per cent in 2016/17, down from 36.8 per cent and 27.9 per cent respectively in 2015/16. Class 7 tests, which cover vans between 3 and 3.5 tonnes, show poorer compliance levels, with a 45.4 per cent initial failure rate and a 35.9 per cent final failure rate, although this is an improvement compared to 2015/16. Van MOT failure rates are at their lowest since 2007/08 before the economic recession (fig 3.21). HGV MOT failure rates are consistently lower than vans', with a final failure rate of 10.3 per cent in 2016/17.

DVSA is increasingly using intelligent, targeted enforcement which is intended to ensure that those most likely to commit an offence are also the most likely to be checked, the total number of checks for vans increased by 7 per cent from 14,214 in 2015/16 to 15,106

in 2016/17 with the van parc registered in Great Britain reaching 4 million. In the same period, total roadside and premises checks for HGVs decreased by 3 per cent to 149,784, however, there was an increase of 2.1 per cent in total checks for non-GB registered HGVs, increasing to 91,507 checks.

In the same period:

- 26,671 GB registered HGVs and 38,019 non-GB registered HGVs had mechanical checks with a prohibition rate of 27.8 per cent and 26.3 per cent respectively.
- 9,787 vans had mechanical checks at the roadside or the operator's premises and of these 55.5 per cent received a prohibition. The number of vans targeted with mechanical checks rose by 12.5 per cent and the number of HGVs targeted rose by 0.2 per cent compared to 2015/16
- 3,165 van drivers and 79,638 HGV drivers, were subject to drivers' hours checks, of which 3.7 per cent of targeted van drivers and 5.6 per cent of HGV drivers received prohibitions

National and local logistics

FTA IS CAMPAIGNING FOR...

Urban policies that recognise the essential role played by logistics in enabling the prosperity and productivity of towns and cities. This includes the relaxation of burdens that restrict logistics' ability to deliver efficiently and competitively while ensuring safe operations and minimisation of environmental impacts. Improvements in the UK's transport infrastructure, will reduce congestion and unreliability and enhancing access to all modes of transport will help businesses to move goods efficiently within the UK as well as to ports and airports.

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Christopher Snelling Head of UK Policy, csnelling@fta.co.uk

WHAT FTA IS DOING...

...FTA regularly engages with HM Treasury, Department for Transport (DfT) and Department for Environment, Food and Rural Affairs (Defra), as well as MPs and select committees for national parliaments and assemblies.

We are calling for...

ISSUE

FTA'S PROPOSALS

OUTCOME SO FAR

DIRECT VISION STANDARD (DVS)

FTA is opposed in principle to DVS, as standards should be set at an EU or UN level and not locally

Transport for London (TfL) to make information on star ratings for all hgv's available to operators as soon as possible
The start dates for DVS and the ULEZ to be delayed, allowing operators enough time to plan their fleets

Confirmation on what will be required under the safety permit scheme as soon as possible, so operators can prepare on a manageable budgetary basis and that they do not make the wrong purchasing decisions in good faith

Vehicle standards to be set at a EU/UN level and not by individual cities

FTA took up the issue at the highest level and was instrumental in influencing the Mayor and TfL to recognise the investment that industry has already made in technological solutions

The DVS has evolved positively and will no longer involve a total ban but has instead become a permit scheme
TfL has now issued details on vehicles' DVS rating through the manufacturers

RETIMING DELIVERIES

Delivery curfews and, in the capital, the London Lorry Control Scheme (LLCS) constrain the ability to deliver more reliably at less congested times of day

Work with local authorities and customers to review overnight delivery restrictions to allow deliveries to be made overnight and at less busy times of day

London Retiming Deliveries Consortium, chaired by FTA, achieved target of retiming deliveries to 530 sites
LLCS review started by London Councils

We are calling for...

ISSUE	FTA'S PROPOSALS	OUTCOME SO FAR
AIR QUALITY	<p>HGVs are an efficient way of moving goods when compared to carrying the same load on smaller vehicles. Today's HGVs are cleaner than ever, with Euro VI (EU engine emission standard) vehicles demonstrably producing 80 per cent lower harmful exhaust emissions than their predecessors. Air quality policies need to be proportionate and minimise the adverse impact on logistics</p>	<p>Clean Air Zones should be kept as small as possible</p> <p>They should start as late as possible so that industry has time to prepare</p> <p>Sunset clauses should be in place for operators based within the CAZs</p> <p>Financial support should be given to help society make the transition to cleaner vehicles</p>
RAIL FREIGHT OPTIMISATION	<p>All modes available for the transport of goods should be optimised to ensure that UK logistics is as efficient, resilient and competitive as possible</p>	<p>A long-term stable fiscal environment</p> <p>A consistent measure of the environmental impact and benefits of rail freight</p> <p>Funding and support for innovation and technology</p> <p>A focus on efficiency improvements by the System Operator</p> <p>A joined-up approach to the planning of freight</p> <p>Robust contingency planning</p>
WATER FREIGHT OPTIMISATION	<p>Making use of water freight allows companies to increase the resilience of their supply chains (where appropriate)</p>	<p>Protection for existing riverside and canal wharves to allow loading and unloading of goods, particularly where there is pressure for riverside development</p> <p>More investment in canal infrastructure to enable priority freight routes to grow</p> <p>Better water freight coordination across regions in the UK, and national coordination</p> <p>Further sustainability – oil typically makes up 35 per cent of road freight costs, but only around 17 per cent of water freight costs. This means that whilst road freight costs will fluctuate substantially with changes in oil prices, water freight gives greater price stability, allowing better business planning</p> <p>More engagement to take place with shippers to promote the benefits of water freight</p>



Image, innovation
and skills

WAREHOUSE SPACE BY REGION AND DOMINANT TENANT

KEY

Warehouse space by region

Percentage of total UK space

Dominant tenant sector (market share percentage)

Food

High street

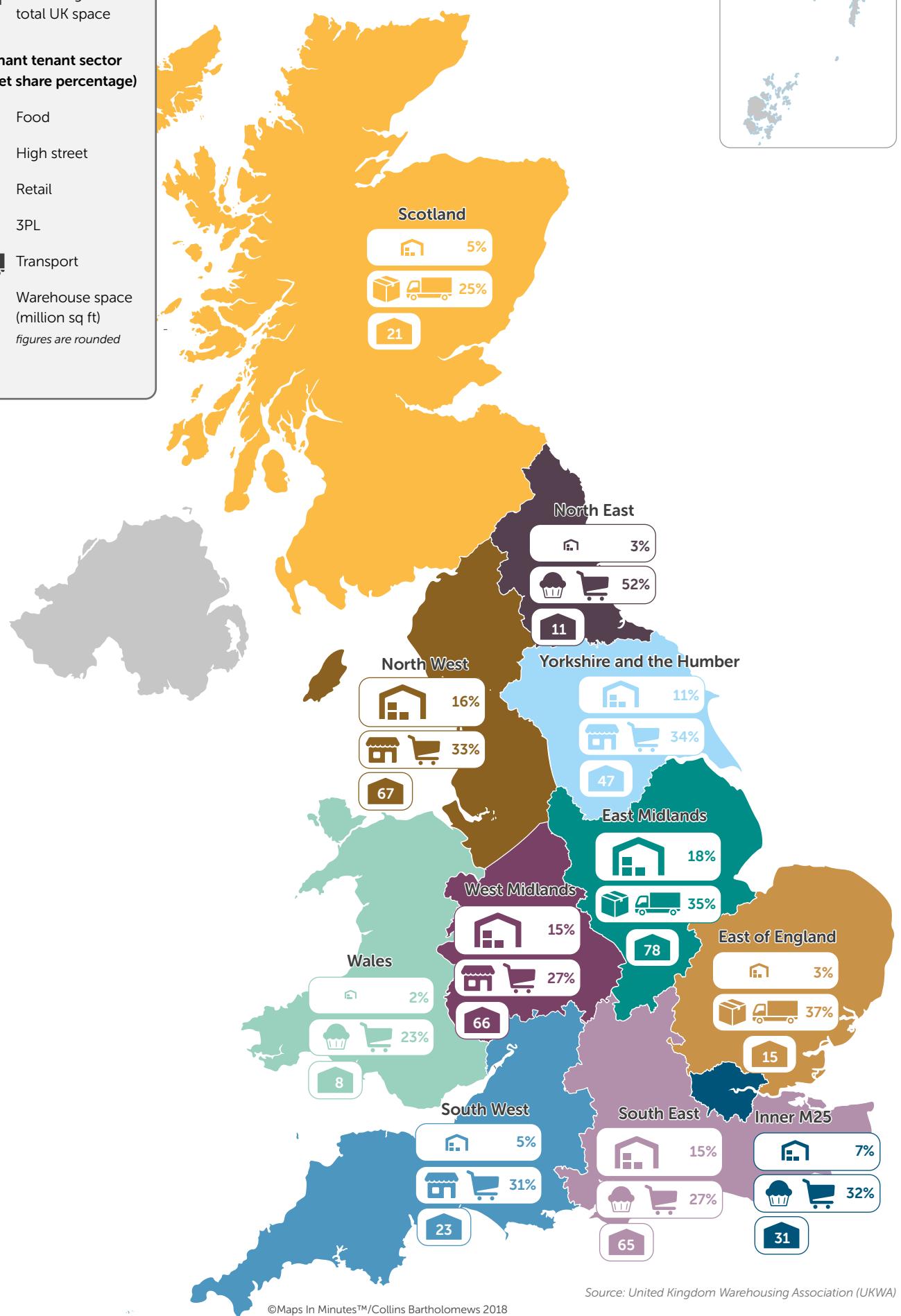
Retail

3PL

Transport

Warehouse space (million sq ft)
figures are rounded

The Northern Isles



Source: United Kingdom Warehousing Association (UKWA)

©Maps In Minutes™/Collins Bartholomew 2018

Image, innovation and skills

The logistics industry suffers from negative perceptions in terms of image and career opportunities, which has led to skills gaps and a lack of diversity. But it is also an industry that seeks continuous improvement, where exciting innovations in technology and practices are taking place. After Brexit, logistics will play a central role in securing UK prosperity through the efficient, uninterrupted movement of goods around the country and through ports, airports and borders.

Recruiting, retaining and training staff across all logistics professions is paramount to the UK's success. Tackling the adverse image of logistics is a crucial element in attracting workers to the sector.

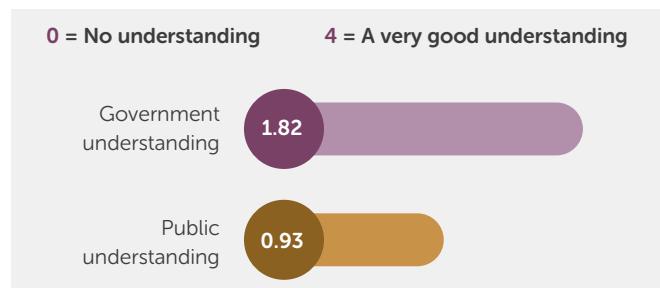
Image

Making logistics more attractive

The FTA Logistics Industry Survey asked participants to rate their perception of government and public understanding of the logistics industry (fig 4.1). The level of public understanding was rated as similar to 2016, at 0.93, showing no improvement in industry image. Furthermore, respondents indicated that they believed that government understanding had deteriorated (from 1.97 last year to 1.82 this year). This is of concern, since UK politicians are engaged in making key political decisions, such as on customs arrangements, that could have a significant impact on supply chains; it is therefore vital that the government understands the knock-on effects that any such changes might have.

Board priorities for logistics companies were also surveyed and, understandably, tend to favour operational and safety issues over promoting the industry through community outreach programmes (fig 4.2). In line with previous years, respondents to the FTA Logistics Industry Survey indicated that their board's priorities concerning a range of corporate and social responsibility issues placed safety and accidents as the highest priority. More needs to be done to promote logistics careers and improve the industry's image; this will have the associated benefit of supporting recruitment and plugging skills gaps.

4.1 Industry perception of government and public understanding of the role of logistics in the economy, 2017



Source: FTA Logistics Industry Survey 2017/18

4.2 Board priorities linked to transport and logistics in 2018



Source: FTA Logistics Industry Survey 2017/18

Facilities for drivers

Goods vehicles perform an essential role in delivering the products consumers need. While the focus of debate is often on the suitability of the transport network and on the efficient operation and utilisation of goods vehicles, it is also important not to lose sight of the importance of driver facilities which are vital.

The quality and availability of suitable driver facilities plays an important role in attracting and retaining key staff, promoting a positive image of logistics and, crucially in ensuring road safety, so that drivers have access to suitable locations to rest from driving.

Lack of provision of truck parking facilities is leading to significant problems with illegal parking of HGVs on routes close to the Port of Dover and Channel Tunnel. Ashford Borough Council in Kent introduced a clamping trial in October 2017. The 18-month trial involves restricting lorry drivers from parking overnight (8pm-7am) on the A20 between and including Charing and the Drovers Roundabout, Ashford and is in place seven days a week. It also covers four locations in the borough

where there is an existing overnight HGV parking restriction: Orbital Park (Sevington), Ashford Business Park (Sevington), Ellingham Industrial Estate (South Ashford) and Wotton Road (South Ashford). The Department for Transport (DfT) has allowed the Council to increase clamping release fees by 275 per cent, from £40 to £150; those who are clamped have to pay this fee alongside the Penalty Charge Notice.

Anecdotal reports indicate that approximately 250 lorries were turned away from the Ashford Truckstop on the first night of the A20 clamping pilot.

It is not just a UK problem, much of the debate surrounding the EU mobility package and implementation of existing drivers' hours rules has focused on legal means to ensure that drivers take their weekly rests from driving in suitable and secure conditions so that they are safe when on the road.

The root of the problem is that the existing lorry parking facilities are inadequate and that there is insufficient provision in the country to accommodate the large numbers of drivers who are looking for safe and secure

parking. Fines would not appear to be the answer to this issue.

Technology is in development and use that allows operators and drivers to find out where existing truck facilities are, if they are provided, and importantly whether they have capacity. A trial is currently taking place at some truck parking facilities to use parking sensors to show automatically where the vacant slots are and allow those slots to be booked through the app.

However, better information is only part of the solution; where new road infrastructure and distribution facilities are planned there is also the opportunity to provide driver facilities. Historically, there have been instances where roads are built or improved to a higher standard but while the road infrastructure has been enhanced there has not been an improvement in capacity for driver facilities. For example, truck parks were lost from the A1 when it was converted to motorway standard.

Workforce, staffing and skills

Recruiting and retaining talent

Logistics faces particular skills and workforce challenges. HGV drivers and mechanics are becoming increasingly hard to recruit and the age demographic, specifically within the HGV driver population, is significantly older than the national average. Because of these factors and the reliance on labour from the EU within various roles, the sector is facing serious labour shortages over the next five years.

There is a lack of people filling the void left by those leaving the industry. Sadly, not enough young people are considering logistics and especially HGV driving as a career option. There appear to be several reasons for this, including: the cost of licence acquisition; lack of understanding of the sector; poor sector image; long or irregular working hours; and, lack of quality driver facilities.

In common with other parts of industry, logistics is also exposed to the opportunities and issues raised by the 'gig economy' and new employment models. Also in common with other industries, the Apprenticeship Levy does not appear to have met the needs of logistics

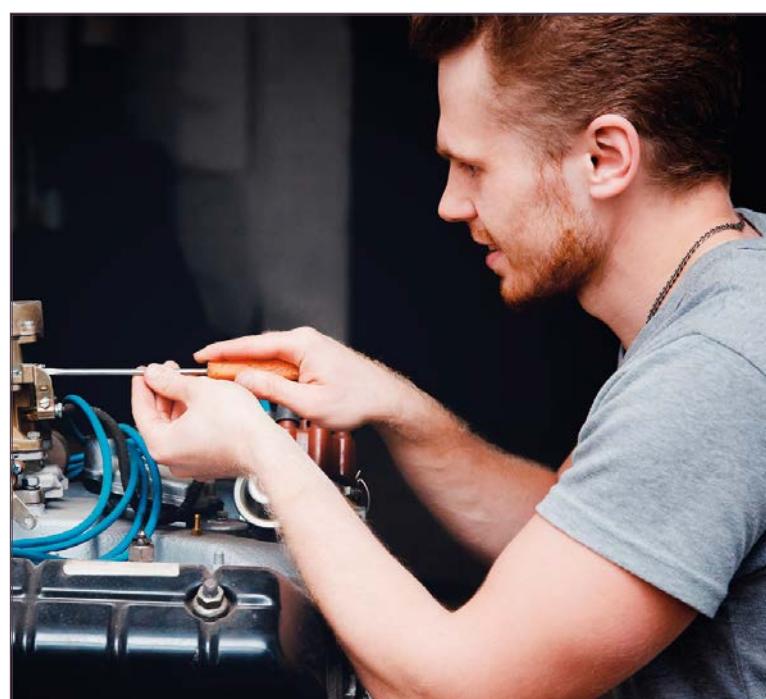
for a variety of reasons and numbers of apprentices are declining.

Policy makers have been busy considering the implications of new forms of work on worker rights and responsibilities, as well as on employer freedoms and obligations. The Independent Review of Employment Practices in the Modern Economy, conducted by Matthew Taylor, was commissioned by the Prime Minister in 2016. Taylor reported in July 2017¹, setting out seven principles to address the challenges facing the UK labour market. In response to the report, government has confirmed that it will be conducting further work on: increasing transparency in the labour market; employment status; agency workers; enforcement of employment rights².

Logistics is heavily reliant on EU workers and the deliberations of the Migrant Advisory Committee (MAC) have been of great interest. The Home Secretary, Amber Rudd, commissioned the MAC to advise on the economic and social impacts of the UK's exit from the EU and on how the UK's immigration system should be aligned with a modern industrial strategy. However, the criteria proposed for the review to establish whether an occupation is in shortage – and therefore worthy

¹ Good Work: The Taylor Review of Modern Working Practices, GOV.UK, July 2017

² Good Work: A response to the Taylor Review of Modern Working Practices, GOV.UK, February 2018



4.3 Employment in logistics: numbers and percentages employed Q2 2017

Occupation	Employment (thousands)				By nationality (thousands)			
	Logistics sector	All other sectors	Total	%	UK	EU	EU%	Other
Purchasing managers and directors	5	57	62	2.5%	58	2	3.4%	2
Managers and directors in transport and distribution	38	53	91	3.6%	88	3	3.2%	0
Managers and directors in storage and warehousing	31	63	94	3.7%	81	9	10.0%	3
Importers and exporters	7	1	7	0.3%	5	3	38.7%	0
Transport and distribution clerks and assistants	26	37	63	2.5%	59	2	3.2%	2
Heavy goods vehicle drivers	189	113	302	12.1%	256	43	14.1%	3
Van drivers	97	152	250	10.0%	212	30	11.9%	8
Fork-lift truck drivers	32	56	88	3.5%	66	19	21.6%	3
Postal workers, and couriers	123	32	155	6.2%	141	7	4.8%	6
Elementary storage occupations	174	242	416	16.6%	308	94	22.7%	14
Other occupations	975	NA	975	39.0%	852	91	9.3%	33
TOTALS	1,697	806	2,502	100%	2,125	303	12.1%	74

Source: FTA Skills Shortage Report, November 2017

of special arrangements for immigration after Brexit – only considers National Qualification Framework level 6 or above. Worryingly, this excludes most logistics occupations, for example, the Transport Manager Certificate of Professional Competence is level 3 and HGV driving would never be listed as a shortage, as it is a level 2 qualification.

male workers (87 per cent) and people who describe themselves as ethnically white (91 per cent).

Logistics experiences skills shortages, especially for HGV drivers, so leveraging the talent from a more diverse workforce would help future-proof it. This is all the more urgent in light of potential changes in free movement arising from the UK's departure from the EU.

Availability of skills and labour

There are 2.5 million people employed in the wider logistics industry in the UK, accounting for 8 per cent of the workforce³ (fig 4.3).

However, there is a stark lack of gender and ethnic diversity in the logistics industry, which is dominated by

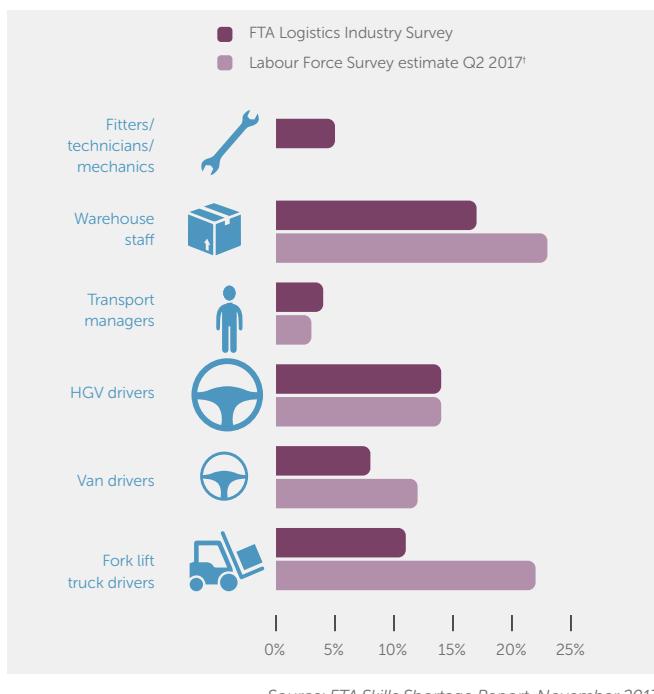
The FTA Logistics Industry Survey polled respondents about the proportion of their staff who are EU nationals. According to respondents, the vocation with the largest proportion of EU workers was warehouse staff, where they represent one in six staff, followed by HGV drivers where they are one in seven (fig 4.4). Contributors indicated that the proportions of EU staff in each logistics vocation were broadly in line with national levels. However, there was a lower proportion of warehouse staff and forklift drivers which may be due to the demand

³ FTA Skills Shortage Report, November 2017

for these vocations from sectors other than logistics, such as wholesale and retail.

Respondents were also asked about how the 2016 EU referendum affected their businesses. The biggest cause for concern was the availability of skilled British workers although a 55 per cent majority nonetheless believed that this is not an issue (fig 4.5).

4.4 Percentage of EU workers in key logistics vocations



Another area of concern to the industry is the low proportion of female staff in logistics. Respondents were questioned about their views regarding women in logistics. An overwhelming 98 per cent thought that more women could be employed in the logistics sector whilst over two-thirds thought that women were sometimes overlooked by businesses (fig 4.6).

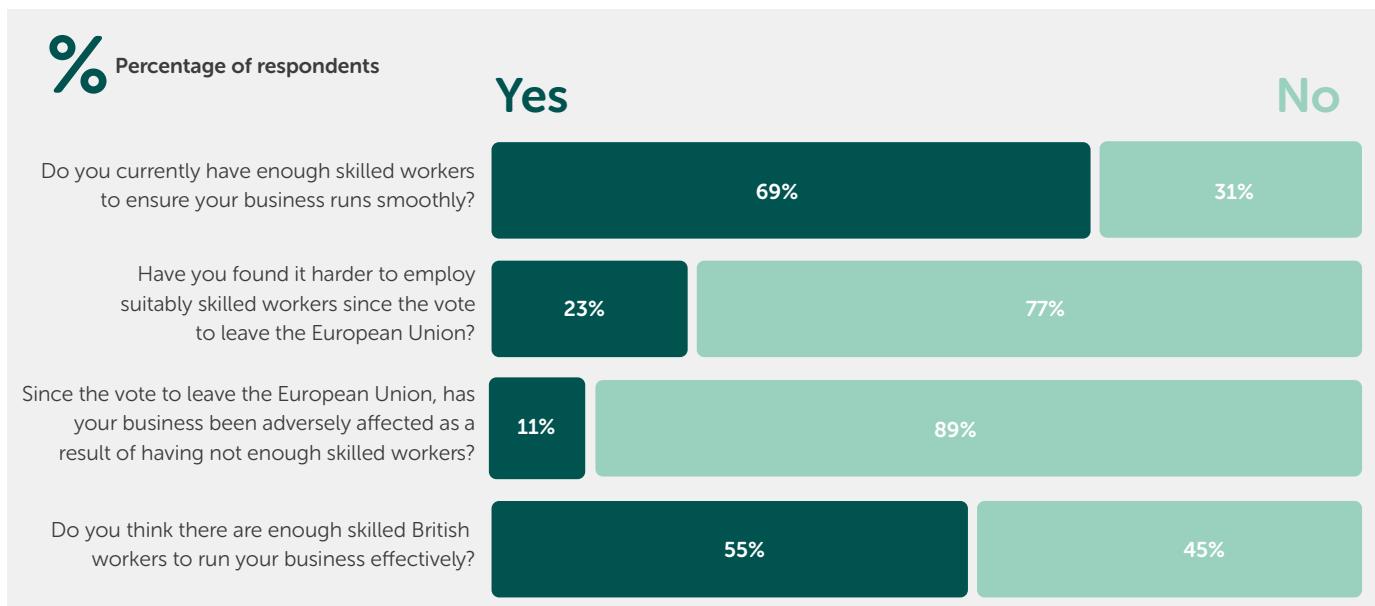
The FTA Logistics Industry Survey asked respondents to rate their anticipation of staff shortages in 2018 across key logistics vocations. In common with recent years, over 10 per cent of respondents anticipated an inability to fill HGV driver vacancies (fig 4.7). Of the key logistics vocations, fitter, mechanic and technician roles are anticipated as being the hardest to fill, with 14 per cent stating that they anticipate unfilled vacancies in this category. Overall, forklift driver jobs are expected to be the easiest to recruit with 63 per cent of respondents expecting no recruitment problems.

Driver skills shortage and recruitment

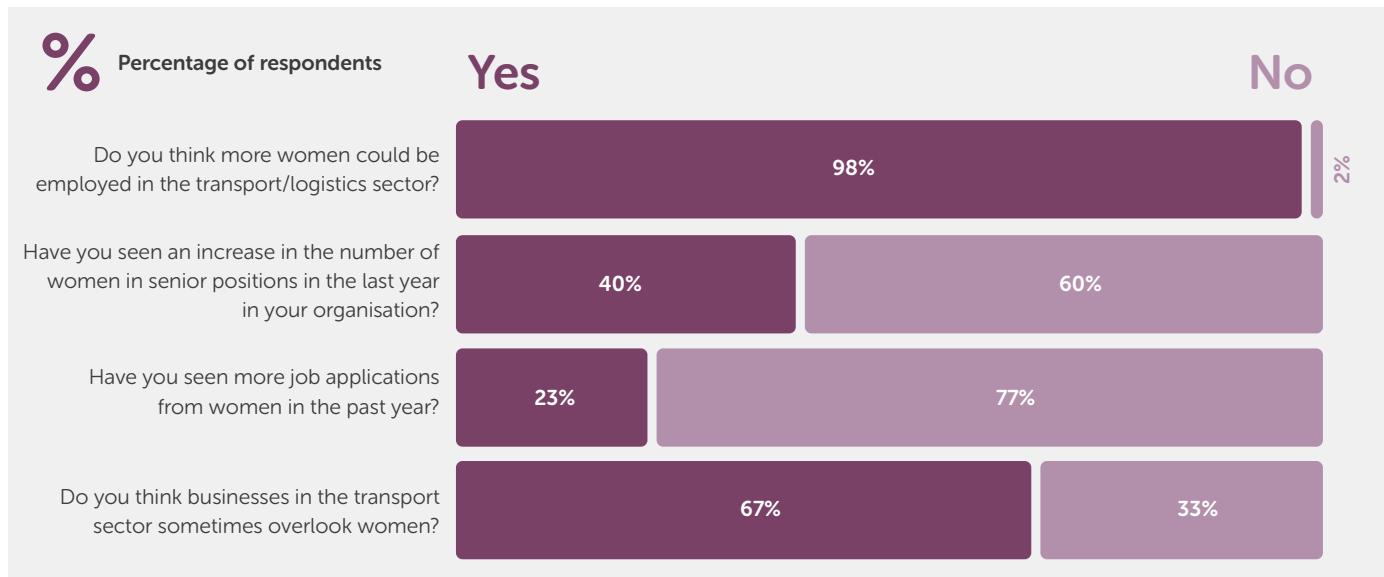
FTA has tracked the ups and downs of the driver shortage over the past few years. There was a significant year-on-year reduction of around 15,000 in the HGV driver population in 2017⁴. From the Q2 Labour Force Surveys

⁴ ONS labour force statistics 2016 and 2017, table EMP04.

4.5 Availability of skilled workers in logistics

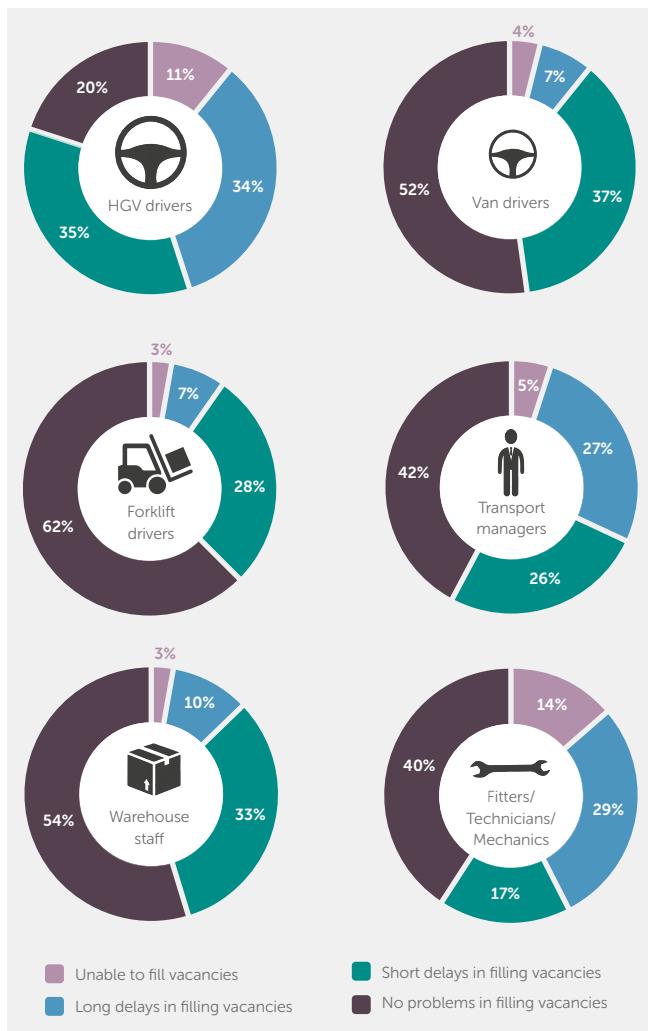


4.6 Women in logistics



Source: FTA Logistics Industry Survey 2017/18

4.7 Anticipated staff shortages for 2018



for 2016 and 2017, the estimated extra jobs created year-on-year across the entire economy was around 0.33 million, or roughly 1 per cent. At the same time, the estimated HGV driver population fell by 4.4 per cent. This translates to a calculated shortfall of around 52,000 drivers, based on job number trends baselined to Q2 2001.

Losses in the HGV driver workforce in this period largely came about from a failure to retain younger drivers who had provided a boost to the numbers in 2016 (fig 4.8)⁵. For 2014-15, the increase in numbers was driven by recruitment of drivers in the middle age band. Hardly any of the increase came from the younger age band. The following year, losses in the central age band were counterbalanced by an increase in retention of drivers near to or beyond retirement age. In 2016 there was a substantial boost in the number of young drivers entering the industry, indicating recruitment efforts aimed at this age group were highly successful. But in 2016-17 this was completely reversed, with the gains in younger drivers over the previous year wiped out. In fact, the loss of younger drivers was more or less responsible for the entire reduction in overall LGV driver count, with modest gains in the middle age band cancelling out small losses of older drivers. This is a worrying trend, as the average age for a HGV driver is 48.3 years old.

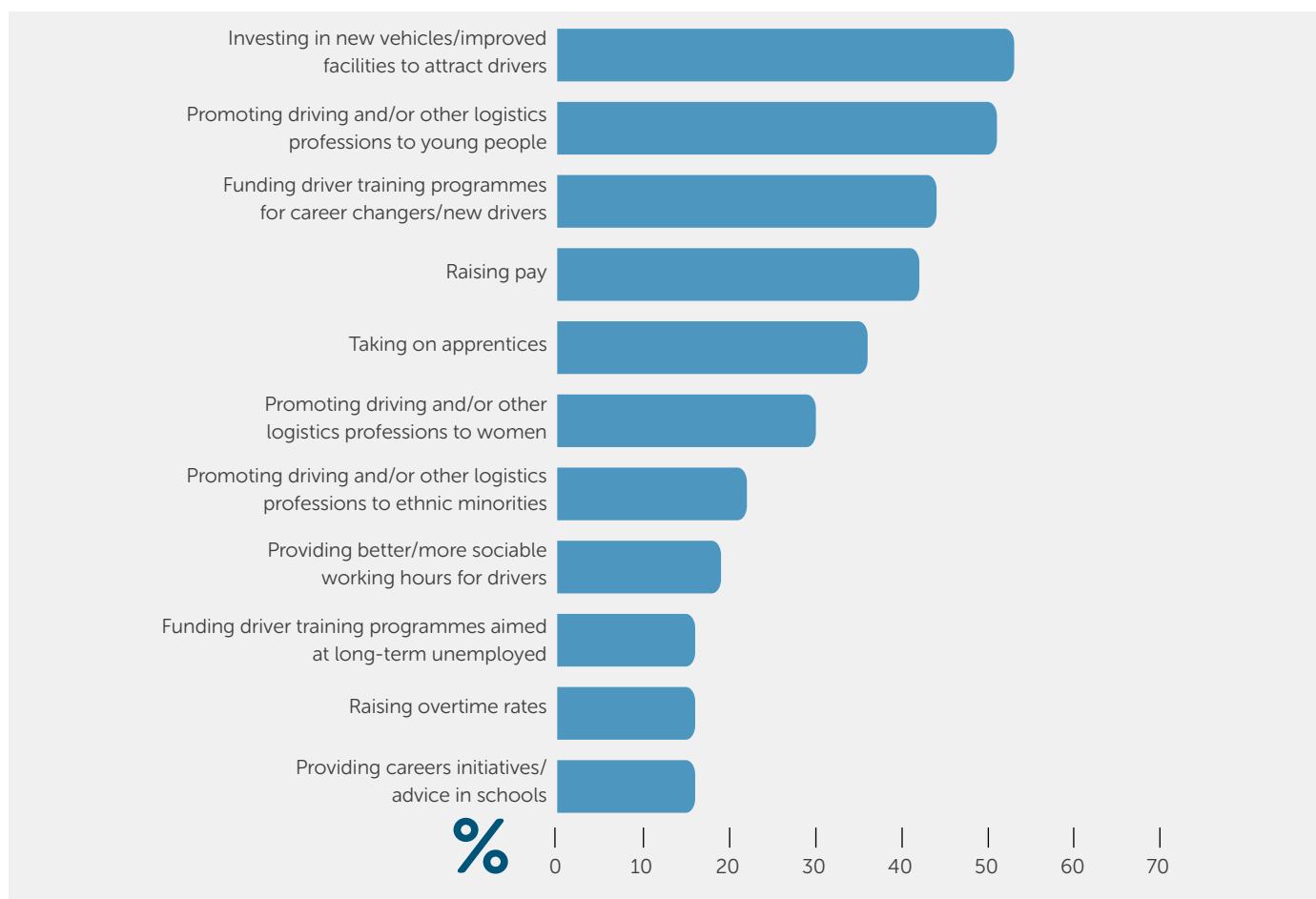
5 FTA Skills Shortage Report, November 2017

4.8 HGV driver numbers by age

Age band	Driver count 2014	Driver count 2015	Driver count 2016	Driver count 2017	2014-15 change	2015-16 change	2016-17 change
17-34	44,806 (±410)	46,180 (±422)	60,672 (±555)	46,420 (±425)	1,374	14,492	-14,252
35-59	200,941 (±1,833)	215,732 (±1,967)	210,368 (±1,919)	212,515 (±1,938)	14,791	-5,364	2,147
60+	41,053 (±375)	37,305 (±341)	44,455 (±407)	42,661 (±390)	-3,748	7,150	-1,794
TOTAL	286,000	299,217	315,495	301,596	+12,417	+16,278	-13,899

Source: FTA Skills Shortage Report, November 2017

4.9 Measures to improve recruitment and retention of HGV drivers



Source: FTA Logistics Industry Survey 2017/18

Respondents to the FTA Logistics Industry Survey were asked about the measures they were taking to address and improve recruitment and retention of new staff. The most popular measure was investment in new vehicles and improved driver facilities, followed by promotion of driving and other logistics professions to young people (fig 4.9).

Apprenticeships

The Apprenticeship Levy was introduced in April 2017 and stipulates that businesses with a payroll of more than £3m are charged 0.5 per cent of their payroll towards the levy. A fifth of training must be off-the-job, which can be away from the workplace, or at an employee's

desk, provided it is not part of doing the job, for example web-based learning. Employers with 50 or more staff who do not pay the Levy must contribute 10 per cent of the cost of training and assessment, unless they have used up their Levy fund. However, less than a year on, the Levy is having a negative impact on the government target of three million people starting apprenticeships by 2020.

Decrease in apprenticeship starts

According to the Office for Budget Responsibility (OBR), in the Economic and Fiscal Outlook, released along with the Spring Statement (14 March 2018), the Apprenticeship Levy will raise almost £1 billion less than originally envisaged between 2017-18 and 2020-21: "The Levy came into force in April 2017 and HMRC statistics show that £1.8 billion of cash receipts have been received in the first nine months. Our latest forecast is that this will raise £2.6 billion in 2017-18 and a cumulative £10.7 billion in its first four years, an 8 per cent drop from the original costing."

In England, apprenticeship starts fell 41 per cent for the six months since the introduction of the Levy, compared to the same period the previous year. There were 114,400 apprenticeship starts for the first quarter of the 2017/18 academic year (August, September, October), compared to 155,600 reported at the same time in 2016/17, a decrease of 26.5 per cent⁶. However, the decrease was not as large as the drop between the last quarter 2015/16 (May, June, July) and the fourth quarter of 2016/17 which was 59.3 per cent. The Department for Education stated that this was likely to be associated with the introduction of the Apprenticeship Levy in April 2017.

Logistics apprenticeship starts in England for the academic year 2016/17 (1 August – 31 July) showed apprenticeship take-up fell by 7 per cent on the previous year. Apprenticeship starts data for 'driving goods vehicles' in the same time period indicated a fall of 6.2 per cent on the previous year (fig 4.10). This is a worrying trend as the Levy only accounted for three of the 12 months. If the start rate for HGV driving continues on this trajectory then there will be a negative knock-on effect on the current driver shortage.

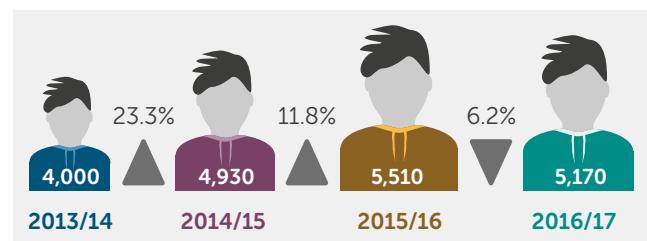
⁶ Apprenticeships and traineeships, Department for Education, January 2018

Pay

In 2017, basic pay for transport staff rose by 2.8 per cent,⁷ which was 1.3 per cent lower than the RPI inflation rate of 4.1 per cent for the same period. This was 0.3 per cent higher than average earnings annual growth of 2.5 per cent for the three months to December 2017 (excluding bonuses). In the FTA Logistics Industry Survey, respondents indicated the majority would raise salaries in 2018 but the proportion who were expecting to freeze pay (31 per cent) is somewhat higher than those who froze pay in 2017, indicating a slowdown in pay increases for the year ahead (fig 4.11).

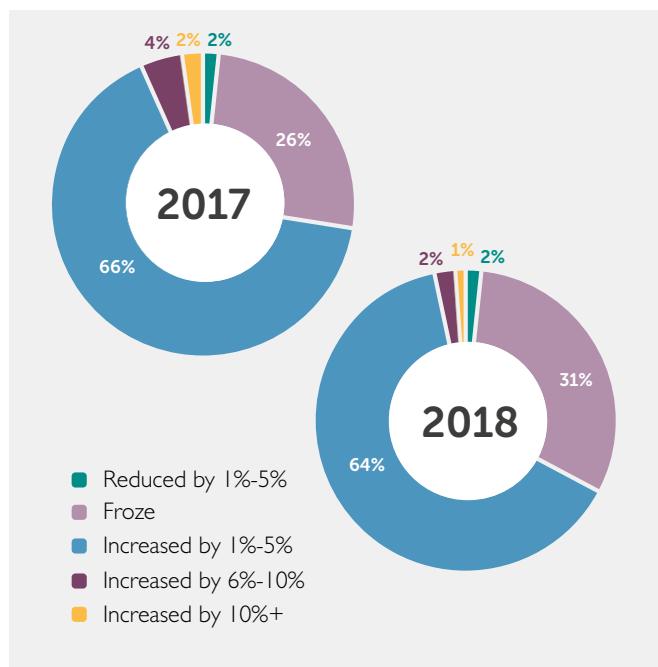
⁷ FTA's Manager's Guide to Distribution Costs, 2017

4.10 Number of apprenticeship starts in England for driving goods vehicles



Source: FE data library: DfE apprenticeships,

4.11 Percentage of respondents changing staff gross pay

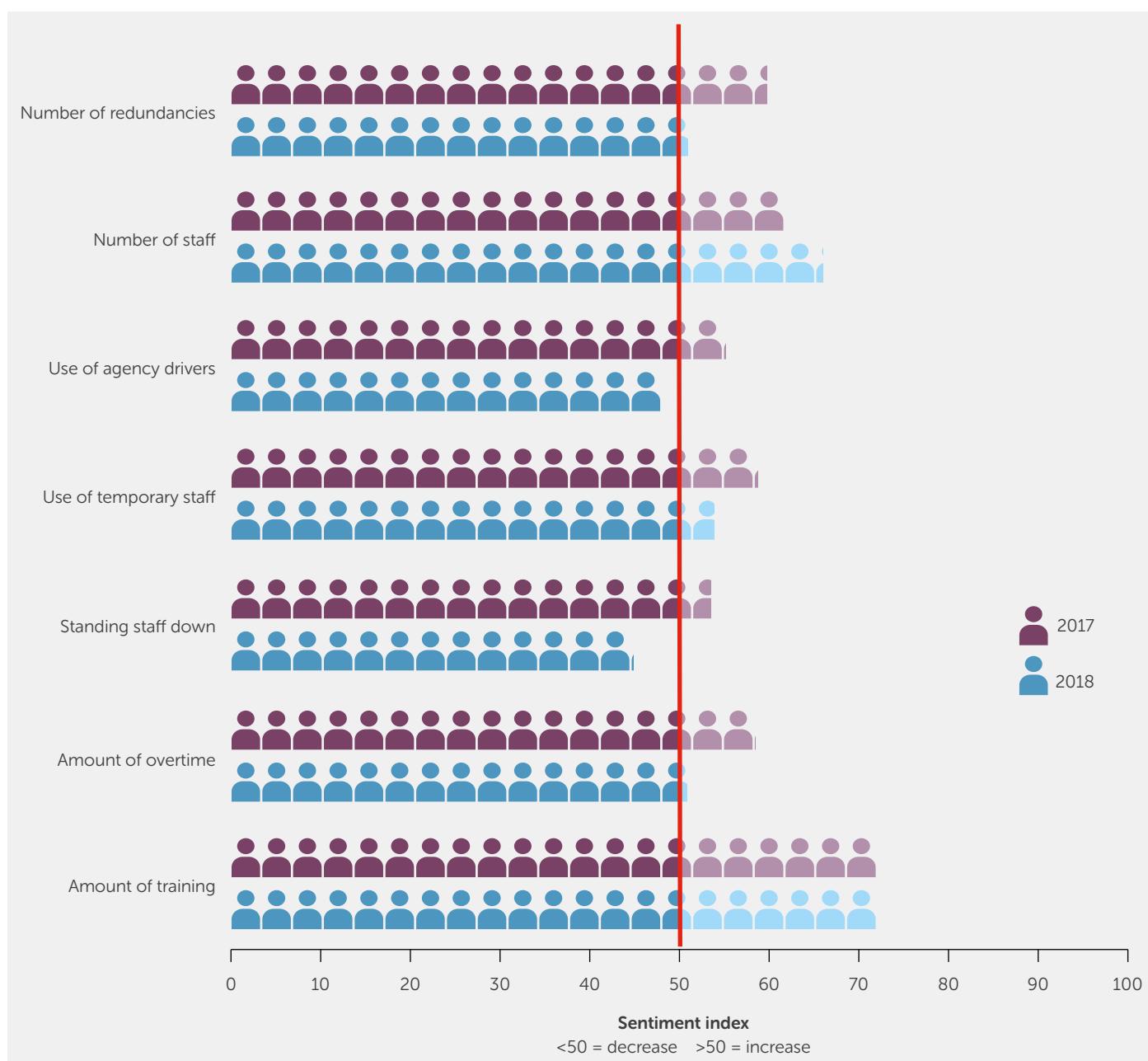


Source: FTA Logistics Industry Survey 2017/18

HR priorities

Respondents to the FTA Logistics Industry Survey indicated that increasing the number of staff and training were the highest HR priorities for the year ahead. Of lowest priority were standing down staff and use of agency drivers, both of which were expected to decrease in 2018, indicative of anticipation that businesses will require more permanent full time staff, especially mechanics and HGV drivers (fig 4.12).

4.12 HR priorities for transport staff



New technology and innovation

Safer, cleaner and more productive logistics

The government's Industrial Strategy sets out a long-term plan to boost the productivity and earning power of people throughout the UK. This aims to encourage innovation in all sectors. For logistics, autonomous and platooning technologies have particularly caught public and media attention.

Road innovation

VEHICLE UTILISATION

For the transport of goods by road, the main restriction on capacity is regulations on the size of the vehicle. In the UK, this is restricted at a lower level than many other European countries due to public safety perceptions. As technological advances on collision prevention are made (such as future iterations of autonomous emergency braking, and increasing degrees of automation), the role of larger vehicles in making a safer system may be recognised. For now, the Longer Semi-Trailer Trial continues to show positive results, with the government agreeing to release an additional 1,000 permits in January 2017.

According to the Department for Transport's (DfT) Road Freight Statistics 2016, even though empty running increased (measured by weight rather than volume), shorter journeys and better loading factors meant HGVs moved 11.8 per cent more goods in 2016 compared to 2015 (fig 4.13). The total of 170 billion tonne kilometres is the highest level recorded since comparable records began in 1990⁸. HGVs travelled 4.7 per cent further in 2016 compared to 2015, with the average length of haul being 90 kilometres, down from 92 kilometres in 2015⁹. This may reflect better vehicle utilisation, with loading factors (the ratio of average load to total capacity) increasing from 56 per cent in 2006 to 68 per cent in 2016 across all categories of HGV (fig 4.14). This is an improvement of 21.4 per cent in 10 years. Empty running among HGVs (where no goods are carried) is up compared to last year at 30.2 per cent of total vehicle distance, having been around 28 per cent since 2008, and compared to the low of 26.4 per cent in 2001¹⁰.

The Department for Transport has explained that "There has been a shift towards using larger HGVs when transporting goods ... loading factors and tonnage lifted have also increased, whilst vehicle kilometres has decreased. This suggests that the sector has looked to consolidate loads into larger vehicles to increase efficiencies and reduce costs." A further indication of the move to larger vehicles is fuel consumption. Fuel consumption across all HGVs has fallen from 8.8 miles per gallon (mpg) in 2006 to 8.5 mpg in 2016. Larger

HGVs tend to run at a lower fuel consumption than smaller vehicles.

4.13 Goods moved by HGVs (billion tonne km)

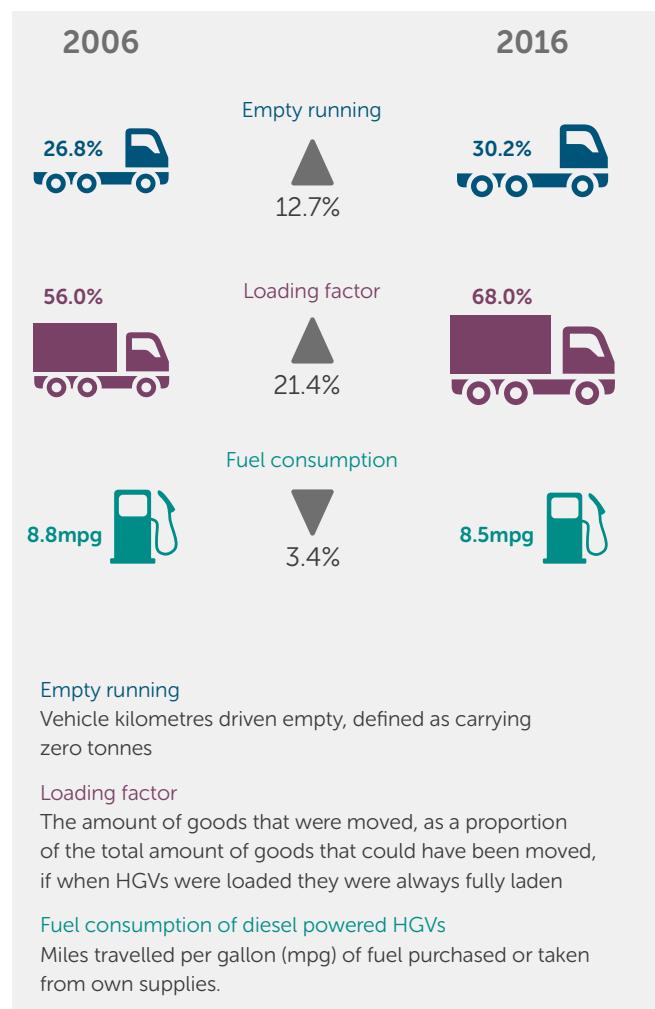


Source: Road Freight Statistics, DfT 2016

AUTOMATION

In the longer term, automation could unlock significant efficiencies in the road freight sector. The biggest opportunities are likely to come when the point is

4.14 Empty running, load factor and fuel consumption for GB-registered HGVs



Source: Road Freight Statistics, DfT, 2016

8 DfT, Table RFS0101 Road Freight Statistics 2016, published July 2017

9 DfT, Table RFS0105 Road Freight Statistics 2016, published July 2017

10 DfT, Table RFS0117 Road Freight Statistics 2016, published July 2017

reached where vehicles can move unaccompanied (ie with no human occupant) with resultant cost savings and increased flexibility. However, to fully use this benefit, delivery points would also need to be fully automated. This change, more than any other, has the potential to revolutionise the use the freight industry makes of the road network. It could bring about a massive switch to the use of the road network at nighttime, reducing daytime need.

Such vehicles are, as a commercial proposition rather than the testing which is currently taking place, at least 10 years away and it could be 20 or 30 years. The variables involved are speed of technological development and public reaction.

EMISSIONS TARGETS FOR ROAD

The Department for Transport (DfT) has been working on a Road to Zero document, which is expected to include a carbon reduction target for HGVs; this is anticipated to be published in 2018.

As part of its Logistics Emissions Reduction Scheme (LERS), FTA has collected, where possible, a breakdown of the LERS vehicle fleet by Euro standards (latest data for 2016). This shows that 40 per cent of the LERS HGV

fleet had upgraded to Euro VI, a continuous upward trend amongst LERS members. For vans, just under half are Euro 5 and just over a quarter are Euro 6, reflecting the fact that Euro 6 regulations only came into place for light commercial vehicles in 2016.

ELECTRIC-POWERED GOODS VEHICLES

Development of electric commercial vehicles in recent years has generally been focused on vans and lighter HGVs due to the limits on battery power and range. However, in November 2017, Tesla unveiled a prototype electric articulated truck which it aims to begin producing in 2019¹¹. Tesla claims the truck will have a range of between 300 and 500 miles fully loaded on a single charge. It will also include a host of other features, including semi-autonomous driving, lane-keeping technology and a design that reduces the risk of jack-knifing. Tesla also claims that the truck would be cheaper than rail freight if operated in convoy.

Tesla is not the only vehicle manufacturer developing electric HGVs. Volkswagen and Daimler are also working on designs. Daimler is already producing a lighter (7.5 tonnes GVW) electric HGV, the Mitsubishi Fuso e-Canter.

¹¹ theguardian.com/technology/2017/nov/17/elon-musk-tesla-electric-truck-sports-car-surprise



In March 2018, DPD, Hovis and Wincanton were the first logistics firms in the UK to purchase the e-Canter for use in and around London. In the same month, Daimler unveiled the design of a heavier electric HGV, the Mercedes Benz e-Astro, which will compete directly with the Tesla truck.

Sea innovation¹²

The UK is a maritime-dependent nation where disruptions to the maritime freight transport network can have rapid and wide-ranging effects on the economy; this was demonstrated by the impact of protests in the port of Calais and migrant incursions causing delays in 2015 which affected the transport of just-in-time perishable goods. The Government Office for Science, under its Foresight projects, published a paper on Trends in the Transport of Goods by Sea, analysing emerging trends and technological development in this area. The report notes that the UK's overall maritime freight volumes are relatively static, but this masks underlying trends, such as the continued rise of (higher-value) containerised traffic, directional imbalances due to more trade in imports than exports, the importance of unitised freight, declining bulk energy product flows and the emergence of new, niche trades such as biomass. Shipping needs to adopt new processes and technologies to keep up with others in the supply-chain.

The food retail supply chain has become increasingly reliant on maritime freight services to deliver fresh produce into the UK in short time, rather than relying on inventory to fulfil orders. This became more exposed in the public eye recently when production shortages in Southern Europe quickly led to empty supermarket shelves. Events such as this have given rise to a growing awareness of supply chain vulnerability and to an increased need to build greater flexibility and disruption contingency into supply chains. This in turn has shifted the emphasis away from the traditional prioritisation of cost minimisation through network optimisation towards investment in dual sourcing, rapid manufacturing and ongoing redistribution of manufacturing networks. For the UK, these changes will inevitably influence maritime freight flows and shipping will therefore play an ever more important role supply chain management.

¹² Trends in the Transport of Goods by Sea, Government Office for Science, August 2017

POTENTIAL FOR A 'DISRUPTIVE INNOVATION'

The current low cost of moving containerised goods around the world makes it less likely that new transportation technologies (such as the magnetically-levitated 'hyperloop'¹³) will displace shipping for the movement of long-distance freight in the short to medium term. However, further advances in digitalisation of paperwork are likely to bring short-term cost and efficiency improvements to the global supply chain process and large shipping companies are already partnering with technology firms to exploit block chain technology to achieve this.

'FUTURE PROOF SHIP', SMART SHIPPING AND SELF-THINKING SUPPLY CHAIN

Technological developments in shipping have, to date, focused heavily on propulsion, communications and navigation. The future direction is likely to shift more towards utilising sensor and data analytics to create smart shipping in the form of autonomous and connected ships with lower running costs and better performance. While the size of container ships has increased almost exponentially over the last 50 years, the advent of smart shipping may necessitate the development of smaller, more reliable 'future proof' ships which take advantage of modular design approaches to provide greater flexibility. The combination of increased data analytics, automation and robotics should ultimately lead to 'self-thinking' supply chain management systems capable of increased cargo handling automation and supply chain adjustment.

Air innovation

Shippers have long campaigned for greater transparency and improvements in the air cargo product. The Global Shippers' Forum and Cargo iQ have been making progress in enhancing transparency in air cargo performance, most notably in establishing commonly agreed air cargo industry key performance indicators. Cargo iQ is an International Air Transport Association (IATA) interest group with the mission of creating and implementing quality standards for the worldwide air cargo industry; its members represent a significant proportion of cargo volumes shipped globally.

¹³ theguardian.com/sustainable-business/2017/aug/04/hyperloop-planet-environment-elon-musk-sustainable-transport



The KPIs will give shippers greater certainty that the air cargo services purchased from airlines and forwarders conform with the products sold to them. The next steps are to encourage airport authorities and ground handlers to adopt the measurement and operational performance standards developed by Cargo iQ. The operational KPIs cover principal door-to-door activity and should be adaptable for all stakeholders throughout the air cargo supply chain. For the future, the measures may be extended to specific air cargo operations, such as temperature-controlled operations.

Rail freight innovation

On rail, digitalisation could provide key benefits for logistics, including:

- additional capacity through enhanced signalling system capability delivering consistently higher train velocity and headway reduction
- improved quality of freight paths with enhanced traffic management capability, adapting real-time changes for cross-route flows through regional control centres. In itself, this has the potential to improve the quality of paths, the interaction between freight and passenger services and overall network management
- digitalisation could also optimise the nodal yard concept to align train paths by optimisation of live network timetable data. There is an opportunity to create a wider traffic management network connecting cross-London freight flows to the

key radial intermodal corridors from the ports of Felixstowe, Southampton and London Gateway across London to the Midlands, North and Wales

- train control and operation could be optimised if systems were capable of dynamic modelling of freight rolling stock capability. If these are delivered, it would result in significantly increased capacity and reduced marginal cost, thus increasing the desirability of rail for freight customers – as long as the implementation costs are not prohibitive

LONG DISTANCE RAIL FREIGHT

The first direct rail freight service from China to the UK began in 2017¹⁴. Travelling through China, Kazakhstan, Russia, Belarus, Poland, Germany, Belgium and France before entering the UK via the Channel Tunnel, the journey took 18 days. Although it required changing locomotives and wagons several times to accommodate the different rail gauges, the service operators say it is cheaper and greener than shipping by air and quicker than shipping by sea¹⁵. This is expected to make it an attractive option for businesses looking to meet customer demand for some products quickly.

Currently, the service only operates from China to the UK. However, the opportunity for a return service exporting goods to China is likely to develop, especially as UK and European firms look to trade more with China.

¹⁴ bbc.co.uk/news/uk-38666854

¹⁵ bbc.co.uk/news/business-38654176

Image, innovation and skills

FTA IS CAMPAIGNING FOR...

FTA campaigns to support the efficiency of the UK economy by promoting policies that will enable UK logistics to be more competitive and by ensuring politicians and the public understand of its needs better. In the run up to the UK's withdrawal from the EU, it is more important than ever that the UK's economy is efficient and competitive internationally. Action in these areas would help deliver that, whilst also aiding the government's environmental agenda.

For more information contact:

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WHAT FTA IS DOING...

...FTA regularly engages with HM Treasury, Department for Transport (DfT) and Department for Environment, Food and Rural Affairs (Defra), as well as MPs and select committees for national parliaments and assemblies.

We are calling for...

ISSUE

FTA'S PROPOSALS

OUTCOME SO FAR

IMAGE

The logistics industry suffers from negative perceptions in terms of image and career opportunities, which has led to:

- skills gaps and a lack of diversity
- lack of understanding of logistics and the harmful consequences of some policies by legislators and the public
- a more favourable operating environment needs to be created

- Free access for the UK freight and logistics industry to the EU market after Brexit
- Government assistance in forging new trade deals with leading and emerging economic powers
- Increased investment in public infrastructure, both road and rail
- Reduction of infrastructure costs associated with rail transport and protection for water freight access, to enable shippers to diversify their transport options
- Identification and removal where possible of burdens on logistics, especially for urban deliveries

Formal engagement programme with MPs to educate them on logistics issues

Substantial Brexit campaign (see Chapter 2, International trade and connectivity, pages 50–51)

Input into government rail and road freight strategic investment plans

We are calling for...

ISSUE

FTA'S PROPOSALS

OUTCOME SO FAR

DRIVER FACILITIES

The quality and availability of suitable driver facilities plays an important role in attracting and retaining staff, promoting a positive image of logistics and in ensuring road safety

Support for FTA's Driver's Facilities Charter which looks to national and local government to consider the provision of suitable facilities for drivers in the planning of infrastructure on the road and at development sites

Drivers, truck stop and service area operators and operators of distribution centres and other delivery sites to co-operate to provide and respect the need for facilities

DfT is due to issue an HGV driver facilities policy package in 2018 which we are hoping will adopt many of our recommendations

SKILLS

See Chapter 1, Logistics performance, pages 30–31

INNOVATION

After Brexit, logistics will play an essential role in securing UK prosperity through the efficient, uninterrupted movement of goods around the country and through ports, airports and borders. To do this it needs to seek continuous improvement and explore exciting innovations in technology and practices

Promotion of initiatives that encourage innovation and understanding of technologies that will allow deliveries to be reduced, re-timed or moved by a different mode of transport

Support the development of refuelling and charging infrastructure for alternative fuels and power sources that deliver environmental benefits

Secure biomethane supplies for the transport sector

Recognise Green Gas Certificates for transport carbon reporting

Allow derogations in vehicle weights and dimensions limits to allow for new tanks and equipment

Work with vehicle operators to understand better the barriers to wider uptake of alternative fuels and work collaboratively to remove them

Government should allow research and testing of load efficient road freight concepts – to assess safety and environmental performance.

Government should make longer semi-trailers permanent as they have passed these tests

Detailed engagement with the National Infrastructure Commission's Freight inquiry

Secured increase in the number of Longer Semi-Trailer Trial permits

In reducing carbon and other harmful emissions Logistics Emissions Reduction Scheme (LERS) members consistently outperform industry as a whole

FTA Logistics Awards launched with the 'Most Innovative Company of the Year Award' going to Freightliner

Find out more at fta.co.uk/logisticsreport18

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ISBN: 978-1-905849-57-4

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