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.
We are facing a period of intense change and uncertainty and logistics is both at the cutting edge of these immense forces and the catalyst for evolution and revolution. But as always, FTA members are buoyant about their businesses’ future activity levels and their ability to respond positively to new opportunities and challenges.

Logistics is a key part of the burgeoning service economy and the facilitator of so much else, from manufacturing to home delivery and from local authorities to utility services, it is the enabler of the way we live today and the lifeblood of the UK economy. Without it, nothing moves and without efficient, competitive logistics, we cannot expect UK plc to thrive.

The Logistics Report 2019 sets out how logistics is performing on key measures and the events and trends that are shaping it here and now. Readers of this report will benefit from access to knowledge from respected sources and expert insights about our diverse and dynamic sector, our performance on competitiveness, international trade and connectivity, as well as labour and skills, sustainability and safety and innovation.

This report also contains the findings of our annual Logistics Industry Survey, which gathers views from 500 businesses engaged in logistics in the UK and globally. FTA’s work to influence policy and represent logistics is guided by its members. The main way we achieve this is through our 13 Councils representing different regions of England and the nations of the UK, our strategic council and our multimodal councils working on road, rail, air, maritime and shipper issues.

FTA has played a central role in the media and behind the scenes in ensuring that the measures that are needed to maintain frictionless trade with the EU and the rest of the world after Brexit are understood and enacted. Our sector is responsive and highly adaptable; whatever the outcome of the UK’s withdrawal from the EU, we will be pivotal in maintaining trade, keeping shelves stocked and ensuring essential services are working.

This report shows the many positive achievements of logistics in the past year, the firm foundations that the sector has in place and its confidence in its future. However, wider political uncertainty is not good for business and the urgent role for government is to provide clarity on the future direction and keep Britain trading.

David Wells
Chief Executive
Freight Transport Association
Santander is proud to be associated with the FTA Logistics Report for the third year running. This report forms part of our collaborative partnership with the FTA and our work with the UK’s transport and logistics sector.

Uncertainty has been the inevitable reality for UK businesses over the last year, especially for those operating in transport and logistics (T&L). At the start of 2018, few expected that we would enter 2019 still unaware of whether we would leave the EU with a withdrawal agreement or not. We have seen businesses taking contingency measures against a no-deal scenario, one of which is the rise in the number of businesses applying to become an Authorised Economic Operator (AEO). While this may not solve delays at borders in the immediate term, moving forward it should allow businesses a smoother transition through customs.

Growth in the UK economy was subdued in 2018, with growth of just 1.4% making it the slowest since 2012. The outlook for the T&L sector tends to mirror that of the UK as a whole and as such 2018 was a flat but stable year.

Export growth slowed to just 2% in 2018, compared to 11% in 2017. That said, international trade still offers huge potential for UK businesses, especially those in the transport and logistics sector. Countries outside the EU saw stronger growth. For example, Nigeria and India saw growth of 27% and 24% respectively. Despite this, the EU remains the largest trading bloc. Trade with the EU will continue to be of upmost importance for UK business, but it is unlikely that it will be as straightforward as it has been while the UK was part of the EU. The expertise that transport and logistics providers can give to their clients to help them to start or continue to trade with Europe will be invaluable to allow them to continue to operate smoothly over the coming years. While 2018 saw the demise of many well-known high-street retailers, the T&L sector was bolstered by strong growth in e-commerce and cross-border sales.

2018 also saw the announcement that from 2019, a number of cities will be including Clean Air Zones, and an Ultra Clean Air Zone has already been introduced last month in London. Vehicle operators may have to replace their vehicles with cleaner, more efficient Euro VI vehicles if they are to avoid the charges. In the Budget in October last year, the Chancellor unveiled a dramatic increase in the Annual Investment Allowance, which will coincide with the introduction of these Clean Air Zones. T&L operators could capitalise on this generous tax relief offer and invest significant amounts in the plant, machinery and other business-critical assets that will help them enhance profitability and productivity.

As we continue to negotiate our way through Brexit, T&L businesses will be vital in ensuring that UK businesses are able to continue their operations with as little disruption as possible. The importance of the sector should not be undervalued, which is why Santander is committed to continuing its work with the FTA and businesses in the sector in 2019 and beyond.

Data source: ONS (Office of National Statistics) GDP report, 2018; OEC (Observatory of Economic Complexity) report, 2017

John Simpkins
Head of Transport & Logistics
Santander Corporate & Commercial Banking
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTA's foreword</td>
<td>3</td>
</tr>
<tr>
<td>Sponsor's message</td>
<td>4</td>
</tr>
<tr>
<td>Logistics dashboard</td>
<td>6</td>
</tr>
<tr>
<td>The Logistics sector</td>
<td>8</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>20</td>
</tr>
<tr>
<td>International trade</td>
<td>30</td>
</tr>
<tr>
<td>Connectivity</td>
<td>40</td>
</tr>
<tr>
<td>Labour and skills</td>
<td>50</td>
</tr>
<tr>
<td>Sustainability</td>
<td>60</td>
</tr>
<tr>
<td>Safety and innovation</td>
<td>74</td>
</tr>
</tbody>
</table>
## Logistics dashboard

### KPI

#### Economic indicators

<table>
<thead>
<tr>
<th>KPI Description</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Year-on-year change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UK ECONOMIC ACTIVITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 GDP (annual percentage change)</td>
<td>3.1%</td>
<td>2.3%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.4%</td>
<td>▲</td>
</tr>
<tr>
<td>2 Average weekly online retail sales (£ million)</td>
<td>£725.38</td>
<td>£816.26</td>
<td>£988.57</td>
<td>£1,146.39</td>
<td>£1,312.63</td>
<td>▲</td>
</tr>
<tr>
<td><strong>UK EXPORTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Goods exported to EU at current market prices (annual % change)</td>
<td>-2.9%</td>
<td>-9.0%</td>
<td>6.8%</td>
<td>15.0%</td>
<td>4.1%</td>
<td>▲</td>
</tr>
<tr>
<td>4 Goods exported to the rest of the world at current market prices (annual % change)</td>
<td>-2.0%</td>
<td>4.7%</td>
<td>2.1%</td>
<td>11.7%</td>
<td>2.6%</td>
<td>▲</td>
</tr>
<tr>
<td><strong>UK IMPORTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Goods imported from the EU at current market prices (annual % change)</td>
<td>2.5%</td>
<td>-1.6%</td>
<td>7.5%</td>
<td>9.2%</td>
<td>2.7%</td>
<td>▲</td>
</tr>
<tr>
<td>6 Goods imported from the rest of the world at current market prices (annual % change)</td>
<td>-4.8%</td>
<td>-3.6%</td>
<td>5.8%</td>
<td>11.5%</td>
<td>2.8%</td>
<td>▲</td>
</tr>
<tr>
<td><strong>UK INFLATION AND CURRENCY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Retail Prices Index (annual inflation in December)</td>
<td>1.6%</td>
<td>1.2%</td>
<td>2.5%</td>
<td>4.1%</td>
<td>2.7%</td>
<td>▲</td>
</tr>
<tr>
<td>8 Consumer Prices Index (annual inflation in December)</td>
<td>0.5%</td>
<td>0.2%</td>
<td>1.6%</td>
<td>3.0%</td>
<td>2.1%</td>
<td>▲</td>
</tr>
<tr>
<td>9 £/$ exchange rate (average for December)</td>
<td>$1.5642</td>
<td>$1.4982</td>
<td>$1.2486</td>
<td>$1.3409</td>
<td>$1.2681</td>
<td>▼</td>
</tr>
<tr>
<td>10 £/€ exchange rate (average for December)</td>
<td>£1,2685</td>
<td>£1,3777</td>
<td>£1,1843</td>
<td>£1,1328</td>
<td>£1,1138</td>
<td>▼</td>
</tr>
<tr>
<td><strong>COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Wage settlements (annual change in basic pay)</td>
<td>+2.4%</td>
<td>+2.6%</td>
<td>+2.2%</td>
<td>+2.8%</td>
<td>+3.0%</td>
<td>▲</td>
</tr>
<tr>
<td>12 Total HGV operating costs (annual change for 44t gvw artic)</td>
<td>-5.1%</td>
<td>-3.0%</td>
<td>+7.0%</td>
<td>+2.2%</td>
<td>+1.5%</td>
<td>▲</td>
</tr>
<tr>
<td><strong>FUEL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Bulk diesel (average pence per litre in December ex VAT)</td>
<td>94.18</td>
<td>81.61</td>
<td>94.04</td>
<td>97.09</td>
<td>99.77</td>
<td>▲</td>
</tr>
<tr>
<td>14 Gas Oil (average pence per litre in December ex VAT)</td>
<td>47.95</td>
<td>35.66</td>
<td>47.52</td>
<td>50.62</td>
<td>53.29</td>
<td>▲</td>
</tr>
<tr>
<td>15 Brent Crude (Futures) (average per barrel in December)</td>
<td>$63.46</td>
<td>$38.90</td>
<td>$54.92</td>
<td>$64.09</td>
<td>$57.67</td>
<td>▼</td>
</tr>
<tr>
<td>16 Jet Fuel (average per tonne in December)</td>
<td>$591.97</td>
<td>$395.53</td>
<td>$509.14</td>
<td>$601.25</td>
<td>$569.95</td>
<td>▼</td>
</tr>
<tr>
<td>17 Rotterdam Gas Oil (average per tonne in December)</td>
<td>$574.08</td>
<td>$353.02</td>
<td>$483.92</td>
<td>$571.29</td>
<td>$545.16</td>
<td>▼</td>
</tr>
</tbody>
</table>

#### Road transport industry

<table>
<thead>
<tr>
<th>KPI Description</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Year-on-year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Reported profit margin of Top 100 road hauliers</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
<td>▲</td>
</tr>
<tr>
<td>19 Number of Goods Vehicle Operator Licences</td>
<td>75,595</td>
<td>77,002</td>
<td>73,458</td>
<td>72,547</td>
<td>No data available</td>
<td>▼</td>
</tr>
<tr>
<td>20 Population of HGVs licensed by body type (UK)</td>
<td>496,773</td>
<td>506,211</td>
<td>517,144</td>
<td>523,336</td>
<td>No data available</td>
<td>▲</td>
</tr>
<tr>
<td>21 Population of vans licensed by body type (UK)</td>
<td>3,569,613</td>
<td>3,736,036</td>
<td>3,889,681</td>
<td>4,011,322</td>
<td>No data available</td>
<td>▲</td>
</tr>
<tr>
<td>22 Population of HGV trailers (based on number tested)</td>
<td>228,286</td>
<td>236,047</td>
<td>245,919</td>
<td>241,592</td>
<td>No data available</td>
<td>▼</td>
</tr>
<tr>
<td>23 HGV registrations</td>
<td>41,469</td>
<td>51,899</td>
<td>53,916</td>
<td>52,120</td>
<td>51,825</td>
<td>▼</td>
</tr>
<tr>
<td>24 Van registrations</td>
<td>321,686</td>
<td>371,903</td>
<td>375,827</td>
<td>362,449</td>
<td>357,325</td>
<td>▼</td>
</tr>
<tr>
<td>25 Number of HGV drivers in employment (thousands)</td>
<td>285</td>
<td>299</td>
<td>315</td>
<td>302</td>
<td>323</td>
<td>▼</td>
</tr>
<tr>
<td>26 Claimant count (HGV drivers for December)</td>
<td>1,300</td>
<td>1,200</td>
<td>500</td>
<td>390</td>
<td>260</td>
<td>▼</td>
</tr>
<tr>
<td>27 HGVs laid up (SORN) in Great Britain</td>
<td>75,072</td>
<td>89,767</td>
<td>104,933</td>
<td>123,320</td>
<td>No data available</td>
<td>▼</td>
</tr>
</tbody>
</table>
## KPI

### Safety

<table>
<thead>
<tr>
<th>KPI Description</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Most recent year-on-year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGV motor vehicle Test Pass Rate Initial (&gt;3.5 tonnes gvw)</td>
<td>80.1%</td>
<td>82.8%</td>
<td>82.8%</td>
<td>84.5%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Van Test Pass Rate Initial (Class 7)</td>
<td>51.1%</td>
<td>53.2%</td>
<td>54.6%</td>
<td>56.2%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>HGV roadside encounter prohibition rate percentage – mechanical checks (UK drivers only)</td>
<td>30.7%</td>
<td>30.1%</td>
<td>27.8%</td>
<td>24.8%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>HGV roadside encounter failure rate percentage – drivers’ hours checks (UK drivers only)</td>
<td>7.3%</td>
<td>7.1%</td>
<td>5.1%</td>
<td>4.3%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>HGV roadside encounter failure rate percentage – weight checks (UK drivers only)</td>
<td>49.6%</td>
<td>45.5%</td>
<td>39.1%</td>
<td>36.9%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>RIDDOR reportable workplace accidents for transport</td>
<td>10,809</td>
<td>10,421</td>
<td>10,073</td>
<td>10,268</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Road casualties linked to HGVs (Number Killed or Seriously Injured)</td>
<td>1,319</td>
<td>1,353</td>
<td>1,284</td>
<td>1,247</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### Efficiency

<table>
<thead>
<tr>
<th>KPI Description</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Most recent year-on-year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of HGVs empty running</td>
<td>28.8%</td>
<td>28.6%</td>
<td>30.2%</td>
<td>29.9%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Percentage of inland freight moved by rail (billion net tonne kilometres)</td>
<td>12.5%</td>
<td>10.0%</td>
<td>8.7%</td>
<td>9.1%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Lading factor percentage for HGVs (&gt;3.5 tonnes gvw)</td>
<td>59.0%</td>
<td>60.0%</td>
<td>60.0%</td>
<td>60.0%</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Use of alternative fuels in HGVs</td>
<td>1.0 mt of oil equivalent</td>
<td>1.0 mt of oil equivalent</td>
<td>1.0 mt of oil equivalent</td>
<td>1.0 mt of oil equivalent</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Average HGV payload capacity (tonnes)</td>
<td>7.6</td>
<td>7.8</td>
<td>7.7</td>
<td>7.9</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### Traffic flows

<table>
<thead>
<tr>
<th>KPI Description</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Most recent year-on-year change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Containers handled by major UK ports (thousand TEUs)</td>
<td>9,511</td>
<td>9,772</td>
<td>10,200</td>
<td>10,240</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Freight handled by air (tonnes)</td>
<td>2,304,350</td>
<td>2,299,213</td>
<td>2,409,832</td>
<td>2,640,337</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Goods moved by HGVs (&gt;3.5 tonnes gvw) (billion tonne kilometres)</td>
<td>128</td>
<td>143</td>
<td>148</td>
<td>147</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Van kilometres (billion vehicle kilometres)</td>
<td>72.4</td>
<td>75.5</td>
<td>79.2</td>
<td>81.3</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Cabotage within the UK (million tonne kilometres)</td>
<td>1,400</td>
<td>1,457</td>
<td>1,819</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goods moved by rail (billion tonne kilometres)</td>
<td>22.14</td>
<td>19.34</td>
<td>17.05</td>
<td>17.17</td>
<td>17.21</td>
<td></td>
</tr>
<tr>
<td>Goods moved by domestic intermodal rail (billion tonne kilometres)</td>
<td>6.41</td>
<td>6.46</td>
<td>6.67</td>
<td>6.79</td>
<td>6.70</td>
<td></td>
</tr>
<tr>
<td>Channel Tunnel rail freight volumes (tonnes)</td>
<td>1,648,047</td>
<td>1,420,826</td>
<td>1,041,294</td>
<td>1,219,364</td>
<td>1,301,460</td>
<td></td>
</tr>
<tr>
<td>Number of rail freight train movements</td>
<td>282,304</td>
<td>236,290</td>
<td>223,751</td>
<td>215,826</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Rail Freight Delivery Metric (percentage of freight trains arriving at their destination within 15 minutes of scheduled time)</td>
<td>93.9%</td>
<td>94.1%</td>
<td>94.2%</td>
<td>94.1%</td>
<td>93.2%</td>
<td></td>
</tr>
<tr>
<td>Percentage penetration of cross channel market by UK HGVs</td>
<td>16.2%</td>
<td>14.7%</td>
<td>14.0%</td>
<td>14.1%</td>
<td>14.5%</td>
<td></td>
</tr>
<tr>
<td>HGV movements to Europe (unaccompanied trailers only)</td>
<td>866,037</td>
<td>927,913</td>
<td>965,590</td>
<td>1,043,798</td>
<td>1,069,294</td>
<td></td>
</tr>
<tr>
<td>HGV movements to Europe (all powered vehicles)</td>
<td>2,399,812</td>
<td>2,458,538</td>
<td>2,466,676</td>
<td>2,447,048</td>
<td>2,397,202</td>
<td></td>
</tr>
</tbody>
</table>
Logistics businesses remain generally optimistic for the future, despite ongoing disruption and uncertainty over the timing and outcome of the UK’s withdrawal from the EU. Domestically, the trend towards growth in online retail continues to have an effect while global supply chains are tempered by signs of a global economic slowdown. Key changes in UK logistics for the past year include pressure on labour supply for pivotal logistics roles, reductions in investment and an increase in warehousing capacity demand.
The Logistics Sector

192,525 logistics enterprises in the UK of which nearly all (192,000) are SMEs

2.7 million employees in the wider logistics industry

£124.5 billion turnover

£124 billion Gross Value Add (aGVA) contribution to the UK economy which is 10 per cent of the contribution to the UK non-financial business economy

Logistics performance

In 2018, the performance of the domestic logistics sector mirrored UK-wide trends, both in terms of economic development, rising wages and workforce increment; the wider logistics industry (logistics-related occupations in all businesses) added around 200,000 jobs in 2018. There was particularly strong growth in occupations related to storage and warehousing, driven by the increase in online retail. Brexit uncertainty continued to weigh on the economy and led to skills shortage issues in several logistics areas, particularly those in which there has been a reliance in the past on EU citizens.

The UK logistics market

The UK logistics industry is the backbone of the UK economy, performing a vital role, not just in moving goods to and from hubs and ports, but also in supporting industries such as construction, manufacturing and services. Furthermore, the wider logistics sector employs 2.7 million people and contributes £124bn to the UK economy.

---

1. FTA Skills Shortage Report, November 2018
2. Labour Force Survey, ONS, Q2 2018
3. Annual Business Survey 2017, ONS, November 2018
The logistics sector is fundamental to the day-to-day, background functioning of UK cities, providing a primary mechanism for prosperity and commercial growth (fig 1.1).

The annual FTA Logistics Industry Survey was conducted in January 2019 and found that logistics activity across all modes (road, rail, sea and air) remained broadly positive for 2018 except for African and Middle Eastern air and sea routes. Domestic and international road freight remained buoyant and there was an expectation that this would continue into 2019.

UK economy

In 2018, the UK economy expanded in line with expectations. The year saw an end to the squeeze on living standards (fig 1.2); this was a result of a continued increase in the employment rate and a rise in average gross wages, while inflation ceased to outstrip pay rises. But skills shortages continued in critical areas.

Despite the improvement in employment levels, growth in the economy remained subdued against a backdrop of a global slowdown and uncertainty over the outcome of Brexit. The latter was broadly responsible for falls in business investment, as firms sought to defer financial commitments in the short term. The retail sector continued its readjustment to online shopping, and this resulted in further high-profile retail store closures.

At the very end of 2018, growth stalled abruptly, with both construction and manufacturing contracting in December and although services expanded this was at a far slower rate than earlier in the year. The early months of 2019 have seen a continuation in uncertainty for business surrounding Brexit.

Brexit-related political chaos has led to fluctuations in sterling exchange rates. At the start of the year the exchange rate average for January 2018 was $1.3813 but following the Prime Minister’s decision to delay the vote on the Brexit withdrawal agreement this fell by 8 per cent to $1.2681 in December 2018. Sterling was around 13 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.

According to the global economic organisation, the OECD, the UK’s economic growth is projected to increase slightly in 2019 before slowing in 2020, this assumes that there is a smooth exit from the European Union. Some Brexit-related uncertainties will remain until there is clarity about future trading arrangements.4

Business expectations

Respondents to FTA’s Logistics Industry Survey 2018/19 were asked to rate their expectations for the UK economy in 2019 (fig 1.3). Nearly one third stated that they anticipated an improvement on 2018, although more than half expected the economy to remain unchanged. Overall expectations were encouraging, given the ongoing uncertainty surrounding Brexit.

4 United Kingdom – Economic forecast summary, OECD, November 2018

---

1.1 Top 10 UK cities contribution to the economy, 2017

<table>
<thead>
<tr>
<th>City</th>
<th>GVA (£ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>£420,996</td>
</tr>
<tr>
<td>Birmingham</td>
<td>£28,156</td>
</tr>
<tr>
<td>Leeds</td>
<td>£23,407</td>
</tr>
<tr>
<td>City of Edinburgh</td>
<td>£23,232</td>
</tr>
<tr>
<td>Tyneside†</td>
<td>£19,822</td>
</tr>
<tr>
<td>Manchester†</td>
<td>£19,316</td>
</tr>
<tr>
<td>Glasgow City</td>
<td>£19,300</td>
</tr>
<tr>
<td>Belfast</td>
<td>£16,803</td>
</tr>
<tr>
<td>Bristol, City of</td>
<td>£14,610</td>
</tr>
<tr>
<td>Cardiff and Vale of Glamorgan</td>
<td>£12,812</td>
</tr>
</tbody>
</table>

†Tyneside includes Newcastle upon Tyne and the metropolitan boroughs of Gateshead, North Tyneside and South Tyneside

Source: Annual Business Survey 2017, NUTS3 ONS, November 2018
1.2 UK economy 2018

- GDP was 1.4% for 2018 down from 1.8% in 2017, its lowest since 2012.
- Business investment was down by 1.4% in December 2018.
- Wages up by 3.5% by mid-2018 and remained strong to the end of the year.
- Full employment: estimated employment rate of 75.8% the highest since records began in 1971 while unemployment has remained largely unchanged.
- Inflation according to the Consumer Prices Index (CPI) fell to 1.8% in January, helped by subdued fuel costs.
- High street slowdown - a net 1,123 stores disappeared from Britain's top 500 high streets in the first half of 2018 compared with a 222 store loss over the equivalent period in 2017.
- Online retail averaged 18% of retail sales in 2018 up from 16% in 2017.
- Construction fell by 0.3% in Q4 2018.
- Manufacturing fell by 1.1% in Q4 2018.
- £/$ exchange rate was $1.2681 in December 2018, down 5% on December 2017.

Sources: GDP first quarterly estimate, UK: October to December 2018, ONS, February 2019
Employee earnings in the UK: 2018, ONS, October 2018
UK Labour Market: January 2019, ONS, January 2019
Consumer price inflation, UK: January 2019, ONS, February 2019
Store openings and closures - HI 2018, PWC/LDC, November 2018
Retail Sales, Great Britain: January 2019, ONS, February 2019
Euro foreign exchange reference rates, European Central Bank, December 2018

1.3 Economic expectations for 2019

- Better than 2018: 54%
- About the same as 2018: 30%
- Worse than 2018: 16%

Source: FTA Logistics Industry Survey 2018/19

1.4 Impact of external factors on business

1 = Entirely positive  5 = Entirely negative

- Margin erosion: 2.18
- Slower UK growth: 2.13
- Increase in UK interest rates: 2.14
- Sterling weakness: 2.18
- Brexit uncertainties: 2.13
- Construction: 2.18
- Manufacturing: 2.13

Source: FTA Logistics Industry Survey 2018/19

The impact of external factors was rated by respondents to the survey (fig 1.4). All the factors surveyed were viewed to be negative on balance. Margin erosion was once again deemed to be the most negative, whilst sterling weakness was judged to be the most positive. Brexit uncertainty was considered to be a neutral factor at the beginning of 2018 but the consensus view of respondents was that it had become more negative, rising from the least negative last year to third this year.

The end of 2018 saw a slowdown in the UK economy and against a backdrop of global slowdown, forecasts suggest this will continue for the year ahead. Survey respondents outlined their plans to mitigate slower growth (fig 1.5).

Reducing costs or staffing was once again the most popular measure in 2018/19 (fig 1.6). Investment and expansion fell dramatically compared to 2017/18.
1.5 Plans to mitigate slower growth

Reflecting the widely reported reduction in business investment nationally towards the end of 2018, diversification was broadly unchanged but the proportion of those for whom plans were unknown or there was no plan more than doubled, reflecting the challenges facing businesses planning for the rest of the year.

Respondents to the survey were asked to rate confidence in business growth for the next three years. Interestingly, sentiment was broadly the same as it was a year earlier (fig 1.7) with 28 per cent very or completely confident that their business would grow.

Heavy goods vehicle (HGV) and van\(^5\) registrations published by the Society of Motor Manufacturers and Traders (SMMT) fell for the second year in a row. HGV registrations fell by 0.6 per cent and van registrations fell by 1.3 per cent in 2018 compared to 2017 (fig 1.8). SMMT has highlighted that operator confidence remains low due ongoing political and economic uncertainty and that this is having an impact on new registrations. However, the van market remains relatively strong with registrations in 2018 being the fourth highest recorded and above industry forecasts.

Despite the small falls in national registrations, fleet investment intentions followed the same positive trend as last year (fig 1.9) and were broadly in agreement with the

---

*New in 2018

---

5 The term ‘Heavy Goods Vehicle (HGV)’ is used to denote a goods vehicle in excess of 3.5 tonnes gross vehicle weight. The term ‘van’ is used for lighter goods vehicles.
predictions of survey respondents in 2018. The sentiment indices for HGV and van investment in 2018 were 60.4 and 55.2, compared to predicted values at the start of 2018 of 60.5 and 54.7 respectively. Both HGV and van investment intentions for the year ahead were positive and increased. But for trailers there was a small reduction in investment sentiment for the year ahead.

Large-scale business investment intentions for 2019 were largely the same for business relocation and other business acquisition (fig 1.10). However, the picture for lease or purchase of distribution premises was quite different to a year ago. Sixteen per cent of respondents stated that additional distribution premises had been purchased in 2018, and 20 per cent indicated that extra space was rented, up by several per cent from the previous year.

The increased demand for storage reflects the general rise in demand for distribution and warehousing space over 2018, as online retail continued to grow, and some manufacturing businesses decided to increase inventory of input materials ahead of the UK’s departure from the EU.

**Road freight**

The FTA Logistics Industry Survey 2018/19 showed that road freight activity continued to experience positive year-on-year growth although at a slower pace than a year earlier (fig 1.11). Anticipated growth rate for the year ahead was firmly positive but fell somewhat compared to the predictions of respondents a year earlier.

International road freight sentiment was positive in 2018 and is predicted to remain so in the year ahead, albeit at a lower anticipated level of activity. Similarly, domestic road freight sentiment for the last year and 2019 are both positive (65.1 and 65.4 respectively) but sentiment a year earlier was somewhat stronger, when the predicted domestic activity index for 2018 was 70.0.

<table>
<thead>
<tr>
<th>1.8 Commercial vehicle registrations 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGV Registrations</td>
</tr>
<tr>
<td>Van Registrations</td>
</tr>
</tbody>
</table>

Sources: LCV Registrations, SMMT, January 2019
HCV Registrations, SMMT, February 2019

<table>
<thead>
<tr>
<th>1.9 Fleet Investment Intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
</tr>
<tr>
<td>Expected</td>
</tr>
<tr>
<td>HGV</td>
</tr>
<tr>
<td>Van</td>
</tr>
<tr>
<td>Trailers</td>
</tr>
</tbody>
</table>

<50 = decrease    >50 = increase

Source: FTA Logistics Industry Survey 2018/19

<table>
<thead>
<tr>
<th>1.10 Large scale business investment plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased additional distribution premises</td>
</tr>
<tr>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

<table>
<thead>
<tr>
<th>1.11 Road freight activity sentiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
</tr>
<tr>
<td>Domestic</td>
</tr>
<tr>
<td>International</td>
</tr>
</tbody>
</table>

<50 = decrease    >50 = increase

Source: FTA Logistics Industry Survey 2018/19
Respondents to the survey were asked to provide their opinion on road journey lead times and usage of warehousing (fig 1.12). Slight increases in both longer and shorter lead times were reported and were also predicted to be the same in the year ahead. Journeys to both storage and distribution points were both strongly positive in 2018 and were predicted to remain so in 2019.

Road freight insolvencies decreased dramatically in 2018 compared to a year earlier. In Q4 2018, the number of business declaring insolvency was down to 38 from 115 a year earlier, a fall of around two thirds year-on-year. The number of road freight operators declaring insolvency decreased by 38.7 per cent in Q4 2018 compared Q3 2018 (fig 1.13). In the second half of 2017, the number of road freight operators declaring insolvency increased significantly, so the Q4 2018 figure is 67.0 per cent lower compared to the record high reported a year ago in Q4 2017. This fall represents a return to the modest downward trend in insolvencies reported since 2011.

For the second year in row, the manufacturing sector showed the highest level of optimism from respondents to the FTA Logistics Industry Survey. But the index was down to 66.7 this year, compared to over 70 at the start of 2018 (fig 1.14). Some of the reduction in positive outlook may be a reflection of the recent slowdown in growth on manufacturing observed in the final months of 2018. The IHS Markit/CIPS UK Manufacturing PMI fell to a three-month low of 52.8 in January 2019 from 54.2 in the previous month and below market expectations of 53.5

(a figure above 50 indicates growth). The latest reading was also the second-weakest since July 2016, the first survey month following the EU Referendum result.

Business expectations were strongly positive in the recycling and waste disposal sector but distribution and haulage saw a significant fall in positive sentiment from a year earlier. Public authority was once again the least optimistic sector, due to the continued squeeze on public service budgets.

In 2017/18 the number of goods vehicle operator licences fell by 1.2 per cent compared to 2016/17. Compared to pre-recession levels (2007/8), the number of licences was down by 26.2 per cent (fig 1.15).

The number of HGVs licensed in Great Britain (paying Vehicle Excise Duty) rose slightly (0.8 per cent) in 2017 compared to 2016 but is still 2.0 per cent lower than in 2008 (fig 1.16). The number of HGVs laid up (SORN) in Great Britain rose by 17.5 per cent to 123,320 in 2017 compared to 2016. The average age of HGVs in use in Great Britain was 7.5 years in 2017.

The number of vans licensed in Great Britain rose by 2.9 per cent in 2017 compared to 2016 and 16.9 per cent higher than in 2008 (fig 1.16). The growth in the number of vans licensed may in part be due to the increase in online retail sales. The number of vans laid up (SORN) in Great Britain by tax class, Vehicle licensing statistics, Department for Transport (DfT), 2017

1.14 Business expectations for top 5 sectors for 2019 compared to 2018

<table>
<thead>
<tr>
<th>Sector</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>66.7</td>
<td>51.1</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling, waste disposal</td>
<td>59.2</td>
<td>42.5</td>
</tr>
<tr>
<td>Distribution, haulage</td>
<td>61.8</td>
<td>55.6</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

---

6 Expected time to collect/deliver goods to/from a customer/storage facility

---

7 Licensed vehicles by tax class, Vehicle licensing statistics, Department for Transport (DfT), 2017

8 Vehicle licensing statistics, DfT, 2017
Britain rose by 14.0 per cent to 489,902 in 2017 compared to 2016. The average age of vans in use in Great Britain was 8.1 years in 2017.

**Rail freight**

In 2018, domestic bulk and semi-bulk rail freight grew beyond expectations, possibly influenced by growth in the construction sector (fig 1.17). However, sentiment for 2019 is more subdued. According to the IHS Markit/CIPS,

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

![Graph showing decline in number of goods vehicle operator licences from 98,316 in 2007/8 to 72,547 in 2017/18.]

Source: Annual Report to the Secretary of State 2017-18, Transport Commissioners for Great Britain, August 2018

UK Construction PMI fell to 50.6 in January of 2019, close to contracting (a figure above 50 indicates growth) from 52.8 in December, well below market expectations of 52.4. New business growth eased to an eight-month low and job creation was the weakest in two-and-a-half years as Brexit uncertainty led to hesitancy among clients and a corresponding slowdown in progress on new projects.

Respondents indicated an expansion in activity for domestic intermodal services in 2018, reflecting UK trade volumes and continued competitiveness of UK exports. With indications of a reduction in global demand in 2019, respondents are anticipating a substantial decrease in domestic intermodal activity (fig 1.17). The total volume of unitised freight traffic handled at major UK sea ports in the rolling year to September 2018 with the rolling year to September 2017 decreased by 2 per cent.⁹

International bulk and semi-bulk rail freight declined in 2018 with no change predicted next year. International intermodal services mirrored domestic expansion in 2018 and is expected to broaden further in 2019. Growth of freight flows to international markets outside the EU is evidenced by improvement in intermodal services; these are strongly linked to intercontinental container shipping outside the EU. Drewry anticipates a softening of the global container port demand growth rate in 2018 from

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>416,328</td>
</tr>
<tr>
<td>2016</td>
<td>404,804</td>
</tr>
<tr>
<td>2017</td>
<td>408,169</td>
</tr>
</tbody>
</table>

Source: Vehicle Licensing Statistics: Annual 2017, DfT, April 2018

1.17 Rail freight activity sentiment

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic rail movements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk/semibulk (ie conventional services)</td>
<td>85.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Intermodal services</td>
<td>66.7</td>
<td>50.0</td>
</tr>
<tr>
<td>International rail movements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk/semibulk (ie conventional services)</td>
<td>25.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Intermodal services</td>
<td>64.3</td>
<td>71.4</td>
</tr>
</tbody>
</table>

<50 = Decrease  >50 = Increase

Source: FTA Logistics Industry Survey 2018/19

⁹ Port freight quarterly statistics: July to September 2018, DfT, December 2018
Bulk rail services were broadly unchanged in 2018 compared to 2017 (fig 1.18). This is due to an increase in the amount of construction materials moved (billion tonne km) being offset by another fall in the amount of coal moved for thermal power generation for the fifth 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 10.7 million tonnes in 2018, a drop of 79.8 per cent.

Sea freight

International sea freight customers who responded to the FTA Logistics Industry Survey 2018/19 reported the strongest on routes trade growth in 2018 to and from Western Europe, Eastern Europe, Mediterranean and the Indian Subcontinent (fig 1.19). According to those shippers who completed the survey, imports from Africa, Middle East and Western Europe declined significantly and were below expectations. Respondents predicted that 2019 should be a good year for international shipping, with growth expected on all routes with the exception of African and Australian imports where neutral growth is expected for the year ahead.

The Baltic Dry Index, an assessment of the price of moving major raw materials by sea, fluctuated during 2018. It began the year at 1,230, fell back to 948 on 6 April 2018 rose to a peak of 1,774 on 24 July 2018 before falling back to 1,271 at Christmas 2018. It remains far below the pre-recession high of 11,793 recorded on 20 May 2008.

Air freight

Air freight export activity, according to respondents to the FTA Logistics Industry Survey 2018/19, will decrease on all routes in 2019, except for Southern Africa, compared with 2018 (fig 1.20). Conversely imports on all routes are expected to increase in 2019 with North America the only anomaly with no change predicted. Last year, respondents’ expectations were exceeded when air exports performed better than envisaged while at the same time there were slightly more imports. Global air freight tonne kilometres (FTK) increased by 3.5 per cent in 2018, down from 9.7 per cent in 2017; this easing in FTK is primarily the typical pattern seen after inventory restocking cycles in the past but also considers renewed signs of weakness in global trade and key economic demand drivers.  

References:

11 Air Freight Market Analysis, December 2018, International Air Transport Association (IATA)
### 1.19 Sea freight activity sentiment

<table>
<thead>
<tr>
<th>Region</th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>61.5</td>
<td>73.3</td>
<td>56.3</td>
<td>62.5</td>
</tr>
<tr>
<td>South America</td>
<td>50.0</td>
<td>60.0</td>
<td>50.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Africa</td>
<td>66.7</td>
<td>60.0</td>
<td>37.5</td>
<td>50.0</td>
</tr>
<tr>
<td>Middle East</td>
<td>50.0</td>
<td>69.2</td>
<td>41.7</td>
<td>58.3</td>
</tr>
<tr>
<td>Indian subcontinent</td>
<td>56.3</td>
<td>72.2</td>
<td>75.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Far East</td>
<td>53.1</td>
<td>53.3</td>
<td>81.3</td>
<td>87.5</td>
</tr>
<tr>
<td>Australia</td>
<td>60.0</td>
<td>54.5</td>
<td>41.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Western Europe</td>
<td>67.1</td>
<td>70.0</td>
<td>73.9</td>
<td>65.4</td>
</tr>
<tr>
<td>Scandinavia</td>
<td>67.9</td>
<td>82.1</td>
<td>64.3</td>
<td>54.5</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>68.8</td>
<td>75.0</td>
<td>70.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>66.7</td>
<td>75.0</td>
<td>70.0</td>
<td>53.8</td>
</tr>
</tbody>
</table>

<50 = Decrease  >50 = Increase

Source: FTA Logistics Industry Survey 2018/19

### 1.20 Air freight activity sentiment

<table>
<thead>
<tr>
<th>Region</th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>70.0</td>
<td>60.7</td>
<td>59.1</td>
<td>59.1</td>
</tr>
<tr>
<td>South America</td>
<td>68.8</td>
<td>66.7</td>
<td>50.0</td>
<td>62.5</td>
</tr>
<tr>
<td>Australia</td>
<td>60.0</td>
<td>65.0</td>
<td>50.0</td>
<td>62.5</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>30.0</td>
<td>70.0</td>
<td>50.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Far East including Japan</td>
<td>70.8</td>
<td>66.7</td>
<td>55.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Middle East</td>
<td>72.7</td>
<td>63.6</td>
<td>37.5</td>
<td>55.6</td>
</tr>
<tr>
<td>Western Europe</td>
<td>72.2</td>
<td>68.8</td>
<td>50.0</td>
<td>56.3</td>
</tr>
</tbody>
</table>

<50 = Decrease  >50 = Increase

Source: FTA Logistics Industry Survey 2018/19
Economic update

After a strong performance in 2017, weak economic growth was the story at the end of 2018. The final year GDP figure of 1.4 per cent was the lowest since 2012.

A number of contributing factors throughout the year were behind the poor performance, with terrible weather, courtesy of the Beast from the East, denting figures in Q1.

Despite strong growth in Q3 due to good weather and World Cup success, Brexit uncertainty finally took its toll in Q4, which saw growth of only 0.2 per cent.

The UK also struggled with confidence figures being negative for some time and remaining negative throughout 2018.

However, it was not all doom and gloom, with unemployment at the lowest it has been for over 40 years. Low inflation, at 2 per cent by the end of 2018, together with wage increases, left consumers feeling better off, which boosted retail figures at the end of 2018.

In 2019, unemployment is expected to remain low, but we will have to wait and see if consumers decide to spend their extra money or save it.

Thus far, 2019 has proved to be off to a slow start, with Brexit uncertainty and a global slowdown acting as headwinds to UK growth this year.

At the time of publication we are past the original Brexit deadline of 29 March and now have until 31 October to agree a deal or plan. Yet we remain without clarity, so it is hard for business to plan ahead, especially when it comes to investment.

Many businesses have put investment on pause, but we may see some of this pent up investment come through in 2019 once the outcome of Brexit is clear.

Providing this happens soon, we would hope that H2 2019 will show a stronger performance than H1, as business and consumers can grow in confidence and start planning for the future with renewed clarity.

Whatever the outcome, opportunity remains for business. Some will undoubtedly be able to take opportunities post-Brexit, depending on how quick and flexible they can be in changing processes, coming up with new products and reaching new markets with their goods and services.

Data source: ONS (Office of National Statistics) GDP report, 2018
The Logistics Sector

2018–2019 Summary

Freight activity by mode 2018
Main survey findings

FTA conducted its annual Logistics Survey in January 2019 and found that logistics activity across all modes (road, rail, sea and air) remained broadly positive for 2018.

Road Freight Activity in 2018
- 36% increased domestic road freight
- 16% increased the number of journeys to storage hubs
- 17% increased the number of journeys to distribution centres

Rail Freight Activity in 2018
- Domestic bulk and semi-bulk rail freight sentiment index was 85
- Domestic intermodal services sentiment index was 66.7

Sea Freight Activity in 2018
- Export activity was strongest in Western Europe, Eastern Europe, and Scandinavia with sentiment indices above 67
- Imports from Africa, Middle East and Western Europe declined significantly with indices below 50, indicating negative growth.

Air Freight Activity in 2018
- Air freight export activity was robust in Western Europe, Far East and Middle East with sentiment indices above 70
- Import activity was highest for North America with a sentiment index of 59.1

Business expectations for 2019
Main survey findings

Consumer behaviour influences the nature and efficiency of logistics with online retail increasing the take-up of warehouse space in 2018 with early signs for 2019 indicating stockpiling in the run-up to Brexit.

54% expect economy to remain unchanged
77% of survey respondents are confident that their business will grow in the next three years

Top 2 external factors to negatively affect business
- Margin erosion
- Slower UK growth

Top 2 plans to mitigate slower growth
- Cut staff costs
- Diversify

Fleet investment intentions
- 28% expect to increase HGV fleet
- 13% expect to increase van fleet
- 17% expect to increase trailer fleet

Increased demand for distribution space
- 21% to rent additional distribution premises
- 18% to purchase additional distribution premises

The logistics sector grew in 2018, with a sustained increase in employment and wages. The wider logistics industry added around 200,000 jobs mainly in occupations related to storage and warehousing, driven by the increase in online retail.

Brexit uncertainty cast a shadow over the economy and has led to skills shortage issues in several logistics areas, particularly where there has been a reliance in the past on EU citizens.
Competitiveness

Key indicators of international comparative strength are showing worrying signs of deterioration. With logistics playing a fundamental role in achieving manufacturing, retail and services success, getting its cost base right and establishing the right conditions for competitiveness is essential. Logistics remains a low margin activity and encouraging innovation and investment requires new thinking.
UK competitive capability

The United Kingdom is the eighth most competitive nation in the world out of 140 countries ranked in the most recent 2018 edition of the Global Competitiveness Report. The UK’s competitiveness rank dropped two places from sixth in 2017. The most competitive score was second in 2007, just before the global recession. Of the key transport indicators, the UK ranks 29th for road connectivity and 26th for road quality under the infrastructure component but higher for airport connectivity and railroad density (fig 2.1).

The UK’s competitors continue to invest in their road, rail, air and port infrastructure. Measures of international competitiveness underline that 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 but research conducted by Ernst & Young reveals that investors find the quality of the UK’s transport infrastructure lacking. According to their report, the UK’s transport and logistics infrastructure has become less attractive to investors, yielding an attractiveness score of 62 per cent in 2017, a long way below its previous

---

1 The Global Competitiveness Report, World Economic Forum, 2018

---

**UK competitiveness facts**

<table>
<thead>
<tr>
<th></th>
<th>Rank/no of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global competitiveness</td>
<td>8/140</td>
</tr>
<tr>
<td>Corruption (least)</td>
<td>11/175</td>
</tr>
<tr>
<td>Ease of doing business</td>
<td>9/190</td>
</tr>
</tbody>
</table>

**Average UK Competitiveness Index (UKCI) scores by region/country**

- **Scotland**: 94.2
- **North East**: 84.8
- **Yorkshire and the Humber**: 88
- **East Midlands**: 89.8
- **East of England**: 97.8
- **London**: 119.8
- **South East**: 103.5
- **South West**: 94.1
- **West Midlands**: 90.5
- **Wales**: 84.4
- **Scotland**: 94.2
- **North East**: 84.8
- **Yorkshire and the Humber**: 88
- **East Midlands**: 89.8
- **East of England**: 97.8
- **London**: 119.8
- **South East**: 103.5
- **South West**: 94.1
- **West Midlands**: 90.5
- **Wales**: 84.4

**Sources:**
- UK Competitiveness Index (UKCI), Huggins R., Thompson P., Prokopj, D., 2019
- The Global Competitiveness Report, World Economic Forum, 2018
- Corruption Perceptions Index, Transparency International, 2018
- Doing Business 2019, World Bank Group, 2018
high of 80 per cent in 2013. Investors’ perceptions on this measure have been falling for four years and the report notes that each year transport infrastructure plans are articulated but consistently not delivered.

Ease of doing business

The UK ranks ninth out of 190 economies on the ‘ease of doing business index’ published by the World Bank Group; this ranks countries against each other based on how the regulatory environment is conducive to business. Economies with a high rank (1 to 20) have simpler and more friendly regulations for businesses. The ranking for the United Kingdom deteriorated to 9 in 2018 from 7 in the 2018 report (New Zealand is ranked first). Regulations affecting 11 areas of the development of a business are measured (fig 2.2). The UK is weakest in trading across borders, getting credit, enforcing contracts and registering property.

Logistics costs

Reducing logistics costs is often the number one priority for a businesses’ bottom line. However, with profit margins of only 2 per cent in 2018; logistics companies are vulnerable to increases in operating, fuel and freight costs.

Fuel prices

Bulk diesel and gas oil prices in December 2018 were higher on average compared to December 2017, mainly due to the weakness of the pound compared to the year before. Crude oil prices did not fall until very late in the year. Marine and jet fuel prices, which are more closely linked to the oil price, were lower as a result compared to December 2017 (fig 2.3). From a UK perspective, since the vote to leave the EU, the pound has been trading at 30-year lows against the US dollar and was around 14.7 per cent lower on average in December than before the referendum vote and 5.4 per cent lower compared to a year ago.

Oil is priced in US dollars, so the year-on-year decrease in the value of the pound against the US dollar has reduced
the benefit of the fall in oil costs for UK importers; whilst the impact on diesel prices is an increase once fuel duty is included. There were year-on-year increases of 2.8 per cent for bulk diesel prices, while at the same time the price of Brent Crude fell 10.0 per cent to a monthly average of $57.67 a barrel (bbl) in December 2018.

Road freight operating costs

According to FTA’s Manager’s Guide to Distribution Costs, total operating costs for a 44-tonne articulated truck rose by 1.5 per cent in 2018. This compares to a 2.7 per cent increase in the RPI (Retail Prices Index) inflation rate in the year to December 2018 and is a result of most input costs increasing, including fuel costs which rose by 0.6 per cent.

Bulk diesel expectations

Despite falling off in the last quarter of 2018, oil prices have risen steadily over Q1 2019, currently trading within a $65-$70 per barrel window (at the time of writing). We now look at the supply, demand and geopolitical factors that could affect prices during the remainder of 2019.

After becoming the world’s largest oil producer late last year, the USA’s production is expected to continue growing, with output projected to average 12.1 million barrels per day in 2019. The consequence of any oversupply would be bearish, however, any uncertainty in the geopolitical situations of key oil-producing nations will also have a major impact on prices.

In 2019, the key areas to watch will be Venezuela and Iran; both were historically major oil producers, and both are struggling under US sanctions. Venezuelan oil exports have plummeted after its biggest market (the US) was cut off, and years of underinvestment by Maduro’s government have only compounded output issues. Similarly, since November 2018, the US has banned any countries who purchase Iranian oil from trading with US companies, effectively barring all but an except few (through waivers) from purchasing Iranian oil. Waivers are up for renewal in May and the number handed out is expected to be reduced, tightening worldwide supply.

Meanwhile, markets have been keenly watching the US-China trade dispute which saw both countries levying tariffs on increasing numbers of goods and services. Any signs of a potential breakthrough in trade talks may lead to oil prices rising, while escalation in tensions might squeeze prices, as markets try to predict how slower growth in two of the world’s largest oil-consuming economies would impact oil demand.

While the price of oil has a significant impact, it is not the only factor affecting prices of refined products in the UK downstream market. Throughout the remainder of 2019, the shipping world will be gearing up for regulatory changes which will see the maximum sulphur content of marine fuels cut from 3.5 per cent to 0.5 per cent from 1 January 2020. This could lead to increased demand for lower sulphur middle distillates which would drive refined product prices up.

Another major factor in the UK fuel price is the pound/US dollar exchange rate. As oil is traded internationally in dollars, if the pound weakens then the price in the UK increases, even if the wholesale price has not moved. Consequently, any major Brexit news, such as whether or not we leave the EU on 12 April (with or without a deal), which at the time of writing is yet to be clarified, will make a significant impact on exchange rates and therefore the price of UK refined products.
during the year. Fuel currently represents almost a third of total operating costs for a 44-tonne truck.

HGV operating cost movements have risen for the last three years, mainly due to rising fuel costs (fig 2.4). The gap with haulage rate movements has widened further, as shown by the sample of domestic haulage rates given by contributors which rose by an average of 3.7 per cent in 2018. Given that just over half of the sample rates increased during the year, this shows that some hauliers are still not passing the increase in vehicle operating costs to their customers.

Respondents to the FTA Logistics Industry Survey 2018/19 indicated that their expectation in 2019 is for no change in the level of use of third-party services across the board, compared to 2018. However, in 2018 more hauliers and contract hire were utilised than anticipated in last year’s report. This reflects more stable economic conditions than were anticipated (fig 2.5).

The FTA Logistics Industry Survey 2018/19 found that input costs in 2018, compared to 2017, saw increases across the board for the second year running (fig 2.6). Vehicle asset costs, fuel prices and wage rates saw the largest rises.

The FTA Logistics Industry Survey 2018/19 asked respondents about changes in freight rate costs across all modes (fig 2.7). The balance of opinion was that costs had increased for road, air and sea but not for rail which is a departure from 2017.

Respondents indicated that road freight rates both domestic and international increased at a higher rate than the previous year, perhaps influenced by the weaker pound and higher fuel costs.

**Warehouse costs**

CBRE UK’s Logistics Index shows warehousing continued to perform strongly during 2018, with total returns of 11.7 per cent. However, this was a decrease of 3 percentage points since the end of 2017. Rental values increased slightly more during the second half of the year but remained fairly flat in most parts of the country, with the overall national average of 1.7 per cent for the whole 2018.

Rental value growth in London and the South East grew faster during the second half of the year, bringing the annual growth rate to 3.1 per cent. On the other hand, rents outside London barely grew during 2018, whilst capital value growth was 5 per cent, with total returns just above 10 per cent. Selected warehouse rent costs per sq ft for big box warehouses (over 100,000 sq ft) are shown in fig 2.8.

**Rail costs**

The final Office of Rail and Road (ORR) determination for the 2018 Periodic Review (PR18) was a mixed result for freight, with welcome investment and innovation funding mixed with a disappointing result for Track Access Charges, where ORR only reduced the overall increase in

---

*Note: Operating costs below inflation indicate efficient logistics

Sources: Manager’s Guide to Distribution Costs January 2019 Update Report, FTA, March 2019
Consumer price inflation, UK: December 2018, ONS, January 2019

4 United Kingdom Logistics – The Property Perspective H2 2018, CBRE, 2019
The increase in charges recommended by the determination provides for a two-year freeze in costs, followed by a ramping up of charges over the final three years of the five-year control period. This would generate an increase in the total variable charges over control period 6 (CP6: 2019-2024) of 10 per cent for freight, with further increases to come in the subsequent control period, unless there is a dramatic increase in the efficiency of Network Rail in the longer term.5

However, increased spending will improve the work of Network Rail’s System Operator; this should develop and release faster train paths for freight to help increase productivity, while the 17 per cent increase in renewal works will reduce infrastructure failures, which often delay freight journeys. ORR has said that it believes further efficiencies are possible, over and above the 10 per cent

---

5 2018 Periodic Review Final Determination, ORR, October 2018
COMPETITIVENESS

2.8 Selected warehouse rents per sq ft

<table>
<thead>
<tr>
<th>Region</th>
<th>Rent (UK£/sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North West Bristol</td>
<td>£7.25</td>
</tr>
<tr>
<td>South West Swindon</td>
<td>£7.00</td>
</tr>
<tr>
<td>South West Bristol</td>
<td>£7.00</td>
</tr>
<tr>
<td>North East Tyne and Wear</td>
<td>£5.50</td>
</tr>
<tr>
<td>Yorkshire Wakefield</td>
<td>£5.75</td>
</tr>
<tr>
<td>Midlands MI–6 Junction</td>
<td>£6.75</td>
</tr>
<tr>
<td>Midlands Birmingham</td>
<td>£6.75</td>
</tr>
<tr>
<td>South East Heathrow area</td>
<td>£15.75</td>
</tr>
</tbody>
</table>

Source: United Kingdom Logistics – The Property Perspective H2 2018, CBRE, 2019

efficiency improvement targeted over the five-year control period.

2.9 Forecast average increase in total variable charges

<table>
<thead>
<tr>
<th>Type</th>
<th>Uncapped increase from close CP5 to CP6</th>
<th>Capped increase averaged across CP6</th>
<th>Capped increase from close CP5 to final year of CP6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight</td>
<td>26%</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>Charter</td>
<td>13%</td>
<td>2%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Note: 2017-18 prices, constant traffic (2018-19), and uses ORR’s final determination assumptions on efficiency. This provides an approximate indication of changes to average charges, before taking account of the change from RPI to CPI indexation

Source: Periodic review 2018: final determination, ORR, October 2018

The increase in air freight rates, according to IATA’s Airline Business Confidence Index, which surveys CFOs and Heads of Cargo, found that 62 per cent of surveyed individuals noted an increase in input costs over the last three months of 2018. Respondents pointed to higher fuel prices and wages, as well as unfavourable hedging and exchange rate effects. The main reasons given for the changes in freight rates were increases in fuel and wages, the latter related to a shortage of HGV drivers.

Sea costs

In 2017, freight rates increased across all markets, with the exception of tankers which remained suppressed, mainly due to an increase in vessel supply that grew at a faster rate than demand growth. The container shipping industry ended 2017 with a total profit of $7 billion. The World Container Index, assessed by Drewry, is a composite of container freight rates on eight major routes to/from the US, Europe and Asia; this fell back between October and November but in December increased 14.1 per cent to $1,792.96 per 40ft container (fig 2.11).

Air costs

Drewry’s Sea and Air Shipper Insight report shows that average freight rates on major east-west lanes increased by 2 per cent year-on-year in December which represents a narrowing of 3.5 per cent when compared to November but reflects seasonal trends. For 2018 as a whole, average prices on east-west lanes were 4.9 per cent more than in 2017 (fig 2.10).

6 Airline Business Confidence Index, IATA, January 2019
7 UNCTAD Review of Maritime Shipping, 2018
### Charges and tolls

#### HGV road user charges

Since 2014, all HGVs at or above 12 tonnes gross vehicle weight using UK roads have been required to pay the HGV Road User Levy (RUL). 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. For most UK-registered HGVs, vehicle excise duty (VED) was reduced by the same amount as the Levy. The Levy is rolled into VED estimates (excluding the tax take from non-UK HGVs). HGV VED and the Road User Levy were frozen from 1 April 2017. FTA estimates that for 2017/18 commercial vehicles raised £6.4 billion in fuel duty, £602 million in VED and £210 million in RUL.

In 2017-18 VED (excluding RUL) from HGVs raised £298 million (fig 2.12) and fuel duty raised £4.4 billion. Company registered vans (around half the van fleet) paid £304 million in VED and £2 billion in fuel duty.\(^8\)

---

8 Annual Report and Accounts, 2017-19, DVLA, 2018
Road tolls

The cost and administrative complexity of freight movements in the UK is compounded by a patchwork of local charges and restrictions. Some limit kerbside access, such as parking enforcement and fine regimes, others result in direct additional costs, such as the Mersey Crossing tolls. All negatively impact the competitive position of UK logistics and the cost of doing business here.

The Dartford Crossing

The Dartford Crossing is by far the busiest toll road for all forms of traffic, with HGVs accounting for 18 per cent of the volume. In 2018 there were approximately 5.95 million crossings by HGVs during charging hours (06:00–22:00). Of these 1.59 million crossings were made by non-UK registered HGVs. The total revenue received was £30 million.

Severn tolls abolished

In a beneficial move for freight, December 2018 saw the permanent removal of the Severn Crossings’ tolls in Wales. Imposing some of the highest charges in the UK, the fees were criticised as a consistent barrier to economic growth and seen as an unfair burden to both employers and employees alike crossing between England and Wales. The removal of the charges is expected to provide a boost to transport businesses in the South West and South Wales, and it is hoped the millions of pounds logistics operators will save each year can be reinvested to help grow business, develop skills and purchase greener fleets.

The Secretary of State for Transport’s decision not to allow Transport for London to increase red route contravention penalties in London was also lauded as a positive move at a time when businesses delivering into urban areas, especially London, found themselves under increasing access constraints.

M6 tolls increase

Less positively, 2018 also brought an increase to the tolls on the M6. The toll increased by 20p–50p per HGV depending on the journey made, with HGV weekday journeys costing £11.50 and weekend trips priced at £9.80. Though a rise in costs is unwelcome in any industry, this addition was particularly concerning to freight due to its probable impact on Birmingham’s clean air agenda. The M6 is a key route for UK logistics, and it was believed the fee increase would encourage some HGVs to abandon the motorway in favour of the free routes running through Birmingham itself. Birmingham City Council has since released proposals for the Clean Air Zone that will be implemented across the city (see Chapter 6), adding to the fiscal burden on freight travelling in and around the M6 area.

### 2.12 Government tax revenue arising from HGVs and vans, 2017/18

<table>
<thead>
<tr>
<th>Description</th>
<th>(£ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VED (excluding RUL for UK HGVs)</td>
<td>£298</td>
</tr>
<tr>
<td>Fuel Duty</td>
<td>£4,439</td>
</tr>
<tr>
<td>RUL from non-UK HGVs</td>
<td>£50</td>
</tr>
<tr>
<td>RUL from UK HGVs</td>
<td>£160</td>
</tr>
</tbody>
</table>

Sources: Transport Statistics Great Britain 2018, DFT, December 2018
Annual Report and Accounts 2017-18, DVLA, 2018
UK competitive capability

The UK dropped 2 places to 8th in the 2018 Global Competitiveness Report

The UK also dropped 2 places to 9th in the ‘ease of doing business index’ published by the World Bank Group

£298 million
VED paid by HGVs

£304 million
VED paid by company registered vans

£4,439 million
raised from fuel duty from HGVs

£2,006 million
tax duty raised from company registered vans

£160 million
RUL paid by UK HGVs

£50 million
RUL paid by non-UK HGVs

£5.95m
HGV revenue on the Dartford Crossing

£1.59m
were non-UK HGVs

£5.95m
HGV journeys over the Dartford crossing in 2018 during charging hours

£30m
raised in revenue by HGVs in 2018

1.5% rise in total operating costs for a 44-tonne truck per FTA’s Manager’s Guide to Distribution Costs (2018)

Fuel represents almost a third of the total operating costs for a 44-tonne truck

Gap is widening between HGV operating cost movements and haulage rates movements

Some hauliers are still not passing on the increase in operating costs to customers

4.9% average increase in air freight rates on major east-west lanes increased in 2018 compared to 2017.

14.1% increase in container freight rates to $1,792.96 per 40ft container in December 2018

UNCTAD’s Review of Maritime Transport revealed that for 2017, maritime freight rates increased across all markets

10% increase in total variable access charges in the period 2019-2024 according to ORR

1.7% increase in national rental values which remained fairly flat in most parts of the country

Rental value growth was faster in London and the South East at 3.1%

1.5% rise in total operating costs for a 44-tonne truck per FTA’s Manager’s Guide to Distribution Costs (2018)

Fuel represents almost a third of the total operating costs for a 44-tonne truck

Gap is widening between HGV operating cost movements and haulage rates movements

Some hauliers are still not passing on the increase in operating costs to customers

4.9% average increase in air freight rates on major east-west lanes increased in 2018 compared to 2017.

14.1% increase in container freight rates to $1,792.96 per 40ft container in December 2018

UNCTAD’s Review of Maritime Transport revealed that for 2017, maritime freight rates increased across all markets

10% increase in total variable access charges in the period 2019-2024 according to ORR

1.7% increase in national rental values which remained fairly flat in most parts of the country

Rental value growth was faster in London and the South East at 3.1%
International trade

The UK has ambitions to grow its international trade against a backdrop of extreme political and commercial uncertainty engendered by the Brexit process. Efficient logistics is central to achieving an increase in trade and with less than 10 per cent of UK businesses engaged in exports but accounting for 30 per cent of GDP the benefits could be immense if the right environment is established.
International trade

According to the CBI, less than 10 per cent of UK businesses export, but that makes up 30 per cent of UK GDP. According to figures published by the Office for National Statistics, UK Trade in Goods consisted of £350.0 billion in exports and £488.8 billion in imports in 2018.¹

The Department for International Trade (DIT) launched a new Export Strategy in August to support British businesses looking to export to the global market. Building on the Industrial Strategy (published in 2017) and the government’s trade, foreign policy and development agenda, the strategy outlines how government will support businesses of all sizes make the most of export opportunities around the world. As the Export Strategy notes, worldwide trends are transforming the global economy, with global exports worth around two times more in 2017 than in 1997 in real terms.² The strategy sets a challenge of increasing UK exports as a percentage of GDP from 30 per cent to 35 per cent.

The delivery of the government’s strategy for exporting more goods and services³ is closely allied with the

¹ UK Trade: December 2018, ONS, 11 February 2019
² United Nations Conference on Trade and Development, UNCTAD
³ Export Strategy: supporting and connecting businesses to grow on the world stage, HM Government, 2018
Industrial Strategy’s four Grand Challenges, focused on long-term global trends which will shape our future: Artificial Intelligence and the Data-Driven Economy, the Future of Mobility, the Ageing Society, and Clean Growth. Logistics will play a crucial role in delivering both.

UK trade with non-EU countries

The USA and China are the UK’s largest non-EU trading partners (figures 3.1 and 3.2).

- The USA is the UK’s top trading partner for exports and third in the top 10 trading partners for imports behind Germany and China.
- Exports of goods to non-EU countries from the UK rose 2.6 per cent from £174.7 billion in 2017 to £179.2 billion in 2018.
- In the same period, imports of goods from non-EU countries to the UK rose 2.8 per cent from £217.0 billion in 2017 to £223.0 billion in 2018.

UK trade with the EU

The EU is a major trading partner with the UK. The following figures are for 2018:

- 48.8 per cent of the goods we exported went to the EU, whilst 54.4 per cent of the goods we imported came from the EU.4
- The EU economy was worth around $19.2 trillion5 with a 513 million population.6
- Exports of goods to the EU from the UK rose 4.1 per cent from £164.1 billion in 2017 to £170.8 billion. In the same period, imports of goods from the EU to the UK rose 2.7 per cent from £258.8 billion in 2017 to £265.7 billion in 2018.
- Seven of the UK’s top 10 trading partners are in the EU.
- Of the £318.6 billion of goods imported from the UK’s top 10 import trading partners7, £211.7 billion comes from those seven EU members (fig 3.1).
- Of the £228.5 billion of goods exported to the UK’s top 10 export trading partners8, £139.9 billion goes to those seven EU members (fig 3.2).
- Top 10 imports to the UK from the EU in terms of commodities estimated at £138.2 billion in 2018 and include road vehicles, electrical machinery medicinal and pharmaceutical products and Telecomms (fig 3.3).

4 UK Trade: December 2018, ONS, 11 February 2019
5 World Economic Outlook database, IMF, October, 2018
6 Tradingeconomics.com, 2019
7 www.uktradeinfo.com, HMRC, December 2018 figures. 11 February 2019
8 www.uktradeinfo.com, HMRC, December 2018 figures. 11 February 2019

3.1 UK top 10 trading partners – IMPORTS

<table>
<thead>
<tr>
<th>2008</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>£ MILLION</strong></td>
<td><strong>£ MILLION</strong></td>
</tr>
<tr>
<td>Germany</td>
<td>43,519</td>
</tr>
<tr>
<td>USA</td>
<td>31,231</td>
</tr>
<tr>
<td>Netherlands</td>
<td>24,764</td>
</tr>
<tr>
<td>France</td>
<td>22,719</td>
</tr>
<tr>
<td>China</td>
<td>21,969</td>
</tr>
<tr>
<td>Norway</td>
<td>20,646</td>
</tr>
<tr>
<td>Belgium</td>
<td>15,817</td>
</tr>
<tr>
<td>Italy</td>
<td>13,408</td>
</tr>
<tr>
<td>Irish Republic</td>
<td>11,631</td>
</tr>
<tr>
<td>Spain</td>
<td>10,066</td>
</tr>
<tr>
<td>Germany</td>
<td>67,933</td>
</tr>
<tr>
<td>China</td>
<td>44,447</td>
</tr>
<tr>
<td>USA</td>
<td>42,560</td>
</tr>
<tr>
<td>Netherlands</td>
<td>41,312</td>
</tr>
<tr>
<td>France</td>
<td>27,465</td>
</tr>
<tr>
<td>Belgium</td>
<td>25,912</td>
</tr>
<tr>
<td>Norway</td>
<td>19,858</td>
</tr>
<tr>
<td>Italy</td>
<td>19,324</td>
</tr>
<tr>
<td>Spain</td>
<td>15,715</td>
</tr>
<tr>
<td>Irish Republic</td>
<td>14,049</td>
</tr>
</tbody>
</table>

Source: Top 25 Trading Partners – Imports and Exports, HMRC, February 2019

3.2 UK top 10 trading partners – EXPORTS

<table>
<thead>
<tr>
<th>2008</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>£ MILLION</strong></td>
<td><strong>£ MILLION</strong></td>
</tr>
<tr>
<td>USA</td>
<td>34,770</td>
</tr>
<tr>
<td>Germany</td>
<td>28,004</td>
</tr>
<tr>
<td>Netherlands</td>
<td>18,992</td>
</tr>
<tr>
<td>France</td>
<td>18,349</td>
</tr>
<tr>
<td>Irish Republic</td>
<td>17,428</td>
</tr>
<tr>
<td>Belgium</td>
<td>12,929</td>
</tr>
<tr>
<td>Spain</td>
<td>9,890</td>
</tr>
<tr>
<td>Italy</td>
<td>9,096</td>
</tr>
<tr>
<td>Switzerland</td>
<td>7,371</td>
</tr>
<tr>
<td>Sweden</td>
<td>4,965</td>
</tr>
<tr>
<td>USA</td>
<td>48,682</td>
</tr>
<tr>
<td>Germany</td>
<td>34,965</td>
</tr>
<tr>
<td>Netherlands</td>
<td>24,869</td>
</tr>
<tr>
<td>France</td>
<td>23,894</td>
</tr>
<tr>
<td>Irish Republic</td>
<td>21,119</td>
</tr>
<tr>
<td>Belgium</td>
<td>20,752</td>
</tr>
<tr>
<td>China</td>
<td>19,150</td>
</tr>
<tr>
<td>Switzerland</td>
<td>14,196</td>
</tr>
<tr>
<td>Italy</td>
<td>10,459</td>
</tr>
<tr>
<td>Spain</td>
<td>10,438</td>
</tr>
</tbody>
</table>

Source: Top 25 Trading Partners – Imports and Exports, HMRC, February 2019
• Top 10 exports from the UK to the EU in terms of commodities estimated at £94.4 billion in 2018 and include petroleum and petroleum products, road vehicles, medicinal and pharmaceutical products and clothing (fig 3.4).

Challenges to international business growth

There is understandably a great deal of uncertainty over our future trading arrangements not only with the EU but with the rest of the world. The FTA Logistics Industry Survey 2018/19 took the opportunity to test the other factors that businesses feel constrain them.

Respondents to the FTA Logistics Industry Survey were asked what were the biggest internal challenges to growing their business internationally. “Maintaining profitability” and “Building the right team” were considered to be the biggest internal challenges to growing internationally (55 per cent of responses) with “Cost of research into new markets” seen as less of an issue (17 per cent of responses) (fig 3.5).

In answer to the question “what do you believe are the biggest external obstacles to growing internationally?” “Market uncertainties caused by Brexit” (61 per cent of respondents) was considered the biggest external challenge to growing internationally at the bottom of the list “Time to research new market opportunities” (11 per cent of responses) regarded as less of an issue by survey participants (fig 3.6).

Road freight activity between Great Britain and Europe

In 2018, almost 3.5 million road goods vehicles travelled from Great Britain to Europe, comprising 2.4 million powered vehicles and almost 1.1 million unaccompanied

9 Road goods vehicles travelling to Europe: 2018, DfT 14 February 2019
10 Powered vehicles: rigid lorries, articulated lorries (tractors and trailers, counted as one unit) and tractor units with no trailer

3.3 Top 10 imports from EU to UK in 2018

<table>
<thead>
<tr>
<th>Merchandise</th>
<th>Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road vehicles</td>
<td>£46.6</td>
</tr>
<tr>
<td>Medicinal and pharmaceutical products</td>
<td>£17.7</td>
</tr>
<tr>
<td>Electrical machinery and appliances</td>
<td>£11.4</td>
</tr>
<tr>
<td>Miscellaneous manufactured articles</td>
<td>£10.9</td>
</tr>
<tr>
<td>General industrial machinery</td>
<td>£10.0</td>
</tr>
<tr>
<td>Telecomms</td>
<td>£9.9</td>
</tr>
<tr>
<td>Office machines and automatic data processing machines</td>
<td>£8.1</td>
</tr>
<tr>
<td>Petroleum, petroleum products</td>
<td>£8.0</td>
</tr>
</tbody>
</table>

Source: Overseas Trade Statistics, HMRC, February 2019

3.4 Top 10 exports from UK to EU in 2018

<table>
<thead>
<tr>
<th>Merchandise</th>
<th>Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum, petroleum products</td>
<td>£19.3</td>
</tr>
<tr>
<td>General industrial machinery</td>
<td>£6.9</td>
</tr>
<tr>
<td>Road vehicles</td>
<td>£17.3</td>
</tr>
<tr>
<td>Electrical machinery and appliances</td>
<td>£6.8</td>
</tr>
<tr>
<td>Medicinal and pharmaceutical products</td>
<td>£10.9</td>
</tr>
<tr>
<td>Power generating machinery and equipment</td>
<td>£6.4</td>
</tr>
<tr>
<td>Other transport equipment</td>
<td>£8.9</td>
</tr>
<tr>
<td>Miscellaneous manufactured articles</td>
<td>£8.7</td>
</tr>
<tr>
<td>Articles of apparel and clothing accessories</td>
<td>£5.4</td>
</tr>
<tr>
<td>Organic chemicals</td>
<td>£4.5</td>
</tr>
</tbody>
</table>

Source: Overseas Trade Statistics, HMRC, February 2019
Overall, this was 0.7 per cent lower than 2017 and 9.9 per cent higher than 10 years ago in 2008.

The majority of powered vehicles (1.9 million, 80.6 per cent) traversed the Dover Strait by ferry from the Port of Dover or via Le Shuttle through the Channel Tunnel and disembarked in France. The majority of unaccompanied trailers (762,000, 71.2 per cent) crossed the North Sea from ports on the east coast of Great Britain and disembarked in the Netherlands, Belgium, Denmark and Germany.

In 2004, the 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 travelling from Great Britain to Europe has fallen gradually, and the number of foreign-registered powered vehicles has increased steadily. Ten years ago, in 2008, the UK had the largest proportion of vehicle registrations with 20.5 per cent of powered vehicles being UK-registered. In 2018, the UK had dropped to second with 14.5 per cent of powered vehicles being UK-registered (fig 3.7).

In contrast, Poland had the second largest proportion of vehicle registrations 10 years ago in 2008 with 11.6 per cent of powered vehicles. In 2018, this had risen to 19.5 per cent of powered vehicles and the largest proportion of any country. Similarly, the proportion of Romanian-registered powered vehicles has risen from 2.3 per cent 10 years ago in 2008 to 10.6 per cent in 2018, making it the third largest country of registration behind Poland and the UK.

---

### Port freight activity with the EU

The EU is the largest international shipping trade route, with 54.6 per cent (207.6 million tonnes) of international tonnage passing through the UK major ports in 2017 destined for EU markets (fig 3.8). This consisted of 116.7 million tonnes of imports and 90.9 million tonnes of exports, both up marginally compared to 2016. Trade with ports in the Netherlands accounted for 30.3 per cent of the EU port traffic passing through the UK major ports in 2017. A total of 62.8 million tonnes was handled to or from ports in the Netherlands, up 2.7 per cent compared to 2016.

### Trade with the Republic of Ireland

The Republic of Ireland is one of the top 10 trading partners with the UK. Trade with the Republic of Ireland consisted of £14.0 billion of imports into the UK and £21.1 billion of exports from the UK in 2018. This is reflected in the volume of UK-registered powered vehicles that cross the Irish Sea from ports on the west coast of Great Britain and disembark in the Republic of Ireland. In 2018, 23.8 per cent of all UK-registered powered vehicles travelling to Europe travelled direct to the Republic of Ireland.

The Republic of Ireland is also the only EU member state to share a land border with the UK. This land border means many businesses operate on an ‘island of Ireland’ basis.
with supply chains designed as if the border is not there.\textsuperscript{12} In 2018, 883,000 road goods vehicles travelled from Great Britain to the island of Ireland, an increase of 1.9 per cent compared to 2017. Further analysis shows:

- 365,000 were powered vehicles, 2.2 per cent fewer than in 2017. Of these, 219,000 disembarked in the Republic of Ireland and 146,000 disembarked in Northern Ireland
- 519,000 were unaccompanied trailers, 4.9 per cent more than in 2017. Of these, 263,000 disembarked in the Republic of Ireland and 256,000 disembarked in Northern Ireland

UK or Irish-registered powered vehicles represented 78.8 per cent of the total number of powered vehicles travelling from Great Britain to the island of Ireland in 2018. However, there are distinct differences in the proportions of UK and Irish-registered powered vehicles that disembarked in the Republic of Ireland compared to Northern Ireland.

- In 2018, 37.8 per cent of the powered vehicles that disembarked in the Republic of Ireland were UK-registered whilst 29.1 per cent were Irish-registered
- In 2018, 89.8 per cent of the powered vehicles that disembarked in Northern Ireland were UK-registered and 7.0 per cent were Irish-registered

The total number of powered vehicles ultimately travelling to the Republic of Ireland after disembarking in Northern Ireland has not been recorded. However, in 2016, it was estimated that 1 million HGVs, or 2,700 a day cross the land border to enter the Republic of Ireland.\textsuperscript{13}

### Exiting the EU – Brexit uncertainty

The Prime Minister, Theresa May’s decision to formally invoke Article 50 on Wednesday 29 March 2017, set the timescale for the UK departing the EU on 29 March 2019.

\textsuperscript{12} Island of Ireland refers to the Republic of Ireland and Northern Ireland combined

\textsuperscript{13} Ireland and the UK – Tax and Customs Links, Irish Tax & Customs Statistics & Economic Research Branch, July 2017

### 3.7 UK-registered vehicles as a proportion of total vehicles travelling to mainland Europe 1993-2018

![Percentage of UK-registered vehicles graph](image-url)
which was subsequently extended. Negotiations for the
UK’s withdrawal from the EU have taken place over the
last two years, but much still remains unknown about the
UK’s future relationship with the EU. As a member state,
the UK has automatically been part of about 40 EU trade
agreements with more than 70 countries.

In order to avoid losing these trade deals if the UK leaves
the EU without a deal, the government wants to replicate
the EU’s trade arrangements. However, so far only six
‘continuity’ deals have been agreed with Israel, Palestinian
Authority, Switzerland, Faroe Islands, Eastern and
Southern Africa and Chile. If the Withdrawal Agreement
is not accepted by Parliament many of the UK’s trade
agreements are at risk of falling away. If the Withdrawal
Agreement is accepted, the EU trade agreements we
currently benefit from would still need to be rolled over for
the end of the transition period. Where this is not possible
the UK would be trading on disadvantageous World Trade
Organization terms.

The business community continues to be affected by
the uncertainty around the terms of UK’s exit from the
EU and in the lead up to the planned departure date,
announcements were made by several industries, not least
the automotive industry, whose supply chain depends on
just-in-time logistics. A no-deal Brexit would result in a
dramatic supply chain disruption and put the flow of goods
from and to the UK at serious risk.

Respondents to the FTA Logistics Industry Survey were
asked about the effect of this period of Brexit uncertainty
on their business. Participants rated the impact of Brexit
uncertainty on five different organisational factors, from
staff retention and recruitment to productivity. Uncertainty
in business tends to have a negative effect and this was
borne out with investment decisions the most adversely
affected (fig 3.9). The second biggest impact was on the
retention and recruitment of EU staff, which is of concern
since one fifth of warehouse workers, van drivers and forklift
drivers employed by survey participants were from the EU
(fig 3.10). Furthermore, when asked about the most pressing
Brexit challenges the top concern was employment status
of EU workers (fig 3.13).

Respondents were also asked about actions and plans
they had made to prepare for Brexit. Overall, the majority
had not undertaken actions to prepare for Brexit with the
exception of one third stepping up contingency plans for
a no-deal Brexit and one fifth stockpiling goods necessary
for their business (fig 3.11). In respect of planning for Brexit,
half of survey participants had held internal discussions
but no specific plan while over one third had not taken any
action (fig 3.12).

Government also had to plan for contingencies in the
event of a no-deal Brexit which in turn required a number
of actions from logistics businesses. Some relate to a
no-deal scenarios, others are required because of Brexit,
whatever the outcome.

Official ‘no-deal’ notices released
Following the EU’s rejection of the Prime Minister’s Brexit
white paper in July, the government published a series
of over 80 technical notices that provided guidance on
how to prepare for Brexit if the UK were to leave the EU
without a deal. Released in batches, beginning in August
and continuing through September and October, the
documents contained information about some of the
potential impacts of a ‘no-deal’ scenario for citizens and
3.11 Actions taken to prepare for Brexit

- Stepped up contingency planning for a ‘no deal’ scenario
- Dealt with warehouse shortages
- Rented more warehouse space
- Stockpiled goods/parts necessary for your business

<table>
<thead>
<tr>
<th>Action</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stepped up planning</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Dealt with warehouse shortages</td>
<td>84%</td>
<td>16%</td>
</tr>
<tr>
<td>Rented more warehouse space</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Stockpiled goods/parts</td>
<td>66%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

3.12 Planning for Brexit

- Held internal discussions but no specific plan
- Not taken any action
- Created a plan for ‘no deal’ Brexit
- Invested in training and up-skilling existing staff
- Prioritised recruitment and training
- Implemented plan for ‘no deal’ scenario
- Planned extra warehouse space
- Engaged consultant specialist/accountant

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Held internal discussions but no specific plan</td>
<td>51%</td>
</tr>
<tr>
<td>Not taken any action</td>
<td>37%</td>
</tr>
<tr>
<td>Created a plan for ‘no deal’ Brexit</td>
<td>17%</td>
</tr>
<tr>
<td>Invested in training and up-skilling existing staff</td>
<td>14%</td>
</tr>
<tr>
<td>Prioritised recruitment and training</td>
<td>11%</td>
</tr>
<tr>
<td>Implemented plan for ‘no deal’ scenario</td>
<td>9%</td>
</tr>
<tr>
<td>Planned extra warehouse space</td>
<td>8%</td>
</tr>
<tr>
<td>Engaged consultant specialist/accountant</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

3.10 Number of EU staff employed

<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forklift drivers</td>
<td>20%</td>
</tr>
<tr>
<td>Van drivers</td>
<td>20%</td>
</tr>
<tr>
<td>Warehouse staff</td>
<td>20%</td>
</tr>
<tr>
<td>Fitters/mechanics/technicians</td>
<td>10%</td>
</tr>
<tr>
<td>HGV drivers</td>
<td>10%</td>
</tr>
<tr>
<td>Transport managers</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

businesses in the UK and identified steps that could be taken to mitigate these effects. On 18 December 2018, Cabinet agreed with the government’s next phase of ‘no-deal’ planning and the need to accelerate these preparations became an operational priority.

Cross-Channel contingencies

Previously, when service disruptions to the Channel crossings occurred, HGV traffic was parked on closed sections of the M20, in a measure known as Operation Stack. In 2015, queues of 4,600 lorries stretched back 30 miles, resulting in an estimated daily cost to the UK economy of £250 million.\(^\text{14}\)

The region of Kent surrounding the M20 is a major freight corridor to the continent. On average, 10,000 lorries pass through the Port of Dover and 5,000 use Eurotunnel every day. A ‘no-deal’ scenario is likely to cause significant customs delays. In light of the impact Operation Stack has had on the rest of Kent’s road network, Highways England was instructed to devise a new approach that would keep the M20 open to all vehicles but still have the capacity to hold port-bound freight safely.

\(^\text{14}\) [https://www.bbc.co.uk/news/uk-england-kent-44169130](https://www.bbc.co.uk/news/uk-england-kent-44169130)
Internationally

In times of subdued economic growth in the UK, businesses should consider the potential opportunities offered by international trade. Despite a global slowdown and rising tensions over tariffs in China and the US, UK exports continued to grow in 2018. Whilst a 2 per cent increase was significantly smaller than the 11 per cent seen in 2017, exports reached an all-time high of £629 billion.

British goods have a reputation for being high-quality, safe and reliable and we have seen record levels of demand from overseas in the years since the referendum, helped by a weak pound. This demand is unlikely to dissipate and the EU remained the UK's most important exporting bloc in 2018. Our recent Trailblazers research shows that the UK's fastest growing businesses still see the EU as presenting the greatest opportunity for international growth.

That said, international trade is not without its complexities and it can be daunting for a business to start or increase their overseas presence, particularly as the future of our relationship with the EU is still not certain. It is here that transport & logistics (T&L) businesses will be able to add real value to their clients by helping them to navigate unfamiliar and sometimes complicated customs processes.

Concerns around the potential for delays at the UK’s borders in the event of a no-deal Brexit has seen an increase in the number of businesses stockpiling goods. Logistics businesses will be key to ensuring that both businesses that have decided to stockpile, and those that must deliver just-in-time supply chains, are able to deliver on their contracts and that their businesses run seamlessly.

Throughout 2018, Santander supported businesses from various UK sectors to start or increase their international trade in markets across the world. Through our global presence, we understand that having the right T&L provider in place can save a business time and money when getting their goods to a new market.

As the UK navigates its way through Brexit and beyond, Santander has the global reach and local presence to help businesses capitalise on a world of opportunity. Santander supports companies throughout their exporting journey, helping them to identify potential opportunities, running trade missions to connect businesses with new customers and suppliers, and introducing business to the services they need when setting up internationally.

Date source: HMRC Trade Info Statistics, 2018

3.13 Most pressing Brexit challenges

<table>
<thead>
<tr>
<th>Order</th>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employment status of EU workers</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>New customs obligations</td>
<td>24%</td>
</tr>
<tr>
<td>3</td>
<td>Access to non-UK workers</td>
<td>17%</td>
</tr>
<tr>
<td>4</td>
<td>Potential lack of permits for cross-border movements of trucks</td>
<td>16%</td>
</tr>
<tr>
<td>5</td>
<td>VAT arrangements after Brexit</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

Following lengthy investigations, Highways England proposed Operation Brock. This new strategy uses a contraflow system on the northbound carriageway of the M20, to allow traffic to travel in both directions between junctions 8 and 9, while Europe-bound goods vehicles over 7.5 tonnes are queuing on the other side. It was deployed in preparation for the EU’s original date, then lifted pending further negotiations.

Trailer registrations and vehicle permits

In a ‘no-deal’ scenario, UK-issued Community Licences will no longer be valid for road haulage businesses to operate in the EU. Several alternative market-access instruments will come into play in a ‘no-deal’ scenario, including ECMT (international road haulage) permits and the so-called EU and UK contingency measures. Businesses have also had to make special, contingency arrangements for other licensing purposes, including driver permits as well as for insurance.

Regardless of whether a Withdrawal Agreement is secured with the EU, from the end of March all commercial-use trailers weighing over 750kg in gross weight, and non-commercial-use trailers weighing more than 3,500kg, must have been registered with the Driver and Vehicle Licensing Agency (DVLA) before they can travel through countries that have ratified the 1968 Vienna Convention on Road Traffic.

The consequence of all these measures has been substantial additional costs and bureaucracy for UK businesses engaged in logistics. Expenditure and effort which directly hits businesses’ bottom line without benefits to their own profitability or the UK’s relative competitiveness.

Date source: HMRC Trade Info Statistics, 2018
UK trade with non-EU countries
The USA and China were the UK’s largest non-EU trading partners in 2018.

UK trade with EU countries
54.4% of the goods we imported in 2018 came from the EU in 2018.
48.8% of the goods we exported in 2018 went to the EU in 2018.
Seven of the UK’s top 10 trading partners are in the EU in 2018.

Top import from the EU to the UK in 2018 was road vehicles.
Top export from the UK to the EU in 2018 was petroleum products.

Challenges to international growth
Internal challenges
55% of respondents to the FTA Logistics Industry Survey felt that ‘maintaining profitability’ and ‘building the right team’ were the biggest internal challenges to growing their business internationally.

External challenges
The biggest external challenge to growing their business internationally for 61% of respondents was ‘market uncertainties caused by Brexit’.

Trade with the Republic of Ireland
The Republic of Ireland is one of the top 10 trading partners with the UK.
23.8% of UK-registered powered vehicles travelling to Europe in 2018 disembarked in the Republic of Ireland.

It is also the only EU member state to share a land border with the UK.

It’s estimated that 1 million HGVs, or 2,700 a day, cross the land border to enter the Republic of Ireland from Northern Ireland.

Exiting the EU – Brexit uncertainty
Uncertainty surrounding Brexit has adversely affected investment decisions and caused concern about retaining and recruiting EU workers.

A fifth have stockpiled goods necessary for their business in preparation for Brexit.

50% held internal discussions but not implemented a plan.
37% had taken no action so far.

Road freight activity between Great Britain and Europe
2.4 million powered vehicles travelled from Great Britain to Europe in 2018.
1.1 million unaccompanied trailers travelled from Great Britain to Europe in 2018.

80.6% of powered vehicles used the Port of Dover or the Channel Tunnel and arrived in France.
71.2% of unaccompanied trailers crossed the North Sea to arrive in the Netherlands, Belgium, Denmark or Germany.

Poland, the UK and Romania are the top 3 countries of registration for powered vehicles travelling from Great Britain to Europe.

The EU is the UK’s largest international shipping trade route with 54.6% of the tonnage that passed the UK’s major ports in 2017.

Uncertainty surrounding Brexit has adversely affected investment decisions and caused concern about retaining and recruiting EU workers.
Connectivity

Good connectivity for all modes of transport is essential for UK trade and for meeting the needs of people and businesses. When surveyed, businesses across the board consistently say that investment in road improvements are their top priority but optimising other modes is also important for complex and specialist supply chains.
Policy actions for government

Once again, we asked respondents to the FTA Logistics Industry Survey 2018/19 to give their view on the priorities among a range of policy actions for government (fig 4.1). As has been the case in previous surveys, investment in road improvements was considered to be the most important thing politicians could do followed by cuts in fuel duty; however, concerns about Brexit were ranked a close third and fourth with responses relating to movement of goods between the UK and the rest of the world (outside the EU), and free and frictionless movement of goods between the UK and the EU, post Brexit, respectively.

Respondents to the FTA Logistics Industry Survey indicated priorities for action by government, industry and FTA. They rated improving industry image, investment in training and apprenticeships and lobbying government as the top three actions industry could take. The top three actions government could take were cutting fuel duty, resolving the Brexit situation and investment in roads, infrastructure and facilities as the top three actions (fig 4.2).

Key Facts

Dover is the UK’s busiest port in Europe, 2,497,804 road haulage vehicles passed through Dover in 2018

Heathrow is the busiest cargo airport in the UK handling 1,685,137 tonnes in 2018

Since 1949 road traffic has increased more than 10-fold from 28.9 to 327.1 billion vehicle miles, largely driven by steady growth in car traffic

Sources: UK Port Freight Statistics: 2017, DfT, August 2018
Road Traffic Estimates: GB 2017, DfT, July 2018
Civil Aviation Authority (CAA) Statistics, 2018
Part of Dover Performance, 2018
Road freight activity

Goods moved by HGVs

According to the Department for Transport’s (DfT) Road Freight Statistics 2017, HGVs moved marginally less goods in 2017 (down 1 per cent) compared to 2016 (fig 4.3). However, the total reported by DfT for 2016 has been significantly revised downward to 148 billion tonne kilometres from 170 billion tonne km, indicating no growth in goods moved. Between 2016 and 2017, the amount of goods lifted by HGVs decreased by 3 per cent to 1.40 billion tonnes and HGVs travelled 3 per cent fewer vehicle kilometres to 18.6 billion vehicle kilometres. Despite the amount of goods being carried falling in 2017, the average length of haul (105 kilometres) for HGVs in 2017 was similar to that in 2016 (104 kilometres). The average length of haul for articulated HGVs (137 kilometres) continues to be longer than that for rigid HGVs (56 kilometres).

This may reflect better vehicle utilisation, with loading factors (the ratio of average load to total capacity) increasing from 57 per cent in 2007 to 60 per cent in 2017 across all categories of HGV (fig 4.4). This is an improvement of 5.3 per cent in 10 years. Empty running among HGVs (where no goods are carried) at 29.9 per cent of total vehicle distance in 2017, has improved slightly, reducing by 1 per cent compared to 2016. HGVs in the UK range from a gross vehicle weight of 3.5 tonnes to 44 tonnes, with articulated vehicles – which tend to be longer, larger, heavier vehicles – carrying more freight. In 2017, articulated vehicles carried 852 million tonnes of freight, whereas rigid vehicles only carried 544 million tonnes of freight. Across 2017, articulated vehicles carried 61 per cent of all goods, similar to previous trends.

Road reliability

According to the FTA Logistics Industry Survey, reliability on the road network declined further, at an even faster rate than previous years, for urban and city roads and motorways in 2018 (fig 4.5; 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. Reducing congestion through improvements to the road network remains vital to freight operators on both local and national roads.

In 2017, HGVs accounted for 5 per cent of traffic, while vans comprised 15 per cent with cars and taxis constituting 78 per cent of all traffic on British roads (fig 4.6).

Air freight activity

UK airports handled 2.64 million tonnes of air freight in 2017 which is 9.6 per cent more than in 2016 and a new record level. Heathrow is by far the largest by volume, handling 1.70 million tonnes in 2017, which is 64.3 per cent
4.2 Top 3 suggestions for Government, industry and FTA

<table>
<thead>
<tr>
<th>Government</th>
<th>Industry</th>
<th>FTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut fuel duty</td>
<td>Improve industry image and promote itself</td>
<td>Lobby government</td>
</tr>
<tr>
<td>Resolve Brexit</td>
<td>Invest in training and apprenticeships</td>
<td>Continue to promote the industry image</td>
</tr>
<tr>
<td>Invest in infrastructure</td>
<td>Lobby government</td>
<td>Continue to support industry</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

4.3 Goods moved by HGVs (billion tonne km)

<table>
<thead>
<tr>
<th>Year</th>
<th>Goods moved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>157</td>
</tr>
<tr>
<td>2009</td>
<td>125</td>
</tr>
<tr>
<td>2016</td>
<td>148</td>
</tr>
<tr>
<td>2017</td>
<td>147</td>
</tr>
</tbody>
</table>

Source: Domestic Road Freight Statistics: UK 2017, DfT, July 2018

4.4 Empty running and load factor for GB-registered HGVs

<table>
<thead>
<tr>
<th>Year</th>
<th>Empty running</th>
<th>Loading factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>9.1%</td>
<td>57.0%</td>
</tr>
<tr>
<td>2017</td>
<td>29.9%</td>
<td>60.0%</td>
</tr>
</tbody>
</table>

Source: Domestic Road Freight Statistics: UK 2017, DfT, July 2018

4.2 Top 3 suggestions for Government, industry and FTA

of the total and over five times more than the next largest airport, East Midlands International. Nearly all (93.4 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.

Airport capacity and world freight traffic

The air freight industry is complex and highly fragmented. The four major sub-markets within air freight are ‘General cargo’, ‘Express’, ‘Specialist and niche products’ and ‘Mail’. The industry is multi-faceted and business models overlap but two principal business models serve all four markets, the forwarder model and the integrator model. One notable feature of the UK air freight market is the huge importance of Heathrow and its surrounding freight facilities, with most forwarders having major consolidation centres in the vicinity of the airport.

Respondents to the FTA Logistics Industry Survey who use air to transport freight stated that there was a substantial increase in airport congestion at UK international airports last year.

Globally, there are signs of a possible economic slowdown. According to the International Air Transport Association (IATA), global air Freight Tonne Kilometres (FTKs) increased by 3.5 per cent in 2018, down from 9.7 per cent in 2017 – with capacity increasing faster than demand. This slowdown in freight demand growth was expected following the boost from the inventory restocking cycle in 2017 but may also reflect renewed signs of weakness in global trade and economic indicators with air cargo volumes expected to increase by 3.7 per cent in 2019.

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 – fell to a 27-month low of 51.5 in December 2018, down from 54.4 the same period the year before. IATA suggests that the new export orders component of the global manufacturing PMI correlates with annual air freight growth which has been below the key 50-mark (ie, into the area normally associated with falling export orders) since September 2018. This suggests that annual FTK growth is unlikely to pick up significantly anytime soon, and indeed, may soften further in the near-term.

North American airlines, which account for 24 per cent of the total world market, experienced the most growth in 2018, with FTK reaching 6.8 per cent growth; this is lower than the 7.9 per cent growth in 2017 (fig 4.7). A

1. Air Freight Market Analysis December 2018, International Air Transport Association (IATA), December 2018
robust performance from the US economy, which has supported jobs growth and consumer spending, has been an important contributor to recent cargo market outcomes for carriers in this region.²

Air cargo by commodity
Gold constitutes nearly a quarter of import and export value for goods carried by air. This is largely driven by the existence of the London Bullion Market, which accounts for over 80 per cent of the global gold trade³ and skews the value of total imports and exports, as well as the value of trade with certain countries (such as Switzerland with its large gold refining industry). Many of the other products with a high share of UK trade value, such as aircraft engine parts and power generating machinery, have a high share of both import and export value, likely reflecting the global nature of these industries’ supply chains and manufacturing processes. One exception is pharmaceuticals, which accounts for a significant proportion of export (but not import) value (fig 4.8).

Rail freight activity
In 2017, approximately 9 per cent of domestic freight was moved by rail. 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 rail freight operators not only compete with each other but also with road hauliers with ‘intermodal’, containerised freight particularly price sensitive to competition from road.⁴ The industry estimates that rail freight now transports more than one in four of the containers that pass-through UK sea ports.

4.7 Air freight market share and growth in 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>World share of air freight market</th>
<th>Market growth in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1.7%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>35.4%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Europe</td>
<td>23.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Latin America</td>
<td>2.6%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Middle East</td>
<td>13.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td>North America</td>
<td>23.7%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

Source: Air Freight Monthly Analysis – December 2018, IATA, February 2019

---

² Air Freight Market Analysis, IATA, December 2018
³ Assessment of the value of air freight services to the UK economy, Steer, 2018
⁴ The role of the railway in Great Britain, Williams Rail Review, February 2019
### 4.8 UK non-EU exports and imports at a 2-digit SITC code level, £ Billion (2018)

#### Exports
- **24%** Gold
- **14%** Power generating machinery
- **9%** Miscellaneous manufacturing
- **9%** Pharmaceuticals
- **5%** Scientific equipment
- **5%** Transport equipment
- **5%** Electrical machinery
- **4%** Industrial machinery
- **4%** Metals
- **2%** Telecomms
- **17%** Other

#### Imports
- **23%** Gold
- **17%** Power generating machinery
- **9%** Telecomms
- **6%** Electrical machinery
- **5%** Miscellaneous manufacturing
- **5%** Transport equipment
- **5%** Office machinery
- **4%** Scientific equipment
- **3%** Metals
- **3%** Industrial machinery
- **19%** Other

Source: Assessment of the value of air freight services to the UK economy, Steer, October 2018

### 4.9 Road and rail network reliability

![Sentiment Index Graph](#)

- **Overall road network**
- **Intermodal**
- **Bulk or semibulk**

Source: FTA Logistics Industry Survey 2018/19
The FTA Logistics Industry Survey found that rail network reliability worsened but at a slower rate in 2018 than 2017 (fig 4.9). As was the case for the previous year, respondents indicated that the level of reliability of roads overall was still below that of rail.

**Rail freight by commodity**

Freight lifted is the mass of goods (tonnes) carried on the rail network, excluding the weight of the locomotives and wagons. Unlike freight moved it takes no account of the distance travelled. The published commodities for freight lifted are ‘Coal’ and ‘Other’, which includes metals, construction, oil and petroleum, infrastructure, domestic intermodal and international. The amount of coal lifted increased by 8 per cent in 2018 compared to 2017, at the same time ‘Other’ commodities fell by 2.7 per cent. The quantity of coal lifted has decreased by nearly 77 per cent since 2008 (fig 4.10).

**UK short sea, coastal and inland shipping activity**

**Short sea shipping**

Short sea shipping means the movement of cargo and passengers by sea between ports situated in the geographical area of Europe or between those ports and ports situated in non-European countries having a coastline on the enclosed seas bordering Europe.

The UK remained the major short sea shipping country in Europe, with a share of more than 14 per cent of the total tonnage of EU short sea shipping in 2016 (316 million tonnes). The UK was followed by the Netherlands with 286 million tonnes and Italy with 283 million tonnes of short shipped goods recorded in their main ports (fig 4.11).

**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 worldwide, with UK ports handling around 5 per cent of total world maritime trade. The performance of the global economy impacts on the success of world seaborne trade. According to the United Nations Conference on Trade and Development (UNCTAD), world seaborne trade gathered pace in 2017, expanding by 4 per cent. This was helped by global economic recovery and the improved merchandise trade. World seaborne trade was estimated at 10.7 billion tonnes, with dry bulk commodities accounting for nearly half the increase. Global industrial activity and manufacturing improved and GDP expanded by 3.1 per cent in 2017, up from 2.5 per cent in 2016, as the global economy experienced a broad upswing, generating positive impacts on seaborne trade.

Seaborne trade, measured in tonne-miles to reflect distances travelled and the employment of ship capacity, increased by 5 per cent in 2017; this was an improvement on the 3.4 per cent increase seen in 2016. Overall tonne-miles generated by seaborne trade in 2018 was an estimated 55,917, some 3.7 per cent lower than the estimated 58,098 billion tonnes for 2017 (fig 4.12) Much of the growth in 2017 was driven by crude oil and coal shipments, which have greatly benefited the shipping industry, given the growth in volumes and distance.

The world fleet rate of growth has been decreasing over the past five years although in 2017 there was a slight increase of 3.3 per cent. On 1 January 2018, the world commercial

---

4.10 Rail freight lifted 2008-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Coal</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>58.70</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>49.21</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>49.04</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>57.92</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>58.98</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>64.91</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>65.83</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>67.42</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>66.31</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>66.48</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>64.70</td>
<td></td>
</tr>
</tbody>
</table>

Source: Freight lifted – Table 13.6, ORR, March 2019

---

5. UNCTAD Review of Maritime Shipping, 2018
fleet consisted of 94,171 vessels, with a combined tonnage of 1.92 billion dwt (deadweight tonnage).

In line with projected growth in world gross domestic product (GDP), UNCTAD expects global maritime trade to grow by another 4 per cent in 2018.

**Port freight activity**

According to the latest analysis by the Department for Transport (DfT), 481.8 million tonnes of freight were handled by UK ports in 2017, down just 0.5 per cent on the previous year. The majority of this (97.7 per cent or 470.7 million tonnes) passed through the major UK ports, down just 0.4 per cent compared to 2016 (fig 4.13).

---

6 UK major ports: ports handling over one million tonnes a year, and a small number of other key ports

---

**4.11 Top 10 short sea shipping European countries in 2016 (gross weight of goods in million tonnes)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Weight (million tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>315.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>286.1</td>
</tr>
<tr>
<td>Italy</td>
<td>283.3</td>
</tr>
<tr>
<td>Spain</td>
<td>199.1</td>
</tr>
<tr>
<td>Germany</td>
<td>177.6</td>
</tr>
<tr>
<td>France</td>
<td>165.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>153.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>143.2</td>
</tr>
<tr>
<td>Greece</td>
<td>100.9</td>
</tr>
<tr>
<td>Finland</td>
<td>91.7</td>
</tr>
</tbody>
</table>

---


---

**4.12 World seaborne trade in cargo (tonne-miles) by type of cargo, 2018 (estimated)**

- **Gas**: 1,766
- **Chemicals**: 1,111
- **Main dry bulks**: 17,729
- **Oil**: 13,809
- **Other (minor bulks and other dry cargo)**: 11,967
- **Container**: 9,535
- **Other Cargo**: 18.8

---

Source: Review of Maritime Transport 2018, UNCTAD, October 2018

---

**4.13 Freight handled by UK major ports (million tonnes) in 2017**

- **Liquid Bulk**: 189.1
- **Roll on – Roll off**: 107.0
- **Lift on – Lift off**: 64.0
- **Dry Bulk**: 91.7
- **Other Cargo**: 18.8

---

Source: UK Port Freight Statistics: 2017, DfT, August 2018
Connectivity

up 2.1 per cent compared to 2016. In the same year, 136.6 million tonnes of international exports left the UK via these major ports, up 0.8 per cent compared to 2016.

Unitised traffic has grown for the fifth successive year, with 24.1 million units of traffic passing through the UK major ports, up marginally (just 10,000 units) compared to 2016. The number of roll-on roll-off units rose by 5,000 units to 18.2 million units but remains 3.6 per cent below the pre-recession peak in 2007. Container traffic also rose marginally, by 5,000 units, to a record-high of 5.9 million units or 10.2 million twenty-foot equivalent units (TEUs).

Water freight in the UK

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 waters from the sea (and which can be further classified as costawise, 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

The total amount of goods lifted for all domestic waterborne freight in 2017 declined by 5 per cent to 97.1 million tonnes. In 2017, the total amount of goods moved for all domestic waterborne freight declined by 18 per cent, to 24.9 billion tonne kilometres. Inland waters traffic accounts for a relatively small proportion of domestic waterborne freight

Logistics leaders talk about multimodal transport

Multimodal transport has been identified as one of the key developments expected to impact the logistics industry over the next decade.

A focus on digital innovation, better connectivity and sustainability over the past year resulted in 2018 being termed the ‘Year of Multimodality’ by the European Union (EU). There are concerns, however, that these breakthroughs in innovation could carry potential dangers; from ‘data disruptors’ to ‘blockchain technology’, a rapid need has been generated for the logistics sector to be prepared.

Members of FTA’s Logistics Leaders Network are already dealing with both these challenges and opportunities on a daily basis. After assembling an expert panel of these members, the individuals were asked what definition the term ‘multimodal’ carries for them. “It depends where you operate.”

Certainly, for those involved with international transport predominantly outside Europe, multimodality is a way of life. The effects of financial and operating efficiencies provided by blockchain technology, and the potential access to new international markets post-Brexit, already exist, or will do imminently.

Whereas domestic operators, whom have fewer uses for these new technologies, experience decreased benefits. Some Network members had made significant progress in identifying partners for load consolidation; indeed, for those moving goods cross-country, potential advantages could be extracted.

However, these same members advised that agreements of this type would require a will to change and compromise, both from the operators involved and the customers required to accept flexible delivery times. Considerations to use rail for long-distance trunking carry significant deadline concerns, especially when facing narrow delivery windows. Operators moving perishable goods warned that the change between modes could slow down the delivery process and increase the handling of goods, potentially leading to greater spoilage rates.

More optimistically, mode-shift advancements could be advantageous to emerging strategies though, such as last mile deliveries. With the growing environmental regulations of urban areas, alternative transport modes will be necessary for the servicing of towns and cities to continue at its current rates. However, even this faces crucial challenges: major investment is required to improve networks, build multimodal hubs and install additional infrastructure, such as electricity charging points, to make these theories practical and financially viable options.

Find out more about the FTA Logistics Leaders Network at http://fta.co.uk/LLN
Road freight activity by HGVs

Goods moved down 1% in 2017 compared to 2016
Good lifted fell by 3% in 2017
Empty running among HGVs (where no goods are carried) improved significantly to 29.9% of total vehicle distance in 2017 compared to 2016

Road network reliability
Respondents to the FTA Logistics Industry Survey indicated that reliability on the road network had worsened in 2018 due to congestion on urban and city roads and motorways

Air freight activity
2.64 million tonnes of freight was handled by UK airports in 2017 up 9.6% on 2016
64.3% of the total tonnes is handled by Heathrow accounting for 1.70 million tonnes in 2017 which is five times more than the next largest airport, East Midlands International

Rail freight activity
9% of domestic freight was moved by rail in 2017
Bulk rail freight volumes (mainly coal and construction materials) were broadly unchanged in 2018 compared to 2017
More than one in four containers passing through UK sea ports are transported by rail in the UK

Rail network reliability
The FTA Logistics Industry Survey found that rail network reliability improved in 2018, in so far as the deterioration was at a slower rate than in 2017. As in previous years, respondents felt that the rail network was more reliable than the road network

Shipping activity
97.7% of the tonnage handled by UK ports in 2017 was managed by the major ports (those handling over 1m tonnes a year)
80% of all port traffic handled by the UK major ports is international
UK imports almost twice as much goods as it exports
The UK was the major short sea shipping (between European ports) country in Europe in 2016 with 14% of the total tonnage moved
Waterborne freight transport (carried on inland waters and around the coast of the UK) fell 5% in 2017 compared to 2016. It has fallen by 51% since 2007 led by declines in one-port and coastwise traffic

Policy actions for government
Respondents to the FTA Logistics Industry Survey indicated that they felt the top three priorities for Government relating to the logistics industry should be:
- Invest in road improvements
- Cut fuel duty
- Ease the movement of goods after Brexit
Labour and skills

An aging workforce, competition for skilled staff and shifting migration patterns, in part in response to Brexit, mean there are continuing challenges in the recruitment and retention of labour for key logistics roles, including HGV drivers and mechanics and warehousing staff. Businesses in logistics need to progress a variety of routes to create a more resilient workforce.
Labour and skills

UK employment

The number of people in work in the UK rose and the number of unemployed people fell in the three months to December 2018, according to UK Labour Market statistics published by the ONS.¹ There were an estimated 32.60 million people in work, 166,000 more than in the three months to September 2018 and 443,000 more than a year ago. The employment rate was 75.8 per cent, up from 75.2 per cent a year ago, and the joint highest since comparable estimates began in 1971.

There were an estimated 1.36 million unemployed people in the three months to December 2018, 14,000 fewer than in the three months to September 2018 and 100,000 fewer than a year ago. The unemployment rate was 4.0 per cent, down from 4.4 per cent a year ago and the lowest since the three months to February 1975.

Claimant count

Meanwhile, the UK Labour Market statistics published by the ONS² also show that the UK claimant count³ was

1 UK labour market: February 2019; ONS, 19 February 2019

² UK labour market: January 2019; ONS, 22 January 2019

³ People out of work claiming Jobseeker’s Allowance or Universal Credit

KEY FACTS

Top 3 job shortages in UK logistics
1 Storage and warehouse managers
2 HGV drivers
3 Importers, exporters

88% of UK logistics workers earn under £30,000

UK logistics jobs by skill level for nationality groupings

<table>
<thead>
<tr>
<th>Level</th>
<th>UK</th>
<th>European Union EU2</th>
<th>European Union EU8</th>
<th>European Union EU15</th>
<th>All other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 574,812 (25%)</td>
<td>1 39,089 (51%)</td>
<td>1 78,710 (43%)</td>
<td>1 16,130 (27%)</td>
<td>1 19,081 (42%)</td>
</tr>
<tr>
<td>2</td>
<td>987,981 (44%)</td>
<td>2 34,523 (45%)</td>
<td>2 88,489 (48%)</td>
<td>2 31,644 (53%)</td>
<td>2 16,763 (37%)</td>
</tr>
<tr>
<td>3</td>
<td>266,465 (12%)</td>
<td>3 1,483 (2%)</td>
<td>3 8,015 (4%)</td>
<td>3 3,796 (6%)</td>
<td>3 4,455 (10%)</td>
</tr>
<tr>
<td>4</td>
<td>440,878 (19%)</td>
<td>4 1,494 (2%)</td>
<td>4 9,770 (5%)</td>
<td>4 8,597 (14%)</td>
<td>4 5,203 (11%)</td>
</tr>
</tbody>
</table>

Source: FTA Skills Shortage Report, November 2018
higher (up 2.1 per cent) in December 2018 compared to November 2018, while the number of HGV drivers claiming Jobseeker’s Allowance\(^4\) was down 10.3 per cent in the same period. The number of HGV drivers claiming Jobseeker’s Allowance was 260 in December 2018, down a third from a year ago and continuing the overall downward trajectory; this was the lowest level since comparable records began in 2005. In comparison, the claimant count for the whole of the UK was 1,016,300, up 21.6 per cent from a year ago.

This worrying statistic shows that labour market trends for HGV drivers in the UK are out of step with general labour market trends. On the surface, this may seem like good news but, in reality, there is an ever-shrinking pool of active jobseekers from which to recruit drivers. The current HGV drivers’ claimant count is 98.3 per cent lower than the peak of 15,255 in March 2009 during the economic downturn, more than double that of the whole of the UK in the same period.

### Employment in UK logistics

Analysis for the FTA Skills Shortage Report,\(^5\) for Q2 2018, shows that the wider logistics industry employed 2.66 million people, of which 12 per cent were non-UK EU nationals. Around 13 per cent of HGV drivers were EU nationals, down slightly from 14 per cent a year earlier.

Non-US EU driver numbers fell slightly by 1,000, while the overall total of HGV deliveries increased by 21,000 (fig 5.1). While there has been an increase in the total number of jobs for most logistics vocations, there continues to be a decrease in the count of transport managers and directors, reflecting the continuing downward trend in the total number of operator licences.\(^6\)

The number of people employed in logistics increased by around 66,000 or 2.5 per cent in the first six months of 2018 (fig 5.2). The rate of growth has however slowed from the 100,000 observed at the end of Q2 2017.\(^7\) The most significant increases were for warehouse and storage occupations (warehouse and storage managers, forklift drivers and elementary storage occupations), driven by rising demand for warehouse space from online retailing. The popularity of online shopping has contributed to record breaking take-up of warehouse space in the first half of 2018.\(^8\) The main driver of demand was the online retail sector, which represented 32 per cent of overall take-up. The second largest sector was 3PLs providers (who also serve online retailers), with 22 per cent of take-up.

Analysis of Labour Force Survey data\(^9\) shows that in the first six months of 2018 compared to the end of 2017, there were significant changes within the age bands of HGV drivers (fig 5.3). There was reduction of around 13,000 drivers aged 35 and over which was offset by an increase of around 17,000 in the number of drivers under 35.

\(^4\) https://www.nomisweb.co.uk/, ONS 22 January 2019
\(^5\) FTA skills report, November 2018
\(^6\) Traffic Commissioners annual report 2017 to 2018, August 2018
\(^7\) FTA Skills Shortage Report, November 2018
\(^8\) Logistics Property Perspective, H1 2018, CBRE
\(^9\) FTA Skills Shortage Report, November 2018

### 5.1 Selected logistics skills indicators and occupations

<table>
<thead>
<tr>
<th></th>
<th>Q2 2017</th>
<th>Q2 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGV drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HGV drivers employed</td>
<td>302,000</td>
<td>323,000</td>
<td>▲</td>
</tr>
<tr>
<td>Average age of HGV driver</td>
<td>48.3</td>
<td>47.8</td>
<td>▼</td>
</tr>
<tr>
<td>Percentage of HGV drivers who are EU nationals</td>
<td>14%</td>
<td>13%</td>
<td>▼</td>
</tr>
<tr>
<td>Gross hourly pay</td>
<td>£11.30</td>
<td>£11.54</td>
<td>▲</td>
</tr>
<tr>
<td>Drivers claiming jobseekers allowance</td>
<td>455</td>
<td>353</td>
<td>▼</td>
</tr>
<tr>
<td>Other selected occupations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport managers and directors in employment</td>
<td>91,000</td>
<td>75,000</td>
<td>▼</td>
</tr>
<tr>
<td>Professional van drivers in employment</td>
<td>250,000</td>
<td>276,000</td>
<td>▲</td>
</tr>
<tr>
<td>Percentage of van drivers who are EU nationals</td>
<td>12.0%</td>
<td>10.7%</td>
<td>▼</td>
</tr>
<tr>
<td>Forklift drivers in employment</td>
<td>88,000</td>
<td>90,000</td>
<td>▲</td>
</tr>
<tr>
<td>Percentage of forklift drivers who are EU nationals</td>
<td>21.6%</td>
<td>25.4%</td>
<td>▲</td>
</tr>
</tbody>
</table>

Source: FTA Skills Shortage Report, November 2018
the age of 35. This change in demography indicates that the industry is increasingly relying on recruitment of younger, newly qualified drivers to replace retirees and older drivers who are moving away from the industry.

The FTA Logistics Industry Survey 2018/19 polled respondents about the proportion of their staff who are EU nationals. According to respondents, the vocations with the largest proportion of EU workers were warehouse staff, forklift drivers and van drivers, where they represent one in five staff (fig 5.4). These vocations were followed by HGV drivers and transport managers. Respondents indicated that the proportions of EU staff were more or less in line with national estimates, with the exception of transport managers and van drivers where national Labour Force Survey estimates are divided between courier and van driver vocational categories.

The FTA Logistics Industry Survey asked respondents to rate their anticipation of staff shortages in 2019 across key logistics vocations. Compared to recent years, there was an increase from 10 per cent in 2018 to 15 per cent of respondents anticipating an inability to fill HGV driver vacancies (fig 5.5). Of the key logistics vocations, fitter, mechanic and technician roles were anticipated as being the hardest to fill, with 18 per cent stating that they anticipate unfilled vacancies in this category. Overall, forklift driver jobs were again expected to be the easiest to recruit with 52 per cent of respondents expecting no recruitment problems at all.

Respondents to the FTA Logistics Industry Survey were asked about the measures they were taking to address and improve recruitment and retention of drivers. The most popular measure was funding driver training programmes, followed by promoting driving and other logistics professions to young people (fig 5.6).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment (thousands)</th>
<th>By nationality (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Logistics sector</td>
<td>All other sectors</td>
</tr>
<tr>
<td>Purchasing managers and directors</td>
<td>7</td>
<td>53</td>
</tr>
<tr>
<td>Managers and directors in transport and distribution</td>
<td>33</td>
<td>42</td>
</tr>
<tr>
<td>Managers and directors in storage and warehousing</td>
<td>35</td>
<td>80</td>
</tr>
<tr>
<td>Importers and exporters</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Transport and distribution clerks and assistants</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>Heavy goods vehicle drivers</td>
<td>202</td>
<td>121</td>
</tr>
<tr>
<td>Van drivers</td>
<td>94</td>
<td>182</td>
</tr>
<tr>
<td>Fork-lift truck drivers</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Postal workers and couriers</td>
<td>129</td>
<td>33</td>
</tr>
<tr>
<td>Elementary storage occupations</td>
<td>217</td>
<td>271</td>
</tr>
<tr>
<td>Other occupations</td>
<td>999</td>
<td>N/A</td>
</tr>
<tr>
<td>TOTALS</td>
<td>1,781</td>
<td>883</td>
</tr>
</tbody>
</table>

Source: FTA Skills Shortage Report, November 2018
HR priorities for transport staff

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 5.7).

Board priorities linked to transport and logistics

Board priorities for 2019 in relation to corporate social responsibility were surveyed. Logistics companies tend to favour operational and safety issues over promoting the industry through community outreach programmes (fig 5.8). 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 improving safety and reducing accidents as the highest priority.

Driver facilities

The logistics sector places significant emphasis on the condition of infrastructure and investment in road networks but the wellbeing of drivers themselves should not be forgotten. Regulatory requirements mean that goods vehicle drivers must take breaks and rests during their working weeks. There is a growing understanding of the importance of providing satisfactory parking and hygiene facilities in which to do so. This is of particular importance now, with driver shortages already at considerably high levels and Brexit likely to bring an even greater decrease in available staff, presenting challenges for all businesses hoping to attract and keep drivers.

Transport Focus released a report that revealed key concerns of commercial drivers, including the lack of overnight security provision and the overall value for money represented by overnight parking fees. Drivers also reported difficulties in the availability of HGV parking, particularly during the day, as well as insufficient parking.

The Department for Transport (DfT) promised nationwide improvements to commercial drivers’ facilities over a year ago, though this commitment has yet to be fulfilled. There are already several regions, such as the Midlands, East of England and South East, where lack of lorry park provision is at critical levels, forcing drivers to park up along the roadside. Local authorities and national government need to collaborate to ensure drivers can take the rest they need when they need it, especially if the logistics sector hopes to continue supplying goods up and down the country at its current capacity and retain skilled labour.

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; these companies can then spend their contributions on apprenticeship training. Smaller companies can access the
The Office for Budget Responsibility (OBR) revised up apprenticeship levy forecasts relative to March 2018 to £2.7 billion in 2017/18 and £2.8 billion in 2018/19. This revision was largely due to unexpectedly strong receipts so far in 2018/19. Over the four-year period 2017/18 to 2020/21, the levy is expected to bring in £11.4 billion in receipts, which is 6.5 per cent higher than forecast in March (or an increase of £700 million). However, this figure is £200 million lower than original expectations of £11.6 billion forecast in November 2015.

There has been a significant decline in the number of people beginning apprenticeships since the levy was introduced, and the government appeared to drop its target of 3 million apprenticeship starts by April 2020 in August.

In England, there were 375,800 apprenticeship starts in the 2017-18 academic year (August–July), which is a drop of 24 per cent from 494,400 in 2016-17.¹¹ Year-on-year, the overall number of logistics apprenticeship starts fell by 37 per cent. Driving goods vehicles apprenticeships (combined with new framework ‘LGV driver’) fell by 30 per cent at the same time from 5,170 to 3,600 starts (fig 5.9).

The Chancellor for the Exchequer, Philip Hammond, announced a £695m apprenticeship initiative on Budget day, 29 October 2018:

- £240m to help small firms hire apprentices, which means small-to-medium enterprises (SMEs) will have to contribute 5 per cent to the training rather than 10 per cent; the government will pay the remaining 95 per cent.
- £450m available to enable levy paying employers to transfer up to 25 per cent of their funds to pay for apprenticeship training in their supply chains.
- £5m to the Institute for Apprenticeships and National Apprenticeship Service in 2019-20, to identify gaps in the training provider market and increase the number of employer-designed apprenticeship standards available to employers. All new apprentices will start on these new, higher-quality courses from September 2020.

Respondents to the FTA Logistics Industry Survey were asked about the usefulness of the apprenticeship levy. Nearly 80 per cent found it of useful to some degree while one fifth stated that it was not at all useful (fig 5.10), and the majority (91 per cent) stated that the funding should be turned into a ‘skills levy’ so that funds could be spent on a wider array of training needs.

### Wages growth

Contributors to FTA’s Manager’s Guide to Distribution Costs indicated that basic and gross pay for staff in key transport roles rose by 3.0 per cent in 2018,¹² this was 0.3 per cent.

---

¹¹ Apprenticeships and traineeships, Department for Education, January 2019
5.10 Apprenticeship levy funding

“How would you rate the usefulness of apprenticeships funded under the Apprenticeship Levy?”

Not at all useful: 20.2%
Some limited use: 32.7%
Fairly useful: 31.2%
Highly useful: 14.6%
The entire solution to skill shortages: 1.2%

“Do you think the Apprenticeship Levy should be turned into a Skills Levy so that funds can be spent on a wider array of training needs?”

No: 9.2%
Yes: 90.8%

Source: FTA Logistics Industry Survey 2018/19

5.11 Percentage of respondents changing staff gross pay

<table>
<thead>
<tr>
<th>Change in Pay</th>
<th>Gross Pay 2018</th>
<th>Gross Pay 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase by 6%+</td>
<td>3.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Increase by 1%-5%</td>
<td>3.2%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Freeze</td>
<td>70.6%</td>
<td>66.8%</td>
</tr>
<tr>
<td>Reduce by 1%-5%</td>
<td>0.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Reduce by 6%+</td>
<td>27.2%</td>
<td></td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19

Logistics leaders talk about Labour shortages

For those working in logistics, the recruitment and retention of staff is a high concern. Consistently, the sector has struggled to obtain sufficiently trained workers or ensure satisfactory wellbeing throughout the working day to retain them.

With the oncoming arrival of Brexit expected to exacerbate this issue, FTA asked an expert panel from its Logistics Leaders Network about the outlook of 2019’s labour shortage and what consequential actions they advise.

Despite fluctuating exchange rates resulting in some Polish workers returning to their country of origin, workforces remain dominated by staff from Eastern Europe. When recruiting from the European Union (EU), managers found suitability for the roles on offer often hindered by poor training or English-language skills.

When attracting a UK workforce, the panel believed improvements in the sector’s image and better working conditions and training would have a greater likelihood of success than increased wages. A dramatic change in the way logistics roles are viewed and treated across wider industry is necessary to enact a societally accepted professionalisation of these working positions. It was felt drivers in particular could be treated like “second class citizens”, acting as a significant deterrent.

The availability and price of insurance for HGV drivers under 21 also needs addressing. School leavers are often asked to wait until their early twenties before learning to drive professionally, due to the high costs associated with starting before this age, resulting in many choosing to enter alternative careers, such as agriculture, instead.

Decisions enacted by local government also plays a crucial element. While consolidating large distribution hubs away from heavily-populated areas appears to be efficient planning, it results in workers having to travel increasing distances to their place of employment, and it is these lengthy commutes deterring workers from applying for logistics roles.

Ultimately, the expert panellists believed the overall challenge is to balance workers’ requirements for greater job flexibility and shift pattern options, with consumers’ appetite for low prices, next-day deliveries and shops fully stocked with fresh goods 24 hours a day. As one member joked: “If all the retailers closed on a Sunday, we just wouldn’t need so many drivers.”

More optimistically, however, it could be future technology that holds the breakthrough to attracting the forthcoming workforce. As HGVs become increasingly sophisticated, they also become more interesting and exciting to drive. Some panellists felt the high-tech cabs of the future could help to turn the recruitment tide, as role requirements would hold more attraction to the “PlayStation Generation”.

Find out more about the FTA Logistics Leaders Network at http://fta.co.uk/LLN
Employment trends

As an industry, the logistics sector faces its own unique challenges and skills requirements, though its overall trends still often reflect those of the wider country. Currently, UK employment is being affected by two major growing themes: the rise of ‘flexible’ working and automation. Both have the potential to significantly impact the logistics industry (or are already), for employees themselves and the kinds of roles workers are employed in.

Self-employment has seen a rapid increase over the last 15 years, likely due to difficulties in finding suitable jobs, the demand for more fluid lifestyles and the technological advances that make starting a business easier and more attractive than ever before. Certainly, ‘flexi-working’ has drastically impacted the number of self-employed workers in the logistics sector. ‘Flexible working’ is not easily defined, though unspecified hours, working part time or from home are all believed to fall under this term.

In the logistics industry, the rise of self-employed ‘flexi-workers’, often referred to as the ‘gig economy’, has seen a drastic shift in delivery drivers and van users. A Department for Business, Energy and Industrial Strategy (BEIS) 2018 publication reported that 4.4 per cent of the Great British population had worked in the gig economy over the past year (roughly 2.8 million people). Providing courier services was the most common type of gig-economy activity, with 42 per cent having carried out courier services.

Conversely, the days of the delivery driver may be numbered. Some industry experts believe technological advances, including delivery drones and autonomous vehicles may become normality between 2030 and 2050, replacing conventional drivers on the road. This is a situation that could be replicated in several areas of the transport industry, as drones are also being designed with capabilities in warehousing needs, security and even vehicle inspection.

However, whether drones completely replace delivery drivers or simply assist in a demanding market is yet to be seen. City populations are expanding at a rate faster than current infrastructure can keep up with, with the increase in people demanding more goods and services to be delivered to their homes, traffic and the resulting congestion is forcing operators to put more vehicles on the road. The continuing rise of online shopping and the subsequent surge of overnight, or even same day, delivery promises are putting additional pressure on logistics companies and their staff, especially as the delivery sector faces significant staff shortages.

Since 2017, when the UK voted to leave the EU, employment surrounding Brexit has also seen a vast amount of movement in the industry sector. Import and export jobs like customs brokers and international freight forwarders are in much higher demand, with at least one new apprenticeship created to satisfy this demand, while the number of EU workers in the UK has fallen. The Migration Advisory Committee (MAC) released proposals for a new migration system, calling for migrant workers to hold at least a Regulated Qualification Framework (RQF) level of six and a minimum salary of £30,000. The majority of logistics sector roles are less than RQF three, and paid less, with around 24 per cent of warehouse workers and 14 per cent of HGV drivers holding nationalities in European Economic Area (EEA) countries. These roles are already suffering worker shortages, so the loss of international workers will only widen the gap between need and availability.

The current uncertainty of the future of the UK/EU trade relationships and the future British economy has also made some companies reluctant to invest in new vehicles, equipment or training during the past year, which could have significant economic impacts in the near future.

Employee well-being

An increased focus on the issue of wellbeing in the workplace has become a prominent topic in the media recently, particularly in respect to mental health. Poor mental health is now the number one reason for staff absence, and What Works Wellbeing has linked employee wellbeing to better business outcomes, such as lower employee turnover, reduced sick days and improvements in performance.

In addition, the Office of National Statistics (ONS) published findings that reveal three out four suicides are committed by men, accounting for the biggest cause of death for men aged under 45. The logistics industry employees a high proportion of men, and official statistics show one in five van drivers describe their current mental health as poor or very poor. The charity Mind offers regular courses for managing mental health at work, and the Campaign Against Living Miserably (CALM) has partnered with Mercedes Benz to improve male drivers’ attitudes towards speaking out about negative mental wellbeing.

---

14 UK labour market: February 2019, ONS, 19 February 2019
15 The characteristics of those in the gig economy, BEIS, 2018
17 Suicides in the United Kingdom, ONS, 2017
18 https://www.mind.org.uk/workplace/training-consultancy/
Employment In UK Logistics

Respondents to the FTA Logistics Industry Survey revealed one in five warehouse staff, forklift drivers and van drivers are EU citizens and one in ten HGV drivers are EU citizens.

18% anticipate unfilled fitter/mechanic/technician roles in 2019
15% anticipate unfilled HGV driver roles in 2019

The wellbeing of drivers is paramount in order to attract and retain drivers. Drivers have reported issues with driver facilities including security, the lack of HGV parking particularly during the day and the cost of overnight parking fees.

Apprenticeships

The number of logistics apprenticeship starts fell 37% in 2017/18 compared to 2016/17.
80% of respondents to the FTA Logistics Industry Survey were generally positive about the usefulness of the Apprenticeship Levy but a fifth stated it was not useful at all.
91% felt the Apprenticeship Levy should be turned into a ‘skills levy’ so that funds could be spent on a wider array of training needs.

Wages growth

Contributors to FTA’s Manager’s Guide to Distribution Costs indicated gross pay for staff in key transport roles rose by an average of 3% in 2018.

70% of respondents to the FTA Logistics Industry Survey had increased gross pay for transport/logistics staff by between 1% and 5% in 2018 and just over two-thirds anticipating doing the same in 2019.

Board priorities linked to transport and logistics

Top board priorities are site safety, reducing road accidents and staff security.

The logistics industry is recruiting younger drivers; the number under the age of 35 increased by 35% in 2018.

The number of people starting “Driving goods vehicles” apprenticeships has fallen 30 per cent in 2017/18.
Sustainability

Logistics faces often conflicting demands in delivering goods and services to customers. On the one hand, it must reconcile some of the biggest trends of our time – increasing sustainability, responding to the digital economy and e-commerce – on the other coping, in spite of disruptive influences such as Brexit. Meeting these needs changes the way in which vehicles are selected and deployed and goods are stored and distributed.
Sustainability

Over 80% of the world’s population lives in places where air quality exceeds World Health Organisation (WHO) guideline limits.

In the UK alone, around 40,000 premature deaths per year are due to respiratory, cardiovascular and other illnesses associated with pollutants.

The UK annual public health costs of air pollution are more than £20 billion.

UK greenhouse gas emissions

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>26%</td>
</tr>
<tr>
<td>Energy supply</td>
<td>25%</td>
</tr>
<tr>
<td>Business</td>
<td>17%</td>
</tr>
<tr>
<td>Residential</td>
<td>14%</td>
</tr>
<tr>
<td>Waste management</td>
<td>4%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

Air quality and carbon

Air quality has become a significant area of concern and policy development in government over the past few years, both in response to legal action compelling it to act on vehicle and other emissions and inter-governmental debates.

Defra’s Pollution Climate Mapping (PCM)1 model estimates the average annual nitrogen dioxide (NO₂) concentration for over 9,000 road links in the UK. The links with the highest average annual concentration in each reporting zone are then used to determine which zones are in compliance with annual NO₂ concentration limits. Fig 6.1 shows the estimated forecast for 2019 assuming no further action is taken. The majority of areas (24 out of 28) exceed legal limits (over 40 micrograms per cubic metres) for nitrogen oxide emissions.

---

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

Source: Reducing air pollution in the UK: Progress report, Royal College of Physicians, 2018

UK greenhouse gas emissions, final figures, BEIS, 2018

Source: Logistics – The Property Perspective H2 2018, CBRE, 2019
Actions to improve air quality

London schemes

Logistics businesses face a multiplicity of schemes and emissions standards which must be taken into account in vehicle procurement and planning. The biggest and earliest new generation air quality scheme is the Ultra Low Emission Zone (ULEZ) which, as of 8 April 2019, started to be phased in. The ULEZ occupies the same jurisdiction as the Congestion Charging Zone (CCZ) but runs 24/7, every day of the year and will expanded even further in 2021.

In addition to this, the City of London Corporation has announced plans to turn parts of the Square Mile into a zero-emission zone by 2022 and cut the speed limit to 15mph. The intention is to follow this with a wider zero-emission zone across central London, aiming to reduce motor traffic by a quarter by 2030 and half by 2044.

Other announced air quality schemes include the Clean Air Villages and Ultra-Low Emission Vehicle (ULEV) Streets proposals. The Clean Air Villages programme, instigated by the Cross River Partnership, has secured the second
largest share of the Department for Environment, Food and Rural Affairs’ (DEFRA) Clean Air Grant, to reduce emissions at 10 air quality hotspots across five London boroughs. Hackney has already introduced ULEV zones to several of its streets, restricting access at certain times only to vehicles emitting less than 75g of carbon dioxide per kilometre (CO₂/km).

With so many different proposals from various governing bodies, there are concerns London could become a complex patchwork of varying regulations for freight. In March 2019, the Mayor of London published his Freight Action Plan which, in addition to the ULEZ, includes consideration of the London Lorry Control Scheme and HGV Safety Permit Scheme (see Chapter Seven). FTA and others have called for the appointment of a dedicated Freight Commissioner to oversee the implementation of these policies, to ensure consistency across the city and prevent unintended consequences.

English Clean Air Zones

In 2017, the Westminster government instructed 33 local authorities to identify any measures that could reduce nitrogen dioxide (NO₂) emission levels on roads to make them compliant with targets ordered by the Supreme Court. These authorities were to report their preferred options by the end of 2018. Since then, five cities have been directed to implement Clean Air Zones (CAZs), and several more have followed suit.

Of the original five – Leeds, Nottingham, Derby, Southampton and Birmingham – only Leeds and Birmingham have confirmed the implementation of a CAZ, both setting the daily fee for HGVs at £50 and both due to come into force in January 2020. The others have opted for alternative air quality measures instead.

Over the past year, at least ten other cities have released plans for a future CAZ, though some of these have also been rejected since initial consultations. The majority of zones look set to include HGVs, while only about half are suggesting incorporating vans. An additional 23 areas are set to follow in the next couple of years (fig 6.2).

Other low emission schemes

In Scotland, Glasgow already has a low emission zone in operation for local service buses, but the city has confirmed this will extend to all other vehicles on 31 December 2022. Aberdeen, Edinburgh and Dundee have all released proposals that echo Glasgow’s scheme.

Following the UK Government’s Plan for Tackling Roadside Nitrogen Dioxide Concentrations in 2017, which set the initial Directive for Clean Air Zones, Welsh Government published an additional supplement at the end of 2018. This outlined the action plan for five sites on the Welsh Government Managed Road Network and in two Welsh local authority areas. Part of this includes making temporary 50mph speed limits, which were brought in at five sections of the Motorway and Trunk Road Network last June, on a permanent basis, alongside the introduction of variable diversion routes in Newport. However, the city of Cardiff rejected proposals for a CAZ.

Oxford City Council is currently consulting on a Zero Emission Zone. This would consist of three zones, gradually widening over time, that would be phased in over 15 years between 2020 and 2035. At the beginning of 2019, there were no zero-emission options for HGVs and only a handful of vans that met the less than 75g/km of carbon dioxide (CO₂) proposed standard, highlighting the need for a nationally accepted definition of freight terms such as ‘Ultra Low Emission Truck’ and ‘Zero Emission Vehicle’.

Alternative sources of fuel

30 per cent of respondents to FTA Logistics Industry Survey 2018/2019 indicated that they were considering using alternative fuel sources for their van or HGV fleets in 2019, while 70 per cent were not. Of those who intend using alternative fuels, the majority (71 per cent) will use electricity (for use by Battery Electric Vehicles (BEV)) for van fleets with natural gas and biodiesel the top choice for HGV fleets, chosen by 47 per cent of respondents (fig 6.3).

Fleet composition

European emission standards, defined in a series of EU directives, indicate the progressive acceptable limits for exhaust emissions of new vehicles sold in the European Union and EEA member states. The current standard is Euro VI for HGVs, introduced on 31 December 2012, and Euro 6 for vans which began in September 2015.

Respondents to the FTA Logistics Industry Survey represent businesses operating 35,683 HGVs (> 3.5 tonnes GVW), 93,069 light commercial vehicles (≤ 3.5 tonnes GVW) and 19,465 trailers. Over 36 per cent of the van fleet is Euro 6 compliant with 40 per cent of the HGV fleet meeting the Euro VI standard (fig 6.4).

Road to Zero

In 2018, the UK Government published its Road to Zero Strategy, outlining ways the government will support the long-term transition to zero emission road transport and how it will reduce emissions from conventional vehicles during this process. The strategy considers the opportunities and risks likely to present until at least 2050, but its focus is on the foundations the UK can lay now in preparation of the transition.

Part of this strategy involved the inception of the Mayor of London’s Electric Vehicle Infrastructure Taskforce. This group is comprised of representatives from business, energy, infrastructure, government and London boroughs,
### SUSTAINABILITY

#### 6.2 Clean air zones

<table>
<thead>
<tr>
<th>Location</th>
<th>Implementation date</th>
<th>Charging Scheme Class</th>
<th>HGV</th>
<th>Vans</th>
<th>Cars</th>
<th>Times of zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leeds</td>
<td>6 January 2020</td>
<td>B</td>
<td>£50</td>
<td>x</td>
<td>x</td>
<td>24/7, 365 days a year</td>
</tr>
<tr>
<td>Nottingham</td>
<td>Rejected proposal for CAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derby</td>
<td>Rejected proposal for CAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southampton</td>
<td>Rejected proposal for CAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birmingham</td>
<td>January 2020</td>
<td>D</td>
<td>£50</td>
<td>£8</td>
<td>£8</td>
<td>24/7, 365 day a year</td>
</tr>
<tr>
<td>Sheffield</td>
<td>January 2021</td>
<td>C</td>
<td>£50</td>
<td>£10</td>
<td>x</td>
<td>?</td>
</tr>
<tr>
<td>Bath</td>
<td>end of 2020</td>
<td>C</td>
<td>£100</td>
<td>£9</td>
<td>x</td>
<td>?</td>
</tr>
<tr>
<td>Middlesborough</td>
<td>Rejected proposal for CAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater Manchester</td>
<td>HGVs, buses, taxis and PHVs – 2021</td>
<td>D</td>
<td>£100</td>
<td>£7.50</td>
<td>x</td>
<td>?</td>
</tr>
<tr>
<td>York</td>
<td>by 2020</td>
<td>Individual buses that enter five times or more per day</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Coventry</td>
<td>Rejected proposal for CAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newcastle, Gateshead and North Tyneside</td>
<td>January 2021</td>
<td>D</td>
<td>£50</td>
<td>£12.50</td>
<td>£12.50</td>
<td>?</td>
</tr>
<tr>
<td>Slough</td>
<td>?</td>
<td>B or C</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Cardiff</td>
<td>Rejected proposal for CAZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### OTHER LOW EMISSION SCHEMES

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Location</th>
<th>Implementation date</th>
<th>Charging Scheme Class</th>
<th>HGV</th>
<th>Vans</th>
<th>Cars</th>
<th>Times of zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra-Low Emission Zone (ULEZ)†</td>
<td>London</td>
<td>8 April 2019</td>
<td>D</td>
<td>£100</td>
<td>£12.50</td>
<td>£12.50</td>
<td>24/7, 365 days a year</td>
</tr>
<tr>
<td>Low Emission Zone</td>
<td>Glasgow</td>
<td>31 December 2022</td>
<td>Ban</td>
<td>Banned not charged</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Emission Zone</td>
<td>Aberdeen</td>
<td>?</td>
<td>To echo Glasgow's scheme</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Ultra-Low Emission Vehicle Streets</td>
<td>Hackney</td>
<td>September 2018</td>
<td>Ban</td>
<td>Banned not charged</td>
<td>Weekdays (7-10am and 4-7pm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Zero Emission Zones</td>
<td>City of London</td>
<td>by 2022†</td>
<td>D</td>
<td>Banned not charged</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero Emission Zone</td>
<td>Oxford</td>
<td>2020-2035</td>
<td>All vehicles except ULEV (undefined)</td>
<td>Banned not charged</td>
<td>10am-6pm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

†Standards for this will be tightened in October 2020 and 2021

†12 month plot scheme likely to be postponed

Source: Clean Air Zones and air quality schemes member briefing note, FTA, April 2019
including FTA, with the purpose to consider the multiple barriers to the uptake of electric vehicles, produce a plan to encourage electric vehicle adoption in London and look at the infrastructure required to ensure adequate provision until 2025. Several workshops have been held to feed into the development of a delivery plan, due to be published in the summer of 2019.

**Category B licence concession for alternatively fuelled vehicles**

Last summer, the UK government implemented legislation that allows the holder of a category B driving licence to drive a vehicle up to 4,250kg, and be exempt from operating licensing, if it is alternatively fuelled. The concession requires drivers to undertake five hours of training first, delivered by an instructor on either the National Register of LGV Instructors or the National Vocational Driving Instructors Register, though the Department for Transport (DfT) has yet to enable the necessary training to be undertaken or recorded. Therefore, no driver or operator has been able to benefit from this licensing measure yet.

To further complicate matters, an EU directive that amends the Driver Certificate of Professional Competence (CPC) and Driver Licensing Directives contains a similar concession but with some differences. The directive’s provisions will be implemented in May 2020 and are likely to supersede the UK measure, without the retention of acquired rights. This could mean a driver who has undertaken the five hours of training could find their entitlement to drive certain vehicles up to May 2020 does not continue after that date.

**Vehicle enhancements**

With the UK Government’s Air Quality Plan mandating that the sale of new diesel and petrol cars and vans will be banned from 2040 and forthcoming Clean Air Zones requiring Euro VI/6 for diesel or Euro IV/4 for petrol, new vehicle models are increasingly being designed with the environment in mind. The number of electric vans on the road is increasing, as is the availability of charging infrastructure sites, with rechargeable HGVs have been in on-road testing since 2015.

But it is not just emission standards meeting new and tougher requirements. Smarter technology is entering into

### 6.3 Percentage of respondents intending to use alternative fuels for Van and HGV fleets in 2019

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity (for use by Battery Electric Vehicles (BEV))</td>
<td>71.4%</td>
</tr>
<tr>
<td>Range Extended Vehicle (REV)</td>
<td>24.3%</td>
</tr>
<tr>
<td>Plug-in Hybrid Electric Vehicles (PHEV)</td>
<td>41.4%</td>
</tr>
<tr>
<td>Hydrogen (for use by Fuel Cell Electric Vehicles (FCEV))</td>
<td>7.1%</td>
</tr>
<tr>
<td>Natural Gas: CNG, LNG and biomethane</td>
<td>15.7%</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas (LPG) and bioLPG</td>
<td>47.1%</td>
</tr>
<tr>
<td>Diesel</td>
<td>8.6%</td>
</tr>
<tr>
<td>Biofuel</td>
<td>29.4%</td>
</tr>
<tr>
<td>Bioethanol</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

Source: FTA Logistics Industry Survey 2018/19
use, with the arrival of the smart tachograph (mandatory in new vehicles first registered from 15 July 2019) and improved satellite navigation systems. London’s Direct Vision Standard, which rates vehicles based on how much of the road drivers can see directly from their HGV cab, and the resulting Safety Permit Scheme will be implemented from 2020, and manufacturers and operators are already adding safety enhancements to vehicles in preparation for this.

Following years of research and development, autonomous vehicles are also becoming a reality. Believed to have optimal efficiency, this new technology could contribute to the adaptable nature of society, consumption, manufacturing, production and trading, across all modes of transport. There is still plenty of preparation that needs undertaking before these vehicles are likely to be seen in everyday use, such as enhancements to infrastructure and additional legislation, but, once autonomous vehicles have demonstrated their safe use and gained social acceptance, the level of regulation burden is likely to be eased.

**Multimodal sustainability**

**Air freight**
Heathrow is currently awaiting the approval process from the Planning Inspectorate on the expansion of a third runway, following government’s vote in support of the development. If consent is granted and given that previous attempts have been beset by legal challenges opposing the development, construction of the new runway would begin in 2021, ahead of the runway opening in 2026.

More recently, Heathrow announced plans to improve its cargo facilities. It has implemented a study to understand the impact of congestion at Heathrow airport on the wider cargo community in order to improve Heathrow cargo and make it an easier place to do business.

The Department for Transport (DfT) is still consulting on its green paper for its new aviation strategy: Aviation 2050. The new strategy will set out the challenges and opportunities for aviation to 2050 and beyond, with a focus on developing a partnership for sustainable growth that balances the reduction of environmental and community impacts, while also building on the UK’s success to establish new connections across the world. The final white paper is expected to be published later in 2019.

**Rail freight**
In December 2018, government opened a consultation on launched the Williams Rail Review, established to recommend the most appropriate organisational and commercial frameworks to deliver the government’s vision of a world-class UK railway delivering new opportunities across the nation. The review looks at rail structure to maximise joint-efficiency between the passenger and freight sector, a system that is financially sustainable, and the agility to respond to future challenges and opportunities. The review’s findings and recommendations will be published in a white paper in autumn 2019, with reform of the sector expected to follow in 2020.

**Actions to reduce rail freight emissions**
The ongoing development of low emission and electric road vehicles means the gap between road and rail is decreasing. In 2018 Defra published its Clean Air Strategy, which, among other sectors, tackles transport as a significant source of emissions of air pollution. Actions to reduce rail freight emissions are outlined in fig 6.5.

**Sea freight**
The DfT published its Maritime 2050 policy paper at the beginning of 2019, setting out the government’s vision and ambitions for the future of the British maritime sector. These strategies are set out in seven thematic areas: UK competitive advantage, technology, people, environment, trade, infrastructure, and security and resilience. The infrastructure theme commits government to assess the needs of the maritime sector as part of the wider supply chain, including considerations of rail and road infrastructure to improve port connectivity.

**Sulphur surcharges – sea freight emissions**
On 1 January 2020, the International Maritime Organization (IMO) will enact a new global regulation to reduce air pollution from container ships. The limit for sulphur (emissions of which are known to be harmful to human health and the environment) in fuel oil used on board ships will be reduced to 0.5 per cent mass by mass (m/m). The current global limit is currently 3.5 per cent, so the new regulation is expected to aid the shipping industry meet its environmental obligations. However, the EU Sulphur Directive already stipulates a maximum 0.5 per cent sulphur content for ships in all EU waters by 2020, and a 0.1 per cent limit in ports, so it is unlikely to dramatically affect Europe-based operators.
6.5 Actions to reduce rail freight emissions

Since 2017, the new Bi-Mode Class 800 – Intercity Express trains have been replacing Class 43 trains.

Bi-mode rail freight locomotives in service, including the new Class 88s which provide an environmental benefit as they are predominantly designed for electric mode but retain the ability to use diesel on nonelectrified lines.

Develop options to reduce emissions from freight.

Develop the evidence and testing alternatives to conventional fuels.

Introduce further measures to reduce idling time and tackle air pollution.

Implement Stage 5 standards in 2020 which require a reduction in PM and NOx emissions of over 90% compared with a pre-1999 train.

Remove all diesel only trains by 2040.

Source: Clean Air Strategy 2018, Defra, May 2018

Logistics Emissions Reduction Scheme

In April 2018, the Logistics Carbon Reduction Scheme (LCRS) became the Logistics Emissions Reduction Scheme (LERS), to emphasise its dedication to improving air quality in line with new government regulations. The rebrand included a website launch to provide easier access to a greater amount of information.

LERS is a free-to-join industry initiative to record, report and reduce carbon emissions from freight transport. LCRS achieved a 7 per cent reduction in road transport carbon emissions between 2010 and 2015, and the new scheme aims to reduce 2015 levels of greenhouse gas emissions by 5 per cent by 2020. LERS was also recognised as part of the Road to Zero Strategy, with the Department for Transport collaborating on a longer-term goal of a 15 per cent reduction on the 2015 levels of greenhouse gas emissions by 2025.
Sustainability and logistics

Consumer behaviour influences the nature and sustainability of logistics systems. Changes in end-user practices are pushed back through the supply chain affecting fleet composition by vehicle type, storage facilities, distribution hubs etc. An example is the increase in online retail which requires more warehouse space and more vans to deliver the goods particularly in urban areas.

Warehousing

In 2018, the take-up level of big box warehouses (over 100,000 sq ft) was 31.50m sq ft – 82 per cent higher than 2017 exceeding the previous annual record from 2016 of 29.35m sq ft with online retail accounting for 32 per cent of the space taken (fig 6.6). According to CBRE, Brexit stockpiling did not majorly affect Logistics Big Box take-up in 2018, with increases of stock being absorbed by 3PLs due to the temporary nature of their requirements. However, in January 2019, IHS Markit and the Chartered Institute of Procurement and Supply, reported that British factories had raised their stocks at the fastest pace since records began in the early 1990s. At the same time, Honda, the Japanese car manufacturer stated it was preparing to front-load some production to ensure it could ship vehicles abroad before Brexit and build up its stocks in Britain.

Jaguar Land Rover, Siemens UK, Unilever, and supermarkets also began stockpiling. This constituted the highest level of stockpiling activity for a G7 nation since comparable records began in 2007.3

Van use and online retail

The growth in the number of new vans and van traffic on the roads far outstrips that of the UK economy. In 2017, the number of vans licensed had increased 23.8 per cent4 and van traffic by 20.7 per cent.5 The annual growth in GDP has been weaker in comparison, often under 2 per cent since the end of the economic downturn and no higher than 2.9 per cent.

According to the Society of Motor Manufacturers and Traders (SMMT) there were over 4 million vans on the road in 2017. SMMT also estimate that there were 357,325 new light commercial vehicle registrations in 2018, down 1.3 per cent compared to 2017 but still the fourth highest figure they have recorded and 23.4 per cent higher than 2008 (Figure 6.7).

Electric vans are becoming more popular, in 2010 there were only 155 plug-in vans, whereas in 2018 there were 1,347 new plug-in vans registered (fig 6.8). This is still a small proportion of the total number of vans registered in that year (357,325). There are practical issues to be overcome, including availability of suitable electricity

---

2 Logistics – The Property Perspective H2 2016, CBRE, 2019
3 UK manufacturers’ stockpiling for no-deal Brexit hit record levels, The Guardian, 1 February 2019
4 Vehicle Licensing Statistics: Annual 2017, DfT, 12 April 2018
5 Road Traffic Estimates: Great Britain 2017, DfT, 5 July 2018

6.6 UK warehousing take-up by sector, 2018

<table>
<thead>
<tr>
<th>Sector</th>
<th>Take-up Level (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail - Online</td>
<td>31.7</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>5.0</td>
</tr>
<tr>
<td>3PL/Distribution</td>
<td>24.6</td>
</tr>
<tr>
<td>Post and Parcels</td>
<td>3.9</td>
</tr>
<tr>
<td>Retail - Other</td>
<td>10.1</td>
</tr>
<tr>
<td>Motor industry</td>
<td>2.1</td>
</tr>
<tr>
<td>Retail - Food</td>
<td>10.1</td>
</tr>
<tr>
<td>Food industry</td>
<td>2.0</td>
</tr>
<tr>
<td>Other</td>
<td>8.5</td>
</tr>
<tr>
<td>Construction</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Units above 100,000sqft and minimum 10m eaves

6.7 New van registrations

<table>
<thead>
<tr>
<th>Year</th>
<th>Registrations</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>289,463</td>
<td>25.1%</td>
</tr>
<tr>
<td>2017</td>
<td>362,149</td>
<td>1.3%</td>
</tr>
<tr>
<td>2018</td>
<td>357,325</td>
<td></td>
</tr>
</tbody>
</table>

Source: United Kingdom Logistics – The Property Perspective H2 2018, CBRE, February 2019
Source: LCV Registrations, SMMT, January 2019
supply that developments in technology and public policy may help with.

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

One area that may well be influencing the growth in the use of vans is the rise in consumer demand for online shopping. There is a benefit to using vans for smaller deliveries such as groceries and other goods to multiple numbers of shoppers, especially where this removes cars from congested roads.

Online shopping continues to grow, accounting for 18.0 per cent of all retail sales (excluding fuel) in 2018 (Figure 6.9). In recent years, online retail sales have increased significantly in November and December due to Black Friday promotions and the build-up to Christmas. In December 2018, average weekly online retail sales (excluding fuel) rose 13.3 per cent compared to December 2017 to an estimated record of £1.86 billion and accounted for almost a fifth (19.8 per cent) of all retail sales (excluding fuel).

6.8 Ultra-Low Emission Vehicles (ULEV): vans registered for the first time in the UK, 2010-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-grant eligible vans</th>
<th>Grant eligible vans</th>
<th>Total plug-in vans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>155</td>
<td>0</td>
<td>155</td>
</tr>
<tr>
<td>2011</td>
<td>171</td>
<td>33</td>
<td>204</td>
</tr>
<tr>
<td>2012</td>
<td>155</td>
<td>259</td>
<td>414</td>
</tr>
<tr>
<td>2013</td>
<td>120</td>
<td>180</td>
<td>300</td>
</tr>
<tr>
<td>2014</td>
<td>145</td>
<td>649</td>
<td>794</td>
</tr>
<tr>
<td>2015</td>
<td>122</td>
<td>886</td>
<td>1,008</td>
</tr>
<tr>
<td>2016</td>
<td>90</td>
<td>1,025</td>
<td>1,115</td>
</tr>
<tr>
<td>2017</td>
<td>106</td>
<td>1,241</td>
<td>1,347</td>
</tr>
</tbody>
</table>

Source: Vehicle Licensing Statistics: Annual 2017, DfT, April 2018

6 Retail sales, Great Britain: February 2019, ONS, 21 March 2019
Congestion

Congestion on the road network affects productivity in logistics and occurs when the demand for road space exceeds supply. FTA estimates that it costs around £1 a minute 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.

The INRIX 2018 Global Traffic Scorecard is an analysis of congestion and mobility trends in more than 200 cities, across 38 countries conducted by INRIX. INRIX measures time lost due to congestion and estimates motorists on the UK’s most congested road spend an average of two and a half days a year sitting in traffic. The top 20 urban areas in the UK were analysed and it was found that UK drivers lost an average of 178 hours a year due to congestion, costing drivers £7.9 billion or £1,317 per driver in 2018. London is the sixth most congested city in the world and the third most congested Europe behind Moscow and Istanbul. Six major UK cities exhibit last-mile travel times less than 10 MPH, and seven UK cities experience delays greater than 140 hours per year, with London losing an average of 227 hours per annum costing around £1,680 a year (fig 6.10).

Congestion on the road has a knock-on effect on port congestion. The FTA Logistics Industry Survey asked

6.9 Proportion of retail sales made online 2008-2018 (seasonally adjusted)

6.10 Worst 10 UK cities/urban areas for traffic congestion (INRIX, 2019)
6.11 Factors in port congestion

- Capacity of the ports: 40.5%
- Capacity of access roads to ports: 39.7%
- Capacity of rail access links to ports: 44.7%
- Availability of road inland haulage for containers: 35.7%
- Availability of rail inland haulage for containers: 40.6%

Sentiment index:
- <50 = Deterioration
- >50 = Improvement

Source: FTA Logistics Industry Survey 2018/19

6.12 Public perception of traffic congestion on motorways and in towns and cities as a serious/very serious problem

2008:
- Motorway: 60%
- Towns & cities: 50%

2017:
- Motorway: 40%
- Towns & cities: 30%

Source: British Social Attitudes Survey 2017: Public attitudes towards transport, DfT (National Centre for Social Research), July 2018

6.13 Industry perception of government and public understanding of the role of logistics in the economy

- Government understanding: 1.69 index score
- Public understanding: 0.92 index score

0 = No understanding
4 = A very good understanding

Source: FTA Logistics Industry Survey 2018/19
respondents to share their views on the improvement or deterioration of port congestion. Respondents indicated that all factors regarding capacity and congestion had deteriorated in 2018. As per 2017, rail access links were the best performing factor, followed by rail inland haulage for containers. Availability of inland road haulage was the worst performing factor although the deterioration was marginally less than in 2017 (Figure 6.11).

### Public attitudes to congestion on roads

In 2017, the general public perceived motorway congestion as much less of a problem than congestion in towns and cities, with only 37 per cent of respondents to the British Social Attitudes Survey considering it as a serious or very serious problem, compared with 56 per cent who thought congestion in towns and cities was as serious (fig 6.12).

10 British Social Attitudes Survey 2017: Public attitudes towards transport, DfT

The logistics industry has traditionally had a negative image with the public. The FTA Logistics Industry Survey asked respondents to rate their perception of government and the public’s understanding of the logistics industry. In the survey, ‘0’ indicates no understanding with ‘4’ indicating a very good understanding. The level of public understanding was rated at 0.92, more or less unchanged from the level in 2017 and showing no improvement in the image of the industry (fig 6.13). Respondents indicated that they believed government understanding had deteriorated further in 2018 with a score of 1.69 compared to 1.82 in 2017. This is of concern, since UK politicians are engaged in making key decisions particularly surrounding Brexit, such as on customs arrangements, that could have a major impact on supply chains; it is therefore vital that the Government understands the knock-on effects that these decisions might have.

Logistics leaders talk about vehicle emissions

With London’s Ultra Low Emission Zone (ULEZ) coming into force in April 2019, and with other low emission zones and air quality schemes being proposed across the country, air pollution has become a hot political topic.

FTA’s Logistics Leaders Network shared how emissions, technology and regulations are expected to affect businesses in the coming year. Strong financial incentives to cut fuel usage was a prominent supposition, as this should lead to instantly reduced emissions. In the immediate future, adjusting vehicle operating efficiencies and modifying driver behaviour are anticipated to derive the greatest savings.

Many of the group were sceptical about government plans to cut air pollution though, both nationally and locally. Current measures being implemented, such as low emission zones and new low emissions vehicles, are not perceived as sufficient-enough solutions to enact the necessary air quality improvements. Panellists felt the logistics industry has the flexibility and willingness to make the required investments, whereas the government is ignoring some of the most effective measures due to political image.

For example, the situation regarding double trailers and road trains was raised. Generally, it is believed there is adequate technology to ensure these vehicles are safe, and they are proven to reduce emissions; however, the government is not prepared to risk opposition and authorise them in the UK. One frustrated panellist surmised: “If we had a full fleet of those, that would get lorries off the road.”

Delivery vans are often unfairly blamed for an increase in urban congestion and pollution when, in actuality, the bulk is caused by personal cars while most vans are used for service industries. Once again, panellists felt local governments were missing a simple and effective answer to cut urban pollution by not permitting larger vans and trucks to operate in some regions.

Alternatively fuelled vehicles within urban centres could have the potential to rejuvenate the environmental future, but a much wider investment in infrastructure is required to make this technology viable. The solutions for sustainable retail delivery would be complex and each firm’s unique proposition would necessitate bespoke conditions.

Find out more about the FTA Logistics Leaders Network at http://fta.co.uk/LLN
Actions to improve air quality

Fleet operators
Respondents to the FTA Logistics Industry Survey represent businesses operating 35,683 HGVs (>3.5t GVW), 93,069 light commercial vehicles (≤3.5t GVW) and 19,465 trailers.

- 30% are considering using alternative fuels in 2019
- 65% of HGV fleet is Euro V/VI compliant
- 68% of van fleet is Euro 5/6 compliant

Consumers and logistics
Consumer behaviour influences the nature and efficiency of logistics with online retail increasing the take-up of warehouse space in 2018 with early signs for 2019 indicating stockpiling in the run-up to Brexit.

Warehousing 2018

- 82% increase in take-up of warehouse space
- 32% take-up by online retail
- 25% take-up by 3PLs

Congestion
Congestion on the road network affects productivity in logistics and occurs when the demand for road space exceeds supply.

Effects of congestion
FTA estimates that it costs around £1 a minute for an HGV to be idling in traffic.

- Cost drivers £7.9 billion or £1,317 per driver in 2018
- 6 UK cities exhibit last-mile travel times less than 10mph
- 7 UK cities experience delays greater than 140 hours per year

2018 saw five UK cities directed to introduce Clean Air Zones (CAZs) to combat air pollution. London’s Ultra Low Emission Zone (ULEZ) will be phased in as of 8 April 2019.

Air quality forecasts for 2019 show that 24 out of 28 UK urban areas will exceed legal limits for nitrogen dioxide emissions.
Safety and innovation

Safety is a major focus for logistics, with specific issues for road transport and well-developed, continuous plans for ever-safer vehicles and practices. New technologies offer the opportunity for innovation and increase efficiency but will also need to address safety concerns to secure public acceptance.
Safety and Innovation

UK roads are safest in EU

Average fatality rate in the 28 EU Member States was 49 road deaths per 1 million inhabitants

Road fatalities in the EU decreased by 21% compared to 2010

Internet of Things (IoT) is the key theme in innovation across all modes

Safety data

Relatively speaking, rail, air and sea transport are not subject to the same types of safety concerns that apply to vehicles using our road network. For that reason, this chapter focuses on HGV and van data.

The operation of HGVs is subject to a strict legal framework, the core of which is a stringent operator licensing system which regulates the quality and compliance of those licenced. Successive EU regulations have mandated safety improvements in the design of goods vehicles to ensure that these are integral to the production process for every new vehicle, rather than retrofitted. Similarly the deployment of new technology in vehicles has been subject to EU directives, with the requirement for so-called ‘Smart Tachographs’ to be fitted in HGVs in 2019.

However, there has been increasing pressure on legislators at EU level to regulate vans along the lines of the HGV operator licensing system. So far this has largely been resisted although it is likely that many vans used for international transport will be affected by new rules as part of the ‘Mobility Package’.

The UK’s withdrawal from the EU will not mean changes to safety requirements as the UK has said that in the first instance it will roll over all directives and regulations into domestic legislation. It is as yet unclear the extent to which the legislative framework will diverge over time.

Road fatalities per million inhabitants – best and worst EU countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Rate per million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BEST 5</strong></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>28</td>
</tr>
<tr>
<td>Denmark</td>
<td>30</td>
</tr>
<tr>
<td>Ireland</td>
<td>31</td>
</tr>
<tr>
<td>Netherlands</td>
<td>31</td>
</tr>
<tr>
<td>Sweden</td>
<td>32</td>
</tr>
<tr>
<td><strong>EU</strong></td>
<td>49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Rate per million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WORST 5</strong></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>96</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>88</td>
</tr>
<tr>
<td>Latvia</td>
<td>78</td>
</tr>
<tr>
<td>Croatia</td>
<td>77</td>
</tr>
<tr>
<td>Poland</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: European Commission, 2019
The EU-led approach to designing-in improvements in technical and safety standards is conducted in dialogue between legislators and technical experts from the manufacturers and is a lengthy and complex process that recognises the Europe-wide nature of HGV and van manufacturing. Local institutions at times seek to implement rules that ignore these processes, for example, the Mayor of London’s Direct Vision Standard and HGV Safety Permit Scheme.

**HGV and van compliance**

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 34.5 per cent and a final fail rate of 26.2 per cent in 2017/18, down from 35.4 per cent and 26.8 per cent respectively in 2016/17. Class 7 tests, which cover vans between 3 and 3.5 tonnes, show poorer compliance levels with a 43.7 per cent initial failure rate and a 34.5 per cent final failure rate, although this is an improvement compared to 2016/17. Van MOT failure rates are at their lowest since 2007/08 before the economic downturn (fig 7.1). HGV MOT failure rates are consistently lower than vans, with a final failure rate of 10.0 per cent in 2017/18.

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 50.7 per cent from 15,106 in 2016/17 to 22,770 in 2017/18 with the van parc registered in the UK being over 4 million in 2017. In the same period, total roadside and premises checks for HGVs decreased by 4.0 per cent to 143,757, down from 149,784 in 2016/17, and within that, there was a decrease of 8.3 per cent in total checks for non-GB registered HGVs, down to 83,886 checks compared to 91,507 checks in 2016/17.

In the same period:

- 13,357 GB registered vans and 578 non-GB registered vans had mechanical checks at the roadside or the operator’s premises, with a prohibition rate of 46.9 per cent and 43.8 per cent respectively
- 28,747 GB registered HGVs and 34,707 non-GB registered HGVs had mechanical checks at the roadside or the operator’s premises with a prohibition rate of 24.8 per cent and 23.8 per cent respectively
- The total number of vans targeted with mechanical checks rose by 42.4 per cent and the total number of HGVs targeted fell by 1.9 per cent compared to 2016/17
- 5,444 van drivers and 74,493 HGV drivers were subject to drivers’ hours checks, of which 2.5 per cent of targeted van drivers and 4.6 per cent of HGV drivers received prohibitions
- 3,391 vans and 5,810 HGVs were subject to weight checks, of which 73.2 per cent of targeted vans and 44.2 per cent of HGVs received prohibitions

**Accident rates involving HGVs and vans**

There is now over 10 times more traffic on the roads than in 1950.1 In the last 20 years, road traffic has increased 16.9 per cent whilst the number of vehicles has increased by 39.9 per cent.2 Over the last 10 years van traffic in particular has increased steadily. In 2017, vans made up 15.4 per cent of all traffic in Great Britain and travelled 50.5 billion miles, up 20.7 per cent compared to 2007. In contrast, HGVs made up 5.2 per cent of all traffic in Great Britain in 2017 and travelled 17.0 billion miles, down 6.4 per cent compared to 2007. Motorways are vital for the movement of freight, carrying almost half (46.2 per cent) of all HGV traffic and over a fifth (20.4 per cent) of all van traffic in 2017. Despite the growth in traffic, road traffic accidents involving commercial vehicles have decreased significantly in the last 10 years.

Reported Road Casualties Great Britain3 revealed that, in 2017, the HGV accident rate (for all severities) per billion vehicle miles was 48.7 per cent lower than 2007 and 13.7

---

1 Road Traffic Estimates: Great Britain 2017, DfT, 5 July 2018
2 Vehicle Licensing Statistics: Annual 2017, DfT, 12 April 2018
3 Reported road casualties in Great Britain: 2017, DfT, 27 September 2018

---

Sources: MOT testing data for Great Britain, DVSA, March 2019
Commercial vehicle testing data for Great Britain, DVSA, April 2019
per cent lower compared to 2016. The number of HGV fatal accidents per billion vehicle miles was 40.0 per cent lower in 2017 compared to 2007 and 7.3 per cent lower compared to 2016 (fig 7.2).

Van accident rates followed a similar trajectory, with the rate for all severities down 29.3 per cent in 2017 compared to 2007 and 7.6 lower than in 2016. The number of van fatal accidents per billion vehicle miles was 48.8 per cent lower in 2017 compared to 2007 and down 1.2 per cent compared to 2016 (fig 7.2).

The HGV figures in particular are somewhat better than the total accident figures (all vehicles) which were 31.6 per cent lower in 2017 for all severities than 2007 and down by 6.3 per cent compared to 2016. The total fatal accident rate was 42.4 per cent lower than 2007 and down 2.9 per cent compared to 2016.

The accident rate of HGVs and vans is lower when compared with cars. In 2017 there were 302 accidents of all severities per billion vehicle miles for HGVs which is more than half that for cars, at 685 accidents per billion vehicle miles. The figures are even lower for vans, with a rate of 247 accidents per billion vehicle miles. This suggests that a road user is twice as likely to be involved in an accident with a car as with an HGV. There are, of course, more cars on the road but these figures take into account the number of miles travelled.

The number of accidents (of all severities) and casualties involving HGVs has declined by half since 2007 (fig 7.3).

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 7.4 details fatal accidents involving pedestrians in Great Britain, over a four year period. Pedestrian fatalities have risen in the past two years of available records. The proportion involving HGVs has also been relatively consistent, with the majority of pedestrian fatalities arising from collisions with cars.

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. Cyclist fatalities have fallen somewhat in past four years. Recent safety campaigns and the introduction of safety features do appear to be making a positive difference. Van involvement in cyclist fatalities increased in 2017, but it should be emphasised that the small numbers involved reduce the statistical significance and it is therefore not possible to draw any meaningful conclusions. Figure 7.5 provides a breakdown of the vehicles involved in fatal accidents with cyclists in the Great Britain.

**Work-related ill health and injuries – logistics**

The Health and Safety Executive (HSE) published its annual Transportation and Storage Statistics in Great Britain in October 2018. Logistics is analysed as a separate category to include, road haulage, warehousing, ports (freight), post and courier, freight air transport and cross-cutting (cargo handing and other support).
Work-related ill health

The HSE examined the Labour Force Survey and averaged ill health over an eight year period from 2009/10-2011/12, 2013/14-2017/18 to improve the reliability of the sub-sector estimates. In the whole of transportation and storage (including passenger) there were 52,000 work-related ill health cases of which, 49 per cent were musculoskeletal disorders and 27 per cent were stress, depression or anxiety. On average less than 1 per cent of workers in transportation and storage suffer from mental health issues associated with stress, depression and anxiety which is significantly lower than rate for workers across all industries (1.3 per cent).

In the logistics sector, on average, a higher proportion of workers suffered from work-related ill health than the industry average of 3.2 per cent. This was not however statistically significant and the only sub-sector with a statistically significant rate was air freight transport (fig 7.6).

In the whole of transportation and storage 1.8 per cent of workers suffered from work-related musculoskeletal disorders which is significantly higher that the rate for workers across all industries (1.3 per cent). The two logistics sub-sectors, post and courier and air freight were both statistically higher than the average for all industries.

Work-related injuries

The HSE also analysed data from The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). In the whole of transportation and storage (including passenger) there were 15 fatal injuries in 2017/18. Over the five year period from 2013/14 to 2017/18, 39 per cent of deaths were due to being struck by a moving vehicle, 19 per cent were falls from a height and 17 per cent were struck by a moving/falling object. There were an estimated 34,000 workers who sustained an injury at work. Around 2.5 per cent of workers in the whole of transportation and storage sustained an injury which is statistically higher than the rate for all industries. The logistics sub-sectors of road haulage, warehousing and postal and courier, were statistically higher than all industries (fig 7.7).

The total economic cost of workplace injury and new cases of work-related ill health in transportation and storage (including passenger) was £866m, with injury costing £444m and illness accounting for £422m.

Technology, investment and innovation

Increased digitisation (Internet of Things) is the key theme in innovation across all modes. The Internet of Things (IoT) forms a network of devices, vehicles and appliances which can actively share data. The hope is that this will result in lower costs and greater efficiency but that it will also, crucially, deliver safe systems. It is clear that public acceptance of autonomous technologies will be a slow process and that there will be challenges, not least in terms of cyber security.

### 7.4 Vehicle involvement in pedestrian fatalities (GB)

<table>
<thead>
<tr>
<th>Year</th>
<th>Casualty</th>
<th>HGV</th>
<th>Other vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>446</td>
<td>77</td>
<td>448</td>
</tr>
<tr>
<td>2015</td>
<td>408</td>
<td>60</td>
<td>431</td>
</tr>
<tr>
<td>2016</td>
<td>448</td>
<td>72</td>
<td>455</td>
</tr>
<tr>
<td>2017</td>
<td>470</td>
<td>76</td>
<td>483</td>
</tr>
</tbody>
</table>

Source: STATS19, DfT, September 2018

### 7.5 Vehicle involvement in cyclist fatalities by vehicle type for the last four reported years (GB)

<table>
<thead>
<tr>
<th>Year</th>
<th>Other cycle</th>
<th>Motorcycle</th>
<th>Taxi</th>
<th>Car</th>
<th>Minibus</th>
<th>Bus or Coach</th>
<th>Van</th>
<th>Light HGV (&lt;7.5 tonnes)</th>
<th>Heavy HGV (&gt;7.5 tonnes)</th>
<th>Other</th>
<th>Vehicle Total</th>
<th>Number of cyclist fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>70</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>19</td>
<td>6</td>
<td>108</td>
<td>113</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>48</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>15</td>
<td>2</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>2016</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>63</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>97</td>
<td>102</td>
</tr>
<tr>
<td>2017</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>59</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>99</td>
<td>101</td>
</tr>
</tbody>
</table>

Source: STATS19, DfT, September 2018
Road trends

Autonomous and electric vehicles, platooning, big data, integrated technology and driver shortages are the top five trends to look out for in 2019 (fig 7.8).4

Internet of Things and Big Data

The IoT allows for better location tracking, environment sensing, fleet management, eco-friendly shipping, and supply-demand balance. A network of sensors mounted throughout the truck can monitor everything from tyre pressure to load stability. There is a relationship between IoT and big data. Precise information on location and real-time data analysis is changing the supply chain. Big data paired with Al also allows companies to achieve accurate forecasts for load optimisation and planning for future performance rather than basing decisions on historical expectations.

4 https://transmetrics.eu

Autonomous vehicle enhancements

The UK roads that would benefit the most from driverless lorry tech have been identified by transport information firm INRIX.5 Technological innovation in driverless vehicles is dependent upon where these vehicles can be deployed in order to maximise the benefits of Highly Automated Vehicles (HAVs). Using current travel pattern data, Inrix identified the M6/M74 corridor between Manchester and Glasgow as the most valuable route for driverless lorries in the UK while the M25 could see the biggest safety improvements. The UK would derive particular benefits from autonomous vehicles due to concerns over labour shortages and while road freight transport will initially need an HGV qualified ‘driver’ behind the wheel, successful deployment in the long-term would free up drivers other routes and save costs.

5 Automated Freight Corridor Assessment, INRIX 2018
According to INRIX the most suitable corridors for autonomous freighting in the UK are:

- A1 Sheffield-Edinburgh
- M5 Plymouth-Birmingham
- M4 Swindon-Swansea
- M25 London Orbital
- M6 Birmingham-Manchester

Last year, the Department for Transport announced that trials involving platoons of self-driving lorries would take place on Britain’s roads. The Transport Research Laboratory (TRL) is conducting the tests of vehicle ‘platoons’. Platooning involves up to three wirelessly connected HGVs travelling in convoy, with acceleration and braking controlled by the lead vehicle, allowing the lorries to drive closer together than they could with human drivers. Lorries driving close together mean that the front vehicle pushes air out of the way, making the other vehicles more efficient and lowering their emissions (fig 7.9). This could lead to fuel efficiency savings for haulage companies. However, congestion and the nature of the UK network have always been highlighted as possible barriers to it working effectively. The fuel consumption benefits from platooning will always be modest, maybe 5%, and then only for the truck in the middle of the platoon.

**Longer Semi-Trailers**

Longer Semi-Trailers, or ‘LSTs’, are a new type of heavy goods vehicle (HGV) trailer that have been on trial since 2012. The LSTs are up to 2.05m longer than the current standard semi-trailers on our roads (15.65m instead of 13.6m). The total weight of the trailer, the goods and the tractor unit must still be within the UK domestic weight limit of 44 tonnes. They must also pass the turning circle test applied to the existing 13.6m trailers. To achieve this, LSTs usually have a steering rear axle. Fully loaded LSTs can move goods using fewer journeys than current trailers, reducing emissions, congestion and collision risk associated with an HGV journey. The trial started in 2012/13 with just a few hundred trailers in the national fleet. At the end of 2017, 1,939 LSTs were on the road and submitting data. The trial results are shown in fig 7.10.

**Rail trends**

The top five trends that are set to shape the global rail industry listed in fig 7.11. In the fragmented rail industry, consolidation and integrated supply chains achieved through mergers and acquisitions continue to dominate. However, the Internet of Things is at the forefront for innovation in the railways around the world although lack of skills is considered by some likely to drive a more global approach to solutions. High population and increasing urbanisation in the Asia Pacific (APAC) region have led to a growth in the demand for expansion and upgrade of their existing rail infrastructure. For all rail networks technology offers the opportunity to derive real-time information on rail movements, assisting with predictive maintenance for fixed assets and rolling stock. As this is more widely taken up it should enable companies to reduce costs and streamline operations.

---

**7.8 Top five trends in road freight transport**

1. Electric vehicles and the way we move
2. Platooning
3. Internet of Things
4. Big data
5. Driver demand


**7.9 Self-driving lorries**

**How they operate**

- **Lead vehicle** controls acceleration and braking
- **Following vehicles** instantly respond to changes in speed

**The benefits**

- Reduced traffic congestion
- Reduced fuel consumption and emissions

Source: ‘Self-driving’ lorries to be tested on UK roads, BBC, August 2017
Air trends

The industry publication, Air Cargo World forecast a top five trends for air freight in 2019 (fig 7.12). Similar to other modes, the air freight industry has started to increase its automated and digitalised processes and is expected to continue doing so in 2019. Anticipated regulatory changes and uncertainty around Brexit coupled with the continued trade war between the United States and China, market uncertainty will be challenging in the coming year. South east Asia is a rising hotspot, but there are concerns about the capacity the region can provide for cargo operations if the countries do not sufficiently develop their infrastructure and policies.

Sea trends

In 2019 the shipping industry will undergo mergers and acquisitions while the strategic cooperation between the major carriers 2M (MSC and Maersk) and HMM (Hyundai Merchant Marine) is set to end in 2020, complicating how shippers select carriers in the future. These changes are among the top five trends shown in fig 7.13.

---

7.10 LST trial results (2012-2017)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSTs submitting data</td>
<td>1,939</td>
</tr>
<tr>
<td>Kilometres saved</td>
<td>30 million</td>
</tr>
<tr>
<td>Average journey distance saved</td>
<td>7%</td>
</tr>
<tr>
<td>Tonnes CO₂ saved</td>
<td>28,000</td>
</tr>
<tr>
<td>Tonnes of Nox saved</td>
<td>141</td>
</tr>
<tr>
<td>Collision/casualty rate of articulated HGVs</td>
<td>1/3</td>
</tr>
<tr>
<td>Fewer personal injury collisions on urban roads than articulated HGVs</td>
<td>90%</td>
</tr>
</tbody>
</table>

Source: The GB Longer Semi-Trailer 2017 Annual Report Summary, Risk Solutions, September 2018

7.11 Top five trends that will shape the global rail industry in 2019

1. Increased ‘Mergers and Acquisitions’ to further industry consolidation
2. Increased focus on digitalisation (Internet of Things)
3. Cyber-security will gain centre stage
4. Shift in spend patterns: Increasing investment in the Asia Pacific region
5. The UK-EU Brexit impact

Source: Top five trends that will shape the global rail industry in 2019, Global Railway Review, March 2019

7.12 Top five trends in air freight transport 2019

1. Increased automation and digitalisation
2. Continued market uncertainty
3. Cool-chain tech advances support burgeoning pharma demand
4. The rise of Southeast Asia
5. Cross-border e-commerce boom continues

Source: Top 5 airfreight trends to expect for 2019, Air Cargo World, January 2019

Infrastructure developments

Infrastructure plays a crucial part in a region’s economic development, as well as providing important social benefits that enable our current way of life. For freight, maintaining our roads, rail tracks and waterways ensures operators are able to carry out their jobs effectively, while the improvement and development of existing infrastructure, such as forging new routes or enhancing facilities, can also have a huge impact on ease and efficiency. These benefits have never been more vital as travel becomes more congested and regulated than ever.
The United Kingdom ranked 11th for infrastructure in the worldwide 2018 Global Competitiveness Report, down from ninth last year. However, despite the UK’s overall rank falling, quality of roads improved from 27th to 26th, and railroad density and airport connectivity ranked within the top 10, at ninth and sixth respectively.

Infrastructure strategies

In July 2018, the National Infrastructure Commission (NIC) published its first National Infrastructure Assessment (NIA). The paper reported on the UK’s biggest infrastructure challenges and provided recommendations to support the requirements of the 21st century, including the need to switch to a low-cost, low-carbon energy system, harness the potential of digital connectivity and modernise road networks to support the use of electric and autonomous vehicles. At the Budget in October 2018, the government announced it was already acting on several of the NIC’s priorities by introducing several investment funds, continuing to reduce carbon emissions, and increasing road maintenance spending. The government will formally respond to the NIA by publishing its first National Infrastructure Strategy later in 2019.

At the same time, the government opened two consultations as part of its Industrial Strategy: the Future of Mobility Grand Challenge and ‘The last mile’. Both sought to inform the government on the latest trends and changes within urban infrastructure to provide insight on environmental and technological needs for the future.

Regionally, Transport for the North ran a consultation on its Draft Strategic Transport Plan, the final version of which is due to be published in early 2019 and will outline transformations to road, rail, sea and air connections to help drive long-term economic growth.

Road developments

A further consultation opened on updated proposals for the Lower Thames Crossing. The new plans for the tunnel, which will be an alternative route to the over-capacity Dartford Crossing, included design changes to make it as efficient and cost-effective as possible while reducing impact to local communities, part of which involved upgrading the original road plan from two-lanes to a more ‘future-proof’ three-lanes.

Highways England also announced the chosen corridor for the new Oxford to Cambridge Expressway, to fill the 30-mile gap within the region’s network and relieve pressure on the A34; a public consultation will open at the end of 2019 to inform the final route. A final decision will also be made later this year regarding the reclassification of the A14 as a motorway when it reopens in 2020 after upgrade work.

2018 saw previous plans and consultations reach their completion too, with several projects receiving approval. The Department for Transport (DfT) authorised the Silvertown Tunnel, which will link the Greenwich Peninsula and Silvertown beneath the River Thames, and HE decided on the new bypass route that will connect the Port of Liverpool to the A5036. September saw work on the A6 in Northern Ireland begin to upgrade it to a dual carriageway, an improvement that is expected to reduce journey times between Derry and Belfast by more than 50 per cent at peak hours.

Spending on roads

The Strategic Road Network (Motorways and ‘A’ roads managed by Highways England) represents only 2.4 per cent of the road network length but carries a third of all traffic, with HGVs in particular depending on it and comprising 10.7 per cent of traffic on motorways, down from 11.4 per cent in 2016.10 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.

Government spent around £10.2 2billion on Britain’s roads in 2017-18 and spending on Northern Ireland’s roads was estimated at £0.37 billion (fig 7.14).11

Maintenance expenditure on UK roads

Maintenance of the existing road network is essential. The Asphalt Industry Alliance (AIA) 2019 ALARM Survey of

7.13 Top five trends in sea freight transport 2019

1. The shipping industry will continue experiencing further consolidation
2. Carrier alliances will continue to change
3. Protectionism will lead to a new era of trade wars and further conflicts
4. Capacity will change due to an increasing number of larger vessels, and rate volatility will continue
5. Mainstream adoption of technology will continue at a faster pace

Source: Shipping industry trends to look out for in 2019, More Than Shipping, December 2018
Local highways departments in England and Wales found that investment is stemming the decline in road surface condition. Local highway authorities in England and Wales, including London, are responsible for over 204,300 miles of roads and for the second consecutive year, local authorities’ highway maintenance budgets have increased by almost 20 per cent. For councils in England and London this included a share of £420 million additional funding allocated in the November 2018 Budget.

ALARM asks respondents to estimate how much it would cost to bring their road networks up to scratch (assuming they had the resources in place to make it practical to do so as a one-off project). The estimate for this one-time ‘catch-up’ cost has grown by approximately 5 per cent to £9.79 billion from £9.31 billion reported last year.

The number of potholes repaired by councils in England and Wales has risen by more than a fifth in the last year. Around 1.86 million potholes were filled in during 2018/19, which is up from 1.53 million in the previous 12 months. The ALARM report revealed that highway maintenance budgets have increased from an average of £20.6 million to £24.5 million year-on-year.

While the numbers of filled-potholes increased in the last year, RAC figures show drivers are two-and-a-half times more likely to suffer a pothole-related breakdown than in 2006. Its patrols received 1,714 call-outs between October and December 2018 for problems usually caused by road defects, such as damaged shock absorbers, broken suspension springs and distorted wheels.

### 7.15 Maintenance expenditure on UK roads 2017-18

<table>
<thead>
<tr>
<th>Country</th>
<th>Routine total</th>
<th>Structural maintenance total</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>£259.0m</td>
<td>£786.8m</td>
</tr>
<tr>
<td>Local Authorities</td>
<td>£1,123.5m</td>
<td>£2,207.6m</td>
</tr>
<tr>
<td>Scotland</td>
<td>£381.8m</td>
<td>£8.7m</td>
</tr>
<tr>
<td>Wales</td>
<td>£56.7m</td>
<td>£42.9m</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>£62.0m</td>
<td>£28.6m</td>
</tr>
<tr>
<td>Total</td>
<td>£1,883.0m</td>
<td>£3,074.6m</td>
</tr>
</tbody>
</table>

Sources: Roads and transport revenue outturn expenditure by service, StatsWales, October 2018; Northern Ireland Transport Statistics 2017-18, Department for Infrastructure, September 2018

### 7.14 Government Spending on roads in the UK 2017-18

<table>
<thead>
<tr>
<th>Country</th>
<th>Great Britain</th>
<th>Northern Ireland</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>National roads(^1)</td>
<td>£4.64bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local roads(^2)</td>
<td>£5.58bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>£10.22bn</td>
<td>0.37bn</td>
<td>£10.59bn</td>
</tr>
</tbody>
</table>

\(^1\) National roads refer to motorways and trunk roads
\(^2\) Local roads are managed by local authorities

Source: Transport Statistics Great Britain 2018, DfT, December 2018; Northern Ireland Transport Statistics 2017-18, Department for Infrastructure, September 2018

### 7.16 Seven key recommendations for the DfT Maritime Modal Connectivity team

1. Form a ‘virtual’ freight team in order to engage with the National Infrastructure Commission from the Maritime Modal Connectivity and DfT modal freight teams

2. Use data-focussed analysis to evaluate the key economic corridors to ports, to model the commodities moved by freight mode, value to the UK economy, and identify government spending on port-related projects

3. Work with industry, to seek a better understanding of the challenges and market opportunities for coastal shipping and inland waterways

4. Seek to ensure the needs of our ports are captured, and included, in future investment decisions by default through representing the sector in all departmental modal and cross-modal infrastructure investment processes

5. Raise awareness through ports working together, to promote the importance of ports more widely

6. Facilitate greater engagement by utilising existing maritime strategy committees and ministerial round tables, holding regional events for ports and regional bodies (eg LEPs, local authorities and sub-national transport bodies) to raise awareness. Review and re-publish Port Master Planning Guidance, and investigate mechanisms to encourage more consistent sharing of information by ports

7. Work across the Maritime Directorate, with the industry and trade associations, to ensure the long-term vision for the sector, including how port connectivity can continue to make the UK an important node in global shipping patterns and technological change is fully captured in ‘Maritime 2050’

Source: Transport Infrastructure for our global future, DfT, March 2018

12 ALARM survey, Asphalt Industry Alliance, 2018

13 Press Release, RAC, 29 January 2019
Develop, Design, Deliver, and Deploy. The decision taken

The RNEP framework is made up of five stages: Determine, Design, Deliver, and Deploy. The decision taken at each gateway will be whether or not to proceed with the ‘Enhancement’. Enhancements are investments in new or improved infrastructure that enable service changes and other benefits. Decisions will be made in consultation with the infrastructure manager, delivery agent and any other funders and informed by the priorities and principles for investment set out in the RNEP paper.

**Port connectivity**

In April 2018, the results of a study examining the current level of access to ports, how port connectivity issues are managed in England and what development plans and ambitions ports have for the future were published. Seven key recommendations are outlined in fig 7.16.

Changing international trade patterns, such as more concentrated and higher volume port calls in Northern Europe, and fewer shipping lines stopping at ports in the north of the UK, are creating new demands on ports and inland connectivity, by road and rail. High quality road, rail and coastal feeder shipping links from ports are critical for the UK economy and Government’s work on the Strategic Rail Freight Network and Road Investment Strategies, will enable this to happen provided that private sector investment is successfully leveraged in order to continue building further capacity and capability of the network.

**Rail Network Enhancements Pipeline**

The ‘Rail Network Enhancements Pipeline’ (RNEP), sets out a new approach for rail proposals that require government funding. This approach creates a rolling programme of investment, focused on outcomes that provide benefits for passengers, freight users and the economy and moving government investment in enhancements away from a rigid five year cycle.

The RNEP framework is made up of five stages: Determine, Design, Deliver, and Deploy. The decision taken in Northern Ireland from 2016-17 to 2017-18, the structural maintenance spend decreased due to less budget being made available in 2017-18. 2017-18 was an exceptional year hence the reason for increased winter maintenance spend from previous years.

14 Transport Statistics GB, Department for Transport, 2018
15 Northern Ireland Transport Statistics, 2018
16 Rail Network Enhancements Pipeline A New Approach for Rail Enhancements, DfT, March 2018
17 Transport Infrastructure for our global future: A Study of England’s Port Connectivity, DfT 2018

---

**Logistics leaders talk about the Impact of technology**

Trade shows can be almost overwhelming nowadays, with the expanse of exciting, cutting-edge technology they contain spanning everything from blockchain to autonomous vehicles. FTA asked expert panelists from its Logistics Leaders Network how these innovations are working for real businesses and how they are exploiting the opportunities offered by new technology.

For most, data is the driving force behind revolutionary ways of working. Enhanced data capture and analysis now enables managers to identify and then efficiently repurpose empty capacity on their sites and within trailers. Similar technology is also providing improvements to security: the analysis of routing plans, to avoid overnight stays in trucks stops, encourages drivers to make better use of secure facilities such as parking ‘safe havens.’ Even amidst some resistance from drivers, this strategy is already garnering successful evidence. New ‘mirrorless’ trucks and vans, which have cameras to enhance visibility, have also been inspiring confidence over increased safety.

Consolidation projects, such as sharing warehouse space, are providing promising results as well. On-road schemes, such as combining truck loads, are experiencing considerable difficulties though, as a much higher rate of negotiation and compromise is necessary between all parties involved.

Political approach appears to be the greatest difficulty to new technology within the logistics sector, with the approval of modern legislation perceived to be too slow and driven by expediency rather than evidence. For example, the panelists disagreed about the likely implementation of autonomous vehicles: some felt the technology could be in operation within the next twelve months, if it had enough political conviction, while others were not convinced these vehicles had been properly tested or deemed safe.

Regardless, a potential accelerant to the implementation of autonomous vehicles and other cutting-edge technology on UK roads could be Brexit. With the driver shortage worsening, it is surmised that politicians may have to expedite the enactment of developing innovations, to ensure an unbroken chain of supply for goods and services continues.
Technology and Innovation
Top five trends

1. Electric vehicles and the way we move
2. Platooning
3. Internet of Things
4. Big data
5. Driver demand

1. Increased ‘Mergers and Acquisitions’ to further industry consolidation
2. Increased focus on digitalisation (Internet of Things)
3. Cyber-security will gain centre stage
4. Shift in spend patterns: increasing investment in the APAC region
5. The UK-EU Brexit impact

1. The shipping industry will continue experiencing further consolidation
2. Carrier alliances will continue to change
3. Protectionism will lead to a new era of trade wars and further conflicts
4. Capacity will change due to an increasing number of larger vessels, and rate volatility will continue
5. Mainstream adoption of technology will continue at a faster pace

Safety and Innovation
2018–2019 Summary

Work-related ill health and injury
(8 year average)

52,000 work-related ill health cases in the Transport and Storage sector
49 were musculoskeletal disorders
27% stress, depression or anxiety

Estimated 34,000 workers who sustained an injury at work. Around 2.5 per cent of workers in the whole of transportation and storage sustained an injury which is statistically higher than the rate for all industries.

The total economic cost of workplace injury and new cases of work-related ill health in transportation and storage (including passenger) was £866m, with injury costing £444m and illness accounting for £422m.

Road infrastructure investment

- Strategic Road Network represents 2.4% of the road network but carries a third of all of traffic
- 97.6% of the road network is managed by local highways authorities.
- HGVs comprise 10.7% of traffic on motorways.
- £10.22 billion government spent on Britain’s roads in 2017-18
- £4.96 billion was spent on structural and routine maintenance of roads in the UK
- Around 1.86 million potholes were filled in during 2018/19
- 1,714 RAC call-outs between October and December 2018 for problems usually caused by road defects
- Councils would need to spend almost £10 billion over 10 years to bring England and Wales’ the roads up to scratch
FTA Policy

FTA is trusted by government to give sound advice. We represent and provide a voice to more than 17,000 members, across all modes, and without any vested interests.

How can I get involved?

- Future-proof your organisation – learn about policies being proposed by government
- Ensure we are lobbying for concerns that matter to you
- Help decide FTA’s response to government proposals
- Network with your peers in the industry

We run effective campaigns on the biggest issues affecting logistics, such as competitiveness, costs, environment, infrastructure and Brexit.

Our expert policy team is the largest in the sector and engages with HM Treasury, Department for Transport, Number 10, Scottish and Welsh governments, Northern Ireland and English regions.

We amplify the voice of logistics through our extensive media reach.

Attend one of our Regional Freight Councils
information available at fta.co.uk/councils