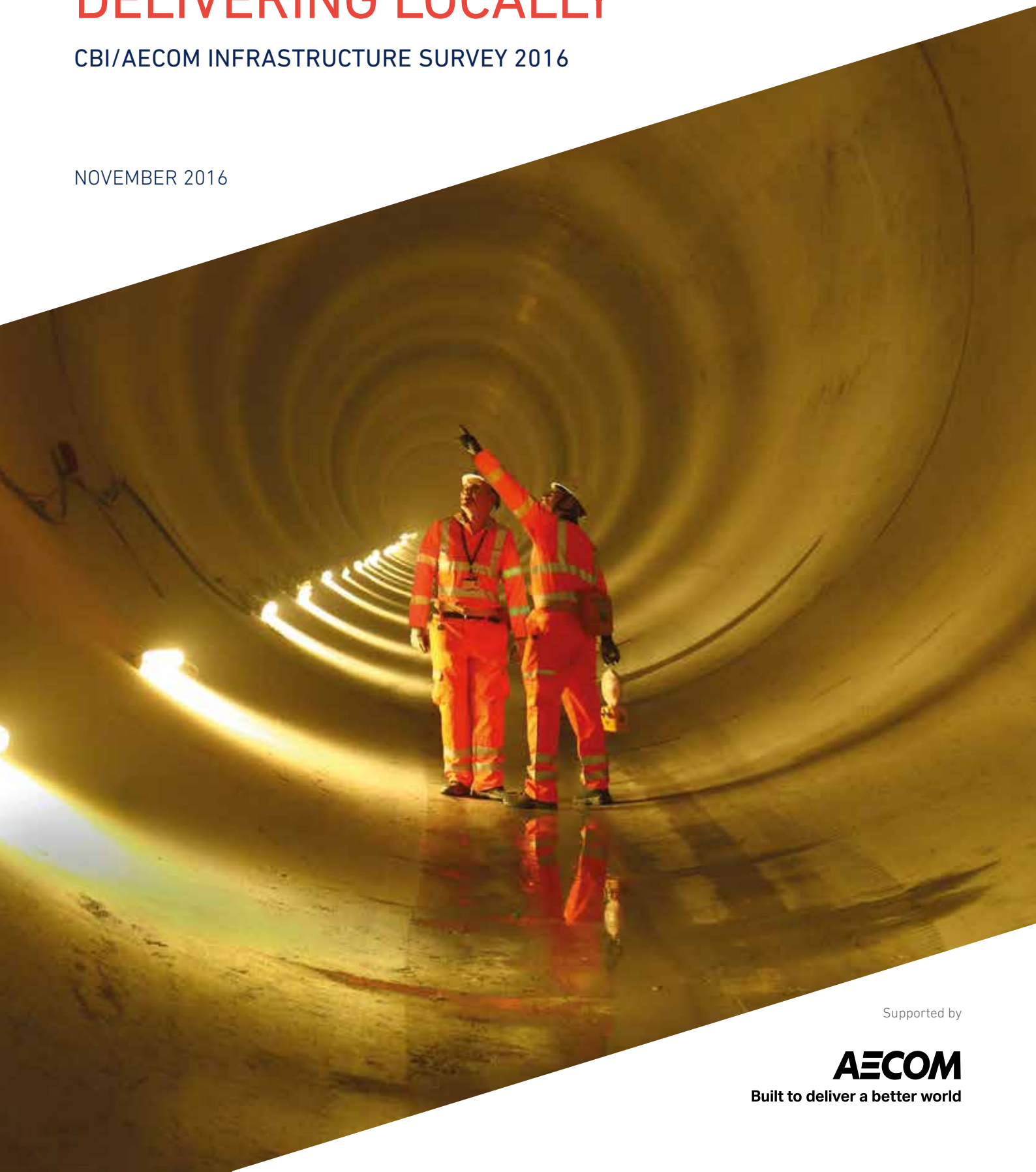


# THINKING GLOBALLY DELIVERING LOCALLY

CBI/AECOM INFRASTRUCTURE SURVEY 2016

NOVEMBER 2016



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## Foreword – CBI



One year on from the last CBI-AECOM infrastructure survey, and we find ourselves in a dramatically different world. A new Government, determined to build prosperity for all at the same time as redefining our relationship with Europe and beyond.

In uncertain times, one thing is clear: the impact that investment in infrastructure can bring makes it a priority for government and business alike.

The survey results – which saw our highest response rate to date – reflect both these uncertainties and also the vital role infrastructure can play in productivity and growth. They provide a clear opportunity for the government to act and continue to bring clarity and confidence to companies and communities.

While firms are positive about the clear prioritisation of infrastructure over the last five years – and are seeing the benefits – they are less confident that improvements will continue in the years ahead, with only digital bucking the trend. Most strikingly, almost two thirds of businesses suggested that the UK is unlikely to be more internationally competitive in 2050 than it is now.

At the very time when the UK must show the world that it is an attractive place to invest, this is a concern. So the message to the government is loud and clear: business wants to see a relentless focus on delivery locally, demonstrating that the UK is well and truly open for business globally.

We are seeing positive steps in the right direction. The Prime Minister's decision to give a green light to both Hinkley Point and Heathrow is warmly welcome. Together, these schemes will see significant sums of private sector investment, generating over 100,000 jobs during construction, which is good news for the economy and business confidence. It is crucial that these decisions swiftly translate into action.

But infrastructure delivery means much more than big political decisions on high profile projects. It means the government keeping its foot on the accelerator across the whole of our infrastructure pipeline – whether that's expanding our rail capacity, tackling congestion on our

roads, keeping up the pace on our digital connectivity or providing the much sought after clarity and consistency in our energy policy.

It also means delivering right across the UK. This year's survey gathered in-depth data from right across all regions and nations, which revealed a very mixed picture. Nearly one in two firms said they were dissatisfied with the infrastructure in the region within which they operate. This is not good enough. So whether it's tackling congestion in the East Midlands or creating the rail links to connect Manchester and Leeds, it is crucial that we have a strategy which joins the dots; delivering in each region, and driving up productivity across the country.

Finally, while delivering now, we must also continue to plan for the future. After strong backing for the National Infrastructure Commission (NIC) last year, businesses are now eagerly awaiting its National Infrastructure Assessment, which should provide a holistic and strategic view of our infrastructure needs.

Delivering the £425 billion pipeline of infrastructure that our country needs presents a huge opportunity; but grasping it will require a concerted and collaborative effort. As we continue into uncertain times, it is crucial, now more than ever, that both government and industry join forces to deliver the world class infrastructure that will put 'Brand Britain' firmly on the map.

A handwritten signature in black ink, reading 'Carolyn Fairbairn'.

**Carolyn Fairbairn**  
Director-general, CBI

## Foreword – AECOM



Business thrives on clarity and stability, both of which may feel in short supply at present. Whilst most five-year business plans are dynamic documents that companies fully expect to change, the unexpected referendum result has put the pound on a rollercoaster and injected a peak of uncertainty that few will have fully anticipated.

As the government prepares to negotiate the terms of our exit from the EU, it is all too easy to fear the future. As the survey we publish today shows, confidence that the UK's infrastructure will improve over the next half decade has fallen by 16 percentage points since our previous study. This is a significant drop in just one year, and very likely due to the uncertainty around Brexit combined with several high-profile issues that hit the news: further delays to a decision on aviation capacity in the south east, a 'pause' in Network Rail investment and doubts about Hinkley.

It is heartening that both Heathrow and Hinkley have moved forward significantly in the second half of the year. This is remarkable progress. The Government's reaffirmed commitments to HS2 and Crossrail 2 are also welcome signs.

In or out of the EU, the UK has strong fundamentals that can be built on in the future. And notable among our nation's most sought-after skills is our world-class expertise in the design and delivery of infrastructure.

Nowhere else in the world are new and innovative models of major project delivery so often implemented on large-scale schemes. The UK has a keen appetite for the new and bold, which will be important going forward as clients and the infrastructure sector adopt greater collaboration and appropriate risk-sharing, working in fully integrated client-contractor teams to increase efficiency and cut costs. Removing interfaces, connecting design to construction and operations, and driving true collaboration are at the heart of AECOM's strategy. We are excited about the future for infrastructure in the UK and the lessons that can be applied globally.

There are good examples we can draw from and build upon, from HS1 to Crossrail and Tideway. These are world-class projects that provide bright beacons of British success and innovation in delivering 21st Century infrastructure.

As a country and as an industry we must continue to green-light significant projects, to hone and develop our exportable skills. This will instil the confidence to recruit and invest in people.

Theresa May's government has recently set a more positive tone, with decisive action on both Hinkley and Heathrow. By their nature these are long-term projects, unlikely to bring much competitive benefit to the country over the next five years, but they will deliver over time and their confirmation also sends an immediate signal to the rest of the world.

A third runway for Heathrow, in particular, makes it clear that the UK intends to remain an attractive place to do business, positioning itself to better compete on the global stage. The decision will certainly be welcomed by the 46% of companies in the survey that fear losing business as a result of poor airport connectivity with emerging markets.

Expansion at Heathrow is of course a vital step, but no single project can secure success on its own. Infrastructure must not be planned and delivered in isolation. Planning for the nation's future growth and prosperity requires a broad, integrated approach. The symbiotic relationship between social and transport infrastructure, energy, housing, jobs, leisure amenities and green spaces must be recognised. A joined-up approach is vital.

Today's CBI/AECOM infrastructure survey provides an important piece of this planning for growth puzzle. It measures the mood of business leaders, and shows where their pain points lie both geographically and by topic, from road, rail and aviation to energy and connectivity.

We publish these findings ahead of the Autumn Statement – perhaps the final such statement for a while, given Chancellor Hammond's recent suggestion that the mid-Budget announcement may soon be scrapped.

No matter how the Chancellor and the government choose to communicate policy going forward, we will all welcome clear and decisive leadership that takes full account of the needs of business. If our exit from the EU is to lead to increased prosperity, the UK must become more efficient at home, empowered by modern infrastructure, as well as more outward-looking than ever before.

A handwritten signature in dark ink, appearing to read 'Richard Robinson'.

**Richard Robinson**

Chief Executive, Civil Infrastructure, Europe, Middle East, India & Africa, AECOM

## Executive summary

While 44% of firms believe the UK's infrastructure has improved over the past five years, and 42% believe that the policies undertaken so far in this parliament have had a positive impact, only 27% think that it will improve in the next half decade.

Over the longer term, 64% of respondents felt that the UK was unlikely to be more internationally competitive in 2050 than we are now. With the UK currently ranked 24th in the world for the quality of its infrastructure, this indicates that the government still has some way to go in setting out a vision that inspires business confidence.

With our economic prospects uncertain, it is crucial, now more than ever, that we are bolstering investor confidence at home. Support for delivery of projects in the existing infrastructure pipeline is high, with 99% seeing delivery of rail projects in Control Period 5 (CP5) and 97% seeing delivery of the Road Investment Strategy (RIS) as important priorities for UK plc.

To this end, maintaining a relentless focus on delivery must form a core part of the approach taken on infrastructure. There is significant opportunity to drive growth and prosperity right across the country: government and industry must now join forces to seize it.

## Key stats by sector

### *Government must continue to play a positive and productive role...*



**ROAD:** 97% of respondents see the delivery of the Road Investment Strategy as important to the UK's future economic growth, with 73% of all businesses seeing tackling congestion on the road network as either critical or important to the future operation of their business.



**RAIL:** The ability to work on the go tops the business wish-list, with three quarters of firms (75%) saying better digital connectivity on trains is either critical or important.



**ENERGY:** 66% of respondents are confident regarding the security of energy supply for the rest of this parliament, but just 27% felt the UK would take steps in this parliament to improve the longer-term outlook.



**AVIATION:** Businesses are pessimistic that the UK's aviation connectivity will improve in the coming years – with almost three quarters (74%) seeing immediate progress unlikely.



**DIGITAL:** Three quarters of businesses (75%) say that UK digital networks have improved in the last five years, with a majority (59%) expecting to see this continue over the course of this parliament.

### *...and ensure infrastructure remains a core part of the UK's long-term economic outlook.*



**REGIONAL DELIVERY:** 46% of respondents are dissatisfied with the current state of infrastructure in the region in which they operate.



**PLANNING:** 40% of infrastructure providers are either dissatisfied or very dissatisfied with the current business environment for delivery.



**SKILLS:** 86% of infrastructure providers are concerned that skills shortages will affect the UK's ability to deliver the current infrastructure pipeline.



**INVESTMENT:** 59% of all firms are open to more private financing models for the road and rail networks, moving away from the exclusively government-funded model currently used.

## Current outlook

### More businesses believe UK infrastructure is improving – but see a far from certain future ahead

- 44% of businesses believe UK infrastructure has improved in the last five years, compared to 24% that believe it has deteriorated
- 42% believe that the policies undertaken so far in this parliament have had a positive impact, with 22% seeing policies as having been damaging
- Confidence that infrastructure will improve in the coming five years has dropped since our 2015 survey by as much as 16 percentage points – with only digital bucking the trend
- Looking out to 2050, 64% of respondents feel that the UK is unlikely to be more competitive internationally than we are now
- Support for delivery of projects in the existing infrastructure pipeline is high, with 99% seeing delivery of rail projects in Control Period 5 (CP5) an important priority, and 97% saying the same for the Road Investment Strategy (RIS).

### The prioritisation of infrastructure over the last five years has had a positive impact on the UK's economic prosperity

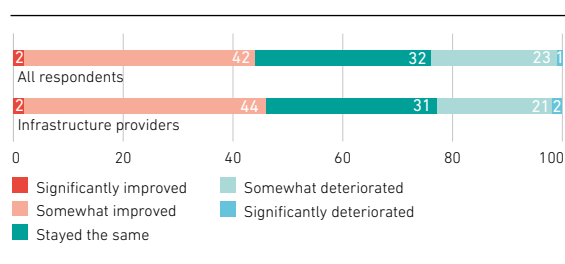
Over the past five years, infrastructure has never been far from the top of the political agenda. Initially prioritised at the height of the financial crisis for the short-term economic benefits that construction activity is able to provide, infrastructure has since become a core part of the UK's long-term economic agenda. From the drive to rebalance the UK economy towards exports, trade and investment, to the focus on regional growth and devolution, investment in infrastructure has featured highly. With the government led by Theresa May both widening the focus of the devolution agenda to cover all of the UK's nations and regions, as well as re-emphasising the need for a comprehensive UK industrial strategy,<sup>1</sup> a clearer picture of each part of the UK's infrastructure needs will be critical.

44%

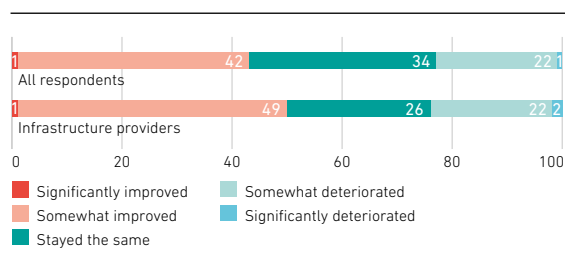
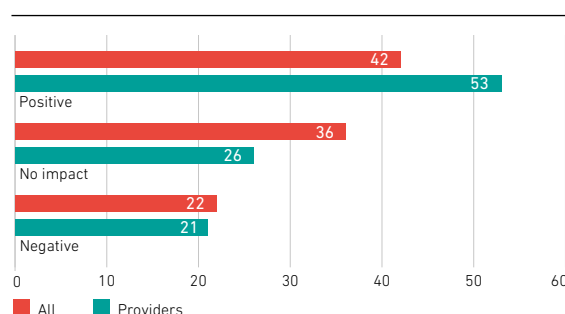
of businesses believe UK infrastructure has improved in the last five years.

Businesses feel that the emphasis on infrastructure over the course of the last five years has started to deliver results. 44% of all respondents believe that UK infrastructure is moving in the right direction, compared to 24% who believe it is deteriorating. Among infrastructure providers, some 46% believe improvement is being observed, compared with 23% who see deterioration (**Exhibit 1**). These results are largely consistent with last year's survey, although notably with a slight drop in the number of positive responses from infrastructure providers.



**Exhibit 1: Business perceptions of changes in the quality of infrastructure over the last five years (%)**

Considering the government's role in this change, again, businesses are on balance optimistic that the prioritisation of infrastructure in recent years has been more than just rhetoric. Asked what impact the policies of the then David Cameron-led government would have on infrastructure in the years ahead, 42% felt that they had had a positive impact, contrasted with the 22% who saw a negative impact (**Exhibit 2**). Infrastructure providers were again even more positive, with 53% of providers seeing a positive impact compared with just 21% seeing the opposite (**Exhibit 3**).

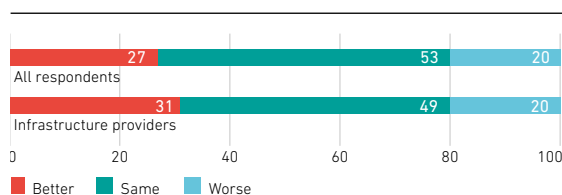
**Exhibit 2: Business perceptions of changes in the quality of infrastructure over the last five years (%) – 2015 Survey Comparison****Exhibit 3: Views on impact of current government policies on UK infrastructure (%)**

Indeed, the last year alone has seen the creation of Transport for the North advisory body and funding set aside for feasibility studies to increase east-west connectivity, including a trans-Pennine tunnel and High Speed Rail 3. This also follows a concerted period of wider government initiatives including the planned creation of a 'roads fund' through the hypothecation of Vehicle Excise Duty (VED), the creation of the first Road Investment Strategy (RIS),<sup>2</sup> historic investment in the UK's railways through Control Period 5 (CP5)<sup>3</sup> and the instigation of programmes such as the UK Guarantee Scheme. Government has played a proactive role in recent years, and business has tended to see this as a positive and productive one – one that it hopes will continue under Theresa May's leadership.

### Uncertainty over the future of UK infrastructure has increased over the last 12 months

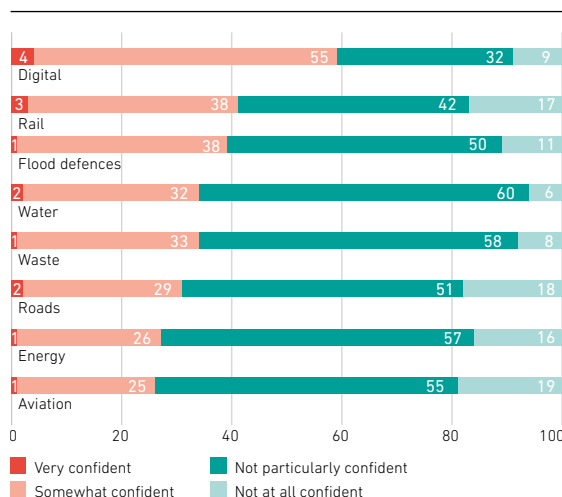
Business outlook on UK infrastructure is less positive than it was this time last year, and has seen a drop in confidence on both the performance of delivery and in the improvement of infrastructure. Over a quarter (27%) of businesses believe the UK's infrastructure will fare even better in this parliament (2015-2020) than the last one (2010-2015), however the margins, at +7% are much closer than previous assessments of improvement made over the past five years (**Exhibit 4**). Almost half of all respondents along with half of all infrastructure providers (53% and 49% respectively), expect to see the same performance.

**Exhibit 4: Business views on whether UK infrastructure will fare better in this parliament (2015-2020) compared to the last (2010-2015) (%)**



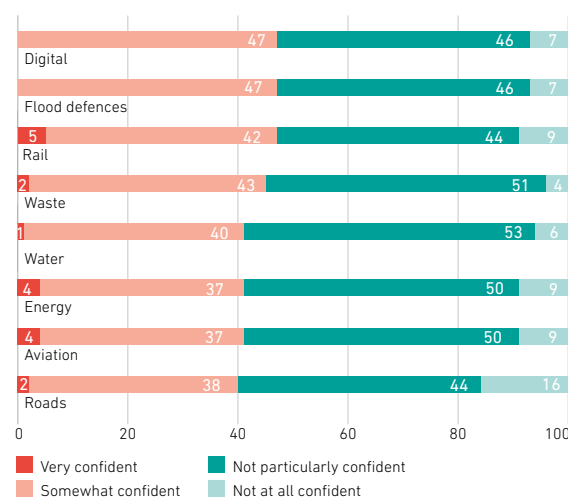
Notably, several specific infrastructure sectors reflect much lower than average levels of confidence when assessing forthcoming improvements. Aviation fares worst, with 74% of respondents not confident aviation infrastructure will fare better, energy is second (73%) and roads third (69%) (**Exhibit 5**). Digital bucks the trend, with 59% reporting they are confident that improvements are forthcoming.

**Exhibit 5: Business confidence in infrastructure improvement (%)**



It is also worth highlighting that confidence levels in every sector but digital have markedly decreased over the course of the last 12 months. Businesses in the aviation sector saw the greatest decline in confidence, registering a 15 percentage point decline, closely followed by energy with a decrease of 14 percentage points. Road and rail also saw decreases in confidence (nine points and six points respectively), while digital again bucked the trend with a 12-point upswing in confidence (**Exhibit 6**). The lengthy debate on aviation capacity in the south east, continued uncertainty over energy policy and concerns over the delivery road and rail investments may provide some context to the decline in confidence.

**Exhibit 6: Business confidence in infrastructure improvement (%) – 2015 comparison**



The outlier in this data is digital, where positive feelings towards the state of digital infrastructure has become a mainstay of the survey over recent years. Indeed, it remains one of the bright spots in an increasingly uncertain time. With the pace of change in digital infrastructure so rapid and with thinking already emerging on 5G before 4G has fully bedded in, this is perhaps unsurprising.

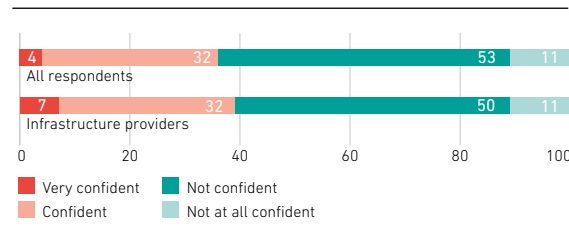
Nonetheless, the overarching picture across the infrastructure sectors in the last year is one of decreased certainty. These concerns are felt acutely across flood defences, which scored highly in 2015 and roads, which scored the lowest a year ago. It is worth remembering, this year's survey took place with the backdrop of the Brexit referendum, which fell in the middle of the survey's data collection and may reflect uncertainty about what leaving the EU would mean for infrastructure, as well as concerns that a new government could blow current investments off-course.

64%

of businesses believe the international competitiveness of UK infrastructure will not have improved by 2050

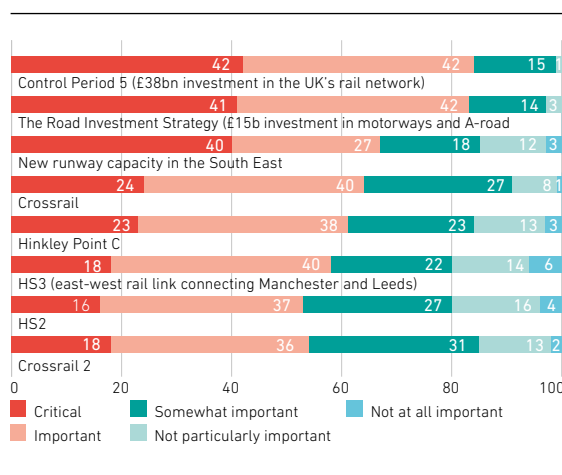
Turning to the prospects of improvements in the long term, businesses are on balance not confident that the UK's infrastructure competitiveness will improve. Looking out to 2050, 64% of respondents feel that the UK is unlikely to be more competitive internationally than we are now (**Exhibit 7**). With the UK currently ranked 24th in the world<sup>4</sup> for the quality of its infrastructure, this indicates that the government led by Theresa May still has some way to go in setting out a vision that businesses can believe in. In a year that will see the undertaking of the first National Infrastructure Assessment by the National Infrastructure Commission,<sup>5</sup> and with the backdrop of the UK needing to set out a vision of its place in the world following Brexit, articulation of an evidence-led plan to meet the UK's long-term infrastructure needs remains a high priority.

**Exhibit 7: Business confidence that UK international competitiveness will have increased by 2050 (%)**



### The government must safeguard industry confidence to ensure delivery of major infrastructure projects

As Theresa May's government shapes its economic policies and attention turns towards the actions needed to bolster confidence ahead of negotiations to leave the EU, businesses are clear that continuity must form a core part of the approach taken on infrastructure. With an impressive £425bn infrastructure pipeline planned, businesses applaud the ambition shown in recent years. But the challenge of delivery remains: government and business to work in tandem to develop this partnership successfully. Asked how important a number of key deliverables in the current infrastructure pipeline are to the UK's economic growth, respondents highlight broad support for the priorities of the previous government.

**Exhibit 8: Importance of major projects for UK economic growth (%)**

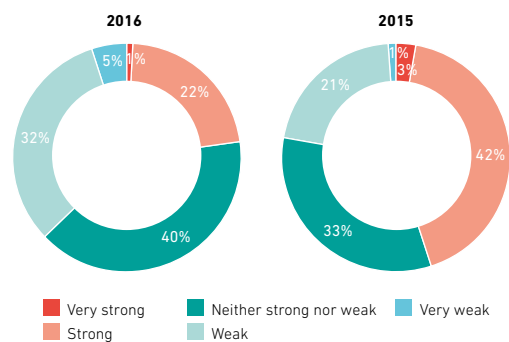
Delivery of programmes of work such as CP5 and the RIS are considered the most important in the coming years above other nationally significant projects such as HS2, Hinkley Point and a new runway in the south east – although no project saw higher than 20% of firms giving a negative response (**Exhibit 8**). 99% of firms report CP5 as either critical, important or somewhat important, while 97% report similarly on the RIS. The proportion of businesses placing new runway capacity in the south east as a 'critical' issue is notably on a par with both road and rail spending programmes.

99%

of businesses believe delivering Control Period 5 remains an important priority for the new government

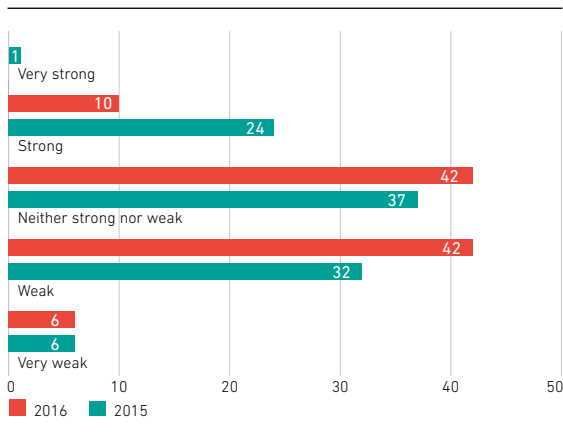
But the results indicate that commitment to the existing pipeline of projects on its own is not enough with concerns about delivery heightening over the last year. Assessments of the UK's ability to both deliver new infrastructure and maintain existing assets have also dropped markedly over the last 12 months. The proportion of those who feel the delivery of new infrastructure is strong or very strong has dropped by 22 percentage points when compared to the 2015 CBI/AECOM survey (**Exhibit 9**), while the same score for maintaining infrastructure has dropped by 16 points (**Exhibit 10**).

*The number of businesses with a positive assessment of the UK's ability to deliver new projects has dropped by 22 percentage points in the last 12 months.*

**Exhibit 9: UK performance on delivery of new infrastructure projects (%)**



**Exhibit 10: UK performance on maintenance of existing assets (%)**



As attention turns towards the actions needed in the first year of Theresa May's government, these results indicate that rather than committing to a new raft of infrastructure projects to provide fiscal stimulus, what business wants to see is a reaffirmation to deliver on existing plans. By sticking to its spending plans for the UK's roads and railways – and ensuring they are delivered in full over the course of this parliament – the government can provide the right foundations to help business drive growth and prosperity across the UK's regions. This should include pressing ahead with major infrastructure projects, like HS2, alongside incremental improvements to our road networks, building on progress already made in areas such as setting a delivery date for the A14 improvement scheme. Business is ready to partner with government to develop the skills and capacity to deliver these plans; if government is to shift the dial on the five-year outlook, it is critical that certainty about future capital investment plans is provided as soon as possible.

## Infrastructure sectors: road, rail, energy, aviation and digital

### ROAD

**With business supportive of the Road Investment Strategy (RIS), delivering quick wins will boost confidence for the future**

- 73% see tackling congestion on the road network as either critical or important to the future operation of their business
- Despite the £15bn Road Investment Strategy (RIS) with a negative balance of -38% of businesses expect to see roads improve over the rest of this parliament, with East of England most positive (-2%) and Northern Ireland least (-76%)
- 71% of infrastructure providers are not confident that Highways England has the capacity to deliver the RIS, while 56% also believe industry lacks the capacity
- Looking to the second Road Investment Strategy (RIS 2), businesses prioritise linking the road network up to other forms of transport, with 75% of respondents calling this critical or important.

**Positivity towards the first Road Investment Strategy (RIS) is almost unanimous, but is yet to translate into optimism for providers**

Improvements to the UK's road network remain high on the list of infrastructure priorities for businesses operating across the UK. Some 73% see tackling congestion on the road network as either critical or important to the future operation of their business. As part of this, the government's multi-year £15bn RIS, running from 2015 to 2020/21 has the overwhelming backing of businesses, with 97% of firms describing it as important and 41% calling the programme 'critical' in attempts to boost capacity and resilience. Support is similar for road investment in the devolved nations, where programmes such as the Investment Delivery Plan for roads in Northern Ireland<sup>7</sup> and the investments as part of the Welsh Infrastructure Investment Plan<sup>8</sup> provide a significant pipeline of improvements for the future.

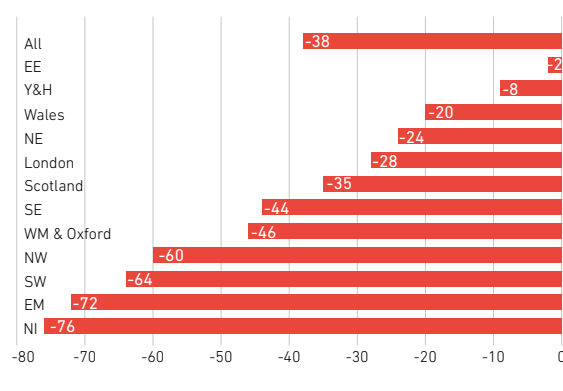
# 97%

of respondents see the delivery of the Road Investment Strategy as important to UK's future economic growth

While all programmes are now under way, business sentiment regarding the future of the UK's motorway and major road network has not yet improved. This is demonstrated by 69% of all respondents, users and providers of infrastructure, who are still not confident that the UK's road infrastructure will improve over the course of this parliament. Broken down by region, respondents in Northern Ireland are the least confident with 88% (a negative balance of -76%) believing their roads will not improve over the course of this parliament, followed closely by the East Midlands with 86% (-72%) and the south west at 82% (-64%) (**Exhibit 11**). No region or devolved nation is

positive about the outlook for the improvements for its roads, though opinions are notably much more balanced in the East of England (with a balance of -2%) and Yorkshire and Humber (-8%).

**Exhibit 11: Business lack of confidence that road infrastructure will improve over this parliament (%)**



Even after a period of historic change to future funding of the road network in the UK, including the planned introduction of a Roads Fund in 2019 through the hypothecation of revenue from Vehicle Excise Duty (VED), confidence that the UK's road infrastructure will improve still remains low. The results of the survey however suggest that these positive changes will take time to feed through to business confidence. It is notable however that the East of England's more positive result comes in a year that has seen the long-delayed dualling of the A14 receive a 2016 construction start date. This contrasts with the south west's result, which still languishes behind many regions, despite high-profile announcements in 2015 regarding upgrades to the A303 and tunnelling adjacent to Stonehenge as an alternative to a route through the middle of a World Heritage site. This indicates that announcements alone are not enough to boost confidence: businesses need to see a deliverable timetable for action that will be adhered to.

### Those operating in the road sector see significant challenges ahead for industry and government alike

Historic levels of investment in England's roads bring new challenges for both the delivery of the RIS as well as for improvement schemes by the devolved nations. Infrastructure providers working in the roads sector already have concerns about the RIS's delivery, with a third (34%) reporting that they are concerned that it is not currently on course.

With capital spending on the Strategic Road Network (SRN) set to rise from £1.4bn to £4bn over the remaining period of this parliament, government and industry both need to collaborate more effectively to develop the skills and capacity needed to keep the programme on track: achieving this will also translate into confidence in the forthcoming second Road Investment Strategy (RIS 2).<sup>9</sup> Currently in its research phase, RIS 2 aims to ensure that investment decisions continue to address the biggest challenges facing the UK's road network. It will be crucial to maximising the success of this work that these collaborative partnerships between government and industry are developed and confidence is maintained.

# 71%

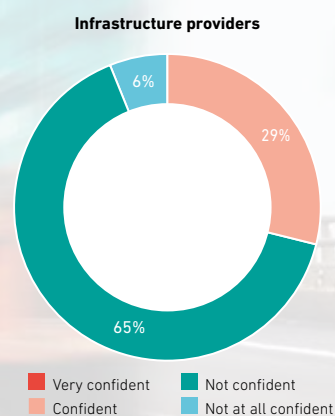
of infrastructure providers are not confident that Highways England has the capacity to deliver the RIS, while 56% also believe industry lacks the capacity





In particular, businesses also see significant challenges in procuring and project managing the RIS. While Highways England is largely recognised to have had a positive start, bringing in external expertise where necessary in order to upscale operations, 71% of providers operating in the road sector are not confident or not at all confident in their capacity to deliver the RIS (**Exhibit 12**). Teething problems around the equitable award of contracts under the Collaborative Delivery Framework (CDF),<sup>10</sup> one of Highways England's primary procurement vehicles, have done little to bolster confidence in the industry. With the framework forecast to exceed its notional value threshold two years earlier than expected, industry is now facing fresh tendering costs at a time when many remain uncertain around the effectiveness of Highways England's procurement strategy.

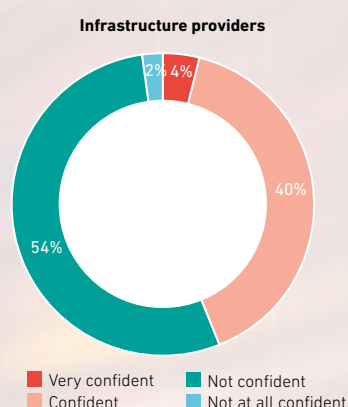
**Exhibit 12: Infrastructure providers' confidence in Highways England's capacity to deliver the Road Investment Strategy (%)**



Not only reflecting concern about the capacity of Highways England as a delivery body, these results also highlight doubts over industry's capacity to deliver the largest investment in the road network since the 1970s. Over half (56%) of those working in the roads sector do not believe the capacity currently exists to deliver the RIS (**Exhibit 13**).



**Exhibit 13: Infrastructure providers' confidence in their capacity to deliver the Road Investment Strategy (%)**



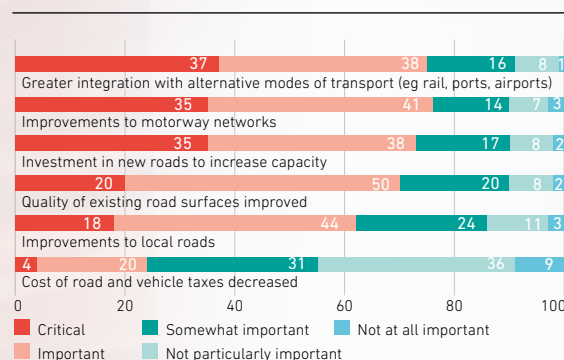
Confidence in a steady and stable investment profile will be critical to upscaling capacity in the sector to meet the challenge. It may however take time for those operating across the roads sector supply chain to adapt and have confidence in the new five-year settlements. Using the £5bn road maintenance budget to even out construction activity over the course of investment programmes could help ensure industry not only brings the right skills through, but is also able to retain them in the UK for the long term.

### As attention turns to the second Road Investment Strategy, greater integration between modes of transport tops the list of priorities

With planning for RIS 2 already under way, attention is turning towards how the UK can maximise the impact of future investment in the UK's road network – both reducing congestion to boost productivity and responding to technological changes. When asked what outcomes need to be secured for road infrastructure in the long term, greater integration with alternative modes of transport, investment

in new road capacity and improvements to the motorway network all score particularly highly, although investment in maintenance and local road networks are also seen as critical or important by a majority of firms (**Exhibit 14**).

**Exhibit 14: Critical outcomes in road infrastructure that need secured in the long term (%)**



More widely, greater integration of UK transport is a theme that has consistently come through this year among survey respondents. Whether integration with other forms of transport or breaking down the barriers between the UK's SRN and its local roads, placing an integrated approach at the heart of RIS 2 and future projects in the devolved nations would be a significant and positive step forward. With local transport increasingly devolved and with many local authorities increasingly hard-pressed for funding for the local road network, an integrated approach would ensure that the positive impact of investment could spread into cities and communities beyond the key arteries of the network.

# RAIL

- Many see rail as critical to boosting productivity on the go, but there is much to do to build confidence in future improvements
- Ability to work on the go tops the business wish-list, with three quarters of firms (75%) saying better connectivity on trains is either critical or important
- On balance, -18% expect to see rail improve over the rest of this parliament, with the south west most sceptical at -58% and the East of England most positive at +10%
- 74% of firms working in the rail sector are not confident Network Rail has the capacity to deliver the rest of Control Period 5 (CP5)
- But only 32% of infrastructure providers operating in the rail sector are satisfied that the industry has the capacity to deliver the upgrades in the coming years.

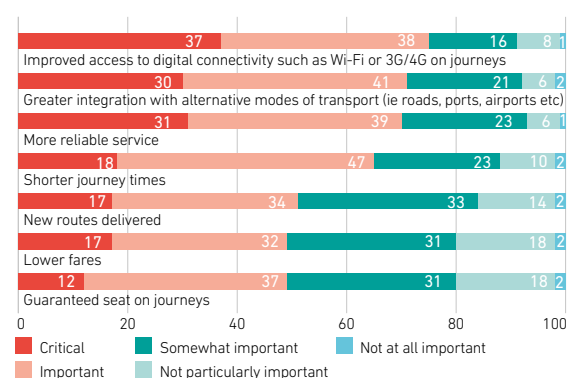
## The ability to work seamlessly between desk and train tops the list of priorities for rail

When asked what long-term upgrades should be prioritised for the UK's rail systems, businesses report that improved access to digital connectivity such as wi-fi or 3G/4G tops their list, with three quarters (75%) saying it is either critical or important to their future operations (**Exhibit 15**). Greater integration with alternative modes of transport and more reliable services follow second and third, with 30% and 31% respectively saying these outcomes are also critical to their business operations.

# 3/4

of businesses see improved access to digital connectivity such as wi-fi or 3G/4G on journeys as critical or important to their future operations

**Exhibit 15: Outcomes for future business operations in rail infrastructure (%)**



The results in exhibit 15 indicate that 'productivity on the move' ranks highly in the minds of many businesses. While for some this might mean minimising journey times through better integration of different forms of transport, for many others it is about moving seamlessly from desk to train and vice versa. With businesses rapidly digitising their operations and service provision, it is perhaps unsurprising this tops the list of future priorities. Digital connectivity and productivity on the move will soon become the norm, rather than the exception.

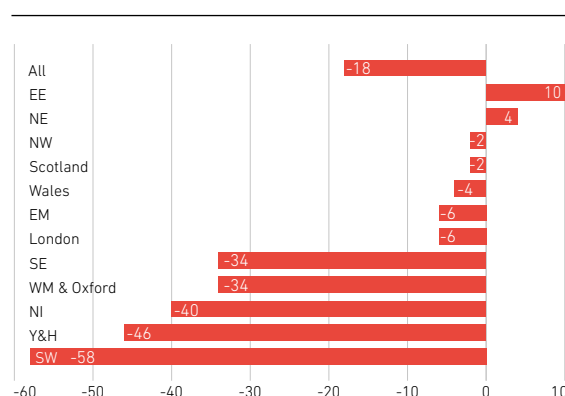
### Confidence in the future is mixed despite historic levels of investment in the UK's railways

The current view however is that the UK on balance is still not moving in the right direction – even as investment in Control Period 5 (CP5) starts to flow. Looking over the course of the rest of this parliament, 59% of businesses believe rail will not improve. Underlying this, there are significant regional variations, ranging from the East of England, which on balance believes rail will improve (+10%), to the south west, which is least confident (-58%) (**Exhibit 16**).

# 59%

59% of respondents believe rail infrastructure will not improve over the course of parliament

**Exhibit 16: Business confidence that rail infrastructure will improve over this parliament\* (%)**

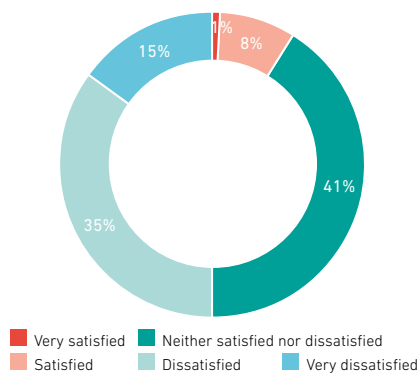


In a period that is seeing almost unprecedented investment going into the railways as part of CP5, these results may still reflect reaction to the negative headlines surrounding the pause of the upgrade programme. Last summer, the government moved to 'pause' a number of rail schemes because of significant project overspend on the electrification of the Great Western line.<sup>11</sup> Alternatively, the results could instead reflect a lack of awareness of the broader investment programme, with mean attention focused on large projects such as HS2.

### A reformed approach to delivery in Control Period 5 and beyond would present an opportunity to innovate

It is not just business users who have voiced their dissatisfaction at the delivery of promised upgrades. Just over two years into CP5, half of all survey respondents operating in the rail sector report that they are unhappy with the delivery of the programme so far – with just 9% reporting they are either satisfied or very satisfied (**Exhibit 17**).

Exhibit 17: Infrastructure firms' satisfaction with delivery during Control Period 5 (%)

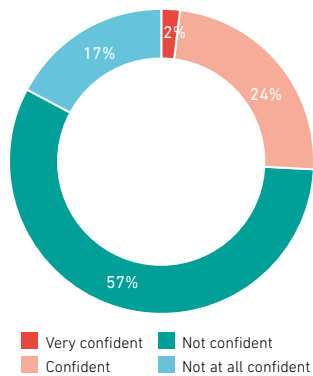


Given delays to the programme, dissatisfaction is perhaps not surprising. Looking forward though, confidence for the rest of the programme fares no better. Despite a number of reviews kick-starting the reform of Network Rail, including reports by Sir Peter Hendy,<sup>12</sup> Dame Colette Bowe<sup>13</sup> and Nicola Shaw,<sup>14</sup> almost three quarters (74%) of respondents working in the rail sector are not confident in Network Rail's capacity to deliver in the rest of CP5 (**Exhibit 18**).

74%

of infrastructure providers working in the rail sector not confident Network Rail's capacity to deliver the rest of Control Period 5

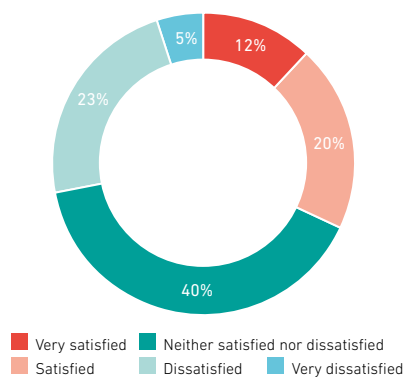
Exhibit 18: Infrastructure firms' confidence in Network Rail's capacity to deliver investments planned in Control Period 5 (%)



Under the leadership of Mark Carne, however, Network Rail has put in place a process of reform, and results suggest the effect of these reforms will take some time to flow through to those charged with delivering rail upgrades. Businesses operating in the sector will nonetheless be looking for signs things have improved in the coming months, particularly when it comes to project management and ownership on big enhancements.

Businesses operating in the sector are clear that delivery challenges are not just limited to Network Rail however, they are also faced the rail industry as a whole. Just one third (32%) of infrastructure providers operating in the sector are satisfied that industry has the capacity to deliver upgrades in the coming years. This could be linked to deficiencies in skills or in the supply chain as the programmes ramp up (**Exhibit 19**).

**Exhibit 19: Infrastructure providers' satisfaction with their capacity to deliver investments planned in Control Period 5 (%)**



# 32%

of infrastructure providers in the rail sector believe the industry currently has the capacity to deliver Control Period 5

With the National Skills Academy for Rail estimating core shortages of some 10,000 workers in areas such as signalling engineers and electrification between 2014 and 2019,<sup>15</sup> the anxiety felt by industry is understandable. Construction firms must have the confidence to invest in skills for the long term, meaning it is essential that investment is consistent – both over the course of, and between, control periods. It also makes initiatives that echo the success of the Tunnelling and Underground Construction Academy (TUCA) at Stratford essential.







# ENERGY

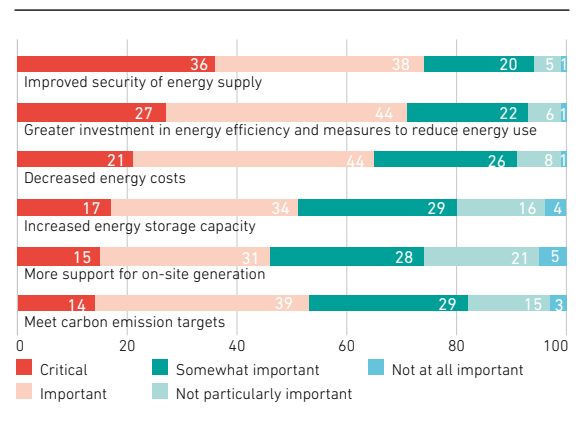
## A clear and consistent strategy is crucial to deliver long-term investment

- 74% of respondents in this year's survey cite improved security of energy supply as a 'critical' or 'important' long-term goal for the future operations of their business, rising to 81% of manufacturers
- 66% of respondents are confident regarding security of supply for the rest of this parliament, but just 27% feel the UK will take steps in this parliament to improve the longer term outlook
- 59% of infrastructure providers in the energy sector are either dissatisfied or very dissatisfied with government's current energy policy framework to boost investment
- 83% of businesses are not confident in the UK's ability to meet the requirements of Paris Climate Change Agreement (COP21).

## Security of supply tops businesses' priority outcomes for energy, with energy efficiency a close second

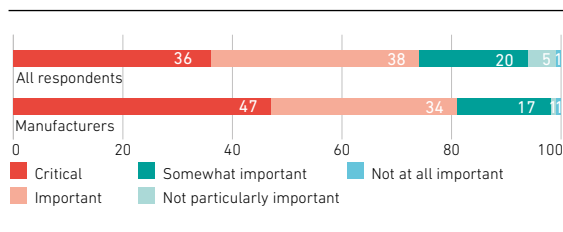
When it comes to energy, the survey indicates the importance of long-term security of supply for businesses. 74% of respondents cite that improved security of energy supply is either a critical or important long term goal for the future operations of their business with just over a third feeling it is critical (**Exhibit 20**). The importance of security of supply increases yet further among manufacturers, with 47% seeing long-term improved security of supply as a critical goal, rising to 81% seeing it as critical or important. With energy storage seen as critical or important by half of respondents (51%), as this technology matures it will play an increasing role in the energy system, as noted in the National Infrastructure Commission's Smart Power Report.<sup>16</sup> It is therefore important that government ensures the right regulatory framework to support its deployment.

**Exhibit 20: Importance of future outcomes in energy infrastructure for business (%)**





**Exhibit 21: Importance of improved energy supply security (%)**



Energy costs are also a priority, with 65% of firms viewing decreased costs as either critical or important. Again, this is most acutely felt by manufacturers with over two thirds (73%) believing lower costs are either critical or important and 35% of them seeing it as critical. Understandably, investment in energy efficiency also scores highly, with a quarter of all firms (27%) seeing this as a critical long-term goal.

Given many of the UK's strengths in areas such as automotive and aerospace depend on a secure and affordable energy supply, a revamped approach to industrial strategy under the Theresa May's government must have energy at its heart – providing the certainty that will facilitate new investment here in the UK.

### Businesses lack confidence that our energy infrastructure will improve, while providers are sceptical about the current policy framework

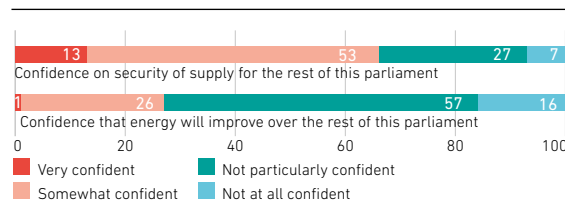
Asked about their immediate confidence in the UK maintaining security of supply for the rest of this parliament, businesses are on balance more confident than not, with two thirds (66%) either very confident or somewhat confident for the coming years (**Exhibit 21**). In contrast, manufacturers are less favourable, with 57% positive and 42% not – a fifth of the latter being not at all confident. Whether the UK's energy infrastructure is likely to improve over this parliament returned a much more pessimistic outlook – with 73% of all firms either not particularly confident or not at all confident (**Exhibit 22**).

This might indicate that while most businesses do not expect a crunch during this parliament, they believe the UK could be storing up problems for the decade following 2020. This is reflected in the predictions of the National Audit Office, which suggest that without significant investment, pinch points in security of supply caused by coal and nuclear sources coming off the system will be felt from 2022 onwards.<sup>17</sup>

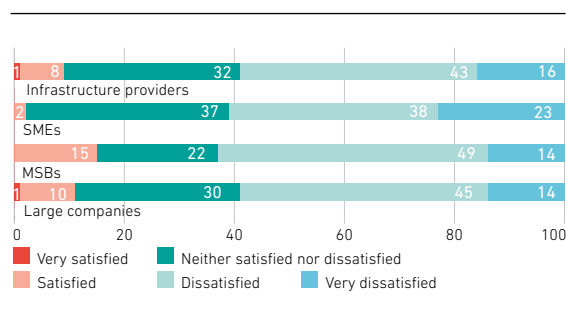
66%

66% of respondents are confident regarding security of supply for the rest of this parliament

**Exhibit 22: Business confidence in improvement in energy infrastructure and security of supply (%)**



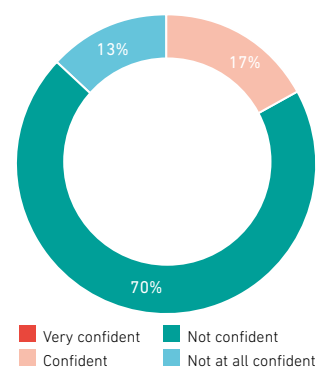
The results also point to a correlation between the lack of confidence felt in the improvement in energy infrastructure and the negative views of the current energy policy framework. This is reflected in the fact that 59% of infrastructure providers working in the energy sector are either dissatisfied or very dissatisfied with government's current energy policy framework to boost investment, with only 9% of providers stating they are either very satisfied or satisfied (**Exhibit 23**).

**Exhibit 23: Business views on government policy to boost energy investment (%)**

This sentiment perhaps reflects a challenging year in which energy policy has seen significant changes, from the curtailing of support for Onshore Wind to the cutting of funding for Carbon Capture and Storage. It is clear that business needs enduring stability in energy policy going forward to build confidence within the sector, and drive the investment needed to secure and decarbonise our power mix. In the short term, clear and timely decisions are needed, particularly around the next Contracts for Difference auction and the future of the Levy Control Framework.

### Recognising the challenge in meeting our long-term climate change objectives suggests the need for a clear and credible plan

This year's survey indicates considerable scepticism about the UK's ability to meet the requirements of the Paris Climate Change Agreement (COP 21), which was formulated at the end of 2015 with the support of 195 countries. Among infrastructure providers operating in the energy sector, just 17% are confident in the UK's ability to meet the requirements of the agreement – with 83% either not confident, or not at all confident (**Exhibit 24**). Prime minister, Theresa May, recently committed to ratifying the Paris Agreement, and it is perhaps timely then that the government has also now legislated for the fifth Carbon Budget, which sets a target to cut emissions by 57% by 2032 in line with the UK's Climate Change Act.

**Exhibit 24: Business views on the UK's ability to meet the requirements of the Paris Climate Change Agreement (COP 21) (%)**

To improve UK business confidence about meeting these ambitious targets, it is crucial that the government comes forward with a clear and credible plan that works for all businesses. The new government department for Business, Energy and Industrial Strategy (BEIS), which also incorporates climate change as part of its remit, presents an excellent opportunity to bring the various strands together in order to achieve this.



# AVIATION

## The UK has important decisions to make if it is to maximise its export and trading potential

- Just 27% of firms expect to see improvement in aviation connectivity over the rest of this parliament, but the devolved nations buck this trend with 61% in both Scotland and Wales confident of improvement over the period
- Faster road and rail access to the UK's airports is ranked as the highest priority, with 70% of firms calling it 'critical' or 'important'. The West Midlands ranked this highest, with 57% calling it critical, followed by London (46%) and the north west (45%)
- 46% of firms expect to see lost business if the UK fails to increase its emerging market connectivity, rising to 88% of multinational firms with a presence in the UK
- 73% of firms are 'not confident' that a new runway in the south east will be delivered.

# 74%

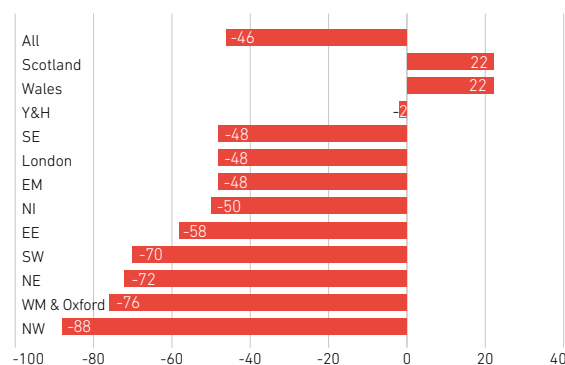
of firms expect to see no improvement in aviation connectivity over the rest of this parliament

## While devolved nations see a positive outlook, most businesses remain cautious on the improvement of the UK's aviation connectivity

Businesses are pessimistic that the UK's aviation connectivity will improve in the coming years – with almost three quarters (74%) seeing immediate progress unlikely. Following the result of the EU referendum, it has never been more important for the UK to enhance its ability to reach out – not only to the EU, but also to opportunities in the rest of the world. The referendum itself has left questions about the UK's future access to European and emerging market airspace, making the conclusion of new deals to provide seamless access to global airspace an immediate priority in upcoming negotiations.

Broken down by region, businesses in the north west, West Midlands, north east and south west are the most negative – all scoring above 80%. Interestingly, Scotland and Wales buck this trend, with businesses on balance positive about improved connectivity, with 61% expecting improvement (**Exhibit 25**).

**Exhibit 25: Business confidence that aviation infrastructure will improve over this parliament (%)**



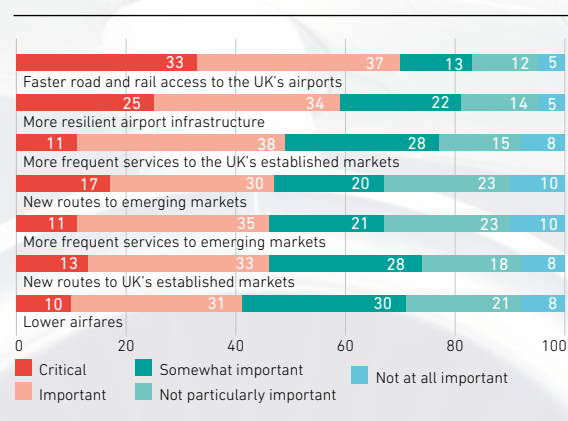
One potential explanation for the negative opinions of UK infrastructure felt in the regions is linked to the devolution of Air Passenger Duty (APD). Despite credible evidence that shows cutting APD would increase revenues from exports and investment, the UK's tax on long-haul flights remains the least competitive in the EU – twice the level of the EU's second least competitive country, Germany. With the government in Scotland having committed to reduce APD by 50%,<sup>18</sup> there is cause for optimism. Similarly in Wales, discussions remain ongoing about amendments to the Wales Bill, although devolution of APD has since been ruled out.

It is also worth noting that those English regions closest to the areas where APD cuts have been discussed – Scotland and Wales – tend to score lower, particularly the south west and north east. A cut in APD in the devolved nations could potentially affect the competitiveness of airports in English regions – with a 50% cut constituting a £73 reduction on long-haul airfares.<sup>19</sup> While any cut to APD should be welcomed, the results could indicate concern among those regions on the borders of the devolved nations. Unless a UK-wide approach is taken to APD, the issue of our current national lack of competitiveness will simply be displaced, rather than solved.

### Faster road and rail access to airports tops the list of desired improvements

While lower airfares are a significant long-term improvement business does want to see, it does not top the list. Though all factors score highly, faster road and rail access to the UK's airports is seen as the most 'critical' according to 33% of respondents. More resilient infrastructure (25%) and new routes (17%) follow as the second and third most critical outcomes (**Exhibit 26**).

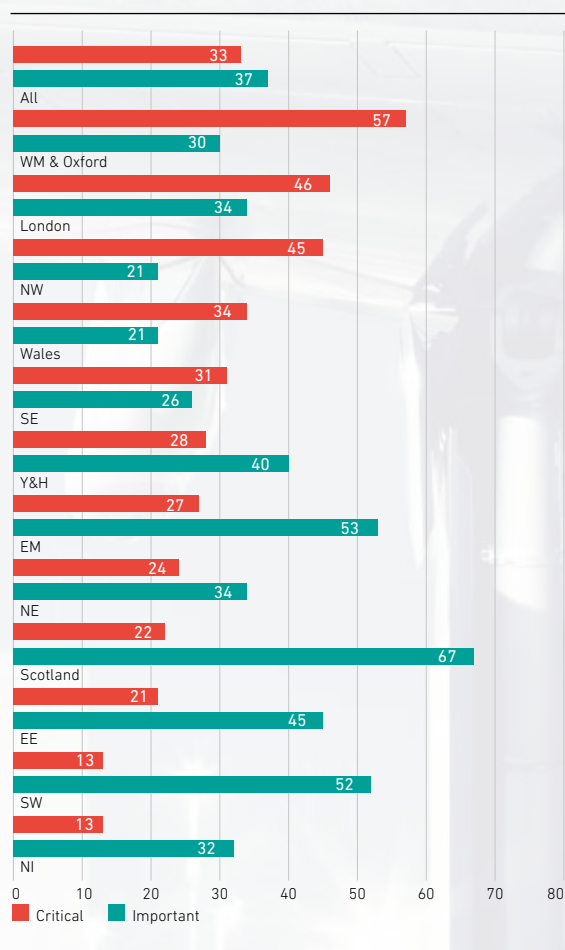
**Exhibit 26: Business priorities for improvements to aviation services (%)**



Looking at the issue of road and rail access in detail, although all regions feel this is an important factor, improvements are deemed most 'critical' in the West Midlands (57%), London (46%) and the north west (45%) (**Exhibit 27**).

If the UK is to succeed in boosting global links, it is essential that we maximise the potential of all our airports. While the debate in recent years has been dominated by runway capacity in the south east, these results indicate that this must be balanced with an appreciation of the central importance of a joined-up approach to our ground and air transport infrastructure as part of a national aviation strategy – a recommendation the CBI highlighted as a priority to the National Infrastructure Commission earlier in 2016.<sup>20</sup>

**Exhibit 27: Businesses rating faster road and rail access to the UK's airports as important by region (%)**

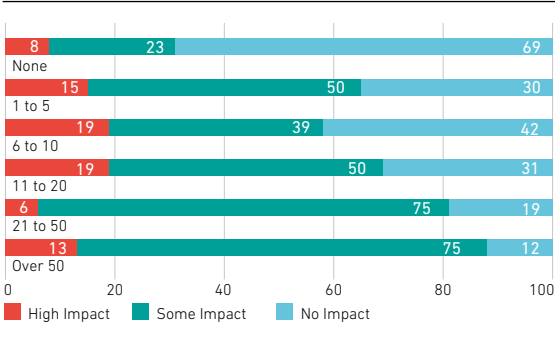


Faster road and rail access to the UK's airports makes it critical that connectivity remains a priority, particularly as projects like HS2 and investment commitments such as the RIS move into the delivery phase, and new projects such as HS3 and RIS 2 are designed. Greater surface access and connectivity boosts economic growth by giving businesses access to a wider marketplace and enables investment and human capital to flow more freely across borders, improving return on investment.<sup>21</sup> While some airports are well served, others, such as Bristol, remain held back, lacking either rail or a dual carriageway connection. This suggests that the inclusion of ground access to airports should remain a priority of the National Infrastructure Delivery Plan (NIDP)<sup>22</sup> for some time to come.

#### **UK-based exporters foresee lost business if emerging market connectivity falls behind**

Yet, with 46% of firms reporting that they expect limited growth in flights to emerging markets to hold back future growth, any national aviation strategy must set out how the UK is best able to deliver the connectivity that business needs. It is notable, although not surprising, that this score increases significantly the more multinational a company is. For firms that operate in over 50 countries, 88% anticipate at least some impact on their future business operations (**Exhibit 28**).

Exhibit 28: Impact on business of limited growth in flights to new emerging markets (%)



Airport capacity in the south east is a critical piece of the puzzle in delivering new routes to emerging markets, given the large population based in and around London. However at the time of asking businesses were sceptical that a new runway will be forthcoming (**Exhibit 29**). CBI figures indicate that, with the UK's hub at Heathrow at full capacity and other airports joining it in the coming decade, failure to deliver new capacity is already having an impact on export growth; for the BRIC economies alone, this could amount to £31bn of lost trade by 2030.<sup>23</sup>

With the green light now given to expand the UK's aviation capacity at Heathrow, it is important that this project should form part of a long-term framework for aviation capacity for the whole of the UK. With our aviation capacity set to run out as early as 2025, a new runway clearly signifies that the UK is well and truly open for business as we negotiate our exit from the EU.

Exhibit 29: There is little confidence a new runway will be delivered

Asked whether a new runway in the south east will be delivered, almost three quarters of firms (73%) indicate that they are 'not confident', reflecting frustrations felt among businesses after almost 18 months of delay following the publication of the Airports Commission's final report in summer 2015.

73%

of firms are 'not confident' that a new runway in the south east will be forthcoming

With research indicating that the UK is already falling behind European competitors in the race for connectivity, the costs of delay are rapidly mounting. CBI research has highlighted that European rivals with spare capacity will gain at the UK's expense, cashing in on their thriving connectivity. By 2030, spare runway capacity could see German trade with the BRIC economies alone grow by an additional £15bn and French trade grow by £7.5bn, taking trade that should be UK-bound.<sup>24</sup> Now that a decision has been taken to expand Heathrow, it's more critical than ever that this is taken forward in a timely way so that construction can begin by 2020 at the latest.

# DIGITAL

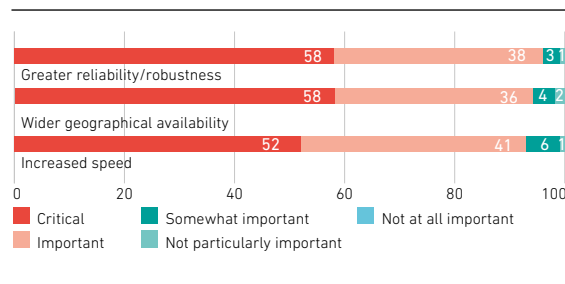
## The UK must maintain its ambition for the long term to retain its place at the forefront of the digital revolution

- Greater reliability and robustness of digital connectivity ranks top of business users' requirements, with 96% of firms viewing this as critical or important for fixed-line and mobile networks
- Three quarters of businesses (75%) believe that UK digital networks have improved in the last five years, with a majority (59%) expecting to see this continue over the course of this parliament
- More than two thirds (68%) of firms report that their current fixed-line broadband meets their business needs, but for the third (32%) of firms that state it does not, three quarters report a lack of speed as the primary concern
- One in five SMEs report that they currently do not have the best fixed-line connection currently available to them.

## Business is happy with the pace of improvement in the UK's digital networks, but our ambitions cannot afford to stand still

Whether it is fixed-line broadband or mobile, businesses are almost unanimous in their view that improvements in speed, reliability and geographical availability of digital connectivity will be critical in the years to come. The digital revolution is in full swing, presenting a real opportunity for businesses and consumers all around the UK. And as technology facilitates a shift in workplace trends, with more workers spending their time out and about or based at home, reliability and geographic availability ranks between six percentage points above speed as a priority.

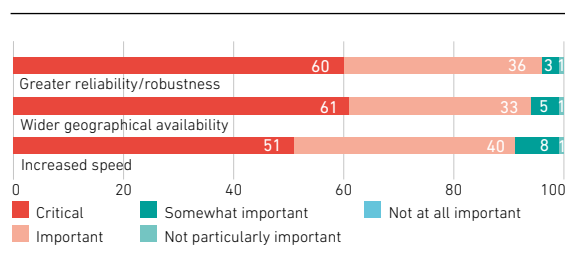
**Exhibit 30: Importance to business of improvements in UK fixed-line digital infrastructure (%)**



For mobile and fixed-line broadband connectivity, respondents see continued improvement of digital infrastructure over the coming years as critical to their business operations. According to 58% of businesses, greater reliability and robustness along with wider geographical availability are the two most important outcomes that need to be secured in the long term for their fixed-line broadband needs (**Exhibit 30**).



**Exhibit 31: Importance to business of improvements in UK mobile digital infrastructure (%)**



A similar story can be found in mobile digital infrastructure, with 61% of businesses stating that wider geographical availability and on the go coverage is the most important long-term outcome (**Exhibit 31**). It is also worth noting that for fixed-line broadband connectivity, the chief concern among three quarters of respondents is overwhelmingly centred on speed of their connection rather than reliability as shown in **Exhibit 33**.

Government and businesses alike cannot afford to get complacent when it comes to digital connectivity. Digitisation is set to continue to be a key enabler of innovation, productivity and economic growth around the UK and will be particularly important as the country looks to secure future prosperity outside the European Union.

*96% of firms see greater reliability and robustness of mobile and fixed-line networks as essential to their future operations.*

To meet demand for wider geographic availability, particularly in mobile, the UK needs to act now to get on the front foot with the delivery of next generation services. While the UK led the way with the rollout of 3G technology, 4G adoption rates have lagged significantly behind those of Asian and North American markets. It is critical that the UK regains the initiative with 5G technology in the coming decade, laying the foundations now for widespread rollout. With the National Infrastructure Commission inquiry set to look at how we prepare the way, government must heed its recommendations if UK firms are to maximise the benefit of digitisation.<sup>25</sup>

### While the majority of businesses are optimistic for the future, many still lack the right digital connections and services

The results of this survey suggest that digital connectivity is moving in the right direction to meet future need compared to other infrastructure sectors. Three quarters of businesses (75%) assess that UK digital networks, including both mobile and fixed-line broadband, have improved in the last five years. Furthermore, the majority (59%) expect to see this improvement continue over the course of this parliament as a result of government and supplier efforts.

59%

of firms expect to see further improvements in the UK's digital connectivity over the course of this parliament

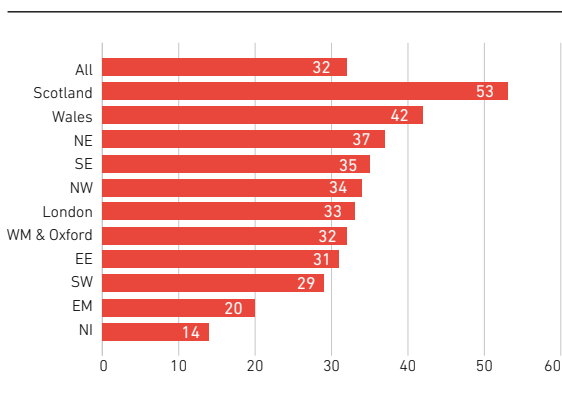
But five years is a long time in the digital business environment – particularly if the connectivity required by many currently does not exist. The last year has seen debate about the quality of the UK's fixed-line broadband in particular, reflecting discussions about the future of BT Openreach as well as plans for a government review of broadband.<sup>26</sup>

While a clear majority of businesses surveyed report that they are satisfied with current fixed-line broadband coverage (68%), it is worth noting that a third (32%) of businesses still feel that their needs are not currently being met. Dissatisfaction is particularly pronounced in Scotland, Wales and the north east of England (**Exhibit 32**).

# 2/3

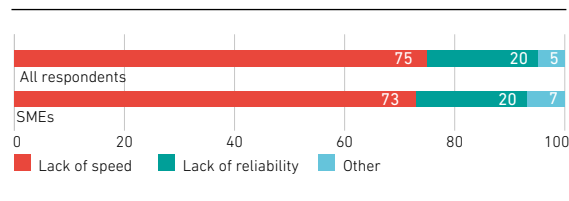
Two thirds of firms report that their current fixed-line broadband meets their business needs

**Exhibit 32: Business dissatisfaction with fixed-line broadband by region (%)**



Of those who report that they are dissatisfied, three quarters cite a lack of speed, rather than a lack of reliability, as the primary concern. This doesn't tend to vary much by size of company, although small and medium-sized enterprises (SMEs) are slightly less likely to cite a lack of speed as the cause of their dissatisfaction (**Exhibit 33**).

**Exhibit 33: Main problems with fixed-line broadband connectivity (%)**



While two thirds of businesses report they are happy with the UK's broadband connectivity, that one third remain dissatisfied should be a concern. As a key driver of productivity and regional growth, technology and digital infrastructure is critical to avoiding some businesses being left in the dark ages by patchy connectivity quality. From business parks in the Tees Valley to high streets in Devon and the highlands of Scotland, the new government should prioritise the rollout of quality business broadband, alongside consumer broadband. Both are critical to economic performance, but for too long funding mechanisms that favour only residential investment have led to poorly connected business centres. Equal prioritisation, together with the permitted erection of masts for mobile connectivity along major transport routes, should go some way to secure the connectivity that business needs for the future.



**Limited awareness of the digital services available to businesses may be holding back take-up, especially among SMEs**

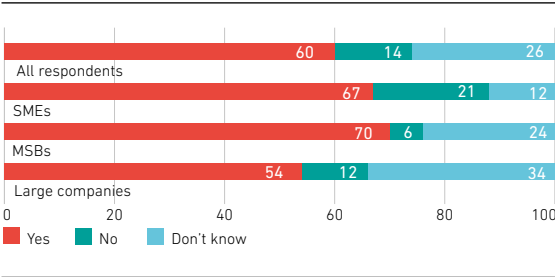
Underlying dissatisfaction with fixed-line broadband connections can be down to a range of factors – whether it is the physical limitations of the UK’s digital infrastructure, a lack of knowledge of the products available or prohibitively high costs.

1 in 5

SMEs do not have the best fixed-line broadband available to them

The results indicate that while 60% of firms believe they have the best broadband available to them, 14% say that they know that they do not, and 26% did not know (**Exhibit 34**). It is particularly notable that over one in five SMEs say that they do not have the best connection available to them, with a further 12% unsure of whether they have the best connection or not. To understand the dissatisfaction beyond speed and reliability, the survey indicates this is dependent on how much businesses know about their broadband connectivity and the options available to them.

**Exhibit 34: Availability of best digital fixed-line (broadband) connection (%)**

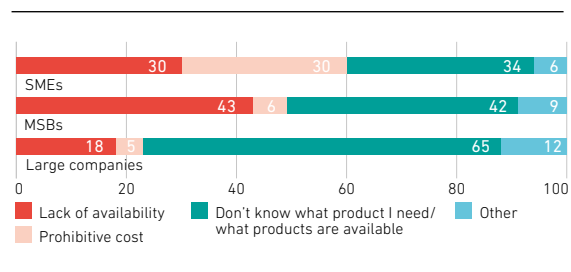




Of respondents who state they want to upgrade from their existing fixed-line connection, the results show a mixed picture. Answers vary between a lack of availability and a lack of awareness of existing products available to them – with high levels of variance by firm size.

While these results should be treated with caution, especially the levels of awareness about products in large companies, given that many will have dedicated IT functions, the results do highlight a number of interesting trends. For SMEs the underlying factor preventing upgrade is an even split between lack of availability and prohibitive cost with almost a third (30%) in both cases (**Exhibit 35**). While for medium-sized businesses, cost is less of a factor, with an even split between availability and awareness.

**Exhibit 35: Factors preventing businesses from upgrading digital fixed-line (broadband) connectivity (%).**



With official figures continuing to show that government and suppliers need to do more to improve services – particularly in rural areas – as the rollout of broadband and superfast broadband continues, it will be important for government to get to the bottom of dissatisfaction in certain parts of the business community, in order to adequately identify the solution. Where costs are prohibitive, refreshed and improved initiatives like the previously lauded superfast voucher scheme should be considered.

While there is no one obvious reason why a third of businesses feel their connectivity is unsatisfactory, it is clear that the mix of availability, cost and general purchasing know-how will require a balanced blend of solutions. Government should therefore prioritise the design of a clear roadmap for initiatives and mechanisms to secure public and private sector investment in digital infrastructure beyond the current 2017 plan.

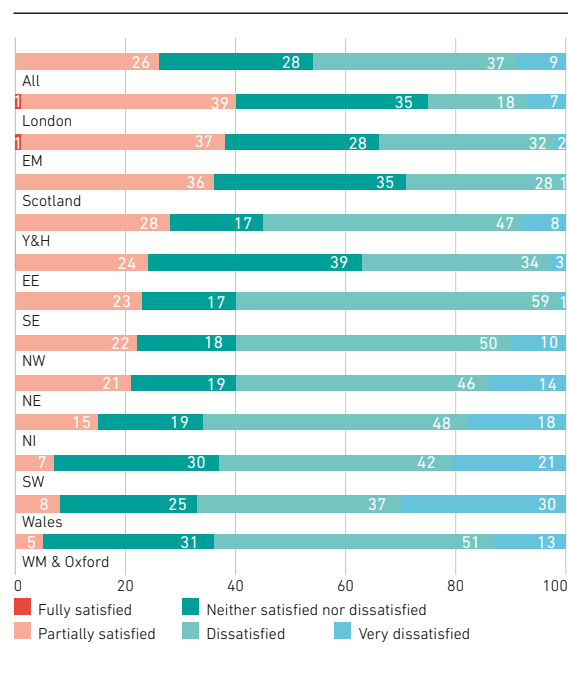
## Regional perspectives on infrastructure: to make a difference, we must move beyond a 'one-size-fits-all' approach to infrastructure

- 46% of respondents are dissatisfied with the current state of infrastructure in the region in which they personally operate, with only 26% satisfied. London scores highest with 40% satisfied, while the West Midlands scores lowest with just 5% positive
- Firms' concerns about infrastructure vary by region:
  - The north west ranks connectivity as most critical (70% of firms)
  - London ranks capacity as most critical (60% of firms)
  - Wales ranks resilience as most critical (51% of firms)
  - Northern Ireland ranks cost as most critical (40% of firms)
- 47% of respondents think devolution will improve infrastructure in their region marking a 14 percentage point decline on last year's survey (61%). Those in the Northern Powerhouse are most positive, including the north west (76%) and Yorkshire and Humber (73%)
- A lack of strategic planning and a lack of central government appetite for investment in the regions are seen as the most critical barriers to improvement, with over a third of respondents (38%) seeing both as critical.

### Each part of the UK faces challenges unique to its region

While the UK faces a number of national infrastructure challenges, for many companies, and the individuals within them, the successful day-to-day running of their businesses relies on the quality of local infrastructure. The survey asked respondents to assess infrastructure in the region that they personally operate in with nearly half (46%) reporting that they are either dissatisfied or very dissatisfied. Of the different regions, London is the most satisfied at 40% with the West Midlands and Oxford least satisfied at 5% (**Exhibit 36**).

**Exhibit 36: Business views on state of infrastructure by region (%)**



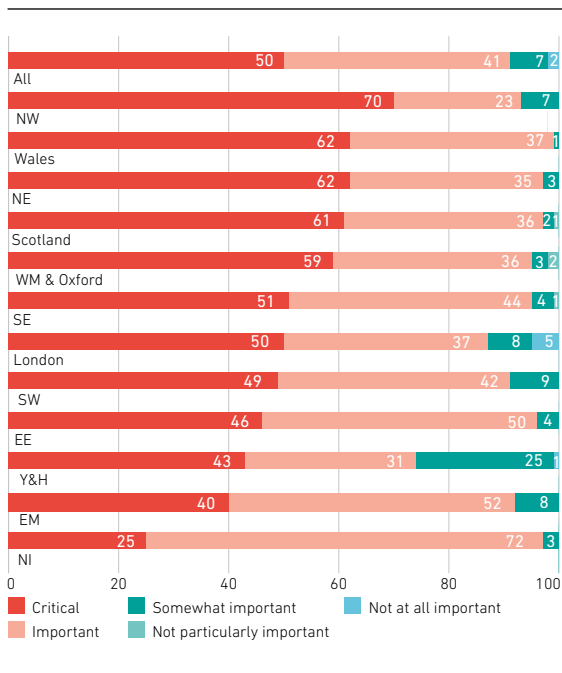
# 46%

of respondents are dissatisfied with the current state of infrastructure in their region

This does not suggest however that all regions face the same issues. Respondents were asked how concerned they are about infrastructure capacity (ability to cope with user demand), connectivity (ease of access to infrastructure), cost (price) and resilience (robustness) in the region they personally operate in, delivering a clearer picture of each region's main challenges.

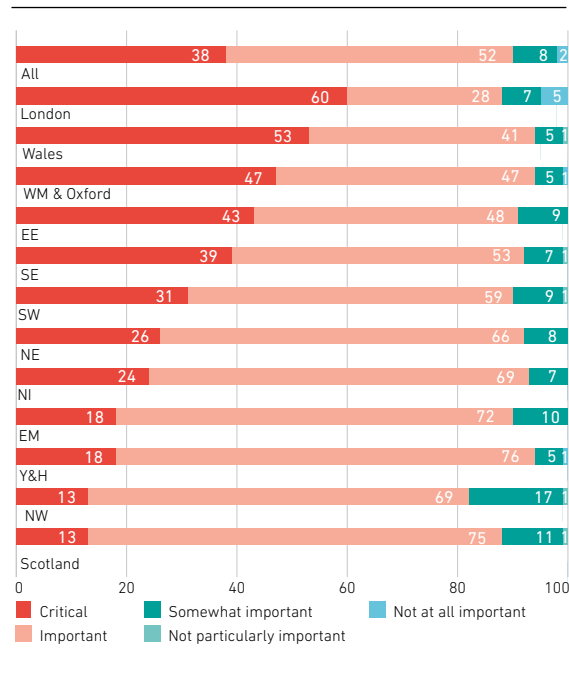
Across regions, concerns about connectivity come out highest, with 50% of all respondents reporting it as a 'critical' concern to their business. The north west scores connectivity highest, with 72% ranking it as a critical concern, followed by the north east and Wales (62%) (**Exhibit 37**).

**Exhibit 37: Business views by region on barriers to improving local infrastructure – connectivity (%)**



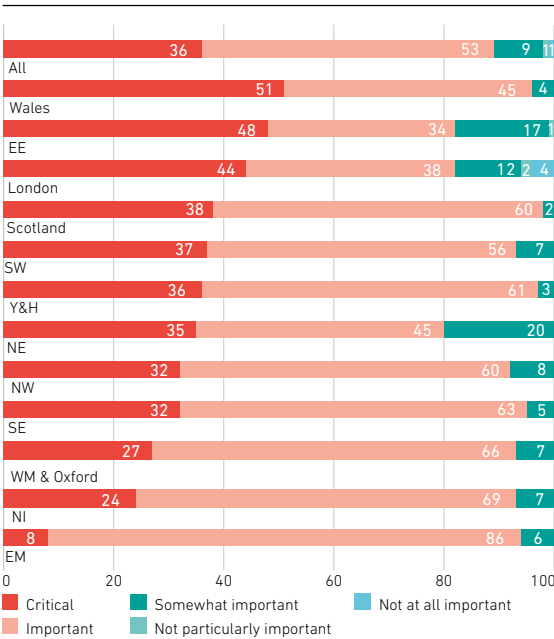
Capacity is the second highest ranking, with 38% of companies on average saying this is a critical concern, with particular peaks in London (60%) and Wales (53%) (**Exhibit 38**).

**Exhibit 38: Business views by region on barriers to improving local infrastructure – capacity (%)**



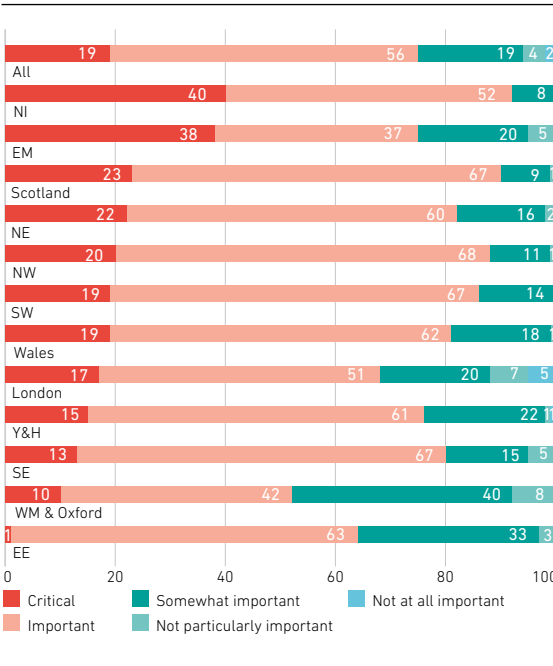
Next is resilience, with an average of 36% of firms reporting it as a critical concern, with notable peaks in Wales (51%) and in the East of England (48%) (**Exhibit 39**).

Exhibit 39: Business views by region on barriers to improving local infrastructure – resilience (%)



Finally, cost is ranked as a critical concern by an average of 19% of respondents, with peaks in Northern Ireland at 40% followed by the East Midlands at 38% (**Exhibit 40**).

Exhibit 40: Business views by region on barriers to improving local infrastructure – cost (%)



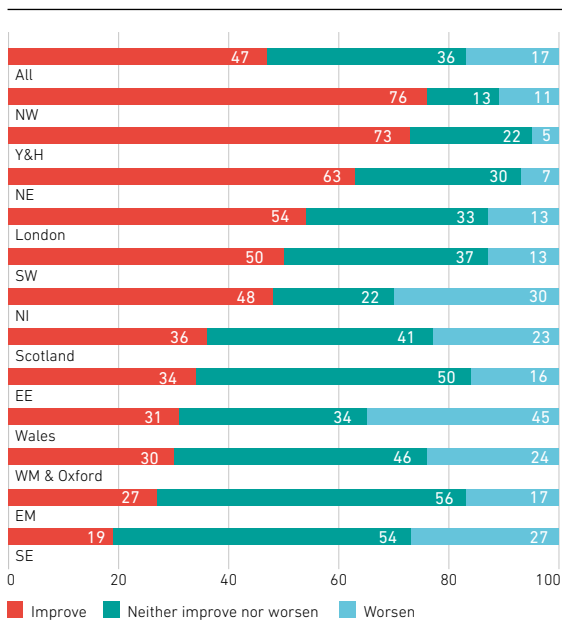
Business sees regional fragmentation as holding back the success of devolution

Turning to consider the impact that devolution could have on infrastructure in the region that respondents operate in, less than half of all respondents (47%) believe it would improve the picture. This is significantly down on the 2015 CBI/AECOM survey, where 61% of respondents felt devolution would lead to improvements in local infrastructure. This suggests that a year of announcements has had limited impact on confidence on the ground.<sup>27</sup>

47%

of respondents think devolution will improve  
infrastructure in their region

**Exhibit 41: Business views on likely impact of  
devolution on regional infrastructure (%)**



Opinions on devolution vary widely from region to region with 76% of those in the north west seeing devolution positively, contrasting heavily with the south east where only 19% of businesses think devolution would have a positive impact on regional infrastructure (**Exhibit 41**). Furthermore, those in the devolved nations tend to be less optimistic too, with Wales (31%) and Scotland (36%) well below the national average.

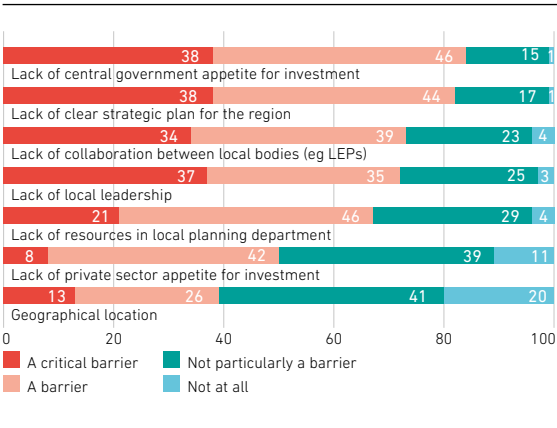
These results indicate a more optimistic outlook for those regions that have been talked up as a part of the Northern Powerhouse in a year that has seen much discussion regarding upgrades such as HS3 and scoping work for a Trans-Pennine Tunnel. Not all regions have felt this though, suggesting that Theresa May's emphasis on ensuring that all areas, and not just big cities, feel the benefits of the devolution agenda is the right approach.

When we look at what businesses see as the greatest obstacles to improving local infrastructure – and therefore what they want to see devolution tackle – a lack of strategic planning and central government appetite for investment in the regions are perceived as the main barriers, with over a third of respondents (38%) viewing these factors as critical. Lack of local leadership and a lack of collaboration both score highly too (**Exhibit 42**).

61%

said the same in 2015, indicating confidence has  
declined

Exhibit 42: Barriers to improving regional infrastructure (%)



The statistics suggest that fragmentation of regional decision-making remains a considerable barrier to the success of devolution in the minds of businesses. This would appear to back the creation of sub-national bodies with a wider, more strategic reach, such as Transport for the North and Midlands Connect, ensuring that regions have the capabilities to compete for inward investment. While government should be cautious in rolling out any 'one-size-fits-all' approach to sub-national governance, it is essential that each part of the UK has the means to take forward a strategic vision of its own.

The devolution agenda must reflect the priorities of businesses in each region

In this survey, respondents from each region were asked which type of infrastructure most needs improving, and which local project currently in development is most crucial to the future growth of the region. The variety of responses from region to region demonstrates that strategic plans for all parts of the UK must flex to match the priorities of the people and businesses who use that infrastructure on a daily basis. (See business priorities by region on page 40-41.)



# Business priorities for UK regions

## SCOTLAND

### TOP 3 PROJECTS

- 1 Electrify the Edinburgh-Glasgow rail network to decrease journey times, increase reliance and improve rail links – 42% say critical
- 2 Complete the improvements to the A9, Perth to Inverness route to improve journey times, capacity and boost tourism – 37% say critical
- 3 Deliver the Aberdeen Western Peripheral Route to improve travel in and around Aberdeen and the north east of Scotland – 40% say critical

### TOP 3 INFRASTRUCTURE PRIORITIES

- 1 Digital 39%
- 2 Roads 29%
- 3 Energy 21%

## NORTHERN IRELAND

### TOP 3 PROJECTS

- 1 Deliver second north/south energy interconnector to secure energy resilience – 87% say critical
- 2 Deliver more domestic flight connections to the rest of the UK – 54% say critical
- 3 Deliver A6 dual carriageway upgrade schemes from Belfast to Derry/Londonderry – 51% say critical

### TOP 3 INFRASTRUCTURE PRIORITIES

- 1 Roads 46%
- 2 Digital 40%
- 3 Energy 37%

## NORTH WEST

### TOP 3 PROJECTS

- 1 Tackle congestion, increasing capacity and improving journey times on M62 and M6 – 92% say critical
- 2 Deliver HS3 (east-west rail link connecting Manchester and Leeds) to decrease journey times – 69% say critical
- 3 Deliver extra rail capacity and regional connectivity such as building the Ordsall Chord rail link to Manchester stations – 55% say critical

### TOP 3 INFRASTRUCTURE PRIORITIES

- 1 Roads 70%
- 2 Rail 63%
- 3 Digital 55%

## WALES

### TOP 3 PROJECTS

- 1 Address growing congestion on M4 around Brynglas Tunnels in Newport – 76% say critical
- 2 Electrify the Great Western Main Line throughout south Wales to increase capacity – 43% say critical
- 3 Improve domestic flight connections from Cardiff Airport – 22% say critical

### TOP 3 INFRASTRUCTURE PRIORITIES

- 1 Roads 81%
- 2 Rail 53%
- 3 Digital 53%

## WEST MIDLANDS

### TOP 3 PROJECTS

- 1 Tackle congestion, increasing capacity and improving journey times on the M6 – 86% say critical
- 2 Ease congestion on the M42 at junction 6 near Solihull – 81% say critical
- 3 Tackle congestion, increasing capacity and improving journey times on M6 between Junctions 13 at Stafford and 15 at Stoke – 69% say critical

### TOP 3 INFRASTRUCTURE PRIORITIES

- 1 Road 50%
- 2 Rail 35%
- 3 Digital 25%

## SOUTH WEST

### TOP 3 PROJECTS

- 1 Electrifying the Great Western rail to increase capacity between London and the south west – 51% say critical
- 2 Transforming the A303/A30/A358 Corridor to Land's End into an expressway – 43% say critical
- 3 Improve transport access to the south west's airports – 32% say critical

### TOP 3 INFRASTRUCTURE PRIORITIES

- 1 Roads 58%
- 2 Rail 45%
- 3 Digital 38%



**NORTH EAST****TOP 3 PROJECTS**

- 1 Dualling of A1 at Newcastle up to Scotland – 42% say critical
- 2 Deliver more domestic flight connections to the UK – 38% say critical
- 3 Deliver HS3 (east-west rail link connecting Manchester and Leeds) to decrease journey times – 34% say critical

**TOP 3 INFRASTRUCTURE PRIORITIES**

- 1 Roads 54%
- 2 Digital 42%
- 3 Rail 38%

**YORKSHIRE AND HUMBER****TOP 3 PROJECTS**

- 1 Tackle congestion by increasing capacity and on the M62 and M1 – 36% say critical
- 2 Deliver HS3 (east-west rail link connecting Manchester and Leeds) – 24% say critical
- 3 Deliver extra rail capacity and regional connectivity in Leeds – 68% say important

**TOP 3 INFRASTRUCTURE PRIORITIES**

- 1 Roads 43%
- 2 Rail 39%
- 3 Digital 28%

**EAST MIDLANDS****TOP 3 PROJECTS**

- 1 Delivering new capacity at the M1/M6 Junction near Rugby to reduce congestion – 25% say critical
- 2 Improving transport access to airports in the Midlands – 24% say critical
- 3 Improvements to the A38 Derby junctions to reduce congestion – 13% say critical

**TOP 3 INFRASTRUCTURE PRIORITIES**

- 1 Roads 47%
- 2 Digital 20%
- 3 Rail 16%

**EAST OF ENGLAND****TOP 3 PROJECTS**

- 1 Deliver the A14 between Cambridge and Huntingdon, reducing congestion and improving access to Felixstowe Port – 48% say critical
- 2 Upgrade to the Ely North rail junction to remove bottlenecks across East Anglia – 45% say critical
- 3 Upgrade to the London Liverpool Street – Norwich line to reduce journey times to 90 minutes – 19% say critical

**TOP 3 INFRASTRUCTURE PRIORITIES**

- 1 Roads 68%
- 2 Digital 52%
- 3 Rail 26%

**LONDON****TOP 3 PROJECTS**

- 1 Better access to the south-east airports – 35% say critical
- 2 Support short-term solutions to increase airport capacity in the south east's, such as building infrastructure at London City Airport – 34% say critical (this has got the go ahead since)
- 3 Redevelop Waterloo to increase capacity and ease congestion – 28% say critical

**TOP 3 INFRASTRUCTURE PRIORITIES**

- 1 Rail 62%
- 2 Digital 52%
- 3 Aviation 50%

**SOUTH EAST****TOP 3 PROJECTS**

- 1 Crossrail 2 in order to improve transport in and around London – 36% say critical
- 2 Tackle congestion, increasing capacity and improving journey times on the M4 between London and the south west – 26% say critical
- 3 Tackle congestion, increasing capacity and improving journey times on the M3 between London and the South Coast – 25% say critical

**TOP 3 INFRASTRUCTURE PRIORITIES**

- 1 Roads 37%
- 2 Digital 37%
- 3 Rail 33%

# The business environment: planning and delivery, investment and skills

## PLANNING & DELIVERY

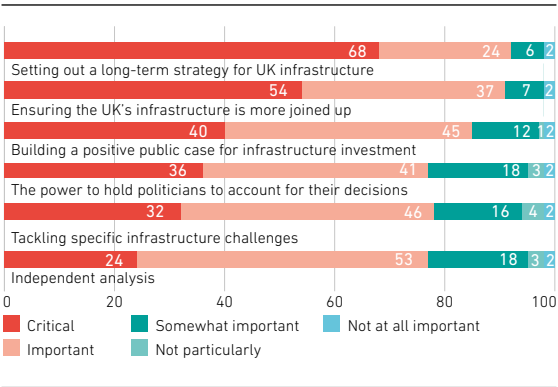
While business is broadly happy with the government's infrastructure policies, more can be done to improve the business environment

- Over two thirds of all firms (68%) are of the opinion that setting out a long term plan is a 'critical' function of the National Infrastructure Commission, with over half (54%) seeing it as playing a role in joining up the UK's infrastructure networks
- 40% of infrastructure providers are either dissatisfied or very dissatisfied with the current business environment for delivery, with firms in the water (46%) and waste (45%) sectors most dissatisfied, followed by energy (42%)
- Infrastructure providers in all sectors are broadly positive about the infrastructure policies of the government in the last five years, with aviation providers most positive with a balance of +54% and energy lowest, but still positive, at +32%
- 84% of infrastructure providers see tackling the skills shortages for delivery of projects as either a critical or important priority for the newly created Infrastructure & Projects Authority.

### Businesses eagerly anticipate the first National Infrastructure Assessment to help provide long-term strategic guidance for UK infrastructure

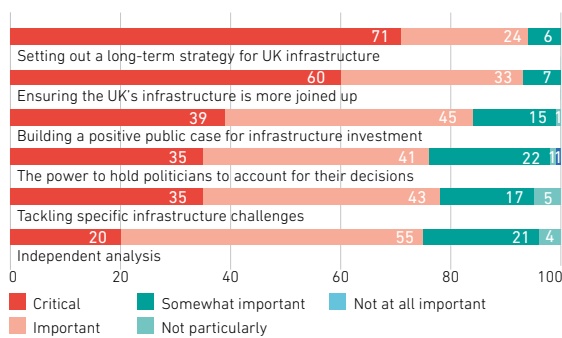
After strong backing for the idea of a National Infrastructure Commission (NIC), business is now looking for the Commission to provide long-term, strategic guidance. With the recent publishing of the National Needs Assessment undertaken by Sir John Armitt on behalf of the Institute of Civil Engineers, lessons should certainly be taken forward from this dry run and applied to the Commissions National Infrastructure Assessment next year.<sup>28</sup> Asked what businesses feel is the primary purpose of the NIC, setting out a long-term strategy for UK infrastructure tops this list, with some 68% of firms seeing this as a 'critical' function, followed by ensuring UK infrastructure is more joined up (54%) and building a positive public case for infrastructure investment (40%) – (Exhibit 43).

Exhibit 43: Business evaluations of functions of the National Infrastructure Commission (%)



The picture is similar for infrastructure providers, with 71% reporting a long-term strategy as a critical goal of the NIC, followed again by more joined-up infrastructure decision-making (60%) and a positive public case for investment (39%) (Exhibit 44).

**Exhibit 44: Infrastructure providers' evaluations of functions of the National Infrastructure Commission (%)**



The year ahead sees the Commission begin the first of its National Infrastructure Assessments, analysing the infrastructure needs facing the UK over the coming 10-30 year period. Results from both providers and users of infrastructure (Exhibit 43 and 44) indicate that an independent analysis of this kind will be an important role of the NIC. But results also highlight that businesses expect it to provide more than simply analysis – going further to deliver a holistic vision for the future that helps to break down the barriers to delivery.

While ultimately decision-making will rightly remain with politicians, if the Commission is to deliver against a number of the priorities set out above by business, it will be critical that the Commission has as wide a remit as possible, is able to articulate the tough choices that government needs to make and has the teeth to hold it to account – regardless of whether it is placed on a statutory footing.<sup>29</sup> This will be particularly important when the NIC sets out a long-term plan for UK infrastructure. The Commission will only be successful if it is able to impact the course of policy – highlighting how changes in today's business operating environment are crucial to changing the longer term outlook for UK infrastructure.

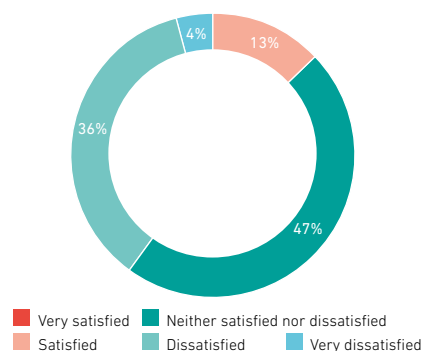
### The water, waste and energy sectors are seen as the most difficult operating environments for infrastructure providers

This year's survey indicates that for firms responsible for planning, investing in, building and operating the UK's infrastructure, 40% are either dissatisfied or very dissatisfied with the current business environment, with only 13% reporting that they are satisfied (Exhibit 45). A wide range of factors can affect how favourable the business environment is for delivering infrastructure – ranging from the availability of skills and finance, through to the planning regime that ensures projects can go ahead.

40%

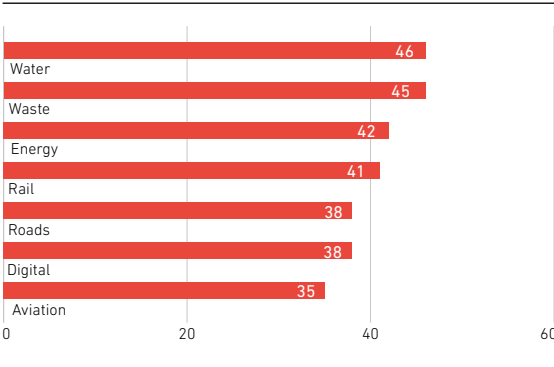
of infrastructure providers are either dissatisfied or very dissatisfied with the current business environment for delivery

**Exhibit 45: Infrastructure providers' views of current business environment for delivery (%)**



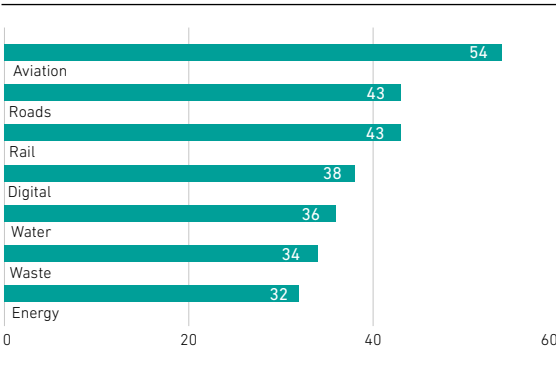
Turning to specific sectors, infrastructure providers working in the water (46%), waste (45%) and energy (42%) sectors are the most negative about the current environment for delivery, while those in aviation (35%) and digital (38%) are least dissatisfied (**Exhibit 46**).

**Exhibit 46: Infrastructure providers’ dissatisfaction (dissatisfied and very dissatisfied) with the current business environment for delivery by sector (%)**



When examining the impact of government policies enacted this parliament upon the overall business environment for infrastructure delivery, providers operating in all sectors are on balance positive – although it should be noted that this question did not ask firms to look at the sector in which they specifically operate but the business environment as a whole. Once again, those operating in the aviation sector are most positive on balance about the approach of the government so far in this parliament, with those operating in the energy sector most likely to take a more negative view – although all sectors are positive about the overall direction of travel during this parliament (**Exhibit 47**).

**Exhibit 47: Views on impact of current government policies on UK infrastructure by sector (% – balance)**



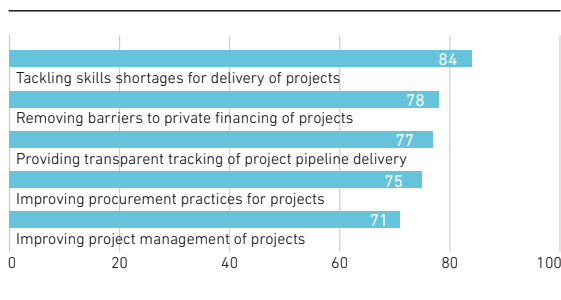
**Infrastructure providers put skills at the top of the list for the newly created Infrastructure & Projects Authority**

Turning towards the more immediate issues the Infrastructure & Projects Authority (IPA) must<sup>30</sup> address, infrastructure providers place skills shortages highest on the list, with some 84% seeing action as either critical or important – something explored in more detail in the next chapter (**Exhibit 48**). This is closely followed by removal of barriers to the private financing of projects as the second most critical (78%).

# 84%

of infrastructure providers see tackling the skills shortages for delivery of projects as either a critical or important priority for the IPA

**Exhibit 48: Priorities for IPA over the course of this parliament (%)**



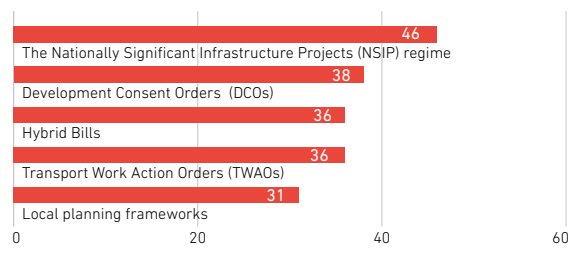
Tackling these barriers will be critical in the coming years, especially in the context of the UK's decision to leave the EU leading to an increased emphasis on the role of infrastructure in delivering a fiscal stimulus to the country's economy. With a significant infrastructure pipeline already in place that includes major projects such as HS2, Hinkley Point C and proposals such as HS3 to create a Northern Powerhouse, as well as a raft of smaller projects, it is critical that government and industry address the current barriers to delivery, rather than radically redesigning the pipeline.

As shown in Exhibit 40, there are currently a number of barriers that will affect the delivery of infrastructure projects, all of which score higher than 71%. Rather than committing to new projects and levels of investment, government needs to reassure industry so that it has the confidence to deliver the current pipeline. This includes taking difficult political decisions and ensuring that the planning framework supports growth-stimulating projects (see **Exhibit 49**).

**Exhibit 49: Local planning frameworks are yet to catch up with national – but there is room for improvement across the board**

Planning restrictions remain a real barrier for many businesses operating in the infrastructure sector. In cutting through these restrictions, the Nationally Significant Infrastructure Projects (NSIP) regime is seen as the most effective for boosting the delivery of infrastructure in the UK, with some 46% of providers reporting it as an effective tool (**Exhibit 49**). By contrast, local planning frameworks are seen as much less effective, lagging some 15 percentage points behind – the only framework that delivered on balance a negative score. It is notable however that none of the frameworks noted in the survey score above 50%.

**Providers seeing planning frameworks as effective in boosting delivery of infrastructure**



## SKILLS

### To tackle skills challenges the Apprenticeship Levy must work for apprentices, business and the economy

- 86% of infrastructure providers are concerned that skills shortages will affect the UK's ability to deliver the current infrastructure pipeline, with concerns greatest among digital providers (91%)
- 79% of infrastructure providers report that they are currently engaged in some form of apprenticeship training, however this drops to 40% among small and medium enterprises (SMEs) and 64% among medium-sized businesses (MSBs)
- Over half (53%) feel that the Apprenticeship Levy will lead to an increase in the number of apprenticeship places, but 30% of providers report it will lead to a decrease in non-apprenticeship training activities.

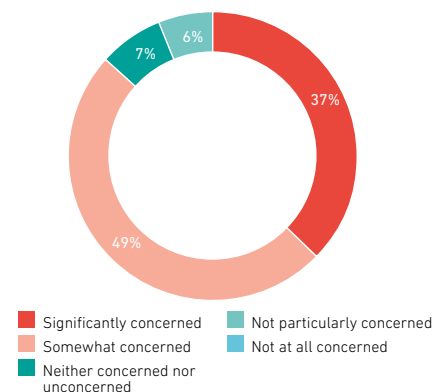
# 86%

86% of infrastructure providers are concerned that skills shortages will affect the UK's ability to deliver the current infrastructure pipeline

### Skills shortages are felt acutely in all infrastructure sectors

When asked whether the skills shortage will affect the UK's ability to deliver the current infrastructure pipeline, some 86% of providers say that they are concerned, with over a third (37%) reporting they have significant concerns (**Exhibit 50**). As the previous chapter highlighted, infrastructure providers place addressing concerns around the availability of a workforce with the right skills at the top of their list of priorities for the newly created Infrastructure and Projects Authority's (IPA) attention in the year ahead.

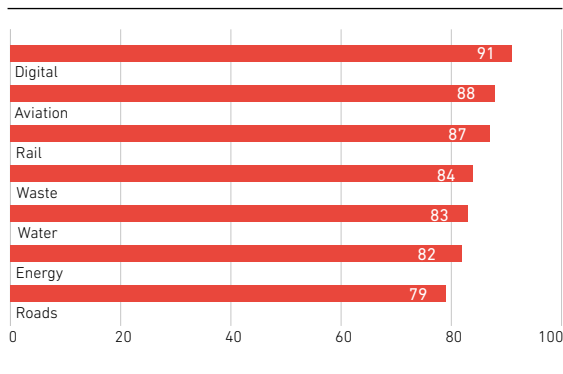
**Exhibit 50: Infrastructure providers' assessments of the impact of skills shortages (%)**



Broken down by sector, those in the digital sector are most concerned, with 91% of respondents either significantly or somewhat concerned, followed by aviation in second place (88%) and rail in third (87%) (**Exhibit 51**). While those infrastructure providers working in the roads sector are the least concerned at 79%, this still represents significant concern with over three quarters still believing it will affect the UK's ability to deliver the current infrastructure pipeline.



**Exhibit 51: Infrastructure providers concerned about skill shortages by sector (%)**



The skills challenge facing the UK is well understood and is felt across the entire industry, as shown by exhibits 50 and 51. This makes it more critical than ever that government and industry work together to promote careers in the sector. The publication of the National Infrastructure Plan for Skills last year highlighted the need for 100,000 new apprentices across all sectors, ramping up to some 250,000 additional workers in construction and over 150,000 engineers by 2020.<sup>31</sup>

The skills challenge is especially acute within construction. An ageing workforce, low levels of diversity and misperceptions about the industry all mean that on average there are just two people seeking a job for every 4.5 jobs available. Furthermore, with some 12% of all construction workers in the UK of non-UK origin, lack of certainty about the future of freedom of movement following Brexit further adds to these concerns.

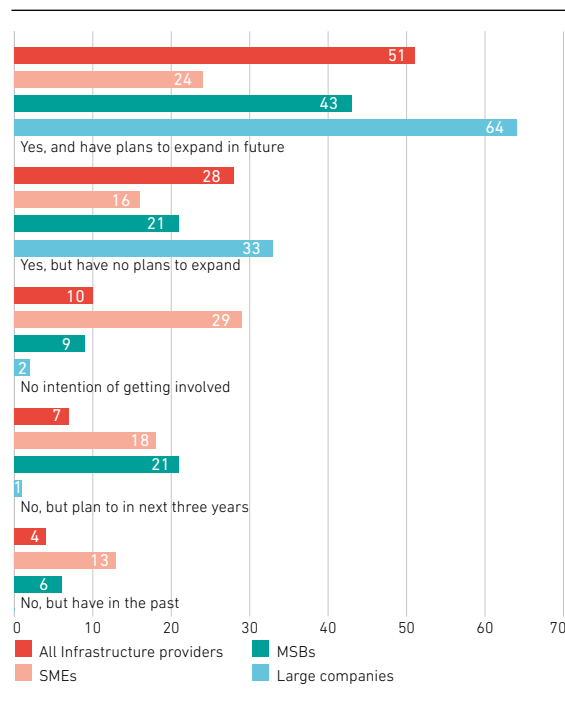
79%

of infrastructure providers are currently participating in apprenticeship training schemes

### Infrastructure providers recognise the value of apprenticeship schemes but more must be done to encourage smaller firms to scale up

This year's survey indicates that over half (51%) of infrastructure providers are currently participating in apprenticeship training schemes that they have plans to expand in future, while a further 28% are participating without plans to expand (**Exhibit 52**). Additionally, 21% of infrastructure providers say they do not offer apprenticeships, although 7% state that they plan to introduce them in the next three years. Businesses in the infrastructure sector are committed to improving skills levels, but also recognise that more needs to be done. Alongside increasing diversity and the modernisation of the sector, it is critical that a new generation of home-grown workers is brought into construction sector. While there are a variety of routes into these roles, apprenticeships can play a key role in giving people the skills and on-the-job experience to start their career.

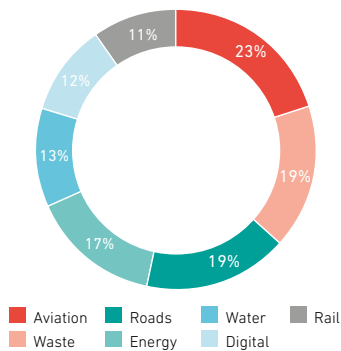
**Exhibit 52: Infrastructure providers' involvement in apprentice training (%)**



Broken down by size of firm, the survey shows a significant discrepancy however, with just 40% of SME infrastructure providers stating that they currently engage in apprenticeships, rising to 64% of MSBs. This is a worrying indication that SMEs are not taking advantage of the growth opportunities in apprenticeships. For large companies on the other hand, 97% report that they already engage in apprenticeship schemes, suggesting that efforts to boost numbers should be concentrated on increasing involvement in schemes across the supply chain.

Looking by sector at those that do not currently provide apprenticeships and have no plans to do so in future, providers in the aviation sector are least likely to participate in such schemes (23%), while those operating in the rail (11%) and digital (12%) sectors are at the most positive end of the spectrum (**Exhibit 53**). While this indicates that there is still more to do in order to ensure all firms are raising their game, it is worth noting that many firms also engage in other forms of in-work training, with apprenticeships serving as just one route towards a more skilled workforce.

**Exhibit 53: Infrastructure providers' involvement in apprentice training for total of all three no categories (%)**

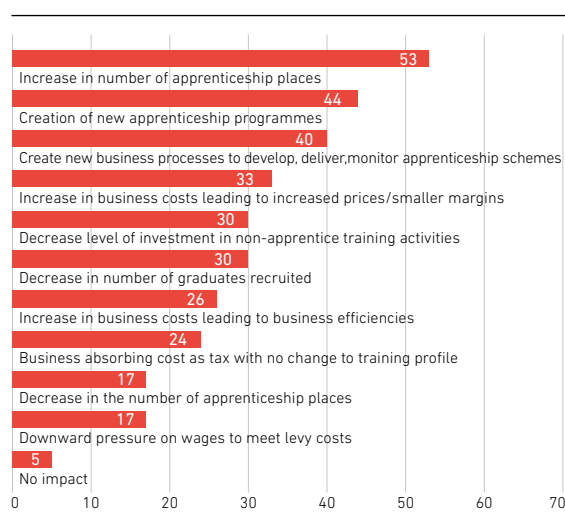


### The impact of the Apprenticeship Levy is still far from clear

Driven by the need to meet the target of three million apprenticeship starts by 2020, the government under David Cameron announced the introduction of an Apprenticeship Levy. Businesses remain far from clear about the impact this will have on skills in the industry. This survey was undertaken as business waited for further detail on the Apprenticeship Levy as the design of the system is ongoing however, which may explain the wide array of different opinions among infrastructure providers on the likely impact.



**Exhibit 54: Infrastructure providers' views on likely impact of the apprenticeship levy (%)**



While half (53%) of respondents think that the scheme will lead to new apprenticeship places and 44% expect to see new apprenticeship programmes, the results indicate that some of this will be a substitution of existing training or rebadging of schemes as apprenticeships (**Exhibit 54**). This is demonstrated with a third (30%) saying the Levy will cut back on non-apprenticeship training and the same number believing it will reduce the number of graduates recruited. The narrow scope of cost recovery through the levy means that some businesses expect they will have to deliver savings from elsewhere in the business to meet their levy obligation with a third (33%) expecting to have to increase prices or narrow margins, while a quarter (26%) will look for business efficiencies.

While the ambition to grow apprenticeship numbers is positive, these results indicate mixed expectations for the impact that the Levy will have in practice. Such concerns have been further heightened by the pre-existence of a levy run by the Construction Industry Training Board (CITB). This is designed to specifically cater for the construction industry and reflects the specific requirements of construction firms for on-site, rather than classroom-based training, as well as the importance of training beyond apprenticeships.

With the current skills shortage facing the UK and the urgent need to fill these gaps in order to safeguard delivery of the pipeline of projects across all sectors of infrastructure, the new Levy system must have an employer voice built into the process. This is particularly important as the onus is on business to fund and deliver all apprenticeship training. The creation of the Institute for Apprenticeships (IfA), reflecting the CBI's calls for an independent business voice to help shape the system, is a positive step. With the imminent introduction of the Levy, the business priority is that the policy can be shaped to work in the best possible way for their apprentices, companies and the wider economy.<sup>32</sup>

# INVESTMENT

## Alternative sources of investment are a key part of the UK's future infrastructure provision

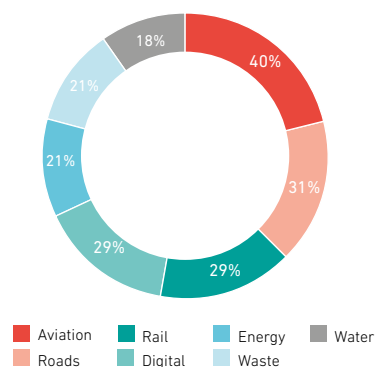
- 26% of infrastructure providers are satisfied with the current access to finance or funding, with satisfaction levels highest in the aviation sector (40%) and lowest in the energy (21%), waste (21%) and water (18%) sectors
- 59% of all firms are open to greater use of private financing models for the road and rail networks, moving away from the exclusively government-funded model currently used
- 54% of respondents would be happy to move to greater use of a 'user-pays' model on the UK's roads if it led to increased resilience and improved journey times, with firms in London and the north west most positive (65%), while firms in the West Midlands the least (29%).

*Only 26% of infrastructure providers are satisfied with the current access to finance.*

Whether privately or publicly financed, investment is an acute concern for most sectors with energy, waste and water the least satisfied

With a little over a quarter (26%) of all infrastructure firms reporting that they are satisfied with the current levels of investment in infrastructure and 40% stating that they are either dissatisfied or very dissatisfied – appetite exists for measures that can increase the flow of investment, whether it is state or privately financed (**Exhibit 55**). When examined by infrastructure sector, those working in the water, waste and energy sectors are noticeably less satisfied – by as much as eight percentage points, while those in the aviation sector are more likely to be satisfied, at some 14 percentage points above the average.

**Exhibit 55: Infrastructure providers' satisfaction with the availability of finance for projects by sector (%)**



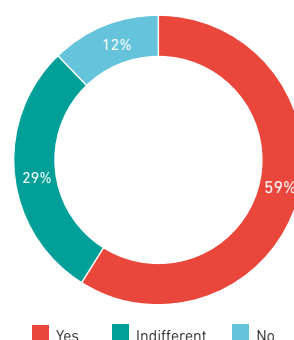
It is worth highlighting that aviation scores highly, reflecting a degree of bullishness that the sector is highly desirable among private investors. All too often the main barrier to investment is not appetite, but rather political and planning obstacles. The debate over runway capacity in the south east has now concluded, with the government giving the green light on expansion to Heathrow. It is now critical that this decision is taken forward in a timely way so that construction can begin by 2020 at the latest.<sup>33</sup>

At the other end of the spectrum are those operating in the energy sector, with just a fifth of providers reporting satisfaction with the availability of private investment – something that most likely reflects the lack of clarity provided by government over the last 12 months on the future direction of energy policy, particularly around the next Contracts for Difference auction and the future of the Levy Control Framework, as stated previously in energy section.

### Infrastructure users are willing to look at alternative sources to state funding

While energy, water, waste, digital and aviation are largely privately financed, the delivery of road and rail upgrades are funded largely from the public purse. Although the UK is currently pumping in historic levels of investment to both, satisfaction with the networks is currently low, and as a result, some 59% of businesses surveyed say that they would support the greater use of private financing models to increase investment in these networks (**Exhibit 56**). This contrasts with just 12% saying that they would oppose such investment.

**Exhibit 56: Business backing for greater use of private financing models for road and rail networks (%)**

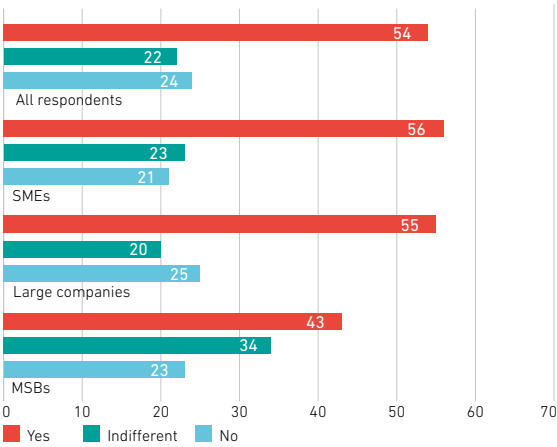


One way of increasing private financing of the UK road network is to move towards a 'user pays' approach. The survey indicates that some 54% of respondents would be happy to move to a greater use of a 'user-pays' model, with 24% opposed (**Exhibit 57**). When broken down by size of company, the results show little in terms of variance, suggesting that whether large corporate or SME, concerns about investment in the road network tend to override concerns about cost to users.

# 59%

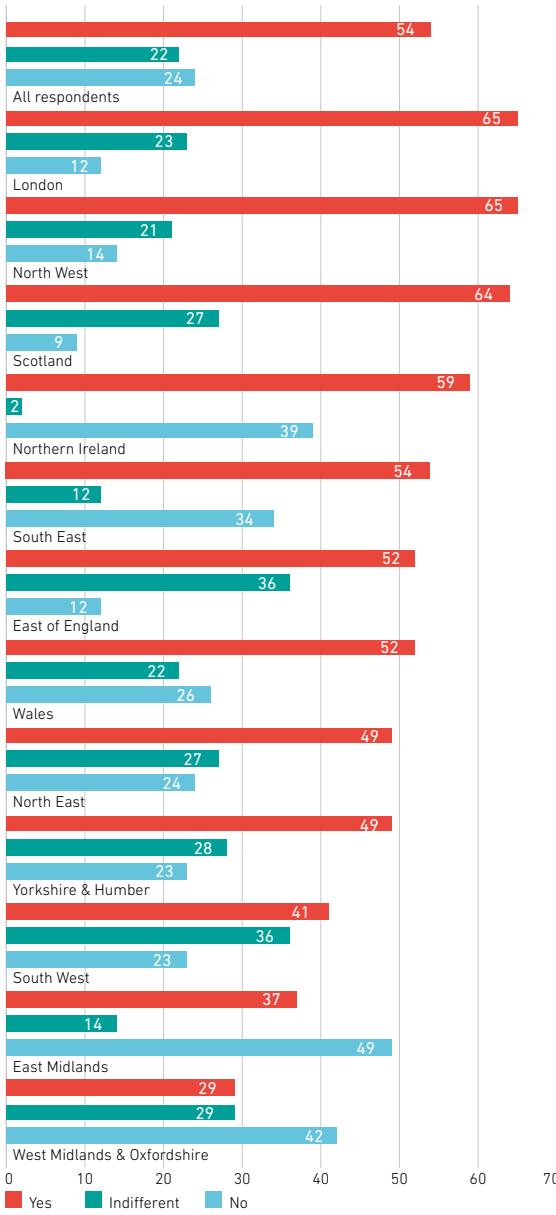
of all firms are open to greater use of private financing models for the road and rail networks, moving away from the exclusively government-funded model currently used

Exhibit 57: Business support for a 'user-pays' modelsif it achieves greater resilience and improved journey times (%)



Broken down by region, the results indicate much about each part of the UK's experience with road tolling. With 65% of respondents positive, London ties with the north west as most supportive of the idea, trailed by Scotland at 64% (**Exhibit 58**). This may reflect London's broadly positive view on the impact of the introduction and expansion of the congestion charge. With both Scotland and the north west of England leading the charge on devolution, it may reflect a similar desire in both to take control of user charging. By contrast, firms in the West Midlands and Oxford are most likely to be negative about a user-pays approach to infrastructure, with just 29% of firms positive about the prospect – something that may reflect mixed opinions around the success of the M6 toll since its introduction in 2002.

Exhibit 58: Business support for a 'user-pays' model if it achieves greater resilience and improved journey times broken down by region (%)







*With 65% of respondents positive, London ties with the north west as most supportive of the idea of a user-pays model, trailed by Scotland with 64%.*

Though the reform and hypothecation of Vehicle Excise Duty (VED) will help to halt the reduction in funding for the UK's road network seen in recent decades, these changes will likely do little to reverse this decline in satisfaction with the road network, both presently and in the future. As such, the long-term future funding of the road network, and how we put it on a sustainable footing, remains unresolved and will need to be addressed through open and honest debate in the years to come.

54%

of respondents would be happy to move to a greater 'user-pays' model if it led to greater resilience and improved journey times on the UK's roads

## Conclusion and recommendations

The 2016 CBI/AECOM infrastructure survey sets out a clear message from respondents: in a time of great uncertainty, we must have a relentless focus on delivering locally to allow us to succeed globally. Firms are positive about the progress made so far to improve the UK's infrastructure, but they see significant risks ahead. Indeed, if we don't keep our foot on the accelerator, our long-term international competitiveness may be threatened. Now, more than ever, we must demonstrate that we are open for business by delivering world class infrastructure at home.

The results of this survey indicate nine actions which government should undertake for UK infrastructure, if the UK is to succeed over the coming years.



**ROADS:** Both government and industry need to collaborate more effectively to develop the skills and capacity needed to keep the current Road Investment Strategy (RIS) on track, and prepare for RIS 2.



**RAIL:** Infrastructure providers must have the confidence to invest in skills for the long term and it is essential that investment remains consistent both over the course of, and between, control periods.



**ENERGY:** In the short term, clarifying the timing of the next Contracts for Difference auction will build confidence, while a long-term carbon plan must be developed which works for the whole economy.



**AVIATION:** Following the green light for a new runway at Heathrow, the government must deliver on this decision as part of a clear long-term national strategy for UK aviation capacity.



**DIGITAL:** Government should prioritise the design of a clear roadmap of investment for digital infrastructure beyond the 2017 plan.



**REGIONAL DELIVERY:** The government must ensure that all areas of the UK feel the benefits of the devolution agenda in order to drive up productivity and prosperity across the country.



**PLANNING:** The UK's long-term infrastructure plans should be based on our long-term needs, as set out by the National Infrastructure Commission in its forthcoming National Infrastructure Assessment.



**SKILLS:** Government and industry must work together to promote careers across infrastructure sectors and address the skills gap.



**INVESTMENT:** Use of private financing models should be explored in order to increase investment in road and rail upgrades.

## Annex

### Respondents

The survey was conducted over an eight-week period ending on 22 July 2016. Useable responses were received from 728 participants. Participants included investors, providers and users of UK Infrastructure from across and outside CBI membership. Approximately 44% of respondents were identified primarily as a provider of infrastructure.

The respondents were made up of the following: 23% CEOs, 38% MDs or directors. Importantly, the survey captures business opinion from all sizes of

businesses, while larger firms employing 500 to 4,999 employees constituted 55% of respondents. SMEs with 1-249 employees represented 35%.

In the analysis, responses were weighted according to the sectorial contribution to gross value added based on the Office for National Statistics estimates.

**Exhibits 59, 60, 61 and 62** show the breakdown of respondents by sector, infrastructure sector, region and date in reference to the EU referendum.

Exhibit 59: Respondent breakdown by sector %

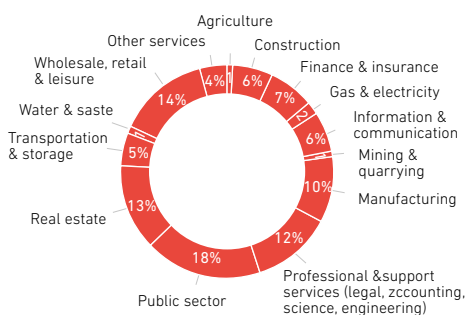


Exhibit 61: Respondent breakdown by region %

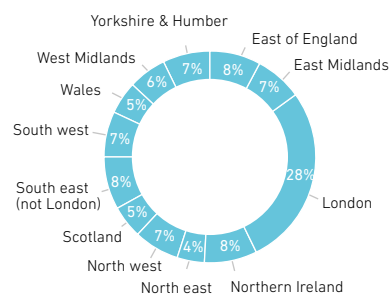


Exhibit 60: Respondent breakdown by infrastructure providers – sector %

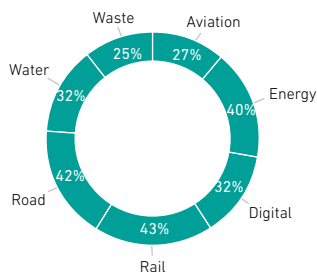
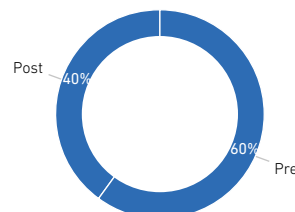


Exhibit 62: Respondent breakdown by date answered in relation to the EU referendum %



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