



BRIEFING PAPER

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Infrastructure policies and investment

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Inside:

1. Definition and overview of UK infrastructure
2. Investment in infrastructure
3. Planned infrastructure projects
4. Government policies
5. Government policies to encourage investment



Contents

1.	Definition and overview of UK infrastructure	3
1.1	Economic effects of infrastructure	3
1.2	Current state of UK infrastructure	4
2.	Investment in infrastructure	5
2.1	Sources of investment	5
2.2	Public investment in infrastructure	6
2.3	Private sector investment in infrastructure	7
2.4	UK country and regional infrastructure investment	8
2.5	International comparisons of infrastructure investment	9
3.	Planned infrastructure projects	11
3.1	What is in the infrastructure pipeline?	11
4.	Government policies	13
4.1	National Infrastructure Commission	15
4.2	National Infrastructure Assessment	15
4.3	Infrastructure and Projects Authority	17
4.4	Nationally Significant Infrastructure Projects	18
5.	Government policies to encourage investment	19
5.1	Review of infrastructure finance (2019)	19
5.2	European Investment Bank	19
5.3	UK Guarantees Scheme (UKGS)	20
5.4	Private Finance Initiative (PFI)	21
5.5	Pensions Infrastructure Platform	21
5.6	British Wealth Funds	22

1. Definition and overview of UK infrastructure

The Economist calls infrastructure the “economic arteries and veins; roads, ports, railways, airports, power lines, pipes and wires that enable people, goods, commodities, water, energy and information to move about efficiently.”¹

The Institute of Civil Engineers defines infrastructure as “the physical assets underpinning the UK’s networks for transport, energy generation and distribution, electronic communications, solid waste management, water distribution and waste water treatment.”²

The government also includes social infrastructure such as schools, hospitals and housing in some infrastructure policies and publications.

Infrastructure policies also cover social infrastructure and housing.

1.1 Economic effects of infrastructure

Infrastructure plays a crucial role in a country’s economic welfare. For instance, a reliable source of energy allows companies to function more efficiently; a transport network enables producers to move goods to consumers; and the provision of schools provide the foundation for more highly-skilled workers of the future.³

In short, better quality infrastructure allows an economy to be more efficient, improving its productivity, and raising its long-term growth rate and living standards.

More infrastructure in and of itself does not necessarily translate into higher long-term growth.⁴ To take an extreme example, spending billions on a 10-lane motorway far away from businesses and consumers will be a waste of money that could have been better used elsewhere.

Good infrastructure can raise productivity and living standards.

The right kind of infrastructure investment, though, will increase an economy’s long-term productive potential. For example:

- lower energy and transport costs enable firms to lower costs and take advantage of economies of scale (when unit cost falls as the number of units produced rises);
- allowing people to move easily – either via commuting or by moving home – to follow employment opportunities that match their skills, thus improving economic efficiency.

¹ Matthew Bishop, *Economics: An A-Z Guide*, 2009, p. 167

² ICE, [A National Infrastructure Investment Bank](#), December 2009

³ For more on the potential benefits of investment in infrastructure see, for example, White House Council of Economic Advisors, “[The 2016 Economic Report of the President](#)”, February 2016, Chapter 6 and Abdul Abiad, Davide Furceri and LSE growth commission, “[Investing for Prosperity: Skills, Infrastructure and innovation](#)”, October 2013, Chapter IV

⁴ Institute of Economic Affairs, “[Infrastructure spending and economic growth](#)”, November 2016 provides arguments on the difficulties governments have in selecting efficient infrastructure investments

1.2 Current state of UK infrastructure

International infrastructure rankings provide a way of comparing the performance of UK infrastructure with other countries. According to the World Economic Forum, **the UK was ranked 11th out of 141 countries in terms of the overall quality of its infrastructure** in 2019, behind France (7th), Germany (8th), and the Netherlands (2nd). The USA was ranked 13th.⁵

The Organisation for Economic Cooperation and Development's (OECD) [2015 UK Economic Survey](#) focussed on infrastructure. It found that infrastructure in the UK has suffered from under-investment, compared with some competitor countries, since the 1980s.⁶ This attributed partly to insufficient long-term planning by successive governments. One result of this is regional disparity in the quality of infrastructure between the South East (including London) and the rest of the country. However, the OECD also note that the UK has a "strong network regulation framework" and a "strong institutional setting" which should enable infrastructure improvements.⁷

The OECD believes the UK has under-invested in its infrastructure over the past 30 years

The National Infrastructure Commission (the independent body that provides advice to government on long-term infrastructure decisions), summed up the UK's infrastructure as follows:

... investment has long been squeezed and policy has been erratic. Much of the country's infrastructure is under strain, not keeping pace with population growth and modern requirements. The failure of our digital infrastructure to provide reliable phone and internet service is especially serious.⁸

The CBI/Aecom [Infrastructure Survey 2017](#) found that :

- 20% of businesses and 26% of the public are satisfied with the pace of infrastructure delivery
- 62% of businesses are not confident that the UK's competitiveness will increase by 2030,
- Only 27% of businesses and 28% of the public are satisfied with the infrastructure in their region
- 45% of businesses think that road and rail access to airports and ports is most critical to improving the UK's capacity and capability to trade internationally.⁹

⁵ World Economic Forum, [Global Competitiveness Report 2019](#), 2019, Pillar 2

⁶ OECD, [UK economic survey 2015: Improving Infrastructure](#), February 2015

⁷ *Ibid*, p 61

⁸ National Infrastructure Commission, [Congestion, Capacity, Carbon: Priorities for national infrastructure: consultation ahead of National Infrastructure Assessment](#), 13 October 2017, p2

⁹ CBI / AECOM, [Infrastructure survey 2017](#), October 2017, p6

2. Investment in infrastructure

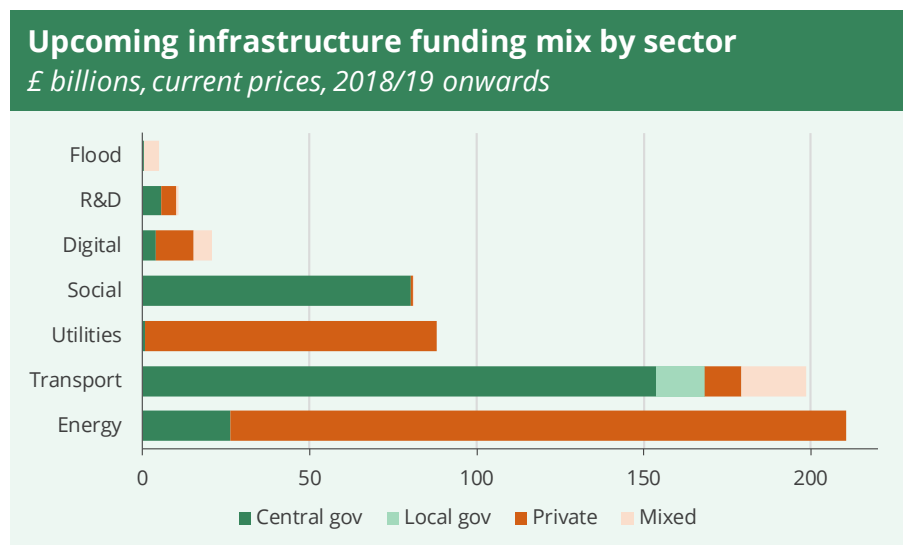
This section looks at investment in infrastructure in the UK.

2.1 Sources of investment

There are three ways in which infrastructure projects can be funded:

- **Public funding:** projects are funded by the government and wider public sector. The proposed High Speed 2 railway will be funded publicly.
- **Private funding:** projects are funded by private companies who plan to recoup and earn a return on their initial investment via customer bills or charges over a number of years. Heathrow Terminal 5 was entirely funded by private investment.
- **Mixed public/private funding:** funding is drawn from both the public and private sector. Network Rail maintains and develops the railway infrastructure using Government grants, government-backed borrowing and private sector funding drawn from charges levied on train operators.

The Treasury's [Infrastructure and Construction Pipeline](#) can be used to analyse what types of funding will be used in upcoming infrastructure projects. The following chart shows the 'funding mix' in each infrastructure sector for all projects planned for 2018/19 onwards.



Funding for projects:
 - 46% public
 - 49% private
 - 5% mixed

Source: Infrastructure and Projects Authority/HM Treasury, [Infrastructure Pipeline, Data tables](#), 2018, House of Commons calculations

Notes: Mixed is local/central gov, or public/private mix

The proposed projects in the Pipeline are 46% funded by the public sector, 49% funded by the private sector and the remaining 5% funded from a mix of source (local and central government or public and private sector).

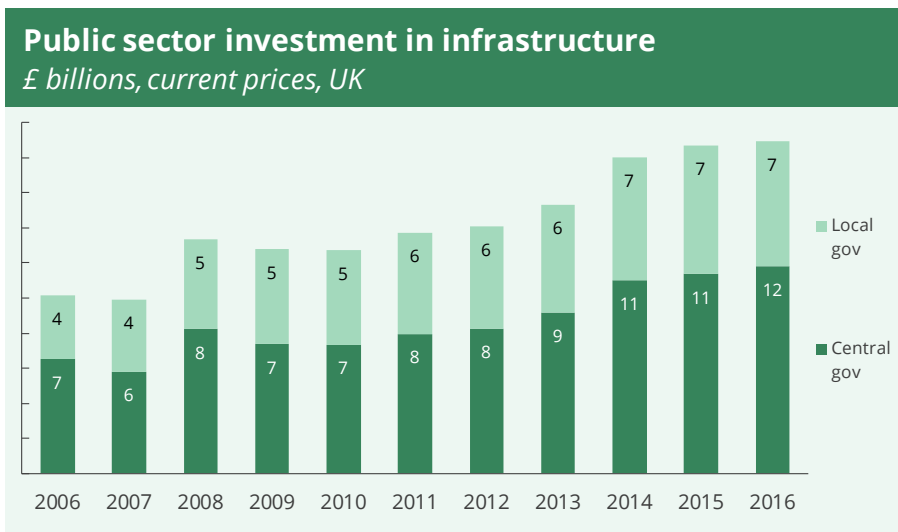
The chart shows the extent to which the source of funding differs from sector to sector. Projects in the energy and utilities sectors are almost entirely privately funded (reflecting the ownership and management of assets in these industries). The opposite is true of projects in the transport and social sectors. Mixed funding represents a minority of

total funding in all sectors except for flood defence, where all projects are mixed funded from central government and the private sector.¹⁰

2.2 Public investment in infrastructure

The Office of National Statistics (ONS) have produced ‘experimental’ data that shows public sector investment in infrastructure.¹¹

The following chart uses these experimental data and shows local and central government infrastructure investment from 2006 to 2016 in current prices (not adjusted for inflation). These data are based on analysis of central government spending figures and local government financial returns.¹²



Source: ONS, [Experimental infrastructure statistics: dataset](#), Tab: Government investment, 2018

The following table summarises the data for 2016:

Public sector infrastructure investment, 2016, £ billion			
	Central govt.	Local govt.	Total public sector
Transport	9.7	6.5	16.2
Other	2.1	0.6	2.7
Total	11.8	7.1	18.9

Source: ONS, [Experimental infrastructure statistics: dataset](#), Tab: Government investment, 2018

In 2016, public sector investment in infrastructure totalled £18.9 billion.

Central government accounts for 62% of public sector infrastructure investment, whilst local government accounts for 38%.

82% of central government infrastructure investment and 91% of local government investment is on transport infrastructure.

One other frequently used measure is [Public Sector Net Investment](#) (PSNI), but this also includes investment into several things that are not normally considered ‘infrastructure’, such as NHS and defence

¹⁰ See: House of Commons Library, Briefing Paper, [Flood risk management and funding](#)

¹¹ ONS, [Developing new statistics of infrastructure](#), August 2018

¹² *Ibid*, [Data tables](#), Tab ‘Gov Investment’

equipment, and government buildings. In 2017/18, PSNI totalled £47 billion, 2.2% of GDP.¹³

2.3 Private sector investment in infrastructure

Estimates of private sector investment in infrastructure are also included in the in new ONS publication used above, [Developing new statistics of infrastructure](#).¹⁴

The private sector data used here are based on ONS analysis of the [Annual Acquisitions and Disposals of Capital Assets Survey](#), which asks private sector firms about their investment in different kind of assets.

Private sector infrastructure investment, 2016		
	£ billion	%
Energy	7.0	61%
Water supply	1.4	12%
Other	1.0	9%
Telecommunication:	1.0	9%
Sewage/waste	0.6	5%
Transport	0.4	3%
Total	11.4	

Source: ONS, [Developing new statistics of infrastructure](#), August 2018,

Data tab *Market sector investment*

In 2016, private sector infrastructure investment totalled £11.4 billion (this excludes investment in mining and quarrying).

£7.0 billion or 61% of this was in energy. Investment in water infrastructure was £1.4 billion.

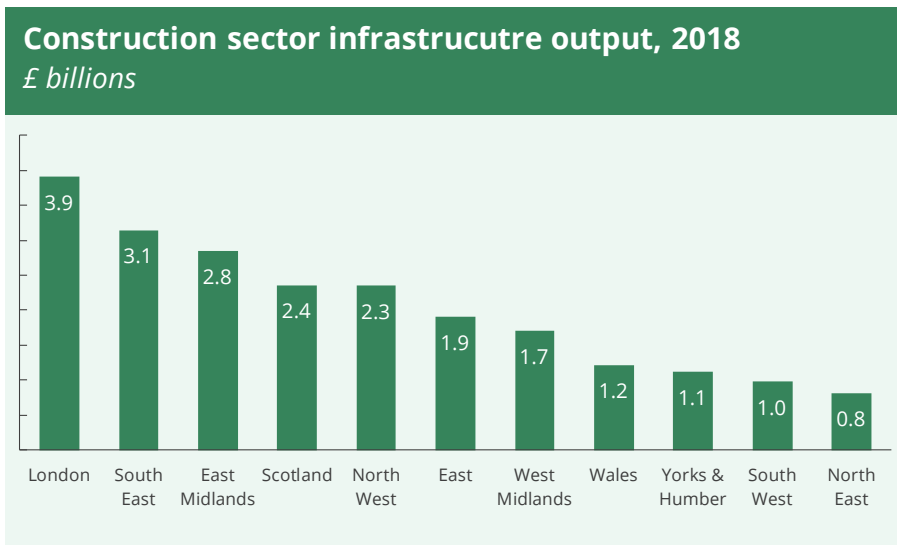
¹³ ONS series [JW2Z](#)

¹⁴ ONS, [Developing new statistics of infrastructure](#), August 2018

2.4 UK country and regional infrastructure investment

Another source of data on infrastructure investment can be used to show how much is invested by region. This data shows the value of output by construction firms commissioned to undertake infrastructure work. This means that infrastructure work undertaken by government departments or arms-length bodies (such as Network Rail) is not included in these figures. These figures are therefore an underestimate of infrastructure investment.¹⁵

Overall, this data shows that in the Great Britain in 2018, £22.8 billion worth of infrastructure work was carried out by construction firms.



ONS, [Output in the construction sector](#), September 2019, Dataset [Output in the construction industry, sub-national table](#)

Excludes infrastructure work carried out by public sector organisations eg, Network Rail

In 2018, construction industry infrastructure output in London was worth £3.9 billion.

It should be noted that people benefit from infrastructure investment outside the region in which they live. Investment in a power station would benefit people all over the country, and so ascribing that investment to one region is misleading.

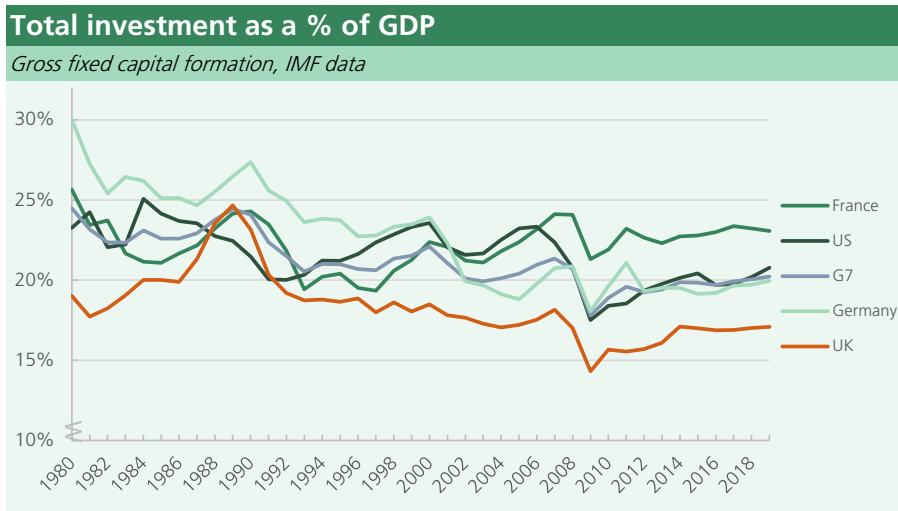
The data above should be viewed as indicating *the location of construction industry infrastructure activity*, not the regions benefitting from investment (although a region containing a new power station would also benefit from it).

¹⁵ Data source: ONS, [Output in the construction sector](#), September 2019, Dataset [Output in the construction industry, sub-national table](#)

2.5 International comparisons of infrastructure investment

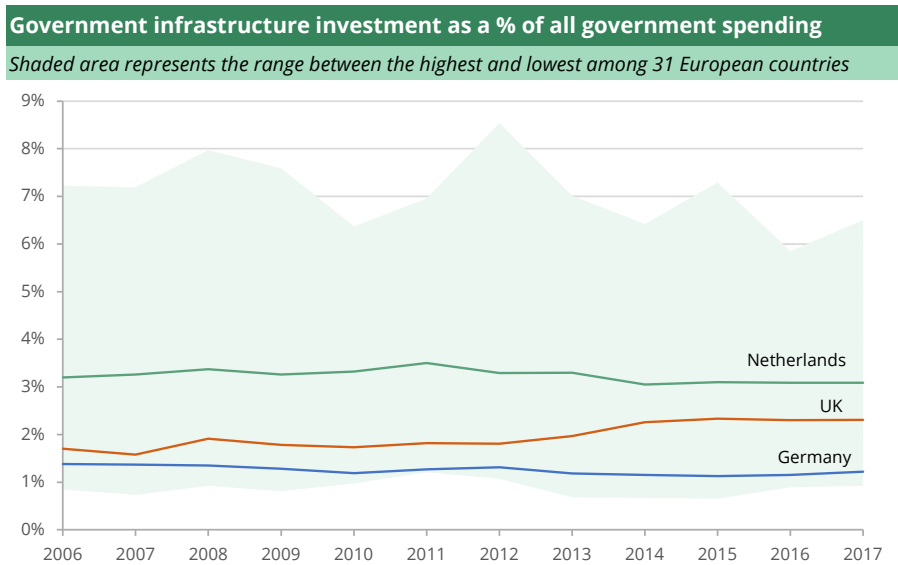
The chart below uses International Monetary Fund (IMF) data on [Gross Fixed Capital Formation](#). This shows total investment, so includes public and private investment. It overestimates infrastructure spending because it includes investment on items that are not infrastructure, such as manufacturing machinery.

UK investment will be equivalent to 17% of GDP in 2019, compared to 20% in Germany and 21% in the US, and 23% in France. The G7 average is 20%.¹⁶



Source: International Monetary Fund, [World Economic Outlook Database](#), November 2019

Another source for international comparisons of infrastructure data is provided by the ONS: [Experimental comparisons of infrastructure across Europe](#). The table below shows government infrastructure investment, as a % of total government spending.



Source: ONS, [Experimental comparisons of infrastructure across Europe](#), 2019; Data table, Tab: Gov infra invest.

¹⁶ International Monetary Fund, [World Economic Outlook Database](#), April 2018

This data shows that UK government infrastructure spending as a proportion of GDP was 2.3% of all government spending in 2017. This was below the level in many European countries, including the Netherlands (3.1%). But it was above many of the other large European countries such as Germany (1.2%), France (1.5%) and Italy (0.9%).¹⁷

It should be noted that a high level of infrastructure spending can be interpreted in different ways. A high level of infrastructure investment could indicate that the stock of infrastructure is poor so needs high levels of investment. Or it could indicate that a well-funded and decent stock of infrastructure.

¹⁷ ONS, [Experimental comparisons of infrastructure across Europe](#), 2019; Data table, Tab: *Gov infra invest - Gov spending*. Figures are government gross fixed capital formation in infrastructure sectors, as a % of total government spending. Some investment included here is in assets not normally considered infrastructure (for example, computer equipment in the Department for Transport)

3. Planned infrastructure projects

The [Infrastructure and Construction Pipeline](#) is a forward-looking pipeline of planned projects and programmes in economic and social infrastructure.

The Pipeline brings together major projects and programmes (largely costing more than £50 million) that are planned or underway. The projects and programmes are distributed across the UK but the majority are in England. This is because most infrastructure spending is devolved and so is the responsibility of the devolved administrations in Northern Ireland, Scotland and Wales.

The Pipeline includes both public and private sector projects and investment. It is not time-limited, so includes some projects with estimated completion dates beyond the 2030s. Many of these long-term projects are still in the scoping or design phases of development.

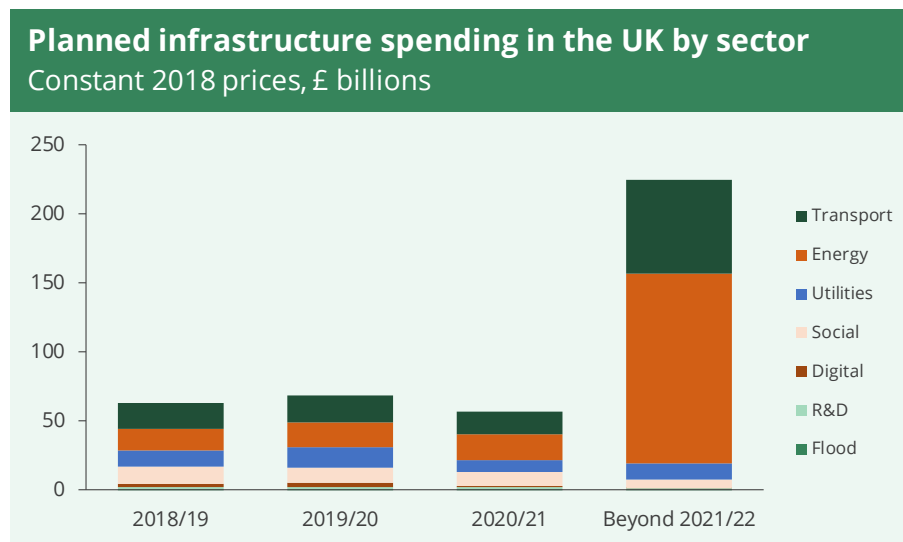
The purpose of the Pipeline is to provide the construction industry with information that supports forecasting and planning for investment and recruitment. It also helps both public and private sectors to plan for future needs in skills and resources.

3.1 What is in the infrastructure pipeline?

The [December 2018 Pipeline](#) includes 684 projects or programmes. These are worth £472 billion of investment (in constant 2018 prices).¹⁸

Around £224 billion of this will be delivered after 2020/21, including Thames Tideway Tunnel and the Hinkley Point C nuclear power plant.

The Pipeline for 2018/19 onwards is summarised in the following chart:



Source: Infrastructure and Projects Authority/HM Treasury, [Infrastructure Pipeline, Data tables](#), 2018, House of Commons calculations

¹⁸ HM Treasury, [Infrastructure and Construction Pipeline](#), November 2018

The Pipeline is dominated by investment in energy (£201 billion planned investment, 43% of the total) and transport (£141 billion, 30% of investment).

4. Government policies

In the UK, the development and operation of infrastructure is largely the responsibility of the private sector (transport is the exception, which is mainly funded by government). The maintenance of operating and safety standards is the responsibility of the various regulators, which operate independently of government. But the government still plays a role in infrastructure policy in several ways:

- **Providing funding** – the amount of public funding varies widely between sectors and projects. The extent of public infrastructure investment is discussed in section 3.1 below.
- **Directing investment** and support towards certain projects that the Government considers valuable for the UK.
- Ensuring the development of coherent **infrastructure “systems”** – long-term frameworks in which individual projects play a role but which require national-level strategic leadership and decisions.¹⁹

Since 2011, the government has set out its infrastructure priorities and re-states its overall approach to infrastructure in the annual [National Infrastructure Plans](#), since 2016 called the *National Infrastructure Delivery Plan*. The OECD commented that these reports

...represent the first steps in the right direction towards providing a comprehensive view of the country’s infrastructure needs and how the government plans to meet them.²⁰

Since December 2016 the government also publishes a consolidated [National Infrastructure and Construction Pipeline](#), which is analysed in the previous section. The Pipeline contains details of large projects and programmes that are planned or underway, across the public and private sectors.

The three key criteria guiding the Government in deciding which projects to invest in or support are:

- Projects are **nationally significant** and must enhance **quality, sustainability and capacity**.
- Projects must have the potential to **drive economic growth** or attract significant **private sector investment**.
- Projects must help **meet the government’s strategic objectives**.²¹

With these criteria providing overall guidance on the direction of infrastructure policy, following table summarises the Government’s approach in each of the major infrastructure sectors.

¹⁹ [“British infrastructure policy and the gradual return of the state”](#), *Oxford Review of Economic Policy*, Volume 29, Number 2, 2013, pp. 287–306

²⁰ OECD, [UK economic survey 2015: Improving Infrastructure](#), February 2015, p. 61

²¹ HM Treasury, *National Infrastructure Delivery Plan 2016-2021*, March 2016, p. 17

Government policy approach - key infrastructure sectors	
Sector	Policy approach
Transport	
Roads	Maintenance and development of strategic roads is funded directly by government through the Highways Agency. Local Authorities are responsible for managing and maintaining local roads. Larger enhancements to local roads are supported by central government.
Rail	Passenger train services are provided through franchises let by the Government (except in devolved cases). Private companies bid for franchises to provide specific services. The physical infrastructure of the network is maintained and developed by Network Rail which is funded partly through money from government grants and partly through money paid to it by freight and train operating companies. The government also directly funds some schemes, such as High Speed 2 and Crossrail.
Aviation	In a largely privately owned market, the government sees its role as one of facilitating competition, ensuring a level playing field and maintaining high standards of safety and security. The development of the aviation sector is seen as a priority for industrial policy.
Energy	Government energy policy is to minimise energy costs for consumers over the long term and to meet renewables targets by 2020. Investment is from the private sector, and the government believes that "the current market is unlikely to deliver further investment...at the scale and pace required. The Government has set out several policies to tackle this problem, further information on which can be found in the relevant House of Commons Library Notes: http://www.parliament.uk/topics/EnergyArchive.htm#SN
Communication/digital	Government seeks to achieve increased coverage and affordability of broadband for consumers and businesses. In addition to ensuring an effective regulatory framework, Government will provide public investment where there is limited commercial viability to providing increased coverage.
Water	In the privately owned water industry, the Government's role is to ensure, through the regulator, that water is of a safe and acceptable standard, that prices are affordable and that companies are investing at levels which will meet long-term pressures.
Flood	The Government coordinates the work of Defra, the Environment Agency, private water companies and local authorities to ensure that the risks from flooding and coastal erosion are properly mitigated. The Government funds the management of rivers and flood defence system through the Environment Agency
R&D	The Government views science and innovation as key drivers of the economy. Public funds are invested in research through funding agencies, particularly the higher education funding bodies, the research councils and the Technology Strategy Board. The Government also seeks to leverage private finance for research projects.
Waste	The Government aims to ensure the current infrastructure is in place to deal with waste as efficiently and as safely as possible. Financial support is provided by government to private sector firms and local authorities in dealing with waste. The Government also seeks to meet EU-wide targets for reducing landfill use and increasing recycling.

Source: House of Commons Library analysis

The various sectors are diverse, with differing priorities, types of investment, risks and levels of public sector involvement. However, there are several themes which are common to them all:

- In all of the sectors, there is a tension between ensuring short-term affordability (for consumers and businesses) and ensuring that long-term investment is secured.
- Since investment in these sectors is unlikely to produce short-term returns, long-term involvement is required from potential investors (whether public or private sector).
- The involvement of both the public and private sectors, with the influence of independent regulators, is common in all of the sectors. This means that the competing priorities of these groups must be managed to ensure results which are acceptable to all of them.

4.1 National Infrastructure Commission

The [National Infrastructure Commission](#) (NIC) provides the government with impartial, expert advice on the UK's long-term infrastructure needs.

In each Parliament, the Commission will provide a comprehensive report on the UK's infrastructure needs over the next 30 years (called the [National Infrastructure Assessment](#), the first of which was published in July 2018). These reports will be updated on a rolling basis and the Government will respond to all of the recommendations.

In addition to the National Infrastructure Assessments, the NIC publishes [reports on individual infrastructure projects](#) as requested by the Government.

The NIC was established permanently as an Executive Agency of HM Treasury on 24 January 2017.²²

Charter for the National Infrastructure Commission

The NIC's relationship with Government was formalised in a [Charter](#) published on 12 October 2016.²³ The Charter explains that the NIC must carry out its work in accordance with a remit and terms of reference set by the government, but in all other respects it has complete discretion to determine independently its work programme, methodologies and recommendations, as well as the content of its reports and public statements.

The Charter commits the Government to:

- Issue a formal response to all recommendations contained in NIC reports, stating whether the Government accepts or rejects the recommendations.
- Provide reasons for disagreeing with NIC recommendations
- Lay NIC reports before Parliament
- Share relevant information with the NIC and respond to reasonable requests

Further information on the NIC can be found in the [Commons Library Briefing Paper on the National Infrastructure Commission](#).

4.2 National Infrastructure Assessment

The major output of the Commission is the National Infrastructure Assessment. Once every five years, the Commission provides a comprehensive report on the UK's long-term infrastructure needs up to 2050. The government is obliged to respond to all of the recommendations, either by accepting them or suggesting alternatives.

The NIC provides the Government with impartial, expert advice on the UK's long-term infrastructure needs.

²² National Infrastructure Commission, [Corporate Plan 2017-18 to 2019-20](#), p. 6

²³ HM Government, [Charter for the National Infrastructure Commission](#), 12 October 2016

The NIC's first Chair, Lord Adonis, stated that "developing the National Infrastructure Assessment will be an enormous piece of work".²⁴

The [first National Infrastructure Assessment](#) was published in July 2018 and is organised around the following recommendations:²⁵

- **Low carbon energy** – making a switch to low-carbon and renewable sources for both the country's power and heating, combined with a move towards electric vehicles, would mean the customer of 2050 would pay the same in real terms for their energy as today
- **Digital technology** – that the Government devise a National Broadband Plan by Spring 2019, to deliver full fibre connections across the whole of the country, including those in rural areas – this should ensure that the technology is available to 15 million homes and businesses by 2025, 25 million by 2030, and all homes and businesses by 2033
- **The future for the nation's roads** – that the Government work with councils and private companies to deliver a national network of charging points for electric vehicles and ensures that the impacts of connected and autonomous vehicles are taken into account when planning for the next rail control period and road investment strategy;
- **Encouraging growth of cities** – that Metro Mayors and city leaders develop and implement long-term strategies for transport, employment and housing in their areas, to support economic growth, with new powers and devolved infrastructure budgets. The National Infrastructure Assessment's spending plans include funding for projects including Crossrail 2 in London, and Northern Powerhouse Rail linking the major Northern cities, and recommends a boost in funding for major cities totalling £43 billion to 2040, with cities given stable five-year budgets, starting in 2021;
- **Tackling floods** – that the Government should put in place a long-term strategy to deliver a nationwide standard of flood resilience by 2050 with funding for flood risk management increasing significantly over the coming decades
- **Cutting waste** – that new national rules for what can and cannot be recycled be introduced, with restrictions on the hardest-to-recycle plastics, aimed at increasing rates and reducing the amount of plastics going to incinerators. This would also mean that all food waste is separated making it available to create biogas, so it can be used to heat people's homes and potentially as a transport fuel

²⁴ National Infrastructure Commission, [Assessment Consultation](#), May 2015

²⁵ National Infrastructure Commission, [National Infrastructure Assessment summary](#), 2018

The Assessment also includes an assessment of the total overall cost of the proposals. In each five year period, the recommendations will cost between 1.5% and 0.8% of GDP. The costs are detailed in the following table taken from the Assessment:²⁶

Table 7.1: The fiscal remit

Average annual expenditure (£ million, 2018/19 prices)	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050
Transport						
HS2	4,500	3,900	900			
Crossrail 2	200	2,200	2,900			
Northern Powerhouse Rail	200	1,100	1,700	1,800		
Network Rail	6,100	6,100				
Highways England	4,300	3,200				
Strategic Transport*			10,500	11,400	11,200	11,600
Devolved Cities	3,300	3,600	4,600	5,400	6,100	6,800
Transport for London	2,600	2,900	2,200	2,000	2,200	2,400
Urban Major Projects	500	400	2,400	3,100	3,500	3,900
Non-urban local transport	2,700	2,900	3,400	3,800	4,200	4,700
Local Roads Backlog		500	500			
Housing Infrastructure Fund	500	200	200	200	200	200
Energy						
Energy efficiency	100	300	300	100		
EV Charging	2**					
Digital						
Rural fibre	400	300	100			
Waste	600	500	500	500	500	500
Flood Resilience	600	700	900	1,300	1,300	1,300
Studies Contingency	300	400	400	400	400	400
Total expenditure on infrastructure	26,900	29,200	31,500	30,000	29,600	31,800
As a % of GDP	1.2%	1.2%	1.2%	1.0%	0.9%	0.8%

*combined allocation for road and rail.

**£10m funding in 2020/21.

4.3 Infrastructure and Projects Authority

On 11 November 2015 it was announced that the [Major Projects Authority \(MPA\)](#) and [Infrastructure UK](#) would merge to form a new body from 1 January 2016, called the [Infrastructure and Projects Authority \(IPA\)](#).²⁷

The IPA reports jointly to the Treasury and Cabinet Office. It combines the functions of project assurance and monitoring from the MPA and the focus on long-term financing from Infrastructure UK.

The IPA reports annually on the status of all the major projects on going in government.²⁸ This is done in the form of a RAG (red, amber, green) report that scores projects on the likelihood of them achieving their aims. A project given a green mark is highly likely to be completed on time and on budget. A project given a red mark appears unachievable in the given timescale and budget.

For example, in the IPA's most recent annual report, a green mark was awarded to the UKRI Implementation Programme, which aims to create a single research and innovation funding body. A red mark was awarded to London's Crossrail project.²⁹

²⁶ National Infrastructure Commission, [National Infrastructure Assessment](#), 2018, p112

²⁷ Cabinet Office, [Government creates new body to help manage and deliver major projects for UK economy](#), 11 November 2015

²⁸ IPA, [Annual Report 2018/19](#), 2019, p31

²⁹ Ibid, p32, 33

4.4 Nationally Significant Infrastructure Projects

The *Planning Act 2008* and the *Localism Act 2011* set out a planning permission framework for approvals relating to projects in energy, transport, water, and waste. This framework is intended to speed up the planning permission process for this sort of project.

The 2008 Act sets out a threshold over which projects are considered 'nationally significant'. Once this status has been granted by the Planning Inspectorate, the application will be examined by the Inspectorate and a recommendation will be made to the relevant Secretary of State, who will make a decision on whether to grant consent or refuse planning permission for the project. The process is timetabled to take approximately 15 months from start to finish.³⁰

By making the process more transparent and quicker, it is hoped that fewer potential infrastructure investors will be put off by the planning permission process.

Further information can be found in the House of Commons Library Briefing Paper, [Planning reform proposals](#).

³⁰ National Infrastructure Planning website, [Planning Inspectorate role](#), 2012

5. Government policies to encourage investment

The Government has taken a number of measures to increase infrastructure investment or to make this type of investment more attractive to the private sector.

5.1 Review of infrastructure finance (2019)

The government launched a consultation on infrastructure funding at the 2018 Budget: [The Infrastructure Finance Review](#). This consultation was due to report alongside the 2019 Budget, but this was delayed when the Budget was postponed.³¹

The review highlights the need for long term stable investment, particularly from the private sector. Some of the challenges in achieving this are outlined, including:³²

- Some **new technologies** will require infrastructure investment, for example an electric car charging network. It can be more difficult to attract investment to this kind of infrastructure because of the unproven returns. Investors may require more incentives or reassurance.
- **Very large projects** have struggled to raise finance recently due to fluctuations in political support and other factors.
- **Economic conditions** have been favourable to infrastructure projects recently, due to low borrowing costs and a glut of relatively low risk projects. If these conditions change the infrastructure finance market might suffer.

5.2 European Investment Bank

The Infrastructure Finance Review confirms that³³

...when the UK leaves the EU, the UK will no longer be a member of the European Investment Bank...

The European Investment Bank (EIB) "has lent €118 billion to the UK since 1973 for a range of infrastructure projects." Repayments on these loans are predicted to continue until 2030. The Review states that the government are "actively exploring options for a future relationship with the EIB."³⁴

The National Infrastructure Commission recommends that if access to the EIB is lost, then the UK government should set up an operationally independent "UK infrastructure finance institution".³⁵

Further information on the EIB can be found in the House of Commons Library briefing paper, [The European Investment Bank](#).

³¹ HM Treasury, [The infrastructure finance review: consultation](#), March 2019

³² Ibid, pp13-17

³³ Ibid, p13

³⁴ Ibid, p11,13

³⁵ Ibid, p28

5.3 UK Guarantees Scheme (UKGS)

The [UK Guarantees scheme](#) (UKGS) was announced in July 2012 and was given statutory backing by the [Infrastructure \(Financial Assistance\) Act 2012](#). The scheme was due to close in December 2016, but at [Spending Review and Autumn Statement 2015](#), the Chancellor announced that availability of the UK Guarantees scheme will be extended to March 2021. At the [Autumn Statement 2016](#), the new Chancellor extended UKGS to at least 2026, and committed to explore construction-only guarantees.³⁶

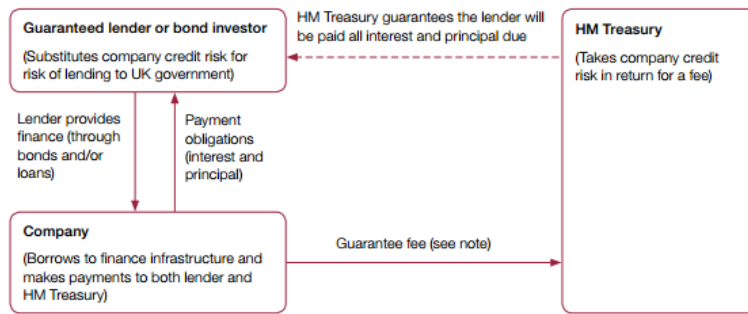
The Government takes on the risk that the company delivering infrastructure won't repay its loans

UKGS supports infrastructure investment by providing financial guarantees for money lent to fund infrastructure projects, in return for a commercial fee. Government backing of infrastructure bonds and loans reduces investors' risk. Eligible sectors include transport, energy, utilities, housing, health and education.

The following diagram from the NAO outlines how the scheme works:³⁷

Figure 1

How the Scheme works



Note

¹ The company agrees to reimburse HM Treasury for any payments under the UK Guarantees Scheme. HM Treasury and the company document various bilateral rights.

Source: National Audit Office, based on *A brief overview of the standard documentation 2013*, Allen & Overy for HM Treasury

The key aspects of the scheme:

- The scheme is intended to “avoid delays to investment in UK infrastructure because of adverse credit conditions making it difficult to secure private finance.”³⁸
- HM Treasury provides guarantees to lenders so that if the recipients of loans are unable to keep up re-payments or if the projects fail, the banks will still be reimbursed. This is intended to transfer the risk of investing in infrastructure from the banks to the government and therefore encourage more bank lending for this sort of project.
- In return for the guarantee, HM Treasury charge an annual fee to each infrastructure project company. The fee is based on the risk associated with the scheme. It is intended that the fee income paid to the Treasury exceeds any losses.

³⁶ HM Treasury, [Autumn Statement 2016](#), p. 29
³⁷ NAO, [UK Guarantees scheme for infrastructure](#), 2015, p6
³⁸ *Ibid*, p12

UKGS reports each year in the [Infrastructure \(Financial Assistance\) Act 2012: annual report](#). The most recent report on the year ending March 2019 states that the Treasury was liable for Guarantees worth £1.8 billion.³⁹

As of 2017, the projects supported were worth £4 billion of capital investment in UK infrastructure across 9 projects.⁴⁰

To date there have been no calls on government to pay out on the guarantees issued.

5.4 Private Finance Initiative (PFI)

At the 2018 Budget, the Chancellor Philip Hammond announced that he will abolish the use of private finance initiatives (PFI) for future building projects.⁴¹

PFI is a controversial approach to building and maintaining new infrastructure, such as schools, hospitals, roads and prisons. It involves a long-term contract with a company specially set up for the project – the public sector pays the company for providing the building and often associated services.

The popularity of PFI-style financing had been declining for several years. In 2004, 68 PFI project contracts were signed. In 2018, only one was signed.

However, payments for existing PFI projects will continue. Total payments for [current PFI projects](#) will be £10.3 billion in 2019/20 and will then fall as projects end.

For more information on this kind of infrastructure funding, please see the Library Insight: [Goodbye PFI](#).

5.5 Pensions Infrastructure Platform

The Pensions Infrastructure Platform (PIP) was the result of a Memorandum of Understanding between the Government and UK pension funds signed in November 2011 in which the parties agreed to develop a facility to help UK pension funds invest more in UK infrastructure assets.^{42 43}

UK pension funds have historically invested relatively small amounts in infrastructure assets. This is because most UK pension funds lack the capacity and in-house expertise to invest directly and assess risks. Pension funds in other countries such as Canada and Australia have been investing in infrastructure for over 20 years.

³⁹ HM Treasury, [Infrastructure \(Financial Assistance\) Act 2012: annual report for year to March 2019](#), 2019, p5

⁴⁰ Infrastructure and Projects Authority, [National Infrastructure Delivery Plan – Funding and Finance Supplement](#), December 2016, p. 16

⁴¹ Phillip Hammond, [Budget Statement 2018](#), 29 October 2018

⁴² [Memorandum of Understanding between HM Treasury, \(NAPF\) and \(PPF\)](#), November 2011

⁴³ [Memorandum of Understanding between HM Treasury and the pensions fund group](#), November 2011

UK pension funds invest an estimated 1% of their total assets in infrastructure. This is low compared with overseas pension funds in Australia and Canada where an estimated 8-15% of assets are invested in infrastructure.⁴⁴

The PIP is intended to help UK pension funds overcome these traditional difficulties by providing a platform for UK pension funds to invest in infrastructure. As of March 2013, the platform had secured ten founding investors and reached £1 billion of investment capital.

The PIP has a target of raising an additional £2 billion of infrastructure investment.

Although the PIP is the result of an agreement with the Government, the scheme is entirely independent. The PIP is the first of its kind in the UK.

Signatories to the Memorandum include, the National Association of Pension Funds (NAPF), which represents around £800 billion of assets, the Pension Protection Fund (PPF), with over £6 billion, and a group of smaller funds holding a combined £50 billion.

PIP has attracted some criticism, particularly surrounding the extent to which Government intervention was necessary to encourage pension funds to invest in infrastructure projects. Deiter Helm, an academic of infrastructure policy commented "...quite what the market failure was to which PIP was supposed to be the answer remains opaque."⁴⁵

5.6 British Wealth Funds

Related to the PIP scheme is the British Wealth Funds Policy. This was announced in George Osborne's [speech to the 2015 Conservative Party Conference](#), along with several other policies to do with infrastructure funding and planning.⁴⁶ A [Government press release](#) summarises these announcements.

Local authority pension funds are a large potential source of infrastructure funding. In order to encourage them to invest more in infrastructure, the Chancellor has stated that the 89 existing pension funds are to be pooled into six British Wealth Funds. This proposal also featured in the 2015 Summer Budget.⁴⁷

The new funds will "follow international norms for investment, meaning larger sums being invested in infrastructure."

Further information on local authority pension fund investments can be found in the Library briefing, [Local Government Pension Scheme investments](#).

⁴⁴ [Fund managers back infrastructure plan](#), *Financial Times*, 25 November 2011

⁴⁵ "British infrastructure policy and the gradual return of the state", *Oxford Review of Economic Policy*, Volume 29, Number 2, 2013, pp. 287–306

⁴⁶ George Osborne, [Speech to the 2015 Conservative Party Conference](#), 5 October 2015

⁴⁷ HM Treasury, [Summer Budget 2015](#), 8 July 2015, p26

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