

INTRODUCTION

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In search of a financing route to national renewal



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FUNDING & FUTURE





It is almost seven years since Philip Hammond, then chancellor of the Exchequer, officially abolished the private finance initiative (PFI) in England, branding the model "inflexible and overly complex".

The Conservatives never warmed to that particular brand of public-private partnership (PPP) deals after coming to power in 2010, even though New Labour had by then used PFI to deliver more than 600 individual projects across the UK. After Hammond sent it to the knacker's yard in November 2018, the whole idea of PPP became something of a political taboo.

But now, the Labour government's promise of an era of national renewal is running up against the hard reality of the public finances. Despite coming to power with no particular desire to restart a big private finance programme, the government is now being forced - by a stuttering economy and empty Whitehall coffers - to look again at how to get private capital to pay up front for the infrastructure the country needs.

In this context, Building at the start of this year launched its Funding the Future project, an in-depth investigation into the potential solutions for bringing in private finance to pay for public projects: what approaches are being considered, and which should be.

The project has weighed questions around the financing of economic infrastructure such

Private finance is being paraded as a realistic option to pay for the enormous challenge of renewing the public estate, setting the country on a path to net zero, and delivering 1.5 million homes

as roads, stations, and water and energy infrastructure, where there is a revenue stream to pay back private finance.

However, a key focus - given both Building's heritage and the fact that private finance for economic infrastructure has continued to flow in recent years - has been the question of a return to social infrastructure PPPs, where private finance is raised against a public

revenue stream. And within that, most obviously, arises the question of PFI-like models.

Since the launch of Funding for the Future, the government has officially confirmed – with the publication of the 10-year infrastructure strategy in June – that private finance has returned. It is now being paraded as a realistic option to pay for the enormous construction challenge of renewing the public estate, setting the country on a path to net zero, and delivering 1.5 million homes.

And yet, while the government has backed models where there is a private revenue stream to pay back financing - such as with utilities - it is yet to finally confirm the way forward for publicly funded projects - with a final decision due at the autumn Budget this year.

Many questions remain, too, about the specific models and structures that will be backed – and, beyond the utility sector, the specific projects that will be judged as best placed to benefit from this renewed enthusiasm for private finance.

This report brings together and builds on the Building the Future Think Tank's work over the past year on the models that will be backed and the sectors that will be supported - and what government needs to do to make them fly.

Labour's decision to cautiously open the door to private finance provides a real opportunity for the sector – now we need to grasp it.

Joey Gardiner, Building the Future Think Tank

EXECUTIVE SUMMARY

The government's re-engagement with private finance to pay for new infrastructure is hugely welcome. Ministers at the highest level have recognised the opportunity that exists in a time of fiscal constraint to finance the improvements that have been promised to the public estate – and which are so desperately needed.

There is broad agreement in the construction sector that private finance has the potential to result in the delivery of a significant volume of new infrastructure assets, beyond what could otherwise be afforded at present.

Private finance, operating through a range of models in a range of different circumstances, can help renew the nation's tired and ageing public estate, prepare the country for net zero and assist with delivering the energy transition, all while creating jobs, improving the places in which we live and delivering tax revenues.

However, that new infrastructure can only be delivered, and those benefits realised, if the potential of private finance is grasped. And despite the positive noises from government, that remains very far from certain.

Grasping the potential does not mean returning to a dogmatic approach, but rather using private finance in a smart way to deliver the projects where it really makes sense and offers good value, in order that limited public money is reserved for those schemes where public procurement remains the best course.

So far, the government's action on private finance have not matched its rhetoric.

Roadblocks

The concern is that a number of problems are holding back the development of private finance in the UK, including:

1. The government does not have a clear vision and has not said which financing model it wants to use

The industry currently has little information about how the government sees its programme working in practice, and there is no clarity over the type of financing structures that are likely to be used.

2. Efforts to bring in private finance for social infrastructure remain limited

In the whole of the infrastructure strategy, just one social infrastructure type – primary care and community health facilities in the NHS – is mentioned as a potential beneficiary of private finance. Private finance is likely to generate better results if a single model is deployed repeatedly against a significant pipeline of projects, giving the sector the confidence to invest, and offering economies of scale.

3. There is currently minimal industry capacity to deliver on private finance

The industry is effectively in hibernation and does not yet see the incentives to wake up and deliver projects through this type of model.

4. The infrastructure pipeline needs updating if it is to become an investor tool

In its current form the pipeline lacks data and offers very little insight into private finance opportunities. It requires further work before it can function as a tool for drawing in investors.

The way forward

Given these challenges - as well as many others - it is clear that further action is required if the government's aim to boost the use of private finance strategies is to have a hope of success.

In order that private finance can become a key enabler for public construction projects, this report has identified a number of key areas in which action is necessary, including:

1. Vision and delivery plan

Waking up the currently hibernating market for private finance will require the articulation of a strong vision backed by a credible set of measures designed to deliver it. This plan should be significantly more ambitious about the level of social infrastructure to be delivered using private finance than is currently being suggested by the government, if it wants to persuade the private sector to engage.

2. Institutional framework for ensuring delivery of the plan

The Treasury, which oversees the National Infrastructure Service Transformation Authority (NISTA), should task NISTA with

the role of driving the implementation of the private finance vision and delivery plan, and with supporting industry to understand the government's policies and the available opportunities.

3. Clarity on funding structures and models

The government should work rapidly to end the present uncertainty over which financing structures it will support. The mutual investment model (MIM) devised by the Welsh government should be strongly considered as the basis for a private finance model for schemes that will not have a future private sector income flow.

4. Making the infrastructure pipeline an effective investor tool

To function as an investor tool, the pipeline must contain far greater detail of individual projects, include private finance projects that remain investment opportunities, and set out the funding or finance route for each project

So far, the government has taken only small steps on private finance. But it has successfully broken an important taboo. With sufficient direction and momentum from ministers, there is still the potential for a massive shift in the way public projects are funded. The infrastructure strategy has opened a door, and it is now in the government's gift to lead the construction industry through it.

Methodology

Research for the report was conducted by Building journalists, supplemented by contributions from industry. Building's research delivered a series of articles, since updated by the Building the Future Think Tank team, which forms the heart of this report.

Building was ably assisted by team of experts in this field who formed the Funding the Future advisory panel, helping to inform the research and guide the direction and conclusions of the project.

The views expressed in the report are those of the author and Building magazine alone, and participants cannot be assumed to have endorsed the final findings.

We extend huge appreciation to the Funding the Future Think Tank advisory panel members.

These were:

- Stephen Beechey, group public sector director, Wates
- Meliha Duymaz, chief financial officer and executive vice-president, Skanska UK
- Craig Elder, partner, Browne Jacobson
- Mark Reynolds, executive chair, Mace; co-chair, Construction Leadership Council; co-chair, Construction Skills Mission Board
- James Stewart, chair, Agilia Infrastructure Partners
- Beth West, director and founder, Navigate Advisory









The need for a new funding model

Labour's manifesto commitments on hospitals, prisons, energy and transport will require investment on a scale beyond what public borrowing alone can cover. While recent budget changes have expanded capital spending, the government is now weighing options for bringing private finance back into social and economic infrastructure.

Labour's 2024 election-winning manifesto may have been short on specific numbers, but it contained no deficit of broad promises to renew and improve the UK's public infrastructure. Pledges committed the party to delivering the New Hospital Programme, building a new generation of prisons, renewing the road network, accelerating the rollout of EV charge points, investing £6.6bn in domestic retrofits and quadrupling offshore wind power – and more to boot (see panel below, on Labour's manifesto commitments).

While the cost of these promises cannot be easily quantified, because many are not specific, they will need to be paid for if Labour

is to be able to make any argument it has met them. The 2024 Budget saw chancellor Rachel Reeves rewrite her definition of public debt to give her an extra £50bn of borrowing capacity to invest in capital spending, allowing her to side-step making swingeing cuts to capital that had been previously planned.

As can be seen from the accompanying Office for Budget Responsibility report, this financial shimmy allowed Labour to increase capital spend by around 10% – just under £10bn – this year across all departments, and ultimately underpinned the announcement of £725bn of funding for infrastructure in the 10-year infrastructure strategy published in June.

Nevertheless, there remains little sense that even this significant fiscal loosening will come close to matching the scale of the ambition, particularly given colossal repair backlogs across the public estate.

The NHS alone, as it embarks on the 15-year New Hospital Programme costing anything up to £45bn, is set to take £13.6bn of the capital spend in the current year. Many of Labour's

Coming up in chapter 1...

- Labour's infrastructure commitments
- Current funding position
- Private finance options
- Sector funding challenges
- **■** Future prospects

Of course, there are multiple ways to bring in private capital to pay for public goods. The much-maligned PFI model is just one such approach – albeit one that was dominant for many years in the social infrastructure sector.

other commitments also come with a price tag in the billions: for example, the grid upgrades necessary to enable planned offshore wind power have been priced at a cool £54bn by 2030, with another £58bn of projects pencilled in after that.

In this context, looking to supplement public money with private capital seems to many in the sector like an obvious option. The government's infrastructure pipeline itself reports that more than half of the projects in the £531bn pipeline are to be privately funded.

Different strokes

Of course, there are multiple ways to bring in private capital to pay for public goods. The much-maligned PFI model is just one such approach – albeit one that was dominant for many years in the social infrastructure sector, where there is no obvious alternative revenue stream available to pay back private loans, other than the taxpayer.

The PFI model is a form of public-private partnership (PPP) in which a special-purpose

Labour's manifesto commitments

The following pledges are quoted directly from Labour's 2024 pre-election manifesto:

- Labour is [...] committed to delivering the New Hospital Programme.
- Labour [...] will use all relevant powers to build the prisons so badly needed.
- Labour will maintain and renew our road network [and] fix an additional one million potholes across England in each year of the next parliament.
- Labour will [...] accelerat[e] the rollout of [electric vehicle] charge points.

- Labour will work with industry to upgrade our national transmission infrastructure.
- Labour will work with the private sector to double onshore wind, triple solar power and quadruple offshore wind by 2030. We will invest in carbon capture and storage, hydrogen and marine energy, and ensure we have the long-term energy storage our country needs.
- Labour will invest an extra £6.6bn over the next parliament [...] to upgrade five million homes.
- Labour will deliver the biggest increase in social and affordable housebuilding in a generation.



A detailed assessment of lessons learnt from years of PPP projects reported that where the right pre-conditions for investment were met, PFI usually delivered schemes on time and on budget

vehicle is set up to design, build, finance, operate and maintain a public facility for 25 years, with borrowing paid back by an annual charge paid by the public sector client.

PFI itself comes in different forms: as well as the revised PF2 in England prior to cancellation, Scotland and Wales both have their own versions, with the Welsh mutual investment model still running.

Other common forms of PPP include joint ventures between public and private sector organisations, and the regulated asset base (RAB) model which already funds most of the construction undertaken by former state-owned utilities and infrastructure operators such as water companies.

The RAB model garners investment from long-term institutional investors into big programmes of investment by often monopolistic providers, where the income to pay back the investment comes from private bill-payers, overseen by industry regulation.

Different industry sectors, clearly, have very different characteristics, and while PFI as such has been closed in England since 2018, public bodies have carried on forming joint ventures where appropriate, and the RAB model has levered in billions of pounds of funding to sectors like energy transmission and water infrastructure and to projects such as the £5bn Thames Tideway tunnel.



Revenue stream

The problem is that the success of RAB cannot be repeated in sectors that do not have a private revenue stream, overseen by a regulator, that will ultimately pay off the cash borrowed to build the infrastructure in question.

For example, while electricity network operators can borrow money to pay for network upgrades on the basis of future bill income, a local authority or central government will not get any income from building a new school which it can use to pay back the finance costs.

Hence, any PPP model designed to finance social infrastructure such as schools, hospitals or prisons requires a guarantee of revenue funding from the government – under PFI it is called a unitary charge – for 25-30 years into the future.

The government is already spending nearly £10bn of its day-to-day revenue spend on these PFI unitary charges each year - hence how reluctant it has been to take on significant further commitments. This reluctance is clearly heightened, given how little room for manoeuvre the chancellor has on revenue spend.

Despite this, the dire need for investment has forced Labour to again look hard at private finance models. At this forthcoming autumn Budget, the chancellor will decide whether to

push ahead with a limited programme of social infrastructure PPP schemes - likely to be similar in nature to PFI deals - covering the primary health and public estate decarbonisation spaces.

A detailed assessment of the lessons learnt from years of PPP projects, published by the National Audit Office earlier this year, reported that where the right pre-conditions for investment were met – around setting clear objectives, a reliable pipeline of work and a skilled workforce – PFI usually delivered schemes on time and on budget.

The question is whether the proposed shift is radical enough to meet demand.

Why returning to large-scale PFI for social infrastructure isn't simple

Coming up in chapter 2...

- The costs of PFI construction projects
- PFI benefits for construction delivery
- Industry verdict on PFI's

The debate over the private finance initiative has reignited as Labour considers limited use of private capital for social infrastructure. While PFI enabled more than 700 projects to be built, critics highlight its higher borrowing costs, inflexibility and long-term liabilities, raising questions over whether it can deliver value for money compared with traditional procurement.

For what is essentially a dry accounting and procurement issue, discussions around the private finance initiative (PFI) have long inspired a surprisingly fierce – almost religious – fervour. Supporters and critics alike are passionate in defence of their own revealed truth about this controversial method of financing and procuring public projects.

However, since 2018 this has been a debate that, in England at least, has until recently been largely silenced, given that the nay-sayers effectively won the argument. The Treasury cancelled the successor scheme to PFI, with then chancellor Philip Hammond declaring PF2 "inflexible and overly complex".

But with chancellor Rachel Reeves having opened the door once more to bringing in private finance to help fund Labour's social and economic infrastructure plans, it is now an argument that looks ready to fire up all over again. For many, though, the question remains whether this form of project delivery, used on more than 700 UK projects to date, is really such a good idea.

PFI differs from traditional public sector build

projects because it sees the public sector engage a private consortium to finance, design, build, operate and maintain a public asset over a 25-or 30-year period - with the private sector's costs paid back through an annual "unitary charge" once the scheme is completed.

While PFI arguably enables schemes to go ahead that otherwise might not, the cost of the private borrowing to invest in projects is higher than the cost of borrowing would be from the public balance sheet.

Despite these important question marks, the National Audit Office (NAO) in 2011 and the Public Accounts Committee (PAC) again in 2018 found that, over a quarter of a decade on from the inception of the model, the Treasury had made no full value-for-money assessment

The Treasury has made no full value-for-money assessment of PFI...
For many, the question remains whether this form of project delivery, used on more than 700 UK projects to date, is really such a good idea



of the use of PFI compared with traditional forms of procurement.

However, many others have attempted to make their own assessments. As Reeves, ahead of the autumn Budget, weighs up the pros and cons of a new, limited version of privately financing primary care buildings and the decarbonisation of the public estate, this is Building's costbenefit analysis of PFI's track record.

The costs

1. Cost comparison

The main argument against PFI is simply that it is inherently more expensive than traditional publicly procured construction because of the higher costs of private borrowing. However, even if all the other cost differences between publicly and privately financed construction projects are ignored (such as likelihood of delivery on time, on budget and to adequate quality), actually determining exactly how the borrowing costs of equivalent projects compare is not as easy as you might think.

Until 2012, the Treasury assessed the value for money of the borrowing costs of PFI against a metric it called the "social time discount rate", which it said reflected the benefit of the ability to deliver projects earlier under PFI, rather than postpone them until government cash would become available.

The reality of this was that any project with borrowing costs of less than 6.09% automatically scored more highly than public projects - despite the fact that public borrowing costs have generally been much lower than that.

The NAO in 2013 said it disagreed with the Treasury's method of assessing financial value, and that the real comparison should be between the cost of private borrowing and the real cost of public borrowing.

MPs on the PAC in 2018 said this private cost could be as much as 3.75 percentage points higher than public borrowing – a difference with an enormous impact over the life of a PFI. For example, according to a 2018 NAO report, the total interest cost incurred on a £100m loan over 30 years nearly quadruples from £34m at 2% to £118m at a 6% interest rate.

The same report estimated that the cost of schools built under PF2 (the successor to



PFI with essentially the same structure) was "around 40% higher than the costs of a project financed by government borrowing", and that similar studies had found costs to be 70% higher.

Studies have also highlighted that PFI schemes do not pay as much as they should to the taxman, with nearly three-quarters of PFI special-purpose vehicles located offshore for tax purposes. Projects are also subject to large set-up, legal and insurance costs that public projects do not have to bear.

Mark Hellowell, senior lecturer in global health policy at the University of Edinburgh and a former adviser to the PAC on PFI, says it is possible to construct an argument that there are benefits to bringing in private sector investors in order to gain from the rigour and challenge they bring – and paying the extra cost for that. Ultimately, however, he says: "I don't think it's very compelling compared to the price paid. The real private sector discipline in PFI comes in the construction fixed price – but you don't need a 25-year contract for that."



The main argument against PFI is simply that it is inherently more expensive than traditional publicly procured construction because of the higher costs of private borrowing

2. Lack of flexibility

Another big problem cited with PFI contracts is the ongoing liability they create for the public sector bodies paying for them, as they grant very limited flexibility to adapt to changing requirements. With unitary charges commonly running for 25 years from the date of a PFI asset opening, the cost of PFI assets is blamed for tying up a significant proportion of the revenue budgets of public bodies such as NHS trusts and education authorities.

The latest government data shows that, despite a £60bn total asset value for the PFI projects built so far, there remain £123bn in outstanding payments towards those same projects to be made by the public sector, running into the 2050s. The 2018 PAC report on the subject bemoaned the fact that the government, it said, was "not doing enough" to address the impact of "inherently inflexible" PFI schemes on local budgets.

Contracts designed to ensure the private consortium delivers specific outputs tend to make the public sector unable to escape the contracts in almost all circumstances. In one of the worst examples of this, the PAC highlighted the case of the £24m Parklands School in Liverpool, built under PFI and then subsequently closed. Due to the contract, the council remains committed to paying charges totalling £47m towards the empty school into the 2030s.

There have also been concerns that this inflexibility has left the public sector without recourse in cases - particularly in early PFI projects such as the notorious Norfolk and Norwich Hospital PFI - where risks have turned out to be overstated and projects have made super-profits in the operational phase.

Salman Ahmad, a lecturer in accounting at Aston Business School, says: "In the UK, PFI project management was centrally prescribed by the Treasury. This added inflexibility to the contractual control regimes and hence the public sector was not able to respond in a timely or appropriate way in line with broader value-for-money objectives."

3. Cart before the horse

PFI was originally set up by the Conservative chancellor Norman Lamont in 1992 explicitly

as a method to keep government borrowing off the public books. While the justification for PFI evolved under New Labour, critics say the fact that it has traditionally benefited from an "off balance sheet" designation has meant that PFI has ended up being used even where it has not necessarily delivered the best outcome.

Similarly, the PFI credits made available to individual departments and government agencies effectively meant that money was available to departments for PFI projects which simply would not be forthcoming for traditionally procured schemes - in effect forcing public clients down this route. Nick Gray, chief operating officer for the UK and Europe at consultant Currie & Brown, and actually a supporter of PFI, admits that "the driver - the main dynamic - was to get spending off the balance sheet".

This is a problem, says Edinburgh University's Hellowell, because the public sector stops making the best decisions it can regarding public cash because of the need to satisfy and attract private partners. He says: "Historically it was the only game in town.

"What happened in the UK – and we've seen it around the world – is that you only get investments delivered that make sense for public-private partnerships, not the ones that make the most sense for the delivery of services.

"You're letting your procurement route decide your project."

4. Benefits not delivered

Even ardent supporters of PFI accept that borrowing costs are higher for PFI than for public schemes. But many would argue that this is more than made up for by a range of benefits (see below for detail) such as more reliable build-out, risk transfer, the consideration of whole-life costings and the required ongoing investment over 25 years to maintain buildings to a good standard.

However, critics say the reality is that many of these benefits are not delivered. Evidence of this comes from the current experience with PFI "handback", where projects that were among the first PFI schemes to be built are now being handed back to their public clients.

A recent report commissioned by the government on the issue found that there

were "increased disputes and deteriorating relationships" between public bodies and PFI companies, due to disagreements over whether buildings are in the state they should be in at the end of the PFI contract.

Craig Elder, partner at law firm Browne Jacobson, says the disputes undermine claims about the benefits of PFI "to a very high degree" and that this "erodes notions of the benefit of certainty about allocation of risk and responsibility at the end of the contract".

In addition, there are a number of individual projects that have been identified as problematic, from the Norfolk and Norwich Hospital PFI – branded the "unacceptable face of capitalism" for the scale of super-profit made from a refinancing – to the M25 widening PFI, which cost an extra £660m due to procurement delays.

Notably, the inquiry into two PFI hospital projects, which were initially undertaken by contractor Carillion before its collapse, found that the cost of the two schemes doubled after a series of build problems stemming, at the Royal Liverpool at least, from poor design. The report said it was not clear why the problems occurred, given that "PFI arrangements are meant to lead to better design and performance by transferring the risk to the most appropriate party".

For many supporters, the off balance sheet factor cannot be ignored as a crucial benefit - because it means projects can be funded which otherwise would stand no chance



PFI benefits

1. Projects delivered

Critics of PFI say the fact that the borrowing undertaken for PFI schemes does not register on the public sector balance sheet means that investment decisions are skewed (see "Cart before the horse", previous page). But for many supporters, the off balance sheet factor cannot be ignored as a crucial benefit – because it means projects can be funded which otherwise would stand no chance. In the real world, where governments have genuine constraints on spending, supporters claim the choice often has not been between PFI and a mythical public sector-funded scheme, but between building something or nothing.

Simon Rawlinson, head of strategic research and insight at consultant Arcadis, says: "The value question has to be considered against the counterfactual that projects might not have been delivered without PFI funding."

Currie & Brown's Nick Gray says: "The point is, if the government doesn't want to borrow, then money at gilt rates isn't available. So the question of whether PFI is more expensive is academic. It can be the only way to do things."

In the case of UK PFI, that means more

than 700 separate projects - schools, hospitals, roads, prisons - with a total capital value of £60bn have been delivered which arguably might not exist today if the financing route had not been available.

In other words, any assessment must factor in the wider costs to society and the economy of not building some important new piece of infrastructure, particularly if it is social infrastructure such as a school or hospital, where the main benefit is in allowing the delivery of public service.

Phil Harris, managing director of investments at Galliford Try, says: "Value for money should consider how well the building has been able to serve its intended purpose over its life, not just the cost of the building itself. Buildings are by their very nature a means to an end."

In a sense, this is what the Treasury's much-criticised "social time discount rate" was an attempt to do.

The former boss of PPP quango Infrastructure UK James Stewart, now chair of consultant Agilia Infrastructure Partners, says it is a "big problem" that value-for-money criticisms of PFI generally do not address the fact that the alternative to PFI is nothing being built at all.

Another significant aspect of the financial

model is the "buy now, pay later" element of it. While traditional procurement requires you to pay your contractor as they build the project out, under PFI the public sector does not spend a penny until the building is occupied thereby easing cash flow and bringing forward delivery timescales.

Stewart says: "The [Treasury] green book analysis has always assumed that the alternative is possible and ignored the value created by bringing forward the delivery and benefits of a project."

2. Better build

PFI's supporters also point to evidence suggesting that privately financed projects are more likely to be delivered on time and to budget than traditionally procured construction. While the evidence on this is not, perhaps, conclusive, it is consistent.

Trade body the Association of Infrastructure Investors in Public Private Partnerships (AIIP) claims that PFI schemes are three times more likely to be built to budget, albeit that claim is based on comparing data taken from separate studies, one in 1999 and one in 2002, which will have used different methodologies.

However, a single study by the NAO in 2009, which aimed to answer this exact question by surveying 150 PFI and 50 traditionally procured projects, did indeed find that PFI schemes were more likely to be built without delay and to cost – albeit not significantly so. The study found that 69% of PFI schemes were on time, next to 63% of public projects, with 65% coming in at price, against 54% under traditional procurement.

These top-line numbers may also understate the benefits of PFI, as the survey also found that in nearly all cases the cost overruns in PFI projects were due to specification changes made by the client, rather than build problems. It also found that project teams valued the nature of the incentives in the PFI contract due to the emphasis on clear output specifications and deferment of payment until completion, with 53% of project teams giving very good quality ratings to completed projects.

Currie & Brown's Gray says: "PFI contracts contained eye-watering penalties for contracting failures in terms of liquidated

Another aspect is the 'buy now, pay later' element. Under PFI the public sector does not spend a penny until the building is occupied – easing cash flow and bringing forward delivery timescales

damages. So you just don't really find any evidence of cost overruns."

Agilia Infrastructure Partners co-founder Amar Qureshi says: "The fact that in the PFI model full revenue only commenced on acceptance of the asset by the public sector was a very powerful incentive to get the project built."

3. Consideration of whole-life costs

If PFI critics bemoan the long-term financial liability created by the unitary charges on these projects, supporters say this approach has not only kept the buildings in good condition but also ensured they were designed with whole-life costs in mind from the outset.

To the first point, the AIIP says there is a £49bn long-term maintenance backlog in the public estate, an issue having a profound effect in schools and hospitals across the country - a level of dilapidation that PFI buildings have escaped. A spokesperson says: "Surveys of PFI projects found high levels of satisfaction in maintenance, and the NAO found the contractually agreed standards resulted in higher maintenance spending in PFI hospitals. On this front, the 'inflexibility' can be considered a strength."

Further to this, Gray says the financial incentives in the operating company made it prioritise long-term value rather than just short-term cost. "This meant they looked at getting the right balance between capital spend and whole-life value."

Supporters also say that the use of PFI forced a genuine appraisal of the long-term costs taken on when deciding to commission a new public building – something otherwise just not done in the public sector. Tim Stone, chair of Nuclear Risk Insurers and former non-executive board member at the European Investment Bank, says: "One of the things PFI does, when properly constructed, is force an honest assessment of the cost of doing something over the long run.

"But one of the things PFI has been hampered by is the public sector's assessment of the counterfactual - there's virtually no remotely reliable data about what the true cost of an asset built and maintained publicly over its lifetime would be."

As Galliford's Harris says: "Often the comparisons are apples and pears: people compare the total unitary charge over 30 years [of PFI] - which includes interest and FM - with the simple capex [capital expenditure] cost of the equivalent asset."

Verdict

Given the high costs of PFI, it is not hard to see why the government moved away from using it in a time of public spending austerity during the 2010s, especially given the relatively cheap government borrowing then available. Likewise, it is easy to see why, with revenue budgets so tightly squeezed, it is not looking to rush headlong into another huge programme.

However, debates for and against this method of financing infrastructure have been more characterised by heat than by light, and an honest appraisal of the method, factoring in all the benefits as well as the downsides, has been long overdue.

While the arguments over value for money are more finely balanced than they at first appear, the prospects for additional spending on social infrastructure programme look grim without further consideration of PFI-type methodologies.



Where is private finance already working in the UK?

The regulated asset base (RAB) model, long used to fund UK utilities, is now being applied to major projects such as the Thames Tideway tunnel and Sizewell C. By allowing investors to earn returns during construction and spreading costs through customer bills, RAB has lowered borrowing costs and attracted institutional finance – although questions remain over risk, regulation and its suitability beyond large-scale utility schemes.

In July, energy secretary Ed Miliband promised a "golden age" for nuclear power as he signed the final investment decision to push forward the £14.2bn Sizewell C project in Suffolk. He went ahead despite the fact that investor interest in building nuclear in the UK nosedived in the wake of EDF's 2016 deal to build Hinkley Point C in Somerset.

That scheme is now massively over budget on

the past four decades

£47bn (in current prices), compared with the £10bn the firm said it would cost in 2010. While that £92.50 "strike price" deal with the

construction - EDF has said it will cost almost

While that £92.50 "strike price" deal with the government - a guarantee to buy energy at a certain price - has protected bill-payers to an extent from these cost rises, it also ensured a big risk premium was priced into the job from the start, making nuclear power expensive, with the National Audit Office saying a risk-sharing approach could have been cheaper. The deal "locked consumers into a risky and expensive project with uncertain strategic and economic benefits", the NAO said.

Either way, as EDF and other nuclear promoters have struggled financially, no one has rushed to repeat the exercise in the decade since. Until now.

So, aside from new investors, what has changed in order to make Sizewell C - a project that EDF once promised would be operational by 2025 - viable again?

The RAB utility model

The difference, as Miliband confirmed to the House of Commons in June, is that Sizewell will be financed under a totally different model from Hinkley Point. Known as the regulated asset base, or RAB, model, it is a tried and tested system for raising private finance from bill-payers for large programmes of infrastructure investment.

The RAB model is that used since the privatisation of UK utilities to draw investment

Coming up in chapter 3...

- Current nuclear context
- What is the RAB model?
- ■Thames Tideway's success story
- Key RAB advantages
- Future applications being considered
- Model limitations
- Success conditions



The RAB model has been responsible for ensuring billions of pounds worth of investment in privatised utilities over



into monopoly providers' infrastructure, while continuing to ensure value for money for their consumers. Crucially, it has also been the model under which the £4.6bn London Thames Tideway super-sewer project has been successfully delivered over the past decade (see later in this chapter).

While the exact form of RAB to be used at Sizewell C is not yet clear, the government has previously estimated that using this model could save bill-payers up to £80bn on new nuclear power stations, compared with a Hinkley Point C-style system.

So, what is the model, how can it make projects cheaper, and what are the prospects of it being used on other major schemes?

How RAB works

The RAB model has been responsible for ensuring billions of pounds worth of investment in privatised utilities over the past four decades. While critics of the service provided by water and power companies - as well as the recent Cunliffe review of regulation - would certainly question just how effectively it has operated in that period, no one can question whether or not it has successfully levered in private cash.

For example, water industry trade body Water UK estimates that British water companies invested £236bn of privately raised cash in water networks between 1989/90 and 2023/24. all generated under the RAB model.

Beth West, director at Navigate Advisory and

A key part of the investor attraction to the RAB model - compared with traditional project finance - is that investors can start getting a return on their money from the day construction starts

an adviser on Building's Funding the Future initiative, worked on Thames Tideway briefly prior to the construction phase. She says of RAB: "It's a really common model, used by utilities all the time, such as for power stations.

"It totally makes sense when you've got a customer paying through a bill for a service."

In basic terms, the RAB model works in utilities where you have a monopoly company that looks to raise money against its existing assets, its income and its operational track record to invest in its infrastructure. A regulator is established in order to ensure that costs and profits are controlled, given the lack of competitive tension, while providing investors with assurance over financial stability.

The idea is that companies borrow money, with investors paid a return out of a surcharge on customers' bills. The regulator vets spending to ensure that only qualifying investment is allowed to be added to the RAB and thereby be clawed back through customer bills.

The key conditions required for a RAB model to work are, therefore, a base of customers (typically, utility bill-payers), a regulator seen as credible by the market, a monopoly, and a market willing to fund the company on the basis of regulated returns.

Project RAB

The innovation that happened around Thames Tideway was to apply this logic to a single major project, rather than to a company running a large programme of works. Tideway took advantage of bespoke legislation - namely the catchily entitled Water Industry (Specified Infrastructure Projects) (English Undertakers) Regulations 2013 - created to allow such a venture to happen.

What this allowed was for a special-purpose vehicle to be established to build Tideway that also became a regulated water company able to borrow under a RAB structure, with money paid back through Thames Water bills.

Mathew Duncan, chief financial officer at Tideway, says this regulated structure, which capped costs and returns within known bounds, automatically provided a much greater level of confidence to potential shareholders and investors.

A key part of the investor attraction to the RAB model - compared with traditional project finance - is that investors can start getting a return on their money from the day construction begins. The regulator allows bill-payers to be charged from day one, as opposed to at project handover, which in the case of Tideway would have meant a delay of 10 years.

This means institutional investors are much more likely to be interested, and Tideway's Duncan says that £600m has already been generated from bills through the RAB model during the construction phase, thereby keeping borrowing costs down.

Craig Elder, partner at law firm Browne Jacobson, says: "One key advantage of RAB is that borrowing costs can be reduced by passing construction costs on to consumers through bills before the project is completed - reducing the need for borrowing and interest payments through the riskier construction phase."

Tideway in the end secured £1.3bn from its initial investors and has drawn in a further £3.6bn from lenders and the bond markets. Duncan says.

Amar Qureshi, joint CEO of infrastructure consultant Agilia, which is now advising the government on Sizewell, formerly led the Thames Water team involved in creating the structure for Tideway. He says the structure,

given the regulatory mechanisms and incentives, allows investors to treat projects as "more akin to investment in a newly established regulated utility company, as opposed to an investment in an infrastructure project exposed to big, gnarly construction risks". Crucially, this helps reduce the cost of borrowing money.

The structure allowed Tideway to reduce borrowing costs to such an extent that initial estimates in 2011 that the project would see £80 added annually to the average Thames Water customer's bill has proven way over the top – in the end customers will pay just £25 per year (in 2016/17 prices).

The reduction in the cost of capital was "absolutely" behind this saving, says Duncan. "It made such a big difference."

Government backing

However, it is by no means the RAB model alone that gave investors such security. Tideway also benefited from a significant government support package. This took the form of guarantees on a range of potential scenarios where the government agreed to step in – scenarios described by Agilia's Qureshi as "high-impact but low-probability".

Most significantly perhaps, the government said it would cover costs if the construction price rose by more than 30% (or £960m) above the target cost of £3.2bn (at 2014/15 prices).

"As we developed the model for Tideway, it became clear that, on its own, it [the RAB model] wouldn't quite drive the pricing benefits that we wanted without a government support package," says Duncan. "Because with the RAB model you have quite a heavily regulated return, investors want to know how those construction risks are going to be managed – particularly those high-impact, low-probability events. The support package gave that confidence."

Dr Alex Budzier, a former McKinsey consultant and now fellow in management practice at the Saïd Business School at the University of Oxford, says: "This model is different to traditional procurement, in that essentially you've got the capital provided by the private sector and the risk taken by the public sector. The RAB with that support is a powerful combination."

This combination resulted in an investment-



An analysis by BEIS in 2021 found that a RAB model could save between £30bn and £80bn on the cost of new nuclear stations for bill-payers, compared with using the system that funded Hinkley

grade rating for the Tideway business which kept the cost of borrowing money low. The Tideway deal was nevertheless widely criticised for opening the taxpayer up to potentially limitless liabilities.

In the event, build costs on Tideway have risen, in part because of a £200m hit from closing and then reorganising sites during the pandemic. The final out-turn price is now expected to be £4.55bn at current prices.

However, with inflation adjusted back to 2014/15 prices, this puts the cost at around £3.85bn, says Duncan, which is well within the range that would trigger the support package. So the taxpayer will not have paid anything, but yet customers will have felt the benefit of the guarantees in lower bills.

Qureshi thinks the significance of the

RAB structure should not, however, be underplayed, despite an understandable focus on the government support package. He says the model allowed a more realistic approach to managing construction costs, in which all parties could respond to the true cost of carrying out the works, with external independent regulation ensuring this was done fairly.

In comparison, a traditional project finance approach would seek to pass the majority of construction risk on to a contractor, with the response being simply to price in a big contingency, paid whether those costs arose or not. Or to underprice the job, relying on pushing up the price post award.

Qureshi says: "As a licensed special-purpose vehicle, you're remunerated via the RAB for

effective expenditure and cost management. You aren't expected to take cliff-edge risks, so your base returns aren't dependent on whether something you can't control or reasonably anticipate arises during the construction of the project."

Sizewell and beyond

The government – actually the previous Conservative government – has already legislated to allow the RAB model to be used in the nuclear sector. The Nuclear Energy (Financing) Act 2022 sets out the statutory provisions necessary for setting up a new regulator to oversee the construction of Sizewell C – and any other power stations that come forward.

Miliband told the House of Commons recently that the RAB system was "the right system [for building Sizewell C] and will cut the cost compared with Hinkley Point C".

Certainly, some in the sector agree with him. Budzier says the system would work well for very big projects such as Sizewell C, which is large enough to generate the logic for its own quango to regulate it, and where "the risks are quite large, but we do understand them".

Qureshi says it is "absolutely" the case that an "appropriately structured RAB model with cover for high-impact, low-probability risks" could "secure low-cost finance to help deliver much-needed infrastructure such as Sizewell C, reducing the cost impact on bills for customers and consumers".

An analysis by the Department for Business, Energy and Industrial Strategy published in 2021 found that a RAB model could save between £30bn and £80bn on the cost of new nuclear power stations for bill-payers, compared with using the system that funded Hinkley.

But, in terms of major projects, it is of course not only Sizewell C that could take advantage of the RAB. Water regulator Ofwat is exploring using it to fund the proposed 30 million cubic metre reservoir outside Abingdon, known as the South East Strategic Reservoir Option (SESRO), with some of the nine further reservoirs the government is considering before 2050 also looking over the model.

An assessment of SESRO by Agilia in 2022, undertaken for Thames Water, found the



project "may offer the potential to generate greater value for money" through the particular form of RAB that was used on Tideway.

In addition, National Highways has publicly stated that RAB is one of three funding models it is considering for the £10bn Lower Thames Crossing project – with most believing it is the favoured option.

The right model

RAB does, of course, have its downsides. And it is not suited for every situation – social infrastructure construction, for example, does not have the customer revenue stream against which investors can invest.

Additionally, the requirement for a regulator imposes a large cost overhead. The structure also relies on faith that the regulator will do its job - a faith being sorely tested in the wider water sector right now, given the situation in which Thames Water's wider business finds itself. West says: "It [RAB] needs to have a strong regulator because you've got a monopoly provider. Their job is to ensure that the company is making the right investments - if they're not strong enough, it's a problem."

Both the structuring of contracts and the offer of government guarantees, all taking risk off the private sector, also open up questions about what happens when the worst does happen.

The Thames Tideway tunnel

Cost: £4.55bn

Finance structure: Regulated asset base (RAB) What is it: The Thames Tideway tunnel is a 25km "super-sewer" built along the tidal section of the river between Acton and Abbey Mills. It is designed to capture almost all the raw sewage and rainwater that would otherwise overflow into the river during heavy rain. Construction began in 2016 and it finally became operational at the start of this year.

Browne Jacobson's Elder says: "The most obvious downside is the transfer of risk away from the contractor.

"There has been criticism that allocation of excess construction costs to taxpayers, for example, constitutes a blank cheque for the developer."

Hence Tideway's Duncan says that, while RAB can work for nuclear, there are a number of necessary conditions that should be adopted, including certainty over revenue streams and an understanding of the construction risk.

He says: "I do see options for using this model in other sectors such as nuclear, but there's got to be a strong understanding of the revenue streams it's going to bring in – some ability for investors to get visibility. That's a really big driver of whether it will work.

"And there's got to be some understanding of construction risk, and how manageable that will be."

West says that while RAB makes "total sense" for reservoirs, nuclear remains "challenging". She adds: "It's just because of cost overruns and the scale. It's not to say it's not possible, but it's just they're big, they always overrun, and they take a really long time."

The RAB model has undoubtedly proved effective at drawing in cheap funding for Tideway, keeping costs down for London bill-payers. "It's about having the right model for the right circumstance," West says.

Whether it becomes a force in the financing of future mega-projects may be dependent on what projects end up getting the go-ahead.

What projects are already being delivered?

Coming up in chapter 4...

- Lower Thames Crossing
 a RAB model frontrunner
- RAB model advantages
- Lower Thames Crossing implementation challenges
- Euston Station complex multi-source funding and funding uncertainties

The government has said it will fund the giant Euston Station and Lower Thames Crossing schemes using private finance. Both projects highlight the potential and the challenges of using private finance to deliver major schemes.

News that the government is considering restarting the regular use of private finance to pay for public infrastructure has got some in the sector excited about the possibility of private capital funding a significant pipeline of work.

But the truth is that, while PFI was cancelled, private finance has never wholly gone away. The regulated asset base (RAB) model, under which investment is secured against a private revenue stream in a market underpinned by statutory regulation, still successfully funds water and energy sector investment in the UK.

The RAB model was also behind major projects such as the successful £4.5bn Thames Tideway scheme. The government has now said it wants two of the biggest and most controversial projects in the country to be funded privately: the £10bn Lower Thames Crossing, and the huge Euston Station redevelopment.

However, beyond the government saying it wants to use private capital on these schemes, little is known about what is being proposed - despite the fact these projects could set the agenda on funding models for the years ahead.

The two projects, which are at very different stages and face wildly differing challenges, together say a great deal about both the benefits and the challenges of reintroducing private finance models into the UK construction market.

Well developed

The Lower Thames Crossing (LTC), a proposed 14-mile road crossing under the River Thames between Thurrock and north Kent, is the further advanced of the two schemes. The project received planning consent under the Nationally Significant Infrastructure Projects regime in March, and already has contractors Balfour Beatty and Skanska engaged to build the roads north and south of the tunnel respectively.

According to a letter written this year by National Highways (NH), the government's trunk roads agency, to the planning inspector that approved the scheme, there are three

funding options on the table. Firstly, full public funding; secondly, a part public-funded, part-PFI model, whereby the government builds the riskier tunnel elements and private capital is used for the roads; and thirdly, an RAB model where a single provider would build the whole thing, and operate the existing Dartford crossing to boot.

While the Treasury has not yet finally committed itself, the recently published infrastructure strategy hinted at which model is favourite, stating that ongoing "further work" to design a funding model for the project included looking at "a regulated asset base model". The most obvious reason for this is made plain in further documents submitted to the LTC planning inquiry: cost.

An assessment by NH submitted to the inquiry found that the part-PFI option was a full £1bn more expensive in capital terms than a public build programme, at £10.2bn. In contrast, the RAB option came out just £200m more expensive than full public funding, because of the costs of setting up the regulator, with a full cost of £9.4bn.

This option would also see the public sector reduce its capital spend to just £1.9bn of enabling works – less than a quarter of the £8bn otherwise being asked of it under the publicly funded option.

The PFI option, on the other hand, is not only more expensive overall but also requires the public sector to stump up more than half of the up-front build cost, at £4.7bn.

The higher price given to the PFI option is understandable for many in the market, given

that many increasingly see PFI as unsuited for very large, bespoke or one-off projects with significant risks. This is in part because the special-purpose vehicles in charge of PFIs have generally relied on fixed-price construction contracts backed by heavy penalties. In such scenarios, the few contractors willing to bid are likely to simply price in very high risk premiums.

Dr Alex Budzier, former McKinsey consultant and now fellow in management practice at the Saïd Business School, University of Oxford, says: "There is very little appetite for classic PFI on that kind of scale. The costs would be quite high because of the risks."

NH's assessment found that the majority (£650m) of the additional costs of the PFI route were due to "taking construction risk under a fixed-price contract".

Meliha Duymaz, chief financial officer at Skanska UK, says contractors have "shifted" their risk attitudes since the early days of PFI, meaning that they will take on "only those risks they can best manage effectively, contrasting with earlier PFI models where risk transfer was less nuanced".

She adds that "few bidders will entertain inflation risk now", and that the experience of Carillion's downfall, which was hastened if not caused by large loss-making PFI hospital contracts, showed how damaging punitive contract conditions could be.

RAB in the headlines

The RAB model also has the advantage of allowing the government to move the borrowing for the project off the public sector balance



The government has now said it wants two of the biggest and most controversial projects in the country to be funded privately: the £10bn Lower Thames Crossing and the huge redevelopment of Euston Station

sheet. Investment under a regulated asset base model works where there is the potential for a revenue stream – road tolls in this case – to pay back capital investment over time.

Borrowing costs are then reduced by the presence of an independent regulator responsible for setting a fair operating environment, allowing long-term institutional investors to step in.

Because the tolls are paid privately and the money is raised privately, the scheme is much more likely to pass the accountancy test of being genuinely off the government books. PFI projects, on the other hand, while originally regarded as off balance sheet, have more recently often been classified as on the balance sheet - thereby impacting the government's self-imposed spending limits.

Agilia Infrastructure Partners chair James Stewart says: "The reality is that the question of whether projects are on or off balance sheet seems to be a very big consideration. Being off balance sheet is a big driver.

"This moves you from thinking about using private finance for social infrastructure projects, to a RAB-type model where there's a private revenue stream."

Mace executive chair Mark Reynolds, who has been working with the government to find funding solutions for both the Lower Thames Crossing and Euston Station projects, says: "The Treasury's problem goes right back

Euston HS2 Station

Cost: Not public - around £6bn quoted **Finance structure:** A combination of private finance, development receipts, tax increment financing and public funding

What is it: The project has been on an extended pause since HS2 north of Birmingham was cancelled in 2023 and Rishi Sunak said Euston needed to be privately funded. A smaller six-platform design is now being pursued and was given a boost after chancellor Rachel Reeves agreed to fund the construction of tunnels connecting Euston to Old Oak Common in the 2024 autumn Budget.

to what's on balance sheet and what's off balance sheet. That's always in the back of the Treasury's mind."

Lastly, where PFI projects can be tough to renegotiate when priorities change, the RAB model is set up to allow for that.

So, if the RAB model seems a clear winner for the Lower Thames Crossing, it does not mean the financing will be entirely straightforward. Director at Navigate Advisory Beth West, formerly CEO of East-West Rail and commercial director at HS2, says the project in principle is "an easy one" because of the expected toll. "It's a well-trodden path that's been done successfully all over the world."

The difficulty of it comes in its size. "It should be in the range of what's achievable, but it's a

massive project," she says. "The question is whether it can be financed at that scale."

This is particularly an issue given the state of the market for toll road operators, which would most probably be the only firms big enough to bid for the whole concession. Oxford University's Budzier says firms such as Egis and Ferrovial have been hit hard by drops in traffic levels in the wake of covid. "At £10bn it's possible that not a single firm could carry it," he says.

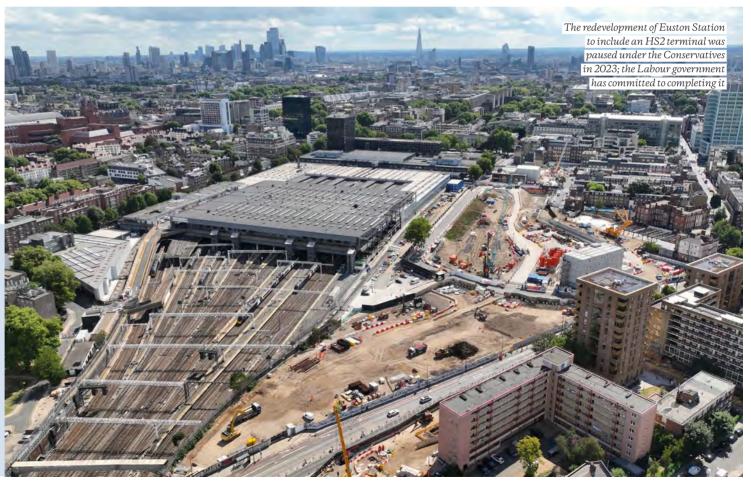
Mace's Reynolds says this is why contractors were clear that, even under the RAB model, the government still needed to spend £1.9bn on enabling works to "de-risk" the project. "They've done the planning, difficult remediation, enabling works, utility diversions − all the

difficult things that slow jobs down before the funding comes in have been covered by the government. Then you get a cleaner funding mechanism going forward."

Delays at Euston

Any challenges, however, are as nothing compared with the situation at Euston.

When then prime minister Rishi Sunak cancelled the HS2 project beyond Birmingham in October 2023, Downing Street also briefed newspapers that the line's connection to Euston would only go ahead if the station could be privately funded. Mace had previously been appointed main contractor to build the earlier 11-platform Euston Station design, and Reynolds says conversations about options



for private finance started immediately.

However, he says that the discussions took a different tenor from those about the Lower Thames Crossing. "On one project you're pushing at an open door. The other is more of a head scratch."

The Euston Station project is complicated by the range of objectives involved, with HS2 prioritising the delivery of a modern, future-proofed station, Network Rail needing to rebuild its own ageing mainline station at the same time, Transport for London requiring an upgraded Tube station, and the local authority, Camden, hoping to use the scheme as a basis for the economic and social regeneration of the area. And Lendlease, now working in partnership with the Crown Estate, is at the same time looking to get a return from the redevelopment of the office blocks that it owns adjacent to the station.

Original plans for an 11-platform station, on which the costs had risen to £4.8bn - which was £2.2bn over budget - have now been scrapped in favour of a stripped-down six-platform scheme, for which no costs have been put in the public domain. Asked about the project by MPs on the Public Accounts Committee in December 2024, Department for Transport officials said the government, which has stated it intends to set up a development corporation to drive the project, was looking to fund the project with a mixture of four funding sources. These are: private finance, development receipts from development around the station, tax increment financing and residual public funding.

PAC chair Sir Geoffrey Clifton-Brown said in the session he understood that the private sector was being expected to raise as much as £6bn for the whole project - a figure that he described as a "very tough target".

Alan Over, director general of the Major Rail Projects Group, did not confirm the figure, but maintained that "we have done some early market testing, and we think that that [financing] is viable".

Alex Budzier thinks that, in principle, this idea has legs. "The government has committed to pay for the tunnels to Euston, so this takes the risk out," he says. "There's potentially a great opportunity to unlock benefits through



PAC chair Sir Geoffrey Clifton-Brown said he understood that the private sector was being expected to raise as much as £6bn for the whole Euston project - a figure he described as a 'very tough target' regeneration, with something like a Docklands Development Corporation that can capture the uplift in value."

Struggling

The recent infrastructure strategy said the government was "exploring both the use of private capital to design, build, finance and maintain the HS2 station", and a "tax increment financing-style mechanism" designed to capture development value and use it to repay public investment.

This supports the reading from industry sources that the Treasury has not settled on a finance model since asking the Department for Transport for options in January, with the industry keen that the government spends more

The Lower Thames Crossing

Cost: £9bn-£10bn

Finance structure: Likely RAB model raised against toll revenues

What is it: The 14.3-mile project received full development consent in March this year, with Skanska and Balfour Beatty already engaged on the enabling works. It has been previously subject to delays and is going ahead despite being rated as "low value for money" by National Highways.

public money up front, as with the Lower Thames Crossing, to de-risk the station scheme and make it investable.

But even if that is done, there are doubts over the revenue stream against which finance could be raised, given that raising money against train access charges – fees paid by train operators for the use of stations – could send the scheme back onto the public sector balance sheet.

In the latest HS2 update to parliament, transport secretary Heidi Alexander would only say that the government will "set out our approach on Euston in due course".

One senior industry source says: "They are really struggling with how to fund Euston. It's a combination of things: what happens with the development, because that's definitely not enough [money]; what happens around the train access charge, because then it goes back onto balance sheet; and how does a RAB model work just on a station?"

Compared with the Lower Thames Crossing, Navigate Advisory's West says that Euston is "a really tricky one". There are also questions over the tax increment financing portion of the funding package. "I would love to see Euston done, but I struggle to see how they're going to make it work," she says.

Mark Reynolds is likewise desperate for the project to work - understandably, as Mace remains with Dragados the joint main contractor - but knows it is a challenge. "It is probably the most complex funding project out of the whole infrastructure portfolio," he says. "If you can crack it on that, you can crack it on anything."

Private finance and the affordable housing challenge

Labour's pledge to build 1.5 million homes depends not just on planning reform but also on unlocking new funding for affordable housing. With grants alone unable to cover the billions required, attention is turning to alternative finance models – including the US low-income housing tax credit system – that could bring in private capital without adding to short-term public borrowing.

Keir Starmer's Labour Party put an ambitious pledge to build 1.5 million homes at the heart of its general election campaign and has moved with speed on measures to reform the planning system in a bid to get Britain building. Starmer's hope is that removing planning red tape and delegating fewer schemes to local planning committees will help to speed up the supply of housing.

But, as the National Housing Federation points out, the target will not be met unless the government also significantly boosts affordable housing, which traditionally has been heavily reliant on grants. The trade body estimates that 90,000 social rented homes are needed each year to meet current levels of housing need.

The problem is that this would require billions in upfront grant funding if the government were to meet a significant proportion of the cost. The Centre for Economics and Business Research (CEBR) has estimated the cost of building these homes to be £35.4bn. If government grants cover just a third of it, this would be a cost of £11.8bn.

The government's dilemma is how to boost affordable housing at a time when many housing associations are also constrained financially, without making the upfront fiscal position of the public balance sheet worse. The answer, according to an influential group of activists, could in part lie on the other side of the Atlantic Ocean.

Low-income housing tax credits (LIHTC) have been used as the primary funding tool for affordable rental housing in the US over the past few decades. The mechanism, under which the government forgoes future tax revenue to incentivise institutional investment to support sub-market housing, has funded more than four million US homes since 1986.

The model is being pushed by members of the pro-development Labour Yimby group and the cross-party group Yimby Initiative, which sees it as a complementary model that could be used to lever in finance for sub-market rental housing without upfront cost to the taxpayer. The latter has enlisted the support of Barack Obama's housing secretary Shaun Donovan, who was in the UK this spring promoting the model.

UK Treasury officials, as one might expect, are understood to be interested.

How the LIHTC model works

In the US, the federal government allocates tax credits to state governments (in the UK, this could be councils or combined authorities).

The public authority sets criteria to determine

The government's dilemma is how to boost affordable housing without making the upfront fiscal position of the public balance sheet worse

the type of housing it requires to be delivered. This could relate to affordability (in the US, this is measured by the percentage of homes within developments set at lower rent levels for householders with below average local incomes), or energy efficiency requirements. Developers then bid for the tradeable credits. When the credits have been allocated, developers sell them to an investor, via a syndicator, to lower the risk.

Once the homes are inhabited, the investor draws down tax relief over a period of time. The developer must maintain the affordability of the homes for a set period, such as 30 years. If compliance is not maintained, the government can withdraw the credits.

Coming up in chapter 5...

- The housing challenge
- US low-income housing tax credit (LIHTC) model
- How LIHTC works
- Key benefits
- UK implementation
- Value-for-money debate
- Alternative models being considered

What are the benefits of LIHTC?

"The main thing is that it doesn't increase public sector borrowing," says Chris Worrall, who is a member of the Yimby Initiative and executive committee member of the Labour housing group.

"We're at about 95% to 100% debt-to-GDP ratio, the government has a plan for growth, but the issue with borrowing above that level is that, for every 1% you go above 100%, you get 0.4% negative GDP growth. So capital investment programmes that involve grant are limited in scope [currently]."

Steve Partridge, director and head of housing consultancy at Savills, agrees. "In the run-up to the spending review, the government line has very much been 'give us ideas that don't hit the public purse within the next five years'. Because that's the crunch point for the fiscal challenge," he says

Under LIHTC, there would obviously be a cost to the Treasury in forgone tax revenue, but as it is a reduction in future income it does not affect short-term fiscal metrics. "It kind of drips out over time, doesn't it? You never take into account the tax you never had; from that perspective it's an interesting idea worthy of investigation," says Partridge.

Worrall insists that the value for money of LIHTC is better than the current system for funding affordable housing, once you take into account the interest costs on the finance that goes in – although this is a bone of contention (more of which later).

A key part of the model is its "pay for success" nature. Worrall sees the model as sitting outside the current social housing regulatory regime. Pay for success means money is only released once homes have been built and are inhabited.

To carry on receiving the tax credits, the development must continue to comply with the council's requirements, with inspectors assessing the properties every couple of years to ensure that they are being maintained to a standard. The Treasury would be able to claw the tax back from the investor in the event of non-compliance.

"They have very low levels of non-compliance [in the US], as opposed to the significant increases in [Housing Ombudsman] severe maladministration cases we are seeing in the current social housing sector," claims Worrall.

"If there is a compliance issue or failure, the investor in the tax credit then sues the owner-operator as a result of that tax being clawed back from them. So there's a financial penalty to the owner-operator. And, funnily enough, they comply."

Partridge says Savills has conversations with American investors who have taken advantage of the LIHTC model in the US and are thinking about how it could work in the UK. "One of the challenges for them would be to make sure that the regime around it - the reporting, the regulation, the monitoring - is as friction-free as possible."

Proponents of LIHTC argue that the longer payment timelines and compliance requirements could appeal to pension funds with varying liability timetables and needs.

Worrall stresses that the LIHTC model is complementary to other funding models and could be used in a versatile way. "This LIHTC model could help us deliver 200,000 to 400,000 or more homes," he says, "because it might be that it is deployed at a different tenure that doesn't fall under the housing regulator.

"It could be that it's care-leaver homes or key-worker housing or goes directly to solve temporary accommodation crises across the UK."

However, there is also a great deal of caution about the model.

Would it actually work in the UK?

The most obvious point to make is that the US is not the UK, with its mature social housing sector and a public-private model that has been

Proponents of LIHTC argue that the longer payment timelines and compliance requirements could appeal to pension funds with varying liability timetables and needs

successful since the 1980s in attracting finance into the sector.

John Perry, policy adviser for the Chartered Institute of Housing, points out that "there is practically no social housing" in the US. LIHTC is estimated to have delivered around 90% of affordable housing over the past few decades, and in a sense is the only serious game in town across the pond.

Rob Beiley, partner at law firm Trowers & Hamlins, who has looked extensively into the LIHTC model, says: "There is a risk that you massively overcomplicate how affordable housing is delivered in England.

"We do have a very well-established and well-trodden path, and one that works in relation to the affordable homes programme, either delivered by Homes England or the Greater London Authority, and I think it worth asking whether or not there is any benefit in duplicating that regime under the LIHTC model."

Whereas Worrall sees strength in the regulation by the investor of the US LIHTC model, Beiley is sceptical whether this would be as robust as that provided by the Regulator of Social Housing: "There is a compelling argument that, actually, if you are putting taxpayer resources into subsidising affordable housing [through forgoing tax], that should be properly regulated.

"And, again, we have got a very wellestablished, well-respected regulator. Why would you move away from that?"

Similarly, the established for-profit registered provider (FPRP) model has been successful in the past few years in attracting institutional investment, with Savills estimating the market could grow to 150,000 homes within five years. The consultant giant's recent survey of FPRPs found that debt costs and regulatory burdens are the biggest barrier to investment.

Of course, these disadvantages might be worth overcoming if there is a compelling argument that the model delivers better value for money for the taxpayer overall than does the traditional grant funding route.

While Paul Hackett, chief executive of Southern Housing, says he has yet to see figures to suggest that LIHTC is better value for money than the current system, by contrast Worrall

LIHTC in the US

4 million

homes delivered since 1986

165.000

affordable rental homes delivered in 2023

38%

average by which LIHTC rents are lower than market rents

US\$7.800

average household saving per year

US\$746bn

estimated wages and business income created through LIHTC since 1986

Source: Action campaign / Yimby Initiative



has no doubts that the model is cheaper in terms of the direct funding cost to the taxpayer in the longer term.

The value-for-money debate

This may be true, but surely value for money should also take into account the long-term benefit of the product that is funded?

Under LIHTC, the home remains affordable only for a set period of time and then flips back to market rate. And this is probably the thing that is creating the greatest doubt about LIHTC, at least when it comes to funding general-needs housing.

Hackett says this makes it "less attractive" than traditional affordable housing. He says: "In the US, the model doesn't provide affordable housing in perpetuity; the tax credits are granted for a period of time when the housing is let to people on low incomes, but at the end of that period, it then is flipped into the private sector.

Hackett points out that in the UK, by contrast, once the government funds social housing it is "social housing forever", and if a property is sold the grant gets recycled.

Savills' Partridge says this is the "equivalent of grant disappearing after 25 years and having to repay it [...] That could be a pretty big constraint, to be honest." he adds.

LIHTC is just one of many ideas being considered

Of course, LIHTC is just one of a number of alternative ways of funding and financing affordable housing now being looked at, despite the generous spending review settlement, given constrained housing association balance sheets (see panel on next page).

The amortised grant model proposed by Housing Today and the G15 is being considered in Whitehall as a way of getting more public investment into affordable housing through the existing infrastructure without affecting the government's balance sheet (as some or all of the funding is repaid, it can be classed as an investment).

Institutional investors are lobbying for deregulation to get more investment in to the sector via for-profit registered providers of social housing, and there are also believed to be



LIHTC's disadvantages might be worth overcoming if there is a compelling argument that the model delivers better value for money than the traditional grant funding route

discussions in Whitehall about ways to make it easier for housing associations to sell shared-ownership properties into a vehicle in order to free up capital.

An idea 'worthy of further exploration'

It may be that the marketplace for funding solutions is simply too crowded. And while most recognise the fact that the LIHTC model of funding has the advantage of not requiring upfront borrowing, there are doubts as to how it can be used and what it adds that other models do not offer.

To be fair to Worrall and his fellow LIHTC supporters, they are pitching the model as a tool that complements the other funding models rather than replacing them. Worrall suggests it could be used to tackle specific problems that are not being addressed sufficiently through the traditional routes.

"There is a model there that could work really

well in helping to solve a number of problems that the country is facing, [such as] sales velocity, getting rid of section 106 properties that developers can't get registered providers to buy for love or money, and a lack of incentives for new entrants into the market."

Beiley echoes this sentiment: "You can see that there might be some attraction in utilising this to address temporary accommodation [shortages]. Equally, there might be some merit in using the system for key-worker or essential-worker accommodation.

"In other words, you could target this system at a need which is not being met by the current grant system. And in that way, it genuinely becomes complementary."

The LIHTC model is certainly setting tongues wagging in the affordable housing sector and in Whitehall. However, those expecting it to take off in the way that it has in the US look likely to be disappointed.

Affordable housing's innovative finance models

The affordable housing sector will have watched Rachel Reeves deliver the multi-year spending review in June with a dizzying sense of glee. With a total of £39bn of grant over 10 years, backed with a 10-year rent settlement, a consultation on convergence and equal access for social landlords to building safety funding, it has felt as though all the social housing sector's Christmases have come at once

And although there was no mention of shared ownership or older people's housing or any update on supported housing, the spending review surely exceeded the expectations of many in the sector.

The return of a substantial grant funding settlement worth nearly £4bn a year could not have come at a more crucial time, as landlords face balance sheet constraints and multi-finding pressures while the numbers in temporary accommodation spiral.

Private funding sources needed

It is tempting to think the announcements by Reeves mean it is job done for the next decade when it comes to funding. This is far from the case. Much more is needed from private funding sources.

For one thing, the tension between the number of homes built and the rental affordability to residents has never gone away.

Labour in its election manifesto pledged to "prioritise the building of new social rented homes", and Reeves has said the £39bn was direct government funding to support housebuilding "especially for social rent".

It is clear that, whereas previous governments have been content to deliver other forms of social housing, traditional social rent is the priority for this government. The problem with this is that grant does not go as far when used for social rented housing as opposed to other forms of social housing.

The total amount of grant per home when social rent was delivered was around £53,000 in 2008, compared with £22,000 in the affordable rent austerity era and £38,500 in the 2021-2026 programme. A largely social rent programme means England will build fewer homes, but homes that are genuinely affordable to people on low incomes.

And this is tricky for a government that has also promised to build 1.5 million homes by the end of the parliament.

Creative thinking

The fact of the matter is that social rented housing funded with big chunks of traditional grant is desperately needed, but Labour also needs to ramp up numbers of homes overall.

That is why it is heartening to see the sheer amount of creative

thinking going on in the sector and in government over recent months to look at fresh ways to attract more finance into the sector for development and improvements to existing stock.

The sector may be rubbing its hands with glee at the prospect of £39bn of grant, but this will not in the immediate term help landlords, particularly in London, who are facing balance sheet constraints. Inflation and funding pressures, including building safety remediation costs, have combined to severely lower many housing associations' EBITDA-MRI cash interest cover.

Interest cover compares earnings to interest payments and is used as a measure of registered providers' financial capacity. Entering into development commitments involves borrowing privately to part-finance schemes, which worsens the interest cover metric. Many of the G15 landlords have scaled back development in the short term until they can increase their interest cover.

Reducing borrowing for development, implementing efficiencies and completing building safety works, coupled with increases to rents, should allow the landlords to widen their interest cover in the longer term, meaning they can ramp up development again within a few years.

But in the here and now, the interest cover constraint is still a constraint on development – a problem for a government looking to every lever it can pull to boost development as it targets 1.5 million new homes by 2029.

Amortised grant model

government's balance

sheet under new rules.

To mitigate against these constraints that are restricting development, officials are also continuing to discuss a proposal by Building's sister title Housing Today and the G15 for an "amortised grant" or "repayable subsidy" model of affordable housing funding.

Under this model, housing associations receive a higher upfront

grant funding per unit from day one, enough to cover operating costs and interest. This means providers then have to borrow less commercially to fund a development. They then repay some or all of the grant back at a later stage, with a negligible rate of interest. The model would mean that housing associations in London can crack on and develop in the short term, without having to wait until their interest cover has recovered. This also has the advantage of being counted as a public investment rather than debt on the

As Paul Hackett, chief executive of Southern Housing, wrote in an article for Housing Today: "As anyone who works in affordable housing will tell you – affordable housing works over the long term – but makes losses in the short and medium term. This model is about bridging that gap and using future repayment obligations to enable the upfront funding of a lot more affordable housing in the here and now"

Homes England is now understood to be working on the details of the model, and sector figures are confident that all the £2.5bn in low-cost loans announced in the spending review will be used for this purpose. Officials are considering implementing a 0.1% interest rate on the loans to ensure government gets a return so it can be classed as investment.

Other models

However, amortised grant is far from the only idea for getting more funding in the sector being discussed. As above, low-income housing tax credits – a model used to attract institutional investment into sub-market rental housing in the US – is being pushed by members of the pro-development Labour Yimby group and the cross-party Yimby Initiative.

Yimby Initiative.

Housing associations, consultancy PwC and government officials are also working on a model that could see large numbers of shared-ownership properties transferred into a for-profit vehicle backed by an institutional investor, which could free up capital for development.

A big question mark over this is whether the scheme stacks up for aforementioned London landlords with cash interest cover constraints, but it is clear there is wider appetite in the sector to look at whether the sale of shared-ownership assets could be a route to attract funding into housing.

What the infrastructure pipeline means for private finance

"the certainty to plan for the long term".

And certainly the pipeline, unveiled as an interactive online tool, was initially welcomed as a huge step forward from the previous attempts made by the last government. Chair of construction firm Mace, Mark Reynolds, who is also co-chair of the Construction Leadership Council, said it would play a critical role in enabling the industry to scale up to deliver 1.5 million new homes and a revitalised national infrastructure. "NISTA's new dynamic approach is a major step forward," he said.

Likewise, Jon Phillips, chief executive of investor member body the Global Infrastructure Investor Association, said it strengthened the UK's investor appeal, with project investors valuing "a clear pipeline of projects that shows the full scope of the UK's investment potential".

But not everyone is convinced it is really up to the job of acting as a helpful prospectus for investors - at least, not yet. Since launch, as people have got under the bonnet of the tool, major questions have begun to be asked about the level of detail in the pipeline, and whether it really provides the information that either the supply chain, or potential backers of private finance and new public private-partnerships (PPPs), really need.

operational view of the opportunities ahead of us", the pipeline would hand investors "a reason to invest here in the UK".

prospectus for investors in future public-private

The strategy said that by giving "a confident

The Treasury's new £530bn, 10-year infrastructure

contractors confidence in future work but also

its interactive format and commitment to fully

to act as a prospectus for private investors. While

funded projects have been welcomed, critics warn

that gaps in data, lack of detail on funding models,

and limited visibility of unconfirmed schemes risk

undermining its usefulness as a tool to attract

government first published a pipeline of the

construction projects. While this was always

primarily seen as a move designed to give the

construction industry the confidence to invest

in capacity to meet the identified demand

strategy said a new infrastructure pipeline

website would also have another role; as a

coming forward, the June infrastructure

biggest planned public sector infrastructure and

It is more than a decade since the UK

private finance.

partnerships.

pipeline tool is designed not only to give

On launch in July, a statement from NISTA - the National Infrastructure and Service Transformation Authority, a new Treasury body set up to transform the delivery of major projects and programmes - said that its £530bn, 10-year pipeline of programmes and projects gave potential project investors

Fully funded

While versions of the infrastructure pipeline have been published since 2013 (before a brief abeyance last year), commentators do not believe they have so far had the impact on

Since launch, as people have got under the bonnet of the tool, major questions have begun to be asked about the level of detail in the pipeline, and whether it provides the information needed

Coming up in chapter 6...

- Pipeline purpose and evolution
- Funding commitment approach
- Key limitations for
- Major data gaps
- Industry requirements
- Future development plans
- Critical success factors

industry investment that had been hoped. Zoe Watters, an infrastructure adviser and former PwC partner, says the previous PDF documents - static analyses of projected departmental spend which did not drill down into projectlevel data - were effectively ignored and "never saw the light of day" once they were published. Even later versions, which included detailed spreadsheets setting out proposed spending on individual projects, suffered from a lack of clarity over the funding status of projects.

Launching the new pipeline, then Treasury chief secretary Darren Jones said it is designed

Infrastructure pipeline data

Duration: 10 years

Projects and programmes: 775

Value: £530bn

Value funded by public sector: £285bn

Value rated as "committed - fully funded": £252bn

NISTA claims the pipeline summarises data on the cost of the "majority of the UK's public and private sector major infrastructure projects", both for new infrastructure and for maintenance and renewals. Data is at 2024/25 prices. NISTA said it has worked hard to make the pipeline comprehensive but admitted there were "known gaps in the pipeline's coverage that NISTA will seek to address in future updates", with some departments having provided data only for 2025/26 and "further capital expenditure data expected in future iterations of the pipeline once future spend has been confirmed". The majority of projects in devolved administrations are also excluded.

It added: "The introduction of four categories which describe the degree of funding commitment has allowed the pipeline to include more projects looking over a longer time horizon than in the past. But this also means that inclusion of a project on the pipeline cannot be interpreted as a commitment to build it."

to be different. For a start, the data is presented in an interactive way, enabling users to quickly break down the pipeline by sector, or region, or funding route. But crucially, he claimed, investors and suppliers can have more faith in the information, because every project in it has both full financial commitment from central government, as well as funds allocated to it by the relevant spending department.

Jones said: "What the last government published was essentially a wish list. It was all the things they wanted to get done at some point in the future, but they hadn't committed the money or got to a business case stage.

"All of the data on this website is for projects we have committed to, so there's no question about whether it's going to happen or not," he said, arguing that this was done in direct response to industry feedback. "They didn't want things in there where we might change our mind."

It is this, he said, that explains the discrepancy between the £530bn of programmes and projects in the pipeline and the much larger (£725bn) number in the June infrastructure strategy, which he said included post-2030 projects that were committed to centrally but had not been through necessary departmental allocations in spending reviews, and therefore did not meet the threshold for inclusion in the pipeline.

One senior construction source said this approach has provided some welcome rigour. "The credibility of these numbers

The methodology of the pipeline states that the different funding status of projects explicitly means inclusion of a project on the pipeline cannot be interpreted as a commitment to build it



is significantly more important than getting a really big number that no one believes," they said. "We want the pipeline to be a truly reliable source of market data. This is beginning to look something like a best-in-class pipeline."

Status anxiety

Darren Jones's idea that only fully funded and committed projects earn their place on the pipeline means that contractors and investors would not be able to use it as a guide to the intentions of the government prior to firm decisions having already been taken – something some are seeing as a limitation.

For example, the infrastructure strategy identified public sector decarbonisation projects and community and primary healthcare premises as potential options for a new "limited" wave of social infrastructure private finance projects – with a final decision due at the autumn Budget. However, because this potential £1bn programme has not yet been formally given the green light, there is no mention of them at all in the pipeline – so any potential PPP investor would not know from the pipeline that the idea exists.

This is just one example. Watters says: "It's difficult to see how this works as a tool for investors if the potential opportunities for investors are not on there."

Another senior construction source says: "We need more than just the committed projects. This doesn't give the sector anything to start working off. We need a statement of intent."

In fact, it appears the reality of the pipeline may not be as clear-cut as Jones has suggested - the full data from the pipeline, available via the "download data" button on the website, lists the spend status of each project or programme. While for many this is listed as "committed - fully funded", the status for many other projects remains "subject to business planning", and for a few it says nothing at all, or reports as "not yet funded". And in fact, the methodology section of the pipeline website itself states that the different funding status of projects on the pipeline explicitly means that "inclusion of a project on the pipeline cannot be interpreted as a commitment to build it".

Asked to explain the disparity between this and Jones's comments, a Treasury spokesperson did not offer a formal statement but explained that

the sentiments expressed by the minister reflected the government's determination to deliver the projects it has committed to - despite the fact that further spending decisions around individual projects may evolve over time.

Missing data

Alas, these concerns over what is allowed onto the pipeline comprise only one issue among many. There are also fears about big data gaps and inconsistency in how data is provided between different departments and sectors, which critics say is likely to make the pipeline less helpful than hoped.

They point out a series of major lacunas. Firstly, much of the information is simply recorded at a programme rather than project level – meaning the individual projects that might need private finance are not detailed. A major example of this is the £23.3bn New Hospital Programme, which is listed, but for which no individual projects are mentioned, let alone detailed. The same goes for the £19.3bn Schools Rebuilding Programme.

Secondly, for many listings key data appears to be missing, such as cost information or the

SIMON WALKER / HM TREASURY FLICKR ACCOUNT / CROWN COPYRIGH

project sponsor. Thirdly, for those that are recorded as either privately funded or having joint public/private funding - the vast majority of which appear to be uncosted energy projects - there is no information given on the specific funding route or structure. In other words, potential private finance investors can get no sense of whether a project is envisaged as being taken forward under a regulated asset base model, or via the contracts for difference model, or through some other PPP-type structure.

NISTA has clearly had a challenge in pulling together data from across Whitehall to populate the pipeline, given its launch just weeks after the June spending review which confirmed departmental allocations. It is hardly surprising, then, that the June infrastructure strategy warned the pipeline at launch would be, to an extent, a work in progress – particularly with regard to its ability to articulate investment opportunities. It said the July launch version would be simply the "first stage in the pipeline's development" and that "over time, the pipeline will be expanded and developed to better meet the needs of investors and will include opportunities for private investment".

Delivering on this promise is important, commentators say, if the government wants the pipeline to become a practical tool for attracting private finance. The senior construction source says: "When you've just got programmes not projects, it's not really useful; it won't help the industry at all. If they can populate that, then it can become useful, but it needs a lot of work."

A spokesperson for the Association for Infrastructure Investors in Public Private Partnerships (AIIP) welcomes the progress made with the pipeline but says it needs to be "clearer on what the social infrastructure investment opportunities are, where PPP models will be applied, and the form they will take".

The AIIP says the pipeline could be improved by populating it with a project status tracker, by including comprehensive information on the estimated total cost of schemes, by giving details of the procurement approach, by including a brief project history, and by including links to relevant media releases or government publications.

Zoe Watters says: "We've got schemes here



There are also fears about big data gaps and inconsistency in how data is provided between different departments and sectors, which critics say is likely to make the pipeline less helpful than hoped

with meaningless project names, some with no numbers. It [the pipeline] raises so many questions - if schemes are committed, why isn't more detail given? It's a good start, but this doesn't really look like the kind of thing that will give the market confidence."

Learning

However, this does not mean the pipeline is necessarily bound to have as little impact as previous efforts. For a start, Darren Jones has already signalled that NISTA will formally start including unconfirmed projects in the pipeline – as long as that can be done without damaging the integrity of the rest of it. He said: "Some companies are saying to us that it'd be helpful to have a longer-term view, even if it's not committed yet.

"So one of the pieces of work we're taking away is how we maintain that confidence and clarity that everything in the pipeline is committed but also, for everyone that's interested, give you just that slightly longer-term view."

In addition, the Treasury told Building that not only will currently missing privately financed projects in the social sector be brought into the pipeline once their status is confirmed, but also more data on projects in general will be added once departments have completed postspending review business planning work.

According to Agilia Infrastructure Partners chair James Stewart, one of the key determiners of success will be whether NISTA is given a further role to talk to the private sector about the opportunities contained in the pipeline. He says: "Publishing the pipeline can't be the only thing that happens. When I was the chief executive of Partnerships UK, one of our jobs was to actively engage the market to talk about the future pipeline of opportunities.

"That proactive engagement is what gives confidence to investors; it absolutely should be part of the remit of NISTA."

Up to date

The other point that the sector sees as crucial if the pipeline is going to make any difference to UK investment is whether the information gaps are going to be filled in – and, vitally, if they are, then the data is kept up to date. NISTA has said the pipeline will be updated every six months, but some feel that as an online "live" website, there should be no reason it is not simply kept updated as projects are approved.

Watters says: "It's fair enough if they want to have a major review every six months, but they should be filling in the data gaps all the time with this. We can't be waiting six months for more information."

Skanska UK chief financial officer Meliha Duymaz sees publication of the pipeline as a very welcome step. However, she sees keeping the document live as vital if greater investment is to flow in, as investors need to have confidence in the data. "Inconsistencies in pipeline publication and occasional project delays or cancellations have, in the past, eroded confidence," she says.

"To truly solidify investor belief in the pipeline's deliverability, the government must maintain consistency. Regular, transparent updates to the pipeline are paramount. Any significant changes or delays need clear communication and justification."

Whether this will actually happen, and whether the pipeline can deliver on its promise for enabling private finance, remains to be seen.

What the new private finance model for social infrastructure will look like

The government has launched early market engagement on a £1bn programme of community health centres using a new public-private partnership model - the first PFI-style procurement in over a decade. Drawing on lessons from Wales's mutual investment model and the NHS LIFT programme, ministers hope to create an off balance sheet framework that could unlock wider social infrastructure investment if the initial trials prove successful.

On the first day of July, the Department of Health and Social Care (DHSC) quietly slipped out a tender for bidders to come and talk about £1bn of work on the health estate. While the headline figure might already have been enough to get your attention, it was the nature of the procurement that was really startling.

That is because this short note kick-started the first procurement of what is effectively a private finance initiative (PFI) tender process - though you will not hear the government call it that - in more than 10 years.

The note was looking for market engagement around finding someone to design, build, operate, finance and maintain "primary and community health infrastructure projects through a public-private partnership (PPP) model" - ahead of beginning a formal tender process in June next year.

The tender can be seen as a sure sign that the government is serious about using an updated form of private finance to pay for building new social infrastructure, ahead of a promised final decision on the issue in the autumn Budget.

June's government infrastructure strategy

The difficulty for potential investors, contractors and consultants is that the infrastructure strategy does not say what exact PPP structure the government will adopt

Coming up in chapter 7...

- Government's new PPP approach
- Proposed structure and
- Health infrastructure programme details
- Industry response and future expansion
- Key challenges and
- Market sentiment

raised the possibility of using PFI-like models in two cases: neighbourhood healthcare centres and decarbonising the public estate. And some more detail on what this might look like emerged in the NHS 10-year plan, published on 3 July. However, nowhere has the government so far said exactly what form the PPP will take - although it has repeatedly talked about "learning lessons" from past experiences. So, what can be said about what this model might look like? And what are the chances that

the scope of any return to PFI could be expanded further?

Chink of light

The infrastructure strategy gave explicit government support for the use of publicprivate partnerships to pay for new

What is planned for the healthcare estate

While the infrastructure strategy proposed using PPPs for both primary health infrastructure and decarbonisation projects, only in the area of health infrastructure have there been signs of significant progress.

After the infrastructure strategy came the 1 July invitation to market engagement on a £1bn programme of community health infrastructure projects. The tender said that the programme will be designed and implemented by the Department of Health and Social Care in conjunction with the National Infrastructure and Service Transformation Authority (NISTA), and will involve "the design, build, finance, operation and maintenance of certain types of primary and community health infrastructure projects through a public-private partnership (PPP) model".

While it said that the scale of the programme was "indicative" and no formal decision on a delivery model had been made, it said it wanted to issue a formal tender by June next year in advance of signing a 30-year contract in June 2027.

Just a couple of days later, the 10-year health plan for England was unveiled, within which a major plank was moving the NHS away from a model based around care in acute hospitals, and instead towards delivery of services in primary care and community settings, with an ambition to establish a neighbourhood health centre in every community across the country.

The plan promised to "progress rapidly" to draw up a business case for private finance in neighbourhood health centres, including an assessment of value for money enabling a "final decision on the approach [...] by the time of Budget 2025 in the autumn".

infrastructure. However, for the most part the strategy limited this government backing to projects where some kind of private income stream exists to ultimately repay the private financing of the project.

This covers all kinds of projects, from water company investment in upgraded treatment works and toll roads, to redevelopment of public land to provide a mix of public and private uses.

Of course, while the sector welcomed the official backing for these kinds of projects, of which the fiendishly complex Euston Station redevelopment (see chapter 4) is given as a prime example, the reality is that this kind of financing is already allowed - if not always encouraged - anyway.

Hence, while the strategy does appear to widen the range of PPP projects likely to be endorsed, some feel this does not offer much that is new. One senior finance figure confesses to "not thinking much of the [infrastructure] strategy" for this reason.

However, despite its broad focus on nontaxpayer funded PPPs, one short section of the document does reopen the door to the potentially revolutionary idea of PFI-style models. While the government does not use that term to describe them, it appears to be contemplating long-term deals in which private firms design, build, finance, operate and maintain public sector facilities, ultimately paid for by public sector spending - which is what PFI was.

Kevin Hawkins, operations director and head of social infrastructure at PFI specialist developer Kajima, says: "It's quite exciting; they're tentatively reopening the door. It seems pretty positive."

According to the strategy, the government will only explore this in "very limited circumstances". Namely, for certain types of primary and community health infrastructure, and taxpayerfunded public estate decarbonisation projects. Rachel Reeves is to make a final decision on

whether to push ahead in her autumn Budget. It might not be much, but "it's the first chink of light we've had since 2018," says Hawkins.

What's the model?

The difficulty for potential investors, contractors and consultants is that the strategy does not say what exact PPP structure the government will adopt. However, it does refer to the mutual investment model (MIM) - a form of PFI developed by the Welsh government - as an example of something the UK government will learn from for English projects. The 10-year health plan for England, however - produced by the DHSC - is more explicit.

This document says the NHS will bring forward plans for a rolling programme of neighbourhood health centres (see panel, previous page), based on the New Labour NHS local improvement finance trust (NHS LIFT) programme which delivered around 350 community health centres in the 2000s. It also says that the programme will build on the experience of the Welsh MIM.

Both NHS LIFT and MIM are variants of PFI which, unlike classic PFI, include the public sector as partial equity owners in the private sector delivery vehicles that are created to build out the projects (see panel on next page). MIM, which so far has just a few projects under its belt after being developed from 2017 onwards, also sets a variety of social outcomes as specific additional contractual targets for the delivery partner, beyond delivering the facility itself.

Paul Deverill, head of PFI at consultant Ridge and Partners, says the lack of clarity on the model is acceptable given that the tendered market engagement can now be used to pin down exactly what the model looks like.

"I think, from what's been said, the model we're looking at is a version of MIM and the [Scottish government's] Hub models," he adds.

So, what would using a LIFT- or MIM-type model mean? Jonathan Barron, senior policy adviser at public healthcare industry member body the NHS Confederation, says LIFT's shared equity model has been seen as "relatively successful", while finding private finance for neighbourhood healthcare projects would be a way to free up public capital for other projects.

Kajima is the developer partner for the

Both LIFT and MIM are variants of PFI which. unlike classic PFI. include the public sector as partial equity owners in the private sector delivery vehicles that are created to build out

the projects

Velindre Cancer Centre in Cardiff, a £312m project which is one of three major MIM schemes to have so far been contracted. While it is early days for MIM, Kajima's Hawkins says his experience so far, 15 months into a 36-month build, has been good.

Referring to different PFI structures used in the UK in the past 15 years, Hawkins says: "We've worked on PFI, on PF2, on [the Scottish government's NPD model. To me, MIM seems to take the best parts of all of those models.

"You've got the public sector investor at the table and that means it's a true partnership. And then the community value side creates a real focus around that."

In other respects - such as contractors working to a fixed-price, fixed-date contract

- he says it is structured very similarly to PFI.

However, Jack Banks, partner at PPP consultant P2G, says if the new model is based on MIM, there are definitely improvements that can be made. "Even if MIM is the template, there should be a desire to look again and learn the lessons, to create something simpler, which is easier to contract."

Off balance sheet

The exact structure of the model is likely to be carefully calibrated by NISTA and the DHSC in order to ensure it retains an off balance sheet



MIM, which so far has iust a few proiects under its belt, also sets a variety of social outcomes as specific additional contractual targets for the delivery partner

classification. An off balance sheet rating would mean borrowing would not count against the government's fiscal rules, potentially leaving more headroom to spend on other projects.

The Treasury's director general of public spending, Conrad Smewing, told MPs on the Public Accounts Committee last month that the government was not influenced whether or not to go down a PPP route by its balance sheet classification, instead only considering whether "it is better for the taxpayer in the long run".

But the reality appears to be something rather different. Just weeks after Smewing's comments, the incoming boss of quango NHS England, Jim Mackey, told staff that one of his urgent "100-day" priorities was to "introduce an off balance sheet capital investment mechanism" - the mechanism later referred to in the infrastructure strategy. Ridge's Deverill says: "Discussing this with peers, all of the conversations are on the basis that this mechanism will have to remain off balance sheet to be workable."

Infrastructure adviser and former PwC partner Zoe Watters says that key to achieving this crucial accounting status - which MIM has but NHS LIFT projects no longer do - will be watching carefully the size of any equity stake offered to the public sector. "Whether it's counted on government debt is really about [₹] how much risk you've transferred," she says.

"So you can take a public equity stake, and sit on the board [and retain an off balance sheet classification], as happens with MIM, as long as that stake is not high. It's the level of equity that drives it."

In practical terms, she says, any stake of above 20% would tend to create a structure that is hard to justify as being off the government's debt. However, other issues will also need to be carefully considered, such as the potential share of gains from any future refinancing, Watters says.

Again, any such public refinancing gains will have to be kept to a low level in order to justify an off-books classification.

Positive

For many, the frustration is simply that the government is not bolder. While the strategy restricts PFI-like structures to just two potential programmes at this stage. NHS England's Jim Mackey has publicly stated his hope that major acute hospitals - which can now cost anything up to £2bn - could be funded via private finance in future years.

Matthew Bevington, policy associate at think tank the Future Governance Forum, says: "The health industry has not given up on getting this applied to other sectors and acute hospitals. The NHS Confederation and other NHS bodies will be pushing for this to be applied more widely.

"You could imagine the government thinking about expanding once this initial market engagement [on the tender] is done."

Likewise, Carly Caton, partner at law firm Browne Jacobson, says: "I would say a successful rollout of these two project types may well open the door to further project types. Why not use a working model that the market and government have got used to and geared up to deliver?"

However, while the chancellor is expected to confirm the programme of PFI-style investment in neighbourhood health centres at the time of the Budget, commentators do not think she will immediately expand the scope to other sectors.

Future Governance Forum's Bevington says: "At the moment I don't think she'll do anything more. This has to play out first - see if there's investor demand. If it works, then we'll see."

Agilia Infrastructure Partners' James Stewart

How MIM and LIFT compare to PFI

NHS local improvement finance trusts (LIFT)

Developed by: UK government/NHS

Usage: Nearly 350 community healthcare facilities with a value of £2.5bn, built by 49 separate LIFT companies, delivered from 2001

How it differs from PFI: LIFT deals were a form of PFI deal in which the public sector, in the form of Department of Health and Social Care-owned company Community Health Partnerships (CHP). took a 40% stake in the special-purpose vehicle undertaking the projects, with CHP ensuring stewardship of the buildings in the long-term public interest.

Balance sheet treatment: Would now be classified as on balance sheet

Mutual investment model (MIM)

Developed by: Welsh government

Usage: Three projects currently under construction: the £1.39bn Heads of the Vallevs dualling of the A465; the £312m Velindre Cancer Care Centre in Cardiff; and a programme of up to £500m of education projects across Wales How it differs from PFI: MIM was developed by the Welsh government to deliver the benefits of PFI while ensuring better social outcomes. It differs from classic PFI by contractually mandating various social outcomes as part of the delivery of the project itself, and giving the public sector an equity stake in the project deliver vehicle. The structure retains an off balance sheet classification in part by ensuring the public sector stake is less than 20%

Balance sheet treatment: Off balance sheet



says one of the strategy's "sweet spots" looks to be social infrastructure projects, where the funding is supplemented with additional revenue streams. "If there's a spectrum of projects, with classic RAB [regulated asset base] like the Lower Thames Crossing at one end, to pure social infrastructure [without a revenue stream] at the other end," he says, "it feels like this strategy is trying to look somewhere in the middle.

"It's aiming at PPPs that deliver social value, but perhaps where there's a land deal, or car parking charges, or something that can reduce the cost on the taxpayer."

From Kajima's perspective, Hawkins is getting involved in the market engagement and is just excited about the possibility. "We're hopeful there's a pipeline of work potentially here in two to three years' time," he says. "There's absolutely the need. We're up for a new pipeline."

Conclusions and recommendations



It is clear from the work in this report that the government's exploration of and re-engagement with private finance to pay for new infrastructure it can be concluded that: is welcome. There is a broad feeling that it has the potential to result in the delivery of a significant volume of new infrastructure assets, beyond what could otherwise be afforded at a time of spending restraint.

In doing so, private finance can help renew the nation's tired and ageing public estate, prepare the country for net zero and assist with delivering the energy transition, all while creating jobs, improving the places in which we live, and delivering tax revenues.

However, that new infrastructure will only be delivered, and those benefits realised, if the potential of private finance is grasped. That is very far from certain.

Grasping the potential does not mean returning to the dogmatic PFI-only approach of the New Labour years, but using private finance in a smart way, to deliver the projects where private finance really makes sense and delivers value, in order that limited public money is reserved for those schemes where public procurement remains the best course.

So far, the government has talked a lot about using private finance, but its actual initiatives have not matched the rhetoric. The fear is that the opportunity to bring in private investment to pay for the renewal of the UK's infrastructure remains on course to be missed.

Conclusions

From the research undertaken for this report,

1. The government is taking too long to decide what model it wants to pursue

The government's strong message of in principle support for private finance, articulated in the infrastructure strategy, marks an important change in direction and is to be welcomed. There are a number of proven successful models in existence which can be built on, on which to base a private financing strategy. In the economic infrastructure sector, variations of the regulated asset base (RAB) model have proved very effective, while in the social infrastructure sector, the Welsh mutual investment model has many supporters.

However, the industry currently has little information about how the government sees its programme working in practice. In particular, the type of financing structures used have huge implications for the types of projects that are likely to be able to be funded, meaning that current uncertainty over whether the government is going to endorse particular existing models, or develop its own, is unhelpful.

2. Current efforts are primarily focused on economic infrastructure

Models to bring in private finance for economic infrastructure, particularly utilities where there is an income stream, already successfully operate. While the government is right to look to streamline and expand investor interest in

these areas, and ensure that blockages are tackled, a strategy focused on expanding investment in economic infrastructure appears unlikely to be transformative.

3. Efforts to bring in private finance for social infrastructure remain limited

In the whole of the infrastructure strategy, just one social infrastructure type - primary care and community health facilities in the NHS - is mentioned as a potential beneficiary of private finance. Political caution over reversing the previous bar on PFI is understandable, but too much caution is likely to see the venture fail, as a currently hibernating sector will not see an incentive to skill up to prepare.

4. There is currently minimal industry capacity to deliver on private finance

While the financing of utility infrastructure under the RAB model has continued, the closure of the PFI market in the UK has meant that many of the skills that existed within consultants, contractors and financial institutions to arrange and agree contracts for publicly funded projects has evaporated. The industry is effectively in hibernation and does not yet see the incentives to wake up.

5. Without a stable model and ambitious pipeline, private finance will not deliver good value

Private finance is likely to generate better results if a single model (or suite of models) is used repeatedly against a significant pipeline of projects, giving the sector the confidence to invest, build capacity, hone the contractual

details, improve delivery and offer economies of scale. If private finance is used sparingly on a small number of high-profile one-off projects. it is unlikely to achieve the momentum and economies of scale that are necessary to deliver good value.

6. The infrastructure pipeline needs updating if it is to become an investor tool

The new infrastructure pipeline tool is a positive step towards offering investors confidence in the future pipeline of projects and opportunities. However, in its current form, lacking significant data and offering very little insight (if any) into private finance opportunities, it requires further work if it is to function as a tool for drawing in investors.

7. The emphasis on a few high-profile projects does not inspire confidence

Investors are keen to see pipelines of repeatable, achievable projects where the risks can be assessed and controlled - therefore keeping the cost of finance down. The construction industry sees this as a way to free up public funding for more challenging projects in which the risks are higher. However, the government's stress on one or two major high-profile schemes including the enormous Euston Station rebuild - as examples of its commitment rather serves to highlight how thin the opportunities remain. Euston in particular is subject to enormous complexity and massive political, planning, logistical, programme and construction risks.

Recommendations

Given these challenges we have identified, it is clear that further action is required if the government's private finance strategy is to have a hope of success.

In order to trigger the successful use of private finance for public construction, the government should take the following steps:

1. Set out a stronger vision for how private finance will be used, backed by a delivery plan and the appropriate incentives to trigger action

If, as expected, the chancellor uses the autumn Budget to back the use of private finance for community healthcare and decarbonisation projects, this endorsement should be quickly followed by a detailed plan setting out a strong vision for the use of private finance and a strategy to roll it out. Particularly in the social infrastructure sector, the government needs to remake a market for private finance – to do this will require the articulation of a strong vision backed by a credible set of measures designed to deliver it.

Measures to make the vision credible could include the creation of centrally endorsed structures, guidance and legal documentation for parties to use, delivery of pilot projects, and incentives for public sector clients to take a private finance approach (such as dedicated funding for departments choosing a private finance route as per the PFI credits system).

2. Set a more ambitious programme of social infrastructure PPPs, in order to wake up the sector from its current hibernation

The above plan should be significantly more ambitious about the level of social infrastructure to be delivered using private finance. Hence the government should explore using PPP-type structures beyond the two areas currently identified (community healthcare and public estate decarbonisation), focused where there is most potential. Obvious target areas include key-worker accommodation, primary schools, and other healthcare facilities, potentially including hospitals. A period of pilot projects

is likely to be necessary as models are tested and capacity rebuilt, but the government should be clear about the level of ambition if it wants to reanimate the sector and so deliver best value.

3. Set an effective institutional framework for rolling out the vision and delivering targeted sector support, to ensure the strategy the government has set is actually implemented

The government needs to back its decision to support private finance with the right institutional framework that will ensure its policies are actually delivered. The newly created National Infrastructure Service Transformation Authority (NISTA) appears well placed to take the role of driving the uptake of the private finance strategy by supporting industry to understand the government's policies and the available opportunities. The Treasury, which oversees NISTA, should ensure that NISTA is tasked with this role and is staffed with the appropriately experienced and delivery-focused staff to drive this implementation.

4. Move quickly to clarify which funding structures or models will be promoted by the government, and put necessary guidance and support in place. Welsh MIM should be strongly considered as the basis for a private finance model where there is no private sector income

The government should work rapidly to end the current uncertainty over which financing structures will be supported and endorsed under its infrastructure strategy. The strategy referenced a wide range of public-private partnership (PPP) models that could possibly be used where there is a potential revenue stream, and is known to be keen on expanding use of the RAB model to finance large one-off projects such as the Lower Thames Crossing and the Sizewell C power plant. However, the strategy did not clarify what would determine which type of model would be used, and gave no information about a model for social infrastructure financing.

In order to give confidence to the sector,

this uncertainty must be reduced. For social infrastructure, a financing model based on MIM would have widespread support. However, it will not be enough simply to set out a general direction - the details of the structure will have significant ramifications for investors and other stakeholders, and will need to be determined as rapidly as possible.

5. Rapidly bolster the new infrastructure pipeline to make it an effective tool for potential private investors in UK infrastructure

While the infrastructure pipeline is a welcome publication, it does not currently function as an investor tool. To do so, it must: contain far greater detail of individual projects, rather than just programmes; include private finance projects where funding is not committed or agreed (in other words, ones that remain investment opportunities); set out the funding or finance route and structure for each project; and be a live, continually updated document, rather than simply one that is subject to six-monthly updates.

Use rigorous criteria to focus where programmes of private finance in social infrastructure should go to ensure value for money

When developing a pipeline of social infrastructure projects for private finance, it should be ensured that selection criteria focus programmes on buildings that are relatively simple and repeatable, and where construction risks are therefore low, in order to get the best performance from the model. The approach should be to identify those areas ideally suited to private finance, with all the private capital raised for those projects translating to more public cash remaining for other public priorities.

In contrast, the government should not seek to use private finance to solve problems of projects that are seen as too hard for the public sector, as this may well lead to worse-value outcomes. It is necessary to be cautious about use of PPPs on large bespoke projects where the risk transfer to the contractor inherent in PFI-type models means build costs are often very high.

7. Move quickly to implement infrastructure strategy recommendations to bolster use of private finance for economic development

The infrastructure strategy included sensible recommendations such as: to ensure improved economic regulation across a range of sectors, designed to drive investment; to launch a new strategic investment opportunities unit within the Office for Investment; and to expand the use of PPPs where there is a user-generated revenue stream and where appropriate risk transfer can be achieved, ensuring value for money. These measures should form part of the above private finance plan and be implemented quickly.

8. Use the autumn Budget to announce a programme of "amortised grant" funding for social housing providers, to efficiently leverage in the maximum volume of private capital to pay for new affordable homes

The social housing sector already leverages public funding to generate huge volumes of private sector finance to build affordable homes. However, the immediate balance sheet constraints of many major landlords mean more public money than usual is currently needed on each scheme to make developments happen.

In this environment, grant paid in the form of low-interest loans from Homes England at a higher rate than usual, and then paid back at low interest rates by the landlord over time, potentially offers a way through the deadlock. The system - known as amortised grant funding - eases landlords' temporary cash constraints, allowing more generous grant rates, while fitting with new Treasury spending rules by being classed as loans, not grants. Such a system could be implemented quickly alongside the Social and Affordable Homes Programme and administered by Homes England.





