

The
**Value of
Consulting**
in the
Infrastructure Sector

2

The Value of Consulting in the Infrastructure Sector

Following the recent disruption due to Covid-19 after a period of significant growth and investment in infrastructure, this paper will outline some of the key challenges for the infrastructure sector in the UK and the ways consulting firms are assisting clients with these issues. It explains both the opportunity and the complexity we face with infrastructure projects, and the value and expertise management consultants can bring. It provides real life examples from recent projects and offers a view from our members on where further benefit can be delivered as the sector transitions out of the current Covid-19 situation.

HOW WILL INFRASTRUCTURE HELP THE ECONOMY POST COVID-19?



The UK's infrastructure is the physical assets that make up our road, rail, airport, energy, water, gas, and telecommunications networks. It is also the housing, hospitals and social infrastructure which serves our communities. Infrastructure is the backbone of a successful economy and society. During the Covid-19 pandemic, our digital infrastructure has enabled businesses to continue to function, children to access virtual classrooms, and society to stay connected. We have also seen some of the best of what we can deliver quickly in construction, building seven Nightingale hospitals in a matter of weeks.

The UK Government's National Infrastructure Plan places emphasis on long term investment as a mechanism for driving economic growth and boosting productivity. It has recently approved HS2, announced a £640bn infrastructure sector programme, and is actively seeking to keep construction work moving to help the economy recover from Covid-19. The industrial strategy and sector deals create further stimulus and opportunity. Infrastructure also lasts a long time - it needs to be maintained and managed, which will also support economic recovery and provide a long-term requirement for support services.

With this opportunity comes a responsibility to deliver the investment efficiently and effectively. Now more than ever we need to balance short term needs with making the right decisions for the long term. Planning, creating, and maintaining assets is challenging - uncertainty and risk are always key factors. Management consultants are often asked to help clients navigate complexity and to solve problems, and our members are actively working across the infrastructure sector to do just that.



PROJECT EXPENDITURE EXAMPLES

£44 BILLION		AMP7 OFWAT WATER	£25 BILLION		RIIO 2 OFGEM TRANSMISSION & GAS DISTRIBUTION
£42 BILLION		CP6 ORR NETWORK RAIL	£12 BILLION		AFFORDABLE HOUSING
£27 BILLION		RIS2 ORR HIGHWAYS ENGLAND	£5 BILLION		GIGABIT BROADBAND

3

Does Covid-19 make infrastructure projects more complex and difficult?

Much of the complexity of Infrastructure projects is Covid-19 agnostic. Projects such as HS2 or Lower Thames Crossing are difficult engineering projects. They also have many interfaces with existing infrastructure such as roads, tunnels, and utilities, and many stakeholders to work with such as local authorities and developers. Despite the complexity, the public want simple solutions, value for money, and minimal disruption to their lives. Expectations are also very high. We live in a world where many services are provided immediately and on-demand. This creates an environment where customers, taxpayers, shareholders, and politicians expect something similar from infrastructure, which creates a time-pressure for decision making, and a risk of being overly optimistic on the costs, benefit, and duration for projects.

These are some of the reasons why establishing a clear baseline for scope of work, expenditure, and timescales is so important, and why it can be so difficult to get agreement. Changing circumstances also alters requirements and assumptions, which in turn can lead to even

more uncertainty and risk. Much of this was happening pre-Covid-19, driven by the climate emergency, a societal and behavioural shift towards what infrastructure is for (e.g. enabling placemaking and social mobility, not just building a railway line or housing development), and an ever-increasing demand for digital connectivity. The disruption caused by the Covid-19 lockdown means there is more focus on some of these topics.

The expertise required for managing the planning, design and delivery of infrastructure requires a combination of skills and experience. This is typically spread across a large and diverse programme team - including the asset owners and operators, construction and maintenance contractors, equipment manufacturers, and professional services firms. Regulators and government departments also play critical roles. Collaboration across all these groups is now more important than ever. Management consultants can help assemble these teams and ways of working together to deliver the results required.

'NORMAL' COMPLEXITY

- 1 Investment allocation and decision making to approve projects
- 2 Signing off the master plan and outline design, so procurement and delivery can start
- 3 Procuring the right supply chain model (skills, responsibilities, value for money)
- 4 Achieving cost certainty and efficiency for infrastructure delivery
- 5 Innovating and making the most of digital solutions
- 6 Achieving zero carbon and sustainability goals

ADDITIONAL COVID-19 COMPLEXITY

- 1 Are short- and long-term benefits what we need? How should the project be funded?
- 2 Have we balanced short term recovery and pace needs, with making the right long-term decisions for a post Covid-19 world?
- 3 Is the supply chain still available? What should the commercial model be?
- 4 How can we achieve construction productivity with social distancing? How should regulators regulate?
- 5 Can we learn from what has been achieved in Covid-19 (e.g. digitisation, innovation, and virtual working) to really transform how we deliver infrastructure?
- 6 Are our policies and plans really going far enough? Is there opportunity to rethink?

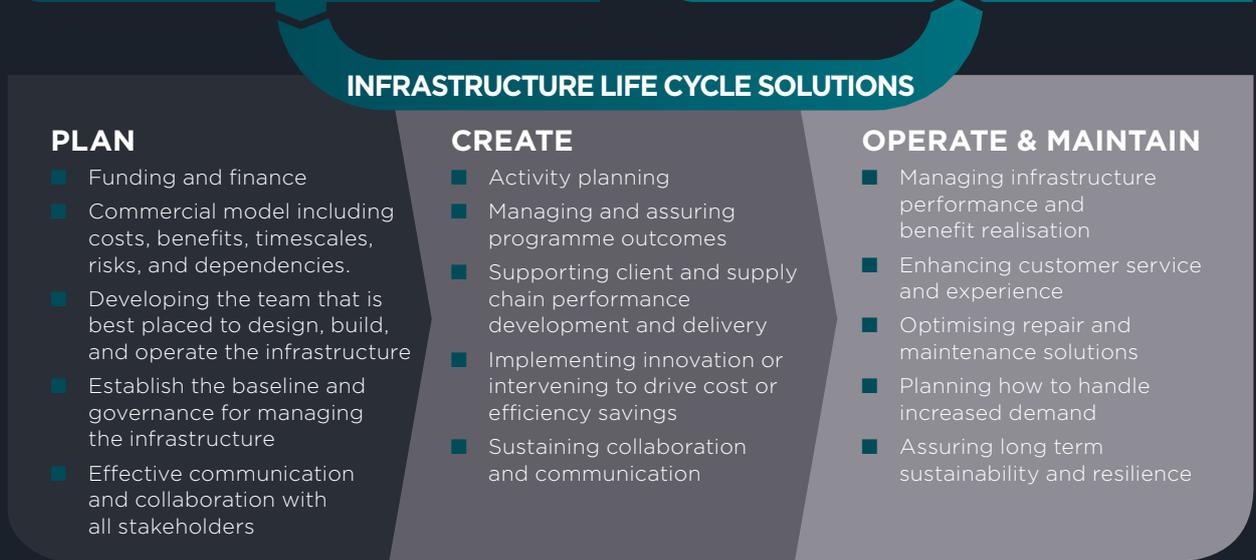
4

How can they be delivered well? Our view

As a society we have a collective responsibility to improve and accelerate infrastructure projects completion and to maximise their benefit. Many previous programmes, including for example the Jubilee Line extension, have evolved to become vital components of the UK's economy. MCA members are challenging themselves to fully play their part and we contribute to all aspects of the infrastructure lifecycle as **shown below**:

STAKEHOLDERS AND PARTICIPANTS WE WORK WITH	
Central Government and Regulators Strategy, policy, funding, and assurance of infrastructure	Asset investors, owners and operators Finance, planning, asset needs, customer service
Local government and communities Local needs, permissions, and engagement	Supply chain contractors and manufacturers Designing, building and maintaining infrastructure
	Technology and digital Networks, platforms, and data

Aspects of infrastructure delivery





How do management consultants create value in this?

Management consulting is the practice of creating value for organisations. We enable organisations to improve performance, reduce costs, and improve the productivity and wellbeing of their employees. MCA member firms help clients achieve these outcomes in many ways – improving organisation structures, processes, and ways of working, implementing better digital and data solutions, working more effectively with suppliers, or enabling teams to collaborate better. Often, we are appointed because we can bring an independent perspective, best practice from other industries, or additional capacity, capability, and help infrastructure

clients solve some of the most complex challenges that they face.

For infrastructure, we work closely with asset owners, operators, contractors, and other professional service providers including legal, engineering, commercial and project management specialists. Our key contribution is to enable all these parties to work together effectively to deliver great outcomes from infrastructure investment.

A collaborative and integrated approach maximises infrastructure benefits to the economy and society.

EXAMPLES

CASE STUDY 1 DELIVERING **UTILITIES** INFRASTRUCTURE MORE EFFICIENTLY

A major UK utility has a £multi-bn construction and maintenance programme. A member firm has helped it change how it works with its contractors and suppliers to:

- Deliver £387m of cost savings
- Implement a new commercial model to enable better collaboration and efficiency
- Transform how work is planned, designed and carried out
- Sustain benefits for the long term through new processes, transformed Supplier Relationship Management (SRM) and behavioural change from all parties

CASE STUDY 2 DELIVERING **TRANSPORTATION** INFRASTRUCTURE MORE EFFICIENTLY

Highways England has just completed its 5-year investment period (RIS1). During this time, MCA member firms supported this organisation and its suppliers to adopt a radical productivity improvement plan helping to drive improvements in the way that:

- Construction schemes are delivered
- Infrastructure maintenance is carried out
- The business operates in its infrastructure management role

Results have been impressive. Over the 5-year investment period, over £300m in capital efficiencies have been realised through the adoption of new practices.

CASE STUDIES CONTINUE >>

How do management consultants create value in this?

CASE STUDY 3 ENABLING **ORGANISATIONS** TO BE MORE EFFECTIVE

Successfully delivering infrastructure associated with water supply and building new homes are two of the most critical priorities for investment in the UK. However, for water companies to become true enablers of property development growth requires some of the most significant changes that these businesses have ever undertaken. Through working with expert management consultants to focus on business case outcomes and lead the innovative digital transformation of its operating model, Anglian Water is now able to provide developers with faster, predictable solutions and is ready to meet the customer service requirements of the future.

- Transformation has placed the business on track to deliver c£35m in capital delivery savings over the next five years
- An uplift of 15% in operational efficiency in this area

CASE STUDY 4 ENABLING **ORGANISATIONS** TO BE MORE EFFECTIVE

Network Rail is digitising its infrastructure, targeting improvements in capacity, journey times, reliability, and customer experience. Member firms have worked with Network Rail and the wider rail sector to:

- Create a new management entity, a “Systems Authority” to coordinate the management of new infrastructure across the whole industry – unlocking decades of mistrust and silo working
- Develop a Long-term Deployment Plan and help secured commitments for £480m of investment between the Department for Transport and Network Rail as part of a £24bn plan to deploy digital train control over the next 40 years
- Drive up to £820m of efficiencies through innovation and technology in a programme involving over 7,000 digital signalling units that are needed to deploy digital train control in the UK over the next 5 years

The acceleration of implementation and change has been recognised by the Department for Transport, Network Rail, Train Operators, and equipment suppliers in transforming how railway infrastructure is delivered.

CASE STUDIES CONTINUE >>

How do management consultants create value in this?

CASE STUDY 5 INDUSTRY STRATEGY AND POLICY

Cities and Combined Authorities have benefited from devolved power and enhanced funding for the infrastructure they need to serve their citizens. Our member firms have

- Developed regional plans to bring together transport, utilities, housing, broadband and social infrastructure as integrated construction programmes
- Provided Planning, Programme Management, Organisational development, and Technology skills to public sector teams which have not undertaken integrated programme before
- Provided external training and good practice coaching to enable the public sector teams be more informed and effective in their new roles

Our member firms are actively supporting regional programmes across the UK, underpinning the government's levelling-up agenda.

CASE STUDY 6 FINANCE AND FUNDING SOLUTION

Thames Tideway Tunnel (TTT) is a major project to build critical sewerage infrastructure for London. It will relieve pressure on existing, ageing infrastructure and prevent sewage overflow discharging into the River Thames. The scale of the investment needed meant an innovative method was required for funding, where new investors own, build, manage, and maintain the tunnel. A member firm worked with Thames Water to:

- Improve collective understanding of technical and construction risks for investors, and enable these risks to be adequately mitigated and managed
- This led to a reduced cost in finance resulting in customers paying £55 a year less on their annual bill

What should happen next?

We recognise the near-term imperative for economic recovery, and the potential the infrastructure sector must help accelerate and sustain it. Working with our members we have identified areas we believe management consultants can add most value, and the areas we would encourage government to support.

TOP 7 AREAS FOR MCA MEMBERS TO SUPPORT THE INFRASTRUCTURE SECTOR

1

Work collaboratively with each other and government for the benefit of the sector – articulate the capability and capacity we can offer to help realise the infrastructure opportunity for the UK.

2

Stimulate collaboration across asset owner, operator, regulator, and supply chain interfaces

3

Proactively bring insights and experience to problem solve – show positive examples of how challenges can be overcome, and how progress can be accelerated.

4

Bring innovation and digital skills at scale and pace – how can the UK maximise this opportunity?

5

Offer flexible and transparent resourcing and commercial solutions, linked to value.

6

Invest in protect and developing talent – creating the next generation of skills the industry needs, aligned to government and sector priorities.

7

Evidence consulting excellence standards on quality, ethics, behaviours, and client value.

TOP 7 AREAS FOR GOVERNMENT TO HELP US TO PROVIDE THAT SUPPORT

1

Engage with us – share your plans and challenges to give us focus, and help us clarify where we can add most value.

2

Work with us to clarify policy vs project-based topics to focus on for infrastructure.

3

Re-energise the National Infrastructure Plan, and accelerate decisions on key projects – it will give clarity and confidence on where we should focus.

4

Support us to build pipeline confidence for our businesses, by segment and timing – it will help us plan and prioritise.

5

Encourage and sustain value-based consultant procurement across government departments and regulated sectors. Engage us in how to do that.

6

Promote collaboration and participation across the sector (clients and consultants) – it will help us all achieve better and faster results.

7

Recognise and celebrate the value management consultants create, but challenge us and hold us to account if there are shortcomings.

Together we can realise the once in a lifetime opportunity we now have in the infrastructure sector – with unprecedented levels of investment, a motivated and inspired workforce, new technology and innovation to bring to bear, it has huge potential to unlock economic recovery, and build a new future for our families, friends and society.



Who are the MCA?

The Management Consultancies Association (MCA) is the voice of UK consulting sector. The MCA is the representative body for the UK consulting sector and has been at the heart of the industry for over 60 years. We have a wide membership base and our members include PwC, Deloitte, EY, KPMG and IBM as well many other medium size firms and small specialist consultancies. Management consulting firms provide a broad range of services, from help in defining strategies to implementing large-scale IT and change programmes, and from coaching individuals and teams to providing expert advice in specialised fields.

The UK consulting industry is extremely competitive and includes a wide diversity of types

of firm and specialisms, providing clients with the means to access precisely the support that they need. Requirements vary enormously – from highest level strategy and policy development to the achievement of specific financial and organisational goals. Common to them is the need to deliver tangible value for the client organisation.

Through our Consulting Excellence principles, which our members sign up to – members commit themselves to high standards in terms of ethical behaviour, clients service and value and professional development. They provide excellent consulting services which deliver the outcomes clients seek and need and they always strive to improve the value we can deliver to clients.

