



National Infrastructure Planning Association

NIPA Annual Dinner 2018

Speech by Professor Sadie Morgan

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The experience of our built environment speaks to our national identity, it says something about who we are and what we are good at.

Those of us who are responsible for designing and building the places in which we live, work and play have a huge responsibility to think about those of us who are going to be living, working and playing in them.

This focus on the belief that good design can be transformative has been integral to my professional life.

When I founded dRMM Architects with Alex de Rijke and Philip Marsh, we set out to create architecture that is innovative, high quality and socially useful, bound by an aspiration to make things better.

So I have become increasingly perplexed that when it comes to the wider built environment the need for it to be designed is rarely considered.

We have architects to design our buildings, engineers our infrastructure, transport planners our roads and master planners to fit it all together. But when it comes to how our built environment connects together, the human scale is lost.

At 1:1 the focus becomes more granular, more personal. We start to ask different questions, our thoughts turn to individual need and ease of use. We begin to imagine who those individuals are.

Is it my elderly aunt, who walks with a stick, uneasy on her feet? My spritely mother, who's hearing isn't what it used to be? My daughters who never look up, only down, but still manage to navigate the lampposts. Is that an innate teenage ability or an app, I wonder? Is it the part 2 architect in my office, wheelchair bound who leaves 2 hours earlier than his colleagues, just to get to work on time? Or my tiny niece in her pushchair, or my sister flustered in unfamiliar streets with toddlers in tow.

How do we then make sure that our large scale infrastructure projects connect the vision and financial arguments to the people and places on the ground? And how do we build in the resilience and sustainability needed so that they continue to do so for our future generations?

On 10 July, we [the NIC] published the National Infrastructure Assessment. The first of its kind for this country, it covers a range of sectors and looks as far ahead as three decades to identify and make recommendations for meeting the UK's infrastructure needs.

It recommends how the country gets the most out of the existing infrastructure we have and suggests how we can be best-placed to make the right choices for new infrastructure, to ensure continued prosperity, competitiveness and general wellbeing in the face of significant challenges such as those from climate change and population growth. The overarching tenet of the report, however, was to respond to the three objectives that underlie everything we do: to support sustainable economic growth across all regions of the UK; to improve competitiveness; and to improve quality of life.

It is those last 5 words that have been the focus of my time at the NIC. To improve the quality of our lives, I believe we have to actively **design** our future.

So what you might ask do I mean by good design?

For me, design isn't just about aesthetics it's about problem solving. It's about making sure things work intuitively, and well for everyone. If you can think of the problems and opportunities early on you can avoid or embrace them. You can encourage risk and innovation rather a stuck-in-the-mud mentality.

I've also learnt that in order to look to ahead and plan for it, you need a vision, and in order to create that vision you need to work with people who can think and imagine the the future.

Yet this kind of thinking often falls through the cracks. When it comes to multi-faceted projects, with overly complex bureaucracy, time and money are much easier to calculate than quality of life. There is no metric or line in the spreadsheet for that.

And without design leadership or understanding, it's all too easy to choose the path of least resistance, delivering results that are at best a compromise and at worst wishy-washy.

I believe we deserve better. We need to get back on to the front foot by making sure that from procurement through to delivery, design is not side-lined.

So how do you lay down a well-designed plan that integrates all of those competing demands and most importantly has a fighting chance of being delivered?

The work I have been involved with at the NIC looking at the Cambridge to Oxford Growth Arc, and latterly the Thames Estuary, has tried to do just this. Both delivered long-term visions based on rigorous research grounded in a granular understanding of people, place and projects already underway and planned.

Through maps and drawings as well as words, these reports aim to accommodate the central issue of a growing population, while allowing people and places to prosper through resilient, safe, sustainable, and economically viable communities that are underpinned by effective social and economic infrastructure.

Creating communities from scratch is a big ask and is almost impossible to achieve with immediate effect. The infrastructure needs to be right from the start, with the flexibility to allow for the expected and, more importantly, the unexpected. We have to make sure that it is properly integrated, has enduring appeal and functionality so that it is valued, retained and capable of evolving for generations to come.

It's all very well talking about it, but leading by example is something that the commission was keen to do. As part of the Commission's work on the Cambridge-Milton-Keynes-Oxford corridor we have had the privilege of working with architects, urban designers, planners, community specialists, development economists and others from across the industry as part of our Placemaking Competition.

This process demonstrated that there is no shortage of creative, commercially-led ideas on how the arc can accommodate housing and employment growth in a way that enhances quality of life, supports positive social outcomes and respects both the environment and the interests of existing residents. It also articulated the argument we also struggle to tell: that good design doesn't cost more. Done early, it can actually save time and money at the same time as delivering better outcomes.

These reports have been instrumental in helping to secure funding from treasury, who responded positively in the recent budget. And we need to learn the lessons from this work.

The NIC's long-term assessment is clear, that cities are key drivers of local economic growth. Cities are crucial to the UK's success, with more than half of the population living or working in urban areas. And that proportion is growing. That's why we've recommended cities should have devolved powers and £43billion of funding on top of current spending levels between now and 2040. This can solve a trilemma of which I'm sure you are all very familiar with – the complex puzzle of how to integrate effective transport, employment and housing.

But, we're not just saying that funding increases are needed in cities. We also believe that the government can afford an increase of 25% in funding for local transport outside of cities by the mid 2030s.

So who will benefit from this funding, how can we make the most out of investment into our infrastructure?

If we are to fully deliver the transformation needed, we require clear-sighted leadership from Government and back-up from councils with robust, special plans that are embedded into the communities they wish to serve.

And we must not just lead, but also collaborate across boundaries to create more ambitious, transformative visions for communities. Regions that not only deliver prosperity and growth, but also become vibrant places where people want to live and work. Alongside transport and housing, creating a low carbon economy is essential to address climate change and the growing threat from air pollution. Replacing petrol and diesel vehicles on our roads with electric vehicles is a crucial element to achieve that.

Digital connectivity too is increasingly crucial to everyone's lives, whether we live in a city, town or village. Demand for data – from families and businesses alike – will continue to grow, so we will need quality broadband right across the country.

All of these things are part and parcel of our everyday lives. Ensuring that they are properly 'designed' in the widest sense of the word is crucial, I believe, to improving the quality of our lives.

I believe that Good design is linked to a wider set of positive social, economic and environmental outcomes, including healthy lifestyles, mental health, environmental sustainability and enhanced financial and economic value.

So that is why I was delighted to announce in February of this year, that the National Infrastructure Commission agreed to set up a design task force to help develop proposals and make a more detailed case for quality design in infrastructure.

We commissioned three separate pieces of work to help us understand better the attitudes of those within the sector of design, to develop principles of what we think good design should look like, and finally begin to show, through national and international examples, that good design adds value.

Our work resulted in a whole chapter of the NIA, dedicated to design and two recommendations made to government.

Our conclusion, was this:

1. That all nationally significant infrastructure projects, including those authorised through hybrid parliamentary bills, have board level design champions and use a design panel to maximise the value provided by the infrastructure.
2. That design panels for nationally significant infrastructure projects have to regard to design principles published by the National Infrastructure Commission based on advice received from the National Infrastructure Design Group.

As we as a country move into a decade where many big infrastructure projects are to be designed, delivered and built, it is incumbent on us all to make sure that we make places that add to the life of our cities and countryside. They must be fit for purpose, designed for the needs for all and not be wasteful of the world's resources but use every ingredient to the maximum.