The Planning Premium: The Value of Well-made Places

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Author: Ben Savours

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Foreword

The Royal Town Planning Institute is committed to acting as the collective voice for the planning profession, and part of that role is to better understand how planning systems can make a positive contribution to the economy and society as a whole. Over the years we have produced a series of research papers assessing the economic value of the planning system starting in 2014 with *The Value of Planning*. Since our last publication in 2016 the landscape around planning has changed significantly.

That is why we took the step to engage economic experts to assess the economic potential of our planning system if properly supported. Public First has done an excellent piece of work and make a clear case for the valuable work that planners do using policy and their powers to benefit communities.

What comes across in this report is that the system doesn't need to be torn down, as many seem to assume, but rather unleashed, so that everyone can benefit from the potential 'Planning Premium' embedded in our system.

This report also provides a rigorous analysis based on real world examples of how delivery has been improved already using examples like Development Corporations. These approaches have been used effectively in recent decades and show the potential of our system to deliver at scale by adopting a more proactive approach to planning.

The first part of the report demonstrates the value that home buyers put on well-planned places, a value partly driven through their ability to stimulate local economic activity. It shows the welfare value and the strong economic return of good quality town planning and urban design.

The second part of the report illustrates the increase in housing delivery that Development Corporations and other delivery models have enabled. This shows that planners have the skills to deliver high-quality communities for the future, and that investment in proactive planning activity can be economically transformative.

Anyone who has been paying attention will know that planning reform has been a constant feature of political debate in recent years, but without substantive

changes to the planning process, ideologically-driven commentators have been left to hypotheticals to think through how our system could or should work.

Ultimately what this research shows is a strong price signal that is hard to ignore; the public want well-planned places. Despite affordability issues in many housing markets, the British public vote with their with wallets and they value planning.

This report will make important reading for any new Government, for councils and for the development sector who should see planners and their influence as more than just a short-term cost or a tick-box exercise. We need a more proactive planning system that properly values the strength of our communities and property markets, including their economic and social benefits, over the long term. Getting this right has the potential to unlock both volume and quality at the same time. Investment in planning is a win-win for all.

It should come as no surprise that well-planned places, where people are happy and healthy can increase local economic activity. Further still, good town planning can lead to productivity growth and higher economic output at a national level, and greater exchequer revenues. It will also come as no surprise that the RTPI would argue for an effective planning system. This piece of work goes a long way to justifying that approach.

Planners properly supported and given the appropriate tools can change the world for the better.

Victoria Hills

Chief Executive of the Royal Town Planning Institute

Executive summary

Town planning is a process that determines how best to use land. Planners investigate the economic, social and environmental needs of an area and determine where homes, commercial units, shared public spaces and roads should go, and where natural areas should be conserved.

From an economic perspective, the role of town planning is to mitigate against natural market failures, which include: negative externalities such as pollution, congestion, and overwhelmed public services; a failure to capitalise on positive externalities associated with mixed use development and optimal housing density; and a new homes market that fails to price in the long-term value of quality urban design. Through intervention, the full social and economic potential of new developments can be realised. Section two of this report demonstrates the value of town planning by estimating the 'planning premium' associated with quality urban design characteristics.

This report comes at a time when home-building needs to accelerate rapidly to address the housing affordability crisis. A major barrier to development has been the mismatch between the wider economic needs of regional economies, including the social and economic requirement for housing, and the local interests of planning committees and the residents they represent. Section three of this report provides evidence that putting town planners at the heart of the development process, and providing them with the necessary remit, funding, and agency, can help mitigate these barriers and deliver housing at scale.

Our analysis finds that:

- Good town planning could lead to **a 'planning premium' of over £70 billion** of additional value if applied to the Government's housing targets over the next two parliaments. This rises to over £90 billion were higher housing targets to be achieved.
- Characteristics that support the development of **vibrant and safe communities** form part of the 'planning premium' and provide an additional value of just under **£50 billion,** again over a ten year period.

- Delivering half of new housing within city boundaries would increase density and, if delivered appropriately, could lead to **productivity growth worth £23 billion** over the next ten years[1].
- When developers, planners, and those with the authority to grant planning permission are all aligned in purpose, a **planning-led approach** to development can **deliver at scale.**
- Development Corporations, which place town planners at the heart of the development process, can, under the right conditions, deliver **significantly more housing** than the status quo.
- Development corporations can be high value for money, with **benefit-cost ratios of approximately 3.7 or even 6.7 possible.**

1 This forms part of the 'planning premium' estimate.

1. Introduction

Good town planning can deliver not just housing, but communities. Through the use of good urban design principles, planners ensure that future development delivers neighbourhoods that are vibrant, safe and liveable - qualities that have economic value beyond what is captured in the new homes market.

This value is generated when town planners mitigate the natural market failures that urban development is vulnerable to, such as: pollution, noise and other negative externalities; inefficient use of shared resources such as energy, water and other utilities; suboptimal density and single-use residential development; and over-development that puts a strain on limited public services. Good town planning can play a vital role in mitigating these market failures and delivering the best long term outcomes for urban communities.

The UK's planning system is designed to balance the housing, infrastructure and economic needs of regional economies with the local desires of the communities in which development is to occur, whilst investment and delivery is largely undertaken by private developers.

In recent times, finding agreement between these competing interests has increasingly proved a challenge, leading to delay, escalating costs, and reduced delivery. Further to this, chronic underfunding of public sector planning departments has severely restricted capacity and expertise, reducing their ability to coordinate, act as mediator, and/or play a proactive role in delivery.

These challenges have led to a failure to deliver housing at the scale the country requires, leading to ever-growing housing costs, a drag on real disposable income growth, widening inequality, and exacerbation of the homelessness crisis[2]. Consequently, the process through which housing is delivered has come under increasing scrutiny, and town planning with it.

This report explores the economic case for public sector town planning at the heart of the urban development process. The introduction looks at: The role of town planners in the urban development process, including the aims as set out by

2 K. Barker (2003). '*Review of Housing Supply; Securing Our Future Housing Need*'

the National Planning Policy Framework (NPPF); and evidence of what happens in the absence of town planning.

Part two of this report explores the economic value of town planning through its ability to deliver quality urban design and liveable communities. This draws on academic literature that makes use of hedonic price modelling to estimate the 'planning premium' associated with good urban design.

The final part of this report provides evidence that a town planning-led approach to development can deliver housing and commercial development at scale. To support this argument we look at case studies in which planners were at the heart of the development process. These include development corporations; purpose-built vehicles incorporated with local planning control in which town planners and developers work side-by-side. For two of these examples we model delivery against a counterfactual and assess value for money by comparing economic benefits against costs. We also carry out a qualitative analysis of the city of Cambridge, an example of where town planning has supported dynamic economic growth.

The role of town planners[3]

The NPPF groups the aims of town planning as either social, economic, or sustainable[4]. The social purpose is a localised objective to support strong, vibrant and healthy communities, the value of which we measure in part two of this report. The economic purpose, which acts at a more regional level, is to ensure sufficient land of the right type is available to support economic growth, innovation and improved productivity. This requirement was strengthened after the seminal Barker Review (2006) and is the focus of part three of this report[5]. Sustainability is achieved by making efficient use of natural resources, energy, and encouraging sustainable modes of transport.

To support the achievement of these aims, research commissioned by the Royal Town Planning Institute (RTPI) sets out four mechanisms through which public

3 The explanation in this section refers to the English planning system rather than the other nations of the UK. However, the analysis in this section is relevant to all.

4 Department for Levelling Up, Housing and Communities (DLUHC) (2023); The National Planning Policy Framework

5 K. Barker (2006); *'Barker Review of Land Use Planning*'. Available: 0118404857.pdf (publishing.service.gov.uk)

sector town planners influence the development of the built environment: shaping markets, regulating markets, market stimulus, and capacity building[6].

The first stage, 'shaping markets', is where broad decisions over the future use of land is made and the rules of development are decided. Planners develop local plans that determine the overall geography of urban spaces and the design principles that must be followed. This is often outsourced to private consultancies by under-resourced planning departments and, ultimately, needs to be signed off by local councillors within local authority planning committees. Although local planning authorities are required to have an up to date local plan, many are failing to do so, leading to uncertainty and increased risk for developers[7].

'Regulating markets' refers to the process through which individual planning applications are processed. The discretionary planning system in the UK ensures each application is considered on its merits in accordance with local development plans and the NPPF, with planners expected to work with developers to improve design characteristics. This culminates in a report authored by planning officers which recommends whether or not the proposal should be approved and under what conditions. Again, the decision to grant or deny the application ultimately rests with the Local Authority Planning Committee.

Through their role shaping and regulating markets, town planners aim to facilitate the development of good quality urban design, the value of which we estimate in the next section of this report. However, these actions alone aren't always enough to stimulate market activity, particularly in areas of low demand or where there are complex local issues acting as barriers to development. In this situation, town planners can take a more proactive role by purchasing and assembling land, initiating public-private partnerships, or simply coordinating communication and action between various actors. Traditionally, this kind of public sector action has been limited to situations where market failure has been identified, but recent thinking has sought to broaden this scope to encompass a more proactive role for public sector intervention[8]. The development corporations evaluated later in this report took just such an approach.

6 The Royal Town Planning Institute (2014); *'Research Briefing No. 5: The Value of Planning'*

7. Planning Resource (2023); *'78% of English councils will have out-of-of date local plan by late 2025, says report'*

8 M Mazzucato, C. Penna (2016); *'Beyond Market Failures: The Market Creating and Shaping Role of investment Banks'*

Taking a more proactive attitude to development, or a 'market stimulant' role, requires a broader remit than planners currently undertake. This requires town planners to develop knowledge of local real estate markets, build networks across disciplines and grow their confidence as market actors. This kind of 'capacity building' requires significantly more funding to attract experience and talent, something that the development corporations discussed later in this report were able to do.

Chronic underfunding of public sector planning departments has seriously compromised the ability of planners to carry out all four of the functions described above. This has led to a focus on the regulatory function of processing applications with planning departments increasingly being seen only as a barrier to development.

Urban development without planning

Town planning is a process that seeks to mitigate against the market failures in the urban development market. Quality urban development characteristics such as pedestrian friendly street design and well-designed shared public spaces benefit not just the new residents but also the wider community. Private developers cannot capture the full spillover benefits and so, without intervention, socially optimal outcomes may not be delivered.

A further challenge is that developers are not in control of the supply of local trains, roads, or schools and so, even if they wanted to, cannot fully mitigate against a strain on local services that their development might cause. Because the negative effects of a shortage of supporting infrastructure are felt by the whole community, the full cost won't be reflected in the sales price. Further still, at the point of sale, these negative externalities may not yet have materialised.

There are additional challenges associated with large strategic developments that seek to deliver entirely new communities. The incentive to build in quality urban design characteristics that support cohesive and vibrant communities may be weak if the homes are to be sold before the neighbourhood has fully formed. The full value of large strategic developments take a long time to be realised and cannot be captured by developers focussed on the new homes market. Further

still, the scale of these developments can be hard for an individual developer to coordinate on their own.

An absence of town planning has historically been blamed for the largely unplanned expansion of cities and towns, often characterised by low-density housing, single-use zoning, and a reliance on cars. This type of development is associated with increased energy use, pollution, congestion, longer travel times, and a decline in community cohesiveness[9]. There is also evidence it results in lower productivity[10]. It was fear of these outcomes that originally led the UK to adopt a discretionary planning system in the post war period[11].

Exacerbation with poor housing delivery recently led to the Conservative government's White Paper, 'Planning for the future', published in 2020, which in effect called for a zonal system of planning[12]. In this system the role of town planners is focused on the initial process of land use designation; what we called market shaping in the previous section. In the next section, 'The economic value of good quality urban design', we provide evidence of the 'planning premium' that quality urban design and town planning can deliver, especially when town planners are fully engaged with the development process.

9 E. Glaeser (2011): *'The Triumph of the City'*

10 S. Hamidi, A. Zandiatashbar (2018); *'Does urban form matter for innovation productivity? A national multi-level study of the association between neighbourhood innovation capacity and urban sprawl'*

11 P. O'Brien (2021); *'Planning Reform: a zonal future?'*: UK Housing Review.

12 Ministry of Housing, Communities,& Local Government (2020); *'Planning for the Future'.* Available: MHCLG-Planning-Consultation.pdf (publishing.service.gov.uk)

2. The Economic Value of Quality Urban Design

£50 billion

Urban design that delivers cohesive and livable communities, such as mixed use development, connectivity, and shared urban spaces, would deliver over £50 billion of value to housing delivery over the next ten years.

£23 billion

Delivering housing that increases the density of our cities could add £23 billion in economic value over ten years through agglomeration effects, such as better employment matching, knowledge sharing and a more efficient use of shared resources

Good quality town planning and urban design builds neighbourhoods with a 'planning premium'; places with characteristics that have a value beyond what the market on its own would deliver. Characteristics such as internal connectivity, mixed-use design, walkability, and publicly-accessible communal spaces help facilitate thriving local communities, the value of which is reflected in local property prices[13].

However, since communities take time to build (a process that can only start when residents have moved into their properties), these characteristics are likely to be overlooked in the new build sales market in favour of more tangible characteristics such as floorspace, number of rooms, garden size and location - disincentivising developers from including them in their designs. This is an example of market failure, where optimum long term economic outcomes are not realised by the market alone.

This section estimates the 'planning premium' that would be generated if good town planning and urban design principles are applied to house building in the UK over the next ten years. To do this we draw on existing academic research that estimates the contribution of property and neighbourhood attributes to property

13 N. Chin (2004); *'Unearthing the Roots of Urban Sprawl: A critical analysis of form, function and methodology'*: UCL Centre for Advanced Spatial Analysis

prices using statistical regression techniques[14]. The data used is mainly made up of homes in established neighbourhoods and so the property prices reflect characteristics such as community cohesion and liveability. This is in contrast to the sales price of new homes sold in the new homes market.

It is important to understand that although we use property prices to estimate the planning premium, this does not imply that incorporating good quality urban design into future development should necessarily lead to higher property prices (This is explained in more detail in Box 1). Further still, we assume that with proper resourcing, good quality urban design can be built into new developments without delaying the process.

The general approach we take is to estimate the property price premium associated with good quality urban design characteristics and calculate the present value if applied to the UK's housing target of 300,000 homes a year over the next two parliaments[15]. We also provide estimates for homes built at a rate of 380,000 a year, the target proposed by the Liberal Democrats, which is more in line with some of the recent estimates around housing need in the UK[16].

In general, for each design characteristic, we define 'good' town planning as that which in which the variable in question is 1 standard deviation above the mean (The method used for 'access to public parks' and 'density' is different, as explained in those sections)[17]. We apply this premium to the average property price of new dwellings in the UK, which is £333,000 in 2024 prices[18].

The planning premium also includes an estimate of the additional economic output obtained when well-planned development optimises urban density. The methodology is quite different to the above and is described in later sections.

We explain all methodologies in more detail in Appendix A.

14 These techniques are based on hedonic price modelling, which assumes that the price of a good, in this case housing, is based on a combination of the many attributes that it possesses.

15 This is the housing target contained in the 2019 Conservative Party Manifesto, and the target recently committed to by the Labour Party.

16 The Financial Times (Feb 2024); *'How many homes does England really need to build?'*

17 If the data follows a normal distribution this means 'good' is defined as being on the 84th percentile.

18 Office for National Statistics (OFS) (2024): *'House Price data: Annual Tables'*

Box 1: Property prices vs economic value

The method we use to estimate the 'planning premium' makes use of existing regression analysis that attributes differences in property prices to various urban design characteristics. However, this should not be interpreted as implying that designing with these characteristics would lead to higher property prices. Instead, the 'planning premium' should be seen as the welfare value that residents place on living in cohesive and liveable neighbourhoods.

As discussed in the main report, the value good urban design characteristics are in their ability to the support the development of coherent vibrant and liveable communities, qualities unlikely to be fully reflected in their initial sales price. Further still, residents place a premium on good urban design characteristics and the cohesive communities they generate in comparison to

Mixed use design and proximity to shops

The Benefits

The value of mixed use urban environments is widely recognised in the UK and features heavily throughout the NPPF. Mixed-use development promotes social interaction and community building within a neighbourhood by allowing residents to 'stay local' when shopping or using local amenities[19,20]. This has social value within its own right, but also supports healthy and safe communities. Further still, it minimises the number and length of journeys needed for employment, shopping, leisure, education and other activities, and increases the opportunity for active travel (e.g. walking and cycling).

From an economic perspective, mixed use development also helps build local economies. By ensuring commercial units are nestled within new, sufficiently dense neighbourhoods, retail businesses are provided with direct access to local markets. By the same token, providing office space in close proximity to residential neighbourhoods allows businesses to access local labour markets. Allowing residents to 'stay local' also keeps their spending power local and has multiplier effects in the local economy. The NPPF recognises the importance that proximity to residential development has on the vitality of town centres and, conversely, the role that town centres play at the heart of local communities.

To estimate the economic value associated with mix-use development and proximity to commercial units we make use of hedonic price modelling carried out by Song & Quercia (2008) on data from the US[21]. We take the estimated impact of two measures from this paper - a variable that measures the level of mixed use development, and the proximity that residential properties have to shops - to calculate a composite estimate of the premium associated with these characteristics. The full method is detailed in Appendix A.

19 Congress of New Urbanism, 2002. Available: www.cnu.org

20 American Planning Association (1998); *'The principles of smart development'*: PAS report #479

21 Y. Song, R. Quercia (2008); *'How are neighbourhood design features valued across different neighbourhood types?'*

Results and interpretation

The more diverse the mix between residential, commercial, public institutional and park space, and the closer residents are to commercial units, the higher the value that residents place on homes. 'Good' mixed use development and proximity to shops is associated with a 1.8% property premium or £6,040 per property in 2024 prices[22]. Ensuring new developments over the next ten years are mix-use and that households are in close proximity to shops could be worth £15.5 billion in additional value. This rises to £19.6 billion if the higher target of 380,000 homes a year were to be achieved.

This is a strong effect. Differences in property prices are dominated by plot size and internal floorspace, with a one standard deviation difference for both of these measures leading to a house price difference of over £85,000. This is compared to property prices averages of £285,000 and explains most of a one standard deviation house price movement[23,24]. In this context, it is perhaps unsurprising that other characteristics have a lower impact.

Connectivity and walkability

The Benefits

Better street connectivity leads to more walking and biking, fewer vehicle miles travelled, higher air quality, and a greater sense of community among residents[25]. Residents and businesses reduce their travel time costs, and local businesses benefit from the increased spending of a population more likely to stay local. The increase in local spending power attracts more businesses to the area, setting off a virtuous circle. Further still, the higher density of people and businesses in the area leads to agglomeration externalities and potentially higher productivity.

22 'Good 'is defined as a one standard deviation change in the independent variable used to measure these characteristics.

23 HM Land Registry: UK house Price Index January 2024. Accessed: UK House Price Index for January 2024 - GOV.UK (www.gov.uk)

24 This is the average price of homes in the UK as opposed to the average sales price of new homes. It is different because of the different characteristics of new homes that are sold when compared to the existing housing stock.

25 F.K. Benfield, M.D. Raimi, D.D. Chen (1999); *'Once there were greenfields: How urban sprawl is undermining America's environment, economy and social fabric'* Natural Resources Defense Council

To estimate the additional value associated with good connectivity we again make use of hedonic price modelling carried out in Song & Quercia (2008). The full method is described in appendix A.

Results and interpretation

High internal connectivity of a neighbourhood is valued by residents. 'Good' connectivity is associated with a 2.7% premium or £9,130 per property in 2024 prices[26]. As with mixed use development and proximity to shops, we consider this a strong effect.

The present value economic benefit of ensuring the UK's 10-year pipeline of housing delivery has 'good' connectivity is £23.4 billion. This rises to £29.6 billion with the higher housing target. Because this result comes from the same regression analysis as our estimate for mixed-use development and proximity to commercial property, these estimates are independent of one another and can be added together[27].

Consumption amenities and visually appealing places

The Benefits

Neighbourhoods in which there is a high density of places to interact, socialise, engage in consumption activities, and that are visually appealing create a sense of community and enjoyable environments in which people can spend time. As with the previous characteristics, this will lead to people spending more time and money in the area, more businesses moving to the area, and a virtuous economic cycle. There may also be agglomeration effects.

26 'Good 'is defined as a one standard deviation increase in the independent variable used to measure these characteristics.

27 It also means that individually the estimates may in fact be an underestimate as they may, to a certain extent, be measuring similar effects.

To estimate the additional economic value associated with consumption amenities and visually appealing places we make use of hedonic price modelling carried out in Ahlfeldt et al (2023). The full method is described in appendix A.

Results and interpretation

Better access to consumption amenities and visually appealing places is valued by residents. 'Good' is associated with a 1.2% property premium or £4,000 per property in 2024 prices. The effect is not as pronounced as the previous estimates.

The present value economic benefit of ensuring our 10-year pipeline of housing delivery has 'good' access to consumption amenities and visually appealing places is £14.8 billion, rising to £18.7 billion with the higher 380,000 homes a year housing target.

Because this result comes from a separate regression analysis from our previous estimates, when estimating an aggregate 'planning premium' we need to be careful that we are not double counting the impact of similar underlying characteristics. It may be the case that this characteristic overlaps with our earlier estimate, 'mixed use development and proximity to commercial spaces'. However, given that this measure includes an explicit social element as well as visually appealing places, we include half of the impact in our total. We believe this to be conservative.

Access to public parks

The Benefits

Living near natural environments such as parks, woodland areas and other publicly-available green spaces are thought to provide positive welfare benefits to the public. Parks in particular are a shared public space where people can gather and interact and a sense of community can be built. They support recreational activities, including walking, jogging and organised sports, which are good for a community's physical and mental health, and harbour environmental benefits by improving air quality and biodiversity.

To estimate the economic value associated with proximity to parks we make use of two academic papers and find the average between the two of them. The first

of these papers analyses data from Aalborg, Denmark, and the second data from Washington County, Indiana, USA. The full method is contained in Appendix A. .

Results and interpretation

The additional value of ensuring residential neighbourhoods have good access to parks is £3,200 per home, which when applied to the 10-year pipeline of housing has a net present value of £8.2 billion. This rises to £10.4 billion if the higher target of 380,000 homes a year were achieved.

We believe that some of the effects of residential proximity to parks may be captured in our measure of consumption amenities and visually appealing places and in the level of mixed use development. As such we include only half of this effect in our aggregated 'planning premium'.

Productivity effects of densification

Another channel through which the intervention of town planning can deliver economic value is through ensuring that optimum housing density is delivered.

There is significant empirical evidence and academic consensus that economic density is associated with higher productivity[28]. This is thought to be due to agglomeration economies relating to externalities such as better matching in the labour and business to business markets, knowledge sharing between firms, and efficiencies associated with sharing resources.

We can increase the productivity of urban conurbations both by targeting development in the right locations (usually where there is the most demand) and by building it with the optimum density. The associated productivity gains won't be fully rewarded in the new homes market both because the benefits are shared by the whole area and because it takes time for the effects of agglomeration externalities to be realised.

It should be noted that the additional value of higher density rests on a different mechanism to the previous estimates, which depended for their impact on the ability to quality planning to create more cohesive and vibrant communities at a local level. Densification and agglomeration economies act at a city wide level

28 D. Graham, S. Gibbons (2018); *'Quantifying Wider Economic Impacts of Agglomeration for Transport Appraisal: Existing Evidence and Future Directions'*

and drive value through productivity gains over this larger area. For this reason it is crucial that densification happens in the right location.

To model the value of densification, we assume half of housing is built within existing urban conurbations and model the productivity impacts using productivity elasticities. The full method is included in Appendix A.

Results and interpretation

Ensuring that half of the 10 year pipeline of homes are built within existing city boundaries would lead to an additional £23.3 billion in value. This rises to £29.5 billion with the higher housing target. This is significant and entirely additional to the modelling carried out previously.

Lower bound estimate of the 'Planning Premium'

As previously discussed, given that the nature of these characteristics may overlap, estimating an aggregate planning premium should be done with caution. To mitigate this we have included only half of both 'access to public parks' and 'consumption amenities and visually appealing places' in our total.

We estimate the total net present value benefit of the five urban design characteristics covered in this section to be £71.5 billion. This rises to £90.5 billion were the higher housing targets set out by the Liberal Democrats to be achieved.

Chart 1 illustrates the cumulative net present value benefit of the 'planning premium' over ten years, broken down by characteristic. It should be noted that productivity effects of densification deliver additional output every year, whereas the 'liveability' characteristics are modelled as delivering a one of economic hit via a property price premium.

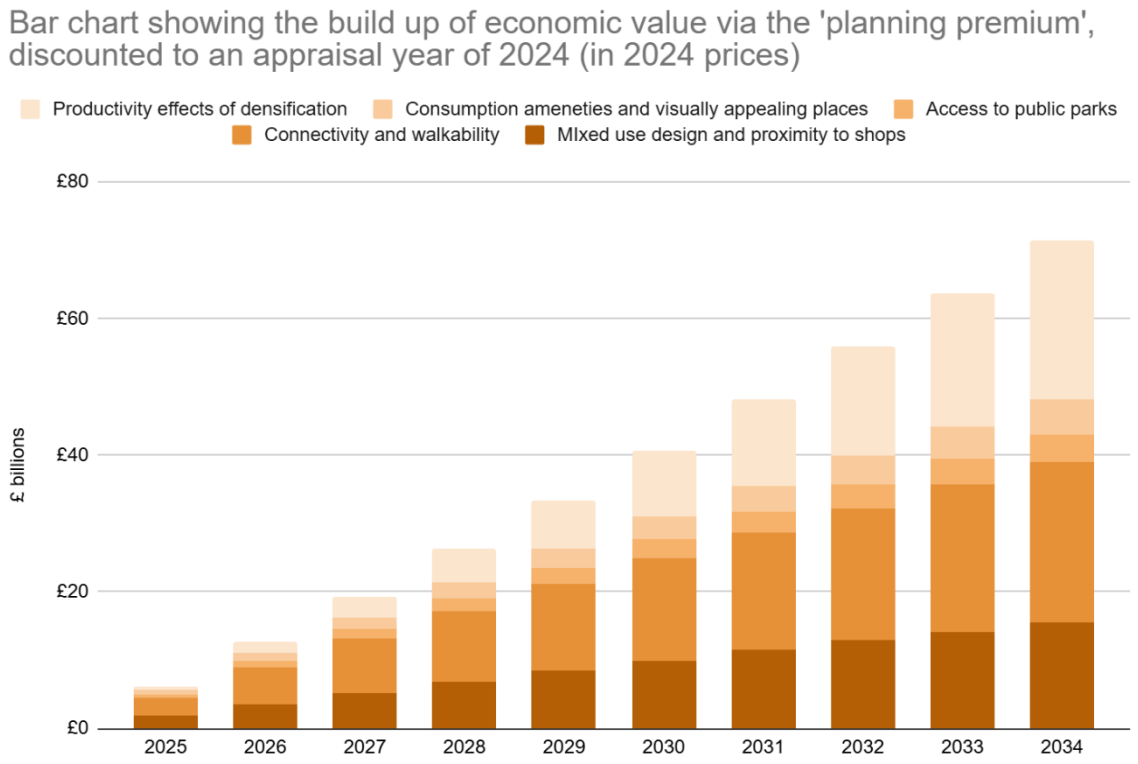

Chart 1: Cumulative net present value of the 'planning premium'

3. Town Planning Delivering at Scale

£3.24

By investing in town planners through the use of Urban Development Corporations, housing and commercial development can be delivered at scale delivering £3.24 for every £1 spent.

150 %

A planning led approach to development, through the use of Urban Development Corporations, can lead to delivery at scale, and 150% more new housing.

The UK has failed to deliver residential development at the scale that the country requires, leading in many parts of the country to a shortage of housing and an affordability crisis. This has negative social and economic consequences including reducing economic and productivity growth, lower levels of fixed capital investment, and increasing economic inequality. Increasing homelessness, deteriorating health outcomes, and even falling fertility rates can also be partly attributed to this issue[29,30].

There are many barriers to housebuilding, but the differing motivations and desires of various stakeholders is primary among them. Competing interests exist between: the economic and social needs of a country or region that needs to build at scale; the desires of local populations and their representatives on planning committees who may be resistant to development; the profit motive of developers and investors; and the urban design objectives of public sector town planners. Further to this, a lack of public sector funding and uncertainty caused by ever-changing government policy also slow down delivery[31].

In this context, the UK's discretionary system of planning itself has come under increased scrutiny, with some viewing a move to a zonal planning system as a

29 K.Barker (2003); *'Review of housing Supply: Securing our Future Housing Needs'*

30 E. Washbrook (2013);*'Do high prices deter fertility? Evidence from England and Wales'*

31 Town and Country Planning Association (2020); '*Planning 2020: Raynsford Review of Planning in England'*

possible solution to the challenges described above[32]. This would mitigate some barriers by removing the ability of local authority planning committees to block developments on a case by case basis. However, it could also remove a process through which public sector town planners can positively influence urban design, the value of which was explored in the previous section of this report.

This section investigates the extent to which putting town planning and urban design at the centre of the development process - with the necessary funding, remit, and powers to drive forward development - can deliver housing at scale.

We first look at examples of development corporations - organisations in which planners, developers and local political representatives work side by side to deliver on a strong regional economic remit. We evaluate the residential and commercial delivery of these vehicles and compare the economic benefits with the costs. We also look at a further case study in Cambridge, and draw lessons from its demonstrable ability to deliver quality development at scale and support economic growth.

The calculation of economic benefits mainly makes use of land value uplift calculations, the method recommended by both HM Treasury and the Department for Levelling Up, Housing & Communities (DLUHC)[33,34]. The main sources of data available for use to draw upon were the development corporation annual reports rather than detailed development plans that would typically be used for cost benefit analysis in a business case. To overcome this challenge we augmented our analysis with assumptions that we detail in the appendix.

It should also be noted that this section focuses only on examples from England. This is because England was the location of all the relevant development corporations.

Development Corporations

Development corporations are organisations formed for the specific purpose of developing large-scale development[35]. Their use was first established in the New Towns Act 1946 with the aim of managing the development of New Towns after the

32 Centre for Cities (2023); '*The Housebuilding Crisis: The UK's 4 million missing homes*'

33 HM Treasury (2022). *The Green Book (2022)*

34 DLUHC (2023). *DLUHC Appraisal Guidance*

35 MHCLG (2019); *'Development Corporation Reform'*. Available: Development_corporation_reform_technical_consultation.pdf (publishing.service.gov.uk)

second world war, such as Hemel Hemstead and Milton Keynes. In the 1980s, Urban Development Corporations were used to renew former industrial areas within existing Connerbations, such as Canary Wharf in London and the Royal Albert Dock in Liverpool. More recently development corporations were used by New Labour to deliver housing and redevelopment in priority areas where delivery was thought to be complex. We look at these more recent examples in this section.

There are a number of features of development corporations which allows them to overcome barriers to delivery that have stymied development in recent years. Perhaps the most important is that they have planning control over a specified area, which means the power to grant planning permission to development applications within the development corporation boundary. This mitigates the risk that local desires are always placed above the urgent need for housing and economic development. It also reduces financial risk to investors, improves viability, and ultimately brings down costs. Development corporations can also acquire and manage land and implement compulsory purchase orders where necessary. This allows them to assemble and remediate land and overcome market failures such as the first mover problem. Concerns around local democratic legitimacy are assuaged by including local politicians on the development corporation board.

Development corporations employ experienced town planners, private sector developers and other built environment experts within one development vehicle. This helps ensure that development plans are both viable from an investment perspective and deliver good quality urban environments with the best long term social and economic outcomes for the community. Development corporations ensure town planners are right at the heart of the development process.

In this section we assess the success of recent development corporations, demonstrate that a fully integrated town planning process is compatible with delivery at scale, and that investment in town planning through these vehicles is good value for money.

Thurrock Thames Gateway Development Corporation

Thurrock Thames Gateway Development Corporation (TTGDC) was formed in 2004 and dissolved in 2012[36]. It was funded by the Department for Communities and Local Government and given a range of powers including, crucially, the ability to grant planning permission to major developments within the entire local authority boundary (seen figure 1)[37]. It could also purchase land and use compulsory purchase orders. TTGDC contained experienced town planners at the core of the organisation with the remit, the powers and the funding to deliver quality town planning within viable development plans.

The statutory objectives of TTGFC were to secure regeneration of the area, by:

- bringing land and buildings into effective use;
- encouraging the development of existing and new industry and commerce;
- creating an attractive environment; and,
- ensuring that housing and social facilities are available to encourage people to live and work in the area.

We evaluate the economic value of TTGDC by modelling the homes and commercial developments that would have been delivered had the corporation continued to operate as originally planned, against a counterfactual which models what would have happened without TTGDC. This counterfactual is based on actual housing delivery in the surrounding area during the relevant period. Although TTGDC became a strategic planning authority in October 2005 and closed in March 2012, it was only fully operational and active in bringing developments forward between January 2006 and September 2010, the point at which its closure was announced. As such we model the benefits during this period. The full method is included in Appendix B.

36 Thurrock Thames Gateway Development Corporation, Annual Report and Accounts (2011/12)

37 UK parliament, Hansard (2010); Available: Urban Development Corporations - Hansard - UK Parliament

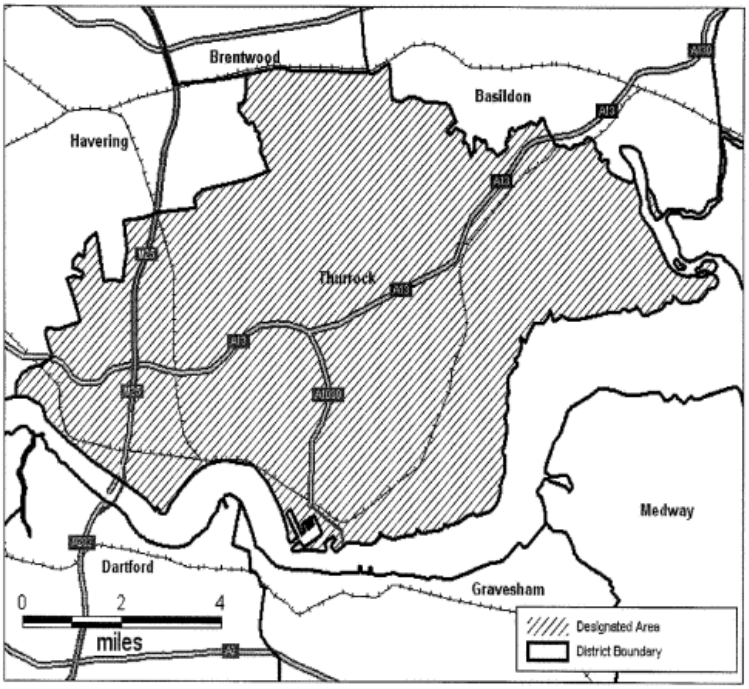

Figure 1: The TTGDC planning control boundary

Results

Homes

During this active period major planning applications were approved for 5,967 homes. We estimate that 2,410 permissions would have been given during this time had the development corporations not existed (see chart 2). This is 2.5 times more housing that would have been delivered by TTGDC. We estimate this additional housing would have been worth £385 million of land value uplift had TTGDC continued to operate and all of the housing been delivered[38].

38 Land value uplift is a net present value calculation, modelled over 10 years, with a discount rate of 3.5% and an appraisal year of 2006, Results are presented in 2023 prices.

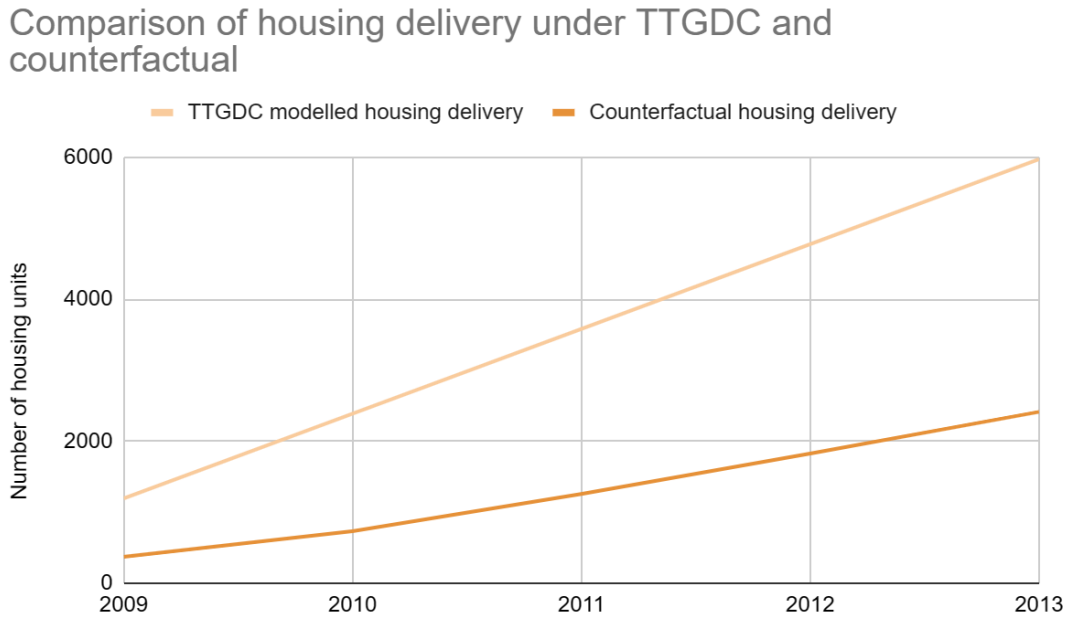

Chart 2: : Comparison of housing delivery under TTGDC and counterfactual

Retail

During the active period of TTGDV, planning permission was given for development that would facilitate 6,500 retail jobs and 50,000 m^2 of retail floorspace. After adjusting for additionality using a 91% downward adjustment, the net present value benefit of land value uplift associated with this development is £342 million (This additionality adjustment is the displacement effect recommended for development, at a UK-wide level, in the Homes and Communities Agency Additionality Guidance[39]). This is discounted at 3.5% to an appraisal year of 2006, but presented in 2024 prices.

Costs

The net present value expenditure of TTGDC over the entire period it was incorporated (2005 to 2012), discounted at 3.5% to an appraisal year of 2006, is £223 million, in 2024 prices. This includes operational costs (salaries, wages and administrative expenditure), capital grants and programme expenditure.

Cost benefit analysis

Chart 3 illustrates the scale of the core benefits set against the costs. Every £1

39 Homes and Communities Agency (2014): Additionality Guidance

spent by TTGDC resulted in £3.24 of residential and retail LVU. This is considered high value for money for investments made by HMT[40].

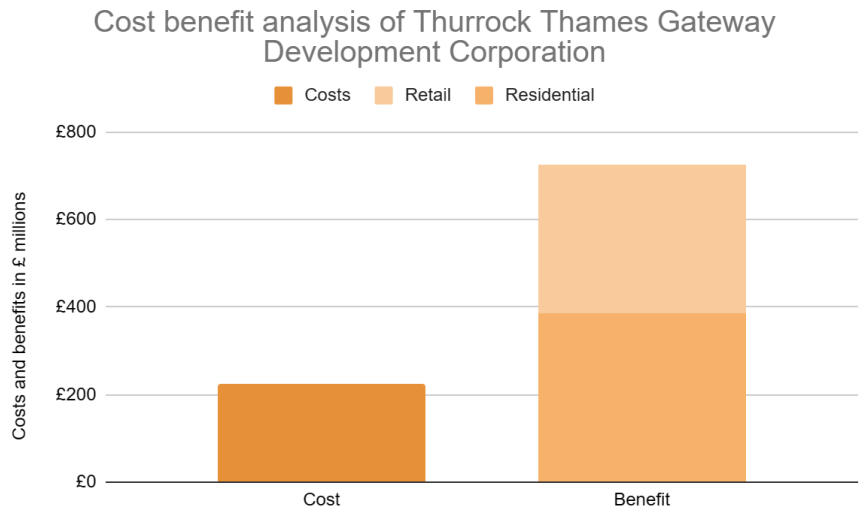

Chart 3: The TTGDC planning control boundary

Further benefits

Further to the above, the intervention of TTGDC supported the creation of 12,000 additional jobs at London Gateway and 1,500 additional jobs at Tilbury port. We calculate that this would lead to £626 million of gross output and £535 million of additional discounted net present value.

London Thames Gateway Development Corporation

London Thames Gateway Development Corporation (LTGDC) was an Urban Development Corporation formed in 2004 and dissolved in 2013. It became a fully operational development corporation in late 2005 and ceased to play an active role in development in September 2010. As with TTGDC, It had the powers, remit and funding necessary to overcome the key barriers to development in the current planning system. These included: planning control within set boundaries; power to use compulsory purchase orders; and funding to purchase significant tracts of land and carry out remediation.

To calculate the economic benefits of LTGDC, we follow the method described above for TTGDC whilst recognising some additional challenges, particularly

40 HMTreasury (2022); Value for Money Indicator 2019. Available: Value for money indicator 2019 - GOV.UK (www.gov.uk)

around creating a counterfactual. This is because, as shown in figure 2, the boundary of planning control of LTGDC did not align with local authority or boundaries or other geographical units at which data is published. Instead, we defined our geographical counterfactual as the entire area of the four local authorities that included most of the designated area of planning control (this should lead to an overestimation of the counterfactual delivery and a conservative estimate of the housing benefits of LTGDC). A full explanation of our method is included in Appendix B.

A second challenge was in identifying expenditure that was associated only with residential development and commercial development rather than other regeneration investments. Again we took a conservative approach and included all expenditure up to March 2012[41].

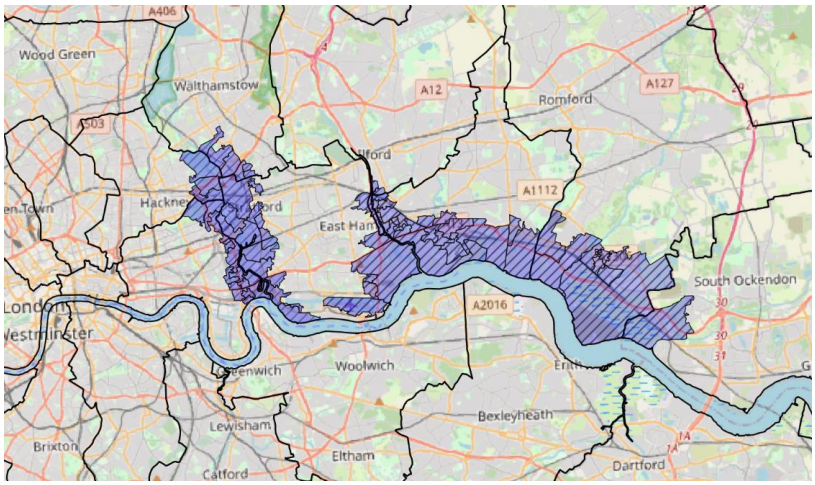

Figure 2: The LTGDC planning control boundary

Results

During the time LTGDC was operational, planning consent was awarded for 22,430 homes against an estimated counterfactual of 16,760, a 34% increase. Although a lower percentage increase than for TTGDC, because of the higher land values in London and because actual number of homes is higher, the land value uplift was much greater at £2.0 billion (in 2024 prices).

41 All expenditure to March 2012 was £222.6 million. Source: London Thames Gateway (2013) *'LTGDC Report and Accounts for the period ended 28th February 2013*

The present value expenditure associated with LTGDC over its period of operation was £304 million. This includes operating expenditure and capital grants and is in 2024 prices. The ratio of residential land value uplift to cost is thus calculated at 6.7 which is considered very high value for money by HMT.

LTGDC also gave planning consents for development that would lead to 18,340 jobs. We calculate that this would eventually be worth £910 million in gross annual output, or £780 million in additional net present value added over twenty years.

West Northamptonshire Development Corporation

West Northamptonshire Development Corporation (WNDC) was formed in December 2004 and dissolved in 2014. It became a fully operational development corporation in late 2005 and ceased to play an active role in development in September 2010. As with the other development corporations, it had the means to overcome the key development barriers in the planning system.

Given the fragmented geographical boundaries under which WNDC had planning control, carrying out an economic impact assessment is not possible. However, we draw conclusions from the annual reports and an independent analysis carried out by the European Institute for Economic Affairs (EIEA)[42].

During its operational phase, WNDC approved over 6,000 new homes and nearly 2 million sq m of commercial development creating thousands of new jobs. Although it is difficult to say whether this was a success without constructing a counterfactual, the report by the EIEA suggests the WNDC found it difficult to deliver housing at the scale required and that the area, much of which is fairly rural, wasn't prepared for a massive amount of housing development. The report concludes by recommending that development corporations be used only where there is an urban challenge of complexity, specialised nature, **scale** or intensity, suggesting the scale of demand wasn't present in this situation. A lesson we can take from WNDC is that residential development must be targeted where there is the necessary demand.

42 The European Institute for Urban Affairs (2014); *'Lessons Learnt from the West Northamptonshire Development Corporation'*

WNDC was more successful when its remit was altered in 2009 to re-focus on town centre regeneration. After that time WNDC supported a £1 billion redevelopment programme in Northampton and, according to the EIEA report, was ultimately a success story.

Cambridge Futures and Cambridgeshire Horizons

Our final case study is not a development corporation, nor did the organisations involved have any legislated powers to act. However, Cambridge is a good example of where town planning, put at the heart of development, can play a proactive role in creating planning solutions and unlocking development. The following analysis is supported by interviews with senior executives of Cambridgeshire Horizons.

In the 1990s, efforts to grow the city of Cambridge through urban expansion and attracting high-tech investment into the area had been thwarted by a series of rejected planning applications[43]. These included planning applications from the Wellcome Institute and the Malaysian Government. There was a real concern that a lack of development put at risk the long term competitiveness of the Cambridge economy.

In response to this, Cambridge University created Cambridge Futures, a forum that brought together people from the University, local authorities and business to debate the issues and make the case for growth. Crucial amongst these were town planners who led the development of a range of urban planning proposals contained in the report 'Cambridge Futures 1 land use options'. Local opinion was gathered through surveys and the most and least popular design characteristics were identified and fed into the 'Cambridge Structure Plan 2004', on which the subsequent development of Cambridge was based (see figure 3).

Quality town planning is evident in this report. Its considerations included transport interventions that would reduce reliance on cars and make the city more walkable and liveable, and densification by locating some of the new developments in the centre of Cambridge. By locating this housing in the place of highest demand it

43 S. Platt (2017); Cambridge Futures

was thought this would help stabilise the spiralling cost of living. It would also ensure the additional development didn't contribute to the city's transport congestion problem.

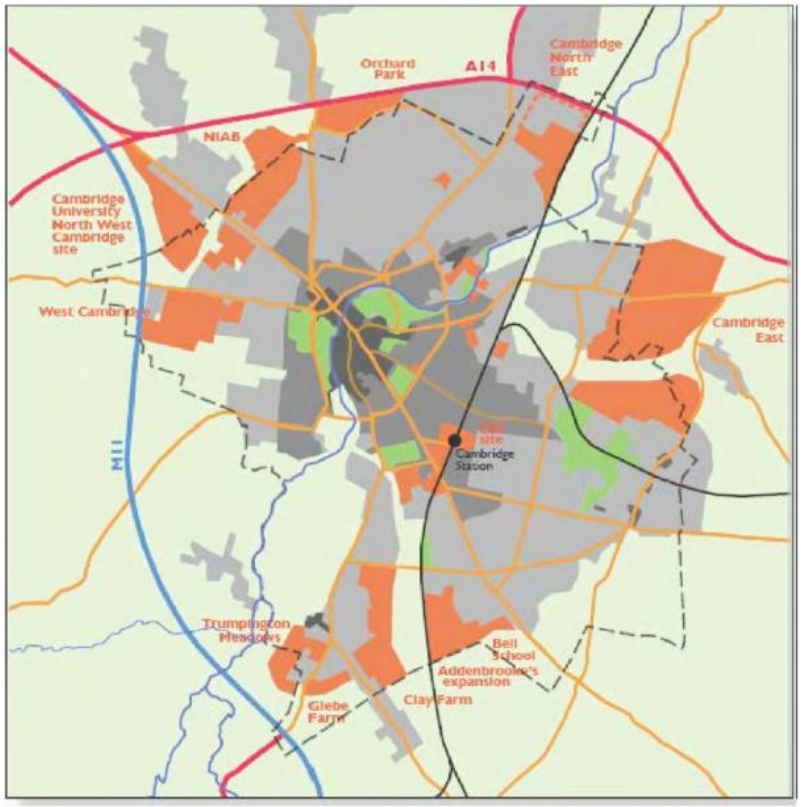

Figure 3: Cambridge Structure Plan 2004 - new development in and around the city

Cambridgeshire Horizons was set up in 2004 to make the most of the newly found consensus and deliver on the proposals. It included developers, land-owners, local authority representatives, and other stakeholders, including Cambridge University, and aimed to drive forward housing and commercial development by coordinating development and infrastructure, and securing and managing funding. It didn't have the powers of an Urban Development Corporation; local planning control remained with the local authorities, as did the power to implement compulsory purchase orders. However, the local consensus that had been reached ensured it was able to deliver at scale.

Cambridge Horizons led the delivery of significant development, including urban developments such as Northstowe new town and Eddington, and hi-tech commercial developments such as Cambridge Biomedical Centre. This has helped make the city Europe's largest technology cluster, home to over 5,000 high

tech firms, and is a good example of where effective communication alongside proactive town planning can play a role in unlocking development and growth[44].

4. Conclusion

Good town planning and urban design delivers a 'planning premium' that the new homes market alone won't deliver. This value is generated through the ability of good planning to deliver cohesive, liveable communities in the long run that support vibrant local economies. The housing affordability crisis necessitates policies which significantly accelerate housing delivery, but these policies should be designed with care to ensure this value is not put at risk and that town planners continue to be able to deliver quality urban design.

The case studies we explored in this report provide evidence that delivery at scale is possible in a development system in which town planning plays a central role. TTGDC and LTGDC demonstrate that when developers, planners, and those with the authority to grant planning permission are all aligned in their purpose, that housing and other development can be delivered at scale. WNDC is perhaps a cautionary tale though. Housing cannot be delivered at scale unless there is the demand necessary to allow for viable development plans. Location matters.

The case studies in this report have been limited to examples from England. Further work exploring the other nations of the UK is recommended.

44 DLUHC (2024); *'The Case for Cambridge'*. Available: The Case for Cambridge - GOV.UK (www.gov.uk)

Appendix A

Methodology: The Economic Value of Quality Urban Design

In general, the following method is used throughout this section:

To calculate the value of urban design characteristics, we take regression coefficients from the academic literature and convert them into the percentage property price increase associated with changes to the independent variable.

We apply this uplift to the average sales price of new build housing unit in the UK to estimate the premium that these design attributes have on property values[45]. A key challenge is estimating the impact that 'good' town planning has on the characteristics in question, as measured by the independent variables used in the hedonic pricing models. In general we apply a one standard deviation change to the independent variable which represents, for a standard normal distribution, a shift from the 50th percentile to the 84th. We define this as 'good' town planning (the method used is different for 'access to public parks' and 'productivity effects of density', as explained in those sections). We then estimate the total value of this premium applied to 300,000 homes a year, which is the housing target included in the 2019 Conservative party manifesto and a target committed to by the Labour party[46,47]. This is modelled over a 10 year period, discounted at 3.5% as recommended by HMT, and provided in 2024 prices[48]. This represents the economic value of good town planning characteristics applied to housing targets over the next two parliaments.

The value of mixed-use design and proximity to shops

To estimate the economic value associated with mix-use development and proximity to commercial units we make use of hedonic price modelling carried by Song & Quercia (2008) and other previous iterations of this analysis on data from

45 Office for National Statistics (2024); *'House Price Data Annual tables. Available'*: House price data: annual tables - Office for National Statistics (ons.gov.uk)

46 Conservative Party Manifesto (2019); Available: Conservative Party Manifesto 2019 (conservatives.com)

47 Housing Today (2023); *'Labour will bring back mandatory housing targets'*. Available: Labour will bring back mandatory housing targets, says Starmer | News | Housing Today

48 HM Treasury (2022); The Green Book

the Washington County metropolitan area[49,50,51]. The models use a semi-log form, common in hedonic price modelling, which allows us to calculate the percentage change in property prices resulting from a one standard deviation change in the level of mixed use development. The model uses a range of control variables such as plot size, floorspace, median household income, average SAT score, and tax rates, which helps to isolate the relationship between the independent variable of interest and the dependent variable.

To calculate the 'price premium' associated with mixed use development, we make use of the independent variable 'NRMIX', a diversity index that measures the mix between residential, commercial and other land use. To calculate the 'price premium' associated with residential proximity to shops, we use 'PEDCOM', which measures the percentage of housing units within one quarter mile of commercial uses.

Because both our estimates of the economic value of mixed use development and proximity to shops are likely to be estimating a similar design characteristic we add them together to get a composite measurement. We can do this because the effects are estimated in the same regression model.

Connectivity and walkability

To estimate the economic value associated with connectivity we again make use of hedonic price modelling carried in Song & Quercia (2008)[52]. We use an independent variable, 'Internal connectivity', that measures the ratio between the number of intersections and the amount of street. We use the same methodology to estimate the present value economic benefit of ensuring our 10-year pipeline of housing delivery has 'good' connectivity. . Again, 'good' is defined as a one standard deviation increase in the independent variable.

Consumption amenities and visually appealing places

To estimate the economic value of density of consumption amenities and visually appealing public spaces, we utilise a model developed in Ahnfelt et al (2023)[53].

49 Y. Song, R. Quercia (2008); ' How are neighbourhood design features valued across different neighbourhood types?'

50 Y. Song, G. Napp (2003); *'New urbanism and housing values: a disaggregate assessment'*

51 Y. Song, G. Napp (2004); *'Measuring the effects of mixed land uses on housing values'*

52 Y. Song, R. Quercia (2008); *' How are neighbourhood design features valued across different neighbourhood types?'*

53 M. Ahlfeldt et al (2023); *'Micro-geographic property price and rent indices'*

This model uses a geographically weighted regression analysis on property data and a measurement of the volume of geo-tagged photos shared in social media in Germany, at the postcode level. This measure can be interpreted as capturing visually appealing places but also the density of locations where people like to socialise, such as bars and restaurants. The techniques used go beyond standard hedonic price modelling taking an algorithmic approach to construct a panel of micro-geographic house prices that helps to overcome the problem of sparse property price data. The analysis controls for key property price drivers such as floor space, number of rooms, and geographical location.

We use the same methodology to estimate the present value economic benefit of ensuring our 10-year pipeline of housing delivery has 'good' access to social amenities and visually appealing places. However, this time we define 'good' as a shift in the independent variable from the 25th percentile to the 75 percentile. This method is different due to the way that the results are presented in this analysis.

Access to Public Parks

We calculate the economic value of providing more parks in newly developed neighbourhoods using the results of two hedonic price models, one in the US and one in Denmark. Both use hedonic price modelling in semi-logarithmic form to estimate the impact that proximity to parks and other natural amenities has on house prices. Both control for house characteristics (size of living area, number of rooms, garden area etc) and use a location fixed effects to control for localised labour market characteristics and other geographic advantages or disadvantages. Various other techniques are used to ensure that the estimates of the willingness to pay for these amenities are not capturing other confounding factors.

For the US example, we use regression analysis from a previous iteration of the Song et al (2008) research that again analyses property data from Washington County[54]. This estimates the impact that proximity to parks (in metres) has on property values. As with previous analysis, we use coefficients of the independent variable together with its standard deviation to calculate the effect that a one standard deviation decrease in distance (175m) has on property price.

54 Y. Song, G Knaap (2003); New Urbanism and housing values: a disaggregate assessment

In contrast, The Danish example provides estimates of the percentage change in price of a 100m reduction in distance to a park at different distance points in the city of Aalborg[55]. We take the the average distance of a UK property from a park (557m)[56], rounded up to 600m and then estimated the property price increase associated with reducing the distance to the park by 175m, which is equivalent to one standard deviation reduction in the Washington County analysis.

We average the two estimates and convert the average percentage uplift into a net present value for a 10-year housing pipeline, as with our previous examples.

Increased density

For town planning that implements 'good' densification, we assume that half of the additional homes delivered over the next ten years contribute one to one to effective economic density (EED). In effect, this would mean half of the homes are built within existing city or town boundaries and do not increase the average cost of travel between zones. The increase in EED is then a one to two relationship with the percentage increase in the UK's housing stock. We apply an agglomeration elasticity of 0.046 to the increase in EED, as identified in the academic literature[57]. This estimate the increase in productivity increase in productivity we model over ten years and discount at 3.5%.

55 T. Panduro, K. Veie; *'Classification and valuation of urban green spaces—A hedonic house price valuation'*

56 Thurrock Thames Gateway Development Corporation Annual report (2011/12)

57 D. Graham, S. Gibbons (2018); *'Quantifying Wider Economic Impacts of Agglomeration for Transport Appraisal: Existing Evidence and Future Directions'*

Appendix B

Methodology: The economic value of Urban Development Corporations

Thurrock thames Gateway Development Corporation

We use information contained in the TTGDC annual reports to source the total expenditure of the development corporation. This includes all spending including operational costs, land purchases and other capital expenditure. We adjust for inflation, presenting in 2024 prices and discount to an appraisal year of 2006 at 3.5%, as recommended in the HMT Green Book.

To estimate the economic benefits of residential development, we first take data on residential planning consents contained in the annual reports[58]. We estimate the economic benefit in the form of land value uplift associated with this development by first converting units to hectares of land using 35 homes per hectare, as recommended by the Department for Levelling Up, Homes and Communities (DLUHC)[59]. We then apply land value estimates provided within the same document, converted to the appropriate delivery year using the house price index[60]. These estimates assume a 3 year build-out to delivery and a 5 year rollout from 2006 (although TGDC became a strategic planning authority in October 2005 and closed in March 2012, it was only fully operational and active in bringing developments forward between January 2006 and September 2010, the point at which its closure was announced).

We apply the difference between residential land values and the lowest priced land value (agriculture). The estimate is made against a counterfactual which describes what would have been developed in the absence of the TTGDC. Our counterfactual is created by taking housing delivery in Essex during this period and scaling to Thurrock's population, adjusting upwards to mitigate the drop in housing delivery after the financial crisis[61]. As with costs, we adjust to 2024 prices and discount at 3.5%.

58 Thurrock Thames Gateway Development Corporation Annual report (2011/12)

59 DLUHC (2019); Land Value Estimates for Policy Appraisal. The conversion rate from unit to hectares is also sourced from here.

60 Office for National Statistics (2023); House Price Simple Averages, from the House Price Index

61 Office for National Statistics (2023); Population estimates by local authority

To calculate the economic value of commercial development we take the number of jobs that commercial planning permissions were set to deliver contained in the annual reports and convert to floorspace using local employment density estimates[62]. We convert to plot size using information about the individual developments but relying on evidence based assumptions where this information doesn't exist. We use land value estimates for policy appraisal to estimate the associated land value uplift. We assume a build to delivery of 5 years, and a 5 year rollout.

To estimate the additionality of commercial development, we don't construct a counterfactual. Instead we apply additionality 'ready reckoners' contained in the Homes and Communities Agency Additionality Guidance[63]. For development at a UK wide level displacement is assumed to be 91% and so 9% is deemed to be additional. We assume no deadweight taking evidence from the TTGDC Annual report and Accounts 2011/2012[64]. Finally, all calculations are adjusted to 2024 prices and discount at 3.5% with an appraisal year of 2006.

London Thames Gateway Development Corporation

To calculate the economic benefits of LTGDC we follow the method described above for TTGDC whilst recognising some additional challenges, particularly around creating a counterfactual. This is due to the area in which LTGDC was given planning control, which was more fragmented than TTGDC and did not match the boundary of a local authority. To estimate a counterfactual housing delivery for the area we used an estimate of the expected housing delivery in the four London boroughs which includes the vast majority of the area of planning control: Tower Hamlets, Newham, Barking and Daghenham, and Havering. We also assume a much higher destiny of housing units of 165 units per hectare, which is the average units per acre of the relevant boroughs contains in the Land Value Estimates for Policy Appraisal (2019)[65]. However, we also used the much higher land value uplift per hectare estimates from the same source.

For LTGDC we don't make a land value uplift for commercial property. This is because the commercial development was more dispersed than for TTGDC which

62 Homes and Communities Agency (2010): Employment Densities Guide. Accessed: employ-den.pdf (publishing.service.gov.uk)

63 Homes and communities Agency (2014); Additionality Guidance

64 Deadweight refers to what would have been built regardless of intervention.

65 DLUHC (2019); Land Value Estimates for Policy Appraisal

causes problems for calculating land value uplift given how location specific land values are for retail. Instead we make a gross value added calculation, which we present separately. This is discounted at 3.5% and adjusted downward to capture additionality by 91%, as per additionality guidance[66]. Because of the quite different nature of this calculation, we don't add this to the residential land value uplift calculation to estimate an aggregate benefit.

66 Homes and communities Agency (2014); Additionality Guidance