Knight Frank

COST AND VALUE

BUILDING BETTER, BUILDING BEAUTIFUL COMMISSION

FEBRUARY 2020

COST AND VALUE

CONTENTS

1.0
INTRODUCTION

The research aims to support the work of the Building Better, Building Beautiful Commission which was set up by the Government in December 2018 to look at improving beauty in the delivery of new homes and neighbourhoods. The Commission has advised the government by developing practical measures to help ensure that new housing developments meets the needs and expectations of communities, making them more likely to be welcomed rather than resisted. To support this work, the Commission wished to take forward a series of research projects. This report is the result of work undertaken in connection with Research Project "Cost and Value".

Overall, the aim of the research will be to identify whether there is added value where schemes are developed with quality as an explicit aim compared with mainstream housebuilder-led schemes. The research will identify differentials in cost and value creation across a range of measures, comparing schemes within the same local property market which have been developed with quality as an explicit programmatic aim, against those mainstream housebuilder-led schemes (where available).

This report will make references to 'high quality' developments, and to 'typical housebuilder' developments. Please forgive this unfair generalisation. We are all too aware that there is a continuum of quality, a range of styles, materials, and an infinitesimal number of choices available to landowners and developers. However, we do believe that there is a scale and it is the choice of the actors involved where to pitch their development. At one end of the scale we refer to 'high quality', meaning well-considered masterplans that promote sustainable, walkable, vibrant communities, usually including mixed use elements with characterful bespoke housing built from materials that will stand the test of time. At the other end of the scale developments can result in generic, standardised housing, built from cheap mass-produced materials where occupiers are reliant on cars and do not integrate with the community. The references in this report to 'quality' encompass all these facets and the case studies selected because they have demonstrated that 'quality' was an explicit aim of the project.

2.0
CASE STUDIES

The BBBBC identified a range of projects that could be reviewed within this research, as below. For reasons of data and time constraints it has not been possible to study them all in detail, and so the top six were prioritised. These were prioritised for a number of reason which we touch on below.

1. **Fairford Leys, Aylesbury:** A large and mature project with a significant Trust landowner, the Ernest Cook Trust. The project was completed before the credit crisis in 2007. The project was recently studied along with Poundbury as part of a report called The Value of Community, and it is considered useful to reflect on that study whilst also building on the analysis. It shows us how the consortium of housebuilders did not believe at the time that the masterplan would add value, but now with the benefit of hindsight we can review whether or not they were right.

2. **Poundbury, Dorset:** Also a large and maturing project. This is the first genuine landowner legacy project where the Prince of Wales has been uncompromising in his long-term vision of how settlements should be built. It represents a maturing project and provides us an opportunity to reflect 24+ years on from its first sale and ask if the values justify the costs. The scheme has continually sought to nurture commerce and facilitate a walkable sustainable community and we can now see whether or not this has been successful.

3. **Oakgrove, Milton Keynes:** This is a large project conducted by the housebuilder Crest Nicholson, situated within one of the largest new towns in the country. The influence of a housebuilder as a lead developer makes it a different proposition. The structure of the land delivery model was designed to engender an aligned partnership over the longer-term. As this project draws to a close, we can consider whether it was a financial success, and whether the delivery structure engendered behavioural change.

4. **Newhall, Harlow:** This is perhaps the largest and most award-winning contemporary housing project in the country. Curated by a family Trust landowner, Newhall's vision was a reaction to uncontrolled housebuilding that occurred on other land owned by the same family. Now in its second decade we can review the project alongside the family's neighbouring traditional housebuilder-led project at Church Langley and consider their relative financial success.

5. **Accordia, Cambridge:** This is different to other projects selected in that it is an apartment-led development in a city centre location. It is unique in its architectural integrity and contemporary style and yet it was beset with challenges associated with delivering a high cost product. It will be interesting to reflect on how values have performed over the longer-term.

6. **Coed Darcy, Neath:** This is an emerging brownfield project in South Wales, with significant remediation costs and ambitious infrastructure requirements. Whilst it is in its infancy it is already illustrating the challenges of delivering high quality housing into a price sensitive market. It asks us important questions, such as how to make the ambitions of a housing project proportionate to its market.

With agreement from the BBBBC, three case studies were added which are in their infancy or have stalled. These were selected because they contextualise the challenges involved in the relationship between cost and value and may suggest solutions.

7. **Great Yarmouth:** This town exemplifies the challenges of so many parts of the United Kingdom and is a good example of a Council that is doing everything right but not getting the support it needs. As a case study, Great Yarmouth gives the report invaluable context and suggests that the challenges of development are specific and nuanced. Within the case study we will consider the value of gap funding and the impact of housing targets.

8. **Welborne, Fareham:** This project is the largest of all those we have studied and tells the story of a landowner that has ambitions to deliver high quality housing within a new garden village vision. It is a compelling vision and yet its scale provides many challenges. The return on planning provides a context to consider land value capture. Its infrastructure burden challenges its viability and begs the question whether major development areas are carrying too much of a burden. In this context we consider what might be done to enhance investment in community infrastructure.

9. **Park View, Woodstock:** This project represents housebuilding that feels far removed from the typical and shows us what can be achieved when there is complete alignment between landowner and housebuilder. In this case, we review the landowner's stance on affordable housing as well as a 'Principles of Legacy' document that it (and any prospective partner) must adhere to.

The following case studies were not prioritised for reasons given, but we believe they are worthy of future analysis should this analysis be extended:

10. **Roussillon Park, Chichester:** Our initial analysis was limited by volatile and inaccurate data.

11. **Upton Park, Northampton:** Our initial analysis showed it was challenging to draw distinctions between the project and surrounding areas.

12. **Nansledan, Newquay:** This is an emerging project where data remains scarce but, as the Duchy of Cornwall's second demonstration project in a more challenging market, will undoubtedly provide a fascinating study in the future.

13. **Sherford, Plymouth:** This project began with ambitious design codes which may have been diluted since. It would be interesting to study, but background information was not made available.

14. **Salford Central, Salford:** This project was deemed unviable by the landowner and so is challenging from a value perspective but interesting from a delivery model perspective.

15. **Trowse Newton, Norfolk:** Time constraints prevented us from completing our analysis.

16. **Saltwell Road, Gateshead:** Time constraints prevented us from completing our analysis.

17. **Allerton Bywater, Leeds:** Time constraints prevented us from completing our analysis.

3.0
EXECUTIVE SUMMARY

The housing schemes analysed were selected because they have been developed with quality as an explicit aim compared with mainstream housebuilder-led schemes.

We have analysed selected projects by comparing historic new build and resale values against benchmarks identified as being the most appropriate. We have also considered the broader relationship between cost and value in development, picking up on themes such as value beyond housing, land cost, infrastructure investment, affordable housing and community infrastructure. The analysis within this report highlights the following themes:

- High quality housing should not erode returns.
- A value premium of 15% is achievable.
- Quality sustains pricing for larger dwellings enabling more GDV per hectare.
- Quality costs more but can be a viable choice.
- Sustainable developments provide additional value beyond housing.
- Sustainable 'good growth' need not be compromised for high delivery rates.
- Long-term investment engenders a higher quality outcome.
- Binding parties with the same investment time horizon creates alignment.
- Value endures in quality development.
- Public subsidy is required to deliver community benefits in challenging locations.
- Housing delivery is typically constrained by demand, not supply. Blunt supply-side policies risk the unintended consequence of the wrong development in the wrong place.
- If gap funding is only channelled to the least affordable places then many communities will be left behind.
- Large projects carry more than their fair share of infrastructure costs, allowing other developments to 'free ride' on the value they create.
- Community infrastructure investment can be enhanced through improved efficiency and cost savings through reduced planning risk, reduced planning costs, reduced planning and infrastructure funding costs, equalising infrastructure costs, and identifying necessary infrastructure investment.
- Landowners can have a real interest in the strength of both the local community and the local economy which can incentivise better place-making and more affordable housing.
- 'Principles of Legacy' could offer a framework for funding and planning support.
- Data availability needs to be improved.

4.0
POLICY PROPOSITIONS

The following policy propositions emerge from our conclusions:

- Initiate a stronger planning regime by reference to tests of 'good growth' to supplement the definition of sustainable development, and protocols for the application of the tests should be set out within future iterations of the National Design Guide.
- Review blunt supply-side propositions (including housing targets, use-it-or-lose-it planning permission deadlines, land value capture) in favour of locally generated capacity analyses to highlight granular and specific property need and demand.
- Provide guidance to public sector bodies that best consideration may be realised over longer timeframes.
- Review the tax treatment of distributions arising from land vested as equity in a project.
- Review the metrics required for gap funding such that low price to earnings ratios do not preclude funding flows to left-behind communities.
- Improve the predictability of the planning decision through a more rational process towards allocation. Consider a geospatially defined presumption in favour of development in the most sustainable locations for development.
- Initiate a new tier of geospatially referenced evidence to inform future planning applications and enable proportionate decision making by the Local Planning Authority.
- Establish a patient capital fund that provides long-term lending for planning and infrastructure investment at competitive rates, with flexible repayment options and where developments meet certain criteria that encourage good quality sustainable settlements.
- Review the application of Section 106 Agreements and CIL in order that they are equalised fairly across developments of all scales.
- Adopt a more effective process towards infrastructure identification informed by available integrated spatial intelligence and modelling.
- Government should regulate so that better and richer data is captured when properties transact and are constructed.

5.0

KEY POINTS ARISING FROM CASE STUDIES

It should be noted that the following analyses and observations have been made in the context of schemes at the scale of urban infill (Accordia) and large scale urban extensions, and we acknowledge that different development dynamics may apply to the delivery of new settlements, in particular new towns.

1. **High quality housing should not erode returns:** The case study of Fairford Leys in Aylesbury illustrates that housebuilders often believe that following a high quality agenda will erode the profitability of a development. The housebuilders at Fairford Leys submitted a paper to the landowner in 1999 stating that the masterplan and design ambition were reducing their saleable floor area, increasing their build costs and infrastructure costs such that the amount left to share with the landowner would fall by 77%. Only with the benefit of hindsight can our research now show that the value premium generated from following a quality agenda offsets the additional costs involved.
2. **A value premium of 15% is achievable:** Of the sites studied, it is felt that Fairford Leys in Aylesbury and Oakgrove in Milton Keynes have the most appropriate benchmarks in their surrounding housing markets and therefore offer the most meaningful conclusions. The value premium they generated ranged between 14% and 16% compared with their benchmarks and we have therefore concluded that 15% is a reasonable expectation. It is evident from the analysis that this value premium is established from the start of the project and is maintained throughout. The value premium can also be seen in the resale values following the end of the project, benefitting the occupiers or anyone that has held an economic interest in the housing.

PROJECT NAME	VALUE PREMIUM	COST PREMIUM
Fairford Leys	14.5%	22% - 30%
Poundbury	7.3% £psf / 55% GDV	17.8%
Oakgrove	16.3%	-
Newhall	-1.1%	18.5%
Accordia	3.4% £psf / 123% GDV	-

3. **Quality sustains pricing for larger dwellings enabling more GDV per hectare:** The case studies of Poundbury and Accordia illustrate that values of larger homes are sustained in good quality developments enabling a significantly higher GDV per ha, for example +55% at Poundbury and +123% at Accordia, which justify higher associated costs.

4. **Quality costs more but can be a viable choice:** Developments with good quality housing cost more to deliver. Whilst data is limited in this regard, evidence across the projects studied suggests that the cost premium might range between 18% and 30%. Poundbury and Newhall correlated closely suggesting an 18% cost premium can be expected for following a high quality agenda. Our analysis showed that this could be offset by the value premium, concluding that following a quality agenda is a viable choice in all but the most price sensitive markets. [Please note that costs typically represent 45-60% of the total completed value, referred to as the Gross Development Value or GDV. If we assume costs represent 50% of GDV then a value premium of x% can offset a cost premium of 2x%. ie. with a value premium of 15% a project could sustain up to a 30% cost premium.] The choice to adopt a higher quality need not preclude cheaper housing. Both may be equally profitable, and both may sit comfortably alongside each other, offering choice to consumers at different price points.

5. **Sustainable developments provide additional value beyond housing:** Poundbury illustrates how stewardship of a development can lead to sustainable growth and add value to all stakeholders over the long term. The value of housing is sustained and maintenance costs are reduced by the use of quality materials. In an unlikely location, commerce has flourished and 1.3 permanent jobs have been created for every house built. £105 million per annum has been added to the local economy, excluding the short-term influence of construction activity. 44% of residents use sustainable methods to travel to work. This offers us a definition of 'good growth'. It supports and sustains communities whilst offering an opportunity for landowners to participate in value creation over the long-term.

6. **Sustainable 'good growth' need not be compromised for high delivery rates:** Whilst absorption rates at Poundbury have increased to 120 homes per annum, they remain slow for a development of this scale. This highlights the possibility that sustainable development might not be compatible with delivering at the maximum pace. Sustainable 'good growth' should not be compromised. In particular, nurturing commercial uses takes time and is a limiting factor. Without a landowner that is prepared to adopt a stewardship role over the development, it is likely to be ignored and dormitory housing may result. This is illustrated by the spatial comparison between Poundbury and Elvetham Heath: two developments of a comparable size. The richness of uses, the walkability and sustainability of Poundbury is self-evident. If more housing is needed in a region it would be preferable to have more developments offering slower 'good growth' than fewer developments of more rapid, but less sustainable growth.

7. **Long-term investment engenders a higher quality outcome:** The Oakgrove and Newhall case studies show how longer-term alignment between landowner and development partner create an environment that incentivises good quality development whilst being a commercial success. The landowner at Oakgrove, English Partnerships and later the HCA, adopted a patient approach investing their land into the project as equity and taking a share of the profit in lieu of up-front land receipts. In doing so, it formed an aligned long-term partnership focussed on building value through a good quality development. At 1,000 homes, the scale of the project appears to have been a critical reason for the alignment of interests. With scale comes more time, which was important because it allowed Crest Nicholson to benefit from increasing values. This suggests that longer-term partnerships between landowners and development partners will encourage the delivery of good quality housing.

8. **Binding parties with the same investment time horizons creates alignment:** The case study of Newhall illustrates the adversarial tension between a landowner trying to enforce a design code through contract, and housebuilders trying to keep costs down. This illustrates the challenge of binding two parties with different time horizons; a landowner with a project length of many decades and housebuilders who will complete their phases of development within a few years. Newhall has now favoured a longer-term partnership with Countryside Properties, which has given the landowner and the housebuilder the same time horizon and each party an equitable share in future value. It is felt that this has the potential to align both parties towards the same goal.

9. **Value endures in quality development:** Accordia generated a new-build premium of 3% over Trumpington, but this premium began at 0% during construction and has grown to 12% since construction was completed. This shows us that values in developments that follow a quality agenda may continue to grow and begs the question whether alternative delivery models can capture the increase in long-term value.

10. **Public subsidy is required to deliver community benefits in challenging locations:** Coed Darcy in Neath illustrates the challenges of developing brownfield sites in price sensitive areas. The project has supported extensive remediation including the removal of over 1,000,000 barrels of oil from the ground. This cost, along with front-loaded community infrastructure projects, places the project's viability at risk. It was hoped that the strong design codes would derive premium values to offset the costs but these are yet to come through. This can be partly explained by the viability challenge which has diluted the aspiration for quality and the early provision of community amenities. In this case the cost of a new road may have not brought as much value to the community as other – more socially beneficial – infrastructure demands.

11. **Housing delivery is typically constrained by demand, not supply. Blunt supply-side policies risk the unintended consequence of the wrong development in the wrong place:** The case study of Great Yarmouth shows us that the issues are nuanced and specific to each location. Here is a left-behind coastal community in the south east of England that has endless supply (housing permissions exceed the housing target by 4.5x) yet completions have fallen behind target by 45% on average. Blunt supply-side policies do nothing but dilute the fragile demand and risk leading to the wrong development in the wrong place.

12. **If gap funding is only channelled to the least affordable places then many communities will be left behind:** Great Yarmouth is in a vicious cycle where the lack of demand for housing reflects the lack of investment into local commerce thereby perpetuating a 'left behind' place. The Local Authority have attempted many measures to stimulate demand, but have been constrained by the fact that house prices appear more affordable than other parts of the South East. It seems scandalous that Great Yarmouth might fail an 'unaffordability test' when investment from central government could stimulate demand through regenerative development and engender a virtuous cycle which would have a transformative medium and long-term effect on values and economic potential.

13. **Large projects carry more than their fair share of infrastructure costs, allowing other developments to 'free ride' on the value they create:** Welborne in Fareham, a proposed new garden village including 6,000 homes, provides an example of a landowner that is determined to generate value over the long-term. That said, the project's viability is being challenged by its infrastructure costs which, at £510 per sq m, are almost 5x the contribution made by other proposed developments in Fareham.

14. **Community infrastructure investment can be enhanced through improved efficiency and cost savings:** Within the context of a viability assessment, the residual item in the calculation is the amount of value extracted as community infrastructure, including affordable housing. This presents an opportunity to increase community infrastructure if efficiencies can be found in the promotion and servicing stages. The Welborne case study shows us that there are many areas where efficiencies may be increased, as summarised below:

    a. **Reduce planning risk:** The key is to improve the predictability of the planning decision through a more rational process towards allocation in the first place; for example, if a Strategic Plan offers a presumption in favour of development in mapped areas defined as the most sustainable locations for development. More consensual processes will identify the nature and form of development. This does not mean minimised planning, but better planning.
    b. **Reduce planning costs:** Costs could be reduced through a new tier of geospatially referenced evidence collation and publication to define known unknowns. This would allow future planning applications to be informed by that material thereby reducing the cost burden on future applicants and enabling proportionate decision making by the Local Planning Authority.
    c. **Reduce planning and infrastructure funding costs:** A patient capital fund could be established to provide long-term lending for planning and infrastructure investment at competitive rates, with flexible repayment options (eg. tariff repayments when homes are sold), and where developments meet certain criteria that encourage good quality sustainable settlements.
    d. **Equalise infrastructure costs:** Section 106 and infrastructure commitments could be benchmarked against CIL to create a level playing field. Over the medium-term we believe there may be an opportunity to gradually increase CIL contributions from smaller developments.
    e. **Identifying necessary infrastructure investment:** Adopt a more effective process towards infrastructure identification informed by available integrated spatial intelligence and modelling.

15. **Landowners can have a real interest in the strength of both the local community and the local economy which can incentivise better place-making and more affordable housing:** Park View in Woodstock highlights a landowner electing to become landlord for all the affordable housing delivered. Given their vested interest in the long-term success of the local economy they have elected to discount the housing by 40% (as opposed to the required 20%) without subsidy in order to attract key workers into the local community. This enables young people to remain in the communities where they have grown up. As well as truly affordable rents, shared ownership homes are available for part buy and part rent with the aim of keeping all their affordable homes affordable in perpetuity.

16. **'Principles of Legacy' could offer a framework for funding and planning support:** The case study of Park View provides an example of a landowner that has volunteered a set of principles as a clear commitment to its behaviour and to the future community. It is intended that these principles will bind any partner developing at Park View. These principles represent a potential alternative to the Garden City Principles, and could be a reference point for Government initiatives offered to landowners and developers that are prepared to adhere to them.

17. **Data availability needs to be improved:** These results were derived from an exercise conducted over a short timeframe, which was heavily constrained by the availability of project data. In order to support policy and property decision-making around the delivery of new settlements and urban extensions we recommend that cost and value analysis on this model is extended across a much wider sample of sites and is tracked over an extended time frame. This will yield valuable market data and will help to understand how different schemes perform across extended market cycles.

6.0

DELIVERY OF S106 ELEMENTS – QUALITY SCHEMES

It should be noted that each of the quality schemes delivered the mixed use components planned for and negotiated (where these were a requirement), and these elements - as well as the design and built quality of the individual units - make up the higher quality 'place' offer, helping to create and sustain value over the long term.

In general, the case study schemes have delivered on relatively high percentages of affordable housing, as well as on a full range of amenities and community infrastructure. We have seen that more effective use of land, and the long-term perspective that tends to flow from a stewardship-led scheme can enable securing a wider range of housing typologies and tenures.

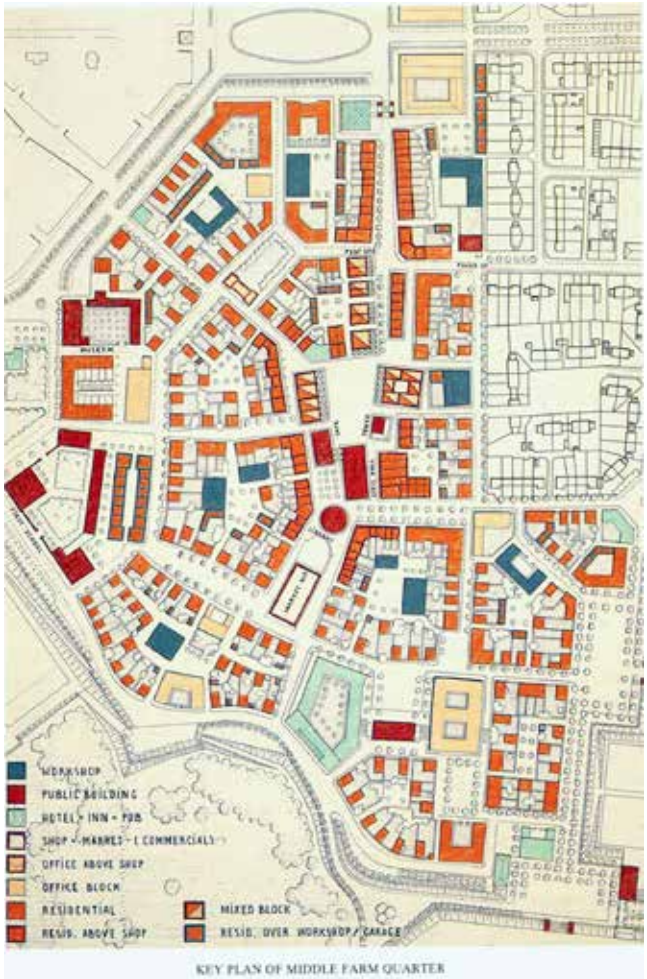
PROJECT	TENURE MIX	MIXED USE
Fairford Leys, Aylesbury	No requirement for affordable housing	Commercial (279,115 sq ft) = B1, B2, B8, built on AVDC's land to the north Retail, D1, D2 and 'other' = church, community facilities, A1, A2, A3
Poundbury, Dorset	35% affordable (20% Phase 1)	Diverse mix of uses including education, retail, office, factories, workshops, restaurants, public houses, market, hotel, communityw hall, clinics and spa
Oakgrove, Milton Keynes	30% affordable	School, Retail, Offices, Health Centre
Newhall, Harlow	15% affordable	School, neighbourhood centre, commercial district (236,806 sq ft)
Accordia, Cambridge	30% affordable	Initially a corner shop – but unviable; neighbouring office scheme was not connected to masterplan
Coed Darcy, Swansea	20% affordable	Commercial, Schools, Retail = 500,000 sq ft
Welborne, Fareham	10% affordable rising to 30%	1.2 million sq ft of retail and business space, four schools, sports and leisure facilities, playgrounds and community hall
Park View, Woodstock	37% affordable	12,000 sq ft of A1/A2/B1/D1 in the first phase

For those projects that are maturing, the table shows (without having interrogated the original s106 negotiations) that each of the quality schemes broadly delivered on affordable housing commitments and community infrastructure where this was required. A conclusion we may be able to draw from this is that the delivery of a fully-fledged neighbourhood with all such community components in fact assists the place making and therefore the commercial success.

The case studies show that the longer the time a landowner or developer participate in a high quality development, the more value they will benefit from. If longer-term interests can be encouraged, we can expect to see more landowners and developers nurturing successful communities. This benefits householders as they are investing into a scheme that preserves and enhances their investment over time. This benefit is shared with the mortgage company whose security is protected.

The benefit to the scheme of a landowner participating throughout the full extent of the development trajectory is that the crystallisation of land value can be postponed such that the land value is realised on completion (of phases) as opposed to at the award of planning permission. This means that available funds can be deployed on design, infrastructure, mixed use components and stewardship rather than on land acquisition, thereby creating genuine (as opposed to speculative) value in the land before land value realisation to the owner. This has important ramifications to the tax treatment of land value realised as income, which creates a significant disincentive for landowners to participate in development.

Key plan of Middle Farm Quarter, Poundbury's first phase: This represents a diverse, sustainable and employment-generating mix of uses.



KEY PLAN OF MIDDLE FARM QUARTER

7.0
METHODOLOGY

With respect to our analysis of housing value we have conducted market research for each of the developments.

Our analysis draws on the following sources of data:

1. Land Registry price paid data
2. Energy Performance Certificate (EPC) data
3. Market listings matched at address level
4. Building Cost Information Service (BCIS) construction costs

For the above data sets, transaction information has been identified at individual property levels and then aggregated to produce the analysis. The first two sources of data are complementary and allow us to see a richer picture of each market analysed.

Our methodology is further compared with the analysis undertaken by 'The Value of Community' within the Poundbury case study.

Graphs:
We have created graphs for each of the developments. For each of the data sets, we have taken each property at its current address and calculated the £ per sq ft and volume of new build sales and resales. These results have been plotted by quarter, although the volumes illustrated have been annualised.

Market Listings:
We have market listings data to determine the average asking to achieved rate and average time on market for each property.

Geography
For each development, geographies have been defined as 1) the boundary of the development and 2) where applicable, the ONS definition of a benchmark built up area, as illustrated in maps within each case study. Every postcode has been aggregated within these geographies to determine the charts and tables.

Limitations
As noted within the Poundbury methodology comparison, our approach has certain limitations.

The £ per sq ft values are only a representation of value. Where homes are offered at a larger scale than typical, as is the case at Poundbury and Newhall, the £ per sq ft values can be diluted and under-represent the value created in the housing stock.

Floor area data does not exist before the introduction of EPC's in 2007. Resold homes can be matched to earlier sales, but assumptions need to be made where they have not re-sold. There is therefore a high degree of uncertainty in the results of our pre-2007 analysis.

The research has been severely limited by the availability of data. There is a pressing need for Government to regulate so that better and richer data is captured when properties transact and are constructed so as to provide a more transparent basis for policy and market analyses.

8.0
FAIRFORD LEYS AYLESBURY

Fairford Leys illustrates housebuilders that believed following a high quality agenda would erode profitability, but the sales premium they had ignored in fact offsets higher costs.

8.1 CONTEXT

Fairford Leys is located to the west of Aylesbury within the jurisdiction of Aylesbury Vale District Council. Fairford Leys is a completed urban extension of approximately 2,500 homes. The area has its own village centre hosting a number of traditionally fronted shops, a village supermarket, public house, private health club, three restaurants, a nursery, an ecumenical church and community centre.

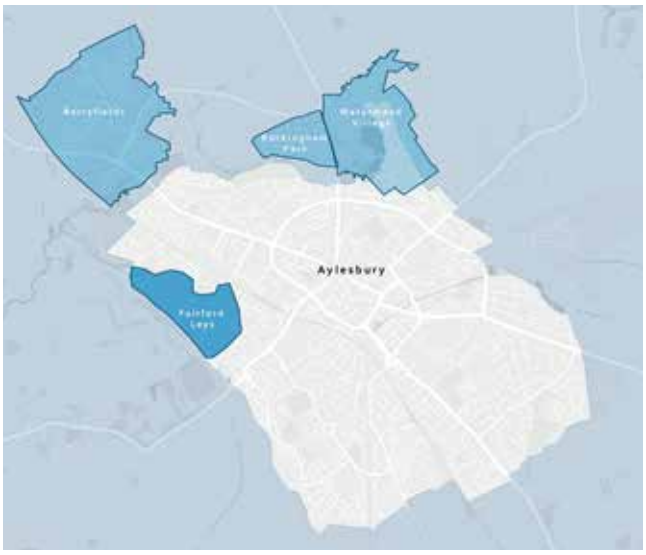
The mean house price across Aylesbury Vale is £375,100 and is 2% below the average price for the South East. Since 2015 to 2018, new homes have represented 22% of the transactional market. The ratio of median house price to median gross annual (where available) workplace-based earnings is 11.2 (compared with 10.4 across the South East).

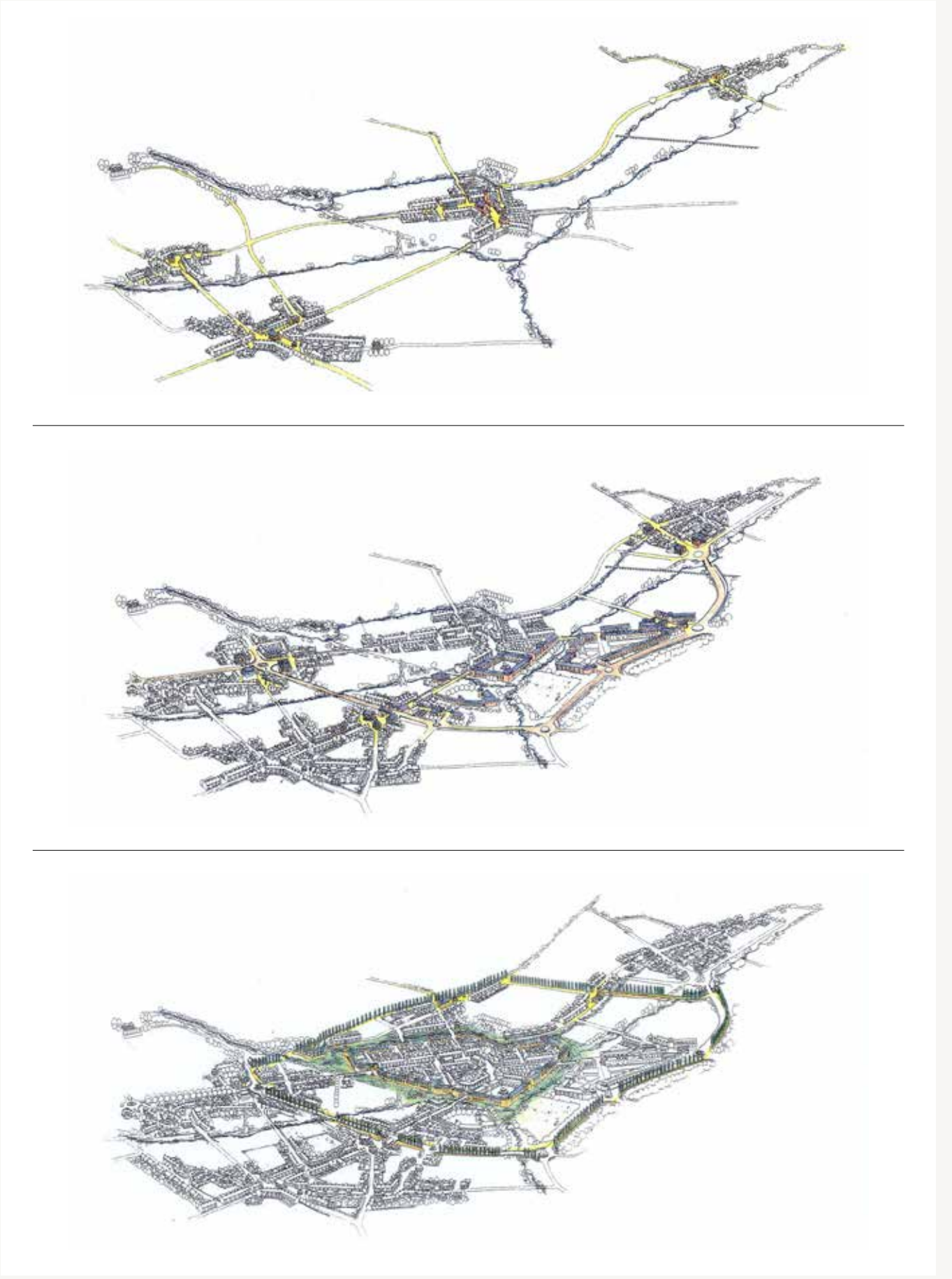
Fairford Leys was built on land owned by The Ernest Cook Trust, which in 1992 set an overarching objective: "To establish high standards of design which might be followed by the housing industry when involved in the development of other 'new villages' within the United Kingdom and realise a proper value from the land released for such development purposes".

John Simpson & Partners was appointed in 1987 to prepare a masterplan firstly to ensure that a consistent development strategy ran through the various stages of the site and secondly to satisfy the Ernest Cook Trust's desire to create "a new place that has coherent identity, character and sense of community, and is not just another collection of anonymous housing estates".

John Simpson was the author of the outline planning application submitted in 1988 and achieved permission in 1990. A conditional Development Agreement was entered into between the Trust and a consortium of housebuilders in 1993, which became unconditional in 1996. The consortium included Wimpey Homes Holdings Ltd, Bryant Homes (Southern) Ltd, Taywood Homes Ltd and Admiral Homes Ltd. The first house was built and sold in 1997 and the last house was registered as sold in 2008.

We summarise the project in the fact file overleaf.





Fairford Leys masterplan by John Simpson Architects

8.2 FACT FILE

	PROJECT NAME	FAIRFORD LEYS
LOCATION	Address	Hampden Square, Aylesbury
	Postcode	HP19 7HF
	Local Authority	Aylesbury Vale District Council Coldharbour Parish Council
	County Council	Buckinghamshire County Council
STAKEHOLDERS	Landowner	Ernest Cook Trust
	Developers	Wimpey Homes, Bryant Homes, Taylor Woodrow and Admiral Homes
PLANNING	Planning reference (OPP)	18/00005/APP
	Design code or controls	Detailed masterplan
DEVELOPMENT	Number of homes	2,100
	Tenure mix	No requirement for affordable housing
	Average size	792 sq ft
	Mix of uses	Commercial (279,115 sq ft) = B1, B2, B8, built on AVDC's land to the north Retail, D1, D2 and 'other' = church, community facilities, A1, A2, A3
CONSTRUCTION	Construction method	Traditional
	Construction start	1997
	Construction finish	2007
	Project timescales	10 years
	Cost premium (est)	22% – 30%
PROFESSIONAL TEAM	Masterplanning architect	John Simpson & Partners
	Urban designer	John Simpson & Partners
	Architect	Barton Wilmore Partnership
SALES	Marketing launch	1997
	Sales completion	2008
	Absorption rate	10.5 per month
	Current day sales value (est)	£360 per sq ft
	Sales value premium (est)	14.5%

8.3 SALES ANALYSIS – FAIRFORD LEYS VS AYLESBURY

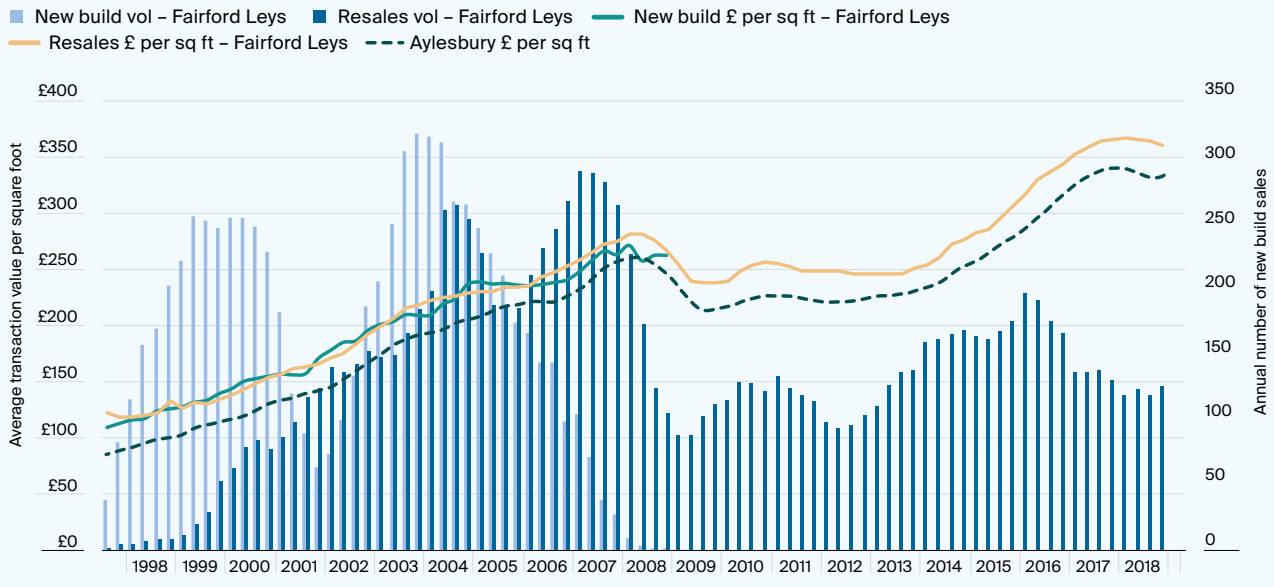
We have examined the sales transactions across Fairford Leys, which occurred between 1997 and 2008 and compared this with benchmark schemes: Aylesbury as a whole (excluding Fairford Leys) and a benchmark formed of typical housebuilder developments at Watermead Village, Buckingham Park and Berryfields (see map extract). It should be noted that these four developments have occurred in different economic climates with minimal overlap in 2007/8.

In 2018, residential homes across Fairford Leys achieved an average of 96.3% of their asking price, and were on the market for an average time of 9 weeks. In comparison to Aylesbury (BUA), the same metrics were 95.7% and 10 weeks respectively. Therefore, homes within this development were sold at a smaller discount and are quicker to sell than the overall Aylesbury area.

Through analysis of the Land Registry price paid data and EPC data set, it is evident that Fairford Leys has consistently generated a value premium over Aylesbury. The new build and resale values at Fairford Leys track each other during the build-out of the scheme (1997 to 2008) and thereafter the resale values maintain the premium until the current day. Importantly, this suggests that the value premium created through the landowner's quality agenda is established immediately and then held by the community in the value of its housing over the longer-term. It also means that the resale values are an appropriate long-term measure of pricing at Fairford Leys.

"The sales premium is evidenced from the outset and maintained over the long-term within resales values."

New build, resales volumes, new build values and resales values across Fairford Leys



Source: Knight Frank

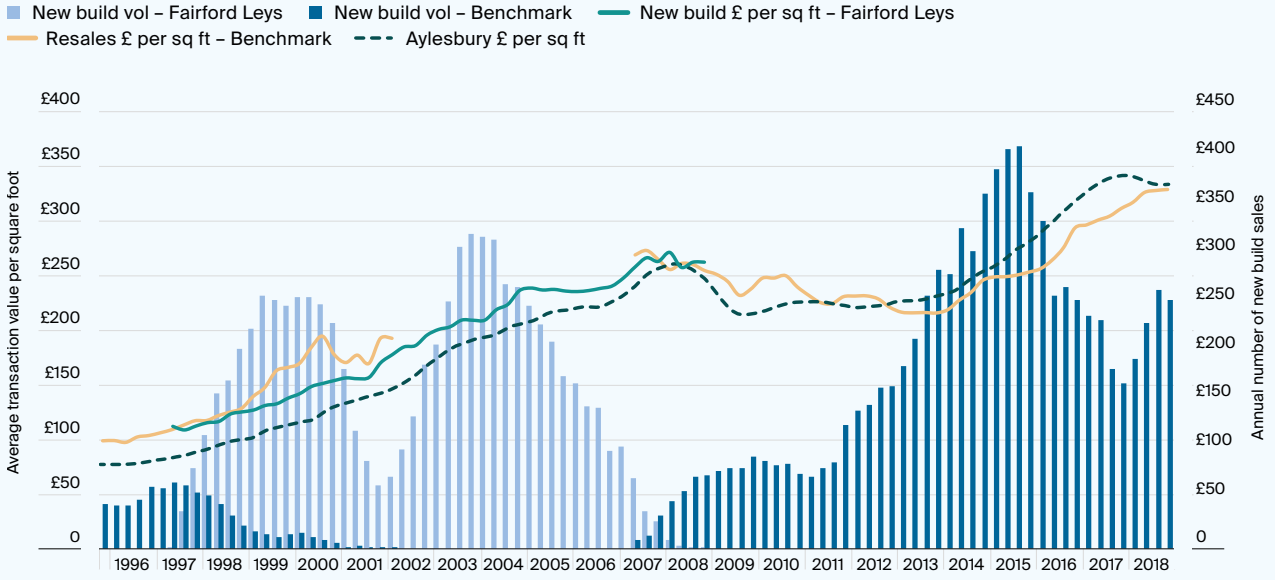
8.4 SALES ANALYSIS – FAIRFORD LEYS VS BENCHMARK SCHEMES

The benchmark schemes (Watermead Village, Buckingham Park and Berryfields) have been aggregated and their transaction volumes and £ per sq ft plotted on the following chart. This illustrates that between 2007 and 2018 the benchmark schemes more closely track the wider Aylesbury market, without justifying the consistent pricing premium witnessed at Fairford Leys. There are periods when the benchmark schemes exceed Aylesbury, but others where they are at a discount to Aylesbury. It must be noted that one of the benchmark scheme (examined later) existed pre 2000 and was achieving a premium against Aylesbury.

In the below chart it can be seen that an initial price premium enjoyed by the benchmark schemes in the period 2007 to 2011 is eroded over time. This may suggest that new build homes that do not enjoy the stewardship of a landowner suffer an erosion of value over time. However, this may also be explained by a changing mix between the benchmark schemes with one generating a premium where others do not. To better assess this trend, we have split out the three benchmark schemes in the following chart.

"Between 2007 and 2018 the benchmark schemes more closely track the wider Aylesbury market, without justifying the consisted pricing premium witnessed at Fairford Leys."

Sales volumes and new build values in Fairford Leys, benchmark schemes compared to Aylesbury



Source: Knight Frank

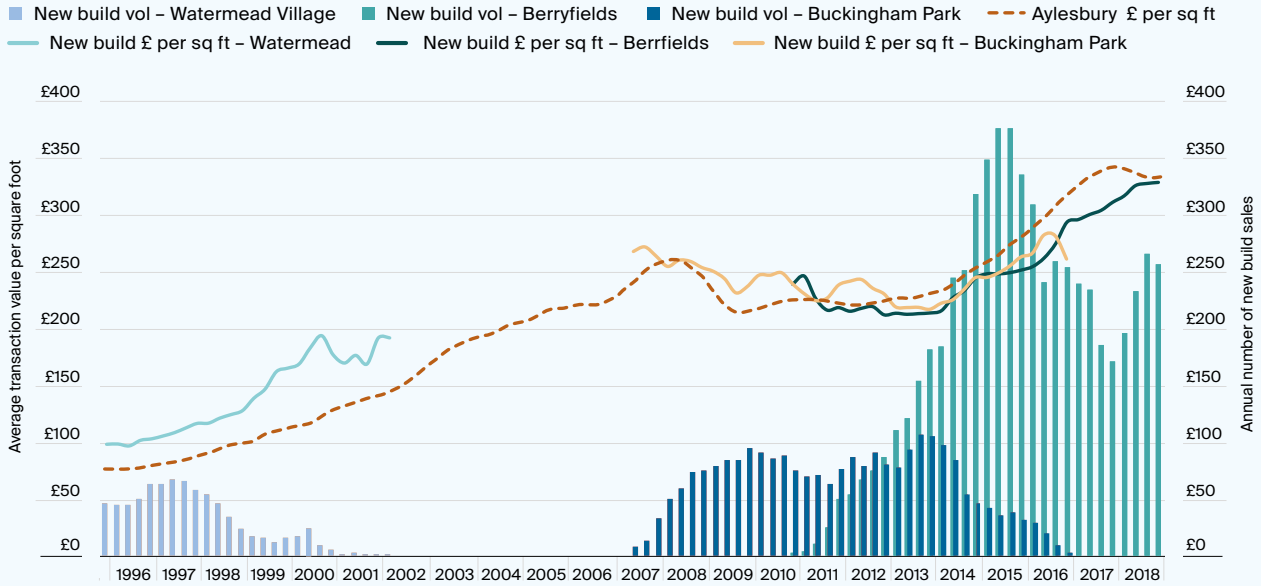
8.5 UNDERSTANDING THE THREE BENCHMARK SCHEMES

The chart below splits out the three benchmark schemes. Watermead Village was selling new build homes until 2001, Buckingham Park between 2007 and 2016 and Berryfields from 2011 to the present day. Watermead Village achieved a significant premium reflecting a better quality development, whilst pricing at Buckingham Park and Berryfields were more closely correlated to each other and to the wider Aylesbury market. The fact that Buckingham Park and Berryfields are more representative of typical housebuilder developments whilst being closely correlated to the wider Aylesbury market, suggests that it is appropriate to use Aylesbury as a longer-term benchmark for typical housebuilder pricing.

Our view that the wider Aylesbury market is an appropriate long-term benchmark for Fairford Leys is further endorsed when we see that the average floor areas are so similar. It is also better to use a benchmark where sample sizes are larger, and to that end Aylesbury benefits from over 32,200 matched records in the period between 1997 and 2018.

FOR PERIOD (1997 - 2018)	AYLESBURY	FAIRFORD LEYS	
		NEW HOMES	RESALES
Total sales	£5,264,037,258	£285,267,448	£606,342,906
Total floor area	25,824,436	1,527,005	2,365,881
Average floor area	802	792	771
Sales volume (matched)	32,204	1,929	3,067

Sales volumes and new build values across the benchmark schemes compared to Aylesbury



Source: Knight Frank

8.6 QUANTIFYING THE PRICE PREMIUM

In order to quantify the premium associated with Fairford Leys, we have compared the values at Fairford Leys each year from 1997 to present with average Aylesbury values. To date, this concludes an average resales premium of 10% and an average new-build premium of 14.5% when weighted by the quantum of sales in each period.

Given that a development project only realises the value premium in the first sale we have highlighted the new-build premium as the principal measure used for Fairford Leys.

COMPARISON (PERIOD 1997 TO 2018)	ARITHMETIC AVERAGE PREMIUM	WEIGHTED AVERAGE PREMIUM
Fairford Leys resales vs. Aylesbury	12.8%	10.0%
Fairford Leys new-build vs. Aylesbury	14.4%	14.5%

8.7 QUANTIFYING THE COST PREMIUM

Whilst we do not have detailed cost information for Fairford Leys, we have been supplied with evidence that exemplifies the challenges associated with delivering a development seeking to follow a quality agenda. This is relatively rare because of commercial sensitivities, but in the case of Fairford Leys the project has been delivered and the sensitivities have dissipated.

We have been provided with an extract from a report in 1999 in which the then consortium of housebuilders were assessing the cost of the masterplan, by John Simpson & Partners (JS&P), on the land value that could be realised from the development of the second tranche of development. This assessment is illustrated in the chart below.

The assessment by the consortium of housebuilders argues that the JS&P masterplan would reduce the serviced land value per acre from a typical net value of £483,000 to £97,000, representing an 80% reduction in land value. The impact was not simply a function of higher build cost, but also lost floor area and higher infrastructure costs:

Proposed impact of the high quality agenda on land value per acre

Source: Knight Frank

This assessment was supplied by the consortium to persuade the landowner – Ernest Cook Trust – that it was not in its best interests to progress the proposed masterplan, because of the loss of land value that would flow to the landowner.

This assessment shows us that the relationship between cost and value is not as simple as the relationship between the value of private housing and its build cost. We also need to consider the optimal density of development, and the cost of the proposed infrastructure, which are both complex. The consortium justified its assumptions as follows:

- **Site coverage:** The consortium claimed that its architect (Barton Wilmore Partnership) could achieve a comparable quality of masterplan with an improved site coverage, even if it would still be a loss of 11% of floor area from a more typical product. Its concern was that the JS&P masterplan was overly onerous and would lead to a total loss of 19% of the floor area.

- **Build cost:** The consortium's consensus was that the construction cost for a higher quality product would be £60 per sq ft, being 20% ahead of a more normal standardised product. Its concern was that the JS&P masterplan was overly onerous and would lead to a cost premium of 30%.

- **Infrastructure cost:** The consortium's consensus was that the infrastructure cost for a good quality masterplan might be 50% higher than normal. However, its concern was that the JS&P masterplan was unnecessarily onerous and would lead to an infrastructure cost premium of 100%.

The consortium's assessment demonstrates the complexity of considerations, but it also makes no mention of a value premium. The consortium did not believe the masterplan would generate a value premium in return for the additional investment. This issue lies at the heart of why this research report was commissioned: if the evidence shows that a value premium can be justified perhaps housebuilders will more readily adopt a quality agenda.

We now have the benefit of hindsight at Fairford Leys and can replay the consortium's assessment with the benefit of what we know.

- **Sales premium:** In 1999 the data suggests the average sale achieved was close to the consortium's judgement of £127 per sq ft. The consortium was referencing the premium in its analysis but had not attributed this premium to the additional costs, instead relating the premium price to a normal build cost. To replay this analysis we need to rebase the 'normal' scenario to the average value in Aylesbury in 1999 and amend an adjusted scenario to reflect the 14.5% premium at Fairford Leys.

- **Site coverage:** By 2002, the overall coverage had improved to 11,600 sq ft per acre – still down on what the house builders were achieving elsewhere – but better than the consortium had expected at Fairford Leys. There is some debate whether lower density is always better, and whilst the debate should be specific to a masterplan, we generally advocate gentle densities achieved in mixed-use places. For this reason, and to isolate the comparison between cost and value, we have assumed that the site coverage equates to a perceived 'normal' density.

- **Build cost:** One of the housebuilders within the consortium provided evidence that, whilst it did not follow the masterplan in every detail in Tranche 1, it had build costs of £61 per sq ft, being a 22% cost premium over its 'normal' housing cost. We have re-run the analysis on the basis that build costs rose by 30% to £65 per sq ft as suggested.

- **Infrastructure costs:** These remained high given the elaborate wooden bridges for pedestrians over the riverine corridors and large road bridges over small ditches. Aylesbury Vale and Buckinghamshire County Council recognised the additional infrastructure cost and mitigated the impact by taking over the maintenance of the riverine corridors and the playing fields at no cost. They also adopted the roads on completion as opposed to 12 months post-completion, and agreed to a phased delivery of the infrastructure to ease the cashflow. This mitigation strategy was agreed in return for an overage on land receipts and helped offset the impact of the higher infrastructure costs.

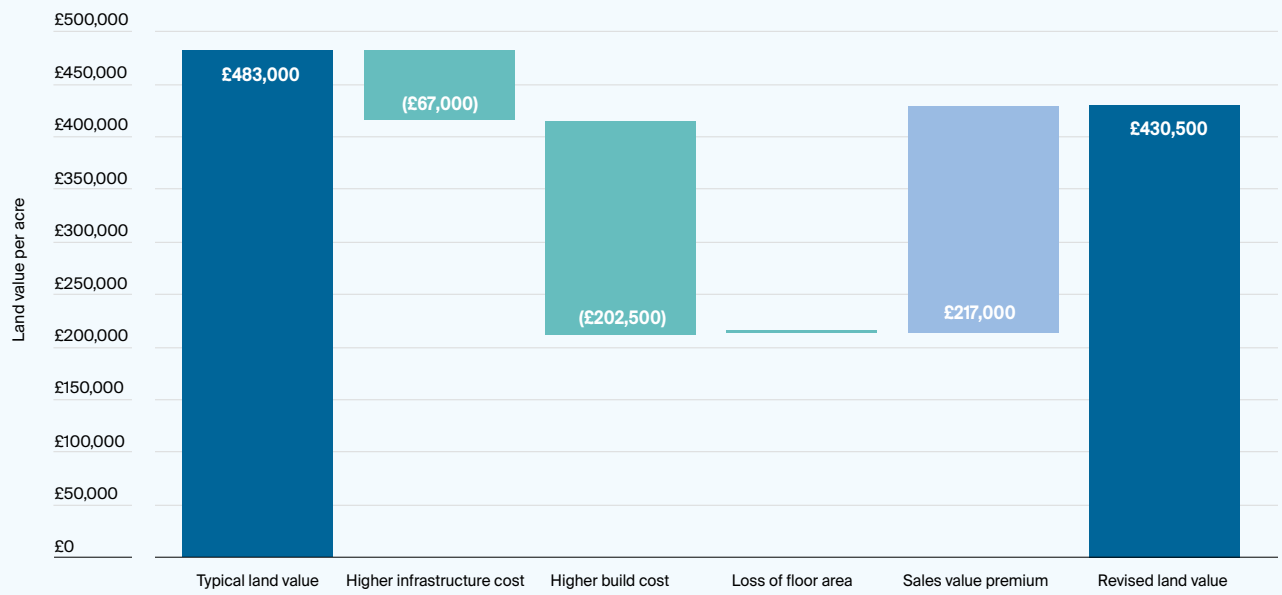
The net effect of these changes to the consortium's assessment in 1999 shows that, once the sales value premium has been taken into account, the higher revenues could offset the higher build costs. That said, the analysis suggests that the higher infrastructure costs associated with the JS&P masterplan could reduce the land value below the level considered typical for the area at the time. This has implications for infrastructure funding that we will consider elsewhere in this report.

APPENDIX I

FAIRFORD LEYS, AYLESBURY.
NET LAND VALUE

1. SITE COVERAGE	NORM	T2 BWP	T2 JS&P
Site Coverage/Acre	13,500 sq. ft.	12,000 sq. ft	11,000 sq. ft.
Loss of Site Coverage/Acre	-	1,500 sq. ft	2,500 sq. ft.
Sale Price £127 psf x Loss	-	£190,000	£317,000
Less Saving on Build Cost @ cost psf	-	(£ 90,000)	(£152,500)
NET COST OF LOST SITE COVERAGE	0	£ 100,000	£155,000
2. BUILD COST			
Build Cost psf	£50	£60	£65
Increase in Build Cost psf	-	£10	£15
INCREASE IN BUILD COST	£ 0	£120,000	£165,000
3. INFRASTRUCTURE COST			
£4.5m total for T2 say £2m for first 30 acres £6.6m total for T2 say £3m for first 30 acres £ 8.85m total for T2 say £4m for first 30 acres	£66,000	£100,000	£133,000
4. CURRENT LAND VALUES per Acre	£550,000	£550,000	£550,000
Less Infrastructure Cost	(£33,000)	(£100,000)	(£133,000)
Less Build Cost	-	(£120,000)	(£165,000)
Less Coverage Effect	-	(£100,000)	(£155,000)
TOTAL LAND VALUE PER ACRE	£417,000	£ 230,000	£ 97,000

Actual impact of the high quality agenda on land value per acre



Source: Knight Frank

8.8. CONCLUSIONS

The case study of Fairford Leys justifies a value premium of 14.5% versus the surrounding Aylesbury market. This value premium is shown to be sufficient to cover a 30% increase in the build cost, but may not be enough to offset higher infrastructure costs associated with the masterplan.

The evidence put forward by the consortium of housebuilders made the case to the landowner that it should stop following a high quality agenda because the proposed would erode land value. The evidence explained that the masterplan and design ambitions were reducing their saleable floor area, increasing their build costs and infrastructure costs such that the amount left to share with the landowner would fall by 80%. Only with the benefit of hindsight can our research now show that the value premium generated from following a quality agenda may have offset the additional build costs involved.

Whilst questions remain over the impact of the higher infrastructure cost and the appropriateness of masterplan densities, the most telling aspect of this case study was that the consortium never considered the potential benefit of a sales premium. In our information gathering, one of the reasons suggested why the sales premium was ignored was because of the timeframe for development. Over a timeframe for building a typical development parcel, the housebuilder has greater certainty that it can enhance profits by cutting costs than it can by adding value.

"Contrary to the housebuilders' expectations, Fairford Leys shows a new-build value premium of 14.5% which is sufficient to cover a 30% increase in build costs."

9.0
POUNDBURY DORCHESTER

Poundbury illustrates how stewardship of a development can lead to sustainable growth and add value to all stakeholders. This offers us a definition of 'good growth': supporting and sustaining communities whilst offering an opportunity for landowners to participate in value creation over the long-term.

9.1 CONTEXT

Poundbury is located to the west of Dorchester within the jurisdiction of West Dorchester District Council. When finished Poundbury is expected to comprise 2,727 homes across 94 hectares (233 acres). In February 2019, approximately 1,790 units were completed with a population of approximately 3,830. Poundbury is under construction and is expected to be completed by 2026 when its population is expected to be approaching 5,800.

The broad age distribution of the Poundbury population is in line with that of the Dorset area as a whole, with about a quarter being aged 65+ years and just under three-fifths aged 16-64 years.

The development is built on land owned by the Duchy of Cornwall, which in 1988 appointed the architect and urban planner, Leon Krier, to prepare the overall development concept within the line of the Dorchester Bypass. Construction began in October 1993 and the first homes sold in 1995.

Poundbury seeks to create a high-density urban quarter which achieves an attractive and modern place in which people can live, work, shop and play. Emphasis is placed on the quality of design and materials with an unashamedly traditional architecture. Often seen as a demonstration project following the Prince of Wales's television programme and book, A Vision of Britain, Poundbury shows that it is possible to build high-quality, traditional housing and provide new factories and offices within the context of radically different urban design.

The Duchy of Cornwall has adopted the role of master developer and has welcomed developers who are prepared to deliver to Poundbury's Design and Community Code. Developers at Poundbury have included C.G. Fry & Son, Zero C, and Morrish Builders. The proportion of affordable homes, which has been integrated throughout the development, has been steadily increasing from 22% in Phase 1, and 35% thereafter to achieve 28% overall.

We summarise the project in the fact file overleaf.

Affordable housing at Poundbury

9.2 FACT FILE

	PROJECT NAME	POUNDBURY, DORSET
LOCATION	Address	Poundbury
	Postcode	DT1 3
	Local Authority	West Dorset District Council
	County Council	Dorset County Council
STAKEHOLDERS	Landowner	Duchy of Cornwall
	Developers	Morrish Builders, Zero C, C.G. Fry & Son
PLANNING	Planning reference (OPP)	1/D/09/001363
	Design code	Poundbury Design and Community Code 2019
DEVELOPMENT	Number of homes	2,727
	Tenure mix	35% affordable (20% Phase 1)
	Average size	1,187 sq ft
	Mix of uses	Diverse mix of uses including education, retail, office, factories, workshops, restaurants, public houses, market, hotel, community hall, clinics and spa
CONSTRUCTION	Construction method	Traditional
	Construction start	Phase 1 – October 1993 Phase 2 – 2000
	Construction finish	Phase 1 – 1996 Phase 2 – 2010 Phase 3 & 4 – ongoing (2026 projected)
	Cost premium (est)	18%
	Project timescales	32 years
ARCHITECTS	Masterplanning architect	Leon Krier
	Coordinating architect	Ben Pentreath, George Saumarez Smith
	Architects	Ken Morgan, Graham Saunders, Clive Hawkins, David Wren, Peterjohn Smyth, Neil Embleton, Willie Harbinson, Giles Downes, Trevor Harris, Liam O'Conner, David Oliver, Philip Storey, Andy Kunz, Charles Morris, James Gorst, Peregrine Bryant
SALES	Marketing launch	1995
	Sales completion	Ongoing
	Absorption rate	7.1 per month
	Current day sales value (est)	£329 per sq ft
	Sales value premium (est)	7.3% £psf / 55% GDV

9.3. SALES ANALYSIS – POUNDBURY VS DORCHESTER

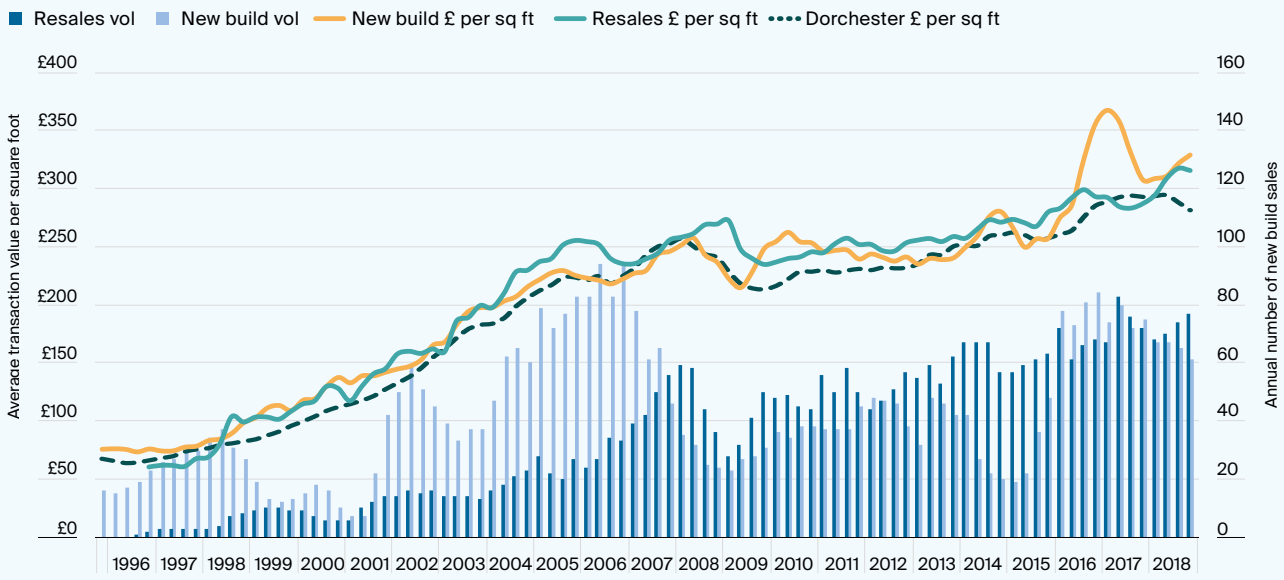
We have examined the sales transactions data across Poundbury which occurred between 1995 to 2018 and compared this with the town of Dorchester. There have been no significant volume housebuilder developments to compare Poundbury with, so Dorchester is the most relevant benchmark.

Through analysis of the Land Registry price paid data and EPC data set, it is evident that Poundbury has consistently achieved a pricing premium over and above Dorchester, although there are periods when this has not been the case. The new build and resale values at Poundbury broadly track each other with differences caused by a changing mix and style of units sold within each phase. Overall, the percentage differences between new build and resale pricing at Poundbury average out to less than 1%. The resale values maintain the premium until the current day suggesting that the value premium created through the landowner's quality agenda is held by the community in the value of its housing over the longer-term.

It is also notable that Poundbury has a philosophy of producing housing that is generous in size and often in excess of national size standards. Overall, Poundbury's housing has an average size of 1,187 sq ft, whereas Dorchester's (excluding Poundbury) housing has an average floor area of 913 sq ft. Larger homes tend to have lower values per sq ft, particularly in price sensitive areas. Perhaps the premium would have been higher if Poundbury more closely matched national size standards? Before we address this, we have quantified the premium by comparing the average price when expressed as £ per sq ft.

"The value premium created through the landowner's quality agenda is held by the community in the value of its housing over the longer-term."

Sales volumes and new build values in Poundbury compared to Dorchester



Source: Knight Frank

9.4. QUANTIFYING THE VALUE PREMIUM

In order to quantify the premium associated with Poundbury, we have compared the values at Poundbury each year from 1995 to present with average Dorchester values. To date, this concludes an average resales premium of 6.4% and an average new-build premium of 7.3% when weighted by the quantum of sales in each period.

Given that a development project only realises the value premium in the first sale we have highlighted the new-build premium as the principal measure used for Poundbury.

7.3%

The weighted average premium per square foot achieved by Poundbury when compared to Dorchester

COMPARISON (PERIOD 1995 TO 2018)	ARITHMETIC AVERAGE PREMIUM	WEIGHTED AVERAGE PREMIUM
Poundbury resales vs Dorchester	6.8%	6.4%
Poundbury new-build vs Dorchester	**8.3%**	**7.3%**

9.5. ASSESSING THE IMPACT OF DWELLING SIZE

Of the data analysed, Poundbury sales have an average floor area of 1,187 sq ft, approximately 30% larger than the average in Dorchester. This differential means we are not comparing like-for-like and the suggestion is that larger units on average derive a lower value when expressed on a £ per sq ft basis, even if the total capital values may be higher.

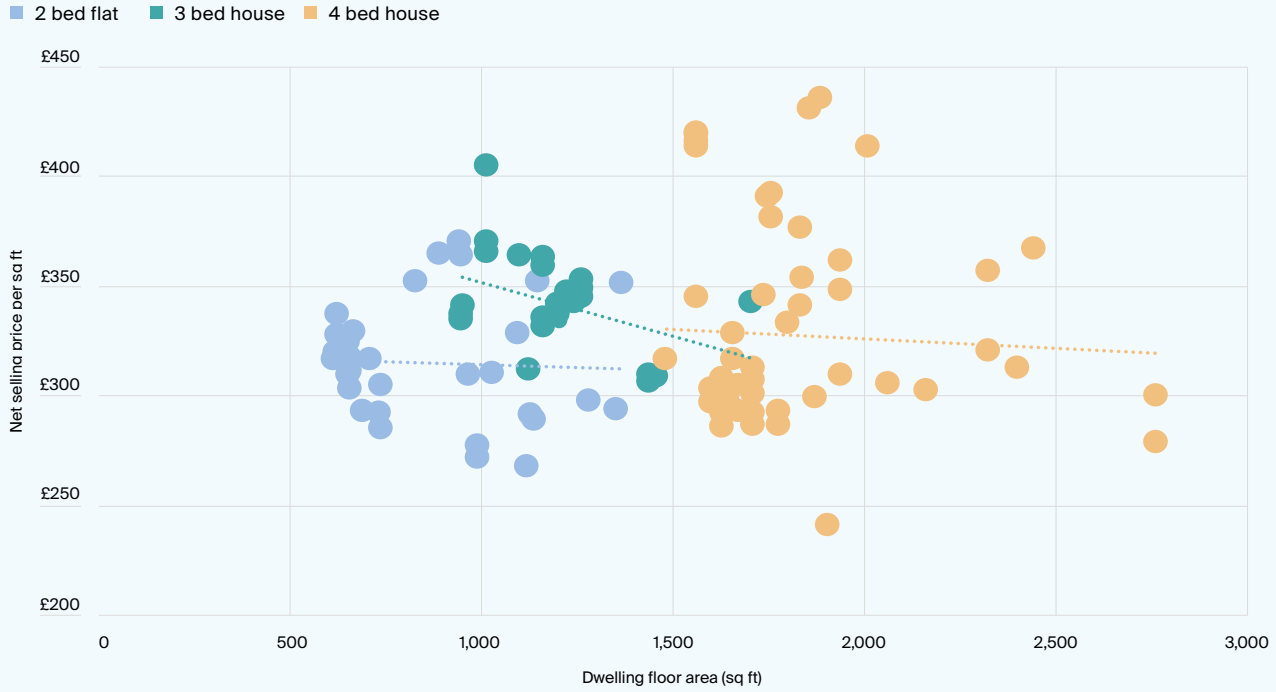
In order to analyse the impact of size on £ per sq ft, we need to analyse sales of different sized dwellings that are similar in nature. Within Poundbury there are many typologies reflecting the bespoke nature of the housing but which makes analysing trends more challenging.

Using proprietary data supplied by the landowner, we have analysed the sales of the most common dwelling types achieved in 2019 at Poundbury. The resulting chart overleaf suggests that any dilution of price per square foot is minimal. In our experience this is an unusual but positive outcome. Ordinarily, additional floor area is considered less valuable; however, in some markets where demand for a particular housing product is strong, pricing can be sustained for larger dwellings. The trend is therefore indicative of a desirable housing product but it does not support the notion that the Poundbury '£ per sq ft' should be higher than the data suggests.

The sales data from 2019 suggests that an average size home of 1,319 sq ft (44% higher than Dorchester), was sold for an average price of £433,000, equivalent to £328 per sq ft.

FOR PERIOD (1995 TO 2018)	DORCHESTER	POUNDBURY	
		NEW HOMES	RESALES
Total sales	£1,546,205,974	£273,692,934	£237,876,250
Total floor area	8,132,447	1,196,864	931,962
Average floor area	913	1,187	1,135
Sales volume (matched	8,905	1,008	821

Poundbury completions (selected typologies) in 2019



Source: Knight Frank

The fact that Poundbury's '£ per sq ft' sustains pricing for larger homes enables it to deliver more value within a given plot of land. This should be reflected by assessing all the private housing value that might be contained within a given land area.

In order to create a fair comparison we have made consistent assumptions for density and affordable housing across Poundbury and Dorchester and used assumptions relating to 2019. This concludes an indicative residential Gross Development Value (GDV) that is 55% higher at Poundbury because of a combination of 44% larger floor areas and a 7.3% £ per sq ft premium.

55%

The value premium for a parcel of land at Poundbury when compared to Dorchester

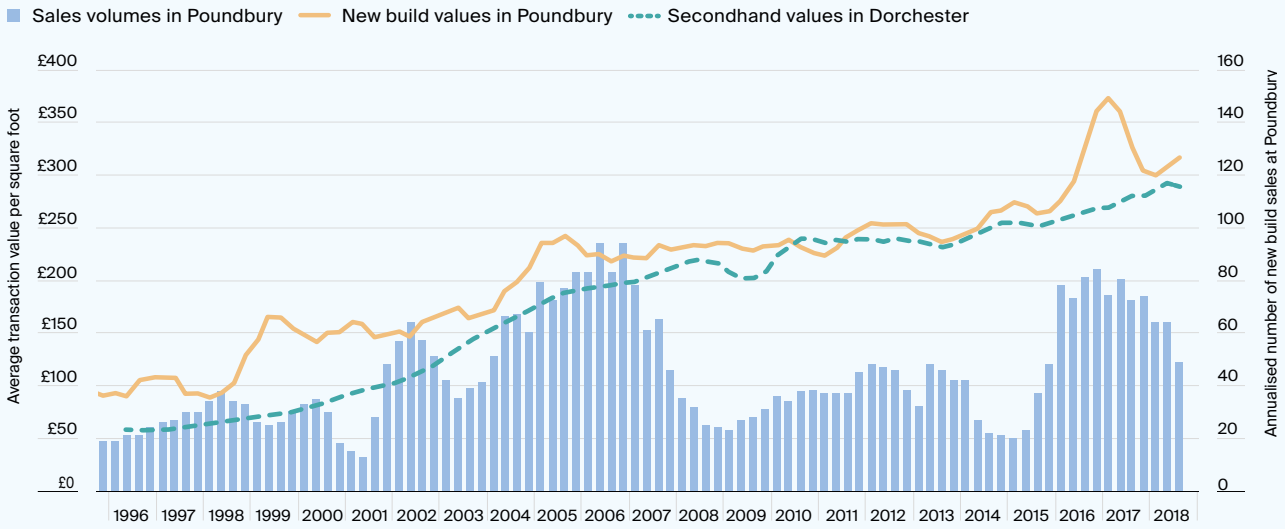
	DORCHESTER	POUNDBURY	%
Density (DPH)	35	35	-
Proportion of private homes	65%	65%	-
Average floor area	913	1,319	44%
Average price (£ per sq ft)	£306	£328	7.3%
Private residential GDV per ha	£6,353,000	£9,842,000	55%

9.6 METHODOLOGY REVIEW

Data relating to Poundbury has recently been studied in a SAVILLS report published last year called "The Value of Community: An Evidence Informed Development Model". It analysed the same data sets and produced a similar graph, compared below. The report concluded that "New homes in Poundbury have achieved an average per square foot premium of 27% since 1996 and 8% since 2008 above the Dorchester second hand market.

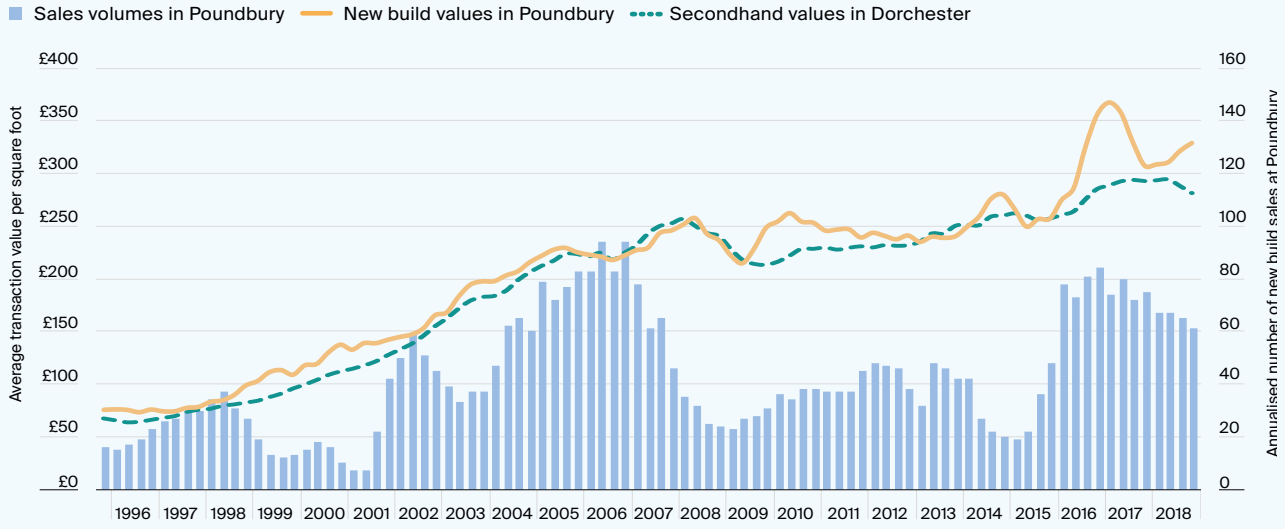
The results are evidently similar but do contain differences. The transaction volumes are identical but the values per sq ft are not. The analysis since 2008 compares closely with the Knight Frank analysis showing an average premium of 7.3% versus The Value of Community's conclusion of 8%. The difference in the analysis occurs in the earlier data. Between 1995 and 2007, the Knight Frank analysis suggests an premium of 10% versus The Value of Community's conclusion of approximately 45% (producing an overall premium of 27%).

Sales volumes and new build values in Poundbury compared to Dorchester
Analysis from The Value of Community



Source: The Value of Community, September 2019, UCEM and Savills

Sales volumes and new build values in Poundbury compared to Dorchester
Analysis by Knight Frank



Source: Knight Frank

9.6 METHODOLOGY REVIEW (CONT.)

Both reports have analysed the same datasets and any disparity in conclusions is explained by differences in methodologies.

Both methodologies match floor areas taken from Energy Performance Certificates (EPC), which were introduced in England and Wales in August 2007, with Land Registry sales data. Both went through a process of excluding outliers. Knight Frank did this by excluding transactions outside of a 2% to 98% spread. The Value of Community undertook a manual process that is likely to have excluded similar outliers, but with some small differences.

The significant difference appears to be in the methodologies before August 2017, before EPC data was available:

- Knight Frank matched all EPC data to pre-EPC sales according to their UDPRN (a unique identifier for every address in the United Kingdom). This may not be accurate where extensions are common, but extensions are controlled in Poundbury.
- Where homes had been sold before August 2007 but had not re-sold since, there will be no EPC data available. In these instances Knight Frank applied average floor areas for each unit type recorded (Detached: 1,514 sq ft, Semi-detached: 1,369 sq ft, Terraced: 1,268 sq ft, Flat: 827 sq ft).
- In contrast, The Value of Community matched pre-EPC sales according to their UDPRN in the same way, but where there was no match the transaction was excluded. This means that any house sold before August 2007 that has not been re-sold has been excluded from the analysis. Also, with respect to Dorchester, the report formed an index based on average capital values and extrapolated backwards before August 2007.

Neither approach can be considered completely accurate as both rely on the averaging effect of data. If floor areas of a given typology change over time the Knight Frank methodology before August 2007 will be inaccurate. If some typologies are more or less likely to have been sold after August 2007, or if the mix of units sold within Dorchester changes over time, the Value of Community methodology before August 2007 will be inaccurate. Intuitively we believe the premium is likely to be relatively consistent over time and it is therefore encouraging that the concluded premium since 2008 of 7.4% is similar to the total project premium of 7.3%.

The methodology comparison highlights that Land Registry data from before August 2007 is less useful in the absence of EPC data. This contributes to a wider recommendation in terms of the richness of publicly available data. For example, data could be collated on number of bedrooms, number of floors, a condition assessment and the date of exchange (as well as completion). Data could also be collated on land transactions and all rental agreements.

For the purposes of this study we recommend more weight is given to trends arising in data after 2008. With respect to Poundbury, it is encouraging that there is consistency in the premium identified since 2008 in the The Value of Community report and this report.

"Analysing value has become more accurate since EPC data began in 2007."

9.7 QUANTIFYING THE COST PREMIUM

Using BCIS costs weighted for a Dorset location and making adjustments for external costs (10%), professional fees (8%) and contingency (5%), we estimate that typical 'all-in' housing build costs are £157 per sq ft. 'External works' include site preparation works, roads and surfaces, landscaping, fencing, drainage and utilities.

The equivalent 'all-in' costs for a current phase at Poundbury are approximately £185 per sq ft, representing an 18% cost premium. However, this cost will inevitably vary between phases, and we understand that costs have ranged between £145 per sq ft and £185 per sq ft. It is therefore reasonable to expect that costs at Poundbury are no more than 18% higher than typical housing developments.

More analysis is required to accurately compare like-for-like construction costs and if they vary depending on the nature of the housebuilder. For example, feedback at Poundbury suggests that volume housebuilders might be more expensive than small or medium-sized housebuilders when building bespoke high quality housing.

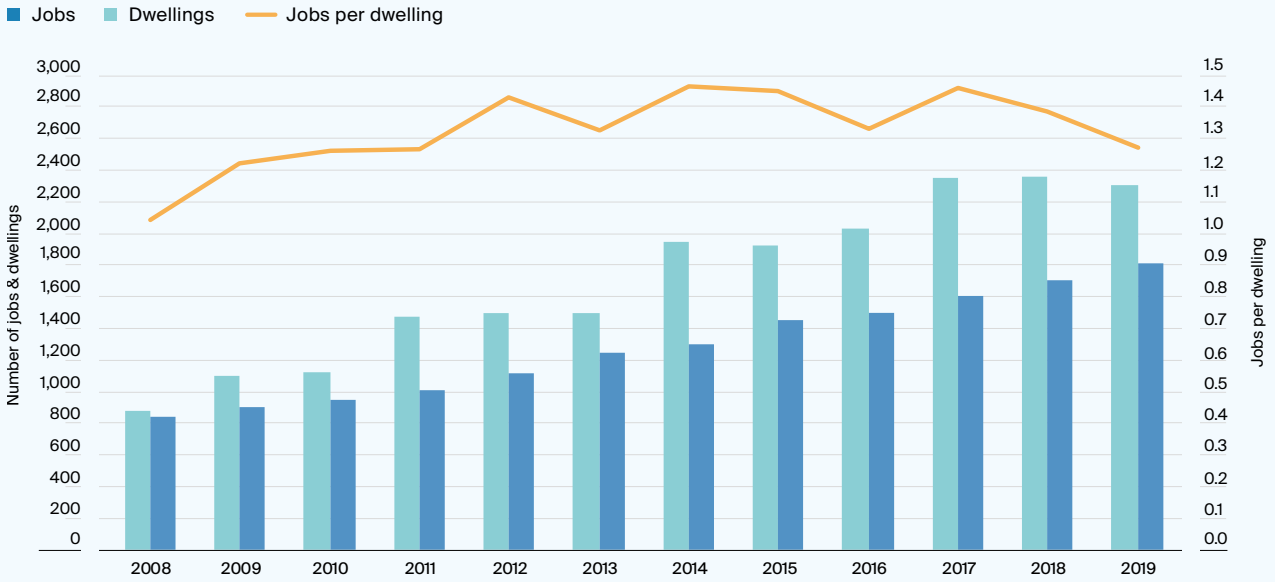
"By comparison to the anticipated sales premium of 55%, the build cost premium of 18% appears more than justified."

It is also important to note that there are other elements of value to the landowner, such as the rents received from commercial units that might be less successful in a poorly planned community. There is also value to the community to consider. The community benefits if house value is maintained over the longer-term and has lower maintenance costs from the use of materials that last. The community also benefits from thriving commerce, both in terms of retail amenity but also local employment. We consider the value in these elements overleaf.

9.8 VALUE BEYOND HOUSING

Poundbury has had a significant impact on its community beyond the quality of its housing. In contrast to many new developments, employment has been encouraged and fostered. The June 2019 Poundbury Factsheet tells us that 207 businesses employ 2,306 people, as illustrated in the graph below. Given that 1,789 homes had been built at February 2019, we estimate that for every new home built 1.3 permanent jobs have been created.

Employment and housing delivered at Poundbury



Source: Knight Frank

The recent dip in employment reflects the success of Dorset Cereals which has now moved to a larger facility in Poole. Associated British Foods plc holds the long lease and is now seeking an assignment.

In June 2018, Dorset County Council undertook an Economic Impact Assessment of Poundbury and estimated that on a permanent basis Poundbury will have added approximately £105 million per annum to the local economy. From data obtained from the Valuation Office Agency, we estimate that Rateable Value of Poundbury in 2017 was £5.17 million. This offers the landowner a significant long-term income beyond the value of housing.

In terms of social impact, this development has offered the opportunity for many residents to improve their quality of life in a walkable neighbourhood with access to a broad range of leisure amenities and countryside and with potential opportunities for employment. In addition, residents benefit from a range of planning gain items supplementary to any provided through Section 106 payments, such as playing fields and social infrastructure improvements from a range of medical facilities to a new primary school, community hall and church. Poundbury integrates 150 acres of green open space including the Great Field, an area of 30 acres incorporating significant tree planting, wildflower meadows, an adventure playground for children, all available to residents of Poundbury and Dorchester.

"In addition, the implementation of an anaerobic digester generates a renewable supply of bio-methane gas to heat approximately 7,250 homes in the winter and approximately 80,600 homes during summer months.

1.3

The number of jobs created for every house built

% TRAVEL TO WORK METHOD	2003	2013	%
Car, van or motorcycle	**68%**	**52%**	**-25%**
On foot	14%	22%	+64%
Bicycle	2%	6%	+190%
Public transport	2%	7%	+267%
Work from home	6%	10%	+70%
Sustainable methods	**23%**	**44%**	**+91%**
Other	9%	4%	-49%
Total	**100%**	**100%**	

Source: Butina Watson & Smith, January 2014, 'Learning from Poundbury 2'

9.8 VALUE BEYOND HOUSING (CONT.)

Potentially negative environmental impacts at Poundbury have been partially mitigated by way of a focus on benefits such as walkability and the installation of high level insulation in properties. The masterplan has been designed in a way to ensure all residents are sufficiently close to local nodes that they will elect to walk as opposed to drive. Travel to work is less easy to influence, but the growing amount of employment within Poundbury has had a significant impact on the methods of transport used. A study undertaken in 2013 showed that 44% of respondents were using sustainable methods to travel to work, a 91% increase on the decade before.

The success of employment in Poundbury is even more impressive when considering its location more than 40 miles from the nearest motorways at Southampton or Taunton. This shows us that employment can be stimulated in unlikely locations, but that it takes time, space and the long-term commitment of a landowner. As part of this research we have not been able to measure the value held in the landowner's interests beyond housing, but it is evidently considerable and only serves to enhance the returns associated with long-term stewardship.

It is important to recognise that the landowner in question, the Duchy of Cornwall, is a private estate that by act of Parliament is duty-bound to achieve best value just as any public sector body is. If there is a difference in attitude, it might be an appreciation that value can be built more effectively over a longer time period. At Poundbury, the landowner elects to defer land receipts, and instead takes a percentage share in sales values typically at 20%. In doing so it stands to benefit from any uplift in value. The landowner also holds many commercial buildings for long-term income where it will benefit from the success of the local economy. In taking the decision to be patient, the landowner knows it will achieve best value, but equally importantly, it creates an alignment of interests between it and the success of the community.

It is surely unequivocal that, in its attitude to nurturing employment over a longer time period and advocating sustainable development, Poundbury has demonstrated a model for 'good growth' that can be readily applied to most locations.

9.9 DELIVERY RATE

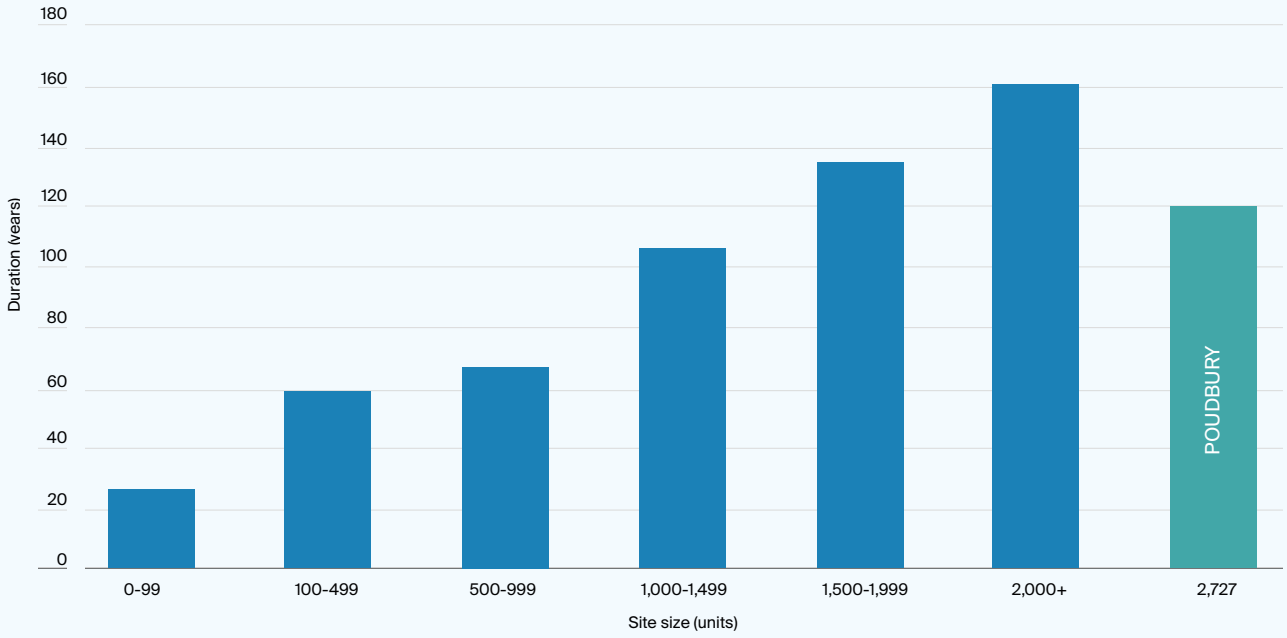
Poundbury, as a case study, allows us to consider the question of whether the speed of delivery is in tension with the quality of a development.

The delivery rate of a development makes a significant impact in a project's viability, particularly where there is a large up-front investment in land and infrastructure. Such costs will need to be covered and may cause a master developer to accelerate a project's delivery.

The timing of construction costs have less of an impact as they are easier to phase so that they immediately precede the sale of each dwelling. This is why housebuilders on any project will plan their delivery rates to match, as closely as possible, the rate of sales (also known as the absorption rate). It is therefore widely accepted that the delivery rate is a function of the absorption rate.

At Poundbury, the absorption rates have been relatively slow by comparison to data at other projects, although more recently they have accelerated to a sustained 120 homes per annum. In the earlier years, the absorption rate was slower causing an anticipated overall absorption rate of 85 homes per annum. By comparison, Lichfields in 'Start to Finish' suggest that a project of over 2,000 units would typically achieve an overall absorption rate of approximately 160 per annum. The Lichfields data analysis is compared to Poundbury in the chart below.

Average absorption rates compared to Poundbury



Source: Knight Frank

9.9 DELIVERY RATE (CONT.)

"The Duchy of Cornwall believes that successful placemaking cannot be rushed because of the need to focus on the quality of place being created, and the time it takes for the commercial/ employment sectors to flourish. Poundbury has gone to great lengths to nurture commerce and support the local economy but it has not happened overnight. If housing delivery is accelerated, there is a risk that it will simply displace areas where successful commerce might have been situated.

One way to assess the impact of delivery rate on the quality of the development is to review the resulting built form at Poundbury and compare it to a development project of a similar size that sold quickly. Reverting to Lichfield's review of absorption rate in 'Start to Finish' we note that Elvetham Heath was the closest project in size to Poundbury and achieved an overall absorption rate of 208 per annum (1,869 homes in 9 years). We compared the spatial mix of uses at Elvetham Heath to Poundbury using a geospatial system, the results of which are illustrated overleaf.

This comparison shows that Poundbury has a rich mix and spatial spread of uses whilst also having a high degree of walkability thereby reducing residents' car dependency. Elvetham Heath offers traditional housebuilder housing in an affluent area and includes retail, employment, education and healthcare uses as well as a place of worship. It is not a bad development; in fact, by most measures it would be considered good, but when compared to Poundbury it is striking how centrally located the services are. Its resulting car dependency and low levels of foot movements are likely to inhibit the creation of a strong community.

Whilst absorption rates at Poundbury have increased, they remain comparatively slow for a development of this scale. This highlights the possibility that sustainable development might not be compatible with delivering at the maximum pace. In particular, nurturing commercial uses takes time and could be a limiting factor to accelerating housing delivery beyond 120-150 homes per annum. Sustainable 'good growth' however should never be compromised.

4 businesses with a rateable value of **£1.4m**

ELVETHAM HEATH

Non-residential use
- Retail
- Commercial
- Education
- Health & Public Sevices
- Place of Worship

207 businesses with a rateable value of **£5.2m**

POUNDBURY

Non-residential use
- Retail
- Commercial
- Education
- Health & Public Sevices
- Place of Worship
- Future Provision

9.10 CONCLUSIONS

The case study of Poundbury provides a rare example of housing where values are not diluted by the size of homes, which are on average 30% larger than Dorchester. This allows a 7.3% £ per sq ft premium be translated into 55% more value in a given area of land. This far outweighs the additional costs for developing to the Duchy of Cornwall's high standards, estimated to be at an 18% premium.

Poundbury illustrates how stewardship of a development can lead to sustainable growth and add value to all stakeholders over the long term. The value of housing is sustained and maintenance costs are reduced by the use of quality materials. In an unlikely location, commerce has flourished and 1.3 permanent jobs have been created for every house built. £105 million per annum has been added to the local economy, excluding the short-term influence of construction activity. 44% of residents use sustainable methods to travel to work. This offers us a definition of 'good growth'. It supports and sustains communities whilst offering an opportunity for landowners to participate in value creation over the long-term.

Whilst absorption rates at Poundbury have increased, they remain slow for a development of this scale. This highlights the possibility that sustainable development might not be compatible with delivering at the maximum pace. Sustainable 'good growth' should never be compromised. In particular, nurturing commercial uses takes time and is a limiting factor. Without a landowner that is prepared to adopt a stewardship role over the development, it is likely to be ignored and dormitory housing may result. This is illustrated by the spatial comparison between Poundbury and Elvetham Heath: two developments of a comparable size. The richness of uses, the walkability and sustainability of Poundbury is self-evident. If more housing is needed in a region it would be preferable to have more developments offering slower 'good growth' than fewer developments of more rapid, but less sustainable growth.

"It is preferable to have more developments offering slower 'good growth' than fewer developments of more rapid, but less sustainable growth."

10.0
OAKGROVE
MILTON KEYNES

Oakgrove provides an example of a well-judged, contemporary housing project which generated a significant premium over the surrounding market. The scheme showcases a public sector landowner that took a patient capital approach over a large project thereby engendering an aligned partnership that encouraged the delivery of good quality housing.

10.1 CONTEXT

Oakgrove is located in Milton Keynes and comprises a development of 1,000 homes. The development completed in late 2019. It includes a small retail centre consisting of a Waitrose supermarket, a Metro Bank branch, and other small services units.

Milton Keynes is just over 50 years old and the town was formed from an Act of Parliament in 1967 which approved the building of a new community of 250,000 people. Milton Keynes is now the largest 'new town' in Britain with a population approaching 230,000.

Oakgrove was one of 7 'Millennium Communities' which was an English Partnerships initiative to set the standard for 21st Century living. This was to be achieved through innovative building technologies, increased economic and social self-sufficiency, high urban design standards and sustainable development principles.

To date, Oakgrove has delivered over 500 homes on this mixed-use development site and out of the 1,000 homes, 30% are to be affordable.

In 2018, residential homes across Oakgrove achieved an average of 98.0% of their asking price and the average time that a property was on the market was 5 weeks. In comparison to Milton Keynes, the same metrics were 95.6% and 9 weeks respectively. Therefore, homes within this development achieved a higher selling price and are quicker to sell than the overall Milton Keynes area.

We have compared Oakgrove to the Brooklands development by Places for People situated 2 miles to the east of Oakgrove.

We summarise the project in the fact file overleaf.

10.2 FACT FILE

	PROJECT NAME	OAKGROVE
LOCATION	Address	Proteus House, 16 Atlas Way, Milton Keynes
	Postcode	MK10 9JQ
	Local Authority	Milton Keynes Council
	County Council	Buckinghamshire County Council
STAKEHOLDERS	Landowner	HCA
	Other stakeholders	Millennium Communities Programme
	Developers	Crest Nicholson
PLANNING	Planning reference (OPP)	09/00618/OUTEIS
DEVELOPMENT	Number of homes	1,000
	Tenure mix	30% affordable
	Average size (sq ft)	988 sq ft
	Mix of uses	School, Retail, Offices, Health Centre
CONSTRUCTION	Construction method	Traditional
	Construction start	2013
	Construction finish	2019
	Project timescales	6 years
PROFESSIONAL TEAM	Masterplanning architect	EP, MKC
	Architect	Gardner Stewart Architects
SALES	Marketing launch	2013
	Sales completion	2019
	Units sold per month (average)	15 per month
	Current sales values (est)	£412 per sq ft
	Sales value premium (est)	16.3%

10.3 SALES ANALYSIS – OAKGROVE VS MILTON KEYNES

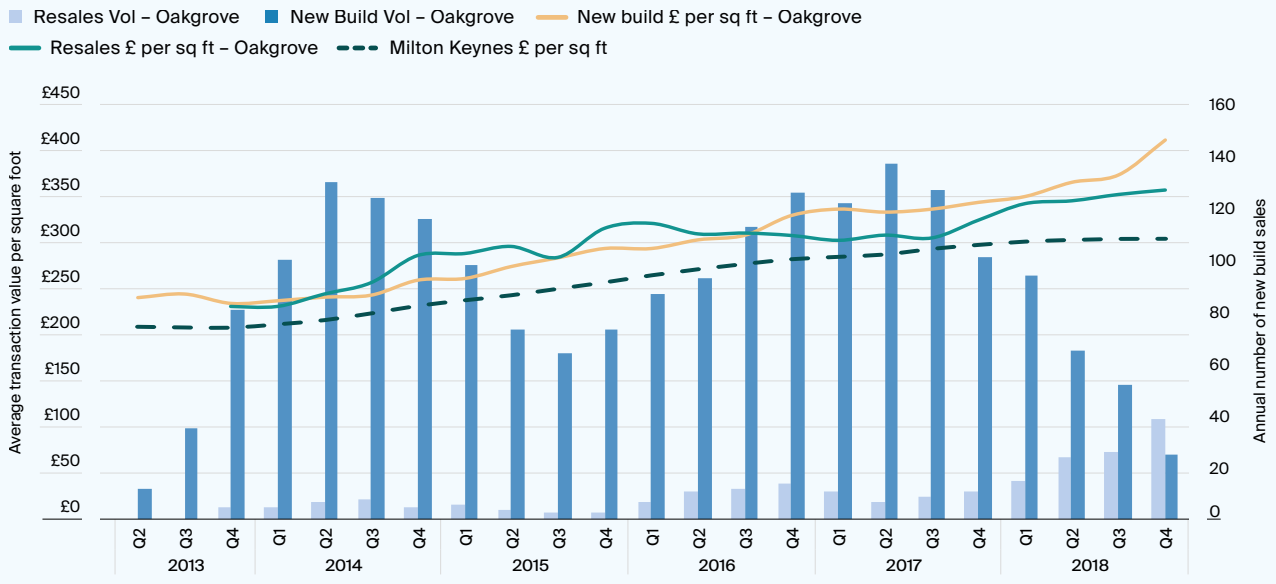
We have examined the sales transactions at Oakgrove (which began in 2013 and completed in 2019) with the wider Milton Keynes market, as well as to a nearby housebuilder benchmark of Brooklands. As a more recent new town, Milton Keynes comprises mostly newly built housing, and should therefore represent a good benchmark.

Through analysis of the Land Registry price paid data and EPC data set, it is evident that Oakgrove has consistently achieved a pricing premium over and above Milton Keynes. The new build and resale values at Oakgrove broadly track each other even if the resale values exceed new build for a period of two years (albeit on low sample sizes) before the trend reverses in the following two years. The resale values maintain the premium until the current day suggesting that the value premium created through the landowner's quality agenda is held by the community in the value of its housing over the longer-term.

The following chart demonstrates the volume of sales and £ per sq ft achieved across Oakgrove. This has been split between new build sales and resales across the scheme and has been compared to Milton Keynes as a total. Throughout the new build sales and resales, we can see the premium achieved across this scheme.

"New build sale values and resale values are closely correlated at Oakgrove".

Sales volumes and new build values in Oakgrove compared to Milton Keynes



Source: Knight Frank

100%

100% of homes were sold off-plan, on average 6 months before completion

There were five phases of development in total sold over seven years. Oakgrove reached peak transaction volumes in the months when phases overlapped. For example, peak volumes were achieved in 2014 at a point when Phase 1 was maturing and Phase 2 was launching.

All of the homes were sold off-plan, and on average six months before completion. Some cash buyers were able to exchange approximately nine months before completion but those needing a mortgage would need to exchange closer to completion. In this way, new build sales reflect prices that were crystallised in an exchange of contracts six months before. Unlike resale transactions which typically exchange and complete within one month. This lag explains why resale values track, and in some cases exceed, new home sales values.

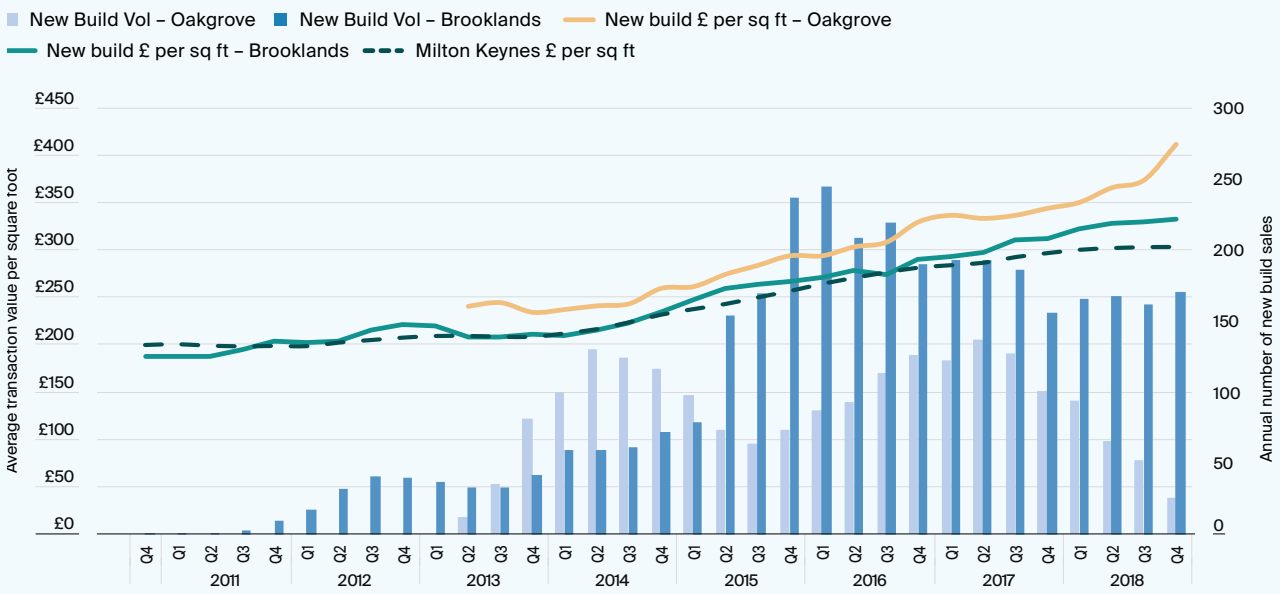
10.4 SALES ANALYSIS – OAKGROVE VS BROOKLANDS

The selected benchmark scheme is Brooklands, located to the east of Oakgrove. Brooklands is a large, recently developed housing scheme. In many respects, it is an equally successful project and since 2015 has achieved higher absorption rates than Oakgrove. However, Brooklands does have differences and in particular has delivered standardised (non-bespoke) house types. This is not to say one is better or worse, or more or less profitable, and it does offer the consumer a different choice. For any given market, consumers benefit from more choice and so it would be a positive attribute if two developments could be equally profitable but through different product options: higher cost / higher value versus lower cost / lower value. These are just two choices in the Milton Keynes market where buyers tend to have the choice of 10 to 15 projects selling at any given time.

The chart below illustrates a comparison between the new build sales at each development. This shows that the benchmark scheme more closely tracks the wider Milton Keynes market, and that Oakgrove consistently achieves a premium above both. Given the wider Milton Keynes market has more sample sizes, it is less influenced by variations in the mix of units being sold and therefore we believe it is a better choice of benchmark than Brooklands. Furthermore, the average floor areas at Oakgrove are typical for the Milton Keynes market and should therefore offer a fair comparison.

"Consumers benefit from choice: higher cost / higher value and lower cost / lower value may be equally profitable options for developers."

Sales volumes and new build values in Oakgrove and Brooklands compared to Milton Keynes



Source: Knight Frank

16.3%

The average new build premium achieved at Oakgrove relative to Milton Keynes

10.5 QUANTIFYING THE PRICE PREMIUM

In order to quantify the premium associated with Oakgrove, we have compared the values at Oakgrove each year from 2013 to present with average Milton Keynes values. To date, this concludes an average resales premium of 15.4% and an average new-build premium of 16.3% when weighted by the quantum of sales in each period.

Given that a development project only realises the value premium in the first sale we have highlighted the new-build premium as the principal measure used for Oakgrove.

It is also noticeable from the sales premium chart that, whilst the premium is established from the outset, it grows over time finishing with a 36% premium in 2018. This is evidence that value builds over time.

COMPARISON (PERIOD 2013 TO 2018)	ARITHMETIC AVERAGE PREMIUM	WEIGHTED AVERAGE PREMIUM
Oakgrove resales vs Milton Keynes	15.8%	15.4%
Oakgrove new-build vs Milton Keynes	18.0%	16.3%

10.6 QUANTIFYING THE COST PREMIUM

We have not been supplied with any cost information at Oakgrove and therefore have been unable to estimate the cost premium required to generate the value premium. However, we can estimate how high the cost premium could go before it exceeds the value premium. We estimate that Oakgrove could absorb a 33% cost premium and still justify the higher cost through the 16.3% price premium.

It is noticeable that the value-add increases over time. If a developer's decision to opt for higher cost / higher value is a marginal one, then it follows that the developer is more likely to opt for the higher quality option if its commercial interest in a project lasts for a longer period. At Oakgrove the investment time horizon was extended by a partnership approach to developing the project alongside the landowner.

YEAR	TOTAL FLOOR AREA (SQ. FT.)	SALES UPLIFT	COST £ PER SQ. FT.		COST UPLIFT	VALUE ADD
			MK	OAKGROVE		
2013	79,902	£2,131,566	£107	£143	£2,830,673	-£699,107
2014	127,381	£3,606,498	£113	£151	£4,763,171	-£1,156,673
2015	75,025	w£2,806,680	£124	£165	£3,067,015	-£260,336
2016	98,450	£4,752,929	£126	£168	£4,097,696	£655,232
2017	92,077	£4,331,037	£137	£182	£4,153,495	£177,542
2018	29,017	£3,134,729	£148	£197	£1,418,745	£1,715,983
Total	**501,853**	**£20,763,438**	–	**33%**	**£20,330,796**	**£432,642**

33%

Estimated cost premium that Oakgrove could absorb

◆◆

"The project was successful due to its sense of place; features such as the early delivery of a wildlife corridor, primary school and local centre all contributed significantly."

◆◆

10.7 REASONS FOR SUCCESS

Oakgrove was a success, reflected in the absorption rate it achieved. The project sought to create distinctiveness within its locality and through design. The site has positive attributes being positioned alongside the River Ouzel which was further enhanced with the early delivery of a wildlife corridor. The sense of place was improved by the early delivery of the Oakgrove Primary School, and the Local Centre which includes Waitrose, Metrobank and Costa Coffee.

Oakgrove's scale of 1,000 homes made it big enough that people knew about it, but small enough that it was still a walkable community. The developer adopted a contemporary architecture vision, albeit one that was not ultra-modern which may have put buyers off. Each house design was bespoke to the development and incorporated tall windows, balconies, patios and captured the best views.

10.7 REASONS FOR SUCCESS (CONT.)

There was a comfortable variation in density across the development with an average density of 35 dwellings per hectare that belied higher density blocks of flats along spine roads and in prominent locations with larger low density suburban housing on the edges of the community. It was felt that this mix captured demand from a wide demographic which would also be positive for the longer-term vibrancy of the community.

From its inception as a Millennium Community, English Partnerships (and later the Homes and Communities Agency) set high standards for Oakgrove. The vision was defined by Crest Nicholson in its bid to be the developer, after which the vision was protected within planning and in particular the design code. One architect (Gardner Stewart Architects) was employed to be the masterplanning architect as well as having responsibility for planning drawings for each phase. This helped maintain a consistent quality, pallet and style.

An aligned partnership approach began with the development agreement. As each parcel received Reserved Matters Approval (RMA) Crest Nicholson was granted a building lease. The building lease gave the developer the right to build and sell homes, with the freeholds only being transferred directly to the end purchasers at the point of sale (practical completion for private housing, on golden brick for affordable housing and on the completion of the first unit of a block of flats). This scheme-wide business plan gave both parties the extended time horizon to reward investment into the community and into the quality of materials.

The receipts from the development were shared. Crest Nicholson had a protected profit margin, but above this hurdle all returns were split evenly with the landowner using audited transparent accounts. The split of profits created a strong alignment between the parties and was the foundation for a healthy working partnership.

By virtue of not paying for the land up-front the project was more financially efficient and both landowner and developer were able to enhance their overall returns whilst investing more in the building fabric and the community.

“The scheme-wide partnership over 1,000 homes gave both parties the extended time horizon to reward investment into the community and into the quality of materials.”

10.8 CONCLUSIONS

The case study of Oakgrove provides a good example of a well-judged contemporary housing project which generated a 16.3% premium over the surrounding Milton Keynes market. We did not benefit from cost data, but we estimated that a cost premium would needed to have exceeded 33% before it would undermine Crest Nicholson's decision to follow a quality agenda.

Oakgrove was a success for a mixture of reasons, but one of the most striking reasons was the way in which the land was delivered by the public sector. English Partnerships (and later the HCA) adopted a patient approach investing their land into the project as equity and taking a share of the profit in lieu of up-front land receipts. In doing so, it formed an aligned long-term partnership focussed on building value through a good quality development.

At 1,000 homes, the scale of the project appears to have been a critical reason for the alignment of interests. With scale comes more time, which was important because it allowed Crest Nicholson to benefit from increasing values. This suggests that longer-term partnerships between landowners and development partners will encourage the delivery of good quality housing.

"Oakgrove suggests that longer-term partnerships between landowners and development partners will encourage the delivery of good quality housing."

11.0

NEWHALL HARLOW

Newhall illustrates how tensions can arise between two parties – in this case a landowner and housebuilders – with different time horizons. Newhall has now favoured a longer-term partnership approach to sharing future value with its development partner where both parties should be aligned in a shared goal of building value.

11.1 CONTEXT

Newhall is located to the east of Harlow within the jurisdiction of Harlow Council. It is a development of approximately 2,900 units. Phase 1 (600 homes) is completed, whilst Phase 2 (2,300 homes) is currently under construction. In total, approximately 1,100 units have been constructed and sold.

Newhall is built on land owned by the Soper and Moen family, who set up a development company called Newhall Projects Ltd. The project began in 1995. Design and control were of prime importance given the family's previous experience at Church Langley (also developed on family owned land), where good design was promised but not secured and hence never achieved. The family's ambition was not to allow that to happen a second time round. They were convinced that good design and high quality materials would lead to better land values, more than offsetting the higher costs involved.

The project's objective was to achieve high quality, contemporary architecture on a greenfield site, thereby proving it could be done and in turn achieving equal or better land values and leaving a legacy. Part of the challenge at Newhall was to create a new place with a distinctively different character from Harlow that could attract buyers from further afield, as well as from the local market.

Newhall Projects Ltd adopted the role of master developer and has sold serviced land parcels to inter alia Cala, Barratt, Countryside, Linden and Bellway. They have also sold self-build plots.

More recently, they entered into a land leasing arrangement with Countryside Properties, which has paid an upfront fee and a fixed percentage for transfer of freehold plots at the time of dwelling sales.

Newhall has promoted contemporary architecture, controlled via a Design Code prepared by Studio Real. The scheme has won a number of architectural awards: Alison Brooks's 'Be' was named the supreme winner at the Housing Design Awards, as well as being nominated for the 2013 Stirling Prize. Proctor & Matthews won RIBA and Housing Design Awards for 'Abode', and won Housing Design and Sustainable Housing Awards for 'Slo'.

The development includes local and neighbourhood centres and adjoins a new Enterprise Zone. The natural environment is being enhanced by the preservation of substantial areas of open space, including parkland, lakes and woodland. As future phases are developed, footpaths, woodland, parkland, play areas and lakes will be created for the benefit of residents and visitors. From the beginning, the Newhall Residents' Association was legally incorporated and is the focal point of the community.

We summarise the project in the fact file overleaf.


Great Auger Street

11.2 FACT FILE

	PROJECT NAME	NEWHALL, HARLOW
LOCATION	Address	London Road, Harlow, Essex
	Postcode	CM17 9SA
	Local Authority	Harlow Council
	County Council	Essex County Council
STAKEHOLDERS	Landowner	Newhall Projects Ltd
	Developers	Countryside, Linden, Bellway, Barratt, CALA
PLANNING	Planning reference (OPP)	HW/PL/04/00302
	Design code	Design code
DEVELOPMENT	Number of homes	2,900
	Tenure mix	15% affordable
	Average size (sq ft)	1,122 sq ft
	Mix of uses	School, neighbourhood centre, commercial district (236,806 sq ft)
CONSTRUCTION	Construction method	Traditional
	Construction start	2001
	Construction finish	Ongoing
	Project timescales	Forecast completion 2028
	Estimated cost premium	18%
PROFESSIONAL TEAM	Masterplanning architect	StudioReal
	Architects	Alison Brooks, Richard Murphy, Proctor & Matthews, Sheppard Robson, PCKO, ECD, ORMS, Scott Brownrigg, BPTW, HTA
SALES	Marketing launch	2001
	Sales completion (est)	Forecast completion 2028
	Units sold per month (average)	6.4 per month
	Current day sales values (est)	£355 per sq ft
	Sales value premium (est)	-1.1%

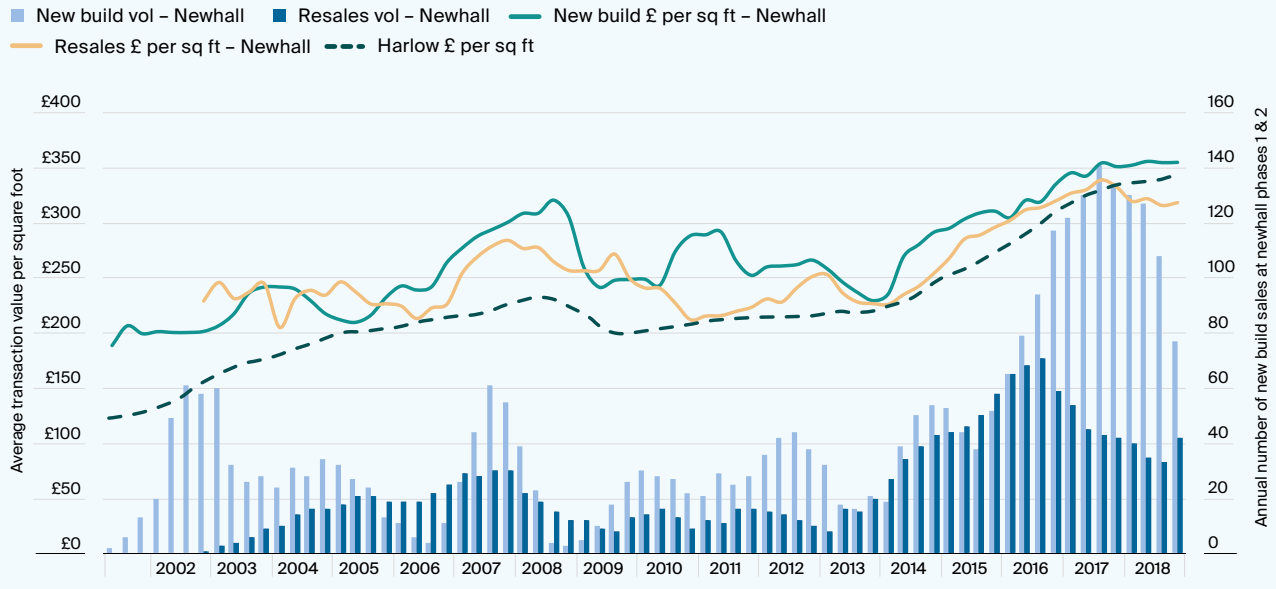
11.3 SALES ANALYSIS

The mean house price within Harlow in 2018 was £298,000. This was 12% below the average price across East of England. Across Newhall, the average price paid in 2018 was £398,000. This implies a premium of 34%, although this masks differences in mix. Most of Harlow is characterised by smaller house sizes associated with its original intention to be temporary (mostly social) housing built after WWII.

We have examined the sales transactions across Newhall, which started in Q4 2002, and compared them to Harlow and the neighbouring housing development of Church Langley.

Through analysis of the Land Registry price paid data and EPC data set, it is evident that housing at Newhall has consistently generated a value premium over and above Harlow. The new build values exceed the resale values by 7.5% on average. This is a notable difference from observations at other case studies where resale values are seen to track new build values. It is also notable that the differential between Newhall and Harlow narrows over time, indeed in 2018 values in Harlow are higher than resale values observed in Newhall.

Sales volumes and new build values in Newhall Phases 1 & 2 compared to Harlow



Source: Knight Frank

7.5%

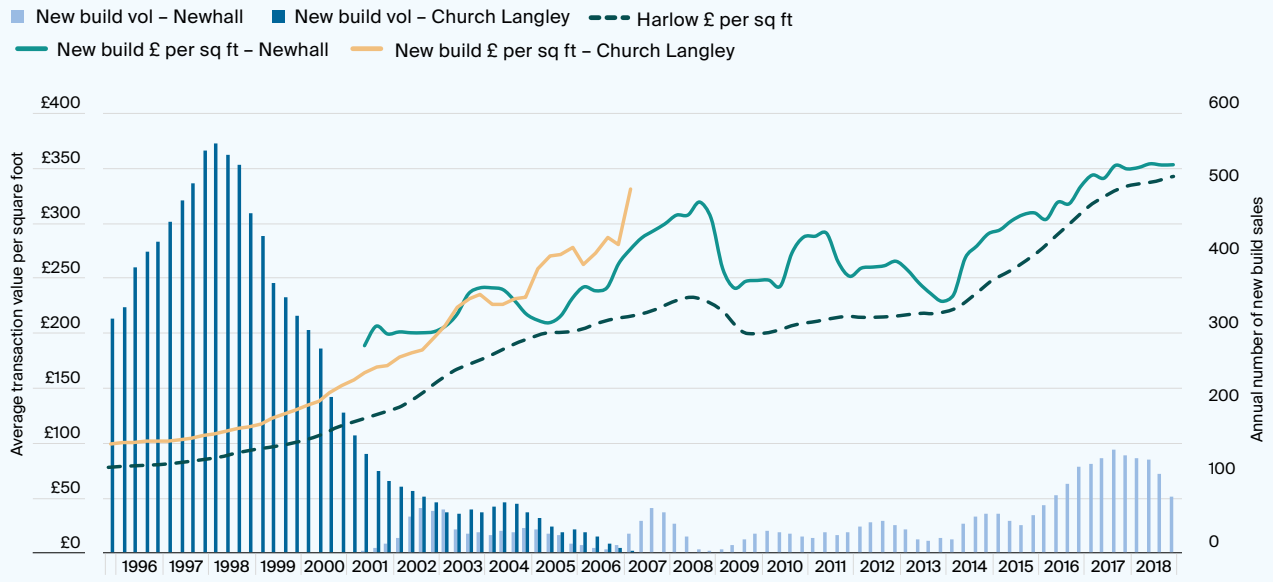
The premium that new build values at Newhall achieved over resale values in Harlow

11.4 SALES ANALYSIS – NEWHALL VS CHURCH LANGLEY NEW HOME SALES

The selected benchmark scheme is Church Langley, located immediately to the south of Newhall. It was master developed by the same landowner, although it adopted a more flexible approach which led to a more traditional housebuilder product. It therefore represents a good comparison between high quality controlled contemporary housing at Newhall, and more typical volume housing without landowner stewardship.

The chart below illustrates a comparison between the new build sales at each development. This illustrates the premium (an average premium of 29%) that Church Langley consistently generated above the rest of Harlow. In fact, this premium widens over time. Newhall overlaps with Church Langley for a time and achieves comparable pricing, but later the premium appears to dissipate. This longer-term trend is best evidenced by resales, as illustrated below.

Sales volumes and new build values in Newhall Phases 1 & 2 compared to benchmark scheme Church Langley and Harlow Local Authority

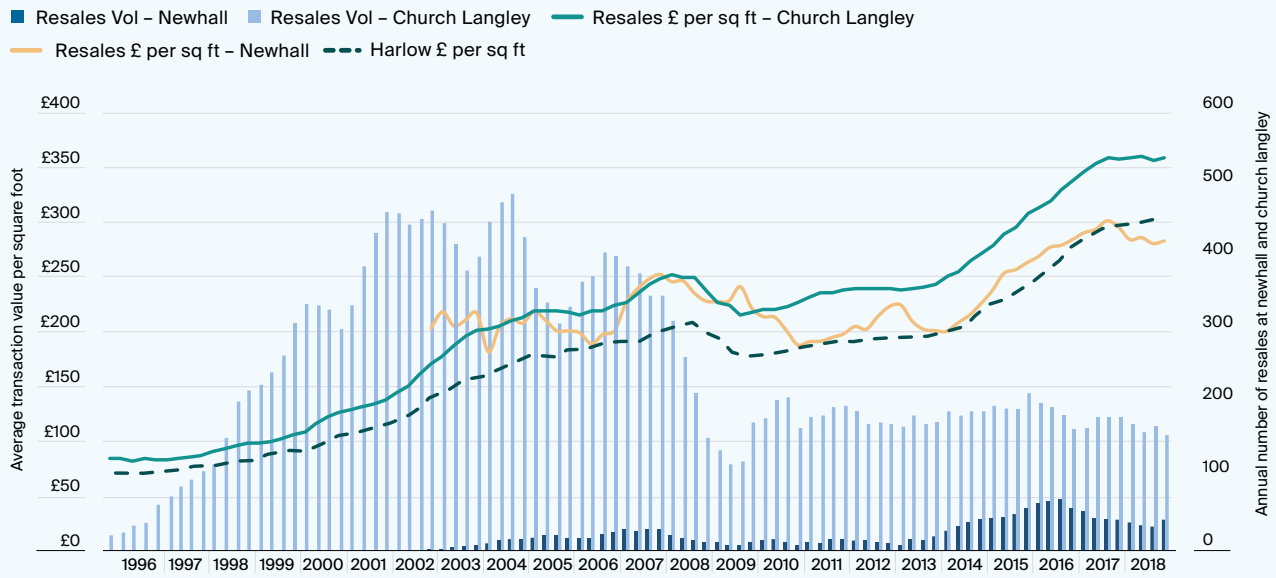


Source: Knight Frank

11.5 SALES ANALYSIS – NEWHALL VS CHURCH LANGLEY RESALES

The chart below illustrates the value of resales at Church Langley and Newhall between 1996 and 2018. The size of Church Langley provides a high volume of sales and therefore is a good sample size that generates smooth £ per sq ft data. Overall, Church Langley resales hold a premium of approximately 22% over Harlow. By contrast, Newhall resales track Church Langley values for the first eight years, but thereafter trend down towards typical Harlow resale values. Between 2002 and 2010 Newhall generated a 22% average premium over Harlow, but between 2010 and 2018 this narrowed to 4%.

Sales volumes and resale values in Newhall and Church Langley compared to Harlow



Source: Knight Frank

Newhall Primary Academy and Nursery

There may be different reasons, or a combination of reasons, for the apparent underperformance of Newhall versus Church Langley. The following have all been suggested in our research:

- **Larger than average dwelling sizes diluted the values (on a £ per sq ft basis):** Of the data analysed Newhall resales have an average floor area of 952 sq ft, 19% larger than Church Langley resales which have an average floor area of 797 sq ft. This differential means we are not comparing like-for-like and the suggestion is that larger units on average derive a lower value when expressed on a £ per sq ft basis, even if the total capital value may be higher. This factor is analysed in the following section.

- **Local demand for contemporary housing was saturated:** Whilst Newhall was successful over its early stages the premium reduced over time. By 2009 Phase 1 (c.600 homes) was mostly complete and it is possible that the local market for contemporary housing was saturated. If the market for a traditional vernacular exceeds that for contemporary housing, then persisting with a contemporary ethos would likely lead to price underperformance. Perhaps if Newhall had found a way to incorporate traditional housing alongside contemporary it could have expanded its market and maintained its price premium.

- **Innovative architecture:** Throughout the period of comparison Newhall was developing a constant stream of new houses in innovative architecture, whereas Church Langley was not. It has been suggested that this commendable commitment to architecture may have had a negative impact on resale values. After all, who wants to buy yesterday's second-hand design with so many new designs on offer? This is supported in the data, which shows new-build homes exceeding the value of resales by 7.5%. Whilst this may not be a positive to a resident suffering from a depreciating asset, it should be borne in mind when making comparison to benchmarks.

- **Placemaking aspects of the masterplan were slow in coming forward:** It has been suggested that the access to Newhall was circuitous for too long and the new access to the A414 has come too late. Furthermore, the Newhall Primary Academy opened in September 2018, some 15 years after the development had its first sales. If these aspects had been accelerated, it is more likely that Newhall would have maintained its premium. However, they were delayed because of viability challenges that were exacerbated by a combination of misadventure and unfortunate timing.

- **Tensions over design compromised the architectural and masterplan vision:** The landowner had many challenges enforcing the design code during the delivery stage. All too often the construction teams on the ground cut corners and failed to deliver what had been contractually committed when the land was purchased. The housebuilders often cited the higher costs of delivering the Newhall design codes and were constantly striving to value engineer the architectural designs and materials. The contractual provisions lacked teeth because the land had been conveyed to the housebuilders, and the landowner's attempts to curate the quality of the housing delivery only served to cause tensions with the housebuilders. The constant pressure from housebuilders inevitably took its toll and led to some compromise.

- **Price taking set a lower valuation benchmark:** Partly as a reaction to the pressures of dealing with housebuilders the landowner embarked on developing their own parcel at Newhall called North Chase. Its timing coincided with the credit crisis of 2007/8 and by 2009 the landowner was under pressure from funders to dispose of unsold units. This caused the landowner to price take and to accept lower offers than they had previously causing the erosion of the Newhall premium. As time went on, those sales caused lower mortgage valuations which forced buyers to pay less than they had been prepared to. The self-fulfilling nature of mortgage valuations meant that the premium proved challenging to recover once it had been lost.

"It has been suggested that Newhall's commendable commitment to design may have had a negative impact on resale values. Who wants to buy yesterday's second-hand design?"

11.6 DILUTIVE EFFECT OF DWELLING SIZE ON VALUE

Of the data analysed Newhall resales have an average floor area of 952 sq ft whereas Church Langley resales have an average floor area of 797 sq ft. This differential means we are not comparing like-for-like and the suggestion is that larger units on average derive a lower value when expressed on a £ per sq ft basis, even if the total capital value may be higher.

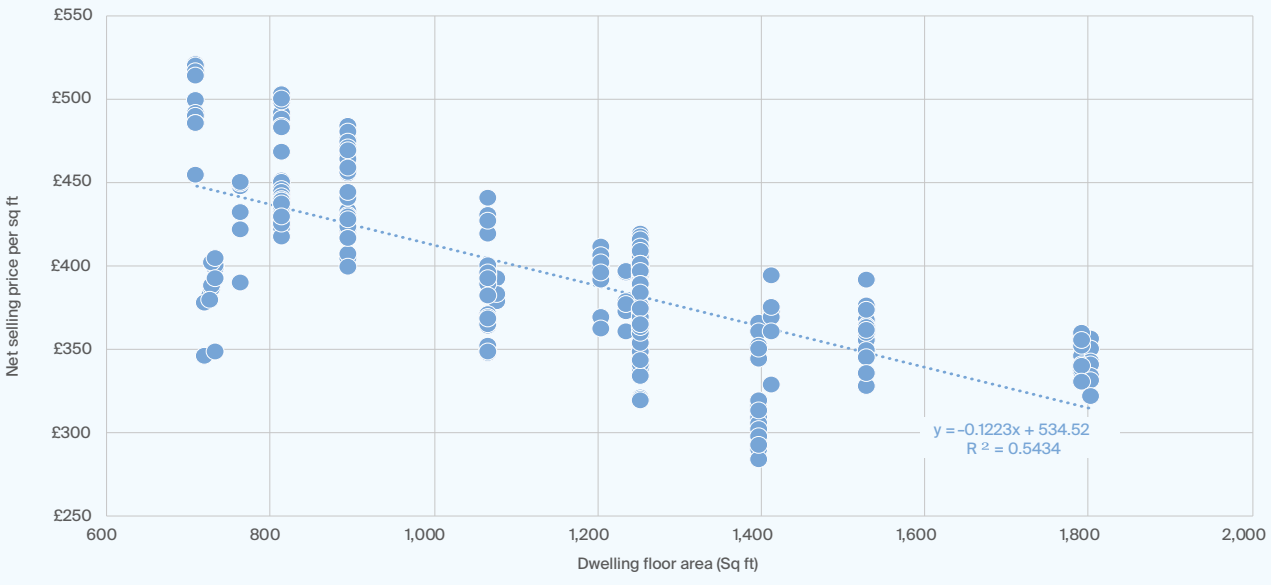
In order to analyse the impact of size on £ per sq ft, we need to analyse sales of different sized dwellings that are similar in nature. This allows us to eliminate other externalities affecting price. The greater the number of sales of a similar product the better the chances of identifying a relationship. We selected Linden Homes's 'Edge' development as it is the largest parcel within Newhall and offers us a relatively complete dataset of 239 sales. The sales occurred between 2014 and 2018 over which time prices moved up and down. We have removed the impact of pricing variation by indexing all the sales to August 2019.

The chart below illustrates the dataset and suggests that pricing expressed as £ per sq ft does reduce with size. Using the trendline and resulting formula we can conclude that whereas a 952 sq ft dwelling might be expected to achieve £418 per sq ft, a smaller dwelling of 797 sq ft might achieve £437 per sq ft, an increase of 4.5%.

4.5%

Newhall pricing would be 4.5% higher if its houses were smaller, like those at Church Langley

All sales at Edge (Linden Homes), Newhall indexed to current values



Source: Knight Frank

The correlation of this dataset is limited by externalities that are challenging to adjust for (such as microlocation and design). However, we believe the trend is meaningful and suggests that Newhall, when compared to Church Langley, should be adjusted upwards by 4.5%.

11.7 QUANTIFYING THE VALUE PREMIUM

In order to quantify the premium associated with Newhall, we have compared the values each year with Church Langley and Harlow from 2002 to present. To date, this concludes an average resales premium over Harlow of 6.7% but an average resale discount to Church Langley of 13.1% when weighted by the quantum of sales in each period.

Given the relevance of Church Langley as a benchmark, we have highlighted the resale comparison as the principal measure used for Newhall.

COMPARISON (PERIOD 2002 TO 2018)	ARITHMETIC AVERAGE PREMIUM	WEIGHTED AVERAGE PREMIUM
Newhall resale vs Harlow	12.9%	6.7%
Newhall resale vs Church Langley resale	-8.1%	-13.1%

We have noted that Newhall new-build sales exceed resale values by 7.5%. New-build evidence cannot be compared directly to the benchmark because they were not selling contemporaneously; however, Newhall as a project does realise the value of the new-build sale so it is appropriate that we adjust the discount accordingly.

We have also adjusted this discount by 4.5% to account for the larger units offered at Newhall.

Further to these adjustments we believe Newhall realised an average discount to Church Langley of 1.1%.

11.8. QUANTIFYING THE COST

The fact file references an average cost premium of 18%. This is evidenced by the Sheppard Robson scheme by Bellway having a total cost of £186 per sq ft at a time when typical housebuilder costs (as supplied by the BCIS) for that area were £157 per sq ft. It is interesting that the cost of £186 per sq ft compares closely to the £185 per sq ft total cost witnessed at the latest phase at Poundbury delivered by a medium-sized developer. This supports commentary, provided during the course of our research, that SME developers can compete favourably with national housebuilders when building bespoke high quality housing.

Using BCIS costs for Harlow between 2001 and 2018, adjusting for externals, professional fees and contingencies, we have estimated that the weighted average construction cost for the project was £123 per sq ft over the period analysed. At a premium of 18% the project had additional construction costs which serve to compound the discounted values achieved.

The above analysis is uncomfortable reading for a project that diligently adhered to its ambition to leave a contemporary legacy. It is possible that premium pricing will be generated in the later stages of Newhall and, given the landowner has adopted a building lease approach where it will share in the value of every house sold, it stands to share in that potential upside.

The impact of lower value and higher costs helps explain why the project's viability suffered. This in turn led to the delayed delivery of key placemaking items such as the primary school and the new link road, eventually leading to the loss of a Newhall value premium. Perhaps if funding sources might have supported the earlier delivery of these key placemaking infrastructure items, then this vicious cycle might have been broken. However, the landowner has been innovative in its approach to the remainder of the development and we suspect Newhall will continue to offer an interesting case study in the evolution of a delivery structure.

“Newhall's additional construction costs served only to compound the discounted values achieved. This is uncomfortable reading for a project that diligently adhered to its ambition to leave a contemporary legacy.”

11.9 NEWHALL'S RESPONSE

Case studies are often more meaningful when things do not go completely to plan. The landowner had been following a Master Developer model investing in infrastructure and disposing of serviced parcels to housebuilders whilst controlling their delivery through a design code. Despite all its considerable efforts, the landowner had failed to deliver a financial return. Whilst the reasons given are interesting to reflect on, the landowner's response is particularly meaningful. It has conceived a delivery model to give its design controls teeth whilst creating an aligned delivery structure over the longer-term. This it achieved within the structure of an Agreement for Lease (AfL)in which a development partner was granted a lease over a much larger area of development (c.1,000 homes) in return for sharing a proportion of the value on each sale. The landowner retains the freehold interest until each unit is sold, and only conveyed to the ultimate occupier if the development partner has complied with all its requirements under the AfL, for example, by complying with the design code.

This is similar in scale and approach to the case study of Oakgrove, except that at Newhall the sold value of each property is split proportionately, whereas at Oakgrove the profits were split proportionately. The impact on behaviour is similar but the risk to the landowner is different in that at Newhall the landowner is exposed to sales risk whereas at Oakgrove the landowner is exposed to sales and cost risk. What both achieve is the deferring of the landowner's distribution until the completion of each plot or phase. In doing so, the contribution for land is not crystallised up-front and there are no funding costs associated with the land. This has significant cost savings which will improve the project's overall viability and extend the participant's investment time horizon to the end of the project.

The change in scale of parcel at Newhall was a significant departure from earlier phases which averaged 98 homes per parcel, each of which would take a few years to build and sell. It was anticipated that 1,000 homes might take over a decade to build and sell and a 25 year lease was granted to provide more than enough time. More time meant that both parties – landowner and development partner – would benefit from value growth. By sharing proportionately in the value of each home sold, their interests were aligned. The AfL is a new approach for Newhall and it seems likely that the factors that created adversarial tensions and undermined value creation may now be a thing of the past.

"By deferring the landowner's distribution until the completion of each plot or phase, the contribution for land is not crystallised up-front and there are no funding costs associated with the land. This has significant cost savings which will improve the project's overall viability."

11.10 CONCLUSIONS

The case study of Newhall has not been a financial success thus far. It makes an interesting comparison to Oakgrove, as both followed a contemporary approach, although Newhall suffered in the Financial Crisis during which time its sales premium was lost and has not been recovered.

It is important to reflect on the adversarial tension between a landowner trying to enforce a design code through contract, and a housebuilding community trying to keep costs down. This illustrates the challenge of binding two parties with different time horizons; a landowner with a project length of many decades and housebuilders who will complete their phases of development within a few years. By comparison, Oakgrove benefitted from having a single housebuilder in an aligned partnership structure with its public sector landowner.

Newhall is a project that is at a cross roads. It has now favoured a longer-term partnership with Countryside Properties, which has given the landowner and the housebuilder the same time horizon and each party an equitable share in future value. It is felt that this has the potential to align both parties towards the same goal. Whether it will be successful will be the subject of future reflections, but the case study of Oakgrove gives grounds for optimism.

12.0
ACCORDIA CAMBRIDGE

Accordia is a celebrated development whose value premium is a combination of price and density delivering a 123% premium over surrounding Trumpington. Whilst the project had viability challenges, the premium has widened over time begging the question if a longer-term delivery model could have captured this value growth.

12.1 CONTEXT

Accordia is located on the south side of central Cambridge, a short walk from Cambridge railway station. Accordia is smaller than other case studies analysed, only 376 units, and it is different in that it is surrounded by an existing, well-established and desirable area. It also has a significantly higher proportion of apartments than other case studies.

Accordia is a notable case study because it was the first housing project to win the RIBA Stirling Prize in 2008 (as well as many other awards) and in doing so became regarded as an exemplar for development.

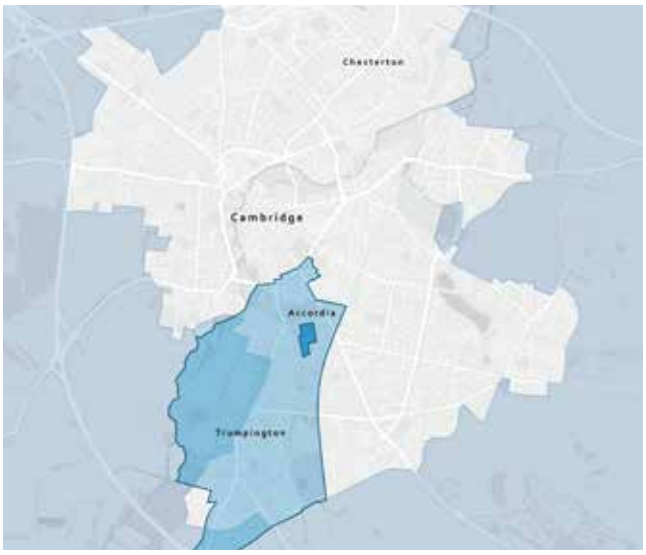
Outline planning permission was originally secured in 2000 by the Countryside Properties in-house design team. The detailed application was prepared by Fielden Clegg Bradley in conjunction with Macreanor Lavington and Alison Brooks Architects. Countryside started construction of Phase 1 in 2003, before selling Phases 2 and 3 to Redeham Homes in 2006.

Accordia's objective was to create an atmosphere whereby residents felt like they were 'living in a garden', where buildings blended with the landscape. It was also important to create a distinctive architecture that would complement the surrounding conservation area. There was no landowner overseeing the whole scheme through to fruition; however, the original masterplan and subsequent planning permission were sufficiently robust to ensure effective implementation of the scheme.

The scheme was fully residential within its boundary except for the inclusion of a small community shop which was short-lived due to the lack of passing trade. The scheme was developed in parallel with a high quality office building on another portion of the original site, and the opportunity to create a more integrated piece of urbanism was foregone by the failure of the masterplans to be connected. This would no doubt have been resisted by residents but would have created more integrated urbanism which may have sustained local servicing.

The average time on the market for a property within this development was 9 weeks with an average asking to achieved rate of 96.3%.

We summarise the project in the fact file overleaf.



11.2 FACT FILE

	PROJECT NAME	ACCORDIA, CAMBRIDGE
LOCATION	Address	Accordia, Brooklands Avenue, Cambridge
	Postcode	CB2 8DL
	Local Authority	Cambridge City Council
STAKEHOLDERS	Landowner	MoD – HMRC – DEFRA
	Developers	Countryside Properties (Phase 1), Redeham Homes (Phase 2,3)
PLANNING	Planning reference (OPP)	16/0278/FUL
	Design code	Trumpington Meadows Design Code
DEVELOPMENT	Number of homes	376
	Tenure mix	30% affordable
	Average size (sq ft)	865 sq ft
CONSTRUCTION	Construction method	Traditional
	Construction start	2003
	Construction finish	2008
	Project timescales	5 years
PROFESSIONAL TEAM	Masterplanning architect	Feilden Clegg Bradley Studios, Grant Associates
	Architect	Alison Brooks Architects (10%), Macreanor Lavington (25%), Fielden Clegg Bradley Studios (65%)
	External consultants	Carey Jones Architects, RJP, WS Atkins, Philip Prank & Partners, Grant Associates, Richard Jackson Plc, Robers & Partners, DTZ Pieda Consulting, Philip Pank Partnership, Kajima Construction Europe
SALES	Marketing launch	2004
	Sales completion	2011
	Units sold per month (average)	1.1 per month
	Current day sales values (est)	£625 per sq ft
	Sales value premium (est)	3.4% £psf / 123% GDV

12.3 SALES ANALYSIS – ACCORDIA VS BENCHMARKS

We have examined the sales transactions at Accordia, which started in 2005, and compared them to Cambridge and Trumpington Ward, within which Accordia is located. Trumpington Ward is dominated by the development of Clay Farm into Great Kneighton by Barratt Homes (Trumpington Meadows), Bovis Homes (Paragon), Crest Nicholson (Halo), CALA Homes (Clay Farm), Skanska (Seven Acres and Long Lane) and Countryside Properties (Aura and Novo). We believe Trumpington is a more relevant benchmark than Cambridge as a whole.

Great Kneighton followed Accordia and its design was heavily influenced by Accordia, which may make a case for good quality development having influence beyond its boundary.

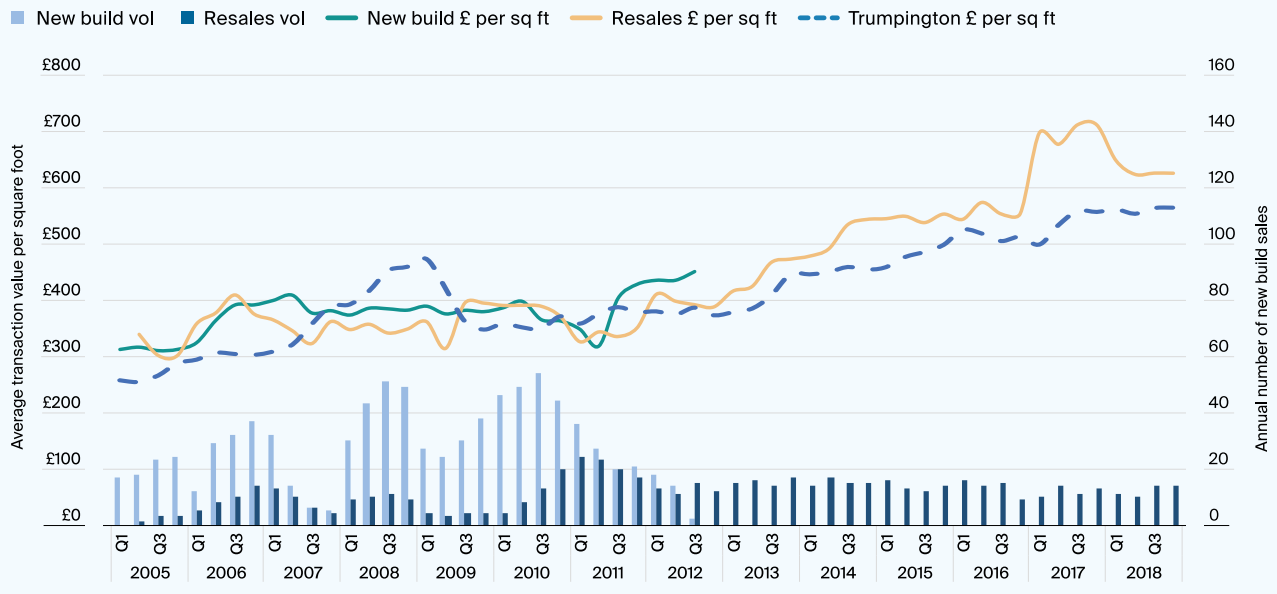
Through analysis of the Land Registry price paid data and EPC data set, it is evident that Accordia has consistently generated a value premium significantly over and above Cambridge, but less so above Trumpington. The new build values exceed the resale values within Accordia by 4% on average, although they are closely correlated and there are periods when resale values exceed new build values.

The resale values are a good long-term illustration of value performance at Accordia, and the data benefits from a relatively stable number of resale transactions at 15 per annum on average. The resale values generate a long-term premium of 28% over Cambridge market, and 3% over the Trumpington market (excluding Accordia). It is interesting to note that the premium widens over time, increasing from 0% between 2005 and 2011 to 12% between 2012 and 2018. This contrasts with Newhall and suggests that contemporary housing can deliver lasting value.

0%

The premium achieved during sales at Accordia, but which widened to 12% following completion

Sales volumes and new build values in Accordia compared to Trumpington



Source: Knight Frank

"The value premium is enhanced by maintaining high values for larger homes, and by a higher density."

12.4 QUANTIFYING THE PRICE PREMIUM

In order to quantify the premium associated with Accordia, we have compared the values at Accordia each year from 2005 to present with average Cambridge and Trumpington values. To date, this concludes an average premium of 28% over Cambridge and an average premium of 3% over Trumpington when weighted by the quantum of sales in each period.

We believe that Trumpington is a more relevant benchmark to the wider Cambridge market, because it more specifically relates to the comparison of high quality new-build housing with more typical new-build housing in the locality. That said, we are conscious that the quality of the 'typical' housing may have been elevated by the influence of Accordia. Given that a development project only realises the value premium in the first sale we have highlighted the new-build premium as the principal measure used for Accordia.

COMPARISON (PERIOD 2005 TO 2018)	ARITHMETIC AVERAGE PREMIUM	WEIGHTED AVERAGE PREMIUM
Accordia resales vs Cambridge	25.2%	26.7%
Accordia new build vs Cambridge	27.6%	28.2%
Accordia resales vs Trumpington	6.2%	7.7%
Accordia new build vs Trumpington	5.4%	3.4%

It is also notable that, on average, dwellings at Accordia are 40% larger than across Trumpington. This means that the average dwelling price at Accordia is 54% higher than Trumpington. Furthermore, its density of 54 dwellings per hectare (DPH) exceeds a typical housebuilding density of 35 DPH. Given 70% private housing, we estimate that Accordia generated a private residential gross development value (GDV) of £17.8 million per ha at the time of construction, which would be £29.7 million per ha at current day values. This exceeds the equivalent estimate of GDV in Trumpington by 123%.

FOR PERIOD (2005 TO 2018)	TRUMPINGTON (2018)	ACCORDIA		%
		2005-2011	2018	
Average floor area	900	1,256	1,256	40%
Density (DPH)	35	54	54	54%
Proportion of private homes	70%	70%	70%	-
£ per sq ft	£605	£374	£625	3%
Average price	£545,000	£470,000	£785,000	44%
GDV per ha	£13,342,000	£17,757,000	£29,692,000	123%

12.5 QUANTIFYING THE COST PREMIUM

We have not been supplied with detailed cost information relating to Accordia, yet the history of the project is informative. The project was promoted by Countryside Properties who appointed Kajima from Japan as contractor. They followed a strong design and sustainability ethos and won all the industry plaudits. However, we understand the spiralling costs of construction to meet the high standards pushed the project to the brink.

From discussions relating to the project, we understand that Countryside Properties were close to having to report a loss on the project when Kajima approached them to offer a surrender payment for the construction contract. This timely surrender payment offset the potential losses and enabled Countryside Properties to reset the project via a disposal to Redeham Homes in 2006.

Through the disposal to Redeham Homes at an appropriate land price, the project was able to proceed to completion without any further viability issues, but it would be imbalanced not to reflect on the losses that Kajima suffered before that point. Whilst the details have not been reported, it is possible that unexpectedly high costs associated with an innovative and high quality product may not have been justified by the values being achieved at the time.

"Accordia residents reported substantially greater levels of local activity, a stronger attitude to connecting and giving locally and a more marginal increase in physical activity."

12.6 VALUE BEYOND HOUSING

In 2015, Accordia was the subject of research[1] to test whether a higher ratio of communal to private outdoor space promoted the "Five-Ways to Well-Being" activity framework. The Five-Ways studied were "connecting", "keeping active", "taking notice", "keep learning" and "giving".

Accordia residents reported substantially greater levels of local activity, a stronger attitude to connecting and giving locally and a more marginal increase in physical activity. Mapped observations revealed a proliferation of activity within Accordia's innovative outdoor hard spaces. As well as promoting health behaviours in a relatively dense scheme of 54 dwellings per hectare, the study highlighted the positive role of home zone streets, hardstanding and semi-civic space concluding the importance of quality as well as quantity.

[1] *Anderson, 2015, Living in a communal garden, published in Frontiers in Health*

12.7 CONCLUSIONS

Accordia is celebrated by architects and industry and has made a positive contribution to design approach beyond its boundaries. RIBA described it as marking a paradigm shift in British housing and it has certainly had a significant influence on the vernacular of Cambridge ever since. It has generated a new-build premium of 3% over Trumpington, but this premium began at 0% during construction and has grown to 12% since construction was completed. This begs the question whether alternative delivery models can capture the increase in long-term value.

There remain some question marks over the viability of building to Accordia's level of design and quality, but there is insufficient evidence to draw specific conclusions. Our comment here is that ambitions need to be balanced with the potential premium. Even if Accordia did go too far in certain aspects, we can be confident that there was sufficient scope within an increased GDV per hectare of 123% to accommodate ambitious designs.

Accordia has had a positive ongoing influence on its residents' well-being and this impact has been attributed to the positive role of home zone streets, hardstanding and semi-civic space amid a high quality development.

Accordia shows that ambitious, innovative, contemporary housing at a gentle density can generate a significant and lasting premium that can justify the additional cost.

13.0
COED DARCY NEATH

Coed Darcy has not yet derived a value premium. This could be because of a highly price sensitive market, but it is equally possible that a premium has been constrained by an insufficient investment into place making. This illustrates the importance of appropriate Section 106 commitments.

13.1 CONTEXT

Coed Darcy is located on the south western fringe of Neath, and to the east of Swansea. It is a new village being regenerated on a former oil refinery site in Llandarcy. Over the next twenty years, Coed Darcy will be home to approximately 10,000 residents supported by schools, retail, leisure and employment space.

The site will be the most significant regeneration project in South Wales. The site will provide 4,000 homes and four new schools

The area was home to Britain's first oil refinery in the 1920s, and up until the 1970s it was a major industrial landmark and key employer, with a 2000-strong workforce. Over the years the refinery began to shut operations and by 2008, it closed permanently and was acquired by site regeneration specialist St. Modwen.

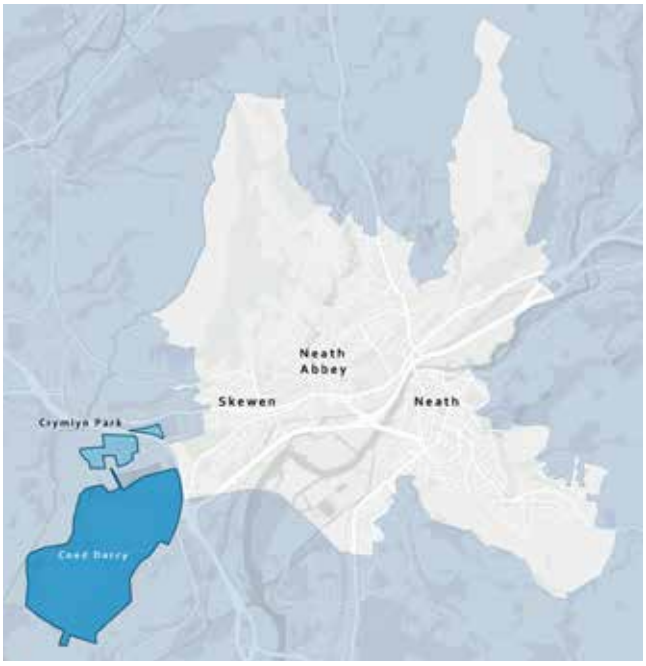
In 1999, the Welsh Development Agency invited The Prince's Foundation to advise on this large-scale residential and business development which led to the creation of a masterplan and town code by design consultants Alan Baxter & Associates.

St Modwen was selected via tender in 2005 to bring the site forward. The site was sold for a nominal sum although with a dowry to cover the liability of unknown future contamination risks. The sale was unconditional although subject to planning permission and vacant possession. Both of these conditions precedent were realised in 2008 once the outline planning permission was free from judicial review.

Extensive phased remediation works began in 2008 and the initial stage was completed by 2015 within the deadline of 7 years. This stage remediated the land to the agreed standard, but more work is required to deliver the site to the standard necessary for housing.

Housing construction began in 2012 with the first sales achieved in 2013. Area 1 (outside of the 4,000-unit masterplan) was designed by ADAM Architecture and developed by Atlantic Properties Plc. Persimmon Homes then developed the initial phases of Coed Darcy as part of its national joint venture with St Modwen. St Modwen Homes is expected to be developing the forthcoming phases of development alongside other housebuilders.

We summarise the project in the fact file overleaf.



13.2 FACT FILE

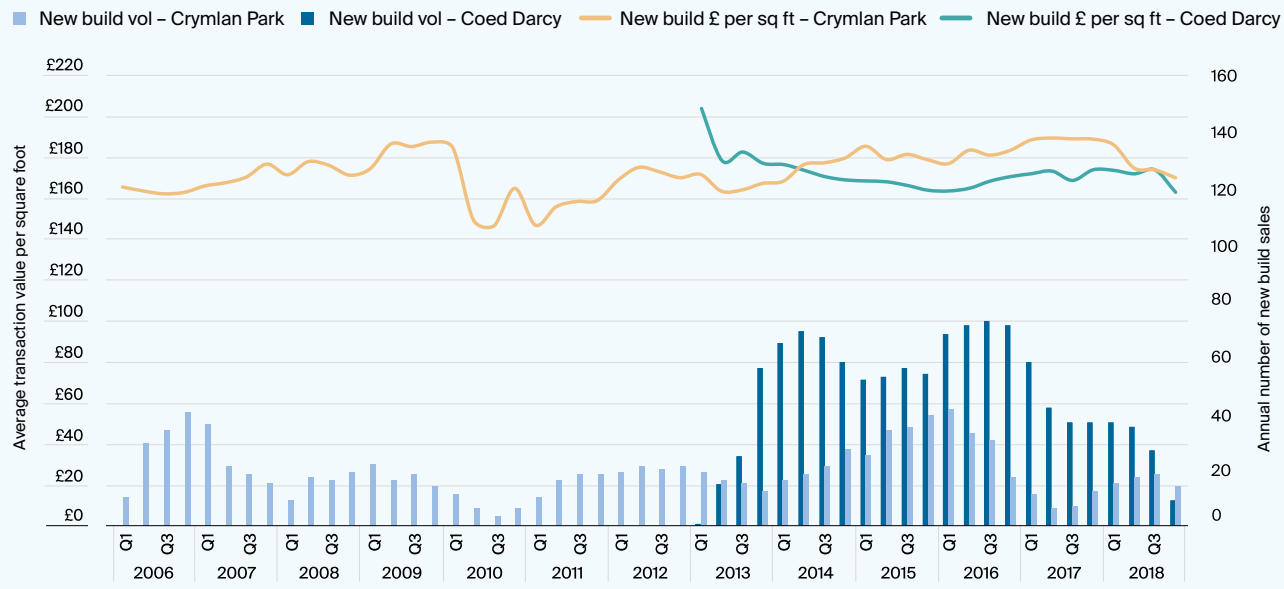
	PROJECT NAME	COED DARCY
LOCATION	Address	Ffordd Coed Darcy, Skewen, Neath
	Postcode	SA10 6FG
	Local Authority	Coedffranc Community Council
	County Council	Neath Porty Talbot County Council
STAKEHOLDERS	Landowner	St. Modwen
	Other stakeholders	Prince's Foundation, Neath Council
	Developers	Atlantic Properties, Persimmon Homes, St Modwen Homes
PLANNING	Planning reference (OPP)	P2005/0393
DEVELOPMENT	Number of homes	4,000
	Affordable housing	20%
	Average size (sq ft)	900 sq ft
	Mix of uses	Commercial, Retail = 500,000 sq ft 2FE Primary school and Secondary school
CONSTRUCTION	Construction method	Traditional
	Construction start	Nov-12
	Construction finish	Unknown
	Project timescales	Ongoing (14 years projected)
PROFESSIONAL TEAM	Masterplanning architect	Alan Baxter & Associates, Studio LK
	Architect	Robert Adam Architects (ph1), Roberts Limbrick Architects (ph2), Barton Willmore (Persimmon)
SALES	Marketing launch	2012
	Sales completion	Ongoing
	Current day sales values (est)	£182 per sq ft

13.3 SALES ANALYSIS – COED DARCY VS BENCHMARKS

We have examined the sales transactions within Coed Darcy and compared them with the surrounding area of Neath and a nearby benchmark called Crymlyn Park. The area referred to as Crymlyn Park is located immediately to the north of Coed Darcy and has been built out by Barratt Homes and Hale Homes. As the closest and most recent new build housing in the locality we consider Crymlyn Park to be the best benchmark to use.

Our analysis of the Land Registry price paid data and EPC data set suggests that Coed Darcy has achieved pricing which is consistent with Crymlyn Park. At the start of sales in 2013, there was a slight premium, but this was eroded and for approximately three years pricing at Coed Darcy has been below Crymlyn Park. In 2018 the pricing at each site converged suggesting that no premium exists. This finding is consistent with the opinion of the master developer St Modwen which has commented that it has not witnessed premium pricing at Coed Darcy.

Sales volumes and new build values in Coed Darcy compared to Crymlyn Park



Source: Knight Frank

It is likely that there are a combination of factors for the lack of a premium at Coed Darcy, despite its aspirations of quality. The reasons suggested have included the following:

- **Social infrastructure:** For reasons of viability (explored below) the project has not been able to subsidise the early provision of social infrastructure that can anchor a community and make a place.
- **Speed:** The project has been held up by viability and remediation issues which have caused the project to progress slower than hoped. A smaller scale of development can fail to establish the sense of place that end-purchasers desire.
- **Persimmon Homes:** St Modwen has an established corporate joint venture with Persimmon Homes which provided Persimmon with the opportunity to deliver the early phases at Coed Darcy. It is possible that Persimmon has not carried through some of the aspects of housing quality that were anticipated at Coed Darcy.

13.4 VIABILITY OF COED DARCY

The viability of Coed Darcy is marginal. The land was offered without a land cost and with a dowry from the vendor acknowledging it had a negative development value. The project is now 11 years old and remains significantly cashflow negative. The project's viability has been influenced by a number of factors:

- **Contamination:** The remediation costs have been significant and time consuming. They are also inherently front-loaded with much of the works being undertaken over the first seven years of the project, including the following remediation highlights:
  - 100km of pipeline and cable removed.
  - 200,000 tonnes of concrete has been recovered, crushed and will remain on site to provide recycled hard core for the buildings.
  - 5,000 tonnes of steel recovered, and the majority recycled on site.
  - Over 1,000,000 litres of oil have been recovered and recycled through an extraction process.

- **Infrastructure:** Ambitious infrastructure projects were enshrined within the Section 106 Agreement. Two good examples are the education requirements and a new road. A two-form-entry primary school is required by the 400th occupation, and a 900 pupil secondary school is required by the 600th unit. There is also the need for a new southern access link road which is costing approximately £12 million. These infrastructure projects, and particularly their timing, are undermining the viability of the project.

- **Affordable housing:** The planning permission provides that 20% of the housing is offered as affordable housing transferred at 40% (a 60% discount) of private housing values. If end values are approximately £180 per sq ft, the affordable housing achieves a value of £72 per sq ft, which is considerably lower than the base cost of building the homes and therefore is a burden on the project viability.

- **Design code:** The project was designed with a commendable aspiration for high quality homes, as supported by the Prince's Foundation with the success of Poundbury in mind. We have been informed that the requirements of this code add approximately £4,000 to £5,000 per dwelling, and in some cases (for example where a slate roof is required) £10,000 to £15,000 per dwelling. Base construction costs are already at approximately £110 per sq ft, and these are set to rise with future Building Regulation requirements.

The net result of these factors is the project is not viable in its current form. Whilst the cost of buying the land was effectively zero, the project has had significant front-loaded and ongoing remediation and infrastructure costs associated with servicing the land. These, combined with base build costs of approximately £110 per sq ft, additional costs associated with the design code requirements, the affordable housing burden and finance costs, it has proved challenging to make a reasonable return with end private values of approximately £180 per sq ft to £200 per sq ft. This is the fundamental reason why the project has stalled.

With land value already at zero, the only things that can give to redress viability are the quantum and timing of the infrastructure requirements (eg. highways and education) and the affordable housing provision. The alternative is to subsidise the project with gap funding, but at present the availability of funding in Wales tends to be linked with the provision of employment.

£32

The approximate net loss per sq ft from developing affordable housing at Coed Darcy

"It is possible that the value premium at Coed Darcy has been constrained by an insufficient investment into place making and indeed the slowness of delivery."

13.5 CONCLUSIONS

Coed Darcy is currently at risk of being an unviable project because of a combination of the remediation requirements, the Section 106 Agreement and unhelpful market conditions. Their ambition to drive value through higher quality housing, connectivity, social and community infrastructure have all failed to offset the additional costs. However, this is not to say the project's viability cannot be improved because the costs (as committed to in the Section 106 Agreement as part of the planning permission) could be amended. It is questionable whether the local community sees value in a new £12 million link road and it has been suggested that residents might prefer local amenities that will help create the new community.

Coed Darcy suggests that not all markets will pay a premium for perceived 'quality' or 'beauty'. What is beautiful to one architect or planner may not be a consideration for a local community that can only afford so much. We should not forget that Coed Darcy is replacing the Llandarcy Oil Refinery which employed approximately 2,600 people locally. Its closure, along with other industries, has had a significant impact on the local economy. That said, it is possible that the value premium has been constrained by an insufficient investment into place making and indeed the slowness of delivery that inherently stifles the growing community.

In the absence of a value premium, the additional costs associated with the design code erode the viability of development and will be in tension with any housebuilder's desire to maximise its return, and in tension with any public or private sector landowner's fiduciary duty to achieve best consideration. This is the future challenge facing stakeholders.

14.0 GREAT YARMOUTH

Great Yarmouth challenges the generalisation of a north-south divide and illustrates a 'left behind' place that needs regenerative development to stimulate demand rather than blunt supply-side policies that ignore the nuances of a local market.

Anthony Moore, Housing Growth Manager at Great Yarmouth Borough Council, kindly supplied the case study of Great Yarmouth as a town. We believe it contextualises this research and sets the scene on many of the challenges that face 'left-behind' places, many of which do not fit the generalisation of the north-south divide.

Imagine a town that has everything a potential investor or home-owner might hope for:

- Beach with bathing water rated as "excellent"
- Gateway to a National Park and Britain's largest network of inland waterways
- Waterfront development land
- Rich history reflected in magnificent architecture from the Norman era through to the 20th Century
- Green flag parks
- Higher paid jobs in the growing energy sector
- Proximity to quality, cultural activities including the world class Out There Festival in Great Yarmouth
- Commutable to London from Norwich in 90 minutes
- Ofsted 'Good' schools
- Extant planning permissions: approx. 3,000 dwellings with consent (as at end of 2018/19)

Once the UK's fifth richest town, Great Yarmouth boasts a plethora of historical buildings, maritime heritage, world class Edwardian seaside architecture, the Victorian winter garden, a virtually complete medieval town wall and, charmingly, the only UK's surviving purpose built circus building. All this in a town once as important as contemporaries such as York and, closer to home, Norwich.

However, the housing crisis discussed in the media does not reflect the 'crisis' in Great Yarmouth. Great Yarmouth has a demand-side housing challenge rather than a supply-side one. Given the great and by no means exhaustive opportunities and assets, and the potential for growth in values and rent, Great Yarmouth has a largely untapped potential to attract investors with long-term horizons if supported by favourable national policy. It is the town itself that faces these challenges, and not the wider Borough which supports higher values and is in great demand.

The council is using all the levers at its disposal to try to support regenerative development:

- Successful Enterprise Zone: The Great Yarmouth and Lowestoft Enterprise Zone is one of the most successful in the country and has a focus on offshore energy uses and related industries.

- Direct delivery of housing: The Council has a wholly-owned, arm's-length property company called Equinox Enterprises Ltd which was established in 2016 to develop housing on Council owned land. Its first development (East Wood at Beacon Park, in Bradwell) will comprise a total of 287 new homes.

- Estate regeneration: The Council has prepared a masterplan for the regeneration of The Middlegate Estate, a 1950's post-war housing estate in Great Yarmouth that remains 90% in the Council's ownership. The masterplan envisages an additional 125 dwellings as part of the regeneration of the estate.

- New river crossing: The Council worked with Norfolk County Council to successfully secure £98 million Department for Transport funding for the Great Yarmouth Third River Crossing in 2017.

- Town centre and seafront regeneration: The Council is seeking to acquire appropriate residential properties (including HMOs and guesthouses) in Great Yarmouth and, following a degree of refurbishment and subdivisions, will re-provide them as better quality homes for the community.

- A new £26 million leisure centre, world class heritage regeneration, business rate discounts, restoring the Venetian Waterways, rescuing the Winter Gardens and renewing the outdoor market.

Great Yarmouth Beach, Britannia Pier and Theatre

"Great Yarmouth needs proper gap funding for all tenures. Not based on cost: benefit ratios, or house price affordability – which exclude all but the Home Counties – but based on wider transformational funding."

The government is sufficiently impressed with Great Yarmouth's planning, delivery and governance that they have awarded it Future High Street funding, Stronger Towns funding and funding toward a new river crossing over the River Yare. This will grant better access to the port and Enterprise Zone, improving journey reliability whilst easing congestion. RIBA named Great Yarmouth one of the five Future Places eligible for their support. Through all of this, the Council is trying to position the town, correctly, as a great place to invest, live, work, play and raise a family.

As place leader, Great Yarmouth Council has been successful in securing much needed funding for place-based initiatives and while there are significant opportunities in Great Yarmouth there are many specific challenges similar to other coastal communities. Housing viability remains a challenge, specifically for the right mix, quality and beautiful market homes which will attract those looking to make a life here and support all these place-based regeneration efforts. The current funding system's cost/benefit ratios focussed on unit numbers and house price pressures does not recognise the wider value of housing regeneration within towns like Great Yarmouth. Gap funding requirements remain the reality across all tenures and this challenge needs to be recognised in developing area-based policy and financial planning. Great Yarmouth is developing its own Coastal Housing Deal along Treasury's Green Book lines to espouse the wider social, economic and environmental benefits. Six potential opportunity areas will be highlighted, including empty homes and town centre vacant properties.

The Council wants to support development passionately; but it wants development to be of a quality to match the Council's aspirations for the town. Constantly striving to fulfil the volume requirements places added pressure and may lead to lower quality development negating all the quality placemaking programmes outlined herein.

As a deprived coastal town and a Council that has done its due diligence around latent demand; the Council's ambitions to attract a broader demographic are being hampered by the above and the negative residual land values within the town centre, which inevitably result in out-of-town, greenfield, car driven developments if left to the market.

The Council welcomes the government's serious ambitions about quality development and is seriously ambitious about helping them. Realistically, as the only developer prepared to forgo developer profit and take the risk on these massively important and strategic town centre sites, Great Yarmouth will need proper gap funding for all tenures. Not based on cost: benefit ratios, or house price affordability which exclude all but the Home Counties but based on wider transformational funding with wider metrics of social, environmental and cultural benefits and needs. We need the funding at the lowest point of the cycle not the highest.

14.1 COMMENTARY ON GREAT YARMOUTH

Great Yarmouth is one example of many communities around the country that are in danger of being left behind. It is surprising to some because it breaks the generalisation of a north-south divide and is a clear illustration that one size never fits all. Policy-making designed to appease the perceived housing crisis does nothing to stimulate investment into areas like Great Yarmouth that need government support the most.

Great Yarmouth is a deprived coastal town that is trying to do everything to stimulate demand for housing and economic growth through place making. This is illustrated by the case study of Council owned land at The Conge, which the Council has identified as a regeneration area along with the North Quay area. The Regeneration Area has the potential to transform one of the major gateways into the town, increase rail traffic, introduce new urban dwellers to the struggling high street and raise the land value of neighbouring stalled sites.

Great Yarmouth from the air

Great Yarmouth Regeneration Area

"This project shows that land value is not necessarily the barrier to viability, but moreover the balance of cost and value."

It is evident that the site is unviable; in fact, the development land value appears to be negative and therefore below the value of the land in its existing use. The Council would be prepared to put its land into a joint venture at nil cost to the project, but the expectation is that the project would not generate sufficient return to justify the risk for a private sector development partner. Gap funding is required to unlock this project for development.

Whilst there is not a long list of developers active in the area, there would be an appetite to develop the site if it were commercially viable. There are developers that are active in the Borough, including Persimmon Homes, Norfolk Homes, Badger Building and some smaller developers, but even without a land cost there is a profitability 'gap' that needs to be subsidised to attract them to the project.

This example of a project that is unviable even without the project suffering a land cost, shows that land value is not necessarily the barrier to viability, but moreover the balance of cost and value. This addresses the common misconception that the cost of land underpins the cost of housing. In fact the causality operates in reverse in that the price someone is prepared for land is a residual calculation after deducting development costs and profit from the anticipated future revenues.

The Council made an unsuccessful bid for £4 million to the Housing Infrastructure Fund in 2017 to help improve the infrastructure of the area and thus viability of the Regeneration Area project. Recognising that regeneration of the area is unlikely to see a private sector led regeneration, the Council is producing a Supplementary Planning Document which will provide further, more detailed, guidance to help in the regeneration efforts. In July 2019 the Council also agreed to release £2.5 million to begin to purchase various properties and landholdings in the area, with a view to land assembly to increase the chances of a comprehensive scheme coming forwards.

The Council has made extraordinary efforts to attract investment into the town centre; however, the fundamental viability of development makes regenerative development challenging. We review two further issues relating to this project in more detail below: first, how gap funding has been assessed means that Great Yarmouth may not be successful, and second, how housing targets can have unintended consequences that will also make town centre regenerative development even less likely.

14.2 GAP FUNDING

Gap funding is needed where development land is unviable; that is to say the land is more valuable in its existing use than to be developed into an alternate use. When considering gap funding HM Treasury considers the cost-benefit to the country. The cost is the size of the funding gap. The benefit is the quantum of units provided and their affordability. If they are built in an area where affordability is more challenging they are considered to have greater value to the country. At Great Yarmouth, the site has a negative value and the local housing has a price to earnings ratio under 10 so the site did not meet the HM Treasury's metrics for gap funding.

"Great Yarmouth failed the gap funding test because it was considered sufficiently affordable. This test perpetuates a left behind place."

In this example, Great Yarmouth only has lower value housing because demand is low. The lack of demand for housing reflects the lack of investment into local commerce creating a vicious cycle that perpetuates a left behind place. Investment from central government can break this cycle, but if it needs to be predicated on high value homes then Great Yarmouth will always fail the test and the vicious cycle will prevail. This illustrates the importance of triple bottom line metrics that consider the social and environmental impacts in addition to financial performance.

Historic regeneration experience (from 1990s post-riot regeneration exercises in Liverpool, Sheffield, Manchester and London), and more broadly Glasgow, Belfast and Dublin show that intervention in markets to support much higher levels of build quality and place making can have a transformative long term effect on values and economic potential.

It can be seen in other seaside towns around the UK that investments in high quality cultural and tourism facilities can substantially change perceptions of a place. So, for example, the Tate at St Ives and the Turner Contemporary at Margate have coalesced regeneration and transformation of local place offers. They have also accompanied by the commitment of entrepreneurial funds to create a new standard of tourist accommodation often through reusing older properties within historic town centres.

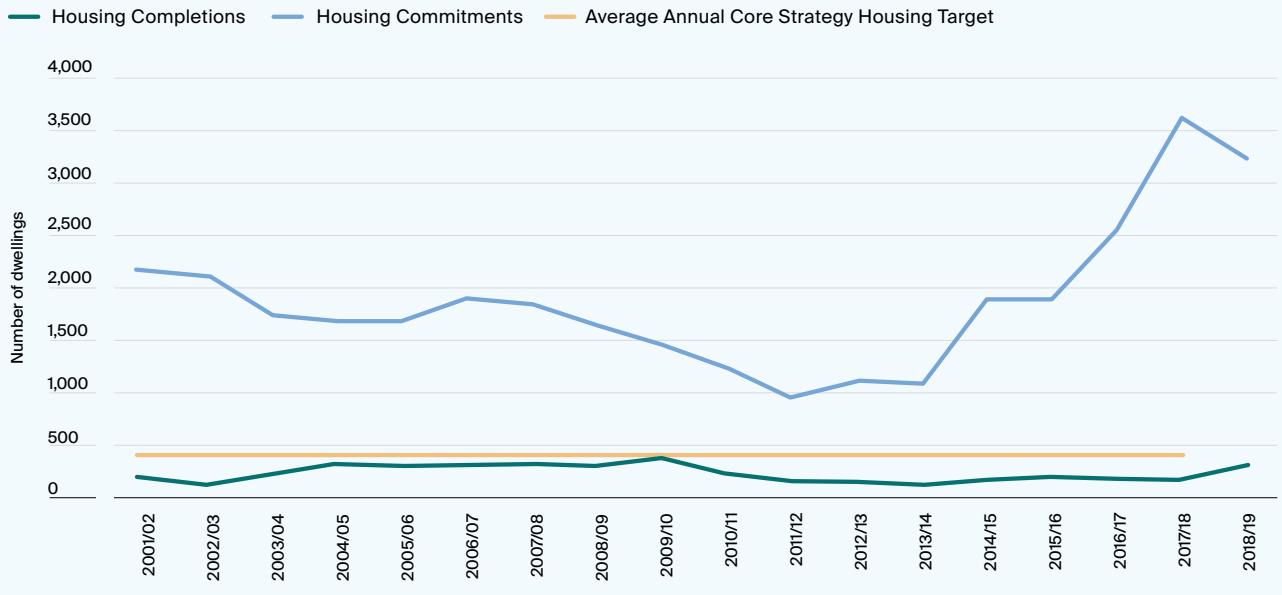
Whilst principally stimulating new economic activity and a transformed 'place offer' such transformational regeneration can also help to change perceptions of residential markets and stimulate new demand and levels of quality expectation. This form of regeneration activity is presently in competition with space that can be allocated towards housing (under a strenuous five year land supply regime) and is difficult to fund where markets are weak. This can further undermine the capacity of a place for regenerative transformation, and underlines the unintended consequence of single focus regeneration and growth policies.

4.5x
housing permissions exceed the housing target by 4.5x on average

14.3 HOUSING TARGETS

Housing targets are designed to force Councils into action and permit land for development. In Great Yarmouth the target has been 300 units a year since 2015 and from 2020 the target is increasing to 504 per annum until 2030. Despite great efforts to stimulate inward investment, according to the housing delivery test 2018 an average of 202 dwellings per annum have been delivered, which is 67% of the housing target. It is not that the planning permissions do not exist. As of April 2019, there were 3,250 dwellings with planning permission or an existing Local Plan allocation across 242 sites. The longer term trend is illustrated in the following chart.

Housing completions & housing commitments (2001/2–2018/19)



Source: Housing Delivery Action Plan, Great Yarmouth Borough Council, August 2019, Appendix A

The above chart suggests that it does not make a difference how many homes have planning permission (referred to as housing commitments) or what the housing targets are, the number of homes sold (completions) will reflect the demand in that year. If that is the case, pushing more land through the planning process will not affect the number of homes built because if the housebuilders understand the markets they operate in, they will ensure delivery rates will closely match absorption rates.

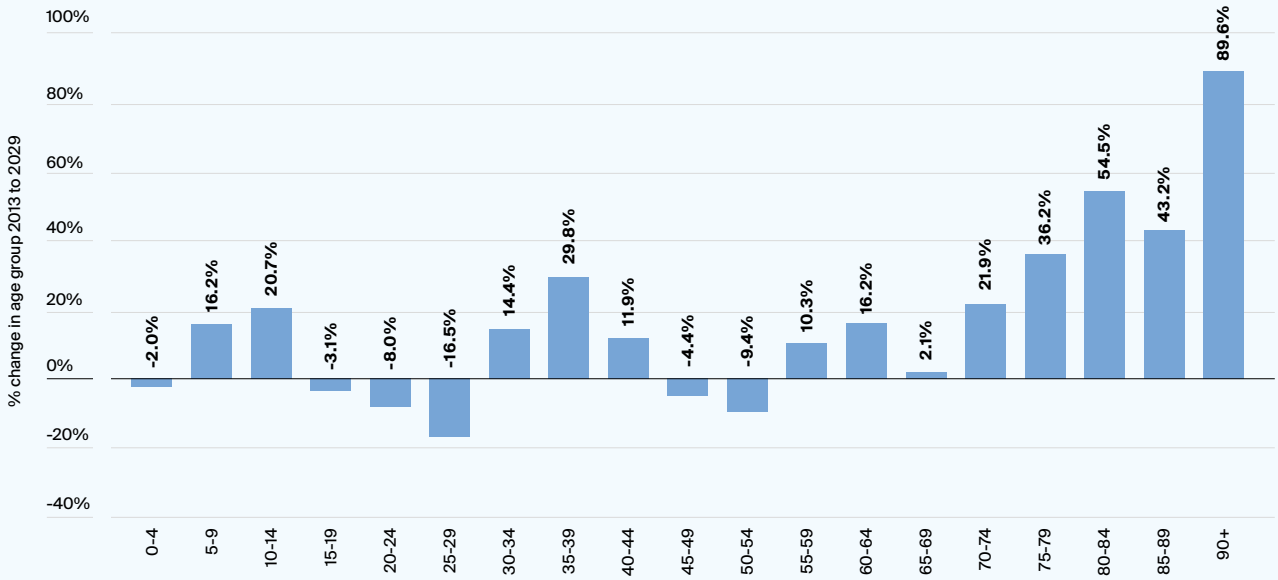
14.3 HOUSING TARGETS (CONT.)

The housing targets were set out in the Core Strategy (adopted Dec 2015) in response to an annual housing need of 420 households as recommended within the Strategic Housing Market Assessment (SHMA) update in 2013. The Core Strategy set out a stepped trajectory as it was considered the 420 homes per annum would not be feasible in the early years of the plan. As illustrated in the 'Housing Completions & Housing Commitments' chart historically completions has fallen short of the need identified by the SHMA. Over a 10 year period the shortfall has represented an average of 45% of this figure. The local authority is responding and is progressing its Part 2 Local Plan with a more realistic figure of 363 homes per annum based upon the standard method for local housing needs as set out in the National Planning Practice Guidance, although that remains above the average housing completions over the past decade of 232 homes per annum.

It is also notable that the SHMA identified increases in particular age cohorts, particularly those aged 90 or over (see forecast population chart below). In addition, the household projections indicate there will be large increases in the number of lone parent and 'other' households. In fact, the one group that we would most identify with needing to live in a house (as opposed to a flat) – the 'Couple with dependent children' – was forecast to only grow by 2.7% between 2013 and 2029 (see summary change in household structure chart overleaf). This is a compound annual growth of 0.17%.

"Future demand is from demographics that will need more town centre flats at affordable rents, not out-of-town housing."

Forecast population change by age group in Great Yarmouth Borough, 2013–2029



Source: Great Yarmouth Borough Council Strategic Housing Market Assessment, November 2013

The SHMA also highlights the challenge of affordable housing. It confirms that there are a large proportion of households that are unable to afford to access private accommodation in Great Yarmouth and identifies a need for 438 affordable dwellings per annum, particularly one bedroom homes. This does not equate logically with the planned total additional 300 new homes per annum and the explanation given in the SHMA is insubstantial:

438

The number of affordable homes needed pa, by comparison to the housing target of 300 homes pa

Herring drifters in 1954 (est), Great Yarmouth

We believe the real explanation lies in the inability of private housing development to sufficiently subsidise the level of affordable housing needed. This is a trend across most markets and we believe is one of the biggest challenges facing the Government. It should be the focus of extensive research. For now, and in respect of Great Yarmouth, we can conclude that there needs to be careful consideration to try to ensure that the right types and tenures of housing are planned for and delivered.

Several sites exist across the Local Authority area that are trying to sell as many homes as they can as fast as they can. There are also many more permitted schemes waiting in the wings if they are all sold out. Either the demand is not there to meet the housing target, or perhaps permission is being granted for the wrong homes in the wrong location. The data suggests that what Great Yarmouth needs is more town centre flats at affordable rents (for example set at 65% of market values as suggested by the SHMA), in part to accommodate the needs of an elderly population, but also to house key workers that can help stimulate and sustain local commerce.

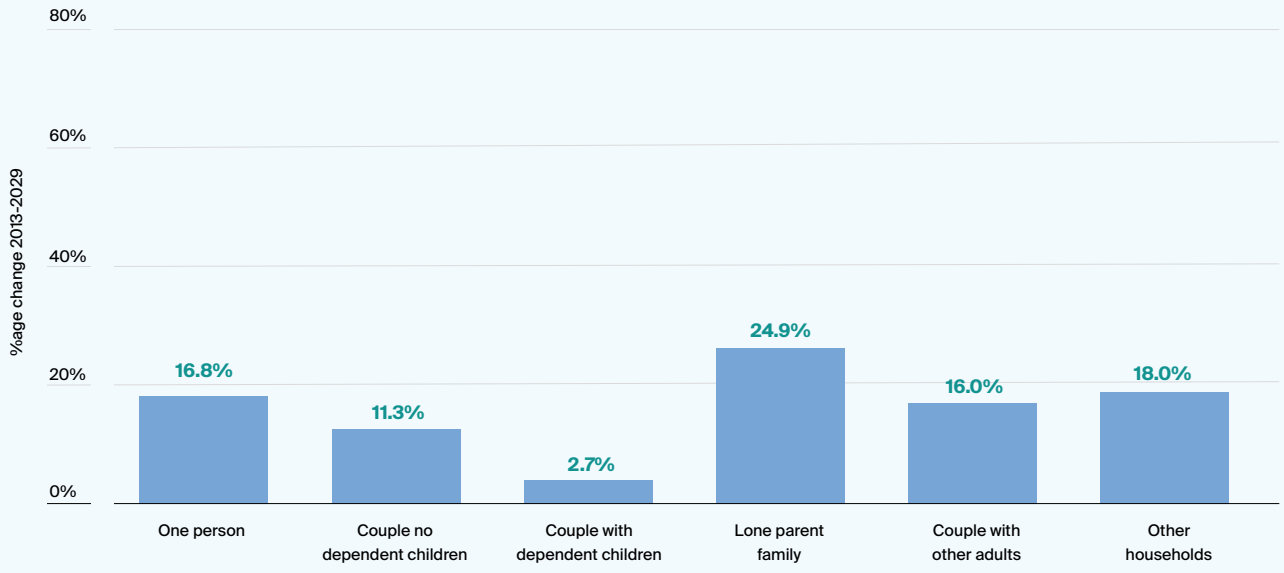
14.3 HOUSING TARGETS (CONT.)

If the town centre sites are to be successful it is important that they harness the small amount of demand there is, and it is therefore important that this demand is not lured to development projects in less sustainable or less regenerative locations. The scale of the housing targets/need and the part-urban and part-rural nature of the Borough requires the Planning Authority to allocate and permit some greenfield housing development. For example, from Knight Frank's own review of the applications currently in Great Yarmouth's planning system, Persimmon Homes is seeking to build 665 homes within the Great Yarmouth Borough beyond Caister-on-Sea's access road – Jack Chase Way (as indicated on the Case Study map) – which currently marks the western limit of the settlement.

This development – if approved – would meet the needs for some types and tenures of housing, including elements of affordable housing. The housing target is putting pressure on the Local Planning Authority to approve more planning permissions, whereas we believe they should be encouraged to refuse applications that do not represent developments that are not in the most sustainable and most regenerative locations.

"Housing targets are putting pressure on Local Planning Authorities to approve more planning permissions, however they should be encouraged to only accept those applications that are sustainable and in the right locations."

Summary change in Great Yarmouth Borough household structure, 2013–2029



Source: Great Yarmouth Borough Council Strategic Housing Market Assessment, November 2013

> **"Blunt supply-side policies do nothing but dilute the fragile demand and risk leading to the wrong development in the wrong place."**

14.4 CONCLUSIONS

The Great Yarmouth case study helps illustrate so many of the challenges facing the housing market. It shows us that the issues are nuanced and specific to each location. Here is a left-behind coastal community in the south east of England that has endless supply (housing permissions exceed the housing target by 4.5x) yet completions have fallen behind target by 45% on average. Blunt supply-side policies do nothing but dilute the fragile demand and risk leading to the wrong development in the wrong place.

Great Yarmouth is in a vicious cycle where the lack of demand for housing reflects the lack of investment into local commerce thereby perpetuating a 'left behind' place. The Local Authority have attempted many measures to stimulate demand, but have been constrained by the fact that house prices appear more affordable than other parts of the South East. It seems scandalous that Great Yarmouth might fail an 'unaffordability test' when investment from central government could stimulate demand through regenerative development and engender a virtuous cycle which would have a transformative medium and long-term effect on values and economic potential.

15.0 WELBORNE FAREHAM

The Welborne case study illustrates the real financial obstacles facing a private landowner seeking to achieve a higher quality outcome. The low returns from investment through planning, and the heavy burden of infrastructure costs beg the question whether the policy landscape sufficiently incentivises these activities.

15.1. CONTEXT

Welborne is located to the north of Fareham and the M27 and comprises a site of 377 hectares. It has received planning permission for 6,000 homes with a vision as a Garden Village for the twenty-first century.

Originally identified by Fareham Borough Council (FBC) as a new holistically planned community, Welborne sat partly within the Southwick Estate, owned by the Thistlethwayte family for nearly 500 years. Concerned by the prospect of "one-dimensional, homogenous housing estates", the family decided to guarantee the quality of the place and established Buckland Development Ltd (BDL) to be the driving force behind the delivery of the new community. BDL subsequently took steps to acquire large portions of the land selected by FBC for Welborne that were outside of the Estate. In particular, more than half of the land was previously owned by a neighbouring landowner that did not want to follow a longer-term development model and sold its land to BDL. BDL now owns 96 per cent of the site.

The landowner, BDL explains that Welborne "has been driven by a shared resolution that the community will be an exemplar that will stand the test of time, with the amenities and infrastructure to serve its residents and the wider area for generations to come". To support the vision BDL is pursuing a long-term approach that prioritises patient investment ahead of short-term financial returns. It appreciates the premium that highly crafted construction, well-considered design and community-led stewardship will reap over time. This is all possible because of the landowner's long-term vested interest in the area. In BDL's words, its intention is to "counter to the prevailing pattern of short-termist suburban growth, driven by housing numbers and quick returns that has dominated much UK housing development in recent decades".

The tools that BDL will use include a design code, estate stipulations, creating aligned partnerships with its future delivery partners, stakeholder management and stewardship mechanisms that will represent the community over the long-term. It intends to act as a benevolent landlord setting low or nominal rents to enable the most suitable tenants to establish enterprises that will not only provide everyday services to residents but will also attract others from the surrounding area and make Welborne a destination in its own right.

15.1. CONTEXT (CONT.)

BDL believes that good development will result in improved values at Welborne over the longer term. This will bring long-term economic benefits, which will, in turn, enable BDL to reinvest more in the community's social and physical fabric across its lifetime and thereby secure a better quality of development. The process of capturing value gains takes time, and thus is often not attractive to conventional investors. This is evidenced by the landowner's viability assessment which forecasts that the project will break-even 22 years after construction begins.

The planning of the project took over a decade and in 2019 received outline planning permission for the largest proposed settlement by dwelling numbers reviewed in this report. The new settlement will provide up to 6,000 homes, almost 300 acres of open space, approximately 1.25 million sq ft of retail and business space, three primary schools, one secondary school, nursery, health centre, veterinary services, public house, village centre, sports and leisure facilities, hotel, playgrounds and community hall. We summarise the project in the fact file below.

15.2 FACT FILE

	PROJECT NAME	WELBORNE
LOCATION	Address	Land north of Fareham
	Local Authority	Fareham Borough Council
	County Council	Hampshire County Council
STAKEHOLDERS	Landowner	Buckland Development Limited
	Developers	To be confirmed
PLANNING	Planning reference (OPP)	P/17/0266/OA
	Design code or controls	Design code
DEVELOPMENT	Number of homes	6,000
	Tenure mix	10% affordable in first phase rising to 30%
	Average size (sq ft)	1,100 sq ft
	Mix of uses	Up to 1.25 million sq ft of retail and business space, four schools, sports and leisure facilities, playgrounds and community hall
CONSTRUCTION	Construction method	Traditional
	Construction start	2021 (forecast)
	Construction finish	2045 (projected)
	Project timescales	25 years
PROFESSIONAL TEAM	Masterplanning architect	Aecom
	Planning consultant	David Lock & Associates
	Architect	Ben Pentreath
SALES	Marketing launch	2021 (forecast)
	Sales completion	2046 (projected)
	Units sold per month (average forecast)	21.0 per month
	Current sales values (est)	£325 per sq ft

15.3 INFRASTRUCTURE COSTS

Infrastructure is the name given to all aspects that will ultimately be to the benefit of the community, whether that be the community of Welborne or the wider region. Infrastructure includes a number of components and in Welborne's case includes the following:

- Movement infrastructure: spine roads, cycle routes, bus service
- Access infrastructure: Junction 10 of the M27, the new roundabouts on the A32, A32 junction improvements
- Utility infrastructure: electricity, water, sewerage, SUDs (Sustainable Urban Drainage Systems), telecommunications
- Social and community infrastructure: four schools, healthcare and leisure facilities, village hall, district centre, village centre, shops
- Green infrastructure: biodiversity, parks, SANGs (Suitable Alternative Natural Greenspace), allotments, woodlands, green corridors, highway buffers

4.7x

Welborne contributes 4.7x more infrastructure investment than smaller developments do through CIL

We have excluded affordable housing from the above list of infrastructure costs, although it should not be forgotten, as the provision of affordable housing is a considerable cost to a project which, as referenced by PBA in its Fareham Borough Council Community Infrastructure Levy (CIL) viability study (June 2014), is typically more costly than CIL.

According to the Welborne Garden Village viability review (dated October 2019), the cost consultant Aecom prepared an infrastructure cost plan which amounts to £308 million. It should be noted that this includes £20 million towards the total cost of £80 million to £90 million for a new Junction 10 of the M27. BDL has secured £29 million of grant funding towards the junction costs, but a commitment of £10 million of Housing Infrastructure Funding (HIF) has been restructured as a loan to be recovered. Therefore there exists a funding shortfall of £31 million to £41 million.

In order to benchmark the cost plan, we have related the costs to Welborne's land area (179 ha net developable area, or 442 acres), its estimated total residential floor area (approximately 6.5 million sq ft or 604,000 sq m) and the total number of units. We have then compared this to a sample of 20 other major development area (MDA) sites of 1,000 to 10,000 dwellings from across England, and the Fareham Community Infrastructure Levy (CIL). This comparison is summarised in the table below.

NAME	WELBORNE	MDAS	FAREHAM CIL (20 UNITS)	FAREHAM CIL @10% AH	WELBORNE VS FAREHAM
Costs per sq m	£510	£520	£121	£109	4.7x
Costs per acre (net)	£697,000	£691,000	£94,000	£84,600	8.2x
Costs per unit	£51,000	£51,000	£7,000	£6,300	8.1x

The Fareham CIL of £105 per sq m has been indexed according to the BCIS index to October 2019 (+15.1%) and then related to the square metres and land area assumptions for a 20 unit scheme (as per PBA's CIL Viability Study, dated June 2014). Given CIL is chargeable on private housing only we have also adjusted the CIL rates by 10% as though they are applying to a development with 10% affordable housing (as is being proposed for the first phase at Welborne).

The comparison suggests that Welborne is shouldering a disproportionate infrastructure burden of almost 5x other smaller developments in the local area.

The same can be said of other MDAs in comparison to smaller sites across the country. The infrastructure costs of other MDAs demonstrate a similar quantum to Welborne at £520 per sq m, whilst on average, we understand that the average CIL rate for residential development is £95 per sq m (see p.5 paragraph 9 of 'The value, impact and delivery of the Community Infrastructure Levy', published in February 2017 by DCLG).

There could be two ways to redress the apparent imbalance. One would be to support development projects through provision of infrastructure finance. This could be grant funding, as is currently being offered to Local Authorities via the Housing Infrastructure Fund (HIF), or debt funding as is currently being offered via the Home Building Fund (HBF). Alternatively it may also be possible to redress the balance by equalising the contributions that all developments make via CIL.

To illustrate how infrastructure equalisation might work for Fareham Borough Council we have calculated the respective anticipated contributions over the current plan period to 2026 based on Fareham Borough Council's housing projections for Welborne and the rest of the Borough. As summarised in the table below, the per unit contributions would be balanced across all sites at £39,000 per unit.

FOR PERIOD 2019/20 TO 2025/26	WELBORNE	FAREHAM	TOTAL
Projected planned housing completions	1,000	383[2]	1,383
Infrastructure contributions per unit	£51,000	£6,300	£39,000
Total infrastructure contribution	£51,000,000	£2,413,000	£53,413,000

"It may be possible to equalise the investment that all developments make to infrastructure."

If Major Development Areas need to have a specific set of contributions to community infrastructure contained within a Section 106 Agreement, the total package of contributions could be benchmarked against the average across the local authority area. For Welborne this would mean that the total infrastructure cost plan should total no more than £234 million (being 6,000 units x £39,000). By spreading the burden in this way Welborne would likely be able to support 30% affordable housing, equating to 1,800 affordable homes that would greatly benefit the local area.

Unfortunately, life is not as simple as rebalancing all the infrastructure demands across the UK. If CIL rates increase, residential land values may drop below alternative uses and the quantum of land released for residential development will likely reduce. The only way (that we are aware of) to block uses substituting each other is through strong planning policy, such as zoning for one use, but that has its own unintended consequences because land will be blocked from being allocated to its most productive use. If CIL rates are to be increased, we recommend the change happens slowly in order that markets have time to adjust.

[2] *See Table 14 on page 216 of the Fareham Local Plan Par 2: Development Sites and Policies, June 2015, Adopted version, https://www.fareham.gov.uk/PDF/planning/LP2DSPAdopted.pdf*

15.4 COST AND VALUE

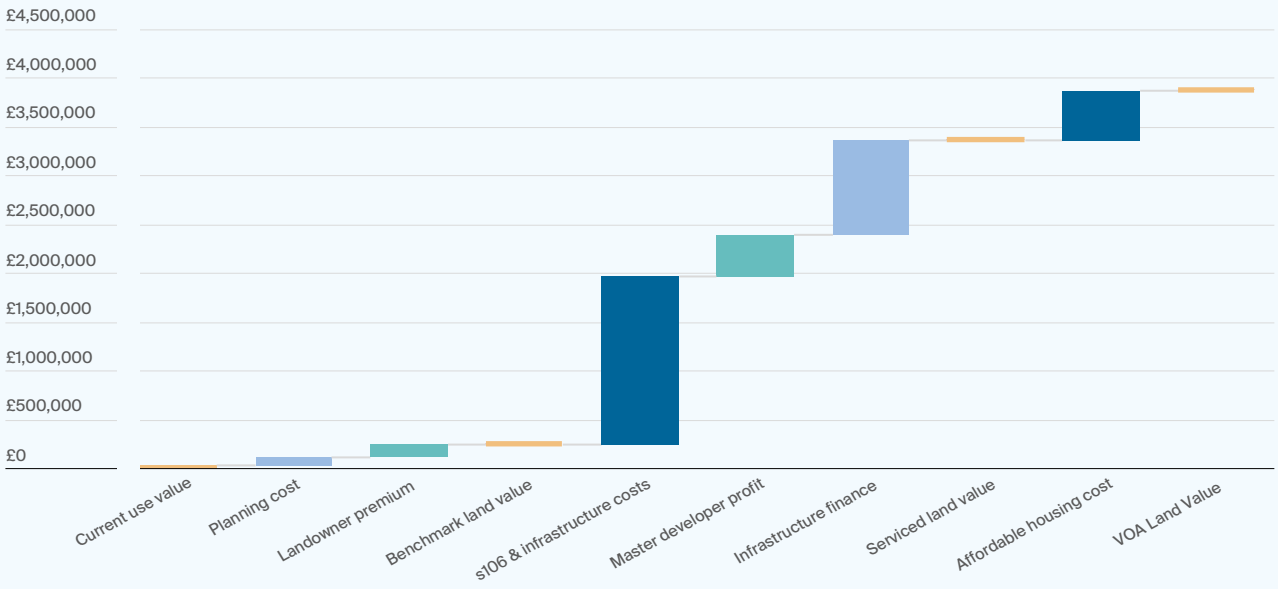
Welborne offers a useful case study to understand the value of land through the planning process, and through servicing the land with infrastructure in order to provide it for development. Value is added as the landowner – in this case BDL – invests in the land. In the chart below, the red lines represent moments when land value can be crystallised and are the moments that justify the activity or investment to that point. The step from Current Use Value (CUV) to Benchmark Land Value (BLV) is the activity of obtaining planning permission – the promotion stage – and the step from BLV and Serviced Land Value (SLV) is the activity of servicing the land for development – the servicing stage. The returns at each stage should justify the investment involved and risks taken.

Everything between the left and right of the chart represents a value that will flow to a stakeholder, whether as profit for each activity (green), investment with no community value (blue) or investment with community value (yellow).

2x

The landowner's return on planning investment was 2x

Value gain per net hectare of residential development land at Welborne



Source: Knight Frank

15.5 THE PROMOTION STAGE

In the promotion stage the value of the land is taken from its CUV – in Welborne's case from its value as agricultural land – to the BLV which is the land's value with planning permission. Through this phase the landowner invests capital in the planning application and supporting documentation and is incentivised to do this in return for a landowner premium. In Welborne's case, BDL has financed the promotion costs, but in many other cases this cost is not fundable and the landowner has to work with land promoters, or dispose of the land via an option agreement with a developer or housebuilder.

The landowner premium is deemed the necessary uplift to incentivise the landowner to invest in the planning application and release the land for development, or in the words of the National Planning Policy Framework published in July 2018:

"The premium for the landowner should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The premium should provide a reasonable incentive, in comparison with other options available, for the landowner to sell land for development while allowing a sufficient contribution to fully comply with policy requirements."

Local Authorities appoint consultants to advise where to set the BLV. If they get it right, the landowner premium is just enough to promote land for development without being too generous, whilst leaving the maximum possible available for community infrastructure. If they get it wrong, there is a risk that land will not be promoted and there will be no corresponding investment in community infrastructure.

The BLV is also the reference point for a viability assessment. If the project is showing a positive viability it can afford more affordable housing and more contributions via a Section 106 Agreement, but if it is negative, the contributions will need to be balanced until ipso facto the value with planning permission is the BLV. They will be one and the same if the viability assessment operates effectively.

The landowner premium can be considered an 'earned increment' for risking capital, and in the case of Welborne the landowner had to invest more than the underlying value of the land to obtain planning. There is insufficient value in the land to secure a cheaper loan so landowners need bridging finance to fund planning costs. If unsuccessful they could be faced with debt and insufficient assets to repay it.

In Welborne's case the landowner invested £27,000 per acre on its planning application and was willing to forego the land value of £19,000 per acre[3]. In return it stands to realise a landowner premium of £55,000 per acre before the BLV of £101,000 per acre[4] is reached. This is a 2x return on the capital put at risk through planning, which does not justify the risk of losing everything, particularly with uncertain planning outcomes. In this case, the landowner has decided to take a very long-term view to justify the risk.

Policy proposals to tax the landowner premium would likely result in one of two things:

- A consultant reassessing the appropriate BLV would conclude that the risk of the planning activity has not changed so, to maintain the uplift whilst covering the cost of the tax, the advice to the Local Authority would be to raise the BLV proportionately. This leaves less value between the BLV and the SLV. A master developer's return will come under pressure, but over the medium-term that will need to be maintained or the activity will cease. The residual item in the chart is, unfortunately, the investment in community infrastructure and affordable housing. In this way, we can expect that any taxation by Central Government will simply redistribute funds from a local level to HM Treasury.

- If the BLV is not reassessed then there will be an insufficient return to justify the promotion of land through planning, and over the medium-term this activity will cease and less land will come forward for residential development.

- Neither of these outcomes are acceptable to the Government, are not in the best interests of the United Kingdom.

Whilst investment in community infrastructure (including affordable housing) may suffer if the landowner premium is taxed, there is also the opportunity to increase investment in community infrastructure through reducing risk and efficiencies within the planning stage. The key will be to improve the predictability of the planning decision through a more rational process towards allocation in the first place. More consensual processes will identify the nature and form of development and if less value is leaked through inefficiencies in planning more funds will be available for community infrastructure and affordable housing. This does not mean minimised planning, but better planning

In Welborne's case, BDL's target is to provide 30% affordable housing if future viability reviews permit; however, the viability assessment[5] suggests only 10% is viable in the first phase of 1,000 homes. There is a further shortfall in that up to £41 million of the cost of the Junction 10 improvement works require grant funding if the project is to proceed.

[3] *Agricultural value taken as £22,500 per ha from the VOA estimate 2015 for Solent. https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017. This has to be converted from gross area to net area in order to compare with the VOA figures for the sale of net developable area. Here 179 net ha relates to 377 ha gross, a gross to net ratio of 2.1x. The acre to hectare conversion is 2.4711x*

[4] *Benchmark land value at £118,700 per gross ha = £250,000 per net ha. FBC Local Plan viability assessment para 2.11.18 page 53 states "The figure that we consider to represent the minimum land value likely to incentivise release for development in the Fareham Borough is c.£370,000/ha, based on gross (overall) site area." Although this has calculated in the wrong direction from an expectation of £250,000 per net ha – see para 2.11.12 – which would actually relate to £118,700 per gross ha.*

[5] *https://www.fareham.gov.uk/PDF/planning/local_plan/DraftLocalPlanEvidenceBase/EV25-Local_Plan_Viability_Assessment.pdf*

15.6 THE SERVICING STAGE

In the servicing stage the value of the land is taken from BLV to Serviced Land Value (SLV) through investment in infrastructure by a master developer. In Welborne's case the master developer will be BDL who will fund the total projected cost of £308 million. Whilst the party is the same, the activity is distinct and justifies its own returns.

Funding the infrastructure cost of £308 million is more challenging because it is front-loaded. It is estimated that £105 million (34%) is required before the 1,000th home (16%) has been occupied ensuring that the project will have a negative cashflow in the early years. In Welborne's case BDL's viability appraisal predicts that the project will not be cashflow positive before the project's 23rd year, with a peak funding requirement of over £135 million. What are BDL's options to finance these infrastructure costs?

One option BDL has is to dilute its equity interest and enter into a joint venture partnership with a master developer partner who can leverage their balance sheet. In doing so the partner will seek a return on equity that will be more expensive than debt.

Debt funding of infrastructure remains relatively scarce, which is why Government – via Homes England's Home Building Fund – has become the lender of last resort to private sector businesses. Following State Aid rules, the Home Building Fund needs to follow a margin matrix (included below for ease of reference) which reflects the 'Creditworthiness' of the entity seeking funding. A private landowner like BDL is seen as having a relatively weak creditworthiness and for a normal collateralisation would receive funding at a margin of over 4%. This will compare unfavourably to a company with a good creditworthiness, such as a housebuilder PLC, who is able to access cheaper funding likely to be below a 1% margin.

"Infrastructure costs are front-end loaded. At Welborne, 34% will be spent before 16% of homes are occupied."

CREDITWORTHINESS	COLLATERALISATION		
	HIGH	NORMAL	LOW
Strong	0.60%	0.75%	1.00%
Good	0.75%	1.00%	2.20%
Satisfactory	1.00%	2.20%	4.00%
Weak	2.20%	4.00%	6.50%
Financial Difficulties	4.00%	6.50%	10.00%

23

BDL's viability appraisal predicts that the project will not be cashflow positive until its 23rd year

The contrast is even more stark when BDL's options are compared to the public sector which can access grant funding via the Housing Infrastructure Fund. This places free sources of capital in support of public sector projects unlocking projects that would otherwise have been unviable.

There is an opportunity to level the playing field between the public sector, corporations, and private landowners through the creation of a patient capital fund for schemes seeking to adopt a high quality stewardship approach to development. The Government could offer long-term funding to support infrastructure expenditure. Patient publicly sourced capital could be offered over longer time periods than currently available (for example 10 to 40 years) to projects that meet a set of credentials, and repaid on a tariff basis when homes are sold. If State Aid rules no longer apply following Brexit, such a patient capital fund might provide long-term rates that create a level playing field across different participants.

Our sample of large private sector MDA projects suggests that Welborne's infrastructure challenges are the norm rather than the exception. This suggests that many large projects face viability challenges, which having been scrutinised within a viability assessment, may result in levels of affordable housing that do not meet policy targets. We also know from other projects that demand can be fragile suggesting that different housing projects can compete for the same demand. That being the case, there is a danger that public sector projects propped up by HIF may erode the viability of private sector projects. In this context it is important that each proposed site is rigorously assessed as being in the most sustainable location.

There is a need for local authorities to be self-disciplined in what they load as costs against the development of new communities. For items of infrastructure that are not clearly causally linked to opening up development, other mechanisms for spreading the cost across all beneficiaries should be considered. The increasing sophistication of option and impact modelling will enable planners to much more scrupulously test the functionality, catchment and impacts of different infrastructure approaches.

"State Aid rules cause funding for private landowners to be unfavourable."

15.7 THE HYPOTHETICAL VOA LAND VALUE

There is a final hypothetical land value benchmark illustrated on the far right of the 'value gain chart', which is the value of land once it is serviced and on the special assumption that there is nil affordable housing. This is the land value assessed by the VOA in its assessment of "residential land value with planning permission"[6] The VOA's land value assessment is hypothetical because it makes a number of assumptions that combined could almost never be a reality. In its own words:

"The purpose of these values is to use in appraising land projects from a social perspective, in line with Green Book principles. The values here assume nil Affordable Housing provision in order to give pure residential use value, rather than market value. In reality we expect the market value of land to reflect the cost of affordable housing provision."

[6] *see the VOA's Land Value Estimates for Policy Appraisal in 2017: https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017*

The assumptions in calculating the VOA land value are as follows:

- Nil affordable housing
- Nil statutory costs associated with CIL, s106 or s278 agreements
- A site of 1 hectare in area of regular shape
- A fully serviced site with services provided up to the boundary and road frontage
- A site without contamination or abnormal development costs, not in an underground mining area, without risk of flooding
- As a proportion of the total value gain from the CUV to the VOA land value, this analysis suggests that 57% of uplift is being 'taxed' as investment into infrastructure and affordable housing.

This is not to say that the dark blue bars in the value gain chart represent all the tax being paid as the project offers significant tax revenue within each stage. For example, SDLT is charged on three land transfers (the transfer from landowner to master developer, from master developer to housebuilder and from housebuilder to end purchaser), levies are charged on construction items, capital gains tax is paid on landowner premium, corporation tax is paid on master developer profit and on the housebuilder's profit.

15.8 CONCLUSION

The case study of Welborne, a proposed new garden village including 6,000 homes, provides an example of a landowner that is determined to generate value over the long-term despite many obstacles in the way. The planning costs have been more expensive than the underlying value of the land, and the justification – the landowner premium – may only offer a 2x return. The infrastructure cost estimate currently stands at £510 per sq m, almost 5x the contribution made by other proposed developments in Fareham, and yet there remains an unfunded cost of up to £41 million required for an improved Junction 10 of the M27.

Within the context of a viability assessment, the residual item in the calculation is the amount of value extracted as community infrastructure, including affordable housing. This presents an opportunity to increase community infrastructure if efficiencies can be found in the promotion and servicing stages. The Welborne case study shows us that there are many areas where efficiencies may be increased, as summarised below:

"This case provides an example of a landowner that is determined to generate value over the long-term despite many obstacles placed in the way."

- **Reduce planning risk:** The key is to improve the predictability of the planning decision through a more rational process towards allocation in the first place; for example, if a Strategic Plan offers a presumption in favour of development in mapped areas defined as the most sustainable locations for development. More consensual processes will identify the nature and form of development. This does not mean minimised planning, but better planning.

- **Reduce planning costs:** Costs could be reduced through a new tier of geospatially referenced evidence collation and publication to define known unknowns. This would allow future planning applications to be informed by that material thereby reducing the cost burden on future applicants and enabling proportionate decision making by the Local Planning Authority.

- **Reduce planning and infrastructure funding costs:** A patient capital fund could be established to provide long-term lending for planning and infrastructure investment at competitive rates, with flexible repayment options (eg. tariff repayments when homes are sold), and where developments meet certain criteria that encourage good quality sustainable settlements.

- **Equalise infrastructure costs:** Section 106 and infrastructure commitments could be benchmarked against CIL to create a level playing field. Over the medium-term we believe there may be an opportunity to gradually increase CIL contributions from smaller developments.

- **Identify the necessary infrastructure investment:** Adopt more a more effective process towards infrastructure identification informed by available integrated spatial intelligence and modelling.

16.0
PARK VIEW WOODSTOCK

Park View offers an example of a landowner whose interests are so inextricably linked to those of the local community that it has decided not only to deliver high quality homes, but also to offer discounted affordable homes and has volunteered 'principles of legacy' that could define a kitemark for stewardship.

16.1 CONTEXT

Park View is the first phase of developments proposed by the Blenheim Palace Estate (BPE) surrounding Woodstock in Oxfordshire. It is the first of three significant proposed extensions to Woodstock on land owned by BPE. Park View is under construction with the first sales achieved off plan in Summer 2019 with first completions due in February 2020. Whilst the premium being achieved is notable, this case study has been selected as an example of a landowner that is sufficiently invested in the local community that it has taken a notable attitude to affordable housing and to legacy development principles.

BPE's stated aim of the development is to secure design standards of the highest quality to complement and enhance the centuries-old legacy of the Blenheim Palace World Heritage Site and the historic town of Woodstock. These standards will be achieved through continued direct investment and management. BPE adopts a multi-generational approach to investment and to its developments contemplating development with a 300 year outlook. It believes that taking long-term view and adopting a stewardship role will benefit the development and wider community significantly.

BPE sees the purpose of a landed estate today as being the lifeblood of the local economy, to enhance the lives of local people, and to protect and share this place. It believes that Blenheim's success impacts directly on that of Woodstock, and vice-versa. BPE's vested interest in the local economy is a large part of its motivation to complete a development that is exemplary and makes a positive impact on the local community. In order that its control over quality and delivery is absolute, BPE took the unusual step of acquiring a local housebuilder called Pye Homes. It is also intends to retain ownership of many elements of the development as a means to enhance its vested interest into the long-term. These elements include non-adopted common areas, community facilities, freeholds subject to long leases, a number of residential homes for market rental and importantly all commercial units. Last year, BPE also introduced truly affordable housing at 40% discount to market rents which it will retain ownership of.

Affordable housing at Poundbury

16.1 CONTEXT (CONT.)

BPE's attitude to the success of Woodstock's economy is exemplified by its annual study of BPE's economic contribution. Its most recent study celebrated passing the milestone of contributing more than £100 million annually to the local economy . The estate also supported 2,159 jobs, a 12% annual rise. Part of BPE's 10-year plan is to triple BHPE's contribution to the local economy [7], which it intends to achieve via three key initiatives: Working with local authorities and the government to improve transport links and infrastructure, supporting and driving investment in accommodation and working with other large attractions and tourism bodies to attract more people to the area. The plan also includes the training of 100 apprentices.

BPE is using a design code to combine the views of all appropriate stakeholders including the Local Planning Authority and the local community. As a requirement of the Design Code locally sourced materials will be prioritised. This helps to ensure that new buildings reflect local character, as well as avoiding unnecessary lengthy transport movements. BPE is now sourcing 44% of all its supplies from within a 20-mile radius.

16.2 FACT FILE

	PROJECT NAME	PARK VIEW
LOCATION	Address	Woodstock, Oxfordshire
	Local Authority	West Oxfordshire District Council
	County Council	Oxfordshire County Council
STAKEHOLDERS	Landowner	Blenheim Estate
	Developers	Pye Homes
PLANNING	Planning reference (OPP)	16/01364/OUT
	Design code or controls	Design code
DEVELOPMENT	Number of homes	300
	Tenure mix	not less than 37% affordable
	Mix of uses	1,100 sq m of commercial
CONSTRUCTION	Construction method	Traditional
	Construction start	Jan-19
	Construction finish	Dec-25
	Project timescales	6 years
PROFESSIONAL TEAM	Architect	ADAM Architecture
	Planning consultant	Terence O'Rourke & Partners
SALES	Marketing launch	2019
	Sales completion	Dec-25
	Units sold per month (average forecast)	5.0 per month
	Current sales values (est)	£455 per sq ft
	Sales value premium (est)	10%

[7] *https://www.blenheim.org/assets/files/downloads/economic-impact-2019-blenheim.pdf*

16.3 AFFORDABLE HOUSING

BPE has decided to retain ownership of all the affordable housing at Park View and within its future developments around Woodstock. It recognises the importance of affordable housing to stimulate the local economy whilst taking social responsibility for those in greatest need. BPE already manages many homes across the estate and this gives it both the resource and experience to successfully manage affordable housing with little incremental cost. West Oxfordshire District Council (WODC) has accepted that BPE adopts a role as an affordable housing provider even if it is not itself a formal Registered Provider.

To qualify as affordable housing the rents need to be set at least 20% below the prevailing local market rents. However, BPE has decided to go further than it needs to. Having assessed the local market BPE decided that a 20% discount was insufficient to be affordable to key workers and others so it elected to provide housing at a 40% discount. In their words "Blenheim has an absolute commitment to provide high quality, affordable properties for local people which will enable young families to remain and work within the local community". Whilst this may seem charitable, we should remember that the unsold equity remains on the estate's balance sheet as an asset for the future. It may never be realised but it can also be considered as a rainy day fund for BPE. In the meantime BPE's model provides and manages affordable housing efficiently and without public subsidy as part of their existing operations. BPE also believes that its long term investment exposure to the area would be seriously undermined if a significant proportion of the population was forced out (economically speaking) so believes it needs to help resolve this issue through provision of affordable housing.

The decision to discount affordable housing by 40% is something that only a landowner taking a long-term view could rationally take. It is a good example of how decision making over the longer-term can deliver a better outcome. The BPE approach has at its core a recognition of the significance of land and landownership in delivering affordable housing and building strong communities and local economies. There are parts of the public sector estate that are taking a similar approach, but perhaps there is an opportunity for all of the public sector estate to take a similar approach.

WODC realises the significant impact BPE's approach should have on Woodstock and is now exploring the potential of applying the same model to other sites in partnership with key landowners in West Oxfordshire as well as promoting it more widely to neighbouring authorities..

BPE's approach to delivering high quality housing appears to be resulting in a premium. Whilst the sales data since launch is not yet publicly available, early subjective indicators suggest a 10% premium and importantly a much faster rate of sales. That said, evidence may be coloured by a recent restricted supply of new housing in the area.

This case study suggests that the rising value in land as it is 'improved' through securing a high quality masterplan, the provision of infrastructure and community facilities and amenities, enhances rather than undermines the ability to secure more generous social and community provisions, and in particular the affordable housing component.

"BPE's vested interest in the local economy is a large part of its motivation to complete a development that is exemplary and makes a positive impact on the local community."

40%

The discount to market rents offered by the landowner on its affordable housing

16.4 PRINCIPLES OF LEGACY

Through its stated purpose, actions and commitments, it is evident that BPE is following a deeply embedded philosophy of legacy. Its ten-year plan includes the following targets, all of which relate to a sustainable future:

- Train over 100 new apprentices in roles across the Estate
- Triple economic contribution to the local area
- Build high quality affordable homes for 300 families
- Become a net generator of green energy
- Complete £40 million of vital restoration work to the Blenheim Palace World Heritage Site
- Secure endowment to £45 million to conserve the World Heritage Site
- Reacquire or borrow key works from the Palace's lost collections
- Become one of the UK's top 100 employers
- Double charitable contributions to the community
- Achieve annual paying visitor numbers in excess of 750,000

This report has been focussed on cost and value. A theme has emerged from many of the case studies that good quality development delivers significant value beyond housing. More often than not this has been linked to the role of a landowner taking a long-term view because of their vested interest in the long-term success of the local community. This is brought into sharp focus by the case study of BPE.

Whilst BPE's commitment to good quality design is enshrined in the Design Codes, there are principles of legacy that fall outside of design aspects. To capture these BPE is drafting a 'Principles of Legacy' document for everyone to adhere to. This is a clear commitment to the community and is a useful reference point for people within BPE's own organisation as well as for any future partners. Any future contract with a development partner will need to adhere to the 'Principles of Legacy'.

The simple fact that BPE has seen fit to make this commitment is evidence that landowners with a long-term vested interest will seek to deliver housing of a better quality. Not only that, the document could be used by other landowners – from the public or private sector – as a reference point to guide a vision for housing development. With BPE's kind permission we have recounted the 'Principles of Legacy' document in full overleaf, although it is important to appreciate that the document remains an evolving document that is both aspirational and constantly under review.

PRINCIPLES OF LEGACY – ALWAYS BUILDING BELONGING

(To share and protect this place)
by Blenheim Palace Estate

This document summarises what Legacy Development means to Blenheim. It will provide a check list for design and development on our/Pye sites as well as being used to demonstrate to other long-term landowners what we are trying to achieve on our own sites. We would urge other long-term landowners to adopt similar principles to demonstrate their moral, social and economic commitment to their local communities as well as their desire to create something both current and future generations can be proud of. It is intended that this paper will be worked into both promotional material as well as operation processes and procedures.

DESIGN

We produce designs "of this place"

A development must:

- Identify and enhance local special qualities, looking at style and character
- Use local materials to complement the local vernacular
- Enhance local distinctiveness, sense of place and tranquillity
- Each development will demonstrate a strong sense of place representing the importance of the development legacy
- Use low-embodied carbon building materials
- Minimise water demand
- Achieve the highest practicable energy efficiency to be not less than an EPC A rating
- Minimise light pollution
- Be inspired by the natural environment and use innovative design and local materials to reflect local distinctiveness

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Other details for check list for designers:

- Look to respect the local vernacular, to look at look at both the best of the past and where appropriate seek to adopt but to also consider the use of local materials and styles in a contemporary way
- Design around pedestrians, cycling and public transport rather than the car
- Look to remove cars from the street scene
- No meter boxes to be on front or side elevations where visible from the public domain
- Reinforce the importance of local character by having regard to scale, height, density, layout, appearance and materials
- Create a safe environment which ensures development is not vulnerable to crime;
- Not have an unacceptable impact on the amenity of neighbouring residents and users due to visual intrusion, overlooking, overshadowing, overbearing effect, noise, light pollution or other adverse impacts
- Include suitable accessible space for waste management facilities and recycling of a scale and type appropriate to the proposal and location away from the main street scenes
- Where appropriate reuse existing buildings rather than constructing new ones

PRINCIPLES OF LEGACY – ALWAYS BUILDING BELONGING

COMMUNITY

A Blenheim/Pye development will focus on community and wellbeing

A development must:

- Be built for everyone and create a sense of community
- Build on existing community within the settlement so that the new blends socially seamlessly with the existing
- Make the landowner and community proud of their development
- Our staff will adhere to the highest standards of customer care in all interactions with all stakeholders at all points before, during and after the development process
- Retain ownership of all commercial space to ensure that a diverse environment is curated
- We will retain control or ownership of the public realm to ensure maintenance of standards are adhered to
- Have a long-term management structure established to ensure the ongoing maintenance of "this place" including appropriate covenants, codes and restrictions on title
- Provide a mix of amenity space which may include; play areas, allotments, quiet areas as well as informal social spaces

Other details for check list for designers:

- Blenheim, on its own schemes will own the commercial space and the community space, we will look to optimise use mix to deliver a vibrant community. Commercial return will take second place to community return – we believe higher returns elsewhere will result.
- We should where appropriate set up a Design and Community Code for the long-term sustainability of the development by way of the Code and covenants
- Customer service standards for interactions with all customers and stakeholders throughout the whole process will be of the highest standards
-

BUILD

We build to endure

A development must:

- Use responsibly resourced materials
- Be designed in innovative ways to achieve sustainability and with close attention to detail
- Be built of high-quality materials that will endure the test of time. Blenheim, on their own sites retain a significant number of completed houses, so this is important to us
- Be built for the future and enabled for future technological innovation.
- Use local suppliers and contractors from within a 20-mile radius if possible, to ensure economic benefit to the local area
- Materials will be UK sourced where practical
- Avoid the use of direct fossil fuel heating

Other details for check list for designers:

- High quality materials will include:
  (a) Durable plaster board
  (b) Aluminium rainwater goods
  (c) Natural stone
  (d) Minimal use of plastics

RELATIONSHIP WITH THE REST OF THE WORLD

Our developments will strive to minimises the use of non-sustainable materials and be resilient to climate change, extreme weather events, and reduce carbon emissions:

Development should be inspired by the natural environment and use innovative design and local materials to reflect local distinctiveness;

A development must:

- Identify and enhance local special qualities, looking at style and character
- Use local materials to complement the local vernacular
- Enhance local distinctiveness, sense of place and tranquillity
- Each development will demonstrate a strong sense of place representing the importance of the development legacy
- Use low-embodied carbon building materials
- Minimise water demand
- Achieve the highest practicable energy efficiency to be not less than an EPC A rating
- Minimise light pollution
- Be inspired by the natural environment and use innovative design and local materials to reflect local distinctiveness

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Other details for check list for designers:

- Look to respect the local vernacular, to look at look at both the best of the past and where appropriate seek to adopt but to also consider the use of local materials and styles in a contemporary way
- Design around pedestrians, cycling and public transport rather than the car
- Look to remove cars from the street scene
- No meter boxes to be on front or side elevations where visible from the public domain
- Reinforce the importance of local character by having regard to scale, height, density, layout, appearance and materials
- Create a safe environment which ensures development is not vulnerable to crime;
- Not have an unacceptable impact on the amenity of neighbouring residents and users due to visual intrusion, overlooking, overshadowing, overbearing effect, noise, light pollution or other adverse impacts
- Include suitable accessible space for waste management facilities and recycling of a scale and type appropriate to the proposal and location away from the main street scenes
- Where appropriate reuse existing buildings rather than constructing new ones

"Ongoing ownership gives the landowner an incentive to invest in the community."

16.5 CONCLUSIONS

Park View is a case study of a landowner that has a genuine vested interest in the strength of both the local community and the local economy. This has caused the landowner to make extra place-making efforts and to elect to become landlord for all the affordable housing delivered. It has elected to discount the affordable housing by 40% (as opposed to the required 20%) without subsidy in order to attract key workers into the local community. This enables young people to remain in the communities where they have grown up. As well as truly affordable rents, shared ownership homes are available for part buy and part rent with the aim of keeping all their affordable homes affordable in perpetuity.

The landowner's commitment to quality is apparent and, whilst early days, appears to be delivering a premium and a higher absorption rate. Its motivation to build quality homes that last forever emanates from its role as a landowner and custodian of a local community. Ongoing ownership gives BPE an ongoing incentive to continue to intervene and invest to make the community work and to continue to flourish.

The landowner has volunteered a set of principles as a clear commitment to its behaviour and to the future community. It is intended that these principles will bind any partner developing at Park View as well as the landowner's own behaviour. These 'principles of legacy' represent a potential alternative to the Garden City Principles, and could define a kitemark for stewardship. In doing so, the 'principles of legacy' may offer a framework for Government initiatives (for example, a Patient Capital Fund) offered to landowners and developers that are prepared to adhere to them.

17.0

FURTHER RESEARCH RECOMMENDATIONS

In order to support policy and property decision-making around the delivery of new settlements and urban extensions we recommend that cost and value analysis on this model is extended across a much wider sample of sites and is tracked over an extended time-frame. This will yield valuable market data and will help to understand how different schemes and approaches to development perform across extended market cycles.

Research should be commissioned to consider how mixed use interacts with residential development. This should consider impacts on the development process; commercial structures and physical format to optimise successful sustainable place-making, as well as the impact that the early delivery of mixed use elements has on sales rates and end values generated.

The value premium should be assessed in all markets to test the expectation (suggested by Coed Darcy) that some regional markets cannot support a premium for a higher quality product that costs more to deliver.

18.0
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Knight Frank LLP
Headquartered in London, Knight Frank is a multi-disciplinary property consultancy with more than 500 offices across 60 territories and more than 19,000 people.

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Respondents:
Listed below are developers and landowners who have responded to our requests for data and information. Their responses have been invaluable in supporting the Building Better, Building Beautiful Commission:

- Guy Greaves
  Ernest Cook Trust (Fairford Leys)
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  ZeroC (Roussillon Park, Chicester)
- Joe Cook
  Home Group (Saltwell Road, Gateshead)
- Phil Mayhall
  Muse Developments (Salford Central, Salford)

17.0

IMAGE CREDITS

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