Institution: University of Liverpool		
Unit of Assessment: C14 – Geography and Environmental Studies		
Title of case study: Behavioural insights research transforms community infrastructure investment through policy changes to developer contributions		
Period when the underpinning research was undertaken: 2015-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	**Role(s) (e.g. job title):**	**Period(s) employed by submitting HEI:**
Prof. Alexander Lord Dr. Richard Dunning Dr. Yiquan Gu	Lever Chair in Planning Lecturer Reader	Nov. 2006 - present January 2017 – present March 2014 – present
Period when the claimed impact occurred: 2015-2020		
Is this case study continued from a case study submitted in 2014? No		

1. Summary of the impact

Behavioural insights research at Liverpool has reformed three key policy areas on the financial and in-kind investments that accompany real estate development in England, known as 'developer contributions. These reforms have changed planning practice, resulting in economic, social and environmental benefits for local authorities and a fairer distribution of investment across England. Communities are benefitting through increased investment in local infrastructure such as affordable housing, transport, and schools:

- An additional GBP1,000,000,000 in developer contributions made to local authorities between 2016-17 and 2018-19.
- Investment distributed more fairly across England - share of total investment has doubled in the North West and East Midlands.
- Developers responding to reforms. For example, Liverpool-based housing association to build 1,000 new affordable extra-care homes for vulnerable older people.

2. Underpinning research

The research that underpins this impact case represents theoretical and conceptual advances using behavioural economics and game theory made by initially by Lord (**3.1**) and subsequently in collaboration with Gu (3**.2, 3.3**) and Dunning (**3.3, 3.4**) to better understand the state-civil-market relationships that come together in the real estate development process. A significant strand in this body of work is the economics of how the uplift in land value associated with the granting of planning consent can be recovered by the awarding agency (usually local government) to support investment in public goods such as physical infrastructure and affordable housing. These attendant investments to the real estate development process are widely described as 'developer contributions'.

Our work has shown that national planning policy on developer contributions can produce spatially unequal outcomes that are not solely explained by market circumstances but may also result from the negotiating practices of planning professionals (**3.2, 3.3)**. Consequently, national policy should ideally allow for locally-specific approaches to the exaction of developer contributions to account for spatial, market and behavioural variations (**3.4**).

To respond to this public policy issue a combination of conceptual and empirical work has been undertaken by researchers at Liverpool. At the core of this work are two consecutive large Economic and Social Research Council grant awards made through the Joint Programming Initiative which allowed for international collaboration with partners from France, Belgium, the Netherlands, Norway and China (**3.5, 3.6**). This research council-funded work has allowed for significant advances in the underlying theory and concepts to the point where empirical application became viable. This journey from theory to practice is recorded in academic publications (**3.3,3.4).**

A suite of projects followed these academic advances as the worlds of policy and practice came to value the behavioural insights approach to planning and real estate economics that had been pioneered at Liverpool. Evidence of this influence on practice can be found in early Liverpool-led projects on planning's role in 'making markets' (**3.7**) and development industry behaviour in relation to developer contributions (**3.8**).

The most significant impact of this applied academic research can be seen in the attention it has garnered from policy makers in UK central government. Evidence of this influence can be found in two pieces of work commissioned by the Ministry of Housing, Communities and Local Government (henceforth, MHCLG) **(3.9, 3.10)** that were led by Liverpool. These are significant pieces of collaborative research in their own right and involved input from the universities of Cambridge and Sheffield to harvest qualitative case study evidence on, for example, the perceptions of real estate developers. The projects as a whole were led by Liverpool and all the valuation and statistical modelling work that determines the value and geographic incidence of developer contributions was conducted wholly at Liverpool.

The results of the first project from 2016/17 (**3.9**) went on to influence three specific reforms to legislation, policy and practice on developer contributions: the removal of restrictions on the pooling of developer contributions from multiple sites (I1), the roll-out of the Community Infrastructure Levy (CIL) into new geographies (I2) and supporting greater local flexibility in the exaction and expenditure of developer contributions (I3). The second study (**3.10**) demonstrated the effects of these policy changes instigated on the basis of the findings of the first project: developer contributions had grown from GBP6,000,000,000 in 2016/17 to GBP7,000,000,000 in 2018/19 and were more evenly distributed across England.

3. References to the research

3.1 Lord, A. D. (2012) *The Planning Game.* Routledge: Oxford. DOI: https://doi.org/10.4324/9780203127445

3.2 Lord, A. D. and Gu, Y. (2018) Can the market be tamed? A thought experiment on the value(s) of planning. *Environment and Planning A: Economy and Space*, 51 (1), 11-24. DOI: https://doi.org/10.1177/0308518X18784600

3.3. Lord, A. D., Burgess, G., **Gu, Y.** and **Dunning R. J.** (2019) Virtuous or vicious circles? Exploring the behavioural connections between developer contributions and path dependence: evidence from England. *Geoforum*, 106, 244-252. DOI: https://doi.org/10.1016/j.geoforum.2019.07.024

3.4 Dunning, R.J., Lord, A.D., Keskin, B. and Buck, M. (2019) Is there a relationship between planning culture and the value of planning gain: Evidence from England, *Town Planning Review*, 90(4), 453-471.DOI: https://doi.org/10.3828/tpr.2019.29

Grant income details

3.5 2014-2018 *S*imulations for *I*nnovative *M*echanisms for the *S*elf-organising City: testing new tools for value capturing (SIMS City Value Capture). ESRC Reference Number: ES/M008444/1. EUR1,429,939 across 4 partners;

3.6 2019-2022 The potential of Land Value Capture to secure sustainable urban development supporting air quality enhancement. ESRC reference number: ES/T000279/1. EUR942,017 across 6 partners.

3.7 2015-2016 Putting a price on planning? A cross-national investigation into the behavioural economics of managed development. Royal Town Planning Institute, GBP10,000.

3.8 2018-2020 Land value capture: attitudes from the house-building industry on alternative mechanisms. Royal Institution of Chartered Surveyors**,** GBP9,000.

3.9 2018. The Incidence, Value and Delivery of Planning Obligations and Community Infrastructure Levy in England, 2016-17. MHCLG. GBP99,800.

3.10 2020. The Incidence, Value and Delivery of Planning Obligations and Community Infrastructure Levy in England, 2018-19. MHCLG. GBP99,800.

4. Details of the impact

Insights from the body of research described above have been pivotal in instigating a change in the system by which local authorities secure developer contributions. In the past this system had two notable shortcomings. Firstly, a lack of flexibility prevented local authorities from matching policy and practice on developer contributions to the character of local real estate markets. Secondly, the system exacerbated spatial inequality as it was strongly biased towards areas of high demand, such as the South East of England. Liverpool-led research for the Ministry of

Housing, Communities and Local Government (MHCLG) in 2016-17 (**5.1**) identified these features of the previous system and pointed to ways in which they could be reformed.

This work was published on the same day (5th March 2018) that the then Prime Minister, Theresa May, launched a consultation on the overhaul of the English planning system at the national planning conference. One of the outcomes of this process was the legislative reform of the instruments under which local authorities secure developer contributions (**5.2**). This legislation and accompanying policy guidance represents three specific reforms that were influenced by the earlier work led by academics at Liverpool: (I1) the removal of restrictions on the pooling of negotiated contributions, (I2) the rollout of the Community Infrastructure Levy and (I3) providing greater flexibility to local authorities in the management of developer contributions. These reforms have resulted in a step change with respect to the value and geographic distribution of exacted developer contributions.

Subsequent research for MHCLG (**5.3**) led by Liverpool has been instrumental in supporting the continued legislative reform of the process by which developer contributions are secured. In this regard testimony from the Ministry (**5.4, 5.5**) clearly acknowledges the influence of our research on proposals for extending the reform of developer contributions policies contained the White Paper, *Planning for the Future* (**5.6**).

National policy

Our 2016/17 study of the value and incidence of developer contributions in England (**5.1**; **5.3**) provided the basis for a range of policy reforms as explained in testimony from MHCLG (**5.4**):

> "The report is an important component of the evidence on developer contributions and has helped inform policy development. For example, the findings of the report contributed towards MHCLG's consultation on *Supporting Housing Delivery through Developer Contributions*, which included figures and tables from the report, and also the viability section of the *Draft Planning Practice Guidance*, both of which MHCLG published on 5 March 2018."

Local authorities have two instruments available to them in order to raise developer contributions. Firstly, they can negotiate a 'Section 106' planning agreement with the developer in question. These agreements generally result in public goods provided as in-kind benefits such as a specified number of affordable homes. Historically contributions have been restricted to the site under development. The 2016/17 study showed that this restriction on local authorities' ability to pool developer contributions from multiple sites was inhibiting their ability to negotiate effectively and restricting finance for larger scale infrastructure projects. Our recommendation that the pooling restrictions be removed was implemented by government through legislation that came into effect from 1st September 2019. The second instrument for raising contributions is the Community Infrastructure Levy (CIL), a charge on development usually expressed as "£X per square metre of developed space". The cash contributions that result from CIL can be used to finance infrastructure investment which, in many cases, may be a stimulus to subsequent investment by the development industry. Our research has showed that implementing CIL in areas where it is viable can help local authorities secure a higher aggregate value of developer contributions (**5.1, 5.3**) The influence of this finding can be seen in the increased adoption of CIL amongst local authorities: at the end of the financial year 2016/17, 39% of local planning authorities had adopted CIL, rising to 50% at the end of March 2020 with a further 18% of local authorities in the legal process of adopting the CIL at this date (**5.3,** page 13).

Increased investment

Our second piece of research for MHCLG was commissioned for the financial year 2018/19 (**5.3**) and evaluated the impact of the reforms introduced through the legislative changes that came into effect from 1st September 2019. This work showed that the aggregate value of developer contributions in England had grown from GBP6,000,000,000 as at the end of the financial year 2016/17 to GBP7,000,000,000 by the close of the 2018/19 financial year. Our report showed that the removal of the pooling restrictions had been universally welcomed by planning professionals and the development industry alike and was found to have acted as a stimulus to the exaction of developer contributions and their corresponding investment. This additional GBP1,000,000,000 of investment represents a significant increase in funding for a range of public goods with clear social, environmental and economic effects: an extra GBP628,000,000 for affordable housing, GBP134,000,000 for transport and travel infrastructure, GBP198,000,000 for educational premises and GBP42,000,000 for open space and the environment (**5.3**: page 45).

Redistributed investment

Our report for MHCLG in 2018/19 (**5.3**) also showed that the aggregate GBP7,000,000,000 of developer contributions in England had been raised and invested in a more geographically equitable manner than was previously the case. This is contributing to rebalancing and 'levelling up' the UK economy. The change is driven by two factors. Firstly, the authorities that have newly adopted CIL between 2016/17 and 2018/19 are disproportionately outside London and the South East. This means that the benefit to authorities where CIL can be a valuable way of exacting cash contributions has been felt most in regions of England where CIL was not previously widely adopted. Secondly, when the adoption of CIL is coupled with the removal of the pooling restrictions some local authorities have been able to secure considerably greater sums through developer contributions. These two impacts (I1 and I2) have combined to provide local authorities with greater local control to devise (behavioural) strategies that combine CIL and negotiated practices to maximise developer contributions (I3). The 2018/19 report (**5.3**) illustrates a fundamental re-balancing of how developer contributions are raised and invested with most regions seeing very significant growth. For example, the North West and East Midlands saw their share of the national aggregate total more than double: GBP334,000,000 more was exacted in the East Midlands in 2018/19 than in 2016/17; GBP231,000,000 more in the North West (**5.3**: page 48). Similarly, the North East recorded a 50% increase and both Yorkshire and the Humber and the West Midlands saw 25% and 20% increases respectively compared to 2016/17.

Continuing influence on national planning policy

The scale of the increase in developer contributions recorded by our work for MHCLG has prompted government to initiate proposals to extend the reform of policy on developer contributions. In commenting on our work (**5.3**), testimony from MHCLG (**5.5**) clearly acknowledges that the proposals that pertain to developer contributions in the 2020 White Paper, *Planning for the Future* (**5.6**), were developed using evidence resulting from our work:

> "The report is an important component of the department's evidence base on developer contributions and has helped inform policy development. For example, the findings of the report contributed towards MHCLG's consultations on *Changes to the current planning system*, which included findings from the report, and *Planning for the future: White Paper August 2020*, which also included findings from the report, both of which were published on 6 August 2020"

This point is further corroborated in testimonial by the Permanent Specialist Adviser to the House of Commons Housing, Communities and Local Government Select Committee (**5.10**): "The direct effect on national policy making of this work is clear and undisputed."

Influence on planning practice

Beyond the impact our work has had on national planning policy and legislation we have also worked directly with planning practitioners to help them make the most of the reformed system of how developer contributions are exacted. How local authorities choose to implement national policy on developer contributions can have a significant bearing on local outcomes. For example, the choice of whether or not to adopt CIL is a local decision as are questions about the rate at which it should be set, how different methods of exaction might be combined and how the proceeds of developer contributions should be invested. Our research has enabled local authorities to use behavioural insights to attune the mix of developer contributions policies to local circumstances. For example, the Liverpool City Region Combined Authority recognise (**5.7**):

> "the important input of Professor Alex Lord and Dr Richard Dunning by way of expert advice and support to the Combined Authority on brownfield land viability and Land Value Capture."

We have also worked directly with the two main professional representative agencies for the built environment in the UK – the Royal Town Planning Institute (RTPI) and the Royal Institution of Chartered Surveyors (RICS) - on development economics and value capture. The influence of our work on practice can be seen in testimony by the Director of Policy, Practice and Research at the Royal Town Planning Institute (**5.9**) who describes the "research excellence of the work that the University of Liverpool has undertaken for the Royal Town Planning Institute." The effects of our work on policy and practice are further corroborated by the Permanent Specialist Adviser to the House of Commons Housing, Communities and Local Government Select Committee (**5.10**) who notes that the work, "feeds into the practices employed by local authorities in securing planning obligations to secure benefits for local communities arising out of development".

Realising benefits for deprived communities

Through engaging directly with local stakeholders, our research is also stimulating physical and economic regeneration in some of our home city's most deprived communities. For example, our behavioural insights work resulted in a commission by a not-for-profit housing association, Cobalt Housing, to produce an extensive study of housing markets in the North Liverpool wards of Croxteth, Norris Green and Fazakerley. This work pointed to the potential for Cobalt's developer contribution in this area to be made through the development of affordable lifetime homes for a vulnerable and ageing population. This work has been instrumental in informing Cobalt's growth strategy in these three deprived wards where they plan to build 1000 new homes - explicitly to meet the needs of those experiencing deprivation in older age. Testimony (**5.9**) from Cobalt establishes that the decision to invest along with the type, tenure and location of the housing to be produced was directly influenced by our work:

> "Directing our investment and using our position to support wider urban regeneration demands a thorough understanding of how our housing markets operate and the longer run social and demographic trends affecting our neighbourhoods. We find all this evidence and more in an *Evidence Base to support Cobalt Housing's Growth Strategy*…It will play a formative role in determining our strategy for the development of Croxteth, Fazakerly and Norris Green."

5. Sources to corroborate the impact

5.1 Lord, A. D., Dunning, R. J. Dockerill, B, Carro, A., Burgess, G., Watkins, C., Crook, A. & Whitehead, C. (2018) *The Value and Incidence of Developer Contributions in England, 2016/17*. MHCLG: London. [*Includes a full report of research conducted and policy recommendations*].

5.2 HMSO (2019) The Community Infrastructure Levy (Amendment) (England) (No. 2) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111187449 [*This legislation enshrines a range of changes to planning law with regard to developer contributions, including some of the recommendations outlined in 5.1*].

5.3 Lord, A. D., Dunning, R. J. Buck, M, Cantillon, S., Burgess, G., Watkins, C., Crook, A. & Whitehead, C. (2020) *The Value and Incidence of Developer Contributions in England, 2018/19.* MHCLG: London. [*This document includes a full report of research conducted and an evaluation of the impact of the changes to the planning system recommended in 5.1 and enacted in 5.2*].

5.4. MHCLG letter of support, 18th May 2018. [*This describes the influence of 5.1 on the policy making process including a direct impact on 5.7 and 5.8*].

5.5 MHCLG letter of support, 3rd November 2020. [*Testimony describing the impact of 5.3 on planning policy – particularly the 2020 Planning White Paper (5.9)*].

5.6. MHCLG (2020) *Planning for the future. White Paper.* MHCLG: London. [*Formal statement of government intention to legislate for planning reform. Explicitly identified as informed by evidence from 5.3 in testimony from MHCLG (5.6)*].

5.7. Liverpool City Region letter of support. [*Evidence of expert advice on developer contributions policy provided to Liverpool City Region Combined Authority by Lord and Dunning*].

5.8. RTPI letter of support. [*Evidence of the influence of our work on planning practitioners from the professional representative agency for the planning profession in the UK and Commonwealth*].

5.9. Cobalt Housing Association letter of support. [*Testimony on our direct engagement with a registered provider of social housing in North Liverpool describing our collaboration on developer contributions in three deprived wards of the city*].

5.10. K. MacDonald letter of support. [*Testimony from the permanent specialist adviser to the House of Commons Housing, Communities and Local Government Select Committee that describes the influence of the work on national policy and local practice*].