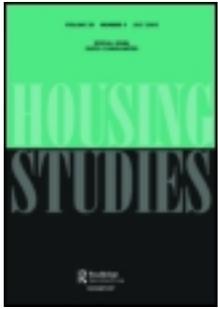


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# Owner-Driven Suburban Renewal: Motivations, Risks and Strategies in 'Knockdown and Rebuild' Processes in Sydney, Australia

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**ABSTRACT** *Decisions by individual owners about reinvesting capital in their homes are important drivers of wider processes of suburban renewal. This paper examines the motivations for owners in mostly middle-ring suburbs of Sydney, Australia, to reinvest through 'knockdown and rebuild' (KDR). This process—not unique to Australia—involves the wholesale demolition of older detached houses and their replacement with completely new dwellings. Until recently, existing literature on housing reinvestment has focused on practices such as renovations or modifications to existing dwellings. Yet, KDR is becoming increasingly popular and moreover appears to involve a distinctive set of actors, drivers and potential impacts. On the basis of a statistical survey of activity followed up by a questionnaire survey and in-depth interviews, the general scale and attributes of KDR are summarised and then explored to discern the main perceived benefits, risks and types of development scenarios pursued. The results reveal a genuine diversity of motivations and circumstances involved in this latest physical makeover of the traditional Australian suburb.*

**KEY WORDS:** Housing investment, urban regeneration, home ownership, suburban renewal, knockdown and rebuild, Sydney

## Introduction

Wholesale demolition of ageing houses and their replacement with new, often oversized, dwellings has become a feature of suburban renewal in many different cities around the world. In the USA, such redevelopment—referred to as 'teardowns', 'scrape offs' or 'dozers'—has been described in the literature as a conspicuous and controversial phenomenon. Such redevelopment in existing suburbs 'can dwarf neighbouring homes . . . construction is disruptive and rapidly rising prices lead to higher tax bills for existing

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residents' (Dye & McMillen, 2007, p. 62). Nevertheless, reinvestment in housing stock is often a necessary measure to counter processes of physical and social decline in the suburbs (Lucy & Philips, 2000). In Australia, this form of low-density infill redevelopment activity is known as 'knockdown and rebuild' (KDR), and is mostly evident in the ageing middle-ring suburbs of major cities. The scale of the phenomenon is considerable, and while our findings indicate that KDR represents around 10 percent of all new dwelling constructions in Sydney, industry generated data suggest an even higher proportion (Pinnegar *et al.*, 2010, p. 207).

Despite its scale and significance, the KDR phenomenon is largely overlooked in recent literature about suburban housing renewal in Australia, with the focus almost exclusively on precinctual multi-unit building development. This reflects a growing concern with the need for, and challenges of, urban densification to meet population growth (Searle & Filion, 2011). Newton's (2010) work, in particular, deals with the ageing middle-ring suburbs in Australia's major cities. He describes these as 'greyfield' areas ripe for integrated redevelopment to achieve higher densities. Yet, the scattered, incremental low-density redevelopment through KDR occurring in the very same suburbs goes almost unnoticed in the literature. In this paper, we point to the relevance of KDR as an important subject for research, focusing primarily on elucidating its complex behavioural drivers—the uncoordinated activities of individual owners with varying motivations—and how this knowledge may contribute to a broader theoretical understanding of suburban development, decline and renewal.

The lead role of individual owners in the making of suburbia has long been a major theme in Australian urban studies. In the 1950s, first-time owners built new houses in new suburban subdivisions even before basic infrastructure such as roads and sewers was put in place (Dingle, 1999a, p. 194). The so-called 'fibro frontier' (Pickett, 1997) of the most affordable cement-sheet houses captured the impact of the post-war baby boom. In time, both residents and housing stock would mature and by the 1970s former fringe suburbs had become middle-ring. By the 1990s, in the less affluent 'Aussie battler' middle-ring suburbs concerns were raised about the potential link between the physical deterioration of an ageing housing stock and wider processes of social decline (Randolph, 2002). In the more affluent middle-ring suburbs, concerns were raised by community groups about retention of local character in the face of newer waves of redevelopment pressures (Searle & Filion, 2011). In both cases, the housing stock had been steadily modified through incremental processes of additions and alterations to accommodate family growth and other changed household circumstances. By the 2000s, demands were apparent for more wholesale transformation of older dwellings through demolition and replacement. Despite state government policies and institutional developer practices favouring integrated area renewal, it is still individual homeowners who spontaneously determine the pace and form of redevelopment of much ageing suburban housing stock.

Through an intensive study of household attitudes and practices, the intention in this paper is to begin to unpack the nature of the behavioural drivers of a pervasive yet under-researched phenomenon. The first part of the paper positions the question about the drivers of KDR within the wider literature on suburban housing development and redevelopment. The second part presents original empirical findings about the drivers of KDR activity in Sydney drawing from quantitative and in particular qualitative analyses drawing respectively on development application (DA) data and in-depth interviews with homeowners. After detailing our methodology, we present our results in four sections. The first provides a statistical overview of the dimensions of the phenomenon in Sydney

mainly to help frame the more detailed discussion that follows. The second identifies and discusses the perceived benefits of KDR, affording the opportunity to reflect on the distinction between investment and consumptionist motivations. The third discusses the risks undertaken by owners when embarking on the path of KDR. The final section provides a more nuanced typology of actors and redevelopment scenarios in this latest makeover of the traditional Australian suburb, further unpacking its complex drivers.

### **Suburban Renewal through Housing Reinvestment: Actors, Drivers and Risks**

The physical and social decline of suburbs and subsequent waves of revalorisation are coupled with cycles of capital investment and disinvestment in housing (Pinnegar *et al.*, 2010, p. 205). Internationally, since the 1970s, much academic interest focused on the decline of inner-city neighbourhoods, and their consequent renewal through processes of gentrification and reinvestment by incoming affluent residents (Badcock, 2001; Lees, 2000; Ley, 2004; Smith, 1996). Recent years have seen a growing scholarly interest in similar cycles of housing disinvestment and reinvestment in suburban rather than inner-city contexts. Lucy & Philips (2000) argued that American suburbs—especially those developed during the post-Second World War suburbanisation boom—tend to decline more rapidly than inner-city neighbourhoods because they often have less to offer in terms of access to services, public transport and entertainment. Larger and more modern housing is perhaps what has attracted residents to the suburbs in the first place, and the ageing of those houses reduces their attractiveness and thus escalates decline. Unlike inner-city neighbourhoods, most suburbs do not benefit from the presence of economic assets such as large employers, government institutions or universities that encourage more sustained capital flows into their area. Further, the deterioration over time of a more homogenous housing stock is particularly visible in the suburbs in ways that can deter reinvestment (Lucy & Philips, 2000, pp. 6–8).

Suburban renewal can take various forms, from large-scale programmes initiated by government or private companies, through to reinvestment by individual owner-occupiers. The low densities of suburbs with a high proportion of detached owner-occupied housing ‘arguably foster lot-based, individual-led renewal activity’ (Pinnegar *et al.*, 2010, p. 206). Although owner-led renewal is typically incremental and uncoordinated, the scale of reinvestment can be significant. As noted by Lucy & Philips (2000, p. 6), decisions by individual owner-occupiers about staying in their homes or moving elsewhere, and about reinvesting capital in their existing homes through renovations or modifications, are key drivers of wider processes of local decline or renewal:

Owners have the following choices. They can reinvest, and if neighbors follow and also reinvest, the neighborhood will be stable or revive; or, if neighbors do not follow their lead, then the neighborhood will decline and the original reinvestors may lose money when they sell. If owners stay and do not reinvest, then decline may ensue. If owners move without reinvesting, then their replacements will tend to be lower-income households, if the region’s population has expanded and the number of low- and moderate-income households has increased. (Lucy & Philips, 2000, p. 6)

This observation highlights the risks for individual owners who reinvest significant capital in home improvement, but depends on decisions by their neighbours and wider local trends if they are to achieve economic returns. This is different to state-led renewal projects,

where reinvestment efforts by a range of actors are coordinated and focused on targeted neighbourhoods as a way to mitigate the risk for each actor (Calem & Wachter, 1999, p. 130). As noted by Smith *et al.* (2008, p. 99), in a UK study, individual homeowners are exposed to two types of risk. First, there is the risk of credit default that may lead to dispossession of their homes; and, second, in a more general sense, the risk of having most of their capital invested in a single asset that is not sufficiently liquid. These risks are enhanced by the fact that homeowners are increasingly reliant on housing wealth as a welfare resource. Smith *et al.* (2008, p. 86) found that while most homeowners were aware of these risks, only a minority sought to diversify their wealth as a means to mitigate risk. Arguably, substantial reinvestment in a single dwelling, as in the case of KDR, can be seen as amplifying the risk for owners, narrowing down rather than diversifying their investment portfolio, without the mitigating effect of coordinated local renewal.

Despite the risk, many owners do eventually choose to reinvest. A relatively small body of literature examines the motivation for owners to reinvest through renovations and extensions (Littlewood & Munro, 1997; Mandic, 2001; Montgomery, 1992; Munro & Leather, 2000). Montgomery (1992), in a study conducted in the USA based on 1985 data, examined choices of owners of single-family detached houses. She found that level of income was the major determinant of decisions about reinvestment and residential mobility. Households with higher levels of income were more likely to move, households with lower level of income were more likely to stay without improving their house and those in between were more likely to stay and improve their house. In the Australian context, Allon (2008) described a national obsession with home improvement, driven by a combination of factors, including the general economic prosperity in recent decades, individual owners' desire for capital gain and a cultural fascination—fuelled in part by popular reality TV shows—with the idea of 'the transformed home, the made-over home, the home before and after and, most importantly, the home "bought low" and "sold high"' (Allon, 2008, p. 28).

A number of recent studies in the USA about 'teardowns' (Charles, 2011; Dye & McMillen, 2007) reflect a growing interest in wholesale demolition and replacement of housing, akin to KDR, as a distinctive form of reinvestment. Charles (2011), in Chicago, found that the probability of redevelopment through 'teardown' was higher for smaller houses. Houses located closer to the central business district (CBD), to a rail station or highway access point were also more likely to be redeveloped. In neighbourhoods with good schools, the probability of teardown activity was also higher. In contrast, teardown probabilities decreased in neighbourhoods with a higher concentration of African-Americans and Hispanics. The median property value of a neighbourhood was found to have little effect on teardowns, when controlling for other factors. However, consistent with Smith's (1996) rent gap theory, in Charles's (2011) study, redevelopment probability was found to be higher for properties valued at lower ratios to that of their neighbourhood.

Both Charles (2011) and Dye & McMillen (2007) used quantitative analysis to identify factors determining the location of teardown activity in Chicago. Our study contributes further evidence and a deeper understanding of the drivers of KDR activity, in a different national and urban context, by providing both quantitative and qualitative analysis of data from a wider range of sources, but emphasising detailed insights obtained directly from the owners responsible for redevelopment.

## Methodology

Several steps were undertaken. First, to assess the scale and identify the locations of KDR activity in Sydney, all 42 local councils in the metropolitan area were approached for DA data from 2004 to 2008. The information was supplied by 29 councils in a format that allowed analysis. Overall, a little over 6800 DAs for KDR were identified.

Second, a questionnaire was sent by mail in September 2010 to the 6800 addresses identified from the council development data. A total of 1218 completed questionnaires were returned by post or online, a response rate of nearly 18 percent. The questionnaire included questions about the reasons for submitting a DA for KDR, the experience and costs of undertaking KDR, the design of the old house demolished and the new one that was built, and demographic questions about the household.

Third, between February and May 2011, follow-up face-to-face interviews were held with 30 owners who were recruited through the survey to provide more in-depth understanding of the multiple factors influencing households to undertake KDR and their experiences of doing so. The interviews took place in four selected case study areas in Sydney, representing a variety of different socio-economic and metropolitan contexts: the western suburbs of Bankstown, Fairfield and Auburn; the northern suburbs of Ryde and its surrounds; the eastern suburbs of Maroubra, Pagewood and their surrounds; and dispersed upmarket waterfront locations such as Avalon Beach and Watsons Bay.

The interviews were held in the participants' new home. They typically included a single participant, but in some cases a couple. These were semi-structured interviews, 45–60 minutes long, following a number of key themes, including length of residency in the area; reasons for selecting the location; reasons for choosing KDR and other alternatives considered; design, planning, finance and construction issues; and utilisation of their new homes. All interviews were audio-recorded and transcribed. At the stage of analysis, we used Nvivo software to code these transcriptions by using a range of key words representing common themes that emerged from the text. Throughout, we use pseudonyms to protect the participants' anonymity.

Below, we present this analysis structured around four foci: first, a brief overview of the geography and demographics of KDR in Sydney; second, the general motives for owners to undertake KDR as a basis to understand the drivers of this phenomenon; third, the risks faced by owners throughout the process of KDR; and fourth, proposing an interpretive typology of actors to distil the major development scenarios uncovered.

## The Geography and Demographics of KDR in Sydney

Our analysis of DAs suggests that KDR represents 10.7 percent of all new dwelling constructed in the sampled council areas, involving replacement of around 1.4 percent of existing stock of detached dwellings in a period of 5 years (2004–2008). Table 1 summarises this scale of activity by council area in Sydney and shows that the most vigorous activity tends to be in more affluent middle-ring suburbs. However, significant KDR activity was also uncovered in less affluent middle-ring local government areas (LGAs) such as Fairfield, Bankstown and Auburn. Overall, KDR activity was found to be prevalent in middle-ring LGAs where there is a higher proportion of older low-density housing.

The questionnaire survey helps us elaborate more on the socio-economic correlates of the phenomenon. It provides evidence that KDR is predominantly initiated by

**Table 1.** Rate of housing replacement and development through KDR by local government area, Sydney 2004–2008

Local government areas	KDR count	KDR as proportion of existing detached houses (replacement rate) (%)	KDR as proportion of new detached houses (detached) (%)	KDR as proportion of all new dwellings (%)	Median household weekly income (ABS, 2006)
Strathfield	271	5	95–100	15–20	\$1093
Mosman	105	2.5	95–100	30–35	\$1916
Hurstville	385	2.5	90–95	25–30	\$1060
Woollahra	147	2.5	25–30	15–20	\$1917
Waverley	145	2	90–95	15–20	\$1446
Pittwater	307	2	45–50	20–25	\$1486
Ku Ring Gai	616	2	75–80	15–20	\$2147
Lane Cove	138	2	65–70	25–30	\$1729
Auburn	233	2	30–35	5–10	\$906
Warringah	580	2	80–85	25–30	\$1387
Randwick	260	1.5	60–65	10–15	\$1185
Ryde	330	1.5	40–45	15–20	\$1158
Hunter's Hill	42	1.5	50–55	30–45	\$1815
Canterbury	388	1.5	95–100	30–35	\$839
Willoughby	177	1.5	95–100	30–35	\$1667
Bankstown	627	1.5	50–55	15–20	\$926
Fairfield	353	1	25–30	15–20	\$1027
Parramatta	265	1	35–40	5–10	\$1043
Botany Bay	59	1	30–35	1–5	\$995
Burwood	55	1	30–35	15–20	\$1071
Hornsby	408	1	30–35	20–25	\$1514
Wyong	235	0.5	10–15	5–10	\$770
Gosford	209	0.5	10–15	5–10	\$944
The Hills	257	0.5	10–15	5–10	\$1732
Canada Bay	74	0.5	15–20	1–5	\$1510
Penrith	96	0.1	10–15	1–5	\$1147
Sydney	31	0.1	50–55	1–5	\$1204
Hawkesbury	41	0.02	5–10	1–5	\$1146
Camden	21	0.01	1–5	1–5	\$1353
<b>Total/average</b>	<b>6855</b>	<b>1.4</b>	<b>30–35</b>	<b>10–15</b>	<b>\$1315</b>

*Source:* Authors; based on analysis of DAs, census data (ABS, 2006) and analysis of building approvals data obtained from the Australian Bureau of Statistics for this study.

owner-occupiers rather than investors. Most survey respondents, 91.2 percent, initiated the submission of the DA for KDR—as opposed to buying a house with a DA for KDR already in place, or a new house that was rebuilt by a previous owner. There were only few responses from people who moved into a house that was rebuilt by a previous owner, suggesting KDR with the intention of selling immediately rather than owner occupation is uncommon.

The primary demographic of KDR owners is small households with relatively young nuclear families. Most KDR owners who responded to our survey were couples with one or more children (65 percent). The average number of persons in a household in the sample

was 3.6. The second largest type of household in the sample was couples without children (18 percent). Close to 4 percent of responses represented multigenerational households including three or more generations in the household (common among immigrants from certain ethnic origins); however, such households may be under-represented in our sample due to language barriers.

KDR owners represent a relatively high-income group, with around 35 percent of households in the sample having an annual gross income of over \$200 000 a year, 41 percent between \$100 000 and \$200 000 a year, and only 24 percent less than \$100 000 a year. Indeed, KDR involves a substantial financial investment, and 45 percent of respondents spent above (often well above) \$500 000 on KDR, excluding the cost of purchasing the original house. Another 16 percent spent between \$400 000 and \$500 000.

Most participants in our sample, 66 percent, lived prior to the KDR in the same address, in the same suburb or in a neighbouring suburb—suggesting that the impact of KDR activity on an area’s demographics is limited. Those 34 percent who moved to their current address from a different area in the city just before undertaking KDR, typically earned incomes that are similar to the local median, suggesting that residential mobility associated with KDR is not necessarily a form of gentrification.

The new dwellings constructed through KDR represent a relatively even mix of project homes and custom architect-designed houses. The new houses had an average floor space of 337 square metres, more than twice as large as the 159-square metre houses demolished, and also significantly above the median size of 262 for new detached houses in New South Wales (Commonwealth Bank, 2009). A typical new house constructed through KDR is two storied, including four bedrooms and three bathrooms. The new dwellings are built to higher environmental standards than the older houses they replaced, and were required to comply with state government BASIX regulations, a point-based checklist of sustainable design features in new dwellings, applied in New South Wales since 2004. Yet, as the new homes are larger and a greater number of electrical appliances are often in use, many interview participants noted that overall energy consumption was similar to, or even greater than, the old house prior to KDR.

### **Choosing KDR**

Recent research in the USA on drivers of comparable suburban renewal activity is based on models to determine the probability of ‘teardown’ activity based on data about the size and value of land parcels, as well as area-based demographic statistics, rather than information obtained directly from owners involved in redevelopment (Charles, 2011; Dye & McMillen, 2007). In this section, we provide a different analytical lens, by using findings from the both survey and interviews with owners to discuss some of the common drivers that led them to choose KDR. We address, in turn, the key themes that emerged in our analysis, namely, features of the old houses that prompted a desire to upgrade; reasons to choose KDR over other alternatives such as renovations or buying an existing house elsewhere; and the balance between consumption-related and investment-related considerations in the decision to embark on the KDR process.

### *Replacing an Old House*

From our analysis of survey responses, 46 percent of the old dwellings demolished were constructed during the immediate post-war period, 1946 to 1960. An additional 25 percent

of dwellings were built between 1961 and 1980, and 25 percent of the dwellings predate 1945. Very few (4 percent) of the old houses demolished were built after 1980.

Through interviews with owners, we identified the major features that were sources of dissatisfaction with the old houses, including their generally run-down condition (although some of the houses were described by participants as ‘sound’), their small size, obsolete internal design (particularly the kitchens), having only a single bathroom and the presence of asbestos (Table 2).

### *KDR Versus Renovations or Buying an Existing House Elsewhere*

Many participants considered renovations as an alternative to KDR, and indeed some had even undertaken renovations before KDR, yet eventually concluded KDR was the optimal strategy for improvement of their dwelling. A key consideration included the potential to significantly increase the size of the old house through KDR. Extensions to the old house were also possible, but might provide an outcome that was aesthetically less satisfying despite a significant financial investment. Further, the extremely run-down

**Table 2.** Old house descriptions

Valuation	Selected comments
<i>Negative</i>	
Run down condition	‘It has rising damp, it stunk, it absolutely stunk’ (Ron and Sara, Ryde) ‘There were holes in floors, there were things that didn’t work. There were places that were so dirty I didn’t want to even go and touch so I never used the outside toilet and things like that. So I was happy just to confine myself to small areas of the house’ (Terry, Ryde) ‘The plumbing was atrocious’ (Melanie, Ryde)
Small size	‘Only a two bedroom house . . . it was just never going to be big enough for us as we got a bigger family’ (Colin, Bankstown)
Obsolete design	‘The kitchen was ridiculous’ (Ron and Sara, Ryde) ‘It wasn’t an entertainer. We needed a larger area to entertain, to dine and whatnot. In the kitchen we had a dining table and we could struggle to open the oven and so on and so forth. So, it was not very comfortable’ (Roberto, Randwick)
Asbestos	‘The really tiny second bedroom had all its walls damaged and they were asbestos so it was asbestos walls and asbestos roof. So I was continually concerned about the fact that all those damaged walls had fibres that were escaping’ (Terry, Ryde) ‘Asbestos too; that’s why we didn’t want to touch it. That was one of the reasons we wanted to knock it down too’ (Melanie, Ryde)
<i>Positive</i>	
Large yard	‘A big back yard. It was great for the kids and they could run around and everything and if you have friends over there’s plenty of space for the kids to play. So it was just the inside was just, you know, just was getting a bit too small’ (Dora, Randwick)
Heritage value	‘It was full brick, quite a nice looking house, a 1930s house’ (Ron and Sara, Ryde)
Sound condition of some old brick houses	‘Structure was sound. Really sound’ (Roberto, Randwick)

*Source:* Interviews conducted by authors.

condition of some of the houses meant renovations provided a very limited response or in some cases would have cost as much or even more than KDR. The asbestos factor in old houses was seen particularly as a major reason to replace the whole house rather than renovate.

Most participants did not consider the old house they demolished as having any heritage value or particular character that was worth preserving; KDR allowed them to ‘start from scratch’ (Peter, Watsons Bay) and ‘choose exactly what we wanted in the new house’ (Colin, Bankstown). KDR was thus seen as offering better value for money than renovations. In addition to providing more flexibility and choice about design, KDR allowed comprehensive replacement of structural features such as older electricity (wiring) and plumbing systems.

Apart from renovations, another alternative to KDR was buying an existing house that suited the household’s requirements elsewhere. Many of our participants considered this option, and decided against it for a number of reasons, including the perceived difference in cost, the desire to ‘build the house you want’, their attachment to specific locations, the financial burden of state government stamp duties and agent commissions associated with buying a house, and sundry personal and strategic considerations related to timing and the state of the residential property market.

The key reason provided by most participants for choosing KDR over buying an existing house for occupation elsewhere was the perceived cost difference, with KDR seen as a more affordable option:

It seemed like a cheaper option just to stay where we were, where we had the land and then just do the knock down rebuild. (Colin, Bankstown)

Buying a house in a better condition was too expensive. (Terry, Ryde)

One of the explanations for the price difference was the need to pay commissions to real estate agents as well as stamp duty to the state government when buying another house, whereas those who already had an old property could avoid these additional costs:

I thought that if I sell up I’ll have to pay the real estate agent commission and then if I buy elsewhere I’ve got to pay out sales, stamp duty, stuff like that, so I think I calculated it would be about 20-something grand for both of them and I thought I’ll put that towards the house like a new house. (Doug, Bankstown)

Yet, after the event—having spent more on KDR than they initially intended—some participants considered the cost saving associated with KDR a false perception:

I think in hindsight, if we’d known the cost of building we probably would have better off just buying a house that existed. Back then we didn’t know. (Lucy, Avalon)

Apart from the financial considerations, KDR was seen as offering a better outcome than buying an existing house, allowing owners to build a new house directly to their requirements:

We were looking for a house that we didn't have to rebuild but we couldn't find anything we liked ... it wasn't affordability. (May, Ryde)

In addition, a recurrent perceived benefit of KDR in many contexts was the decision to stay in a familiar and convenient neighbourhood which they valued:

We did [consider buying a new house elsewhere] and we thought no, where would we go ... are we going to have good neighbours and are we going to be happy with, you know, just where we end up going 'cause we've got very good neighbours and [our son] had started school down the road, nice and handy. (Dora, Randwick)

Attachment or attraction to a locality is one the most significant factors influencing owners to undertake KDR rather than move to an existing house elsewhere. Respondents who had lived at the same address for many years described social and sentimental reasons to remain. Those who had relocated from elsewhere, typically did not move a great distance and cited reasons related to social and familial networks, affordability and lifestyle. Many participants expressed preference for not only a particular neighbourhood, but also to a specific lot, due to perceived high amenity or familiarity with the immediate neighbours. Some of the main locational considerations are summarised in Table 3.

**Table 3.** Location choice and considerations

Valuation	Selected comments
Long-term attachment	'I used to live in Bankstown about four blocks down the road with my parents ... I don't mind the Bankstown area since I sort of grew up in it' (Doug, Bankstown)
Affordability	'We wanted to live on the coast. We just didn't have enough money ... So really this was the most affordable area for the money we had saved' (Jack and Julia, Ryde) 'Well, the fact that we went to a less expensive suburb meant that we could actually afford to knock down and rebuild too' (Adele, Randwick)
Life style choices	'Just liked the people in Avalon. They're walking down the street and they said hello to you ... there's an arty-farty mob, there is a more social mob, I just like the people and I love the beach, I can swim. A million reasons really' (Peter, Avalon)
Chance opportunity	'My mother-in-law actually owned the house and we bought it from her. She'd owned the house for 10 years I think' (Peter, Watsons Bay)
Access to public transport	'My husband wanted it to be close to the train line' (May, Ryde)
Family and social networks	'It was closer to family ... if I lived out there I didn't think my family would ever come and see me' (Terry, Ryde) 'In the end it was a combination of the financials and the—how can I say?—proximity to friends and family, like babysitting and just assistance' (Gerald, Ryde) 'My parents actually live just around the road so that was another reason to move over here' (May, Ryde)
Middle suburbs—access to other metropolitan areas	'It's just close to everything. My husband's a plumber so he drives from Manly to Bondi to Katoomba to Penrith and it's just a really central spot for him' (Louise, Bankstown)

Source: Interviews conducted by authors.

*Consumption-Driven and Investment-Driven KDR*

Participants in our study represent different points in the spectrum between consumption-driven and investment-driven KDR. Consumption-driven KDR can be described as motivated, first and foremost, by the desire to build a house that would serve the needs of the owners' household. Investment-driven KDR can be described as motivated predominantly by a desire for profit through capital gain realised through later resale.

The 'consumerists' either did not expect the capital gain achieved through KDR to exceed the financial investment in the process, or if they did expect significant increase in their investment that was not a primary consideration but merely a bonus:

Nothing about making a profit out of it because in my area, you know ... you wouldn't really get the money back for all you spent. (Albert, Bankstown)

Did I see it as a view to capital gain, making money selling it? No. It wasn't a motivator. (Sean, Avalon)

The driver was we're looking for a house for the next 10 to 15 plus years. Somewhere to live for that long. I guess one of the benefits of that, of what we did was yeah it does capitalise it probably by far. (Gerald, Ryde)

For other participants, KDR was an opportunity to combine both consumption-driven and investment-driven goals: to build the house they want to live in for a number of years and at the same time seed a future capital gain that would fund a subsequent housing investment as circumstances changed (for example, when the children finish school or when the housing market provides opportunities for a profitable resale). This would enable them to upgrade to a better location (houses with waterfront views—a distinctively Sydney factor—typically imagined as the final stage in this housing ladder):

The area is great, so I guess the motivation to develop it was because—a great location and obviously probably to make some money. (Peter, Watsons Bay)

It's the best investment because it's tax free ... and if we were mobile or young enough we'd probably do it, I'd like to do it again. You know, sell this and move to even a more expensive area and build again. (Ron and Sara, Ryde)

We would like to live in a better area [elsewhere] and this is more or less an investment for us ... we don't mind staying here for another few more years until the price recovers. (Julian, Bankstown)

The survey findings indicated that overall, across the sample, lifestyle-related factors such as location and the quality of the house were more significant than financial factors. Reasons associated with location were the most significant motives for KDR ('Our lot is well located within the neighbourhood'—74 percent; 'I was attracted to this area as a good place to live in'—68 percent). Other primary reasons were associated with the ability to build a new house unconstrained by the layout and quality of the existing dwelling ('I preferred knockdown-rebuild over renovations because it allows me to build the house I

want’—74 percent). Statements associated with financial reasons to undertake KDR (‘I expected that the capital gain from knockdown-rebuild will be greater or more secure than any other investment’—45 percent) were significantly less popular than those associated with the quality of the house and the neighbourhood. One potential subgroup of owners, which is not covered in our sample, includes those who undertook KDR purely as an investment with no intention of living in the new house they built. Investors who bought an old house, undertook KDR and then sold or leased out the new house were excluded from our sampling.

### **Undertaking KDR: Costs and Risks**

Having identified some of the perceived benefits for owners in KDR investment, set against the range of considerations factored into their decision-making, we now shed light on another important aspect of the owners’ agency in processes of suburban renewal. This is the issue of risk. Key aspects of risk are effectively externalised in integrated redevelopment, but constitute a more pressing factor for households contemplating KDR because of the personal investment involved. We address the three key issues, which surfaced in our qualitative analysis, namely, securing finance for KDR, attaining local council approval and dealing with builders throughout the process of construction.

#### *Finance for KDR*

Suburban renewal through KDR involves reinvestment of capital into existing suburbs by individual homeowners. Much of this capital is raised through debt. This involves significant financial risk, particularly for participants in our study who undertook KDR in the years 2004–2008, which were characterised by gradual decline in most of Sydney’s housing markets. In most of Sydney’s LGAs median house, prices peaked in 2003–2004, after long years of continuous and steep rise, followed by moderate decline.

Most participants in our study—particularly younger owners under 55 years old—had to take out a bank loan to meet the costs of KDR. They were in most cases already mortgaged (their previous loan typically taken to buy the old house), but had repaid a sufficient amount to take a new one based on their equity in the property:

There was enough for a deposit and then I purchased the house with a loan and then over the course of about four years or so I paid off enough of the loan to then be able to get a larger loan to finance the KDR. (Terry, Ryde)

Increases in the value of the land they owned allowed some participants to raise more finance for KDR.

Participants from the smaller cohort of older KDR owners over 55 years old were in a more comfortable financial position to undertake KDR, with no previous loan to repay and in some cases sufficient savings to fully finance KDR even without a loan. For some of these participants, KDR was an opportunity to realise capital gain from past investments in the housing market:

I used to have a few investment properties . . . So money I got from those financed my bill here . . . I sold everything, all my investment properties. So I realised that as

you approach 65, it's stupid to have investment properties because ... there'd be taxes and things that doesn't apply—my financial advisor said get rid of them so I did that. (Peter, Avalon)

With the exception of owner-builders, access to finance was generally not a problem for most of the participants in our study, largely due to their high incomes and equity. Nevertheless, repayment pressures were significant for some who had overstretched their investment beyond their means:

We were totally surprised at how much they [the banks] were willing to give us ... we had a \$1.5 million mortgage and my husband and myself, our income is barely around the \$100 000 mark total income, so we were really doing it tough ... I had to pick up a spare shift and be working nearly full time to be able to pay the building ... we were struggling. (Kristina, Randwick)

For others, repayment pressures also related to contractual requirements to meet very tight payment deadlines attached with various construction milestones.

### *Planning Risks*

KDR as a mechanism of urban renewal involves other elements of risk-taking on behalf of private owners. In land use planning terms, the demolition of old houses and the construction of new ones require formal planning approval from the local council. As with any development requiring statutory scrutiny, a variety of technical and contextual issues come into play. In some cases, among our respondents, the DA process involved significant financial risks to owners with issues such as storm-water retention, site coverage and neighbours' objections acting as impediments or delays in construction.

One of the main challenges for owners in gaining planning approvals for KDR was the connection of new homes to existing infrastructure networks. Planning controls related to storm-water retention and restrictions concerning building near storm-water easements were mentioned by several participants as problems causing delays in getting their DA approved, and in some cases required costly adjustments. One of the key issues that emerged was the poor quality of information held by both council and owners about older infrastructure (in this case, storm-water easements), leading to unnecessary complexities in decision-making and communication.

KDR involves building a new house in an existing and already settled suburb. Further, the new homes built are typically higher than the neighbouring older houses, resulting in overshadowing and privacy concerns. Therefore, the potential for conflicts between neighbours is higher than in greenfield construction. Nevertheless, most participants gained planning approval without any objection or with only minor delays and minor adjustments to design. However, several owners faced objections from neighbours after submitting a DA and long bureaucratic battles ensued. In some instances, there were major financial costs.

Since 2008, new planning provisions for 'Complying Development' have been introduced to fast track local approvals in New South Wales. They permit owners and builders to gain private certification for their plans without a DA through council and the usual processes of public exhibition. The wider uptake of this mechanism may significantly change the historic dynamics described above.

*Building Risks*

In addition to planning risks, owners embarking on KDR are required to bear significant financial risks associated with actual construction. Most participants worked with small–medium-scale building companies, some of whom actively promote their products into the KDR market. They described a relatively comfortable relationship with their builder, resulting in a smooth, quick and painless construction process. The major risk for such owners, particularly those working with smaller builders, was the possibility that the builder might go bankrupt. However, a large number of participants experienced very difficult relationships with their builder, involving budget blowouts, defects, contract violations, miscommunication, distrust, legal battles and severe emotional and financial stress:

The builder was pretty bad ... we went to court. So it took us four or five years in the court system, many defects, the house ... the defects amounted to over \$180 000. (Albert, Bankstown)

I went to the tribunal, spent 13 grand on building consultants and I only got six and a half grand back but that's because I settled. (Doug, Bankstown)

Accumulation of unexpected costs throughout the construction phase was a common theme in the interviews:

Before we started we found there was asbestos on the site, so when we started demolition there was \$50 000 straight up before we even started building. So we were behind the eight ball right from the start. Then it was just one thing after another. (Lucy, Avalon)

While the causes for unexpected costs are often beyond the control of the builder, the contract typically provides builders with full control over contractors leaving owners with very little power to negotiate these additional costs. Hence, the risk of unexpected costs is fully borne by the owners:

They basically can mark it up as much as they want to. (Julian, Bankstown)

In some cases, participants felt they were manipulated by the builders into signing unfavourable contracts, with little negotiating power once the first deposit was paid:

I went there thinking we'll negotiate ... When I sat down and started going through the contract and what I needed, ... [the builder] got up and said, 'I'm not doing this' and walked out of the room. Then came back in with a salesman and they spent 10 minutes in all honesty terrorising me ... He goes 'no, you have to sign the contract today, here and now otherwise the price will go up by 10 to 15 percent' ... What do you do? I signed the contract. Walked out trembling. (Gerald, Ryde)

Our survey found that nearly one-fifth of the respondents spent 30 percent more than they initially expected on KDR, and nearly half spent between 5 percent and 30 percent more than they expected, further reinforcing the significant financial risks associated with KDR that need to be offset against the benefits of seeking higher housing standards *in situ*.

## A Typology of KDR Owners

While the general motives and risk factors described in the previous sections were common to most participants in our study, there were nevertheless some significant differences in motivation and process between them. This final section of our empirical analysis attempts to distil the diversity of owner participation into a small number of ‘ideal types’. Our analysis recognises seven ideal types in all: long-time dwellers; strategic improvers; dream-home makers; owner-builders; multi-generation households; landlords turned owner occupiers; and inheritors. While the typology is based on qualitative analysis of interviews, we also used survey data in attempt to assess the relative proportion of each subgroup within the wider group of KDR owners. This more nuanced analysis helps to identify more specifically the type of actors who currently lead processes of suburban renewal in the Sydney housing market through KDR.

### *The Long-Time Dweller*

The long-time dweller lived in the old house many years before it was demolished. They did not buy the house with the intention of rebuilding it, and often spent money over time on renovations to improve living conditions. Yet, over time, their needs and/or financial capacity have changed. Typical scenarios involve the physical deterioration of the old house, the birth of a child or increasing demands for space for more teenage or adult children, retirement or completion of previous mortgage debt repayment or rising income. Renovations would no longer be sufficient to resolve their needs, and moving to a different property was seen as less attractive (for example because of established relationships with immediate neighbours, or reluctance to give up the advantages of a specific location). On the basis of the survey data, we estimate that close to a third of KDR owners are long-time dwellers.

### *The Strategic Improver*

The strategic improver chose KDR as a stepping stone in their housing career—one that involves an immediate improvement in dwelling quality, as well as a long-term strategy to accumulate capital for future housing improvements. Yet, the strategic mover is often willing to settle for ‘second best’ in terms of location, by moving into a relatively lower-value housing market compared to the one in which they already live to achieve a larger and more modern dwelling. It is a compromise as the strategic mover trades off location for dwelling quality, but the compromise is minimal since they typically stay in the same general locality, and expect that KDR investment by other incomers will improve the suburb. In our analysis of the interview transcripts, we labelled 10 of our 30 participants as strategic improvers, but the survey did not provide useful data to quantify the proportion of strategic improvers using a larger and more representative sample.

### *The Dream-Home Maker*

Many owners saw KDR as an opportunity to build their ‘dream home’—one that meets their ideal housing standards as well as their location expectations. Some of these expectations are practical (e.g. close to work), but the desire to reflect individuality and status through a uniquely designed house is also a key influence shaping the expectations of the dream-home makers. KDR with a custom-designed house allows these owners to

achieve their objective without having to make significant tradeoffs or being limited by the quality of the available stock that is on the market. Affordability is not an issue for the generally affluent dream-home maker, yet they spend money on KDR with the expectations of equal or higher returns on their investment when they sell. Close to a third of respondents to our survey reported their new house was purpose-designed by an architect and might thus potentially be described as ‘dream-home makers’.

### *The Owner-Builder*

In 1954, at the height of post-war suburban housing development in Australia, ‘self-help’ housing development by owner-builders also reached its peak accounting for more than 40 percent of all new constructions. Since then, the proportion of owner-built housing has declined dramatically. Owner-building ranges from coordination of the work of subcontractors to manual work by the owners themselves including carpentry and unskilled labouring (Dingle, 1999b, p. 343). The owner-builders in our study are very different from those in the 1950s. Then, self-help housing was a way to enter homeownership (Dingle, 1999b); now, owner-building is a way to improve and upgrade housing for those who are already homeowners.

In our study, owner-builders acted mainly as project managers in the process of rebuilding their own home. Their motives to become an owner-builder varied, embracing the prospect of cost savings, greater control over the process and the final product and greater flexibility in timing, allowing a longer-staged process of rebuild that does not require having all the finance available upfront. Many of the owner-builders we interviewed were involved in one way or another in the building industry—often as contractors—and therefore had the experience, connections and confidence to take responsibility for such a project. In addition to the practical benefits and despite the challenges, being an owner-builder involved a sense of self-fulfilment and pride. In our survey, 16 percent of respondents were owner-builders.

### *The Multi-Generation Household*

A typical multi-generation KDR household involves elderly grandparents who were born overseas in a non-English speaking country, their son or daughter and their own family. KDR is a way for the extended family to continue living together in a large home that can be divided into subsections with relative privacy, reflecting cultural norms of keeping two or three generations in a single household, as well as addressing some of the affordability challenges for the younger couple. KDR costs will often be funded by the grandparents (utilising their life savings) or shared with the younger parents. The younger son or daughter will often manage dealing with council and builders, particularly when the grandparents’ English language skills are limited.

Multi-generation KDR often takes place in some of the middle-ring lower-value housing markets with high concentration of immigrants and ethnic communities, where the parents have settled many years ago after immigrating to Australia. In some areas, high demand for multi-generation houses encourages even KDR owners who are not part of multi-generational households to consider building larger dwellings than they need to be able to sell the house more easily into this submarket. A relatively small number of multi-generation households participated in our study (including both the survey and the interviews), but we estimate that this subgroup is under-represented in our sample, possibly because of language barriers.

*The Landlord Turned Owner-Occupier*

An old run-down house was initially purchased purely as an investment opportunity, and was then rented out for a number of years while the landlord lived elsewhere (in some cases as a renter) in a house and/or location that were more suitable for their needs. Over time, as their needs, expectations and financial means have changed, moving to live in the old house and rebuild it becomes a viable option to improve the owner's own housing situation. Landlords turned owner-occupiers were few in our study, but the significant implications of a redevelopment scenario that involves displacement of renters suggests that this subgroup needs to be acknowledged despite its relatively small proportion.

*The Inheritor*

This KDR owner inherited the old house or purchased it from a relative. The new owner did not find the existing dwelling attractive, but wanted to move in for practical as well as sentimental reasons. In some cases, the financial opportunities that come with inheritance of a property made KDR a viable option. Only a few of our participants were inheritors.

In sum, the owners who chose to undertake KDR can be grouped according to distinctive types of motives and circumstances. The typology presented above demonstrates that suburban renewal through KDR is uncoordinated and driven by a complex set of different processes and drivers. The implications of such complexity are further discussed in the Conclusion section.

**Conclusions**

Higher-density development around town centres in the middle-ring suburbs, and low-density development in the metropolitan fringe, are generally initiated, controlled and coordinated by planning authorities and developers (Gwyther, 2005; Searle, 2007). In contrast, much of the redevelopment activity in the middle-ring suburbs takes the form of scattered replacement of older detached dwellings with new ones. Just as owner-occupiers were the key agents leading the development of these post-war suburbs in the 1950s (Dingle, 1999a, 1999b), they are now key agents in this process of redevelopment and renewal through KDR. However, there are also significant differences. Those in the 1950s sought to build their first home as owners, whereas KDR owners invariably have already owned one or more homes before. Owner-builders in the 1950s were 'pioneers' willing to move into the metropolitan edge before infrastructure was in place, whereas KDR owners today choose the very same suburbs because they are already well serviced and represent a central metropolitan position.

Yet, KDR owners today do take significant risks, financial and otherwise, in expectation of both lifestyle and economic returns. In this sense, the renewal of low-density housing stock in the post-war suburbs can be understood as a collective outcome that is driven by the uncoordinated, risk-laden practices of self-interested individuals. In state-led urban development or renewal projects, financial risk is mitigated to some extent via large-scale integrated investment that ensures economic returns through the 'revaluation of urban land' (Swyngedouw *et al.*, 2002, p. 552). In contrast, individual KDR owners have no guarantee that their own investment will be followed by a wider trend of local renewal and revaluation. Yet, despite the lack of formal coordination, these owners take their cue from

the built environment itself and the conspicuous presence of KDR activity in their suburbs. Arguably more so than in the case of renovations or extensions, the wholesale replacement of older housing stock provides clear signals to owners that suburban renewal is well underway.

This paper described a variety of dynamics leading to KDR development, suggesting that similarity in physical form obscures a more diverse range of concurrent social processes. Here, our typology of actors comes into play. For example, investment-driven KDR (associated, in particular with the ‘strategic improvers’) can result in more fluid population flows in these suburbs, and at the same time contributes to the ‘financialisation’ of housing submarkets, increasing their vulnerability to the crisis tendencies of financial markets (French *et al.*, 2011). On the other hand, KDR by landlords choosing to become owner-occupiers in the houses they once leased out raises some concerns about displacement of low-income renters, akin to the negative consequences of gentrification (Atkinson & Wulff, 2011). A third process, KDR by multi-generational households, implies a new ‘sociology of families’ (Liu & Easthope, 2012, p. 28) in the post-war suburbs, requiring consideration of the potential impact on density and service provision.

Our study also demonstrates the significance of subjective and emotive motivations in processes of owner-driven suburban renewal. Charles’s (2011) study of ‘teardown’ activity in Chicago identified objective factors contributing to ‘teardown’ activity such as distance from the CBD or rail station and rankings of local schools. In our study, subjective emotive factors, such as long-term attachment to an area, were found to be prominent drivers of KDR activity. This may reflect differences between the Chicago and Sydney housing markets and the type of actors involved in redevelopment activity. Just as importantly, our research demonstrates the significance of subjective perceptions and desires of individual owners in prompting reinvestment and redevelopment, and highlights the methodological value of information obtained directly from owners to more fully understand processes of low-density suburban renewal. While the KDR phenomenon is a relatively modest component of suburban housing markets, its complex behavioural drivers and the varied design, and environmental and fiscal implications arising make it worthy of closer scrutiny.

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