

Retirement Villages – An Institutional Asset Class?

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Abstract

Globally the world is facing an ageing trend and while this trend has been global, seniors housing has remained a local asset class with different product offerings in different countries. In Australia accommodation for seniors includes a retirement village product which while physically similar to retirement living estates in other countries is occupied under a number of tenures with a common feature of all these tenure types is the fee structure whereby a resident purchases their right to occupy and at the end of their tenure pays an amount based on variable factors to the owner/operator of the village. The owner/operator receives their return at the end of residents' tenure, therefore the value of this return can only be estimated based on projections including the length of tenure of the current and future residents, increase in sale price of units and future demand for units. This difficulty in projecting future returns results in an opaque market for investors, financiers and residents alike which has been cited as a contributing factor for the lack of enthusiasm by institutional investors in the sector. This paper presents original research into valuation metrics including the length of resident tenure (Duration) and the proportion of units which transact per annum (Turnovers) component parts used in the Monte Carlo simulation that is being applied to the DCF analysis that is increasingly being used in the sector.

Key Words: Retirement Village, Institutional Investment, Valuation Metrics

Introduction

In line with the ageing trend in OECD countries the number of Australians aged 65 and over comprises over 3 million or 14.0% of the population (ABS 2011). This ageing cohort face the issue of age appropriate accommodation, while the majority of Australian seniors prefer to remain in their own homes approximately 4.5% of Australians aged 65 and over live in Retirement Villages and the total population of these residents (aged 55 and over) amount to approximately 140,000 people (ABS 2011). As part of this research the author has compiled a database of retirement villages in Australia operated under the relevant State and Territory Retirement Villages Legislation (DMF villages). Villages operated as rental seniors' accommodation have been compiled separately.

There are in excess of 2,000 operational villages with approximately 120,000 Independent Living Units (ILUs) and Serviced Apartments (SAs); of these villages approximately 30% are operated by for-profit operators and 70% are operated by not for profit operators; however the situation is reversed with 55% of the number of units (ILUs & SAs) operated by for-profit operators and 45% operated by not for profit operators.

While the for-profit operators own more than half of the units the institutional investors, listed and unlisted funds, comprise a smaller proportion with nearly 12% of villages and 27% of the units. These organisations tend to own larger villages with an average size of 120 ILUs when compared with the average across the industry of 59 ILUs. The main institutional investors in the sector are Australian Unity, FKP Property Group, Ingenia Communities, Lend Lease and Stockland and; collectively these three own and manage over 220 operational villages with nearly 28,000 ILUs, comprising approximately 11% of all villages and 25% of units.

Notwithstanding the type of owner/operator a defining feature of retirement villages is the Deferred Management Fee (DMF) structure of occupation; individual residents purchase a right to occupy a unit and at the end of their period of occupancy pay an amount dependent on variable factors to the owner/operator of the village. During the

period of the residents' occupancy in the village they pay a regular monthly levy for the ongoing operations of the village, however these amounts are controlled under state legislation to a cost recovery basis. Therefore a retirement village owner/operator receives their return from a residents' occupancy when that resident departs. The actual amount of this return is dependent upon the calculation of the DMF which may be based on either the initial entry price or the price paid by the next incoming resident; this amount is multiplied by a percentage based on the period of residency. Where there is a difference between the initial purchase price and the price paid by the next incoming resident (capital growth) this amount may be shared between the resident and the village owner/operator. Further components of the residency agreement include responsibility for the cost of refurbishment of a newly vacant unit and marketing expenses/sales commission in attracting the next resident.

The primary method of valuation of a fully developed operational retirement village utilises Discounted Cash Flow (DCF) analysis as this method is suited to the lumpiness of a village's projected cash flows, however this method is dependent upon the veracity of the underlying assumptions (Hatcher & O'Leary, 1994, McAuliffe, 2012). These assumptions include: a prediction as to the Duration for individual residents both current and future; that type of DMF structure both current and future; the period of vacancy between a resident leaving and a new resident entering; and the capital growth of the value of units in the village and hence the future contributions paid by incoming residents (Towart, 2009).

The DCF analysis incorporates variable cash flows and the application of Monte Carlo simulations allow for a variation in the inputs resulting in the sensitivity of the valuation to these variables to be determined, the quoted parameters of these variables has not been publically established. This paper aims to quantify the average resident Duration for both Initial residents, those occupying a new ILU, and Rollover residents, those occupying a previously occupied ILU. The proportion of ILUs that Turnover per annum as a percentage of the total stock of ILUs in that village will also be addressed.

Investment markets prefer certainty in forecasts of performance and sectors with a potential for high variations in returns can be negatively impacted notwithstanding that actual investment performance. The Monte Carlo simulation approach when incorporated with DCF analysis is able to accommodate this uncertainty by determining the value under a series of scenarios coupled with the probability of these scenarios occurring. The requirement therefore is to quantify the variability in these valuation metrics.

Listed Australian village operators have disclosed valuation metrics from their portfolios as part of market reporting requirements. Following the acquisition of Australian Retirement Communities (ARC) in 2007 Stockland reported that the average resident Duration for the 17 villages in the portfolio was 12 years (Stockland, 2007). These metrics had changed little when in 2011, following the acquisition of the Aevum portfolio; in an investor briefing it was reported that a typical retirement village achieves maturity after 10 – 12 years from completion and that the average resident Duration across an established retirement village portfolio was 12 years (Pitman, 2011).

The resident Duration across a portfolio includes mature, maturing and new villages and these do not necessarily present the same profile, a shortening of Durations was noted by FKP Property Group which reported an average Duration of those residents who entered before 1990 of 9.7 years. For residents who entered in later years, this Duration had declined with those entering from 2001 to 2005 staying on average 3.6 years (FKP Property Group, 2010).

Accountants acting in advisory and agency capacity in the retirement village sector are in a position to view recent asset performance and purchasers' benchmark metrics; with benchmark resident Durations of 11 to 13 years and average Turnover frequency of between 8% and 10% of village units (Willison, 2012)

The focus of this paper is the Duration of Initial and Rollover residents in particular to quantify the difference between these two groups of retirement village residents. Current residents (though still in situ) will also be addressed as the current resident schedule is often the major information source on which a valuer has to base assumptions of likely Duration. The average annual Turnover frequency will also be addressed.

Methodology

The aim of this research is to quantify the most likely Duration by any individual resident and the average percentage of residents in a village likely to vacate in any given year based on historical analysis of established villages over time. This has been undertaken with an aim to establishing benchmarks that can be utilised by valuers and village owners/operators.

Traditional staged development of a retirement village occurs over a period of years with individual stages ranging from <10 units to in excess of 50 units, in this way a village developer is able to meet market demand and minimise the expense of holding unsold stock. This results in a sale profile with a sale to the first resident (Initial Resident) in that new unit which is followed by a series of secondary sales to later residents (Rollover Residents). An individual unit will have one Initial resident followed by a series of Rollover residents all of whom stay for varying periods.

Data was collated for 15 individual villages from the date of initial development for all residents who had entered and exited the villages, data on resident duration was separately collated depending whether a resident was initial, rollover or current (still in situ). This data was sourced from third party data providers. For Initial Residents the maximum Duration observed was in excess of 20 years and for Rollover Residents this was in excess of 15 years; this creates a potential data distortion in analysing villages which have been in operation for lesser period of time. To overcome this issue, data sets were further divided into subgroups depending upon the date of entry, detailed as follows.

- All Initial Residents
- Initial Residents entering before 1988 (potentially staying in excess of 25 years)
- Initial Residents entering before 1992 (potentially staying in excess of 20 years)
- All Rollover Residents
- Rollover Residents entering before 1997 (potentially staying in excess of 15 years)

Information on Current residents was compiled separately with the intention to form a basis of comparison as the current resident schedule is often the main source of information provided to valuers by retirement village operators therefore determining any correlation between current residents and historic resident Durations is considered relevant and will be addressed in future research.

This research utilises data from 15 villages which comprised 10 villages in New South Wales, 5 villages in Queensland, 13 villages operated under Strata Title tenure and 2 villages operated under Leasehold tenure.

Robustness of Data

The retirement villages analysed were selected due to their period since initial development, older villages are able to provide a greater quantum of historical resident Durations. However in sourcing the information initial data was scrutinised and transactions removed which did not conform to resident occupancy parameters. Transactions that were removed included the following.

- All transactions involving operators were scrutinised, it was noted that some operators (of Strata title villages) purchase units from exiting residents hold these for a period (<one year) and then sell to an incoming resident.
- Bulk transactions involving operators.
- Transactions with resident durations outside benchmarks and where the name of the historic incoming resident did not match the latter exiting resident.
- Transactions involving survivorship, namely a transfer from two residents to one of these two residents.

As a result approximately 20% – 30% of original data was not included in the analysis.

Initial Resident Duration

The analysis of the initial residents observed that the maximum Duration of any single resident was 25.4 years and the minimum Duration was < 2 months. Of the sample size of 15 villages six of these had commenced operations before 1988, therefore residents in these villages had the potential to stay this maximum observed period of time; 11 villages had commenced operations before 1992 which allowed the initial residents to potentially stay for at least 20 years. The Average Duration and the number of resident Durations (data points) for each of these three groups are shown in Table 1.

Table 1: Average Durations and Number of Observations for the Three Initial Residents Groups: 15 villages, 1985 to 2012

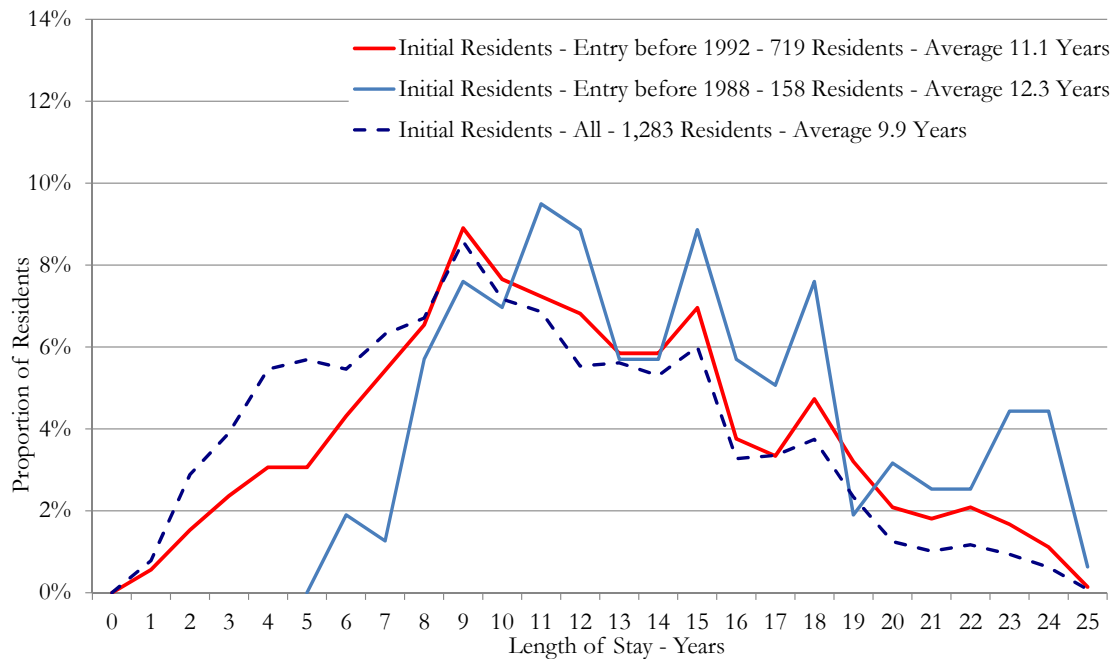
Sample Group	Average Duration	No. of Resident Durations
Initial Residents - All	9.9 Years	1,283
Initial Residents - Entry before 1992	11.1 Years	719
Initial Residents - Entry before 1988	12.3 Years	158

On average the Initial residents – All group had a Duration of 9.9 years; for the Initial residents – Entry before 1992 sample this average Duration increased to 11.1 years and for the group that had the longest potential period of stay, Initial residents – Entry before 1988 this average Duration was 12.3 years. As anticipated the Initial residents who entered before 1988 comprise the smallest sample with 158 resident Durations recorded, this was followed by the Initial residents who entered before 1992 with 719 resident Durations recorded.

The average Duration for each of these three groups is within the parameters stated by Stockland; however it is noted that this operator based their Durations across their entire portfolio which comprised established, establishing and under development villages.

Industry participants consider that the distribution of resident Duration's does not follow a normal distribution curve but would be skewed towards the earlier years of occupancy; this would reflect that while some residents do stay for an extended period of time the majority of residents stay for a shorter period. A chart of relative frequencies of the distribution of each of the three sample groups' resident Duration with the Length of Stay – Years is shown in Figure 1.

Figure 1: Relative Frequencies of Distribution of Duration for the Three Initial Residents Groups: 15 villages, 1985 to 2012



Rollover Residents

Similar to the analysis of Initial residents the maximum Duration for any single Rollover resident was 18.1 years and the minimum Duration was < 2 months. The analysis of Rollover residents considered two groups, all Rollover residents and residents who had entered before 1997. Of the sample size of 15 villages 11 of these had Rollover residents who had entered before 1997, therefore residents in these villages had the potential to stay for at least 15 years. The Average Duration and the number of resident Durations (data points) for both of these groups are shown in Table 2.

Table 2: Average Durations and Number of Observations for the Two Rollover Residents Groups: 15 villages, 1985 to 2012

Sample Group	Average Duration	No. of Resident Durations
Rollover Residents - All	5.2 Years	1,039
Rollover Residents - Entry before 1997	6.7 Years	245

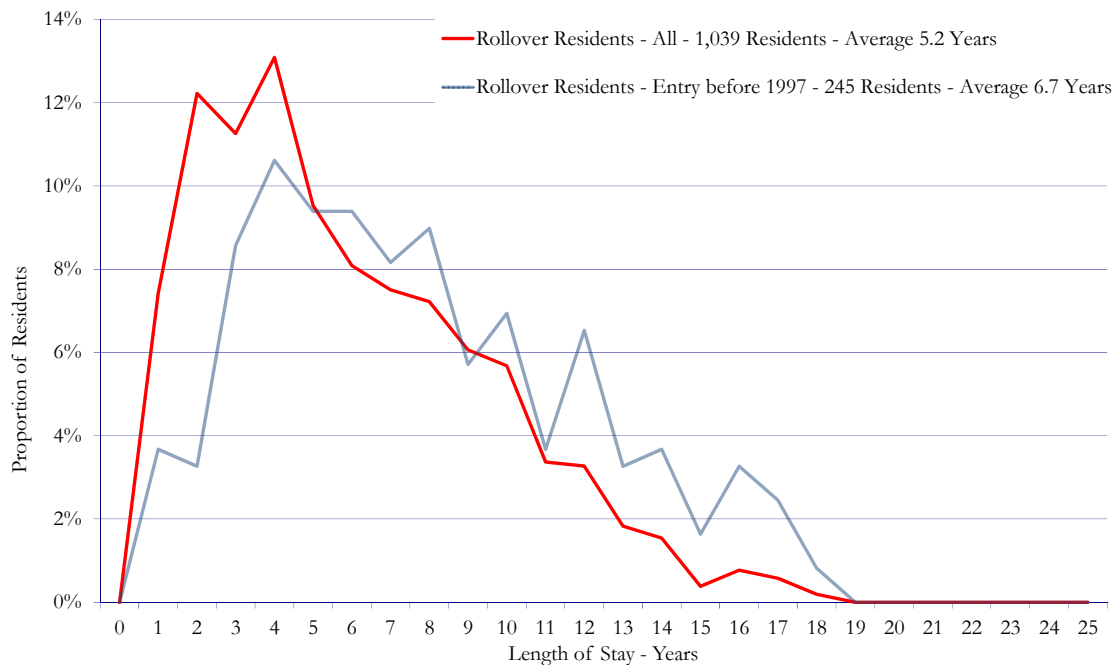
The Rollover residents – All sample group had an average duration of 5.2 years, for the earlier entering sample group of Rollover residents – entry before 1997 the average Duration had increased to 6.7 years. The size of the sample group Rollover residents – All was 1,039 resident Durations recorded, the number of Rollover residents – entry before 1997 was considerably smaller with 245 resident Durations recorded.

The average Duration for these two Rollover residents groups ranges between 42% and 68% of the average Duration for the three groups of Initial residents; this indicates a significant difference in average Duration between Initial residents and Rollover residents. However it is noted that these average Durations are still greater than those reported by FKP Property Group in 2010 of 3.6 years which was measured for residents who had entered their villages between 2001 and 2005.

The difference in average Duration between the three groups of Initial residents and the two groups of Rollover Residents reflects industry opinion of a difference in Duration between these two types of retirement village residents. While the existence of a difference in average Duration has been accepted across the industry, the quantum of this difference has never been publicly established.

The distribution of resident Duration displays a skewed profile with the maximum observed of 18.1 years and averages of 5.2 years and 6.7 years. A chart of relative frequencies of the distribution of the two sample groups' Resident Duration with the Length of Stay – Years is shown in Figure 2. This skew is more pronounced when compared with the chart of resident durations for Initial residents; this would indicate a different profile of occupancy between these two retirement village resident groups.

Figure 2: Relative Frequencies of Distribution of Duration for the Two Rollover Residents Groups: 15 villages, 1985 to 2012



Current Residents

Current residents, both Initial and Rollover, are those that have not yet left the village, therefore their Duration to date can be anticipated to be less than their final actual Duration. The schedule of Current residents, with date of birth, gender, date of entry, purchase price and type of Resident Contract is significant information provided by the owner/operator to a valuer by the owner/operator on which to base their valuation assumptions. It is therefore of interest to determine whether there is a relationship between historical resident Duration and Current residents period in situ.

Information on Current residents was compiled and the Average Duration and the number of resident Durations (data points) is shown in Table 3

Table 3: Average Durations and Number of Observations for Current Residents: 15 villages, 1985 to 2012

Sample Group	Average Duration	No. of Resident Durations
Current Residents - All	9.1 Years	1,813

The Current residents had average duration of 9.1 years, greater than the rollover residents of 5.2 years and 6.7 years, and less than the initial residents of 9.9 years to 12.3 years. The number of resident Durations was 1,813 and comprised 386 Initial Residents and 1,427 Rollover Residents. Given that the sample group of current residents comprised both Initial and Rollover that the average Duration was between that recorded for these two resident types can be anticipated. A chart of relative frequencies of the distribution of Current Residents' Duration is shown in Figure 3.

Figure 3: Relative Frequencies of Distribution of Duration for the Current Residents: 15 villages, 1985 to 2012



Average Turnover Frequency

The valuation metric of an average percentage of ILUs reselling per annum is based on the assumption that a mature village will on average Turnover a standard percentage of the total completed units in any given year. Notwithstanding valuers and industry practitioners acceptance of the DCF model as the primary method of retirement village valuation due to its ability to accommodate the lumpiness of projected village cash flows the metric of an average percentage of turnovers per annum is often utilised as a check method or a benchmark for an individual villages' projected revenues. As more advanced computer programs were able to incorporate more complex analysis into the valuation of retirement villages this metric became less likely to be used as the primary prediction of future cash flows.

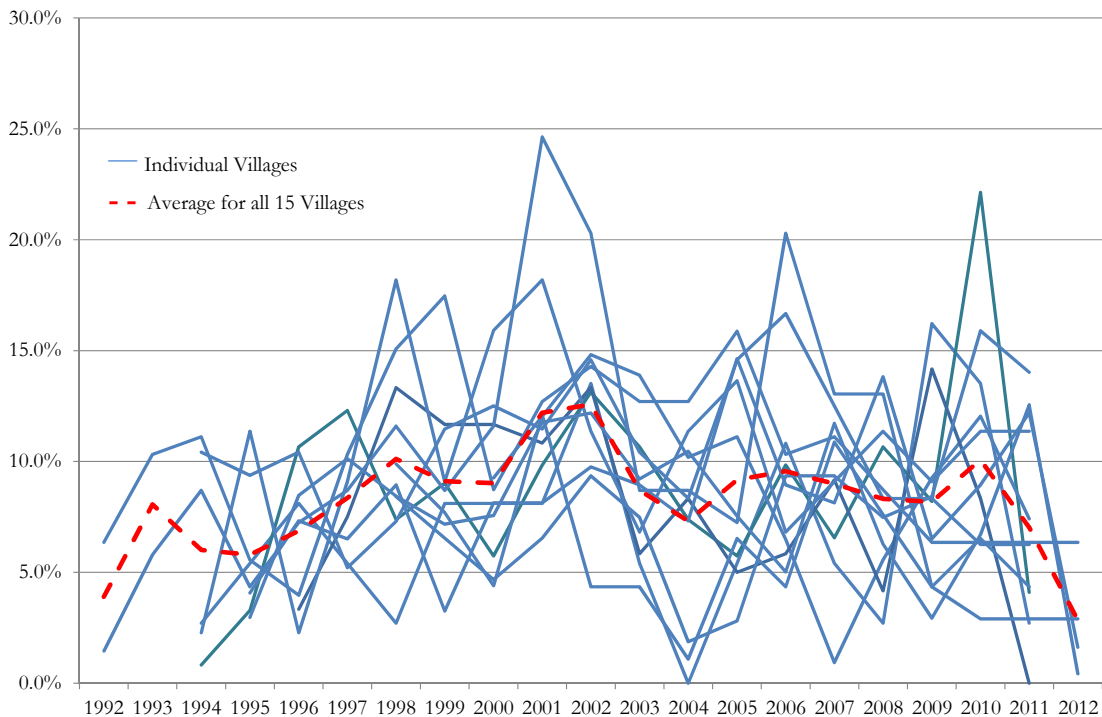
The analysis of the 15 villages determined what percentage of the total developed stock of that village the number of Turnovers in any year comprised. As retirement villages are developed in stages the analysis for each village commenced in the year in which the final stage of development was completed, therefore the analysis reflects maturing and mature villages. The 15 villages analysed comprise 1,500 ILUs and a period of analysis over 20 years, the percentage of Turnovers for each village was calculated for each year; across the total villages the maximum

percentage of Turnovers in any given year was 24.6% and the minimum was zero indicating no Turnovers in that year.

The percentage of Turnovers per annum shows considerable volatility which can be attributed to any number of factors that pertain to individual villages, these include the timing and size of the development stages, the size of a village and local market conditions in any year. A chart showing the average annual percentage of Turnovers for all villages across the 20 years analysed is shown in Figure 4 .

The (unweighted) average annual Turnover across all years and all 15 villages was 8.7% of total retirement village stock; this falls within the parameters of 8% to 10% quoted by retirement village operators and industry practitioners. While this annual average can be utilised to predict future village cash flows the considerable volatility shown by individual villages makes this a less reliable predictor tool. The advances in computer spread sheet modelling (in particular the Excel package) allows complex modelling of individual villages to be undertaken utilising standardised and flexible worksheets, this modelling is then more likely to rely on input metrics which pertain to the individual village.

Figure 4: Annual Average Percentage of Turnovers: 15 villages, 1985 to 2012



Industry opinion is that a village does not achieve full maturity until 10 – 12 years from completion of the final stage of development, therefore the degree of variation an average annual Turnover between individual villages is to be anticipated (Pitman, 2011).

Conclusion

This paper addresses the lack of quantifiable data on which retirement village valuation metrics are based. The objective is to establish benchmark parameters which can be incorporated into the DCF analysis of individual villages. This paper has established that there is a difference in resident Duration between Initial residents and Rollover residents with the resident Duration for the former group ranging between 9.9 years and 12.3 years and of the latter group ranging between 5.2 years and 6.7 years. The quantum of this difference is in the vicinity of double and is considered to be significant.

The further implications of this difference is that retirement village operators can then incorporate a DMF fee structure to best match their villages projected resident Durations. Villages that are currently being developed and are selling new ILUs to Initial residents would achieve a greater projected DMF income to the operator (and a greater retirement village value) by incorporating a fee structure which utilises the longer Duration of these residents. Operators of established villages would achieve a greater projected DMF income by incorporating a fee structure which achieves a maximum quantum at the average resident Duration of this group (5 to 7 years) this would enable the maximum fee to be achieved from this shorter staying group.

This paper is based on villages which commenced operations in the 1980s and 1990s and carries the implicit assumption that there has been little change in retirement village residents since this period. Residents entering retirement villages are doing so later in life and often staying for longer periods than previously observed which has been attributed to the care and support that can be provided through retirement village accommodation (RVA, 2010). It is proposed to further augment this analysis by comparing individual years of entry since the 1980s to determine whether there has been any significant change in resident duration over time.

While this analysis shows the difference in duration between initial and rollover residents it does not address the relationship with the determining factors to this duration these are considered to include resident age, gender plus lifestyle issues. This would require establishing those factors for each transaction, while the data in this paper has been sourced from third party providers, further data on the personal nature of could only be obtained through these sources at considerable cost. There are village operators who have maintained these records since the commencement of a village at access was available to these records then whether there is a causal relationship could be established.

The results from the analysis show the different Durations between Initial residents and Rollover residents, this has been sourced from third party data providers. This analysis is purely quantitative, qualitative analysis comprising interviews with village operators may determine further factors to be incorporated into the analysis.

A valuer when instructed to provide a valuation of a retirement village is usually provided with a current resident schedule which is often the only piece of information provided on which to base the average resident Durations in the DCF analysis. Determining whether the Current resident schedule can be used to predict future resident Durations would be useful as it would enable more an accurate valuation analysis to be undertaken with the limited information provided.

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