# The Real Costs of New

# **Apartment Delivery**

ANALYSIS OF AFFORDABILITY AND VIABILITY





October 2017



The Society of Chartered Surveyors Ireland is the independent professional body for Chartered Surveyors working and practicing in Ireland. One of our key objectives is to provide impartial, independent and authoritative advice on key issues for consumers, business and policy makers, as well as advancing and maintaining standards for Chartered Surveyors working in the property, construction and land sectors. All aspects of the profession, from education through to qualification and the continuing maintenance of the highest professional standards are regulated and overseen through the partnership of the Society of Chartered Surveyors Ireland and Royal Institution of Chartered Surveyors, in the public interest. While we are politically neutral, we are not policy neutral.

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## ABOUT THE SCSI WORKING GROUP

The SCSI would like to acknowledge the commitment and efforts of the Working Group members that have prepared this Report.

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This Working Group of Society of Chartered Surveyors Ireland (SCSI) was set up in early 2017 to produce a follow up Report to 'The Real Cost of New House Delivery 2016' focusing on apartments. The Report was produced with the assistance of industry experts from the following disciplines:

Chartered Quantity Surveyors in private practice

Chartered Quantity Surveyors working in-house for main contractors and developers

**Chartered Planning & Development Surveyors** 

**Chartered Residential & Valuation Surveyors** 

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## EXECUTIVE SUMMARY

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Ireland's housing crisis is showing little signs of improvement. This is due to the slow pace with which supply is increasing to meet demand. The lack of new residential supply coming to the market is the single biggest challenge for authorities and policymakers, but also for many households looking for affordable homes in the right location to buy and rent. The SCSI believes that poor information has compounded the crisis. In May 2016, the SCSI published 'The Real Cost of New House Delivery Report 2016' that presented both the actual 'bricks and mortar' costs of building a 3-bed semidetached house and the 'soft costs' (e.g. levies, VAT and finance costs).

Similarly, this report provides an independent assessment of development costs and viability based on the current market for apartments. The findings are based upon market conditions on the costs of delivering **2-bedroom apartments (79 sq.m.)** to the market in Dublin. The data was collected from Chartered Quantity Surveyors working on **28 apartment schemes consisting of a total of 2146 apartments** which were classified into three types – Suburban (low-rise); Suburban (medium-rise); and Urban (medium rise). The total development costs for each of



📕 Sales Price (excl. VAT) 🛛 📕 Total Cost (excl. VAT) 🛛 📕 Viable/Viability Gap

#### Viability of Two Bed Apartment

the types, based on 91sq.m (gross), ranged as follows, Category 1: Suburban (low rise) €1,700 psm to €1,925 psm, Category 2 Suburban (medium range) €2,125 psm to €2,450 psm and Urban (medium rise) €2,400 psm to €2,800 psm.

Only in the case of a suburban low-rise development (Category 1) does the current market price adequately meet the total delivery costs. In all other scenarios, it is not currently commercially viable to build at these costs when compared to current market prices for similar apartments. Therefore, in order for apartments to be built, one of two things must change – the current price must increase or the total delivery cost must decrease.

The least expensive type of apartment

(suburban low-rise at the lower range) requires a (combined) gross salary of at least €87,000 per annum provided they have a 10% deposit. According to the most recent CSO figures, only the top 20% of households are earning over €80,000 per annum. These figures illustrate that there is limited capacity for price and moreover a need for nominal price stabilisation leading to real price reductions.

Costs, therefore, are the major focus of this report as addressing them will be the key to addressing the housing crisis. In our analysis, the total delivery costs were divided into three parts: the site purchase cost, which represents **16%**; the 'bricks-and-mortar' construction costs, which represents **43%** of the overall cost; and the 'soft costs' of **41%**. Apartments are expensive to build and vary significantly depending on their design and car parking provisions. The Site Cost is another large variable with lots of underlying interconnected cost drivers. The Site Cost included in this report ranges from €33,000 to €125,000 per apartment. The analysis indicates that a number of cost drivers need to be addressed, these include:

#### Increasing the supply of serviced land,

Inovation in apartment design – gains with up to 5% overall costs savings,

Revising the Design Guidance & parking ratios,

Extending Development Contribution rebate scheme,

Establishing a State finance agency for funding housing projects,

Temporary reduction/rebate on VAT for new affordable housing, and

Revise Department's Design Guidelines to include Build to Rent.

### **Category 1:** Suburban | Low RISE

This type of apartment scheme is generally

incorporated into new housing schemes to provide the required planning density. Blocks are typically 3 storey. They are similar in appearance to housing and are built using simple traditional methods. Surface car parking is generally provided as opposed to basement parking.

	SALE PRICE	BUILD PRICE
LOWER RANGE	298K	293K



## **Category 2:** Suburban | medium rise

This type of apartment scheme is generally 3-6 storeys high and forms a separate scheme of apartments. It involves more complicated structure due to height and have more expensive facades. Parking is generally a mix of partial basement (under-croft) with some surface spaces. These blocks are found in suburban locations e.g. Sandyford, Carrickmines etc.

	SALE PRICE	BUILD PRICE
LOWER RANGE	318K	400K



### **Category 3:** Urban | MEDIUM RISE

This type of apartment scheme is generally 5-8 storeys high and forms a separate scheme of apartments. These blocks are located in urban locations and have higher specification facades and more complicated mechanical and electrical systems. Parking is normally a full basement solution. These blocks are found in urban locations e.g. North Docklands.

	SALE PRICE	BUILD PRICE
LOWER RANGE	337K	470K



## INTRODUCTION

Ireland's housing crisis is showing little signs of improvement due to the slow pace with which new supply is coming to the market.

The SCSI believes that insufficent information has compounded the crisis. The decisions of authorities and the private sector participants requires better information to develop proper initiatives and reduce the costs of an unstable market to build. The SCSI has and will continue to play its part in addressing the lack of relevant, independent information available to decision makers and the public. In May 2016, the SCSI published 'The **Real Cost of New House Delivery** Report 2016' that presented both the actual 'bricks and mortar' costs of building a 3- bed semi-detached house and the soft costs (e.g. such as levies, VAT and finance costs).

The deepening housing and homelessness crisis calls for a more radical change in policy to increase the supply of newly constructed residential units to the market in areas of high demand and at affordable prices. According to the Department of Housing, Planning and Local Government there were approximately 15,000 new housing units constructed in 2016 across Ireland and only approximately one third of these were built in Dublin. The level of new supply coming to the market is substantially lower than current demand. Based on the cumulative effect of the annual undersupply, it is estimated that it will be another decade before there is an equilibrium of supply and demand.

Apartment living rates in Ireland are extremely low in comparison to other EU countries. Across the EU as a whole, almost 50% of dwellings are apartments; in Ireland, apartments represent only 12%. The next lowest is Belgium, with almost 30%. According to recent Census 2016 data, 25% of the working population of Leinster outside Dublin travels to Dublin every day, while half the daytime population in Cork and Galway travel from outside these cities also. In 2016, more than 230,000 people commuted at least an hour each way to work. This represents a 30% increase in just five years and is clearly not sustainable.

## APPROACH & METHODOLOGY

Apartments are currently expensive to build, with costs varying significantly from suburban to urban locations. However, they can and should form a significant part of our affordable housing supply, mindful of good use of our limited land resources and for the sustainability and of our cities and economic growth.

Developing and reporting on apartment delivery costs has been a far more complex and challenging exercise when compared with the SCSI's 'The Real Cost of New House Delivery Report 2016'. Given the significant range of apartment types, locations and design, there was a broad range of cost returns that gave rise to anomalies in some instances when analysing and comparing different scheme data. To address this data was categorised and results are presented in a lower to higher range.

Detailed construction cost information was collected from Chartered Surveyors on a strictly confidential basis during the month of February 2017. Construction cost data was received, reviewed and analysed for **28 apartment schemes consisting of a total of 2,146 apartments,** all based in Dublin. While the financial and narrative information was provided, no project names or other identifying information is reported. In relation to the prices being paid for development land and apartments currently, our chartered valuation surveyors and residential agents provided their experiences which are included within our reported figures.

This report covers construction costs for a 79 square metres (sq. m.) net internal floor area (i.e. useable area), which equals 91 sq.m. gross floor area (i.e. area including

walls), two-bedroom apartment in each of the three categories (as defined). The minimum size for a twobed apartment is 73 sq.m. (See the Sustainable Urban Housing: Design Standards for New Apartments published in December 2015). On apartment schemes over 100 units, the majority of apartments have to be 10% larger to comply with the Department of Housing, Planning and Local Government's Design Guidelines. Unless the apartment is open plan, designers find it very difficult to fit the various rooms and ancillary spaces into the minimum 73 sq.m. This is mainly due to other minimum standards (e.g. bedroom dimensions), dual aspect (two different views) and other adjacency requirements. The 79 sq.m. used is based on our member's experience on schemes being designed to the current design regulations.

The costs for the schemes returned from our members are all in the Dublin region. This is because there are very few apartment schemes being built in regional areas. There were other types of apartment designs including bespoke, boutique infill developments and some large high-rise (12-15 storeys) schemes, which make up a minority and, as such, fall outside the categories in this report. This data was not used in the preparation of this report for that reason.

## CATEGORIES OF APARTMENTS COVERED IN THIS REPORT

Apartments are more complicated in their design and construction than housing and there is a large variance in the type and size of apartment schemes being developed. For this reason, the apartment data was categorised into three main categories that exist in the marketplace.

### **Category 1:** Suburban Low RISE



The suburban low-rise type of apartment scheme is generally incorporated into new housing schemes to provide the required planning density. The apartment blocks are typically 3 storeys in height.

The physical structure and specification for this apartment type is very similar to housing. For example, they are traditionally load bearing construction with standard internal finishes. The external walls will be traditional cavity blockwork with largely plastered walls and elements of brickwork with steel balconies fixed externally. The windows are generally PVC. Allowances for internal fittings and equipment will be at the lower end of the cost scale, compared to the other two categories. The mechanical system will be domestic grade and self-contained (e.g. individual gas boiler) rather than centralised.

Car parking is generally provided at surface level as opposed to basement parking. The external works are largely green open areas with limited landscaping and tarmac finish to car spaces.

## Category 2:

Suburban medium rise



The suburban medium rise type of apartment scheme is generally 3 to 6 storeys in height and comprised within specific scheme apartments.

The construction method comprises of a concrete framed structure with concrete lift/stair cores and elements of blockwork. The layouts and finishes internally are similar to Category 1 but may have a higher specification depending on the location, target market and potential sales price. The external walls will be more expensive to construct and normally include a high percentage of brick or precast finishes with render to rear facing or internal facades. The balconies may be recessed or larger steel types. The glazing specification may be higher (e.g. Aluclad) and may incorporate larger elements of glazing to the lift/stair cores or set-back floors.

The mechanical installation (i.e. heating & plumbing) may be centralised and can incorporate more sustainable features. Parking is generally a mix of partial basement / undercroft with some surface spaces. The external works feature hard landscaping (e.g. paving, stone) and higher specification courtyards.

### **Category 3:** Urban MEDIUM RISE



The urban medium rise type of apartment scheme is generally 5 to 8 storeys and comprised within a specific scheme of apartments.

The construction is generally a concrete framed structure with concrete stair/ lift cores with elements of blockwork. The layouts and finishes internally are similar to Category 2 above but it may have a higher specification depending on the location, target market and potential sales price. The external walls will be more expensive to construct and more akin to a commercial type facade with elements of stone, precast panels or rainscreen with larger expanses of curtain walling and screens to recessed balconies with glazed balustrades.

The mechanical installation will most likely be centralised and may incorporate more sustainable features. If the building is open plan or higher than 30 meters, it may also have a fire sprinkler system installed. Parking is generally a full basement under the building footprint. The external works will feature more hard landscaping (e.g. paving, stone etc) throughout with more public thoroughfares.

## CONSTRUCTION COSTS

The **average construction cost** (including siteworks and parking) from each of the categories is applied to the gross floor area of the apartment (91 sq.m) to arrive at a unit cost for each category e.g. 91 sq.m x  $\in 2,125 = \in 193,000$  in Category 2 (lower range).

### APARTMENT COSTS ASSESSMENT

The construction costs from our sample were categorised under the various cost elements as outlined in the cost tables within this report. The construction costs are based on traditional procurement where the developer and contractor are separate entities. However, the report includes costs provided by developers where they are undertaking the work directly (e.g. 'Builder/Developer'), these often represent the lower range of the cost scale due to accounting treatment.

This balances out in aggregate as the construction profit (i.e. profit normally charged by main contractors) would be normally included in the overall development margin as opposed to the component construction rates and overheads, which are usually included in preliminaries. Preliminaries may also be included in company's group accounts and therefore not feature at all in the project development budget. The construction costs used are based on a mix of planning schemes and projects on site.

The soft costs (e.g. fees, contributions, financing etc.) are based on industry norms, rather than from the specific projects as these were seen as commercially sensitive.

Consultations with other Chartered Surveyors involved in these aspects provided a benchmark on these figures. Chart 1 on page 14 presents the analysis divided into the main building elements, as illustrated in image 1.

The cost ranges in table 4 on page 30 and 31 are split into the actual Building Apartment unit and the External Works/Parking. Apartment buildings are typically examined from a cost perspective in this way.

The average cost range for each of the categories is then used in the viability assessment in section Development costs and Viability of a two bedroom apartment of this report.



### CONSTRUCTION COSTS RESULTS

The construction costs data received from our project returns has produced total apartment delivery cost ranges for each of the three apartment categories. The figures in chart 1 represent the cost/sq.m. of twobedroom apartments including siteworks and parking. The full elemental breakdown, narrative and exclusions are shown later on in this report.

#### Construction Cost (*c*/sq.m) of a Two-Bed Apartment



The reported delivery costs information contains both hard costs i.e. the 'bricks and mortar' element and the soft costs i.e. VAT, levies, finance, land costs, profit, etc. A comparative analysis is carried out which shows the reasons for the cost differences between the categories as shown in the report appendix.



#### Total development costs of a two-bed apartment (excl vat)

Chart 2

Chart 1



The analysis shows the overall make-up of the total delivery costs of a two-bed apartment. Note that in

chart 3, the construction costs, make up 43% of the overall delivery cost.



## VIABILITY AND AFFORDABILITY AT CURRENT PRICES

In today's market, the question remains, just how viable is apartment construction for the three categories being examined in this report? In the previous section, the report determined the total development costs. When sales price equals this amount, the firms involved will determine that it makes commercial sense to develop. This section assesses the current market price that a 2-bed apartment is receiving in 2017. If, as the analysis will show, this price is below the cost then prices would need to rise to that rate or construction costs will need to reduce. The second half of this section reviews the affordability of such a price increase on (potential) owners.



Category 2: Suburban (Medium Rise)



Category 3: Urban (Medium Rise)



### CURRENT COSTS vs. CURRENT PRICES

The analysis below compares the construction cost analysis of 28 projects from the previous section with the general market sales information provided by Chartered Residential Agency Surveyors who market, sell and value new apartment schemes. As previously outlined in the methodology, the data collected on construction cost was strictly confidential and as such we are comparing sales prices to the general market rather than the specific projects costed. However, in order to minimise location cost discrepancy, the sales information was gathered to reflect the areaswhere the cost information was provided.

Chart 4 compares the typical sales price (excl VAT) based on market analysis provided by SCSI Chartered Estate Agents and the Total Delivery Costs (excl. VAT) for each apartment category, with the resultant net present value either positive (i.e. viable for development) or negative (unviable for development). It is worth noting that developments targeting more affluent purchasers can secure sales prices above this general average.

As illustrated in Chart 4, Category 1 (suburban low-rise apartments), the lower end of this range is the only commercially viable point at current general market prices according to this analysis. However, if any of the input costs increase e.g land or construction, this would not be the case.

Total Cost (excl. VAT) Viable/Viability Gap



Sales Price (excl. VAT)

Viability of Two Bed Apartment

Chart 4

No other categories, including even the higher range of the Category 1 apartment, are commercially viable based on data received. Higher land costs and more expensive construction costs are the main contributing factors for the increased costs in these categories. Finance, VAT, margin/risk and Contingency are mostly percentage based and, therefore, increase in line with those costs as a result. The comparative analysis between the three categories provides a useful insight into how a scheme can be viable in one scenario and not in another. This is further analysed in Section 'What-If' scenarios later in this report.

This section examines the **availability of mortgages under the current lending rules for first time buyers**. It is not intended to be an exhaustive financial analysis rather a high level view based on different salary ranges. We note the following in relation the apartments examined in this report and the current lending constraints:

- The sales prices for the two-bed apartments reviewed range from €338k to €500k. (Category 1,2 & 3)
- A first-time buyer couple would require a 10% deposit of €34-€50k and a combined salary range of €87-€129k to buy within this price range.
- A couple both earning the average national salary (CSO 2016) earn €90,090 a year.
- The current Central Bank lending rules currently apply a Loan to Value (LTV) restriction on mortgages to **First-Time buyers** of 90% and a Loan to Income (LTI) cap of 3.5 times the salary of the applicant(s).

The table in Example 1 shows that a couple both earning the average national wage ( $\epsilon$ 45,045) each, who are both First-Time buyers would only be able to obtain a mortgage for the lower priced two-bed apartment in Category 1, along with the required 10% deposit. Unless the couple had additional savings on top of the 10% deposit and other related purchase costs, the other apartment categories would be unaffordable.

Example 1

	CATEGORY 1	CATEGORY 2	CATEGORY 3
SALES PRICE OF 2 BED APARTMENT (LOWER RANGE)	€338,000	€361,000	€383,000
DEPOSIT REQUIRED (10%)(FIRST TIME BUYER)	€33,800	€36,100	€38,300
MORTGAGE REQUIRED	€304,200	€324,000	€344,700
MORTGAGE AVAILABLE (BASED ON LTI OF 3.5)	€315,315	€315,315	€315,315
	€11,115	-€9,585	-€29,385
	$\checkmark$	×	×

#### Couple both earning Average Salary of $\epsilon_{90,090}$ .

First Time Buyers = 2 x €45k Salaries = €90k







The **Affordability Scenarios** table expands further on Example 1 as shown in table 1. It sets out a number of scenarios, showing a couple with different salary levels, the 10% deposit requirement and the mortgage available. The addition of the mortgage and the deposit is the couple's purchasing budget. In addition to the affordability element, the three categories of apartments examined earlier in the report are overlaid for comparison purposes.

#### Affordability Scenarios

SCENARIOS	SALARY NR. 1	SALARY NR. 2	COMBINED SALARY	MORTGAGE AVAILABLE	10% DEPOSIT	COUPLE'S BUDGET	APARTMENT CATEGORIES	APARTMENT SALES PRICE (INCL VAT)	TOTAL APARTMENT DEVELOPMENT COST (INCL VAT)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
			(a)+(b)	(c) x 3.5		(d) + (e)			
SCEN. 1	€45,000	€22,500	€67,500	€236,250	€26,250	€262,500			
SCEN. 2	€50,000	€25,000	€75,000	€262,500	€29,167	€291,667			
SCEN. 3	€55,000	€27,500	€82,500	€288,750	€32,083	€320,833			
SCEN. 4	€60,000	€30,000	€90,000	€315,000	€35,000	€350,000	Cat 1 (lwr range)	€338,000	€333,203
SCEN.5	€65,000	€32,500	€97,500	€341,250	€37,917	€379,167	Cat 1 (upr range)	€350,000	€387,630
SCEN.5	€65,000	€32,500	€97,500	€341,250	€37,917	€379,167	Cat 2 (lwr range)	€361,000	€442,938
SCEN. 6	€70,000	€35,000	€105,000	€367,500	€40,833	€408,333	Cat 3 (lwr range)	€383,000	€515,555
SCEN. 7	€75,000	€37,500	€112,500	€393,750	€43,750	€437,500	Cat 2 (upr range)	€438,000	€533,097
SCEN. 8	€80,000	€40,000	€120,000	€420,000	€46,667	€466,667			
SCEN. 9	€85,000	€42,500	€127,500	€446,250	€49,583	€495,833			
SCEN.10	€90,000	€45,000	€135,000	€472,500	€52,500	€525,000	Cat 3 (upr range)	€500,000	€637,471

Table 1

Chart 5 below illustrates table 1. It highlights the Affordability issue in Scenarios 1-3 (i.e. none of the Apartment categories covered in this report are affordable.

#### **SCENARIO 4**

is the only scenario which is affordable (available mortgage is above purchase price) and viable (Sales higher than Costs).

#### **SCENARIOS 4-10**

show the combined salaries required to purchase the three apartment categories examined.

#### **SCENARIOS 5-10**

highlight the viability issues examined in Section 2. The following Section 4 examines the 'What-if' scenarios in seeking to bridge this viability gap.

It is clear that there is an affordability issue for purchasers who have a combined salary of less than  $\notin 87,000$  for all three apartment types.

#### Affordability Graph

Chart 5



## COST CONTAINMENT TO ACHIEVE AFFORDABILITY

### SITE PURCHASE COST

The site purchase cost is a considerable variable in development appraisals. When calculating the site cost, it should be the residual figure that is left when all development & finance costs are subtracted from the net sales values.

However, in today's market, there is high competition for well located, zoned and serviced land. Given the high demand for this type of asset, many developers will take a long term approach in terms of capital appreciation and therefore may be prepared to pay inflated prices for land. We have included an average range, for each category, based on market transactional analysis received from Chartered Valuation Surveyors. The cost breakdown shows the site purchase cost per apartment unit, ranging from €33,000 for a site at the lower range of Category 1 to €125,000 at the higher range of Category 3. This is a significant range and has a huge impact on viability. Site prices are a function of supply and demand and can vary greatly from one location, or even one street to another. The site price data used as part of this study was provided in conjunction with the Sales Prices. Typically, areas that command higher Sales Prices will have correspondingly higher land costs and therefore these two are linked. However, sometimes this relationship can become distorted.

Table 2 shows the relationship between the Site Purchase cost and the Sales Price in each of the three categories. As shown, it ranges from 10% to 25% of the Sales Price. In Category 2 and 3, which are not viable in this analysis,

#### Site and Sale ranges

Table 2

	CATEGORY 1		CATEGORY 2		CATEGORY 3	
SITE COST:	LOWER RANGE €33.000	HIGHER RANGE €50.000	LOWER RANGE €70.000	HIGHER RANGE €95.000	LOWER RANGE €90.000	HIGHER RANGE €125.000
SALES PRICE:	€338.000	€350.000	€361.000	€438.000	€383.000	€500.000
% OF SALES:	10%	14%	19%	22%	23%	25%
% OF COSTS:	11%	14%	18%	20%	19%	22%
LOCATIONS USED FOR SITE AND SALES INFORMATION	CARRICKMINES / KILTERNAN TYPE LOCATIONS		SANDYFORD / LEOPARDSTOWN TYPE LOCATIONS		NORTH DOCKLANDS TYPE LOCATIONS	

the Site Cost makes up a significantly higher proportion of the Total Development Costs - 22% versus 11%. This is a significant factor and worthy of further investigation by policymakers when trying to solve the viability gap. The viability issue is further exacerbated when locations with lower sales prices are considered. While the site cost might reduce somewhat in line with the sales price, the development costs do not. For example, the Foundations, Structure, Services, Internal Walls and Finishes all have to be constructed regardless of location. The only items that might be adjusted based on the sales price would be the standard of external and internal finishes, fittings and equipment.

## STATUTORY FEES AND DEVELOPMENT CONTRIBUTIONS

Statutory Fees and Development Contributions include planning application costs, development contributions (Dublin City Council (DCC) in this example), Irish Water charges, Disabled Access Certificates, Part V costs, Fire Certificate fees and utility connections. These are all largely known costs.

(Note Irish Water/Councils do not have a published set of charges) and are based on the actual size of the scheme. It is worth noting that the development contributions can range from  $\epsilon_{1,3}62$  (Westmeath) -  $\epsilon_{7,8}62$  (DCC) for this size of apartment. In addition, if the scheme is in an area where special conditions (Section 49) apply (usually where there are large public infrastructure projects to be carried out e.g. LUAS) then these can add an additional  $\epsilon_{2,000}$  (LUAS) -  $\epsilon_{43,448}$  (Glenamuck Road upgrade) per apartment to the costs.

We have included an industry-standard range percentage for professional design team fees. These will depend on the composition of the team, expertise, timeframe and the complexity of the project. For the purposes of this exercise a range of 8-10% of the construction costs has been applied as indicated in the table.



### SALES, MARKETING AND LEGALS

The budget for Sales, Marketing and Legals include the costs incurred in selling and conveying the units. We have included an average percentage based on the sales price. Whilst these figures may vary, they do not impact on the viability in any significant way.

## DEVELOPMENT FINANCE

Development Finance has become somewhat more complicated in recent years with the advancement of different funding streams and models and vary significantly from one project to another. Private Equity, Mezzanine Finance and Senior Bank Debt all feature in the current development funding model. This is a welcome advancement and reflects a maturity in the market compared to the former over reliance on senior bank debt funding the majority of the development. The cost of finance depends on the actual project, the experience and competence of the promotor and the overall risk involved. Recently we have also seen the increase of publicly quoted development companies in the market, which raise funds on the stock market.

Private Equity, depending on its source, can cost between 10-20% p.a. and make up 5-15% of the overall funding requirement. Mezzanine Finance can cost between 10-15% p.a. and make up 10-30% of the overall funding requirement. Senior Debt, provided by Banks, can cost between 5-8% p.a. and make up 60-70% of the overall funding requirement. These ranges are very broad and change on a scheme by scheme basis.

For the purposes of this exercise, we have included a blended rate of 9% across the development and have assumed a holding period of 2 years for the site and an 18



month construction delivery programme. A percentage has been included for Arrangement Fees and Funder Advisors. The current cost and complexity of development finance presents a real challenge to developers.

The chart 3 on page 13 shows the percentage breakdown of the total development cost for a two bed apartment (Category 2, Lower Range) including VAT on Sales. A Development Contingency of 5% has been included. This can range from 3-10% depending on the risk involved.

### **RETURN ON RISK**

This will vary from site to site, depending on the risks involved in the development. Whilst a developer may wish to proceed with a lower margin level, this is often not possible due to the Funder's minimum underwriting requirements. It is expected that apartments, unlike housing, will have a higher overall return as more capital is locked in the construction for longer. The technique of phasing in a housing development where homes are sold as they become available allows the firm developing the site to use the cash flow from sales to finance the next phase. In apartment blocks, no sales can be completed until these are fully constructed and commissioned.

The analysis shows that only the Category 1 apartments (lower range) is viable. In each of the other cases they show a viability gap which ranges from 11-28%. It is interesting to analyse why the lower end of the Category 1 apartments are viable when the other examples make a significant loss.

It is clear from the analysis that certain costs increase more rapidly than others when compared across the categories.





#### Comparative analysis of development costs of a two-bed apartment

Table 3

	Categ	gory 1	Categ	Category 2				ory 3	% CHANGE
	LOWER	HIGHER	LOWER	HIGHER	(CAT.1 V 2)	LOWER	HIGHER	(CAT.1 V 3)	
ITEM	(a)	(b)	(c)	(d)	(d)-(a)/(a)	(f)	(g)	(h) (g)-(a)/(a)	
CONSTRUCTION	€155.000	€175.000	€193.000	€223.000	+44%	€218.000	€255.000	+65%	
SITE PURCHASE	€33.000	€50.000	€70.000	€95.000	+188%	€90.000	€125.000	+279%	
CONTRIBUTIONS	€16.000	€16.000	€16.000	€17.000	+6%	€18.000	€20.000	+25%	
PROF FEES	€12.000	€14.000	€17.000	€20.000	+67%	€22.000	€26.000	+117%	
SELLING COSTS	€8.000	€9.000	€9.000	€11.000	+38%	€10.000	€13.000	+63%	
FINANCE	€20.000	€25.000	€30.000	€37.000	+85%	€36.000	€46.000	+130%	
CONTINGENCY	€11.000	€12.000	€13.000	€15.000	+36%	€15.000	€18.000	+64%	
MARGIN/RISK	€38.000	€45.000	€52.000	€63.000	+66%	€61.000	€75.000	+97%	
SUB-TOTAL	€293.000	€346.000	€400.000	€481.000	+64%	€470.000	€578.000	+97%	
VAT ON SALES	€40.203	€41.630	€42.938	€52.097	+30%	€45.555	€59.471	+48%	
TOTAL DELIVERY COSTS	€333.203	€387.630	€442.938	€533.097	+60%	€515.555	€637.471	+ <b>91</b> %	

Chart 6

#### Comparison of Total Development Costs across the 3 categories



The increase in the Site Purchase Cost (+279%) between Category 1 and 3 is significant. We noted the supply and demand nature of land prices earlier which are influenced by a complex range of factors.

Finance Costs (+130%), Contingency (+64%), Margin/Risk (97%) are all percentage based and relate to the input costs and therefore increase/decrease accordingly. The Professional Fees (+117%) are a function of the complexity of the design and the need for additional consultants. For example, a Category 1 type apartment involves traditional construction methods with little specialist consultant input. Category 3 apartments are more complex and can involve additional costs such as, specialist Facade Consultants, Wind Experts, specialist Structural Engineer input, Project Management, external lighting design, traffic analysis amongst others. The increase in Construction Costs (+65%) (ref. column (h) in Table 3) between Category 1 and 3 may be analysed more closely in the construction costs section but, at a high level, the increases are largely due to more complex structure (load bearing walls v concrete frame), more sophisticated facades (plaster/brick v stone/precast/ curtain walling), higher spec finishes, more en-suites, more complex mechanical and electrical services and the use of basement parking.

Selling Costs (+63%) are based on the sales price of the unit and increase proportionately.

VAT on Sales (+48%) is included in the Sales Price at 13.5% and therefore changes in accordance with this.

The Statutory Fees and Development Contributions (25%) are made up of a number of items as shown in the viability analysis. The contributions are driven by the size of the apartment only and if Section 49 contributions (e.g. LUAS etc) apply. Part V is another component and is influenced by the site cost and Sales Price The comparative analysis between the three categories provides a useful insight into how a scheme can be viable

in one scenario and not in another. This is further analysed in the section, 'What-If' scenarios.

## Category 1 Suburban

LOW RISE

		RANGE	
	LOWER		HIGHER
SALES PRICE (EXCL. VAT)	€298K	-	€308K
TOTAL COS (EXCL. VAT)	€293K	_	€346K
VIABLE / VIABILITY GAP	€5K	_	-€38K
	2%	_	-11%



## Category 2 Suburban

MEDIUM RISE

		RANGE	
	LOWER		HIGHER
SALES PRICE (EXCL. VAT)	€318K	-	€386K
<b>TOTAL COS</b> (EXCL. VAT)	€400K	_	€481K
VIABLE / VIABILITY GAP	-€82K	_	-€95K
	-20%	-	-20%



## Category 3 Urban

MEDIUM RISE

		RANGE	
	LOWER		HIGHER
SALES PRICE (EXCL. VAT)	€337K	-	€441K
<b>TOTAL COS</b> (EXCL. VAT)	€470K	_	€578K
VIABLE / VIABILITY GAP	-€133K	-	-€137K
	-28%	-	-24%





## CONSTRUCTION COST (ONLY) OF TWO-BED APARTMENT (EX.VAT)

	<b>CATEGORY 1</b> SUBURBAN (LOW RISE )		CATEGORY 2 SUBURBAN (MEDIUM RISE )		<b>CATEGORY 3</b> URBAN (MEDIUM RISE)	
RESIDENTIAL APARTMENT CATEGORIES						
AVERAGE CONSTRUCTION COST RANGE (EXCL. PARKING AND SITEWORKS)	€1,550 - €1,750/sq.m €14 4- €163/sq.ft		€1,750 - €1,950/sq.m €163 - €181/sq.ft		€1,950 - €2,250+/m 2€181 - €209/sq.ft	
BUILDING ELEMENT	DESCRIPTION	€/sq.m	DESCRIPTION	€/sq.m	DESCRIPTION	€/sq.m
SUBSTRUCTURE (BASEMENTS INCLUDED IN PARKING BELOW)	Traditional strip footings on good load bearing soil	120 - 150	Concrete slab over under-croft parking (priced below); foundations to part	45 - 75	Transfer slab over full basement (priced below)	70 - 90
STRUCTURE	Load bearing blockwork to walls and cores; timber/precast floors; timber roof; overall domestic housing con- struction	215 - 315	Mix of blockwork and concrete; concrete cores; precast floors with screed; flat precast concrete roof; blockwork external walls; lightweight steel to setback top floors	215 - 495	Concrete framed structure; concrete cores; precast floors with screed; flat precast concrete roof; concrete walls externally; lightweight steel to setback top floors	225 - 685
INTERNAL WALLS AND DOORS	Internal stud partitions; regular door sets; timber balustrades	150 - 275	Internal stud partitions; regular door sets; tim- ber/steel balustrades	150 - 275	Internal stud partitions; regular door sets; steel balustrades	175 - 285
EXTERNAL WALL ENVELOPE	Plastered blockwork; some brickwork; PVC windows;	115 - 140	Some plastered block- work; mainly brick; aluminium windows; plant-on balconies	125 - 175	Stone/Brick/Precast to façade; some cur- tain walling; aluclad screens/windows; recessed balconies	135 - 250
ROOF ENCLOSURE	Pitched tiled roof/flat roof with membrane; some skylights	45 - 75	Flat roof with mem- brane; some decorative elements to roof e.g. overhangs; rooflights	35 - 60	Flat roof with mem- brane; lead/zinc elements; overhangs; feature elements; roof glazing	45 - 110
INTERNAL FINISHES	Acoustic floor underlay; carpet to circulation areas; limited tiling to bathroom and kitchen; plasterboard ceilings; painting throughout	95 - 140	Acoustic floor underlay; carpet to circulation areas; tiling to bathroom, en suite and kitchen; plasterboard ceilings; painting throughout	110 - 215	Acoustic floor underlay; carpet to circulation areas; tiling to bathrooms, en suites and kitchen; plasterboard ceilings; painting throughout	125 - 240
FITTINGS AND EQUIPMENT	Standard allowances for Kitchens, Wardrobes and Sanitary fittings; few en suites	125 - 150	Higher allowances for Kitchens, Wardrobes and Sanitary fittings; white goods; Bathroom Pods; possible 1 x en suite (2 bed)	240 - 450	Higher allowances for Kitchens, Wardrobes, Sanitary fittings and white goods; Bathroom Pods; 1 x en suite (2 bed)	250 - 475
MECHANICAL & ELECTRICAL SERVICES	Standard M&E installation; few lifts	250 - 315	Range includes standard to centralised M&E more lifts; more light fittings;	260 - 470	Range includes standard to centralised M&E more lifts; more light fittings; possibly sprinklered	260 - 500
PRELIMINARIES	Preliminaries range from 8 - 12%	135 - 195	Preliminaries range from 10 - 12%	208 - 246	Preliminaries range from 12 - 16%	279 - 359

Table 4

RESIDENTIAL APARTMENT CATEGORIES	CATEGORY 1 SUBURBAN (LOW RISE)		CATEGORY 2 SUBURBAN (MEDIUM RIS		CATEGORY 3 URBAN (MEDIUM RISE)	
PARKING AND SITEWORKS (AVERAGE COSTS)	€150 - €175/m 2€14 - €16/sq.ft		€375 - €500/sq.m €35 - €46/sq.ft		€450 - €550/sq.m €4 2- €51/sq.ft	
CAR PARKING (1 PER APT.)	Surface Only (incl. in site costs)	0 - 0	Simple undercroft type basement; normal ground conditions; no abnormals	225 - 275	Full basement; piled; reasonable ground conditions; NO contamination or extensive rock/water	340 - 375
EXTERNAL SITEWORKS AND LANDSCAPING	Site services and drainage; mainly grass and tarmac finishes; concrete footpaths; surface carparking	150 - 175	Site services and drainage; grass, tarmac, precast paving; elements of decorative hard landscaping; paving to footpaths	150 -225	Urban hard landscaping throughout; features to landscaping; (taller buildings therefore less landscaping per apartment)	110 -175
TOTAL CONSTRUCTION COSTS INCL. SITEWORKS (EXC VAT)	€1,700 - €1,925/sq.m €158 - €179/sq.ft		€2,125 - €2,450/sq.m €197 - €228/sq.ft		€2,400 - €2,800+/sq.m €223 - €260/sq.ft	

#### COST RANGE FOR A TWO - BED APARTMENT

(INCL. SITEWORKS & PARKING)



	<ul> <li>Costs per sq.m and sq.ft are based on the Gross Floor Area</li> </ul>
NOTES	<b>Exclusions:</b> VAT   Tender Inflation from Sep' 17   Site Acquisition   Planning and Statutory Fees   Development Contributions   Capital Contributions for Services connections   Significant Demolition   Bonds   Fees   Sales and Letting Costs   Archaeology   Marketing   Legals   Part V   Accountancy Costs   Finance Costs   Homebond   Show Units   Works outside the boundary of the site   Adjoining Neighbour Costs   Contaminated material   Abnormal ground conditions   Furnishings   Purchaser costs

## DEVELOPMENT COSTS & VIABILITY OF TWO-BED APARTMENT (EX VAT)

RESIDENTIAL APARTMENT CATEGORIES	CATEGORY 1 SUBURBAN (LOW RISE )		CATEGORY 2 SUBURBAN (MEDIUM RISE)		CATEGORY 3 URBAN (MEDIUM RISE)	
TOTAL CONSTRUCTION COSTS INCL. SITEWORKS (EXC VAT)	€1,700 - €1,925/sq.m €158 - €179/sq.ft		€2,125 - €2,450/sq.m €197 - €228/sq.ft		€2,400 - €2,800+/sq.m €223 - €260/sq.ft	
BUILDING ELEMENT	DESCRIPTION	COST RANGE PER UNIT LOWER TO HIGHER (€)	DESCRIPTION	COST RANGE PER UNIT LOWER TO HIGHER (€)	DESCRIPTION	COST RANGE PER UNIT LOWER TO HIGHER (€)
CONSTRUCTION COST RANGE	Construction cost range for 2 Bed Apartment (91sq.m gross floor area)	155,000- 175,000	Construction cost range for 2 Bed Apartment (91sq.m gross floor area)	193,000- 223,000	Construction cost range for 2 Bed Apartment (91sq.m gross floor area)	218,000- 255,000
NON-CONSTRUCT	ION COSTS					
SITE COST	The site cost is a large variable from site to site. A notional range has been included based on advice from SCSI Sales Agents.	33,000- 50,000	The site cost is a large variable from site to site. A notional range has been included based on advice from SCSI Sales Agents.	70,000- 95,000	The site cost is a large variable from site to site. A notional range has been included based on advice from SCSI Sales Agents.	90,000- 125,000
STATUTORY FEES AND CONTRIBUTIONS	This includes planning application costs, development contri- butions (DCC used), Irish Water, DAC, Part V, Fire Cert, Utility connections. Note special S.49 levies apply in certain areas e.g. LUAS excluded	16,000- 16,000	Same as Category 1. Note special S.49 lev- ies can reach €43,448 in areas of Dun Laoghaire Rathdown (ref. Glenamuck). Excluded from this example.	16,000- 17,000	Same as Category 1. Assume LUAS contribution included (€2,000)	18,000- 20,000
PROFESSIONAL FEES	Assume 8% for Category 1	12,000- 14,000	Assume 9% for Category 2	17,000- 20,000	Assume10% for Category 3	22,000- 26,000
SALES, MARKETING & LEGALS	Assume standard market percentage fees for these items	8,000- 9,000	Assume standard market percentage fees for these items	9,000- 11,000	Assume standard market percentage fees for these items	10,000- 13,000
DEVELOPMENT FINANCE	Assume blended finance rate for funders of 9% plus Funder Advisors	20,000- 25,000	ssume blended finance rate for funders of 9% plus Funder Advisors	30,000- 37,000	Assume blended finance rate for funders of 9% plus Funder Advisors	36,000- 46,000
CONTINGENCY	Allow 5% on Total Costs (excl site)	11,000- 12,000	Allow 5% on Total Costs (excl site)	13,000- 15,000	Allow 5% on Total Costs (excl site)	15,000- 18,000
DEVELOPMENT MARGIN/RISK	Allow 15% on Total Costs for Risk and Development Margin	38,000- 45,000	Allow 15% on Total Costs for Risk and Development Margin	52,000- 63,000	Allow 15% on Total Costs for Risk and Development Margin	61,000- 75,000
Table 5

RESIDENTIAL APARTMENT CATEGORIES	CATEGOI SUBURBA	RY 1 AN (LOW RISE )	CATEGOI SUBURBA	RY 2 NN (MEDIUM RISE )	CATEGO URBAN (I	RY 3 MEDIUM RISE)	
TOTAL CONSTRUCTION COSTS INCL. SITEWORKS (EXC VAT)	€1,700 - €1,925/sq.m €158 - €179/sq.ft			€2,450/sq.m 228/sq.ft	€2,400 - €2,800+/sq.m €223 - €260/sq.ft		
NON-CONSTRUCTI	ON COSTS	;					
VAT	VAT is deducted off the sales price below.		VAT is deducted off the sales price below.		VAT is deducted off the sales price below.		
TOTAL DEVELOPMENT COSTS (€)		(a) 293,000 - 346,000	(a) 400,000 - 481,000		(a) 470,000 - 578,000		
SALES PRICE FOR 2 BED DEDUCT	338,000 - 350,000		361,000 - 438,000		383,000 - 500,000		
VAT (13.5% INCLD.) (€)	(40,203) - (41,630)		(42,938) - (52,097)		(45,555) - (59,471)		
NET SALES PRICES (€)	(b) 297,797 - 308,370		(b) 318,062 - 385,903		(b) 337,445 - 440,529		
VIABLE / VIABILITY GAP (€)	(B) - (A)	4,797 - <b>(37,630)</b> 2% - (11%)	(B) - (A)	<b>(81,938) - (95,097)</b> (20%) - (20%)	(B) - (A)	<b>132555 - 137471</b> (28%) - (24%)	





- Note average cost and sales ranges used for examples above; Viable / Viability Gap will vary upon inputs used

# 'WHAT-IF' SCENARIOS' – ANALYSING THE OPTIONS

This section examines the 'What-If' scenarios for each of the categories to highlight the extent of change required to bridge the viability gap. It looks at each of the Development Cost headings and poses scenarios for consideration. It is not intended to provide definitive solutions but rather highlight the areas that are worthy of further scrutiny and investigation by policymakers



### Example of 'What-if' scenarios (Category 2 - Lower Range)

The chart 9 shows the various scenarios presented in Table 5 to bridge the viability gap (category 2 - lower range).

It is clear from the scenarios put forward that the solution will not be sourced from one area alone. The viability gap is significant in Categories 2 and 3 and will require input and thought-leadership from both the Private and Public sectors to arrive at a combined remedy. Some components like land costs are complex and combine macro and micro economic factors that are not easily solvable. Some scenarios, like parking ratios, may be more easily implemented but are location specific (e.g. some locations require the use of a car). Certain industry bodies have called for Government intervention to reduce the burden of State Costs and Taxes, such as VAT and Development Contributions. These measures require careful consideration and mechanisms to ensure that any such measures do not lead to increased land values.

A 5% reduction in construction costs leads to a significant saving. Similar to other scenarios, successfully achieving a sizeable reduction is difficult to achieve without significant intervention (e.g. facade design, planning changes etc.)



### 1) Site Purchase:

As the site cost makes up a significant portion (11-22%) of the overall cost in our analysis, a percentage range (10-30%) reduction was applied to the three categories. The higher percentages were applied to the more expensive sites. The reduction equated to  $\epsilon_{5,000} - \epsilon_{53,000}$ . The site cost is a function of supply and demand in the market place which is driven by many other interconnected macro and micro economic factors.

### 2) Construction Costs:

A notional 5% reduction was applied to the construction costs which delivers a potential saving of €11,000 -€18,000, if it were possible to achieve. Construction costs are made up of labour, plant and materials. Typically, real savings can only be achieved when the design requirements are reduced e.g. a plastered facades instead of more expensive brick, reduced glazing specification etc.

### 3) Parking:

The costs included in the three categories included one car space for every apartment. This option looks at reducing that ratio to one car for every two apartments. There is latitude within the current planning guidelines to achieve this subject to the particular requirements of the actual site. For example, can the other 50% of the units be sold if there they do not have a car space? The saving ranges from  $\epsilon_{2,000}$  in Category 1 (surface car space) - $\epsilon_{36,000}$  in Category 3 (basement car park).

### 4) Development Contributions:

These are the charges paid by developers for local public services such as Roads, Bridges, Sewage works etc and are referred to as Section 48 Development Contributions or Levies. There are also additional charges, called Section 49 Development Contributions, for one-off pieces of public infrastructure e.g. LUAS. The omission would amount to €10,000-€13,000 across the three categories.

### 5) Finance:

A blended rate of 9% was used in the examples illustrated to include the cost of Equity, Mezzanine finance and Senior Bank debt. This option examines the impact of a 2% reduction to 7%. As shown, the saving achieved ranges from €5,000 - €11,000 per unit.

### 6) VAT:

13.5% VAT is included in the sales price of any new home. This option explores the impact of a 4.5% reduction in the VAT rate to 9%. The resultant saving across the categories ranges from €13,401 to 19,824.

#### 7) Apartment Size:

The minimum sizes for apartments were reset back to the 2007 sizes by the Department of the Environment, Community and Local Government in December 2015. The current minimum sizes are 45m2 for a one bed, 73m2 for a two bed and 90m2 for a three-bed apartment. A new 'Studio' apartment classification was also introduced a with a minimum floor area requirement of 40m2. In schemes of 100 or more units, the majority (i.e. greater than 50%) need to exceed the minimum sizes by 10%. This option estimates, at a high level, the cost saving if the apartment size was reduced by 10%. The potential saving would be between  $\epsilon$ 6,000 -  $\epsilon$ 9,000. However, this does not take account of any change in the current requirements for dual aspect provision, which could also deliver savings.

### 8) Build to Rent

The private rented sector (PRS) is now home to 28% of all households (an increase of 9% since Census 2011. The sector is essential in supporting labour market mobility and SCSI supports the provision of more high quality private rented homes. We believe that that the planning system should take a more positive approach to enabling this sector to contribute to the achievement of housing targets through accelerating housing delivery rates. Positive support should be given for purpose-built private rented schemes through the planning system. This may, for instance, involve Local Plans recognising how this tenure can increase supply, meet a range of needs, and be particularly suitable for certain identified locations and/ or sites.

The SCSI believes that Build to Rent developments can make a particular contribution to increasing housing supply and are beneficial in a number of ways. They can attract investment into many urban housing markets, particularly as Build to Rent is attractive to institutional investors seeking long-term, inflation-tracking returns; more easily deliver across the housing market cycle as they are less impacted by residential price downturns; provide a more consistent and at-scale demand for off-site/pre-fabricated manufacture; offer longer-term tenancies and more certainty over long-term availability; ensure a commitment to, and investment in, place making through single ownership; and provide better management standards and higher quality homes than other parts of the private rented sector.

To encourage the development of this type of housing, policymakers should recognise the distinct economics of the sector relative to mainstream 'build for sale' market schemes, and should take account of this when considering any review of design requirements and planning applications for Build to Rent schemes.

# WHAT-IF SCENARIOS

RESIDENTIAL APARTMENT CATEGORIES	CATEGORY 1 SUBURBAN (LOW	(€) RISE)	CATEGORY 2 SUBURBAN (MED.	(€) IUM RISE )	CATEGORY 3 URBAN (MEDIUM	(€) RISE)
TOTAL DEVELOPMENT COSTS (€)	(a) 29	93,000 - 346,000	(a) 400,000 - 481,000		(a) 470,000 - 578,000	
SALES PRICE FOR 2 BED DEDUCT VAT (13.5% INCLD.) (€)	338,000 - 350,000 (40,203 - (41,630)		361,000 - 438,000 (42,938 - (52,097)		383,000 - 500,000 (45,555) - (59,471)	
NET SALES PRICES (€)	(b) 297,797 - 308,370		(b) 318,062 - 385,903		(b) 337,445 - 440,529	
VIABLE/ VIABILITY GAP	(b) - (a)	<b>4,797 - (37,630)</b> 2% - (11%)	(b) - (a)	<b>(81,938) - (95,097)</b> (20%) - (20%)	<b>(b) - (a) (132,555) - (137,471)</b> (28%) - (24%)	
SCENARIOS	CATEGORY 1		CATEGORY 2		CATEGORY 3	
(1) SITE PURCHASE COSTS:	10% REDUCTION IN SITE PURCHASE COST (INCL. ON - COSTS)	(5,000) - (7,000)	20% REDUCTION IN SITE PURCHASE COST (INCL. ON - COSTS)	(20,000) - (27,000)	30% REDUCTION IN SITE PURCHASE COST (INCL. ON - COSTS)	(38,000) - (53,000)
00010.	REVISED +/- VIABLITY GAP	9,79 - (30,630) 3% (9%)	REVISED +/- VIABLITY GAP	(61,938) - (68,097) (15%) (14%)	REVISED +/- VIABLITY GAP	(94,555) - (84,471) (20%) (15%)
(2) CONSTRUCTION COSTS	10% REDUCTION IN CONSTRUCTION COSTS (INCL. ON - COSTS)	(22,000) - (24,000)	10% REDUCTION IN CONSTRUCTION COSTS (INCL. ON - COSTS)	(27,000) - (31,000)	10% REDUCTION IN CONSTRUCTION COSTS (INCL. ON - COSTS)	(31,000) - (36,000)
	REVISED +/- VIABLITY GAP	26,797 - (13,630) 9% (4%)	REVISED +/- VIABLITY GAP	(54,938) - (64,097) (143%) (13%)	REVISED +/- VIABLITY GAP	(101,555) - (101,471) (22%) (18%)
(3) PARKING	REDUCE TO 1 SPACE FOR EVERY 2 APARTMENTS (INCL. ON-COSTS)	(2,000) - (2,000)	REDUCE TO 1 SPACE FOR EVERY 2 APARTMENTS (INCL. ON-COSTS)	(16,000) - (19,000)	REDUCE TO 1 SPACE FOR EVERY 2 APARTMENTS (INCL. ON-COSTS)	(24,000) - (26,000)
	REVISED +/- VIABLITY GAP	6,797 - <mark>(35,630)</mark> 2% (10%)	REVISED +/- VIABLITY GAP	(65,938)-(76,097) (16%) (16%)	REVISED +/- VIABLITY GAP	(108,555) - (111,471) (23%) (19%)
(4) DEVELOPMENT CONTRIBUTIONS	OMIT DEVELOPMENT CONTRIBUTIONS (S.48)(INCL. ON - COSTS)	(10,000) - (10,000)	OMIT DEVELOPMENT CONTRIBUTIONS (S.48)(INCL. ON - COSTS)	(10,000) - (10,000)	OMIT DEVELOPMENT CONTRIBUTIONS (S.48 & S.49)(INCL. ON - COSTS)	(13,000) - (13,000)
	REVISED +/- VIABLITY GAP	14,797 - (27,630) 5% (8%)	REVISED +/- VIABLITY GAP	(71,938)-(85,097) (18%) (18%)	REVISED +/- VIABLITY GAP	(119,555) - (124,471) (25%) (22%)
(5)	REDUCE BLENDED FINANCE RATE FROM 9% TO 7%	(5,000) - (6,000)	REDUCE BLENDED FINANCE RATE FROM 9% TO 7%	(7,000) - (9,000)	REDUCE BLENDED FINANCE RATE FROM 9% TO 7%	(9,000) - (11,000)
FINANCE	REVISED +/- VIABLITY GAP	9,797 - <mark>(31,630)</mark> 3% (9%)	REVISED +/- VIABLITY GAP	(74,938)-(86,097) (19%) (18%)	REVISED +/- VIABLITY GAP	(123,555) - (126,471) (26%) (22%)

Table 6

RESIDENTIAL APARTMENT CATEGORIES	CATEGORY 1 SUBURBAN (LOW	<b>(€)</b> RISE )	CATEGORY 2 SUBURBAN (MED	(€) IUM RISE )	CATEGORY 3 URBAN (MEDIUM	<b>(€)</b> RISE) (€)	
TOTAL DEVELOPMENT COSTS (€)	(a) 29	3,000 - 346,000	(a) 40	0,000 - 481,000	(a) 470,000 - 578,000		
SALES PRICE FOR 2 BED DEDUCT VAT (13.5% INCLD.) (€)		338,000 - 350,000 (40,203) - (41,630)	361,000 - 438,000 (42,938 - (52,097)		383,000 - 500,000 (45,555) - (59,471)		
NET SALES PRICES (€)	(b) 2	97,797 - 308,370	(b) 318,062 - 385,903		(b) 337,445 - 440,529		
VIABLE/ VIABILITY GAP	<b>(b)</b> - (a)	<b>4,797 - (37,630)</b> 2% - (11%)	<b>(b) - (a) (81,938) - (95,097)</b> (20%) - (20%)		<b>(b) - (a) (132,555) - (137,471)</b> (28%) - (24%)		
SCENARIOS	CATEGORY 1		CATEGORY 2		CATEGORY 3		
(6) VAT	REDUCE THE VAT RATE TO 9% FROM 13.5%	(13,401) - (13,877)	REDUCE BLENDED FINANCE RATE FROM 9% TO 7%	(14,313) - (17,366)	REDUCE BLENDED FINANCE RATE FROM 9% TO 7%	(15,185) - (19,824)	
	REVISED +/- VIABLITY GAP	18,198 - <mark>(23,753)</mark> 6% (7%)	REVISED +/- VIABLITY GAP	(67,626) - (77,731) (17%) (16%)	REVISED +/- VIABLITY GAP	(117,370) - (117,648) (25%) (20%)	
(7) APARTMENT SIZE	REDUCE NET APARTMENT SIZE BY 10% (INCL. ON-COSTS)	(6,000) - (7,000)	REDUCE NET APARTMENT SIZE BY 10% (INCL. ON-COSTS)	(7,000) - (7,000)	REDUCE NET APARTMENT SIZE BY 10% (INCL. ON-COSTS)	(8,000) - (9,000)	
	REVISED +/- VIABLITY GAP	10,797 - (30,630) 4% (9%)	REVISED +/- VIABLITY GAP	(74,938) - (88,097) (19%) (18%)	REVISED +/- VIABLITY GAP	(124,555) - (128,471) (27%) (22%)	

# CONCLUSIONS

Apartments are expensive to build and vary significantly from suburban to urban locations. The construction cost for a two-bed apartment varies from  $\epsilon_{155,000}$ to  $\epsilon_{255,000}$  (exc. VAT) depending on its design and car parking strategy. The Site Cost is another large variable with lots of underlying interconnected cost drivers. The Site Cost included in this report ranges from  $\epsilon_{33,000}$  to  $\epsilon_{125,000}$  per apartment.

There is an issue with Apartment Affordability whereby a couple need to have a combined salary of  $\in 87,000$  to afford a suburban apartment at the lower end of the scale.

### Opportunities to be explored

# **Supply of Land:**

Government review the current measures in place to deal with the supply of serviced land.

## 2 Construction Costs:

CIC submit a paper to the Department of Housing, Community and Local. Government on the measures required to reduce construction costs by 10%.

# 3 Parking:

Department of Housing, Community and Local Government publish updated Design Guidance on parking ratios.

# **4 Development Contributions:**

Government investigate the extension of the Contributions Rebate scheme.

## 5 Finance:

Government expand the current State finance measures (e.g. ISIF) for the funding of housing projects.

# 6 **VAT:**

Government investigate measures whereby a VAT rebate can be put in place for affordable housing that would not lead to land price inflation.

# 7 Build to Rent (B2R):

Department of Housing, Community and Local Government publish more detailed Design and Planning Guidance on the Build to Rent sector.









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