Tipperary County Council
A Supplementary Analysis of Household Affordability in County Tipperary
KPMG Future Analytics, October 2021

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An assessment of household incomes, pricing, affordability and trended change in size, tenure and type for the County Tipperary Draft Housing Strategy 2022-2028

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Executive Summary

Introduction

Housing affordability is an important aspect of housing delivery and influences demand for social housing support. In order to understand, examine and project housing affordability, and in particular, estimate the number of households in the county who may not be able to afford accommodation either through purchase or rental over the lifetime of the Plan, KPMG Future Analytics were commissioned by Tipperary County Council in June 2021 to prepare a supplemental analysis to the Draft Housing Strategy of the Draft County Development Plan 2022 – 2028 (the Plan).

This supplementary analysis set out to:

— Examine and categorise households across the county on the basis of household income (by decile).

— Consider how likely changes in income and house prices could impact on affordability over the lifetime of the Plan.

— Assess the cohort of the housing market in Tipperary that would be eligible, or ineligible for a mortgage, as per the Central Bank Rules.

— Determine what a sustainable mortgage amount would be for households across the income spectrum, over the average mortgage period.

— Estimate the volume and price band distribution of houses, and what a given household could therefore sustainably afford to repay a mortgage on.

— Assess affordability in the private rental sector for households that would not be eligible for a mortgage under the Central Bank Rules.

— Compare the identified sustainable mortgage amount to prices and volume, or in rental, compare sustainable rent to market rates by type.

— Assess how many households, of both tenure types, that would likely face affordability challenges, and potentially require social housing supports.

— Estimate how many 'affordable' units would likely be required as part of overall housing delivery, should these assumptions hold without intervention.

Section 3.0 of the Tipperary County Housing Strategy, identifies and assesses the 'Housing Market Drivers' of Tipperary in line with the 'Guidance on the Preparation of a HDNA', (Department of Housing, Local Government and Heritage, 2021) and relates to the identification of key housing market drivers, including household formation, population, housing affordability, including incomes, house prices, rent levels, access to finance and key drivers of the local and national economy. This supplementary analysis relates to housing affordability, and should be read in conjunction with Section 3.0 of the Tipperary County Housing Strategy.

Summary of findings

By comparing and contrasting the resulting findings, the principal features to emerge from the analysis are as follows:

- A total of 5,917 households are expected to be formed in Tipperary over the Plan period, equating to a target for a full-year average of 986 units (247 in Q4 2022 and 740 in Q3 2028);
- Over the course of the Plan period, it is estimated that of 5,917 anticipated households to form, 1,225 or approximately 209 per full-year will not be eligible to qualify for a mortgage for the cheapest house under the Central Bank Loan-to-Income rule (LTI);
- That these 209 households are in the 1st and 2nd income deciles (the lower end of the income spectrum in Tipperary), and have a net annual income of €11,905 and €15,888 respectively, or €992 and €1,324 monthly – in year 2022;
- That these same 209 households will encounter affordability issues renting sustainably in the private rental market (spending no higher than 35% of their disposable income on accommodation);
- That 777 households of the 986 forming each typical full-year across the Plan period, will not encounter a mortgage qualification or an affordability challenge in meeting their accommodation needs – based on income, price and supply assumptions;
- That Housing Assistance Payment supports, at current rates, would continue to provide essential support to households unable to afford accommodation in the private rental sector, for most households – however, those with more than 2 children face continued affordability challenges. Constraints on supply overall may work against Housing Assistance Payments support;
- That a full-year average of 21.2% of new household formations will therefore experience affordability challenges (as defined in Section 93(1) of the Planning and Development Act 2000, as amended) in attempting to provide for their own housing needs;

— That this 21.2% of households comprises approximately 10.5% social need and 10.7% affordable need, in full-years, approximately 104 and 105 households respectively;

— That house prices are anticipated to grow between 10-12% in 2021 and 2022,

— That the composition of the housing stock at market is changing, with the number of homes brought to market at formerly 'cheaper' price points diminishing quickly,

— That rental prices are anticipated to grow between 6-8% in 2021 and 2022,

— That there are strong intercensal trends in declining household sizes (average household size is now 2.7 persons), supporting an increase in demand for 1 and 2-person homes / correlating with 1 and 2-bed units (increasing from ~54% in 2016 to ~59% by 2028) over the lifetime of the Plan. This could translate into the region of ~570 units per annum to cater for this type of household; and

— That rental tenure is set to continue to increase at the expense of owner-occupancy (increasing from approx. 14% in 2016 to 18.7% by 2028).

Considerations and Conclusions

The observable demand for social and affordable units across the period (1,225 total or 209/21.2% per annum in most years[1]) assumes delivery of at least the annual anticipated number of households being brought to market. However, not all these houses will be affordable by those identified with social or affordable needs. Additionally, if the number of units are lower than this, the relative increase in social and affordable need will also increase. It may be prudent therefore to explore a higher number of affordable homes to ensure sufficient elasticity in requirements that may emerge. Much closer monitoring of the number of units delivered each year and the percentage of these which meet affordable criteria would help inform related planning policy.

The county-level assessment undertaken by this analysis provides an overview of affordability as it would generally apply to an average household falling into any of the ten-assessed income deciles. As such, it can be viewed as taking into broad account the more favourable areas of affordability, with those less favourable, and in so doing, sets out a balanced view.

The identified number of households facing a social or affordable challenge can be factored in as an additive amount to the existing social housing waiting list. Keeping a +/- tolerance to this will allow for the most flexibility in terms of addressing future needs.

The results of the analysis indicate that there are certain price points which all households forming can sustainably afford to repay, if eligible for a mortgage.

[1] 22/9% for Q4 2022 and 157/21.2% in 2028 to Q3

Aiming to deliver housing around these price points (affordable mortgage repayment amounts translated into total house prices; accounting for average periods, interest rates, etc.), would provide an effective means of addressing the anticipated requirements faced by households in the 1st and 2nd income deciles.

Ensuring sufficient supply at the effective price bands for all household income deciles will be important to mitigate too much downward pressure or over-competition for cheaper units. This is equally true for the private rental market, where there is likely to be an increase in demand for 1 and 2-bedroom units, contrary to the majority of existing tenancies occupying 3 and 4+ bedroom units.

Depending on which parameters and households are in view, there is an affordability gap in the County for some households. Whilst broadly speaking, assuming incomes, price and supply progress as anticipated by this study, the majority of households are would be able to both qualify for a mortgage under the Central Bank rules, and also adequately compete in the market for homes that suit their optimal repayment capacity, this won't be the case for households in the 1st and 2nd deciles. Furthermore, households up to the 4th decile (42.7% of the market) will be more vulnerable to income, price, and supply changes.

As a result, there is an affordability gap particularly observable for 1st and 2nd decile households, when compared to the cheapest houses, but certainly the average pricing. Affordable options aimed at these groups would help alleviate the most acute cases, but additional consideration of further affordable homes (for instance) may provide significant support to households in the 3rd and 4th deciles who are otherwise vulnerable.

Furthermore, forthcoming unit sizes and types will need to adjust to reflect both a mix of design and space for 1 and 2 person households, which will increase to almost 60% of the entire number of households in the County by 2028. Apartments alone may not offer the best answer to this, but rather a balanced mix of different unit types that can support changing tenure arrangements and also lifecycle of occupants (there is an existing high proportion of 1st and 2nd decile households aged over 65 years who may benefit from downsizing or smarter designed homes for example).

The delivery of appropriate unit-type mixtures should be closely monitored by the Planning Authority, to evaluate forthcoming housing supply and its completion status. A much closer, perhaps annual review of the specification of units proposed, and delivered, will allow for more timely consideration and engagement on how identified needs can best be catered to.

Consideration to address the projected challenges in affordability (such as qualification for mortgages, sustainable repayment amounts and adequate supply across price points), should be made so as to give effect to timely interventions for newly forming households over the Plan period. This report's examination of affordability will provide a helpful resource for future monitoring and adjustment in that regard.

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1 Introduction

KPMG Future Analytics were commissioned by Tipperary County Council to undertake a supplementary assessment of household affordability, as part of the wider preparation of the Draft Housing Strategy and Draft Tipperary County Development Plan 2022-2028 (the Plan).

This document will provide an overview of the analysis undertaken and summarise its key findings. The document reflects an analysis of housing affordability for the entire county of Tipperary. Relevant context is set out in the following sections, followed with a statement on applied methodology, a summary of projected findings across the Plan period, and conclusions and observations to close.

This report forms Appendix 5 of the County Housing Strategy set out in Volume 3, Appendix 1 of the Plan.

Section 3.0 of the Tipperary County Housing Strategy identifies and assesses the 'Housing Market Drivers' of Tipperary in line with the 'Guidance on the Preparation of a HDNA', (Department of Housing, Local Government and Heritage, 2021) and relates to the identification of key housing market drivers, including household formation, population, housing affordability, including incomes, house prices, rent levels, access to finance and key drivers of the local and national economy. This supplementary analysis relates to housing affordability and should be read in conjunction with Section 3.0 of the Tipperary County Housing Strategy.

1.1 Context

A key consideration in examining future housing need is to reflect on affordability, and whether future households are likely to have adequate financial capacity to purchase or rent. Given the current constraint in the market around new housing supply, a greater proportion of households across the income spectrum are spending much more on their accommodation costs than may be sustainable over the longer term, relative to historic norms.

A central tenant in the preparation of Housing Strategies, as defined by Section 94 (5) (a) of the Planning and Development Act, 2000 (as amended), is to assess the relationship between the price of housing and income, for the purposes of establishing *affordability* in the development plan area. Section 93 (1) of the Act defines a household or eligible person who is facing an affordability challenge as:

> *"A person whose income would not be adequate to meet the payments on a mortgage for the purchase of a house to meet his or her accommodation needs because the payments calculated over the course of a year would exceed 35 per cent of that person's annual [net] income…"*

Consideration of various quantitative and qualitative measures can provide direct insight into the current profile of affordability in the county, and also how anticipated changes in prices and incomes may impact on affordability over time.

1.2 Guidelines

Since the early '00s operative guidelines in the production of quantitative modelling for housing affordability assessment have supported the preparation of Housing Strategies[2]. Though more contemporary Housing Need and Demand Assessments (HNDA) were heralded with Objective 37 of the National Planning Framework, as far back as 2018, the timely communication of procedural guidance and implementation around HNDA has not kept pace with broader statutory timelines (i.e. Development Plan reviews). As a result, Local Authorities have progressed with guidance and policy available to them. This has led to a hybridised situation in many cases in how local authorities have prepared their housing strategies.

The Department of Housing, Local Government and Heritage (DHLGH) clarified the situation in early 2021[3] with the release of several circulars and Guidance on the Preparation of Housing Need and Demand Assessment (DHLGH, 2021). A work-in-progress HNDA Toolkit was also made available. The guidelines set out revised ambitions for undertaking evidence-led assessment; with steps to consider more novel use of certain data now available, and to encourage greater consistency in approach, as linked to broader regional and national policy factors and developed research outputs (i.e. the ESRI's structural housing figures).

It is likely that, at the national level further work will be done to strengthen the HNDA process. In the meantime, Local Authorities must tailor guidance available to the individual character and needs of their own county and manage constraints in the granularity of available toolkits (particularly in assessing data at the local level) and what they do or do not do, as of yet. This has placed a renewed focus on being able to examine the finer detail around such aspects as affordability at individual county and town level, in order to better support overall analysis, and to tailor policy measures to respond to identified demand.

1.3 Approach

Examining affordability in the context of the legislation requires a thorough understanding of the relationship between the financial capacity of households, and cost of accommodation. Housing affordability is an important aspect of housing delivery and influences demand for social housing support.

Our approach to assessing housing affordability in Tipperary is to:

[2] 'Part V of the Planning and Development Act, 2000 – Housing Supply: A Model Housing Strategy and Step-by-step Guide', DELG, December 2000
[3] 'Guidance on the Preparation of a Housing Need and Demand Assessment', DHLGH, April 2021

— Examine and categorise households across the county on the basis of household income (by decile).

— Consider how likely changes in income and house prices could impact on affordability over the lifetime of the Plan.

— Assess the cohort of the housing market in Tipperary that would be eligible, or ineligible for a mortgage, as per the Central Bank Rules.

— Determine what a sustainable mortgage amount would be for households across the income spectrum, over the average mortgage period.

— Estimate the volume and price band distribution of houses, and what a given household could therefore sustainably afford to repay a mortgage on.

— Assess affordability in the private rental sector for households that would not be eligible for a mortgage under the Central Bank Rules.

— Compare the identified sustainable mortgage amount to prices and volume, or in rental, compare sustainable rent to market rates by type.

— Assess how many households, of both tenure types, that would likely face affordability challenges, and potentially require social housing supports.

— Estimate how many 'affordable' units would likely be required as part of overall housing delivery, should these assumptions hold without intervention.

The above can be summarised into the following five pillars of assessment:

[1] Household Incomes by Income Decile

[2] Review of Macro-Economic Trajectories

[3] Impact of Macro-Prudential Rules on Eligibility

[4] Market Pricing Assessment and Compositional Shifts

[5] Owner-Occupier and Rental Affordability Assessment

Collectively the analysis estimates the cohort of households that are likely to face affordability challenges in either purchasing or renting.

We have also explored how trended shifts in household size, tenure and type may apply to this cohort – so as to provide greater context in the interpretation of potential future needs overall. Though intercensal trends can be a helpful indicator over short periods, they are not infallible predictors. In the absence of official guidance however, a broad consideration of potential impacts which could arise as a consequence of such trends does provide a helpful understanding of possibilities.

2 Findings

The following sections provide an outline of summary findings from each stage of the assessment. Each component plays a part in developing the final analysis of affordability and ultimately the estimated social and affordable requirement.

2.1 Households

An estimate of housing need in Tipperary over the lifetime of the Plan, informed by national guidance[4], has been set out in the Housing Strategy (Section 5.0). It concluded that at least 5,917 new units in total (including public and private sector housing) will be required over the Plan period, equating to a target for at least 986 units per year.

For the purposes of our assessment the annual figure of 986 was adjusted to reflect a reduced figure of 247 for the starting quarter in 2022 (Q4) and 740 for the ending quarter in 2028 (Q3). This allows for the Plan period to have exactly 5,917 units in consideration.

This analysis seeks to support national Guidance on how to further interpret these households and their projected individual needs, i.e. by population size, income, tenure or specialist need. Therefore, our analysis has sought to examine the composition of this figure in further detail with particular reference to how housing delivery may be influenced by affordability constraints, using available data and suitable proxies.

Knowing what proportion of households are likely to be at either end of the income spectrum, and knowing what this income is, provides a solid basis to assess affordability with respect to market pricing, for both sales and rental. In examining relevant descriptive data, and modelling for assumed changes over time, the relationship between a household's capacity to afford in the present, and over the Plan period is possible. This is done on the basis of what the legislation defines as 'affordable' (see Section 1.1).

Knowing the composition of households further allows for consideration in change over time in relation to household sizes, changes in tenure and likely type of housing requirements.

Subsequent sections will set out how the annualised household's figure is treated with respect to these factors.

2.2 Household Incomes

Gross and net household incomes have been identified from available data published by the Central Statistics Office Survey on Income and Living Conditions 2019 (SILC)[5]. This is the official source of data on household and individual incomes.

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[4] The Housing Supply Target Methodology for Development Planning Guidelines for Planning Authorities (DHLGH,2020)
[5] https://www.cso.ie/en/releasesandpublications/ep/p-silc/surveyonincomeandlivingconditionssilc2019/

Setting out base-year figures, we distribute household on a ten 'decile' basis as informed by the SILC. This allows for incomes to be more categorically assessed in relation to the distribution of the population. The deciles are roughly 10% each, reflecting variance in the survey cohort, but are statistically robust.

2.2.1 Distribution of Households by Decile

The distribution of households, by decile, at State level is largely in and around the 10% mark. As shown below however, consideration as to the regional variation in this regard was given, so as to more closely match our assessment of income for Tipperary. The profile for the Southern Region (which better reflects the County), was therefore utilised as a means to qualify the breakdown of households across the income deciles.

It sees a slightly lower proportion of households in the 1st decile as compared to State (9.1% vs. 9.8% respectively). However, there are more noticeable changes in the 2nd Decile (12.1% vs. 10.6%) as well as some latter deciles; with the overall change largely seen in the low to mid deciles. This means that slightly more households in Tipperary will be in the low to mid deciles, relative to the State.

In applying this as a profile for assumed proportional mix annually (held fixed), the following distribution of housing supply targets was achieved:

Table 2.1: Estimate distribution of Structural Housing Figures by Income Decile

Income Deciles	Proportional share per Income Decile (State[6], 2019)	Proportional share per Income Decile (Southern Region, 2019)	Estimated No. of Households		
			Q4 2022	2023-2027 (p.a.)	Q3 2028
1st Decile	9.83%	9.10%	22	90	67
2nd Decile	10.57%	12.10%	30	119	90
3rd Decile	10.47%	10.80%	27	106	80
4th Decile	10.44%	10.70%	26	106	79
5th Decile	10.25%	10.70%	26	106	79
6th Decile	9.94%	9.80%	24	97	73
7th Decile	9.62%	10.30%	25	102	76
8th Decile	9.65%	9.70%	24	96	72
9th Decile	9.61%	8.70%	21	86	64
10th Decile	9.62%	8.10%	20	80	60
Total	**100.00%**	**100.00%**	**247**	**986**	**740**

This shows that on average approximately 90 households per annum, across the period (exceptions in 2022 and 2028 due to Plan period commencement/end timing) can be assumed to be in the 1st income decile. With 119 in the 2nd Decile, and so on, until all 986 annually are assigned.

[6] As reported by the CSO Household Budget Survey 2015 (SILC does not provide for State)

2.2.2 Household Incomes in Base Year (2019) - State

Income is estimated to be distributed across the deciles in the following manner at State level (by week and per annum):

Table 2.2: Estimated distribution of Average Weekly Gross and Net Income by Decile in State (2019)

Income Deciles	Average Weekly Income (State) (€) (2019)		Average Annual Income (State) (€) (2019)	
	Net	Gross	Net	Gross
1st Decile	213.05	225.29	11,078.60	11,715.08
2nd Decile	284.34	299.33	14,785.68	15,565.16
3rd Decile	330.51	365.46	17,186.52	19,003.92
4th Decile	374.70	435.33	19,484.40	22,637.16
5th Decile	428.91	508.69	22,303.32	26,451.88
6th Decile	491.00	617.82	25,532.00	32,126.64
7th Decile	556.81	725.60	28,954.12	37,731.20
8th Decile	641.76	864.92	33,371.52	44,975.84
9th Decile	767.18	1,130.05	39,893.36	58,762.60
10th Decile	1,266.16	1,944.19	65,840.32	101,097.88

What this shows is that there are significant differences in both gross and net income between the deciles, and these differences gradually increase up to those households in the 10th decile.

It indicates that a household in the 1st decile, which may comprise of retired individuals, students, or those out of employment (or under-employed) takes home approximately. ~16.8% of the income a household in the 10th decile would have at its disposable after tax. This is largely mirrored in gross income terms too, though the gap between both falls to ~11.6%.

Incomes accounts for direct income (such as employee income), other income (such as rental income, investments), and social transfers (jobseekers, pensions, allowances).

Furthermore, it also shows that in 2019, over 53% of households are estimated to earn below €26,500 per annum gross, or ~ €22,300 net.

2.2.4 Household Incomes in Base Year (2019) - Tipperary

Adjusting the national base year for use with County Tipperary requires consideration of a localisation parameter, as county-level data is not available. In this instance, the ratio between the County, and the State in terms of incomes in 2018[7] was applied.

Table 2.3: Estimated Ratio of Gross and Net Income Variance between State and County Tipperary (2018, CSO)

Ratio of State to County – Localisation of Income (2018)	
Net Income Per Person - State	€21,270
Net Income Per Person - Tipperary	€19,673
Tipperary County Deflator	**0.925**
Gross Income Per Person - State	€30,753
Gross Income Per Person - Tipperary	€27,251
Tipperary County Deflator	**0.886**

Using the identified County Deflator of 0.925 for Gross and 0.886 for Net income, the 2019 baseline figures at State level were adjusted for County Tipperary. Table 2.4 sets out the modified Gross and Net figures as estimated on a monthly and annual basis.

Table 2.4: Estimated distribution of Average Monthly Gross and Net Income by Decile in Tipperary (2019)

Income Deciles	Average Monthly Income (Tipperary) (€) (2019)		Average Annual Income (Tipperary) (€) (2019)	
	Net	Gross	Net	Gross
1st Decile	853.90	865.09	10,246.79	10,381.02
2nd Decile	1,139.63	1,149.39	13,675.54	13,792.68
3rd Decile	1,324.68	1,403.32	15,896.12	16,839.85
4th Decile	1,501.79	1,671.61	18,021.47	20,059.35
5th Decile	1,719.06	1,953.31	20,628.74	23,439.67
6th Decile	1,967.92	2,372.35	23,615.00	28,468.22
7th Decile	2,231.68	2,786.21	26,780.18	33,434.56
8th Decile	2,572.16	3,321.18	30,865.91	39,854.21
9th Decile	3,074.84	4,339.25	36,898.08	52,071.00
10th Decile	5,074.74	7,465.45	60,896.88	89,585.35

What this shows is that households in Tipperary have lower gross and net incomes to State, but that the amount of incomes is still predicated by what income decile the household finds itself in. On average this actually indicates an average household gross income in 2019 (for Tipperary) to be ~€32,793. The average is skewed by the income of the 9th and 10th deciles, however. The median gross estimate for same would be ~€25,954, which is significantly below the Southern regional equivalent of €41,612. Naturally, that is itself heavily skewed by households in the Cork and Limerick city regions.

[7] https://www.cso.ie/en/releasesandpublications/er/cirgdp/countyincomesandregionalgdp2018/

2.2.5 Review of Macro-Economic Trajectories

Consideration of broad economic assumptions has been undertaken to help inform possible future changes in household incomes. The use of Gross Domestic Product (GDP) as a macro-indicator in this regard has been incorporated. Though other measures, such as Modified Domestic Demand may offset for the certain foreign direct investment influences, relatively few recognised sources develop forecasting using such measures.

Therefore, a review of economic literature was undertaken to establish forecasting from academic, industry and government sources[8]. Though specific figures differed, an emerging consensus was determined for a positive upswing in economic growth in the short term following the reopening of the economy, followed by a return to prior levels of growth in broad terms.

In the first instance, a review of the historic GDP growth was undertaken to establish the rates during 2017 – 2019 (i.e. from the baseline). The published data indicates that national GDP growth was 8.1% in 2017, 8.2% in 2018, 5.6% in 2019 and 3.4% in 2020 respectively and hence these rates of GDP growth are applied in our assessments.

On the basis of the literature, a series of conservatively tapered GDP rates have been considered and applied to the modelling on future impacts to household incomes:

— 2020: 3.4% GDP growth reflected across the following sources: Central Bank, Davy, IBEC, EU, CSO and ESRI.

— 2021: 6.4% which is an operative average across multiple sources. Brought up by recent publications from Central Bank (8.3%), ESRI (11.1%), IBEC Q2 (6.5%), OECD (5.1%)

— 2022: 5.6% which aligns conservatively with Central Bank (5.4%), IBEC (4.6%), ESRI (9%), Davy (5.4%).

— 2023: 4.8% which aligns with Central Bank Q3 2021

— 2024: 4.5% as a tapering towards 2025

— 2025 - 2028: 4% held fixed as a stable growth trajectory. Higher than what the Department of Finance is setting out (3.2% as of July 15th 2021).

2.2.6 Household Incomes in Future Years (2020-2028)

Assumed changes to income have been considered using GDP as a macro-economic proxy. Inflation has not been assumed. A selection of years from base year 2019 up to period start and end have been included below for both gross and net:

[8] Sources consulted have been listed in Appendix A2

Table 2.5: Forecasted Average Annual Net Incomes by Decile for Tipperary

Income Deciles	Average Annual Household Net Income (€)			
	2019	2022	2025	2028
1st Decile	10,247	11,905	13,559	15,252
2nd Decile	13,676	15,888	18,096	20,355
3rd Decile	15,896	18,468	21,034	23,661
4th Decile	18,021	20,937	23,847	26,824
5th Decile	20,629	23,966	27,297	30,705
6th Decile	23,615	27,436	31,248	35,150
7th Decile	26,780	31,113	35,436	39,861
8th Decile	30,866	35,860	40,843	45,943
9th Decile	36,898	42,868	48,825	54,921
10th Decile	60,897	70,749	80,581	90,643

Table 2.6: Forecasted Average Annual Gross Incomes by Decile for Tipperary

Income Deciles	Average Annual Household Gross Income (€)			
	2019	2022	2025	2028
1st Decile	10,381	12,061	13,737	15,452
2nd Decile	13,793	16,024	18,251	20,530
3rd Decile	16,840	19,564	22,283	25,065
4th Decile	20,059	23,305	26,543	29,858
5th Decile	23,440	27,232	31,016	34,889
6th Decile	28,468	33,074	37,670	42,374
7th Decile	33,435	38,844	44,242	49,766
8th Decile	39,854	46,302	52,736	59,321
9th Decile	52,071	60,495	68,902	77,506
10th Decile	89,585	104,079	118,542	133,344

What is set out in Tables 2.5 and 2.6, is how incomes across the deciles are anticipated to grow in line with broad macro-economic indicators (GDP). The caveats in using this as a proxy have been noted already, but it is important to stress that though above estimates are indicative, they importantly build off localised and distributed incomes that are reflective of Tipperary as of 2019.

By 2022, incomes are anticipated to have grown by approx. 16.1% in nominal terms, i.e. not adjusted by inflation. If the cost of living were to remain as-is, this would represent a largely positive situation. However, the cost of accommodation is unlikely to hold fixed in that same time, particularly as constraints in the supply of new stock are clearly visible.

The next section will explore how this pricing may evolve, such that the aforementioned incomes can be assessed for viability using a 35% affordability threshold.

2.3 Market Pricing

2.3.1 Sales

2.3.1.1 Historic Prices

House sales pricing in Tipperary has been on the increase since 2014, with both markets for new and existing properties seeing sustained growth (with the exception of a blip in 2016 for new stock). Naturally, this reflects an increase over a low base following the post 2007/8 economic collapse, however, the recent trend indicates a very stable and consistent 10-13% annual increase in the price of existing stock, which reflects equal parts demand and availability within the County.

Table.2.7: Historic Median Prices and Trends 2010-2020 (RPPI, CSO)

Year	All Dwellings	New	Existing
2010	€170,000	€191,815	€151,400
2011	€146,250	€197,062	€131,500
2012	€110,000	€158,900	€100,170
2013	€92,000	€101,015	€92,000
2014	€100,000	€108,960	€99,500
2015	€110,000	€154,928	€105,000
2016	€114,500	€145,000	€110,000
2017	€127,500	€155,000	€125,000
2018	€142,000	€187,275	€140,000
2019	€160,000	€203,733	€155,000
2020	€155,000	€207,138	€152,000
Long Term Average	**€129,750**	**€164,621**	**€123,779**
Short Term Average	**€146,125**	**€188,287**	**€143,000**

As can be seen below, price variation has been significant on a percentage basis:

Table 2.8: Historic Prices and Trends 2010-2020 (RPPI, CSO) Percentage Change

Year	All Dwellings	New	Existing
2010	-	-	-
2011	-14.0%	2.7%	-13.1%
2012	-24.8%	-19.4%	-23.8%
2013	-16.4%	-36.4%	-8.2%
2014	8.7%	7.9%	8.2%
2015	10.0%	42.2%	5.5%
2016	4.1%	-6.4%	4.8%
2017	11.4%	6.9%	13.6%
2018	11.4%	20.8%	12.0%
2019	12.7%	8.8%	10.7%
2020	-3.1%	1.7%	-1.9%
Long Term Average	**0.0%**	**2.9%**	**0.8%**
Short Term Average	**8.1%**	**9.5%**	**8.6%**

New units have fluctuated considerably by comparison, with 2015 seeing a 42% year on year increase, or 20% in 2018, only to be 6-8% otherwise. Overall, pricing appears to be on an upwards trajectory, of around 11% per annum. There is a very clear breakpoint from 2014, when prices began to increase, and this was shared between both new and existing dwellings. Thereafter, price increase in existing housing has been much more stable than in new build. This stability is visualised in Figure 2 -1, where it can be seen as a straighter line for existing units (purple) as compared to higher annual variability in new units (blue).

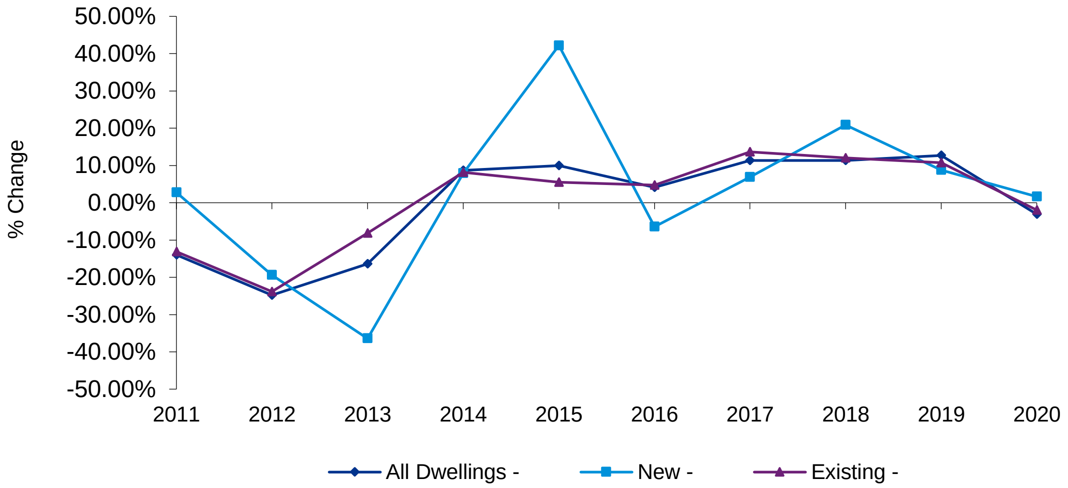

Figure 2 -1: Annual change in CSO RPPI Transactions in Co. Tipperary 2010-2020

However, the recent rate of change in Tipperary is indicatively on the increase again. Data from REA estate agents published in September 2021 for three-bed semi-detached homes, would indicate that average pricing in Tipperary has increased to €199,250, a 9% increase in the year; making Tipperary the county with the highest growth rate in pricing nationally[9].

2.3.1.2 Composition

An analysis of price change and transactional volume of the Property Price Register for County Tipperary was undertaken. The register displays all transactions that have been registered. Analysis of the register allows for highly granular information to be collated on the composition of the market.

Specifically, the distribution of sales across price bands and the number of sales over time can provide helpful indicators as to the price elasticity at play within the market and can point to likely patterns in shifting composition. The share of properties anticipated to be brought to market at a given price point will largely be dictated by broad regional and national influences, but the consequence of even small changes in localised market share can have significant impacts on affordability or even availability of suitable stock.

[9] Irish Independent/REA House Price Index September 2021 – As available 28/09/2021 - https://www.independent.ie/irish-news/revealed-13-areas-where-house-prices-have-risen-by-more-than-5pc-in-three-months-40892204.html

Table 2.9: Distribution of property transactions in Tipperary in 2020 (PPR)

Price Band	2020	
Estimated Value Distribution	**# Transactions**	**% of total**
0-50000	73	6.0%
50001-100000	260	21.5%
100001-150000	278	23.0%
150001-200000	300	24.8%
200001-250000	136	11.3%
250001-300000	67	5.5%
300001-350000	37	3.1%
350001+	57	4.7%
Total Transactions	1,208	100.00%

Looking at the distribution pattern over time, we can see than from 2012, there has been significant change in key price bands. Namely, the rate at which properties under €50,000 have fallen (more than halving by 2020), and the corresponding increase in the €50,000-100,000 band. Whilst there has been growth in the upper ranges, this is still largely confined to the €50,000-200,000 range, though properties transacting in the €250-350k bands have doubled in cases.

Table 2.10: Historic distribution of property transactions in Tipperary (PPR)

Price Band	2012	2013	2014	2015	2016	2017	2018	2019
0 - 50000	15.5%	19.4%	18.9%	16.5%	15.3%	12.2%	9.2%	6.7%
50001 - 100000	31.4%	34.6%	34.2%	30.7%	32.1%	30.5%	25.2%	21.8%
100001 - 150000	24.0%	23.7%	19.9%	24.2%	23.1%	22.8%	23.7%	23.9%
150001 - 200000	16.6%	11.8%	14.9%	14.5%	13.6%	16.8%	19.3%	22.9%
200001 - 250000	4.7%	4.9%	6.4%	6.8%	7.8%	8.3%	11.1%	11.8%
250001 - 300000	4.5%	2.8%	2.6%	4.1%	4.4%	4.7%	6.2%	6.2%
300001 - 350000	1.3%	1.5%	1.5%	1.6%	1.3%	2.1%	2.5%	3.2%
350001	1.9%	1.3%	1.8%	1.7%	2.4%	2.7%	2.8%	3.5%

The rate of change is highly variable, and in considering trends, may be too variable to robustly incorporate into an assumption of future change at this time. Certainly, if one concludes a continuing fall off in the proportion of properties transacting sub €100,000 and corresponding increases up to €250,000k, then an outlook similar to the following may emerge up to 2028:

Table 2.11: Speculative future distribution of house bands in Tipperary

		Projected Distribution by Price Bands								
Price Band	Annual % Change	2020	2021	2022	2023	2024	2025	2026	2027	2028
0 - 50000	-0.25%	6.0%	5.8%	5.5%	5.3%	5.0%	4.8%	4.5%	4.3%	4.0%
50001 - 100000	-0.50%	21.5%	21.0%	20.5%	20.0%	19.5%	19.0%	18.5%	18.0%	17.5%
100001 - 150000	0.25%	23.0%	23.3%	23.5%	23.8%	24.0%	24.3%	24.5%	24.8%	25.0%
150001 - 200000	0.25%	24.8%	25.1%	25.3%	25.6%	25.8%	26.1%	26.3%	26.6%	26.8%
200001 - 250000	0.25%	11.3%	11.5%	11.8%	12.0%	12.3%	12.5%	12.8%	13.0%	13.3%
250001 - 300000	0.00%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
300001 - 350000	0.00%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
350001		4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%

However, this is extremely speculative and in reality, will be highly influenced by the supply of new builds and the impact of remote working, etc.

As a result of this, we have not assumed any change in the distribution of future price band size in our analysis. Therefore, the proportion of stock in each price band as identified in 2020, is being assumed to continue throughout the Plan period.

2.3.1.3 Future Prices

A forecast on future prices has been developed with reference to historic growth rates and assumed stabilisation in the market. It is anticipated that further increases are likely in the near-term recovery, as supply still remains a noted constraint in the market, therefore increases to 10 and 12% are considered. However, the scenario reflects a view for a gradual reduction thereafter, to fall from 2023 to a 4% reoccurring increase.

On the basis of this outlook, the effect on pricing has been annualised and set out from Table 2.12 to Table 2.14. These tables display each year's price band ranges. Inflation has not been assumed.

Table 2.12: Projected House Prices in Tipperary 2021-2028 – 1st to 3rd Bands

Year	Assumed Price Change (%)	1st Band (€) Upper	2nd Band (€) Lower - Upper		3rd Band (€) Lower - Upper	
2020	-	50,000	50,001	100,000	100,001	150,000
2021	**10.0%**	55,000	55,001	110,000	110,001	165,000
2022	**12.0%**	61,600	61,601	123,200	123,201	184,800
2023	**8.0%**	66,528	66,529	133,056	133,057	199,584
2024	**4.0%**	69,189	69,191	138,378	138,380	207,567
2025	**4.0%**	71,957	71,958	143,913	143,915	215,870
2026	**4.0%**	74,835	74,836	149,670	149,671	224,505
2027	**4.0%**	77,828	77,830	155,657	155,658	233,485
2028	**4.0%**	80,941	80,943	161,883	161,885	242,824

Table 2.13: Projected House Prices in Tipperary 2021-2028 – 4th to 5th Bands

Year	Assumed Price Change (%)	4th Band (€) Lower - Upper		5th Band (€) Lower - Upper	
2020	-	150,001	200,000	200,001	250,000
2021	**10.0%**	165,001	220,000	220,001	275,000
2022	**12.0%**	184,801	246,400	246,401	308,000
2023	**8.0%**	199,585	266,112	266,113	332,640
2024	**4.0%**	207,569	276,756	276,758	345,946
2025	**4.0%**	215,871	287,827	287,828	359,783
2026	**4.0%**	224,506	299,340	299,341	374,175
2027	**4.0%**	233,487	311,313	311,315	389,142
2028	**4.0%**	242,826	323,766	323,768	404,707

Table 2.14: Projected House Prices in Tipperary 2021-2028 – 6th to 8th Bands

Year	Assumed Price Change (%)	6th Band (€) Lower - Upper		7th Band (€) Lower - Upper		8th Band (€) Lower
2020	-	250,001	300,000	300,001	350,000	350,001
2021	**10.0%**	275,001	330,000	330,001	385,000	385,001
2022	**12.0%**	308,001	369,600	369,601	431,200	431,201
2023	**8.0%**	332,641	399,168	399,169	465,696	465,697
2024	**4.0%**	345,947	415,135	415,136	484,324	484,325
2025	**4.0%**	359,785	431,740	431,742	503,697	503,698
2026	**4.0%**	374,176	449,010	449,011	523,845	523,846
2027	**4.0%**	389,143	466,970	466,972	544,798	544,800
2028	**4.0%**	404,709	485,649	485,651	566,590	566,592

What these tables show is that in line with the assumed price change trajectory, house prices are set to increase year on year, particularly in the short term to 2022. After which, it is assumed there will be a degree of stabilisation in the market, with policies, supply or financial factors having helped ease the pace at which prices are growing in excess of earnings.

The outlook for Tipperary would suggest that there will be significant change within the price bands originally set against the 2020 situation, i.e. a house priced within the 150k-200k price band, will by 2028, be valued at between 242k and 323k. This applied to all bands, from those in the 1st band starting at up to 50k moving to just under 81k by 2028, and those in the 8th band, starting at 350k, moving to at least 566k by 2028.

Though this study's frame of reference was to examine county-level impacts and trends, it should be noted that there is significant variation on pricing at local sub-county levels. Specifically, the pricing in the Key Towns of Clonmel, Nenagh and Thurles will vary with greater fluidity than county-level data (mitigated by rural areas).

These assumed county-level price dynamics will have a noted impact on the assessed affordability of future households, in terms of their capacity to access and afford sustainable mortgage repayments. The results of which are summarised in Section 2.6.

2.3.2 Rental

2.3.2.1 Historic Prices

The average rent in Tipperary has returned to levels last seen before the economic crash. 2014 was the turning point in the decline of rents, as available stock started to become more sought after and growth returned to the economy.

A long term average over this entire period is just 0.3%, illustrating that return, however, growth in recent years (since 2017 particularly), has exceeded ~ 5%, with the exception of 2020's impact due to COVID-19; reflecting several years of sustained, but stable increases.

Table 2.15: Historic average rental pricing and change 2008-2020 (RTB)

Year	Average Rent (All Types)	% Change
2008	€673	-
2009	€635	-5.64%
2010	€589	-7.25%
2011	€567	-3.69%
2012	€551	-2.93%
2013	€538	-2.34%
2014	€541	0.68%
2015	€552	1.90%
2016	€567	2.87%
2017	€596	5.06%
2018	€629	5.49%
2019	€664	5.54%
2020	€690	3.90%
Long Term Average	€599	0.3%
Short Term Average	€645	5.0%

The average rent does not paint a complete picture however across all unit types. Table 2.16 illustrates the difference between rents for 1, 2, 3 and 4+ beds in recent years, as well as how they have changed year on year.

Table 2.16: Historic average rental pricing by unit type 2018-2020 (RTB)

Year	One bed (€)	Two bed (€)	Three bed (€)	Four plus bed (€)
2018	478	572	661	741
2019	506	613	692	784
2020	520	635	715	827

2.3.2.2 Composition

As of July 2021, the RTB rental register indicates that the majority of current rental properties in Tipperary are comprised of 3 and 4+ bed units. With 2-bed occupying slightly over a quarter of the stock available (1 Bed: 14%, 2 Bed: 26%, 3 Bed: 45%, 4+ Bed: 15%).

These proportions reflect the type of unit being rented, which may be conventional stock over purpose built-to-let delivery. However, these proportions provide a reliable indicator of the current segmentation across the market. They can be used to explore 'demand' insofar as the uptake of potentially available future rental stock by households, at least in the short term.

As a result, we establish the proportion of any cohort being assessed for private rental across these types. For example, were households were identified as not being eligible for a mortgage, or could not afford a property for purchase, they were assessed for private rental. Based on these metrics, the households were split according to type segment; so, 45% of households were assessed against 3-bed demand, etc.

Households were assessed against 35% disposable income (affordability threshold), and market rents were used for three beds, as informed by RTB statistics.

2.3.2.3 Future Prices

A forecast on future rents has been developed with reference to historic growth rates and assumed stabilisation in the market.

It is anticipated that further increases are likely in the near-term recovery, as supply still remains a noted constraint in the market, therefore increases to 6% and 8% by 2022 are considered. However, the scenario reflects a view for a gradual reduction thereafter, to fall to 6% in 2023, and increment 0.5% thereafter to 2027, to a 4% reoccurring increase.

Price variability in Tipperary's urban centres, and especially in the Key Towns of Clonmel, Nenagh and Thurles, will naturally have a greater degree of price fluidity to them, however, the main trends are:

Table 2.17: Estimated future average rental pricing by unit type 2021-2028

Year	One bed (€)	Two bed (€)	Three bed (€)	Four plus bed (€)
2021	552	673	758	877
2022	596	727	819	947
2023	632	771	868	1,004
2024	666	813	916	1,059
2025	700	854	962	1,112
2026	731	892	1,005	1,162
2027	760	928	1,045	1,209
2028	791	965	1,087	1,257

What this means is that rental pricing is set to increase further in the near-term, before stabilising (a lower rate of annual increase). While this will affect pricing across the board, it is likely that pricing for certain types may vary more than is estimated, due to supply constraint versus increasing demand.

2.4 Impact of Macro-Prudential Rules (Central Bank LTI)

The Central Bank of Ireland's rules limit the maximum amount someone can borrow to 3.5 times their annual gross income, regardless of how much they earn (with exceptions). This is called the Loan-to-Income rule (LTI). Though this serves as an important lever to control the credit landscape, with house prices rising quicker than earnings, it can present a constraining factor on whether a household – which may be able to sustainable repay a mortgage, may not qualify as property price exceeds their LTI capacity. In practice, this places a higher burden onto the household to build a larger deposit.

In assessing households' affordability, we have considered the effect of the Central Bank's LTI rule as it would apply to the upper value of the cheapest house price band, and each household's gross income.

The result is that households in the 1st and 2nd deciles are largely locked out of the owner-occupier market. This is the case across the period, with the exception of 2022, where those in the 2nd decile can compete.

The following tables illustrate how the cohort ineligible has been identified on an annualised basis. The first shows the start of the period (Q4 2022), where the 1st decile faces difficulty, and then 2023, where it is joined by households in the 2nd decile.

Table 2.18: Mortgage Eligibility under Central Bank Loan to Income (LTI) in 2022

Year	Income Decile	No. of Additional Anticipated Households	Upper Value of Cheapest House Price Band	Minimum LTV (90% of Cheapest House Price)	Maximum LTI (x3.5 Gross)	Mortgage Qualification
2022	1st Decile	22	€61,600	€55,440	€42,212	FAIL
	2nd Decile	30			€56,084	PASS
	3rd Decile	27			€68,475	PASS
	4th Decile	26			€81,566	PASS
	5th Decile	26			€95,312	PASS
	6th Decile	24			€115,759	PASS
	7th Decile	25			€135,953	PASS
	8th Decile	24			€162,057	PASS
	9th Decile	21			€211,734	PASS
	10th Decile	20			€364,276	PASS
	Total	247				(22)

Table 2.19: Mortgage Eligibility under Central Bank Loan to Income (LTI) in 2023

Year	Income Decile	No. of Additional Anticipated Households	Upper Value of Cheapest House Price Band	Minimum LTV (90% of Cheapest House Price)	Maximum LTI (x3.5 Gross)	Mortgage Qualification
2023	1st Decile	90	€66,528	€59,875	€44,238	FAIL
	2nd Decile	119			€58,777	FAIL
	3rd Decile	106			€71,762	PASS
	4th Decile	106			€85,482	PASS
	5th Decile	106			€99,887	PASS

	6th Decile	97			€121,315	PASS
	7th Decile	102			€142,479	PASS
	8th Decile	96			€169,836	PASS
	9th Decile	86			€221,897	PASS
	10th Decile	80			€381,762	PASS
	Total	986				(209)

The result of the application of LTI across the period translates into approx. 209 households per annum being excluded. The figure is consistent due to the size of both deciles affected versus the annualised housing supply target (986 per annum). Table 2.20 sets out what this looks like per year across the Plan, with 2022 and 2028 being different because of their shorter number of quarters.

Table 2.20: Cohort of households ineligible for mortgages across period

Cohort of Households	Q4 2022	2023	2024	2025	2026	2027	Q3 2028	Total
No. of Additional Anticipated Households Per Annum (Housing Supply Targets #)	247	986	986	986	986	986	740	5,917
No. of Households that Do Not Qualify for a Mortgage (CB LTI #)	22	209	209	209	209	209	157	1,225
No. of Households that Do Not Qualify for a Mortgage (% of Total HST)	**9.1%**	**21.2%**	**21.2%**	**21.2%**	**21.2%**	**21.2%**	**21.2%**	**-**

Households that are ineligible for assessment are considered against private rental, a summary of the results are set out in Section 2.6.

2.5 Owner-Occupier Affordability

The basis for assessing owner-occupier affordability is to determine whether a household can sustainably repay a mortgage for a property of at least the cheapest house price band on the market, without compromising long-term affordability (exceeding 35% of its disposable income on accommodation costs).

2.5.1 Affordable Mortgage Amounts

An annuity formula is used to assess affordability against five key variables which are central to the analysis. These are:

- Household income;
- House price;
- Mortgage interest rate;

- Mortgage term; and
- Loan to value ratio

A note on the derivation and structure of the annuity formula is contained in Appendix A1. Suffice it to say that, based upon the incremental household formations over the period, and drawing upon the associated measure of income distribution, it has been possible to establish a series of house prices which represent the maximum price which these new households in Tipperary can be expected to afford.

The annuity formula used then factors in the average mortgage interest rate (3.42%) and average loan term (29 years) – as of April 2021[10]. It assesses 35% of each decile's disposable income in conjunction with these variables to arrive at a 'mortgage affordability threshold'.

A figure that represents the loan amount which a household on that income could sustainably repay over the average lifetime of the mortgage, without compromising its affordability.

Table 2.21 overleaf sets out what the annuity formula assesses each income decile's affordable mortgage threshold or capacity would be. While not every household may be able to qualify for a loan, it does illustrate that every household can afford a loan of a certain amount. This could be bolstered by a deposit for example, or a non-central bank affected scheme in theory to address identified constraints.

Table 2.21: Affordable Mortgage Thresholds for Households (Annuity 2022-2028)

Income Decile	% of HH per Decile	2022 (€)	2023 (€)	2024 (€)	2025 (€)	2026 (€)	2027 (€)	2028 (€)
1st Decile	9.10%	85,087	89,172	93,184	96,912	100,788	104,820	109,013
2nd Decile	12.10%	113,559	119,010	124,365	129,340	134,514	139,894	145,490
3rd Decile	10.80%	131,998	138,334	144,559	150,342	156,355	162,610	169,114
4th Decile	10.70%	149,647	156,830	163,887	170,443	177,261	184,351	191,725
5th Decile	10.70%	171,297	179,520	187,598	195,102	202,906	211,022	219,463
6th Decile	9.80%	196,095	205,507	214,755	223,345	232,279	241,570	251,233
7th Decile	10.30%	222,378	233,052	243,539	253,281	263,412	273,948	284,906
8th Decile	9.70%	256,305	268,607	280,695	291,923	303,600	315,744	328,373
9th Decile	8.70%	306,395	321,102	335,551	348,973	362,932	377,450	392,548
10th Decile	8.10%	505,677	529,949	553,797	575,949	598,987	622,946	647,864

[10] Retail Interest Rates – April 2021, Statistical Release, Central Bank of Ireland, April 2021

What this is saying is that a typical household in the 1st decile, in 2022, could afford to service a mortgage of just over €85,000 without exceeding 35% of its disposable monthly income. Similarly, by 2028, that would increase to over €109,000.

Note that approx. 9.1% of households are in the 1st decile, and approx. 12.1% of households are in the 2nd decile.

2.5.2 Assessment with Central Bank LTI considered

Table 2.22 overleaf sets out an extract of the analysis undertaken for full year 2023. The number of households across each decile has been highlighted, with those not passing the Central Bank LTI test being removed from the total number of households anticipated to form (from 986 to 777; 209 fewer). This effectively removes households in the 1st and 2nd deciles from the assessment, and they are assessed under private rental (see section 2.6.1).

The affordability thresholds/amounts are compared with each house price band, and those households which might be able to afford a property up to that price band are identified. In order to assess whether there is likely to be adequate supply, all other things being equal, the number of households who might be able to afford a property is then compared to the percentage of houses anticipated to be brought to market at that price band. This is informed by the use of the market composition as of 2020 (see section 2.3).

Table 2.22: Affordability assessment for purchase, with CB LTI – 2023 Part I

<table>
<tr><th>Year</th><th>Income Decile</th><th>No. of Additional Anticipated Households That Qualify for a Mortgage</th><th>Running Total</th><th>Mortgage Affordability Threshold</th><th>Household Price Band(s)</th><th>Upper Value of Price Band</th><th></th></tr>
<tr><td rowspan="11">**2023**</td><td>1st Decile</td><td>0</td><td>0</td><td>€89,172</td><td rowspan="2">1st to 2nd Band</td><td rowspan="2">€133,056</td><td rowspan="11">Ctd. below</td></tr>
<tr><td>2nd Decile</td><td>0</td><td>0</td><td>€119,010</td></tr>
<tr><td>3rd Decile</td><td>106</td><td>106</td><td>€138,334</td><td rowspan="3">3rd Band</td><td rowspan="3">€199,584</td></tr>
<tr><td>4th Decile</td><td>106</td><td>212</td><td>€156,830</td></tr>
<tr><td>5th Decile</td><td>106</td><td>317</td><td>€179,520</td></tr>
<tr><td>6th Decile</td><td>97</td><td>414</td><td>€205,507</td><td rowspan="2">4th Band</td><td rowspan="2">€266,112</td></tr>
<tr><td>7th Decile</td><td>102</td><td>516</td><td>€233,052</td></tr>
<tr><td>8th Decile</td><td>96</td><td>611</td><td>€268,607</td><td rowspan="3">5th to 8th Bands</td><td rowspan="3">None</td></tr>
<tr><td>9th Decile</td><td>86</td><td>697</td><td>€321,102</td></tr>
<tr><td>10th Decile</td><td>80</td><td>777</td><td>€529,949</td></tr>
<tr><td></td><td>**777 (of 986[11])**</td><td></td><td></td><td></td><td></td></tr>
</table>

[11] 986 households anticipated in 2023, however 209 were identified as not eligible due to CB LTI rules

Table 2.23: Affordability assessment for purchase, with CB LTI – 2023 Part II

Year	Household Price Band(s)	Upper Value of Price Band	No. of Households That Qualify for a Mortgage Able to Purchase at Upper Value	% of Housing Units Anticipated per Price Band (PPR 2020)[12]	No. Housing Units Anticipated per Price Band	Housing Surplus (+) or Deficit (-) per Price Band
2023	1st to 2nd Band	€133,056	102	27.6%	214	112
	3rd Band	€199,584	300	23.0%	179	-121
	4th Band	€266,112	203	24.8%	193	-11
	5th to 8th Bands	None	-	24.6%	191	-
				100.00%	777	-20

Households in the 3rd decile (106) can afford to service a mortgage of up to €138,334 sustainably, against a property in the 3rd house price band. However, there is competition from households in higher deciles, and this has been assessed by determining what proportion of households in the 4th and 5th income deciles who can similarly afford a house in the 3rd house price band. Households in the 6th decile are also checked, as some will be borderline on available properties in the 4th house price band. Therefore, up to 414 households combined may potentially compete for houses in the 3rd price band. This assumes a household will pursue a home at the highest cost it can afford – as a proxy for quality, area, type, size, etc.

Of the 414 households, 300 qualify for a mortgage capable of purchasing a home in the 3rd house price band. Assuming 23% of all homes brought to market will be priced within the 3rd house price band however (2020's composition), only 179 units are anticipated; therefore, an identified deficit of -121 units presents. Table 2.23 illustrates this deficit in red.

It can also be observed that there is a further deficit of units in the 4th house price band (-11), but a surplus in the 1st house price band (112) – meaning that practically speaking, a minor deficit of -20 homes may result overall, assuming the market delivers all units. However, the purpose of the analysis is to identify where constraints emerge in affordability or anticipated supply (due to market composition and/or downward competition from higher deciles).

Households in the 3rd decile and above have much greater capacity to access accommodation in such circumstances, such as via private rental, than households in the 1st or 2nd deciles. Therefore, none present as specific social or affordable requirements, though supply at their operative price points will be a key factor in

[12] These rates reflect the composition of the transactional market in 2020, i.e. 27.6% in 1st price band

determining whether their housing needs will be met without electing to purchase cheaper options or enter the private rental market.

2.5.3 Assessment without Central Bank LTI considered

When assuming the Central Bank LTI is not at play, the full number of households can be assessed. Examining sample year 2023 yet again, Table 2.24 and Table 2.25 overleaf displays how households in the 1st and 2nd deciles can this time compete for properties valued up to the 2nd house price band, although the number of properties in and around what the 1st decile can sustainable afford to repay a mortgage on (~€89k) may be extremely limited (around 6% of the 2020 market).

Working through the tables it can be seen that households up to the 3rd decile can compete for houses in the 1st and 2nd house price bands, adding downward pressure, however, a sizable number of homes would be anticipated to be brought to market at these price points (27.6%). Of the 316 households forming up to the 3rd decile, 303 would qualify for a mortgage for a property in the 1st and 2nd house price bands. However, only 272 units are anticipated to be brought to market; a deficit of -32 units. Similarly, households up to the 6th decile (623, less the 303 already resolved) can compete for houses priced in the 3rd house price band, except this time, 302 qualify. As only 227 units are anticipated to be brought to market, there would be a deficit of -75 units. Taken collectively, there is a deficit of -106 units for 2023 across both price bands, affecting households in the 1st and 2nd deciles mostly. As there are no cheaper options, these present as a social or affordable need; unless viable in the private rental market.

Table 2.24: Affordability assessment for purchase, without CB LTI – 2023 Part I

Year	Income Decile	No. of Additional Anticipated Households That Qualify for a Mortgage	Running Total	Mortgage Affordability Threshold	Household Price Band(s)	Upper Value of Price Band	
2023	1st Decile	90	90	€89,172	1st to 2nd Band	€133,056	Ctd. below
	2nd Decile	119	209	€119,010			
	3rd Decile	106	316	€138,334	3rd Band	€199,584	
	4th Decile	106	421	€156,830			
	5th Decile	106	527	€179,520			
	6th Decile	97	623	€205,507	4th Band	€266,112	
	7th Decile	102	725	€233,052			
	8th Decile	96	820	€268,607	5th to 8th Bands	None	
	9th Decile	86	906	€321,102			
	10th Decile	80	986	€529,949			
		986					

Table 2.25: Affordability assessment for purchase, without CB LTI – 2023 Part II

Year	Household Price Band(s)	Upper Value of Price Band	No. of Households That Qualify for a Mortgage Able to Purchase at Upper Value	% of Housing Units Anticipated per Price Band (PPR 2020)[13]	No. Housing Units Anticipated per Price Band	Housing Surplus (+) or Deficit (-) per Price Band
2023	1st to 2nd Band	€133,056	303	27.6%	272	-32
	3rd Band	€199,584	302	23.0%	227	-75
	4th Band	€266,112	208	24.8%	245	37
	5th to 8th Bands	None	-	24.6%	242	-
				100.00%	986	-69[14]

2.6 Social and Affordable Housing Needs

Part 6 of the Affordable Housing Act 2021, amends Part V of the 2000 Act and the Housing Strategy must now include estimates for the required amount of affordable and cost-rental housing, not just social housing.

Having assessed the relationship between incomes, price and anticipated supply, a number of households were observed to encounter affordability or supply concerns. Depending on whether the impact of the Central Bank's LTI rule is considered, the size of this cohort changes. Therefore, the following sets out the impacts with and without LTI considered. Firstly, by showing the resulting combined social and affordable requirements, and then, by setting out how this is split between social and affordable.

Not considering LTI may be technically deemed academic however, as it is unlikely a household would gain access to finance for a mortgage if they do not qualify under the Central Bank rules. There are exceptions naturally, such as schemes operated by Local Authorities, or future Government policy. Consideration of these options is not undertaken in this assessment.

2.6.1 Combined Social and Affordable Requirements

The methodology to determine the social and affordable requirement examines the impact of the Central Bank's LTI rule. The following table sets out the identified combined

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[13] These rates reflect the composition of the transactional market in 2020, i.e. 27.6% in 1st price band
[14] The broad surplus/deficit balance is -69, however households may not be able to afford the surplus of 37 in the 4th band, and this is a purely artificial indicator. The combined -32 and -75 (-106) being more reflective.

social and affordable proportion of households on an annualised basis across the Plan period:

Table 2.26: Summary of Social and Affordable Housing Needs – With Effect of Central Bank Loan To Income (LTI) measure

Requirements With Effect of Central Bank LTI	Q4 2022	2023	2024	2025	2026	2027	Q3 2028	Total
No. of Additional Anticipated Households Per Annum (Housing Supply Targets #)	247	986	986	986	986	986	740	5,917
No. of Households that Do Not Qualify for a Mortgage (CB LTI #)	22	209	209	209	209	209	157	1,225
No. of Households that Do Not Qualify for a Mortgage AND are Unable to Afford Private Rental (#)	22	209	209	209	209	209	157	1,225
No. of Households Facing a Social and/or Affordable Challenge (% of Total HST)	**9.1%**	**21.2%**	**21.2%**	**21.2%**	**21.2%**	**21.2%**	**21.2%**	**-**

Of the total number of anticipated households forming per annum, approximately ~ 21.2% are unlikely to be eligible to access a mortgage under the Central Bank's rule. This is as much as 209 households out of 986 on average across the period (or 1,225 cumulative of 5,917 total).

2.6.1.1 Split Social and Affordable Requirements

This cohort of 21.2% of households is the social and affordable requirement, before being assessed in the private rental market. It can be split as approximately 10.5% considered as having a social requirement, whereas ~10.7% would have an affordable requirement.

This is determined by assessing the impact with the Central Bank's LTI and without it. As without it, households that still present as having an affordability challenge under owner-occupier, are typically due to social need (typically households in the 1st decile who do not have other effective means to compete or access an owner-occupier solution (as standard; schemes and deposits are not assessed). Section 2.6.2 provides more information on the social requirement itself.

The 'affordable requirement' is where a household cannot afford a home at their optimal mortgage repayment amount, and/or if there are insufficient units anticipated to be brought to market at a cheaper price point that the purchaser can afford.

Alternatively, there is an insufficient number at their optimal price point, but as a consequence of downward pressure from households in higher deciles the number of anticipated units is also insufficient. Where a household cannot be accommodated at a cheaper price band, it presents as an 'affordable requirement'.

2.6.1.2 Confirming Social and Affordable Challenge via Rental

The 209 households per annum identified as facing either a social or affordable requirement were assessed against average rental pricing by type of unit in the market (see section 2.3.2 for the rents assessed). This was done to determine whether they might be able to be accommodated by the private rental market. Here, it was observed that the full cohort faced difficulties affording anticipated market rates at or below 35% of their disposable income. These households would require supports in order to compete effectively in the market.

These households are therefore likely to present for rental supports, unless they were to increase their spend on accommodation above the accepted affordability threshold, or rental pricing was to reduce (perhaps due to increasing supply).

2.6.1.3 Composition of households facing a social or affordable need

Over the period, the cohort is largely comprised of households in the 1st and 2nd income deciles (90 and 119 respectively; 209), and therefore would have at their disposable ~ €347 per month in 2022 and ~ €444 in 2028 if 1st decile, or ~ €463 per month in 2022 and ~ €593 in 2028 if 2nd decile, to set against the cost of accommodation (35% of disposable income).

These levels compare poorly to the anticipated average rent however, with a one bed in 2022 estimated to cost ~ €600 per month or ~ €800 in 2028.

Additionally, these households won't all comprise of one individual where a single bedroom may be suitable. As of 2019[15], just over one third, 36.2%, of 1st decile households comprise of a single adult. This increases to 44.9% in the 2nd decile. Of this, 23.5% are aged over 65 in the 1st decile and an enormous 89.3% aged over 65 in the 2nd decile.

Assuming this established distribution was to continue, the remainder of households will comprise broadly of 1 adult with children under 18 (27% in 1st decile or 9.8% in 2nd decile) or 2 or more adults with children or other household combinations (notably, 12.% of 2nd decile households comprise 1 adult aged over 65, with another under; possibly a carer or adult child living at home relationship).

When looking at whether households in both of these affected deciles might be able to meet their accommodation needs in the private rental market, with support from a HAP payment (at current rates), we have assumed a matching exercise between the applicable rates for varying compositions of household[16] in Tipperary (e.g. 1 adult or

[15] SILC, CSO https://data.cso.ie/table/SIA41
[16] Citizen's Information, as summarised for Co. Tipperary (accessed 15/07/2021): https://www.citizensinformation.ie/en/housing/renting_a_home/housing_assistance_payment.html

Couple with 2 Children, etc.) and the cost of rental accommodation by type that would potentially suit such a household.

For example, we looked at what 35% disposable income, plus a baseline HAP payment for a couple with 3 or more children would be, against the average 4+bed rental price. We compared the baseline HAP payment for a single person to 1 bed rentals, couples for 1 bed and 2 bed rentals, couples with 2 children for 3 bed units, and so on.

While there may be a correlation between such compositions, this is purely an estimate in order to evaluate whether the operative baseline HAP rates could offset the affordability challenges faced by these identified households across the Plan period.

The results indicate that where households in an affected decile could not compete at market rental rates initially at any point in the period, when assessed again after the addition of a supporting HAP payment:

- Single person households could then afford 1 bed units across the period.
- Couples could then afford 1 bed units across the period.
- Couples with children could then afford 2 bed units across the period.
- Couples or lone parents with 1 child could then afford 2 bed units across the period.
- Couples or lone parents with 2 children could then afford 3 bed units up to 2025 only, thereafter not being able to afford these units, but potentially smaller units.
- Couples or lone parents with 3 or more children could only afford a 4+bed unit in 2022, thereafter not being able to afford these units, but potentially smaller units.

At least 36.1% of households in the 1st decile may conform to 1 or 2 adult households with children, falling to 16.5% in the 2nd decile. These households would appear to face the most challenge and may require anything between 2-4+ bed units in order to meet their accommodation needs. A further 9.2% and 13.9% respectively comprise ‘other households with children under 18’, which if included, would increase the proportion in both deciles to approx. 45.3% and 30.4%.

If these households as modelled are unable to qualify for a mortgage under the central bank rules, and are unable to compete unaided in the private rental market, this could translate into approx. 41 x 1st decile households and 36 x 2nd decile households (77 combined) with children facing acute accommodation needs. Of which those with 2 or more children in them may not be able to satisfy market rates even with a baseline Housing Assistance Payment.

Figure 2-2 displays visually the relative size of this combined 1st and 2nd decile cohort that are likely to face a social or affordability challenge in the market over the Plan period. It shows, the annual number of anticipated households forming in dark blue, those identified as facing a social or affordable challenge in light blue, and the relative percentage of total that this represents in a purple line.

The proportion of total households is largely consistent as it affects both the 1st and 2nd deciles across most of the period, and this is the size of both deciles combined.

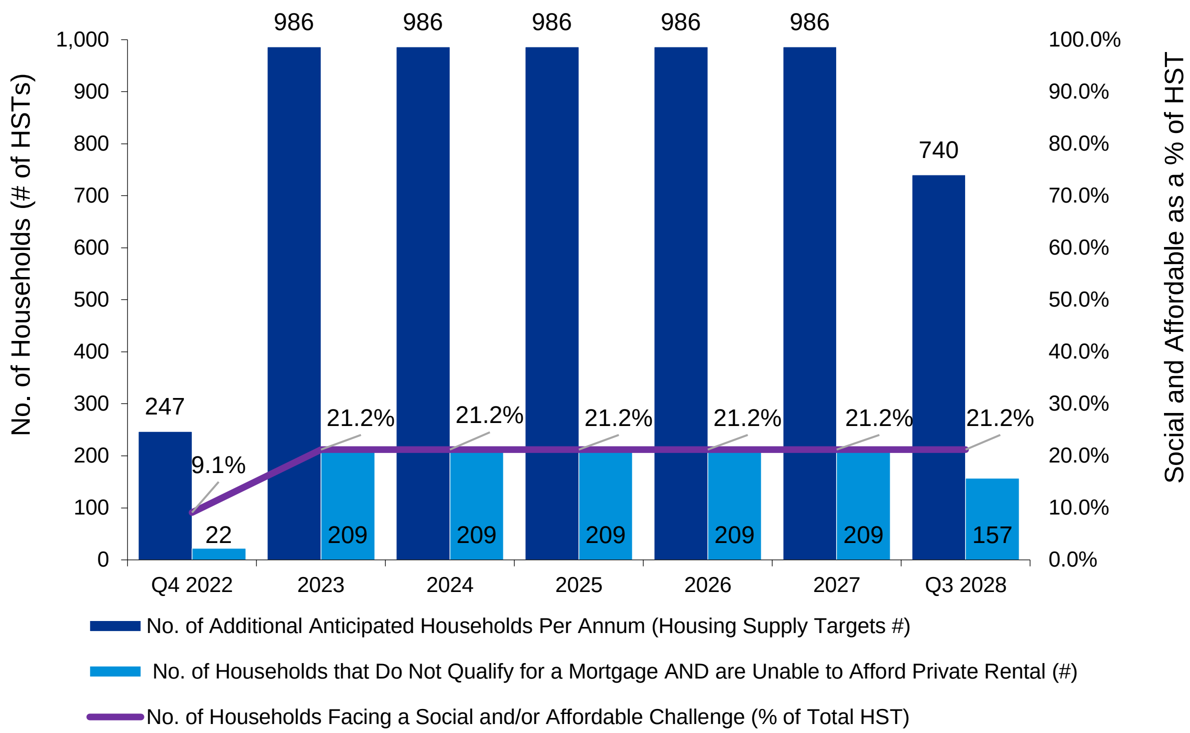

Figure 2-2: Summary of Anticipated Households facing Social and Affordable Needs in County Tipperary over Plan Period Q4 2022 – Q3 2028

2.6.2 Determining the Social Requirement Only

As noted in section 2.6.1, the combined social and affordable requirement can be split by assessing the impact without the Central Bank LTI rule. The following breakdown resolves from the modelling undertaken.

In essence all households are being tested against their affordability for a mortgage situation and the availability of matching homes at their operative price band(s) (the price band of a home within which they could sustainable afford to repay a mortgage on; under 35% disposable income per month).

The results indicate that there is still an identified cohort, namely those in the 1st decile, who continue to face difficulty either affording homes at the cheapest price band, or they may be able to afford them, but are likely to still require supports due to insufficient anticipated market delivery of housing at that operative price point (based on historic volumes in the market).

The table below sets out the size of this cohort as projected across the period:

Table 2.27: Summary of Social and Affordable Housing Needs – Without Effect of Central Bank Loan To Income (LTI) measure

Requirements Without Effect of Central Bank LTI	Q4 2022	2023	2024	2025	2026	2027	Q3 2028	Total
No. of Additional Anticipated Households Per Annum (Housing Supply Targets #)	247	986	986	986	986	986	740	5,917
No. of Households Facing a Social and/or Affordable Challenge (#)	22	106	104	104	104	104	78	621
No. of Households Facing a Social and/or Affordable Challenge (% of Total HST)	**9.0%**	**10.8%**	**10.5%**	**10.5%**	**10.5%**	**10.5%**	**10.5%**	**-**

What this suggests is that there is a core ~10.5% cohort of households forming which are likely to require some level of intervention. This means a social support of some form is needed in order for the household to be able to meet its accommodation needs. This could take the place of a socially provided tenancy, an affordable home targeted at a price point affordable to 1st decile households, or targeted Housing Assistance Payment interventions that would adequately supplement the household to compete in the private rental market. Assessing the potential viability or applicability of existing or future potential schemes lay outside of scope for this study.

A social support would be needed because these households cannot sustainably afford a mortgage for the cheapest house anticipated to be brought to market, or if they can, there may be insufficient supply available (partly due to downward competition from households in higher income deciles).

As a result, households in this cohort, approximately 103 per annum or 621 over the period (of 5,917 total), would likely require social housing supports. As identified in the earlier analysis, where this cohort was assessed against market rents, there are significant affordability challenges anticipated. The addition of Housing Assistance Payments does have an impact on positively allowing households to compete, however, there are challenges for the larger households with children in doing so reliably across the period (assuming baseline Housing Assistance Payment rates).

In reality, households encountering affordability challenges will often exceed what is held to be 'affordable', for example, not more than 35% disposable income. The RTB Rental Sector Survey 2021[17] suggests that on average 35.58% of disposable income is being spent on rental accommodation nationally (the median being 30%), but that this varied significantly regionally. That is was in excess of 40% in and around Dublin, and even close to 40% if renting less than one year (nationally)[18].

[17] https://www.rtb.ie/images/uploads/general/RTB_Tenant_Survey_Report_July_2021.pdf
[18] (ft #15) Table 2.31 Percentage of monthly net income that goes towards paying rent excl. don't know

2.6.3 Determining an Affordability Gap

With caveats as set below, the majority of future households to be formed in Tipperary will be able to access and compete for housing without surpassing 35% net disposable income, on the basis that incomes, prices and supply develop as projected.

However, it should be noted that this does not mean there is universal (positive) affordability in the County. Rather, households having been assessed against their capacity to sustainably repay a mortgage at an optimal price point may struggle to find property at that price, or access a mortgage or both if incomes stagnate or fall.

The assumptions used in this study are therefore sensitive to such considerations, and the estimate of social and affordable requirements should be used in that context – i.e. households up to the 4th decile could be particularly vulnerable to large variations in forthcoming years.

Similarly, a household in the 3rd or higher decile may be able to access a loan for 'a' property (at cheapest pricing), but that may not be viable at the average price within the County.

Indeed, in the case of those households who are facing an affordability challenge, the 'affordability gap' is upwards of nearly 50% of the cost of a property values €133,000 in 2023 for 1st decile households, and ~12% for 2nd decile households.

In other words, to sustainably afford to repay a mortgage for the cheapest property price in full year 2023, a household in the 1st decile would be short ~€43,800 and in the 2nd decile, by about ~€14,000 over the period. This is assessed as paying no more than 35% of their disposable income over the lifetime of the mortgage. Neither 1st nor 2nd decile household qualify for a loan at 90% of that €133,000 property price; with the Central Bank LTI rule showing that 3.5 times gross income would fall far short.

This changes marginally over the course of the Plan, and is relatively static as incomes and prices increase. Households in other deciles can attain sustainability at different house price points; assuming supply was to materialise and pricing/incomes develop as tested.

With ~209 households overall affected annually, of which ~104 face social requirement, the provision and access to schemes that are aimed at supporting greater affordability, affordable purchase or rental options, is therefore going to be an important consideration for Tipperary County Council and housing policy.

Affordability will also be particularly sensitive to localised markets at sub-county level. Namely, the Key Towns of Clonmel, Nenagh and Thurles each present their own variation on pricing, both in sales and rental, that add higher thresholds to households seeking accommodation. The consideration of affordable need in such places is logical and should be closely monitored in conjunction with available and timely data, to inform the pursuit of any relevant affordable schemes or initiatives which may be available.

2.6.4 Determining an 'Affordability Constraint '

2.6.4.1 Context

In 2018 the National Planning Framework established Objective 37 for all planning authorities to undertake a Housing Need and Demand Assessment (HNDA). In April 2021 the Department of Housing, Local Government and Heritage released a 'Toolkit' to support the data analysis for preparation of HNDA. Tipperary County Council was one of a number of local authorities to pilot the tool before its release. At this time, the Tool was very much at development stage, and whilst feedback was provided to the Department, it was decided not to apply it to HNDA preparation. This is in line with Circular Letter Housing 14/2021 which states that Planning authorities which had already commenced their development plan reviews are not obligated[19] to integrate the findings of the HNDA Toolkit. Noting that the Plan commenced in September 2020, or before the date of the Circular.

This does not preclude the application of the Toolkit i.e. at a later stage when it is finalised, tested and when training in its use and application has been provided by the Department. The Toolkit was adapted from a comparable model used in Scotland, however, given different data sources and spatial scales, the current iteration is designed to function at county/city scale only, and does not yet address all National Planning Framework requirements. It allows for a range of pre-set scenarios to be examined, with limited customisation – where it can be justified by the planning authority.

Among other outputs, the HNDA Toolkit produces an 'Affordability Constraint' figure. The definition of the constraint is given in the *'Guidance on the Preparation of a Housing Need and Demand Assessment'* which states that,

"The affordability constraint category will only arise in certain local authorities where the levels of income required to purchase or rent the relevant threshold dwelling are both higher than the applicable social housing eligibility threshold. In such cases, some households will require an affordable solution, whether affordable purchase or cost rental."

This reflects what the estimated proportion of households will be that require a 'cost rental' and/or 'affordable purchase' option. These were later defined in more detail by the 'Housing for All' policy document released by the DHLGH in September 2021.

2.6.4.2 Identified Constraint

A preliminary evaluation of the HNDA Toolkit using the prescribed default 'core settings' for County Tipperary, highlighted 0 households between years 2020 and 2026, increasing to 6 households in 2027 and 2028, as having an affordability constraint. The

[19] It is expected that HNDA will be integrated into the development plan review process where planning authorities give notice of review of a development plan in accordance with section 11(1) of the 2000 Act, *after* the date of this Circular - Circular Letter Housing 14/2021

Toolkit therefore indicated a negligible or extremely low need for cost rental and/or affordable purchase within the County when using default values and assumptions.

As stated, the Toolkit output is highly sensitive to the data variables in use; which have not been updated since April 2021. Specifically, the sales and rental pricing as well as income data used by the toolkit will not be in sync with more contemporary data available for the County (and trace back to 2018/2019 in part). As a result, the preliminary output should be considered indicative until examined in a greater context than what is in scope for this study.

In considering more contemporary data, the default output may be subject to change.

Furthermore, the Toolkit's assessment is with reference to the entire County. As such, sub-county variability in terms of incomes and pricing is not evaluated. It is feasible that there may be a higher affordability constraint present in Tipperary's Key centres, namely, Clonmel, Nenagh and Thurles.

As stated in Section 2.6.4.1, the Council has not applied the provisions of the Toolkit to the HNDA preparation, with the HNDA as set out in the County Housing Strategy being informed by this Supplementary Analysis.

The HNDA Guidelines states that whilst the affordability constraint does refer to the need for some form of subsidised private rent, it may also be viewed as a potential indicator of demand for alternative shared equity products that are used to support home ownership. It is the finding of this analysis, that notwithstanding the HNDA Toolkit findings in terms of affordability constraint, there is evidence of an affordability constraint in Tipperary when using more up-to-date statistics and more reflective market assessments on income growth, and anticipated changes in purchase prices and rental costs.

Therefore, appropriate consideration to the reckoning of localised need for cost-rental and affordable purchase should still be practiced, with particular reference to the Key towns, in line with all relevant guidance and practices.

3 Trended Change in Size, Tenure and Type

3.1 Household Size

The average Household size nationally has increased in the most recent Census compared to prior (2011 to 2016) and in Tipperary stands at 2.7 persons per unit. Therefore, the size of households across the county are mostly 1 and 2 person households. The combination of smaller households and population increase will give rise a demand for more units in general, and a greater proportion of units of a smaller type. This finding is addressed in the County Housing Strategy.

If historic trends were to continue at their present pace, the profile of households in the County may see a steady increase in 1 and 2-person households, with corresponding fall-offs in larger households. Ultimately, pushing the county close to having a level of household occupancy where 30% of all households comprise of just a single person. This would translate into a higher demand for suitable unit sizes, namely 1 and 2-bedroom dwellings. As the size of the population is set to increase, this will place an increasing pressure on the delivery pipeline or the retrofitting of existing stock to match foreseeable demand.

Table 3.1 below suggests a compositional breakdown of what this may look like per year:

Table 3.1: Forecasted changes to household sizes in Tipperary 2022-2028

Forecasted Composition	2022	2023	2024	2025	2026	2027	2028
1 person HH	27.1%	27.4%	27.6%	27.8%	28.0%	28.2%	28.4%
2 person HH	29.6%	29.7%	29.9%	30.1%	30.3%	30.5%	30.7%
3 person HH	16.5%	16.5%	16.4%	16.4%	16.4%	16.3%	16.3%
4 person HH	15.5%	15.4%	15.3%	15.3%	15.2%	15.2%	15.1%
5+ person HH	11.3%	11.0%	10.7%	10.4%	10.1%	9.8%	9.5%
Total Households	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Forecasted Composition	2022	2023	2024	2025	2026	2027	2028
1 person HH	67	270	272	274	276	278	210
2 person HH	73	293	295	297	299	301	227
3 person HH	41	163	162	162	161	161	120
4 person HH	38	152	151	151	150	149	112
5+ person HH	28	109	106	103	100	97	71
Total Households	**247**	**986**	**986**	**986**	**986**	**986**	**740**

Assuming each 1-person household sought a 1-bed dwelling, that could see demand spike to as many as ~270 such units per annum. The likelihood however is that a mix of units will be desired by such households, reflecting both their personal preferences, their income profiles, their individual work or living needs and also the capacity of the market itself to deliver at affordable cost.

It is not possible to precisely infer the unit type relationship without assuming highly speculative and subjective delivery of existing pipeline, future trends in construction, individual household affordability profiles to target market pricing, preferences and household sizes. However, indicatively, it can be surmised that the trended increase in 1 and 2 person households specifically will necessitate the delivery of 1-2 bed units, with some overspill into 3 for households of higher means, or if preferences are to live outside of towns where the capacity for larger unit sizes may be more achievable.

Figure 3-1 provides an illustrative overview of the anticipated change in the proportion each household size may undertake over the course of the Plan period (building on intercensal trends since 2002, from 2016 and up to 2028).

It can be seen that the relative size of both 1 and 2-person households may increase from approx. 56.7% of all households in 2022, to 59.1% by 2028. This 2.4% shift in overall composition of occupancy may appear small, however, if scaled against the anticipated number of households, it could translate into significant added pressure on the delivery side of the market, as units capable of accommodating just 1 or 2 people are increasingly needed (increasing pressure elsewhere).

Having consideration to household composition changes as set out in Figure 3 – 1 annual housing delivery in the county should consider changing composition and should include a range of house types to accommodate changing trends. Annual monitoring of housing type delivery would be an important factor in managing hosing type delivery with demand.

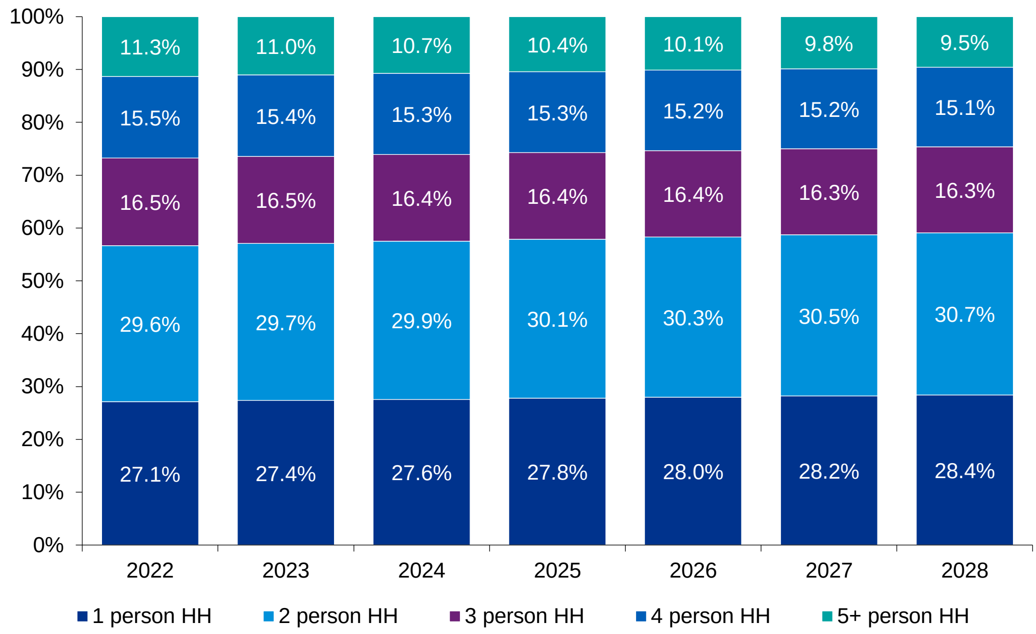

Figure 3-1: Forecast of Household Composition in Tipperary 2022-2028

3.2 Household Tenure

Tenure is influenced by several factors, and intercensal analysis would indicate a steady increased in the private rental sector across the County. While this has diminished owner-occupation, that is consistent with broader trends regionally and nationally. Social housing has also increased since provision in 2002, more than doubling.

If trends were to continue in this regard, the potential for gradual increases in the number of renting households will continue. Table 3.2 suggests a compositional breakdown of what this may look like per year:

Table 3.2: Forecasted changes in tenure in Tipperary 2022-2028

Forecasted Tenure	2022	2023	2024	2025	2026	2027	2028
Social Housing	13.1%	13.4%	13.7%	13.9%	14.2%	14.5%	14.8%
Rented (Privately)	16.3%	16.7%	17.1%	17.5%	17.9%	18.3%	18.7%
Owner Occupied (All)	70.6%	69.9%	69.2%	68.6%	67.9%	67.2%	66.6%
Total Households	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Forecasted Tenure	2022	2023	2024	2025	2026	2027	2028
Social Housing	32	132	135	138	140	143	109
Rented (Privately)	40	165	169	172	176	180	138
Owner Occupied (All)	174	689	683	676	669	663	493
Total Households	**247**	**986**	**986**	**986**	**986**	**986**	**740**

The application of a simple intercensal trend in this regard will not accurately project the real-term changes, as it does not account for social, financial, construction or preferential patterns or likelihoods. However, as an indicator on the potential trajectory of each of those considerations, as have applied historically for households across the County, the potential impact into the future (particularly in the short term) will likely take some view from such a forecast.

As a result, this indicates an increase in private rental's share of total tenure in the County, from an estimated 16.3% in 2022 to 18.7% in 2028. This increase will come at the expense of Owner-Occupier tenure (falling from just over an estimated 70% in 2022 to 66.6% in 2028); a consequence of continued shifts in the market due to affordability and delivery of housing stock (if unresolved). This is visually illustrated in Figure 3-2:

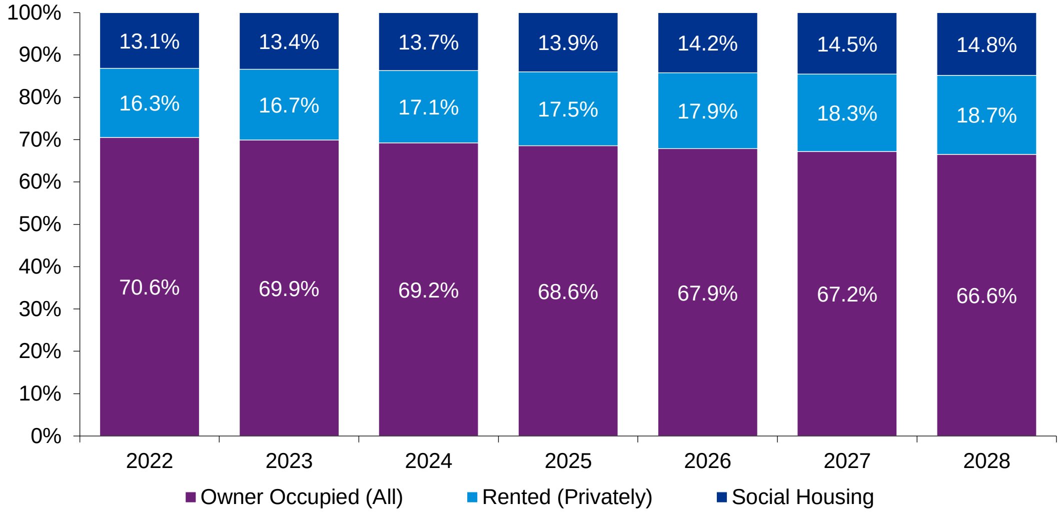

Figure 3-2: Forecasted changes in tenure in Tipperary 2022-2028

3.3 Housing Type

In 2010/11 there was a sharp drop in commercial housing construction, particularly in towns and villages as a result of the recession. Since then there has been a continuing pattern of low multi-unit housing delivery (noting that housing delivery trends started to increase in 2019). There has been very low delivery of new houses in urban areas in general, with new house delivery mostly concentrated in one-off private house construction. In addition, there has been little house type choice, particularly in the delivery of smaller units. The County Housing Strategy in Section 4 Housing Stock and Housing Need explores this in detail.

The County Housing Strategy has emphasised the need for the consolidation of growth in urban areas in line with the provisions of the National Planning Framework. The focus on compact growth will support housing delivery in towns and villages – particularly in the delivery of 1 and 2-bedroom units as remarked upon in section 3.1 – a specific gap in the market, which aligns with falling household sizes and delayed household formation.

With the added move towards 1 and 2-person household sizes, the market will respond to a greater degree of need for apartment or multi-occupant house-based unit delivery. This will lead to a likely greater proportion of units in the Flat/Apartment share of total unit type over time. The delivery of appropriate unit-type mixtures will closely rely upon the Planning Authorities' continued ability to monitor forthcoming housing supply and its completion status. A much closer, perhaps annual review of the specification of units proposed and delivered will allow for more timely consideration and engagement on how identified needs can best be catered to.

4 Conclusion

This analysis was tasked with examining a range of housing statistics and modelling to determine, in a more granular fashion, what the affordability dynamics at play across the Plan period are likely to be.

In other words, to assess the degree to which anticipated households forming may encounter affordability challenges with respect to projected increases in accommodation costs (relatively to changes in income). By comparing and contrasting the resulting findings, the principal features to emerge from the analysis presented in this report are as follows:

— A total of 5,917 households are expected to be formed in Tipperary over the Plan period, equating to full year average of target of 986 housing units (247 in Q4 2022 and 740 in Q3 2028);

— Over the course of the Plan period, it is estimated that of 5,917 anticipated households to form, 1,225 or approximately 209 per full-year (of 986) will not be eligible to qualify for a mortgage for the cheapest house under the Central Bank Loan-to-Income rule;

— That these 209 households are in the 1st and 2nd income deciles (the lower end of the income spectrum in Tipperary), and have a net annual income of €11,905 and €15,888 respectively, or €992 and €1,324 monthly – in year 2022;

— That these same 209 households will encounter affordability issues renting sustainably in the private rental market (spending no higher than 35% of their disposable income on accommodation);

— That 777 households of the 986 forming each typical full-year across the Plan period, will not encounter a mortgage qualification or an affordability challenge in meeting their accommodation needs – based on income, price and supply assumptions;

— That Housing Assistance Payment supports, at current rates, would continue to provide essential support to households unable to afford accommodation in the private rental sector, for most households – however, those with more than 2 children face continued affordability challenges. Constraints on supply overall may work against Housing Assistance Payment's support;

— That a full-year average of 21.2% of new household formations will therefore experience affordability challenges (as defined in Section 93(1) of the Act) in attempting to provide for their own housing needs;

— That this 21.2% of households comprises approx. 10.5% social need and 10.7% affordable need, in full-years, approx. 104 and 105 households respectively;

- That house prices are anticipated to grow between 10-12% in 2021 and 2022.
- That the composition of the housing stock at market is changing, with the number of homes brought to market at formerly 'cheaper' price points is diminishing quickly.
- That rental prices are anticipated to grow between 6-8% in 2021 and 2022.
- If the impact of the Central Bank Loan-to-Income rule was not to be accounted for, it is estimated that the observable social and affordable requirement would drop to 106 households per full-year or approximately 10.5%;
- That there are strong intercensal trends in declining household sizes, supporting an increase in demand for 1 and 2-person homes / correlating with 1 and 2-bed units (increasing from ~54% in 2016 to ~59% by 2028). This could translate into the region of ~570 units per annum to cater for this type of household; and
- That rental tenure will continue to increase at the expense of owner-occupancy (increasing from approx. 14% in 2016 to 18.7% by 2028).

The observable demand for social and affordable units across the period (1,225 total or 209/21.2% per annum in most years[20]) assumes delivery of at least the annual anticipated number of households being brought to market. This analysis assumes a continuation of 2020's market composition in that regard, i.e. the transactional distribution of houses by their sales price. This composition informs how many dwellings are anticipated to be brought to market at a given price band. In assessing owner-occupier affordability, Section 2.5 also looks at the anticipated supply of dwellings for that affordable mortgage amount. Where there is anticipated under-supply, a household would need to compete outside its optimal affordability bracket.

In short, this could present as a household facing an insufficient number of affordable homes at their price point. It could also cause a downward-pressure effect on households seeking to compete for cheaper units too. Conversely, should ample stock materialise, house prices may be moderated such that affordability improves overall; bolstering the affordable capacity of households previously below such a threshold. Therefore, the composition of the market is an important driver which should be considered through ongoing monitoring.

It may be prudent therefore to explore a higher number of affordable homes to ensure sufficient elasticity in requirements that may emerge. Much closer monitoring of the number of units delivered each year and the percentage of these which meet affordable criteria would help inform related planning policy.

Local affordability is a good example of where variation within the County may present a different picture. In general terms, house prices will be higher in urban areas, and incomes tend to be lower. However, this does vary and localised assessments may offer further insight into specific affordability challenges which may emerge. In the first instance, an allocation of anticipated households to form in such locations would need

[20] 22/9% for Q4 2022 and 157/21.2% in 2028 to Q3

to be evaluated alongside localised pricing, rents and potentially further localisation of incomes (specifically between urban and rural contexts).

The county-level assessment undertaken by this analysis provides an overview of affordability as it would generally apply to an average household falling into any of the ten-assessed income deciles. As such, it can be viewed as taking into broad account the more favourable areas of affordability, with those less favourable, and in so doing, sets out a balanced view. That said, it naturally accounts for rural as much as for urban, and this is where many differences can be found. Therefore, the findings should largely guide county-level considerations, however, it can provide an indicator as to the middle of the road picture with respect to settlement level appraisal – however, it should be contextualised with localised data and relevant factors.

The identified number of households facing a social or affordable challenge can be factored in as an additive amount to the existing social housing waiting list. The identified needs are the product of modelling. There is an inherent reliance therefore upon the variables assessed progressing as set out, and where this does not align precisely, (e.g. earlier or delayed alignment), adjustments should be considered accordingly. As a result, it may be best to consider the specific figures, i.e. the 209 households identified for full-years within the period, or the 104 with a social requirement, as approximate indicators with a +/- tolerance that can be held under review.

The results of the analysis indicate that there are certain price points which all households forming can sustainably afford to repay, if eligible for a mortgage.

Aiming to deliver housing around these price points (affordable mortgage repayment amounts translated into total house prices; accounting for average periods, interest rates, etc.), would provide an effective means of addressing the anticipated requirements faced by households in the 1st and 2nd income deciles.

For the remainder of the anticipated households, who can more effectively compete in the private market (both for purchase and rent), sufficient supply at the effective price bands will be important to mitigate too much downward pressure or competition for cheaper units – for households who may have more limited options. This is equally true for the private rental market, where there is likely to be an increase in demand for 1 and 2-bedroom units, contrary to the majority of existing tenancies occupying 3 and 4+ bedroom units. A review of the composition of stock transacting on the market each year will be an important indicator in this regard – as this assessment has not factored in change here – due to significant variability being likely.

The question of whether there is an affordability gap in the county has been discussed in section 2.6.3, but suffice it to say that there is, depending on which parameters and households are in view. Whilst broadly speaking, assuming incomes, price and supply progress as anticipated by this study, the majority of households would be able to both qualify for a mortgage under the Central Bank rules, and also adequately compete in the market for homes that suit their optimal repayment capacity, this won't be the case for households in the 1st and 2nd deciles. Furthermore, households up to the 4th decile (42.7% of the market) will be more vulnerable to income, price, and supply changes. Potentially leaving them in unaffordable situations, or without sufficient supply to address their needs. Similarly, favourable changes will help bolster their status. That said, this study assessing a household by its optimal pricing on an affordable basis over the lifetime of repaying a mortgage. While a household may be able to afford this, it may not adequately be able to compete for a house for sale at 'the average price', should that price exceed their optimal price. In this instance, the households effectively have an affordability issue requiring a higher deposit or to spend greater than 35% net disposable income to service the mortgage ("unaffordable" under the legislation).

As a result, there is an affordability gap particularly observable for 1st and 2nd decile households, when compared to the cheapest houses, but certainly the average pricing. Affordable options aimed at these groups would help alleviate the most acute cases, but additional consideration of further affordable homes (for instance) may provide significant support to households in the 3rd and 4th deciles who are otherwise vulnerable.

A preliminary assessment of the DHLGH HNDA Toolkit would indicate a low or negligible 'affordability constraint' across the county. This is based on April 2021 data (and older), and may not adequately reflect the price and market fluidity at sub-county too well in its current work-in-progress iteration. Nevertheless, it would indicate that cost rental and affordable purchase may not be as pressing at county level, though further assessment should be undertaken at settlement level when possible, as more acute needs are likely to present in more localised settings. Careful monitoring of emergent needs will allow for a timely response; particularly in facilitating the accessing of helpful support schemes.

Furthermore, forthcoming unit sizes and types will need to adjust to reflect both a mix of design and space for 1 and 2 person households, which will increase to almost 60% of the entire number of households in the County by 2028. Apartments alone may not offer the best answer to this, but rather a balanced mix of different unit types that can support changing tenure arrangements and also lifecycle of occupants (there is an existing high proportion of 1st and 2nd decile households aged over 65 years who may benefit from downsizing or smarter designed homes for example).

The delivery of appropriate unit-type mixtures will closely rely upon the Planning Authorities' continued ability to monitor forthcoming housing supply and its completion status. A much closer, perhaps annual review of the specification of units proposed and delivered will allow for more timely consideration and engagement on how identified needs can best be catered to.

Consideration to address the projected challenges in affordability (such as qualification for mortgages, sustainable repayment amounts and adequate supply across price points) should be made so as to give effect to timely interventions for newly forming households over the Plan period.

While this analysis assumes the eventual stabilisation of macro-economics (as effects incomes), house and rental pricing (as affects affordability), and fixed house price band compositions (as affects supply dynamics), the situation may take longer to resolve if the implementation of national policy, housing delivery, available labour and finance in particular are stunted. Nevertheless, this proactive approach in examining affordability against foreseeable policy and economic amelioration will provide a helpful resource for future monitoring and adjustment in that regard.

Appendices

Appendices are lettered A1, A2, etc.

A.1 Annuity Formula

To assess affordability under Section 93(1) of the Planning and Development Act, 2000 (as amended), the relationship between a household's income and the cost of repaying a mortgage at a 35% of disposable income is to be assessed. This can be achieved by comparing relevant variables using an annuity formula.

The annuity formula compares monthly after-tax income with the monthly mortgage servicing cost associated with a particular house:

$$PV = Pt \left[\frac{1 - (1+i)^{-n}}{i} \right]$$

where,

PV = total loan size

(no greater than 90% of Market Value - Section 93(1))

Pt = monthly repayment amount

i = monthly interest rate

n = number of months over which the loan is to be paid

A.2 Macro-economic forecasting – primary sources

The following documents have been particularly utilised in our framing of a scenario:

— 2021 Outlook paper published by Davy in January 2021[21];

— Q3 2021 Quarterly Bulletin published by the Central Bank of Ireland in July 2021[22];

— Q2 2021 Economic Outlook published by IBEC in Q2 of 2021[23];

— Q2 2021 Quarterly Economic Commentary published by the ESRI in June 2021[24];

— Winter 2021 Economic Forecast published by the European Union in February 2021[25]; and

— OECD Economic Outlook for Ireland Q1 2021[26]

— 2021 Summer Economic Statement by Department of Finance, Ireland[27]

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21 https://www.davy.ie/market-and-insights/insights/marketwatch/2021/outlook-2021/looking-past-the-pandemic.html
22 https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/qb-archive/2021/quarterly-bulletin---q3-2021.pdf?sfvrsn=12
23 https://www.ibec.ie/influencing-for-business/economy-and-tax/quarterly-economic-outlook-q2-2021#:~:text=The%20economy%20is%20set%20to,returning%20to%20most%20domestic%20sectors.
24 https://www.esri.ie/publications/quarterly-economic-commentary-summer-2021
25 https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-performance-country/ireland/economic-forecast-ireland_en
26 https://www.oecd.org/economic-outlook/
27 https://www.gov.ie/en/publication/4d84e-summer-economic-statement-2021/

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