Dunedin City Council

Housing Framework Predictions

The Housing We'd Choose

Research Report | December 2019

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Key Messages

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This report, and the accompanying model, gives policy makers a key insight into the intended housing choices of Dunedin households in the immediate and near future. This work provides guidance on the levers required to effectively manage growth. The key insights from the report are:

The research has highlighted areas where demand may differ from supply; it has highlighted some differences between where people choose to live in an ideal situation and where they select once financial constraints are applied.

Dunedin is experiencing a period of challenging growth and change. Historically the city has been on a low growth path, but in recent years the nature of this growth has changed. This has been driven by a drift South (caused by higher house prices in the North Island) and is reflected in a growing number of working age families. As a result, Dunedin has been called 'the hottest town in the South' and is experiencing a mini construction boom.

Along with the incoming migration, the nature of housing demand in the city is changing, with a trend towards smaller homes and greater appetite for attached dwellings (e.g. apartments, terrace houses and duplexes). However, demand will remain for standalone houses, with a strong sentiment in the research for the desire to keep the 'Kiwi dream' and have a house with space outside. But demand for houses with more than four bedrooms is forecast to reduce dramatically. This is principally driven by the changing age profile of city residents.

Inner city demand does not feature highly in the research with the inner suburbs having the highest share of demand. However, respondents reported wanting to live near where they work or study. Future planning for housing should consider this and consider housing opportunities around future planned commercial development and infill around areas of redevelopment.

Introduction and Scope

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This report outlines the approach and scope of work, then describes the outputs and conclusions that can be drawn from the model.

2.1 Scope and purpose

The key purpose of this research is to provide Dunedin City with an ability to reliably estimate current levels of demand for different dwelling typologies and locations. Dunedin needs to be able to forecast future demand for different housing typologies and locations based on scenarios of population and demographic projections. As outlined in the RFP, the work is expected to support;

- Responses to appeals on the Second Generation District Plan (2GP) seeking rezoning of land to residential or rural residential.
- A broader analysis of future housing demand that is being done to meet the DCC's monitoring and capacity assessment obligations under the National Policy Statement on Urban Development Capacity (NPS-UDC).

In order to achieve those objectives, we have built a housing choice model that integrates the findings from the primary research with population structures and projections such that the volume and location of future growth can be predicted. It is important to note that the model assumes locations and typologies captured and explored are realistic options and are not constrained by other factors such as planning regulations and price change.

The research and modelling provide insight into the trade-offs that households are most likely to make when faced with budget constraint. The prediction model is flexible enough to ensure that as the city grows, and high amenity areas become 'full' that the price/location/typology trade-offs are appropriately managed. The model in itself does not account for capacity in any given location, however the flexibility is such that if Council deems an area has exhausted its capacity to accommodate growth, that the next best locations have been identified.

The model is developed in excel and will form part of the delivery package to Council.

Approach and Data Sources

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This section outlines the approach adopted for the modelling as well as outlining the data relied upon to develop the Housing Framework Model for Dunedin. In summary, results from the survey for each identifiable group are extrapolated to the population to provide snapshots of demand for different housing.

3.1 Method

3.1.1 Data Collection

Research First surveyed a representative sample of 770 respondents from Dunedin between 9 September and 23 October 2019 and quotas were set to ensure age, gender and geographic coverage.

This research project was based on a 2011 Australian study conducted by the Grattan Institute, entitled The Housing We'd Choose. Data was collected through a two-staged mixed method design. This involved a short telephone pre-recruitment of the sample population, who were then invited to complete a longer online survey. This ensured that the respondents participating were randomly selected and representative of the population.

Those who agreed to participate were sent an email containing a personal link to the online survey that they then could complete at their own time. This survey covered what respondents look for when choosing a place to live and asked for feedback on a range of housing options and designs. It was conducted online in order to give respondents the time they needed to make decisions, and to properly conduct the choice experiment, including accounting for financial limitations and presenting visuals, as exampled below.

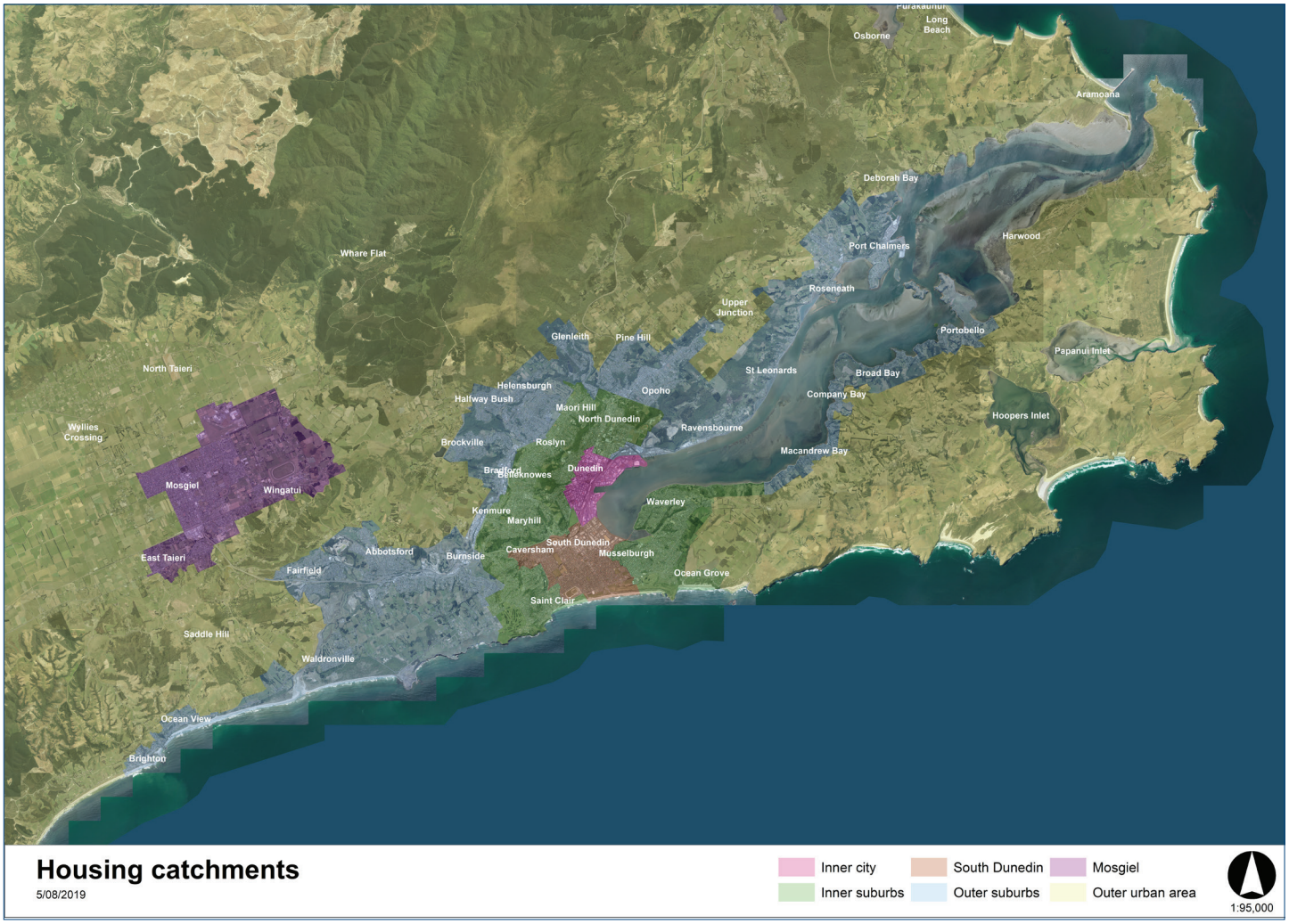
Figure 3.1: Example Choice Set, Housing We'd Choose Survey, 2019

3.1.2 Demographics and Analysis

With an achieved sample size of 770, the results have a margin of error of +/-3.5% at a 95% confidence level. The sample size also allows the sample to be split into multiple subsets that still offer evidentially compelling insights into housing preferences (such as wards, or suburbs).

The City has been divided into a set of catchments that are made up of suburbs with common locational characteristics (Figure 3.2). This effectively divided the city into broad areas based on proximity to the CBD.

Figure 3.2: Survey Catchments, Housing We'd Choose Survey, 2019



The Inner City is surrounded by the Inner Suburbs – from which South Dunedin has been identified separately. The remainder of the urban area is termed the Outer Suburbs with Mosgiel identified separately. The remainder of Dunedin City Council TLA is coded as Other Areas.

These 6 areas form the locational basis for analysis and reporting. Therefore, while respondents have been asked where they would choose to reside, and they were able to respond at the individual suburb level, these have been aggregated up to the 6 broad areas for analysis and reporting purposes. This ensures the results remain robust.

Approximately one-third of respondents were drawn from both the Inner Suburbs and the Outer Suburbs with 12% drawn from Mosgiel. 8% was drawn from both South Dunedin and the Outer Area and 4% from the Inner City.

Figure 3.3: Housing We'd Choose Survey Respondents by Location, Dunedin City 2019

Home location	Survey Count	Share
Inner city	29	4%
Inner suburbs	245	32%
Outer suburbs	276	36%
South Dunedin	59	8%
Outer area	65	8%
Mosgiel	96	12%
Total	**770**	**100%**

Source: Housing We'd Choose Dunedin, Research First & M.E

The data has also been weighted across household income and household types. The survey was weighted slightly towards households earning less than $100,000 (64% of the total) and heavily towards households made up of parents with children (46%) as these are the principal household types in Dunedin. Single person households accounted for 21% of respondents followed by couples with no children at 16% and multi person households also accounting for 16%.

Figure 3.4: Housing We'd Choose Survey Respondents by Household Income, Dunedin City 2019

Household Income	Respondents	Share
Less than $30,000	110	14%
$30,000 - $50,000	130	17%
$50,000 - $70,000	106	14%
$70,000 - $100,000	146	19%
$100,000 - $130,000	122	16%
$130,000 or more	156	20%
Total	**770**	**100%**

Source: Housing We'd Choose Dunedin, Research First & M.E

Figure 3.5: Housing We'd Choose Survey Respondents by Household Type, Dunedin City 2019

Household Type	Respondents	Share
Couple without children (aged under 65 years old)	86	11%
Couple without children (aged 65 years and over)	42	5%
Parent(s) or caregiver(s) with children	351	46%
One person households (aged 65 years and over)	73	9%
Other multi-person household (e.g., flatting/ student flat etc)	123	16%
One person households (aged under 65 years old)	94	12%
Other (please specify)	1	0%
Total	**770**	**100%**

Source: Housing We'd Choose Dunedin, Research First & M.E

By capturing responses with this level of demographic information allows results to be carefully matched against existing and future populations within Dunedin to provide insight into housing needs – both in terms of structure and location.

Housing Framework Model

4

In this section, results from Research First's Housing We'd Choose: Dunedin survey are analysed. The modelling framework is flexible in that it is able to be applied to a range of household projection scenarios to provide alternative views of future dwelling demands.

4.1 Approach

There is a difference between the categories of households from which data has been collected in the survey and the categories contained within the projections (Figure 4.1). This necessitated expanding the DCC projection series to match Market Economics 210 Household Market Model code frame (see Appendix 1 for details). This framework is based on the 2013 Census and allows Dunedin's household structure to be split in a fine grained way by income, household type and the age of the respondent.

Figure 4.1: Survey and Projection Household Classification

Survey Categories	DCC Projections
One person households (aged under 65 years old)	Couple only
One person households (aged 65 years and over)	Flatting
Couple without children (aged under 65 years old)	Couple with child(ren)
Couple without children (aged 65 years and over)	One parent withchild(ren)
Parent(s) or caregiver(s) with children	One-person household
Other multi-person household (e.g., flatting/ student flat etc)	
Other (please specify)	
Total Sample	**Total**

Once the structure was applied to the projections, it was also applied to the survey. This was a simpler task as the survey had been designed to match with the Household Market Model. It is worth noting that structural changes in Dunedin's households will be evident in the Census 2018 data which is not yet available at this level of detail. It is a relatively simple task to apply updated information, once it becomes available. At this stage the 2013 structure is the most up to date information available.

With the survey responses and household projections now on a common base, it is a relatively simple task to apply the proportions from the survey to the projections to obtain a first cut at future housing demands.

4.2 The Housing Chosen

Survey respondents were asked a series of questions about their current housing situation (location, the type of dwelling, ownership and how long they had been there). They were also asked questions about the type of features they looked for in a dwelling, and the level of importance they placed on these features as part of the purchasing decision. These features included locational features about the area plus accessibility to work, shops, schools etc. In addition, they were asked about the local environment and about dwelling features (orientation, title, aspect, section size, presence of a balcony etc).

Respondents were asked about their financial situation in terms of household income, debts and assets. Then, based on this and their living arrangements, the survey calculated the amount of money they would be able to spend on a dwelling[1].

Finally, by way of set up, respondents were asked where they worked. Then based on their knowledge of Dunedin suburbs and their own financial constraints and prices, they were asked to select a first and second choice in terms of where they would most like to live.

The survey then presented each respondent with a series of dwelling options that matched their affordability profile. The dwellings also accounted for their living situation and other preferences. However, if a respondent's desires did not match their budget, the survey provided options across the city that did match their budget. At each stage the respondent was shown 4 options and they were to select their preference. At the end of 4 rounds, respondents were shown their 4 selected options in order to make a final selection.

1 These calculations are based on a standard set of bank mortgage calculators. While the estimates did not take into account gifts and other government based incentives to purchase a dwelling, the model provides a robust base estimate of affordability.

4.2.1 Dwelling Demand by Location

The Dunedin Housing We'd Choose survey (along with other Housing We'd Choose surveys conducted in New Zealand and Australia) point to work location as being a key driver of dwelling locational choice. In total the survey is made up of 76% employed people (working within Dunedin at a business premise, or from home or working outside of Dunedin), 12% were retirees, 8% were currently not working and 4% were students (Figure 4.2).

While Students were heavily concentrated in the Inner City the Unemployed and Retirees' were more evenly spread across the city. In terms of total survey respondents, 4% were from the Inner City, 32% Inner Suburbs and 36% from the Outer Suburbs. Mosgiel accounted for 12% of respondents with 8% from both South Dunedin and the Outer Areas of Dunedin City (Figure 4.2).

Figure 4.2: Respondent Work Status by Home Location, Housing We'd Choose, 2019

	Respondent Work Status							
Home Location	Total Working	I am a student	I am not currently working	I am retired	I work from home	More than one part of Dunedin	I work outside Dunedin area	Total Survey
Inner city	51.7%	10.3%	6.9%	13.8%	6.9%	10.3%	0.0%	3.8%
Inner suburbs	61.6%	4.1%	9.0%	11.0%	7.8%	4.9%	1.6%	31.8%
Outer suburbs	62.7%	5.1%	7.6%	11.6%	4.7%	5.4%	2.9%	35.8%
South Dunedin	64.4%	1.7%	6.8%	16.9%	3.4%	5.1%	1.7%	7.7%
Mosgiel	63.5%	2.1%	8.3%	17.7%	0.0%	6.3%	2.1%	12.5%
Outer area	60.0%	1.5%	7.7%	7.7%	6.2%	10.8%	6.2%	8.4%
Total	**61.9%**	**4.0%**	**8.1%**	**12.3%**	**5.2%**	**6.0%**	**2.5%**	**100.0%**

Source: Housing We'd Choose Dunedin, Research First & M.E

The survey indicated that there is a strong correlation between home location and work location. With the exception of the Outer Suburbs, each broad catchment accommodates over 33% of local residents workplaces (as viewed along the diagonal in Figure 4.3). Outer Suburbs by their very nature are dormitory suburbs where residents commute from in towards more central employment nodes. The strongest shares occur in Mosgiel and in the Outer Areas. These are significantly removed from central Dunedin and have a high degree of employment self-sufficiency.

Note also that the survey has captured high percentages of employed people. With over 60% of respondents in each area (other than the Inner City) employed (Figure 4.3).

Figure 4.3: Respondent Work Location by Home Location, Housing We'd Choose, 2019

	Work Location						
Home Location	Inner city	Inner suburbs	Outer suburbs	South Dunedin	Mosgiel	Outer area	Total Working
Inner city	33.3%	0.0%	46.7%	13.3%	6.7%	0.0%	51.7%
Inner suburbs	45.7%	35.1%	7.9%	7.9%	2.0%	1.3%	61.6%
Outer suburbs	39.3%	21.4%	24.9%	7.5%	6.4%	0.6%	62.7%
South Dunedin	36.8%	21.1%	0.0%	36.8%	2.6%	2.6%	64.4%
Mosgiel	32.8%	4.9%	4.9%	9.8%	47.5%	0.0%	63.5%
Outer area	23.1%	12.8%	5.1%	2.6%	7.7%	48.7%	60.0%
Total	**38.8%**	**22.2%**	**14.0%**	**10.1%**	**10.1%**	**4.8%**	**61.9%**

Source: Housing We'd Choose Dunedin, Research First & M.E

4.2.2 Dwellings by typology and Location

The Choice experiment component of the survey asked respondents to choose up to 4 location and housing types when presented with 4 sets of options that both matched their family size requirements and budget. In the final round, respondents were re-presented with their 4 previous selected dwelling options in order to make a final decision that reflected their most preferred housing option given their financial position and their household characteristics.

Because these decisions are tied to household demographics, it is possible to translate survey responses into ratios and proportions that can be applied across the wider population and population growth scenarios.

4.2.3 Influence of Age on Dwelling Choice

Age and life stage play a role in determining dwelling choice. The presence of children in the home and home-owners mobility has a significant bearing on housing choice. These are indicated by age. For the purposes of this report we have assessed the age-related dwelling choices in two ways. First, the survey asked respondents to answer in an unconstrained manner what type of dwellings they would prefer and what location they would like to live in – based on their understanding of price and affordability (prior to the choice experiment). This paints a picture of the type and nature of housing by location respondents would prefer (Figure 4.4).

Figure 4.4: Unconstrained Dwelling Location Choice by Age, Dunedin City Total, 2019

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	35%	31%	6%	20%	2%	6%	100%
25 - 29	18%	27%	6%	36%	6%	6%	100%
30 - 34	6%	34%	3%	29%	11%	17%	100%
35 - 39	7%	21%	3%	48%	14%	7%	100%
40 - 44	7%	30%	4%	37%	7%	13%	100%
45 - 49	4%	42%	5%	28%	10%	10%	100%
50 - 54	8%	45%	3%	26%	7%	12%	100%
55 - 59	9%	42%	5%	24%	9%	12%	100%
60 - 64	5%	28%	6%	27%	17%	17%	100%
65 - 69	7%	29%	11%	29%	11%	13%	100%
70 - 74	5%	36%	7%	19%	14%	19%	100%
75+	14%	22%	8%	27%	5%	24%	100%
Total	9%	34%	5%	28%	10%	13%	100%

Source: Housing We'd Choose Dunedin, Research First & M.E

Figure 4.4 indicates that 35% of 18-24 year olds prefer to live in the inner city and a further 31% in the Inner Suburbs with only 2% choosing to live in the Outer Urban Area – if they had a choice. This contrasts with 45-49 year olds, where only 4% would choose an Inner City residence but 42% would choose an Inner Suburb address.

In addition, respondents were asked what their second choice of location would be. Therefore, we are able to understand how a market adapts to constraints across different age groups. For example, we are able to report that 70% of under 35 year old respondents who choose the Inner City as their first choice, choose the Inner Suburbs as their second choice. Or that only 7% of the respondents in the 35 – 65 age group that selected the Outer suburbs as their first choice, selected the Inner City as their second.

Of those that chose to live in the Inner City, their second choice was strongly weighted towards being close to the centre with 67% selecting the Inner Suburbs as their second choice (Figure 4.5). This was the highest single concentration of locational second choices across the 6 areas, showing a high dependence or desire from those who would choose the inner City to be located centrally.

Figure 4.5: Respondents Second Choice Locations of Inner City First Choice

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	0%	79%	16%	0%	0%	5%	100%
25 - 29	0%	67%	17%	17%	0%	0%	100%
30 - 34	0%	0%	50%	50%	0%	0%	100%
35 - 39	0%	100%	0%	0%	0%	0%	100%
40 - 44	0%	20%	40%	40%	0%	0%	100%
45 - 49	0%	75%	25%	0%	0%	0%	100%
50 - 54	0%	25%	0%	50%	0%	25%	100%
55 - 59	0%	100%	0%	0%	0%	0%	100%
60 - 64	0%	80%	0%	20%	0%	0%	100%
65 - 69	0%	67%	33%	0%	0%	0%	100%
70 - 74	0%	50%	50%	0%	0%	0%	100%
75+	0%	75%	0%	25%	0%	0%	100%
Total	0%	67%	14%	15%	0%	4%	100%

Source: Housing We'd Choose Dunedin, Research First & M.E

Second Choice Tables are Included in the appendices to this report.

4.3 Constrained vs Unconstrained Choice

There is a difference between where respondents would like to live in an ideal situation and their selections taking into account their financial constraints (Figure 4.6).

Figure 4.6: Unconstrained and Constrained Locational Choice (%), Dunedin 2019

Locational Choice	Unconstrained	Constrained
Inner city	6.0%	9.5%
Inner suburbs	34.9%	34.3%
Outer suburbs	32.2%	27.9%
South Dunedin	3.4%	5.5%
Outer area	8.2%	9.6%
Mosgiel	15.3%	13.2%
Total	**100.0%**	**100.0%**

Source: Housing We'd Choose Dunedin, Research First & M.E

Prior to imposing financial constraints on respondents approximately 6% opted to live in the Inner City as their first choice. However, given the financial realities of income, prices and assets, this rose to 9.5% in the constrained choice modelling.

The situation is reversed with respect to the Outer Suburbs. Over 32% of respondents opted to live in the Outer Suburbs as their first choice. However, the financial realities of house prices and incomes meant that once the choice experiment was run, this dropped to 28%. This implies that living in a more traditional sub-urban setting is important for a large portion of Dunedin residents. The same is true with respect to Mosgiel. A total of 15% of respondents selected Mosgiel as their first choice for residential location. However, the realities of prices, incomes and dwelling stock availability saw this drop to 13% following the Choice Experiment.

Finally, the less desirable areas of South Dunedin and the Outer Areas of Dunedin (selected by 3.4% and 8.2% of respondents respectively) ended up with 5.5% and 9.6% of dwellings once the choice experiment was run.

Conclusions

5

The Housing We'd Choose Research has gathered a significant amount of information about the housing preferences and locational choices of Dunedin residents. It has provided insights into the trade-offs between location, size and dwelling typology Dunedin residents are likely to make when faced with financial constraints in their locational decision making.

The research findings, when applied to Dunedin's anticipated household and population growth have highlighted some areas where demand may differ from supply. It has highlighted some differences between where people would choose to live in an ideal situation and where they select once financial constraints are applied.

A key component of this project has been to develop a model that will allow Dunedin City Council to run alternative growth futures that draw on the research findings to generate alternative views of future demand by type and location.

The "Housing Framework Model" spreadsheet that accompanies this report allows Council to adjust total population and/or household demand for the city as a whole (or locally) and assess future dwelling typology shifts.

The findings from this research provide insight into the demand characteristics of Dunedin's household market. In order to ensure that sufficient capacity is provided through Dunedin's Second Generation Planning documents, it will be necessary to assess Dunedin's Capacity to accommodate dwelling demand by type and location. The combination of both demand and capacity to meet that demand is important for Dunedin City in order to meet their obligations under the National Policy Statement for Urban Development Capacity (NPS – UDC) and the upcoming National Policy Statement for Urban Development (NPS-UD), that is set to replace it.

These national statements require large and high growth councils to assess demand and capacity every three years. The Housing We'd Choose research allows Dunedin City to ensure that the demand assessment captures different typologies and locations and that if the key drivers of demand change, that the assessment is flexible enough to capture the implications of that change.

Appendix 1

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M.E Household Market Model 210 Household Type Code frame, Dunedin (Census 2013)

Household Type	Age of Respondent	Household Income	Households
One Person	15-29	< $30K	496
One Person	15-29	$30-50K	215
One Person	15-29	$50-70K	95
One Person	15-29	$70-100K	30
One Person	15-29	$100K +	7
One Person	30-39	< $30K	329
One Person	30-39	$30-50K	271
One Person	30-39	$50-70K	230
One Person	30-39	$70-100K	100
One Person	30-39	$100K +	35
One Person	40-49	< $30K	611
One Person	40-49	$30-50K	426
One Person	40-49	$50-70K	299
One Person	40-49	$70-100K	185
One Person	40-49	$100K +	66
One Person	50-64	< $30K	1,776
One Person	50-64	$30-50K	953
One Person	50-64	$50-70K	552
One Person	50-64	$70-100K	268
One Person	50-64	$100K +	157
One Person	65-74	< $30K	1,734
One Person	65-74	$30-50K	431
One Person	65-74	$50-70K	157
One Person	65-74	$70-100K	74
One Person	65-74	$100K +	46
One Person	75+	< $30K	2,802
One Person	75+	$30-50K	403
One Person	75+	$50-70K	100

Household Type	Age of Respondent	Household Income	Households
One Person	75+	$70-100K	32
One Person	75+	$100K +	28
Couple	15-29	< $30K	201
Couple	15-29	$30-50K	281
Couple	15-29	$50-70K	342
Couple	15-29	$70-100K	566
Couple	15-29	$100K +	408
Couple	30-39	< $30K	59
Couple	30-39	$30-50K	86
Couple	30-39	$50-70K	125
Couple	30-39	$70-100K	342
Couple	30-39	$100K +	470
Couple	40-49	< $30K	64
Couple	40-49	$30-50K	106
Couple	40-49	$50-70K	141
Couple	40-49	$70-100K	341
Couple	40-49	$100K +	467
Couple	50-64	< $30K	328
Couple	50-64	$30-50K	598
Couple	50-64	$50-70K	787
Couple	50-64	$70-100K	1,334
Couple	50-64	$100K +	1,797
Couple	65-74	< $30K	413
Couple	65-74	$30-50K	1,085
Couple	65-74	$50-70K	500
Couple	65-74	$70-100K	371
Couple	65-74	$100K +	387
Couple	75+	< $30K	341
Couple	75+	$30-50K	871
Couple	75+	$50-70K	203

Household Type	Age of Respondent	Household Income	Households
Couple	75+	$70-100K	119
Couple	75+	$100K +	67
2 Parents 1-2chn	15-29	< $30K	64
2 Parents 1-2chn	15-29	$30-50K	200
2 Parents 1-2chn	15-29	$50-70K	258
2 Parents 1-2chn	15-29	$70-100K	237
2 Parents 1-2chn	15-29	$100K +	130
2 Parents 1-2chn	30-39	< $30K	90
2 Parents 1-2chn	30-39	$30-50K	253
2 Parents 1-2chn	30-39	$50-70K	516
2 Parents 1-2chn	30-39	$70-100K	799
2 Parents 1-2chn	30-39	$100K +	818
2 Parents 1-2chn	40-49	< $30K	86
2 Parents 1-2chn	40-49	$30-50K	209
2 Parents 1-2chn	40-49	$50-70K	421
2 Parents 1-2chn	40-49	$70-100K	956
2 Parents 1-2chn	40-49	$100K +	1,558
2 Parents 1-2chn	50-64	< $30K	58
2 Parents 1-2chn	50-64	$30-50K	150
2 Parents 1-2chn	50-64	$50-70K	295
2 Parents 1-2chn	50-64	$70-100K	493
2 Parents 1-2chn	50-64	$100K +	1,309
2 Parents 1-2chn	65-74	< $30K	7
2 Parents 1-2chn	65-74	$30-50K	55
2 Parents 1-2chn	65-74	$50-70K	49
2 Parents 1-2chn	65-74	$70-100K	84
2 Parents 1-2chn	65-74	$100K +	70
2 Parents 1-2chn	75+	< $30K	2
2 Parents 1-2chn	75+	$30-50K	19
2 Parents 1-2chn	75+	$50-70K	34

Household Type	Age of Respondent	Household Income	Households
2 Parents 1-2chn	75+	$70-100K	30
2 Parents 1-2chn	75+	$100K +	12
2 Parents 3+chn	15-29	< $30K	20
2 Parents 3+chn	15-29	$30-50K	32
2 Parents 3+chn	15-29	$50-70K	47
2 Parents 3+chn	15-29	$70-100K	38
2 Parents 3+chn	15-29	$100K +	20
2 Parents 3+chn	30-39	< $30K	27
2 Parents 3+chn	30-39	$30-50K	101
2 Parents 3+chn	30-39	$50-70K	208
2 Parents 3+chn	30-39	$70-100K	261
2 Parents 3+chn	30-39	$100K +	202
2 Parents 3+chn	40-49	< $30K	37
2 Parents 3+chn	40-49	$30-50K	61
2 Parents 3+chn	40-49	$50-70K	128
2 Parents 3+chn	40-49	$70-100K	266
2 Parents 3+chn	40-49	$100K +	480
2 Parents 3+chn	50-64	< $30K	8
2 Parents 3+chn	50-64	$30-50K	12
2 Parents 3+chn	50-64	$50-70K	38
2 Parents 3+chn	50-64	$70-100K	43
2 Parents 3+chn	50-64	$100K +	117
2 Parents 3+chn	65-74	< $30K	0
2 Parents 3+chn	65-74	$30-50K	2
2 Parents 3+chn	65-74	$50-70K	0
2 Parents 3+chn	65-74	$70-100K	4
2 Parents 3+chn	65-74	$100K +	2
2 Parents 3+chn	75+	< $30K	0
2 Parents 3+chn	75+	$30-50K	0
2 Parents 3+chn	75+	$50-70K	0

Household Type	Age of Respondent	Household Income	Households
2 Parents 3+chn	75+	$70-100K	0
2 Parents 3+chn	75+	$100K +	2
1 Parent Family	15-29	< $30K	339
1 Parent Family	15-29	$30-50K	178
1 Parent Family	15-29	$50-70K	57
1 Parent Family	15-29	$70-100K	23
1 Parent Family	15-29	$100K +	16
1 Parent Family	30-39	< $30K	473
1 Parent Family	30-39	$30-50K	253
1 Parent Family	30-39	$50-70K	122
1 Parent Family	30-39	$70-100K	57
1 Parent Family	30-39	$100K +	21
1 Parent Family	40-49	< $30K	533
1 Parent Family	40-49	$30-50K	368
1 Parent Family	40-49	$50-70K	289
1 Parent Family	40-49	$70-100K	173
1 Parent Family	40-49	$100K +	82
1 Parent Family	50-64	< $30K	250
1 Parent Family	50-64	$30-50K	292
1 Parent Family	50-64	$50-70K	204
1 Parent Family	50-64	$70-100K	210
1 Parent Family	50-64	$100K +	108
1 Parent Family	65-74	< $30K	38
1 Parent Family	65-74	$30-50K	81
1 Parent Family	65-74	$50-70K	52
1 Parent Family	65-74	$70-100K	36
1 Parent Family	65-74	$100K +	15
1 Parent Family	75+	< $30K	32
1 Parent Family	75+	$30-50K	84
1 Parent Family	75+	$50-70K	44

Household Type	Age of Respondent	Household Income	Households
1 Parent Family	75+	$70-100K	20
1 Parent Family	75+	$100K +	15
Multi-Family Hhlds	15-29	< $30K	6
Multi-Family Hhlds	15-29	$30-50K	10
Multi-Family Hhlds	15-29	$50-70K	13
Multi-Family Hhlds	15-29	$70-100K	27
Multi-Family Hhlds	15-29	$100K +	56
Multi-Family Hhlds	30-39	< $30K	7
Multi-Family Hhlds	30-39	$30-50K	7
Multi-Family Hhlds	30-39	$50-70K	8
Multi-Family Hhlds	30-39	$70-100K	17
Multi-Family Hhlds	30-39	$100K +	32
Multi-Family Hhlds	40-49	< $30K	6
Multi-Family Hhlds	40-49	$30-50K	17
Multi-Family Hhlds	40-49	$50-70K	18
Multi-Family Hhlds	40-49	$70-100K	21
Multi-Family Hhlds	40-49	$100K +	78
Multi-Family Hhlds	50-64	< $30K	8
Multi-Family Hhlds	50-64	$30-50K	10
Multi-Family Hhlds	50-64	$50-70K	25
Multi-Family Hhlds	50-64	$70-100K	42
Multi-Family Hhlds	50-64	$100K +	179
Multi-Family Hhlds	65-74	< $30K	0
Multi-Family Hhlds	65-74	$30-50K	6
Multi-Family Hhlds	65-74	$50-70K	6
Multi-Family Hhlds	65-74	$70-100K	10
Multi-Family Hhlds	65-74	$100K +	24
Multi-Family Hhlds	75+	< $30K	0
Multi-Family Hhlds	75+	$30-50K	0
Multi-Family Hhlds	75+	$50-70K	2

Household Type	Age of Respondent	Household Income	Households
Multi-Family Hhlds	75+	$70-100K	0
Multi-Family Hhlds	75+	$100K +	9
Non-Family Hhlds	15-29	< $30K	1,165
Non-Family Hhlds	15-29	$30-50K	687
Non-Family Hhlds	15-29	$50-70K	365
Non-Family Hhlds	15-29	$70-100K	259
Non-Family Hhlds	15-29	$100K +	246
Non-Family Hhlds	30-39	< $30K	42
Non-Family Hhlds	30-39	$30-50K	60
Non-Family Hhlds	30-39	$50-70K	63
Non-Family Hhlds	30-39	$70-100K	77
Non-Family Hhlds	30-39	$100K +	100
Non-Family Hhlds	40-49	< $30K	33
Non-Family Hhlds	40-49	$30-50K	50
Non-Family Hhlds	40-49	$50-70K	44
Non-Family Hhlds	40-49	$70-100K	46
Non-Family Hhlds	40-49	$100K +	45
Non-Family Hhlds	50-64	< $30K	68
Non-Family Hhlds	50-64	$30-50K	112
Non-Family Hhlds	50-64	$50-70K	105
Non-Family Hhlds	50-64	$70-100K	57
Non-Family Hhlds	50-64	$100K +	55
Non-Family Hhlds	65-74	< $30K	23
Non-Family Hhlds	65-74	$30-50K	59
Non-Family Hhlds	65-74	$50-70K	28
Non-Family Hhlds	65-74	$70-100K	9
Non-Family Hhlds	65-74	$100K +	7
Non-Family Hhlds	75+	< $30K	13
Non-Family Hhlds	75+	$30-50K	41
Non-Family Hhlds	75+	$50-70K	9

Household Type	Age of Respondent	Household Income	Households
Non-Family Hhlds	75+	$70-100K	10
Non-Family Hhlds	75+	$100K +	6
TOTAL Dunedin City			46,518

Appendix 2: Locational Second Choices

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Figure 7.1: Second Choice of Inner Suburbs First Choice Respondents by Age

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	53%	0%	24%	24%	0%	0%	100%
25 - 29	33%	0%	33%	33%	0%	0%	100%
30 - 34	0%	0%	25%	75%	0%	0%	100%
35 - 39	17%	0%	0%	83%	0%	0%	100%
40 - 44	25%	0%	0%	60%	10%	5%	100%
45 - 49	27%	0%	5%	59%	5%	5%	100%
50 - 54	31%	0%	0%	49%	13%	7%	100%
55 - 59	21%	0%	5%	65%	5%	5%	100%
60 - 64	37%	0%	7%	47%	0%	10%	100%
65 - 69	23%	0%	0%	62%	0%	15%	100%
70 - 74	13%	0%	13%	47%	7%	20%	100%
75+	31%	0%	15%	31%	0%	23%	100%
Total	27%	0%	8%	53%	5%	7%	100%

Figure 7.2 Second Choice of South Dunedin First Choice Respondents, by Age

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	0%	100%	0%	0%	0%	0%	100%
25 - 29	0%	100%	0%	0%	0%	0%	100%
30 - 34	0%	100%	0%	0%	0%	0%	100%
35 - 39	0%	0%	0%	0%	0%	100%	100%
40 - 44	0%	33%	0%	67%	0%	0%	100%
45 - 49	0%	20%	0%	60%	20%	0%	100%
50 - 54	33%	33%	0%	33%	0%	0%	100%
55 - 59	0%	0%	0%	60%	0%	40%	100%
60 - 64	17%	17%	0%	50%	0%	17%	100%
65 - 69	0%	60%	0%	0%	0%	40%	100%
70 - 74	33%	0%	0%	67%	0%	0%	100%
75+	20%	20%	0%	40%	0%	20%	100%
Total	10%	33%	0%	38%	2%	17%	100%

Figure 7.3: Second Choice of Outer Suburbs First Choice Respondents, by Age

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	9%	45%	0%	0%	27%	18%	100%
25 - 29	0%	25%	0%	0%	42%	33%	100%
30 - 34	0%	50%	0%	0%	30%	20%	100%
35 - 39	7%	29%	0%	0%	29%	36%	100%
40 - 44	12%	28%	0%	0%	36%	24%	100%
45 - 49	4%	48%	4%	0%	41%	4%	100%
50 - 54	0%	27%	4%	0%	35%	35%	100%
55 - 59	8%	42%	0%	0%	42%	8%	100%
60 - 64	10%	28%	3%	0%	45%	14%	100%
65 - 69	0%	54%	8%	0%	23%	15%	100%
70 - 74	13%	50%	13%	0%	25%	0%	100%
75+	6%	31%	6%	0%	31%	25%	100%
Total	6%	36%	3%	0%	36%	19%	100%

Figure 7.4: Second Choice of Outer Urban Area First Choice Respondents, by Age

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	0%	0%	0%	100%	0%	0%	100%
25 - 29	0%	0%	0%	100%	0%	0%	100%
30 - 34	0%	0%	0%	50%	0%	50%	100%
35 - 39	0%	0%	0%	50%	0%	50%	100%
40 - 44	0%	0%	0%	40%	0%	60%	100%
45 - 49	0%	10%	0%	50%	0%	40%	100%
50 - 54	0%	14%	14%	29%	0%	43%	100%
55 - 59	11%	11%	0%	67%	0%	11%	100%
60 - 64	6%	0%	0%	67%	0%	28%	100%
65 - 69	0%	0%	20%	20%	0%	60%	100%
70 - 74	17%	17%	0%	67%	0%	0%	100%
75+	33%	0%	0%	67%	0%	0%	100%
Total	5%	5%	3%	55%	0%	31%	100%

Figure 7.5: Second Choice of Mosgiel First Choice Respondents, by Age

Age of Respondent	Inner city	Inner suburbs	South Dunedin	Outer suburbs	Outer urban area	Mosgiel	Total
18 - 24	0%	0%	33%	67%	0%	0%	100%
25 - 29	0%	0%	0%	0%	100%	0%	100%
30 - 34	0%	17%	0%	17%	67%	0%	100%
35 - 39	0%	50%	0%	50%	0%	0%	100%
40 - 44	0%	0%	0%	33%	67%	0%	100%
45 - 49	0%	0%	0%	50%	50%	0%	100%
50 - 54	8%	33%	0%	33%	25%	0%	100%
55 - 59	8%	8%	0%	50%	33%	0%	100%
60 - 64	6%	11%	0%	39%	44%	0%	100%
65 - 69	17%	0%	0%	50%	33%	0%	100%
70 - 74	0%	38%	0%	38%	25%	0%	100%
75+	0%	43%	0%	21%	36%	0%	100%
Total	4%	18%	1%	37%	40%	0%	100%

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