Life in Medium Density Housing in Tāmaki Makaurau / Auckland

Chapter 3

Research method and sample





Life in Medium Density Housing in Tāmaki Makaurau / Auckland

Overview of the Life in Medium Density Housing in Tāmaki Makaurau / Auckland report

The *Life in Medium Density Housing in Tāmaki Makaurau / Auckland* study was undertaken by Auckland Council's Economic and Social Research and Evaluation team and Tāmaki Makaurau Design Ope (TMDO) in 2023. The primary purpose of the research was to investigate how Aucklanders are experiencing living in recently built medium density housing (MDH).

The results of this research will support everyone involved in the delivery of housing in Auckland (including Auckland Council, central government, developers) to improve future MDH, and ultimately the wellbeing of Aucklanders, through consenting processes, design guidance and land use planning. It will also enable better informed choices by Aucklanders looking to live in MDH.

This study involved a number of methods including a rapid literature review, geospatial analysis to identify recently developed MDH across the Auckland region, an online survey of 1337 participants living in MDH, analysis of the consented plans of 110 properties whose residents participated in the survey, and 20 in-depth in-home immersions which collectively provides a comprehensive view of how people experience their MDH.

This report is divided into 10 chapters and 13 appendices:

Main report:

Chapter 1: Introduction

Chapter 2: Legislation and policy context

Chapter 3: Research method and sample

Chapter 4: Indoor spaces for living

Chapter 5: Storage, laundries and bathrooms

Chapter 6: Outdoor living spaces

Chapter 7: Indoor environment

Chapter 8: Carparking and vehicle storage

Chapter 9: Shared facilities

Chapter 10: Discussion and recommendations

Appendices:

- 1: References
- 2: NPS-UD and Auckland Regional Policy Statement objectives and policies
- 3: Survey invitation letter and reminder postcard
- 4: Survey consent form
- 5: Survey questionnaire
- 6: Standalone houses excluded from the sample
- 7: Survey sample characteristics
- 8: In-home immersion screener survey
- 9: In-home immersion discussion guide
- 10: Design attributes for analysis of consented plans
- 11: Map of broad geographic study areas
- 12: Study limitations
- 13: Codes for open ended responses

Each chapter is provided as a separate PDF and can be accessed on the Knowledge Auckland website. A summary report with key findings is also available on the Knowledge Auckland website.

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Introduction to this chapter

This chapter outlines the research methods employed in this study and describes who participated. Section 1 describes the four research methods used – the first of which was to identify the location and postal addresses of medium density housing (MDH) in Auckland. Section 2 shares the results of that analysis, and the location of households who participated in the survey are described in Section 3, using a series of maps. The following two sections introduce the household composition of the survey participants (Section 4) and the number of people in the household (Section 5). Section 6 outlines the broad characteristics of the 20 households who participated in the in-home immersion interviews. Further details are provided in appendices, which are referred to throughout.

1 Research methods

This project involved a mix of research methods comprising four components: 1) identification of recently constructed medium density housing (MDH) using Auckland Council data, 2) an online survey of residents living in the identified MDH, 3) 20 follow-up in-home immersions with households who had completed the initial survey, and 4) a desktop exercise to extract specific design attributes from the consented plans of 110 homes whose households participated in the survey. Each component is discussed in more detail below.

The first three components of this project were reviewed by Auckland Council's Research Ethics Advisory Group in October 2022 (reference 006-2022). The in-home immersions were reviewed by the Aotearoa Research Ethics Committee in October 2023 (reference 2023_47).

1.1 Identifying properties

Properties that were 'in-scope' for this study were identified using Auckland Council data on consents and rates. In-scope properties needed to have received a Code Compliance Certificate (CCC) after November 2016 (AUP operative in-part date) and estimated to be a medium density typology (i.e. terraced house, duplex, or apartment).

Properties in Auckland's city centre or Hobsonville Point precincts were not included. The city centre provides for a range of activities, including residential dwellings, and is primarily a high-density zone (i.e. apartment buildings over seven storeys). It is subject to planning rules that were generally established under the Auckland City Council Central Area District Plan, rather than the residential zone standards of the Auckland Unitary Plan. Hobsonville Point is a master planned neighbourhood subject to additional layers of design control (including a dedicated design review panel), and has been studied previously (Haarhoff et al., 2019).

The focus for this study was on properties developed by private developers that are owned by individuals. Properties owned by Kāinga Ora (formerly Housing New Zealand), other community housing providers (e.g. Accessible Properties, Community of Refuge Trust, Housing Foundation) or other organisations (e.g. hotels, retirement villages, aged care providers) were not included.

A total of 17,789 properties were identified as meeting the criteria for this study.

Residents of the identified properties were invited to participate in the online survey via the Electoral Roll. An extract of the Electoral Roll was requested from the Electoral Commission and was used to address survey invitations to named occupants. The addresses of properties identified in the rating database were joined with those in the Electoral Roll. A total of 8076 rating database addresses were able to be joined with addresses in the Electoral Roll. The remaining 9713 rating database addresses

¹ A technical methodology report on how this was done exists as an internal document.

² Auckland Council data lacks a variable for housing typology that classifies a property as, for example, an apartment or terraced house. A range of variables were consequently used to estimate the typology of properties.

did not have an address in the Electoral Roll extract to which they could be joined, preventing named invitations being posted to these properties.³

1.2 Survey

The questionnaire was developed by researchers from Auckland Council's Economic and Social Research and Evaluation team (ESRE) in consultation with council's Tāmaki Makaurau Design Ope (TMDO). The survey was cognitively tested with 10 Auckland Council staff who live in MDH, prior to finalisation.

Households living in identified MDH were invited to participate in a 20-minute online survey via a posted invitation letter. Participants were given the option to enter a prize draw to win one of three Prezzy cards in acknowledgement of their contribution to the research.

Invitations were sent over two data collection waves. The first data collection wave was undertaken in January 2023, inviting 1713 households. Invitation letters were addressed to named individuals when addresses were able to be joined with the Electoral Roll (811 properties), or to 'the household' when addresses were unable to be joined with the Electoral Roll (902 properties).

The response rate from letters addressed to 'the household' was lower than the response rate from letters addressed to named individuals (2% compared with 8%). As a result, in the second data collection wave, invitations were only sent to properties that could be addressed to a named individual (from the Electoral Roll).

The second data collection wave followed on 10 March 2023, and 7265 households were invited to participate. All remaining households that had a postal address in the Electoral Roll were invited. A reminder postcard was sent out on 22 March 2023, and a response rate of 16 per cent was achieved.

See Appendix 3 for a copy of the survey invitation letter and reminder postcard, Appendix 4 for a copy of the consent form, and Appendix 5 for the questionnaire.

1.2.1 Survey sample

A total of 1431 responses were received across both data collection waves when the survey closed on 1 May 2023.

A small proportion of participants living in standalone houses completed the survey (n=94). The survey responses from those 94 properties have been excluded from the analysis and the sample used in this report is from 1243 properties. See Appendix 6 for more detail.

Multiple survey responses from a single invited property were encouraged in the invitation letter. Most (93%) properties returned one survey response, as shown below in Table 1. A total of 1337 survey responses were received from 1243 properties.

Chapter 3: Research method and sample

³ There are several reasons to explain the large proportion of addresses unable to be matched to the Electoral Roll, including the low frequency with which individuals update their address in the Electoral Roll and that not everyone living in Auckland is eligible to be on the Electoral Roll.

Sections 3, 4 and 5 of this chapter outline in more detail where the participants lived, their household composition and household size. Refer also to Appendix 7 for an overview of the sample's demographic characteristics.

Table 1: Number of responses from a property

Number of responses from a property	Count	Percentage (%)
One	1158	93
Two	83	7
Three	2	0.2
Total properties	1243	100

Survey responses were processed and analysed in SPSS and Excel. Results have not been weighted. Tests for statistical significance have been undertaken and are reported as likelihood.

1.3 In-home immersions

In-home immersions are a research technique that draws from ethnographic methods of active participant observation and participant-led interviewing.

A sample of survey participants were invited by email and screener survey to participate in in-home immersions (see Appendix 8). Recruitment of participants had soft quotas that aimed to produce a sample that included participants from across the Auckland region, a mixture of housing typologies, and a range of household compositions, ethnic groups, genders and ages, as well as variation in satisfaction with aspects of their home. Survey responses to questions about how well the size of the living space meets the needs of the household, satisfaction with temperature in summer, satisfaction with privacy in outdoor living spaces, and rating for the amount of built-in storage in the kitchen were used as an indicator of satisfaction with the home when inviting participation.

All members of the participating household who wished to do so were able to participate. Twenty households participated, comprising 41 individual participants.

Eight households were located in south Auckland, four in west Auckland, one in east Auckland, three in north Auckland and four in central Auckland. Ethnic groups represented in the sample include Chinese New Zealand, Filipino New Zealand, New Zealand Indian, New Zealand Malaysian and British, as well as Māori, Pacific and Pākehā New Zealand. See Section 7 for more details about the in-home immersion participants.

Prior to visiting a household, the research team (comprising a researcher and research assistant) reviewed the consented plans for the home to become familiar with the development and the home (e.g. number and location of bedrooms). Design details of the home were considered against best practice guidance to inform questions asked of participants. For example, if the dimensions of a bedroom were smaller than best practice, a note was made to investigate the impact of this for the participant(s).

The research team arrived ahead of the time scheduled with the participant(s) to make observations of the neighbourhood such as on-street carparking or typologies of other homes. Once entering the

participants' home, the research team and participating household members sat in the dining or lounge space where they had a conversation about who lives in the home, how long they have lived there, where they lived before, and their decision to live here.

Following this initial conversation, the research team asked the participant(s) to take them on a tour of their home. For each space in the home, they were asked how the space was used, what modifications had been made, and what they liked and disliked about that space. Environmental aspects of spaces such as temperature, privacy and airflow were asked about throughout the home. Tours involved going outside the private home to be shown carparking, rubbish bin rooms, mailboxes and other shared facilities like outdoor living spaces for those living in apartments and homes that were part of a complex with facilities shared with neighbours. The research team had a discussion guide, although in practice, the conversation was led by participants and what the researchers observed (see Appendix 9). For example, if researchers observed an additional storage cupboard next to empty shelves in the kitchen, a front door blocked by a chair, or furniture that appeared to be bespoke, they asked participants to tell them about what they had observed.

The visit ended sitting back in the dining or lounge space of the home where the participants gave concluding remarks and described their aspirations for their home in the future.

Several types of data were collected during the visit:

- Photographs were taken throughout the home tour to illustrate how spaces are used.
- The conversation was audio recorded and later transcribed.
- Consented plans were annotated to include furniture and measurements.

Analysis was undertaken through workshops with the project team and transcripts analysed through NVivo. Participants received a koha in acknowledgement of their contribution to the research.

Selected findings from the immersions have been included in this report to provide greater insight to results of the survey and consented plan analysis.⁴

1.4 Analysis of consented plans

A sample of 110 properties from which we had received survey responses were selected for inclusion in this phase of the project. (A total of 117 participants living in these properties responded to the survey.) Each survey response is joined to the property address, which enabled sourcing the consented plans for the home. Participants consented to their survey responses being combined with information from the consented plans (see consent form in Appendix 4).

Properties were selected to be representative of the overall survey sample with respect to household composition, geographic area and overall satisfaction rating. We slightly over-sampled terraced houses. For full details of the sample properties, see Appendix 7.

⁴ A full report exploring the findings of the in-home immersions in more depth is forthcoming. Chapter 3: Research method and sample

The 110 sample properties were from 86 unique developments.⁵ Three developments had three participating properties, and nine had two participating properties.

The consented plans of selected properties were sourced from Auckland Council records. A selection of design attributes were extracted into spreadsheets from these plans for analysis by a small team of Urban Design Analysts within the TMDO. A full list of design attributes with descriptions is in Appendix 10.

Survey responses were joined with design attributes and are reported together in sections throughout this report.

It is acknowledged that homes can be renovated and modified after they have been consented; for example, to add cupboards or change the kitchen.

⁵ For this purpose, a 'development' is defined as having a shared parent site (the address granted a resource consent). Note that the homes within a development may have no shared facilities and may be freehold.

2 Location of MDH in Auckland

The first component of this research study was to identify recently built medium density housing in Auckland. This analysis was undertaken in late 2022 using data available up to September 2022. The primary purpose of this task was to facilitate inviting households to participate in the survey and subsequent in-home immersions.

A total of 17,789 properties were identified as fitting the housing typology and location (i.e. excluding city centre and Hobsonville Point) criteria for participation in the survey. This number includes properties owned by community housing providers and others that were not invited to participate in the survey. Figure 1 shows these properties on a map of Auckland.

For the purpose of this study, we divided Auckland into four broad geographic areas: North, West, South/East and Central (see the maps in this section and also the map in Appendix 11). Our estimates identified a relatively even distribution of MDH across those four broad areas, as shown in Table 2.

Table 2: Count and proportion of MDH across the Auckland region

	Count	Proportion (%)
North	3,926	22
West	3,168	18
South/East	5,798	33
Central	4,897	28
Total	17,789	100

As described earlier, a subset of these identified properties was invited to participate in the survey (8978 properties). These properties were determined to be privately owned. Figure 2 shows the spatial distribution of which MDH properties were invited to participate in the survey, and which were not.

Figure 3 shows the spatial distribution of all 8978 MDH properties invited to participate in the survey, by their estimated typology, and Figure 4 shows the same information but focuses on the isthmus area only. Both maps show 'dwellings NFD' which are properties estimated to be MDH but which were unable to be further defined with available data (e.g. could be a terraced house or a duplex but which is unknown). These dwellings were estimated to be terraced houses, duplexes or walk-up apartments.

As the maps indicate, apartments are mostly located in central and northern parts of Auckland, whereas terraced houses are located throughout the region. The geographic distribution of different

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⁶ Properties that received a Code Compliance Certificate between November 2016 and September 2022 are represented in the analysed data.

housing typologies is attributed to Auckland Unitary Plan zones, as MDH can only be built in some zones (see Chapter 2 for more detail about the Auckland Unitary Plan). The clustering of apartments in Central Auckland, for example, is likely to be explained both by this being the location of most Terraced Housing, Apartment Building (THAB) AUP zoning and higher land values (whereby the higher infrastructure costs of apartment buildings are mitigated by higher land values, and ultimately sale prices).

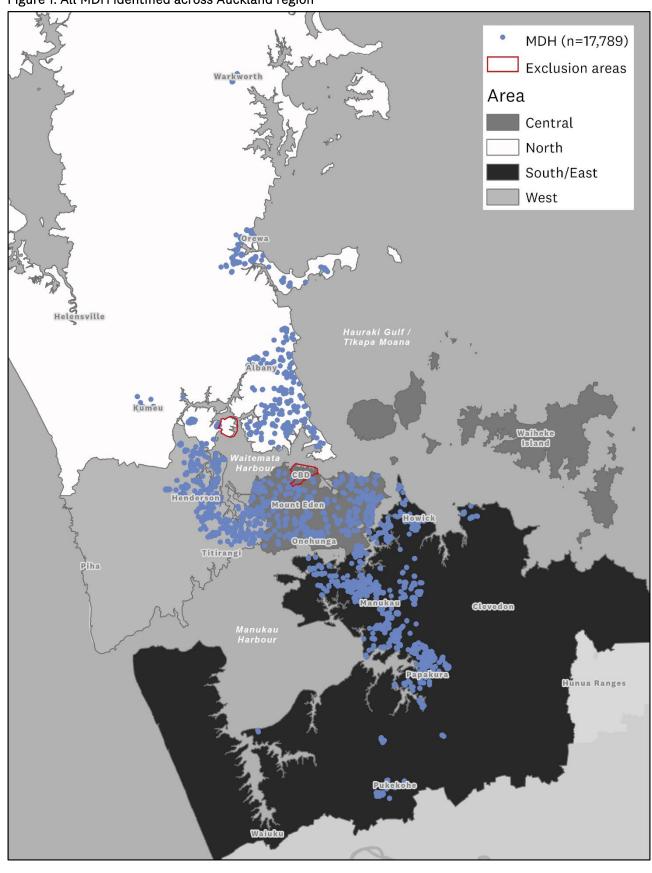


Figure 1: All MDH identified across Auckland region

Invited (n=8978) Not invited (n=8811) Warkworth Exclusion areas Area Central North South/East West Helensville

Figure 2: Spatial distribution of MDH identified across Auckland region, by invited or not invited to participate in the survey

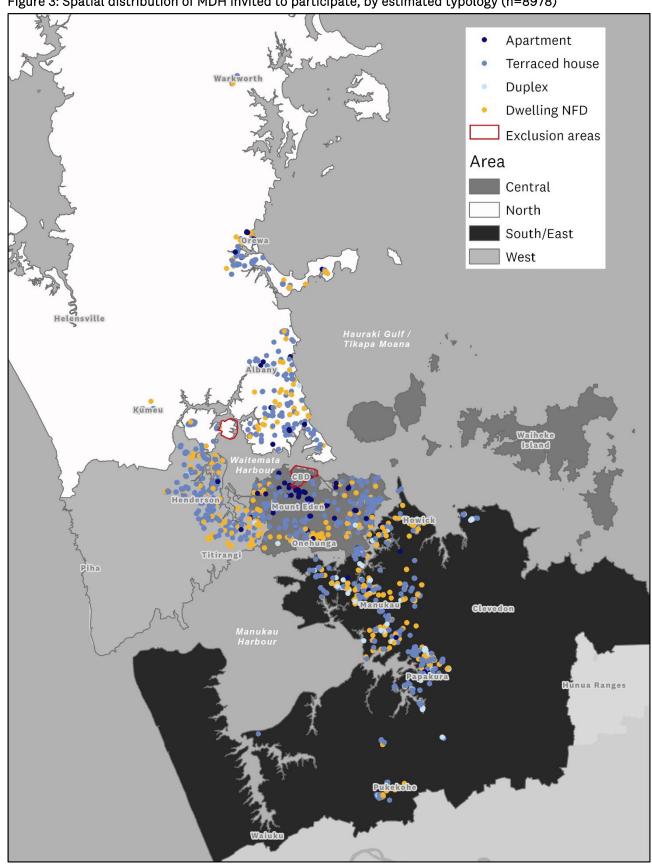


Figure 3: Spatial distribution of MDH invited to participate, by estimated typology (n=8978)

Note: NFD stands for 'not further defined', see description above.

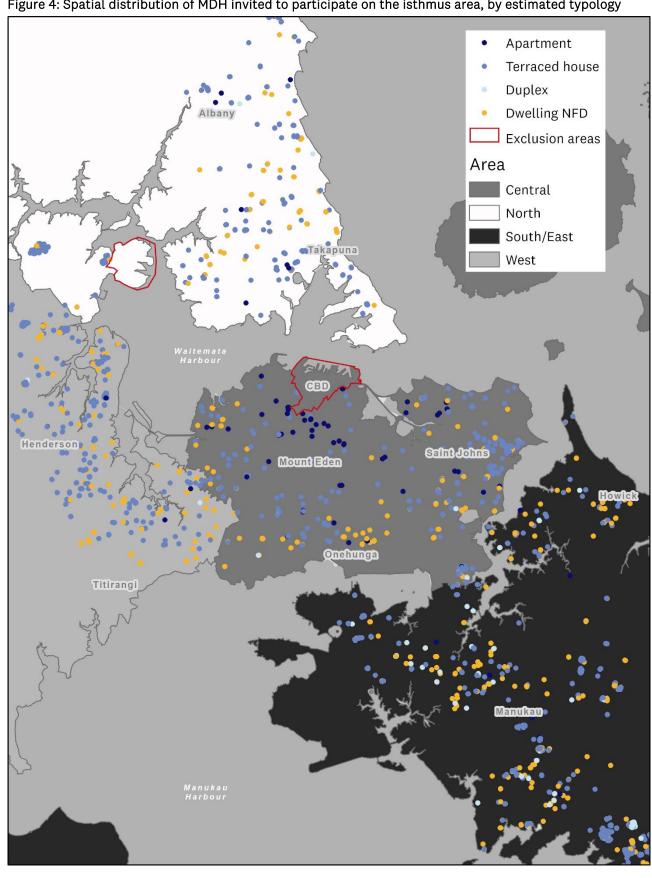


Figure 4: Spatial distribution of MDH invited to participate on the isthmus area, by estimated typology

3 Location and typology of participating properties

Medium density homes in this study are one of three housing typologies: apartments, terraced houses and duplexes. Although the preliminary stage of the study (outlined above) identified MDH and estimated housing typology, the study reports on the survey participants' own definition of the home in which they lived.

Over two-thirds (68%) of the 1337 survey participants reported living in a terraced house or duplex, and the remaining 32 per cent live in an apartment (Table 3).

Table 3: Count and proportion of responses, by housing typology

Participant-defined typology	Count of responses	Proportion of responses (%)
Apartment	424	32
Terraced	670	50
Duplex	243	18
Total	1337	100

However, as mentioned in Chapter 1, Section 3.1, multiple members of a household were encouraged to participate in the survey. Survey responses were received from a total of 1243 properties, of which 83 returned two survey responses and two returned three responses. For those 85 properties that returned more than one survey response, responses from one participant were chosen at random to represent the property. Using this approach, we found that half (50%) of the 1243 properties were defined by participants as a terraced house, 32 per cent as an apartment and 19 per cent as a duplex. See Table 4 below.

Table 4: Count and proportion of participating properties, by housing typology

Participant-defined typology	Count of properties	Proportion of properties (%)
Apartment	391	32
Terraced	622	50
Duplex	230	19
Total	1243	100

Note: due to rounding percentages of responses add to 101 per cent.

Table 5 shows these results by housing typology broken down across the four broad geographic areas mentioned earlier (demonstrated on a map for the Auckland region in Figure 5 and for the isthmus only in Figure 6).

Table 5: Number of participating properties, by participant-defined typology and area (counts)

	Terraced	Duplex	Total Attached	Apartment	Total all typologies
North	158	59	217	91	308
West	172	33	205	31	236
South/East	175	109	284	32	316
Central	117	29	146	237	383
Total	622	230	852	391	1243

As Table 5 and the maps show, there was a relatively even distribution of MDH across the four broad geographic areas.

The survey results are from a sample of the wider population of Aucklanders living in MDH and are generally representative of the geographic distribution of MDH.

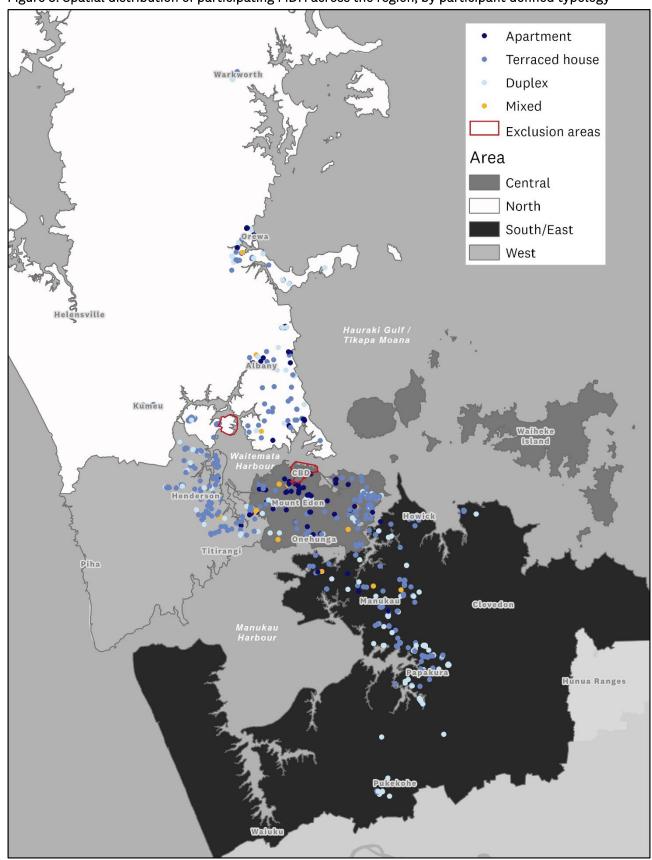


Figure 5: Spatial distribution of participating MDH across the region, by participant defined typology

Note: 'Mixed' represents properties where participants either in the same household or building/complex reported different typologies for the same building/complex.

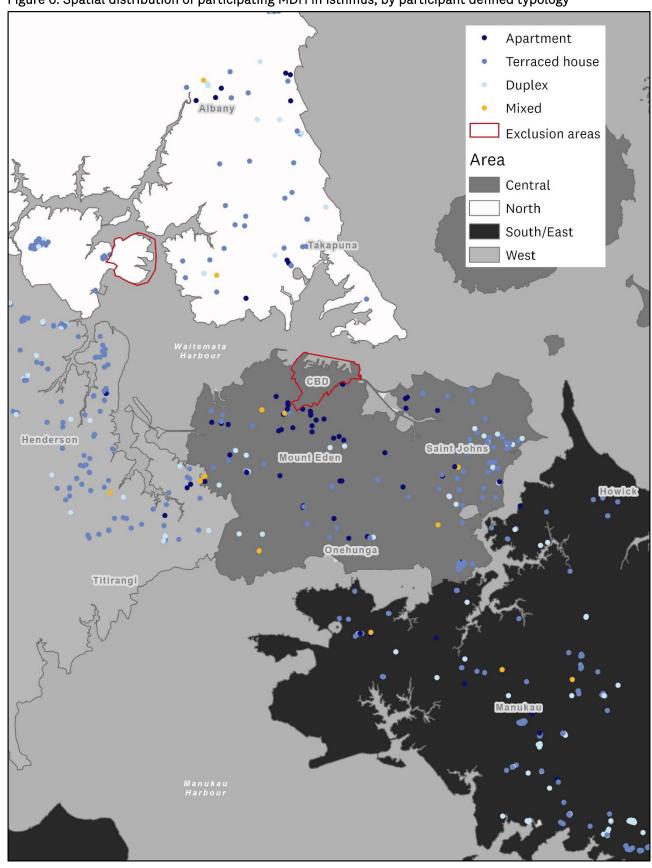


Figure 6: Spatial distribution of participating MDH in isthmus, by participant defined typology

Note: 'Mixed' represents properties where participants either in the same household or building/complex reported different typologies for the same building/complex.

4 Household composition

The survey asked participants about their living arrangements, which were used to construct a household composition variable. We were able to use the results from 1272 participants for this exercise. Sixty-five participants were unable to be assigned to a household composition due to their answering 'prefer not to say' to the questions or giving conflicting responses (e.g. responding that they lived with a child only in one question, and then answering that there are five adults in the household in another question). A further 29 participants shared their household with at least one other survey participant.

We calculated a total of 1178 households that span five distinct household compositions. Over a third were 'partner only' households (39%) and a quarter were households with children living in them (15% with one child and 10% with two or more children). The classifications are described further in Table 6.

Note that the questionnaire asked participants to indicate who "usually" lives in their home, including children for whom they were "one of the people who has primary responsibility for their care and welfare".

Table 6: Household composition (n=1178) (%)

Classification	Illustration	Proportion of households (%)
Live alone Participants who are living alone.		22
Partner only Two adults who are partners.		39
One child (with one or more adults) Households with one child (in secondary school or younger), and any number of adults. This could include, for example, single parent households, two parent households, or grandparents and a grandchild. It could also include adult children, and a younger child.	NA NA	15
Two or more children (with one or more adults) Households with two or more children (in secondary school or younger), and any number of adults. This could include, for example, two parents and two children; a parent, grandparent and three children; or adult friends/siblings living together with their children.		10

Two or more adults, no children

This includes a wide range of situations such as flatting with related or unrelated adults, and multigenerational households; for example, adult children living with their parent(s) and/or grandparent(s).



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The household compositions constructed from the survey responses are unique to this study, preventing comparison with the population overall.

Household composition correlates with age, and this can be interpreted as household compositions changing across life stages (Figure 7). Starting with younger participants, the most common household composition for participants aged 18-24 years is 'two or more adults, no children'. This is likely to be representing young adults living with their parents or in flatting situations.

For participants in the age brackets 25-29 and 30-34 years, the most common household composition is 'partner only'. From 25-29 years, the proportion of households with one child starts to increase while the proportion of those living with a partner only begins to decrease. This represents a transition in this age group of starting to have children.

Households with two or more children increases in proportion from the 30-34 years age group. The age groups between 35-39, 40-44 and 45-49 years have near equal proportions of households comprising one child, two or more children, or living with a partner only.

From 50-54 years, households with children start to decrease in proportion and those living with a partner only or living alone start to increase. This is likely representing children moving out of the family home. For those aged 60-64 years and older, very small proportions of households have children and those living with only a partner or on their own are the most common household compositions.

The diverse manifestations of households represented by the category 'two or more adults, no children' changes across different age groups. This category decreases in proportion sharply for the age groups 25-29 and 30-34 years. It remains the smallest proportion of household compositions between the age groups of 35-39 to 45-49 years. From 50-54 years, it begins to increase and continues to be the third most common composition until 65-69 years. This may be due to children growing into young adults as their parent(s) reach 50-54 years and continue to live together, or elderly parents coming to live with their adult child(ren).

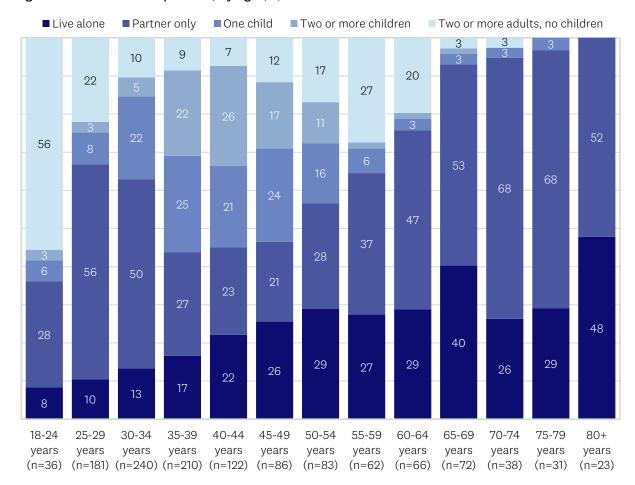


Figure 7: Household composition, by age (%)

Notes: 1. Base is all participants who gave their age.

2. Data labels for values less than 3 not shown.

The next section in this chapter introduces the relationship between housing typology and household composition. Throughout the report, participant responses to the survey questions about their satisfaction or how well different design aspects are meeting the needs of the household are reported for each of these household compositions. From this analysis, we can see aspects of MDH are working well for some household compositions and not so well for others.

4.1 Household composition by housing typology

There were noticeable differences in the demographic characteristics and household composition of participants who live in attached homes (i.e. terraced houses and duplexes) compared with those living in apartments.

The most common household composition among those living in apartments were partner only (48 per cent) or living alone (40%). Meanwhile, the household compositions of those living in attached homes were most commonly one child, with one or more adults (20%), two or more children, with one or more adults (14%), or two or more adults and no children (17%).

Attached homes are more likely to have larger households compared with apartments. Sixty per cent of one person households live in apartments, 74 per cent of two person households live in attached

homes, 90 per cent of three person households live in attached homes, and 95 per cent of 4 or more person households live in attached homes.

Figure 7 above shows the relationship between participant age and household composition. A relationship is also found between participant age and housing typology. The proportion of participants living in apartments increases with age as the proportion living in attached homes decreases with age (Figure 8).

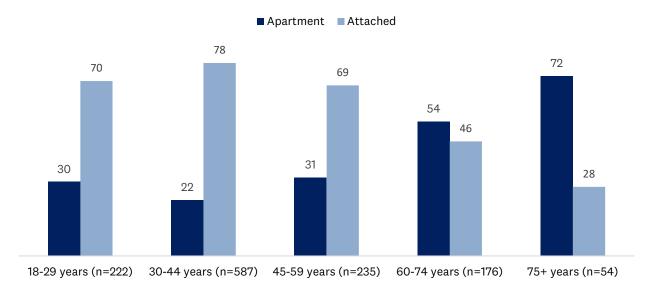


Figure 8: Housing typology, by age groups (%)

This data suggests different housing typologies appeal to different life stages. Designing homes with these life stages in mind may assist in delivering homes with the right components to facilitate a good lived experience. For example, as attached homes are more frequently occupied by younger households, often with children, these homes require affordances for the activities of interest to them. In contrast, apartments are more commonly occupied by older households, who tend to be living alone or with a partner only, and so cater to different needs.

4.2 Households with pets

Over a quarter (26%) of participants reported that they have a pet in their households. The survey did not ask participants to describe the type or numbers of pets they owned. No significant differences in having pets are seen across household composition. The proportion of participating households with a pet ranged from 21 to 30 per cent (Figure 9).

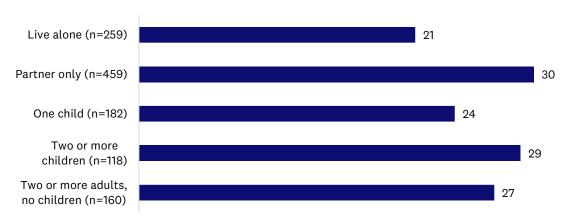


Figure 9: Households with pets, by household composition (%)

Pets are more common in attached homes with a third (32%) of households living in an attached home reporting that they owned a pet; this compares with 13 per cent of participants living in an apartment. This difference could be in part due to body corporate rules regarding pets in apartments.

5 Number of people in a household

Participants were asked how many people live in their household (number of adults and number of children). Their responses can be compared with the Auckland population in the 2018 Census to suggest how similar or different households of MDH may be to the population overall.

Compared with the number of people in households from the 2018 Census, we see a larger proportion of those reported to be in a household of one or two people are living in MDH (30% compared with 17%, and 43% compared with 27%, respectively), whereas those in households of three people or four or more people are less likely to be living in MDH (15% compared with 18%, and 11% compared with 34%, respectively). This comparison demonstrates that households living in MDH tend to be smaller than the population overall.

One person

Two people

Three people

15

18

Figure 10: Number of people in the household (survey households n=1240, census n=496,458) (%)

The average size of participating households across all MDH typologies is 2.1 people (43 per cent of households who participated in the survey comprise of two people, 30 per cent have one person, and the remainder have three or more people). The 2018 Census reports an average household size for Auckland overall of 3.0 people.

These figures could be interpreted to suggest MDH are accommodating (or are perceived at the point of choosing housing, to accommodate) the needs of small households, and not those of larger households.

Four or more people

6 Sample characteristics

The figures below illustrate the broad characteristics of the sample, including ethnicity, gender, age and tenure. Further details are available in Appendix 7.

6.1 Ethnicity

Nearly two-thirds (64%) of participants who answered the question on ethnic identity identified with a European ethnicity and 27 per cent identified with Asian ethnicity. Māori, Pacific ethnicities and other ethnic groups comprise smaller proportions of the sample (5%, 3% and 5%, respectively).

64

27

5
3

5
4

European Māori Pacific Asian Other Prefer not to say

Figure 11: Proportion of participants in broad ethnic groups (n=1269) (%)

Note: Multiple responses allowed; therefore, total does not sum to 100.

6.2 Age

Forty-five per cent of participants were aged 30-44 years. There were much smaller proportions of participants in the other age groups: 17 per cent aged 18-29 years, 18 per cent aged 45-59 years, 14 per cent aged 60-74 years, and 4 per cent aged 75 years and older.

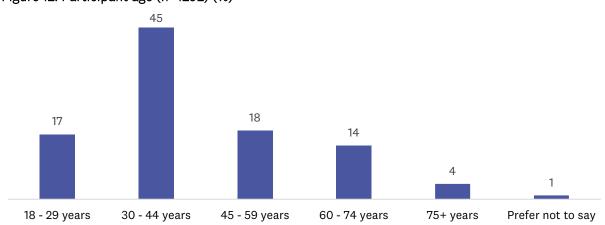


Figure 12: Participant age (n=1292) (%)

6.3 Gender

Slightly more than half (54%) the participants identified as female and 45 per cent as male.

45

45

1

Male

Female

Prefer not to say

Figure 13: Participant gender (n=1291) (%)

Note: Six participants answered as 'another gender' (less than 1 %) and are not shown on the chart.

6.4 Tenure

Eight-four per cent of participants reported living in an owner-occupier home and the largest proportion within this group (74%) said they personally or jointly owning their home. Fifteen per cent were renting from a private landlord and the remaining 1 per cent did not know who owned their home.

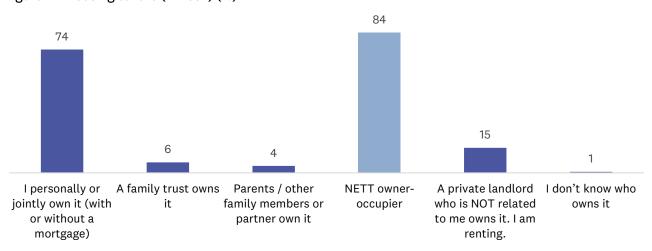


Figure 14: Housing tenure (n=1337) (%)

Note: NETT owner-occupier includes those who answered their home is personally or jointly owned, owned by a family trust, or owned by parents/other family members.

7 In-home immersions participants

Twenty households were recruited to participate in the in-home immersions. The sample was carefully chosen to ensure a mix of housing typologies, household compositions, and satisfaction with aspects of the home. All participating households were owner-occupied so that participants had autonomy to make modifications to their home and did not need to seek consent from property owners to participate.

All members of the household who wished to do so were able to participate. Twenty households participated, comprising 41 individual participants. Six of the participating households lived in apartments, 12 in terraced housing, and two in a duplex. One of the 12 households living in terraced housing also had a minor dwelling above their detached garage as part of their property.

Participants were classified as being generally satisfied, dissatisfied, neutral or having a mixture of satisfied and dissatisfied responses. This was based on selected survey questions used in recruitment (how well the size of the living space meets the needs of the household, satisfaction with temperature in summer, satisfaction with privacy in outdoor living spaces, and rating for the amount of built-in storage in the kitchen). Five participants were classified as being satisfied with their home, four as dissatisfied, four as neutral and seven as mixed.

Table 7 below describes the households and their homes in more detail.

Table 7: Property characteristics of in-home immersions

Typology	Number of bedrooms	Number of bathrooms /WC	Carparking	Household description	Household composition	Age of primary participant	Generalised satisfaction from survey
Ground floor walk-up apartment	1 bedroom 1 guest bedroom	1 (bath, shower, toilet)	Outdoor carpark (1 car)	1 adult	Live alone	45-49 years	Satisfied
3rd floor walk-up apartment	3 bedrooms	2 (1 shower, 1 shower and toilet)	No carpark (2 cars parked on street)	Couple and twin 16-year-old sons	Two or more children	50-54 years	Mixed
3rd floor apartment	1 bedroom 1 flexi-room (study)	2 (shower and toilet in each)	No carpark (1 car parked in nearby carpark)	1 adult	Live alone	Preferred not to say	Dissatisfied
5th floor apartment	1 bedroom 1 spare bedroom (study)	1 (shower and toilet)	No carpark (no car)	Couple	Partner only	35-40 years	Satisfied
3rd floor walk-up apartment	2 bedrooms 1 spare bedroom (study/storage)	1 (shower and toilet)	Outdoor carpark (1 car)	Couple, 3-year-old and 6-month-old children	Two or more children	25-29 years	Neutral
2nd floor walk-up apartment	1 bedroom 1 spare bedroom (study/storage)	2 (shower and toilet in each)	Outdoor carpark (1 car)	Couple and 18- month-old daughter	One child	30-34 years	Satisfied
2-storey terraced house	1 bedroom 1 guest bedroom	1 (shower and toilet)	Car pad (1 car)	1 adult	Live alone	30-34 years	Neutral
2-storey terraced house	1 bedroom 1 spare bedroom (laundry) 1 flexi-room (study)	1 (shower and toilet) 1 WC	Outdoor carpark (1 car)	1 adult	Live alone	50-54 years	Satisfied
2-storey terraced house	3 bedrooms	2 (1 bath and toilet, 1 shower and toilet)	Single garage (car parked on driveway)	Couple, 14-year-old son, grandmother	One child	35-39 years	Mixed

Typology	Number of bedrooms	Number of bathrooms /WC	Carparking	Household description	Household composition	Age of primary participant	Generalised satisfaction from survey
2-storey terraced house	2 bedrooms 1 flexi-room (teenager space)	1 (shower and toilet) 1 WC	Car pad (2 cars)	Couple, 14-year-old daughter, 8-year-old son, grandmother	Two or more children	40-44 years	Dissatisfied
2-storey terraced house	2 bedrooms 1 spare bedroom (study/laundry)	2 (1 bath, shower and toilet in each) 1 WC	Car pad (2 cars, 2nd car parked on street)	Couple	Partner only	40-44 years	Mixed
2-storey terraced house	2 bedrooms 1 spare bedroom (study)	1 (bath, shower, toilet) 1 WC	Car pad (2 cars, 2nd car parked on footpath)	2 adults (couple)	Partner only	35-39 years	Neutral
2-storey terraced house	2 bedrooms 1 spare bedroom (hobby) 1 flexi-room (teenager space)	2 (shower and toilet in each) 1 WC	Single garage (car parked on street)	Couple and 14-year- old daughter	One child	45-49 years	Mixed
2-storey terraced house with standalone garage	Main house: 3 bedrooms	1 (bath, shower, toilet) 1 WC	Double garage (1 car parked in garage, 3 cars parked on	Couple, 2 adult daughters (20 and 27 years), 16-year old	One child	25-29 years	Mixed
and minor dwelling	Minor dwelling: 1 bedroom	1 (shower and toilet)	street)	daughter			
2-storey terraced house	3 bedrooms	1 (shower and toilet) 1 WC	Outdoor carpark (3 cars, 2 parked on street)	Couple and 2 flatmates	Two or more adults, no children	40-44 years	Dissatisfied
2-storey terraced house	2 bedrooms 1 spare bedroom (study)	1 (bath, shower, toilet) 1 WC	Car pad (2 cars, 1 street parking)	Couple	Partner only	25-29 years	Neutral

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Typology	Number of bedrooms	Number of bathrooms /WC	Carparking	Household description	Household composition	Age of primary participant	Generalised satisfaction from survey
2-storey terraced house	2 bedrooms 2 spare bedrooms (study, exercise/media room)	2 (1 bath, shower and toilet in each) 2 WC	Single garage (1 car parked in garage)	Couple and adult daughter	Two or more adults, no children	55-59 years	Satisfied
3-storey terraced house	2 bedrooms 1 flexi-room	3 (2 with showers and toilet, 1 with bath and toilet)	Single garage (2 cars, 1 parked on driveway)	2 flatmates	Two or more adults, no children	35-39 years	Dissatisfied
2-storey duplex	2 bedrooms 1 spare bedroom (study)	1 (bath, shower and toilet) 1 WC	Single garage (car parked on driveway)	Couple and 18- month-old daughter	One child	30-34 years	Mixed
2-storey duplex	1 bedroom 1 spare bedroom (hobby/laundry 1 flexi-room (study)	2 (shower and toilet in each) 1 WC	Car pad and front lawn parking (1 car)	1 adult	Live alone	35-39 years	Mixed