

MDH/8b

Medium density housing assessment of CORT's Airfield 11 development

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About This Report

Title

Medium density housing assessment of CORT's Airfield 11 development

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Reference

Ryan, V., Lock, G., Smith, B. & Blackmore A. (2021). Medium Density Housing assessment of CORT's Airfield 11 development. Report MDH/8b by Beacon Pathway.

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1 Introduction

CORT Community Housing engaged Beacon Pathway to assess the Airfield 11 community development using Beacon's medium density assessment tools.

These tools were developed to assess good practice in medium density housing development as part of an 18 month Building Research Levy- and MBIE-funded project looking at how good quality medium density housing might be defined in New Zealand and the elements that make it up.

The tools are based around the core outcomes which New Zealand would want to see in its future medium density developments. These core outcome principles are:

- 1) **Character, context and identity** To develop a site and buildings that integrate with or relate to existing building form and style in the surrounding neighbourhood
- 2) Choice The development provides for and enables occupancy by a diverse range of residents that can benefit from and support a thriving local economy with the understanding that high levels of diversity and optimum residential density make the development viable in terms of marketability and cost per unit
- 3) Connectivity Connecting infrastructure enables safe, universal access using active, mobility, shared and private modes of transport within and through the site to identified key destinations
- 4) **Liveability** Providing quality facilities and facilitating positive interactions between residents and the wider community
- 5) **Sustainability** Efficient and cost-effective resource use through design, behaviour and technological advancement

The outcome principles were developed into an assessment framework, which provides a structure for the tools to assess developments against the desired outcomes. Each core outcome principle is divided into areas, each of which has its own outcome-focused principle – it is at this level that the tools assess each development.

The framework forms the basis for the development of assessment tools. Each outcome has an associated set of assessment questions which are answered through a combination of approaches.

- A site review
- A developer's interview
- A residents'/occupants' survey.

Taken together, these tools give an integrated picture to developers, enabling them to consider what works and doesn't work in their design, and where improvements might be made either to the existing development or in future developments. It enables comparison of what the developer believes they have achieved, with an independent site review and with residents' views of what has been successful.



This iteration of the medium density tools has added a tenancy managers' interview and survey at the request of CORT.

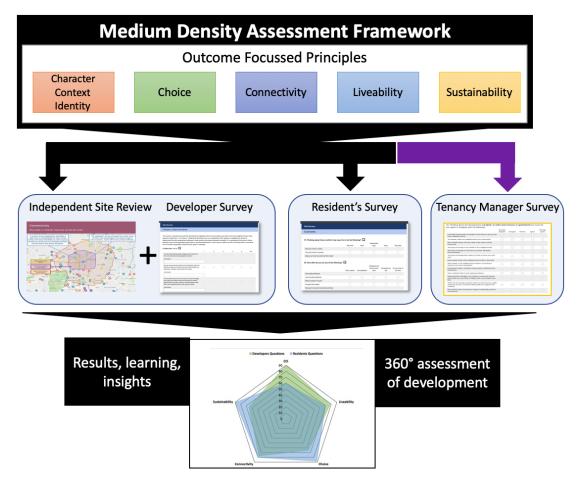


Figure 1: The Medium Density Assessment Framework, Tools, and Process¹

¹ Ryan & Smith (2018)



2 Process for assessment

The assessment tools were applied to CORT's Airfield 11 development in Takanini. This development has 14 units including 8 x 1 bedroom units and 6 x 2 bedroom units.

2.1.1 Tenancy managers and tenant surveys

At CORT's request, feedback from the tenancy manager was included in the assessment.

To conduct the face-to-face surveys, CORT contacted the tenants to let them know that the work was about to be undertaken. Following this, on 19 April the tenancy manager door knocked each unit to introduce Glenda Lock and to set a time suitable to the tenant to undertake the survey, e.g. after work for tenants who were working.

Tenant surveys were conducted during the daytime and evening with tenants on Friday 22 and Monday 25 April. The tenancy manager's interview was conducted on 19 April.

Tenants were provided with a \$30 supermarket voucher for undertaking the survey; this was given to the tenant prior to commencement of the survey. All tenants were told that they did not need to respond to any questions they felt uncomfortable with, and this would not impact on their voucher. Despite this, survey completion was high; unanswered questions were largely due to their complexity.

All units were occupied and there were ten responses from the fourteen units at the Airfield 11 development.

2.1.2 Site surveys and developer interviews

Verney Ryan and Bill Smith undertook an independent site review to gather data and make assessments of key criteria. Verney Ryan met with Julia Te Hira of CORT to undertake a developer interview about the Airfield 11 site.

2.1.3 Analysis and reporting

The data from the tenants' survey, interview and site review were combined and analysed, and presented as infographics. Additional qualitative data from the interviews with tenants was broadly analysed to give as rich feedback as possible to CORT Community Housing. The tenancy managers' responses have been compared to tenant responses to highlight areas where perceptions differ. Their comments have been included and compared to tenant comments where relevant.



3 Results - Airfield 11

Nine tenants completed the Residents' Survey in face-to-face interviews and one tenant took the questionnaire and completed it with assistance from a family member.

3.1 Application of assessment tools

Living at Airfield 11

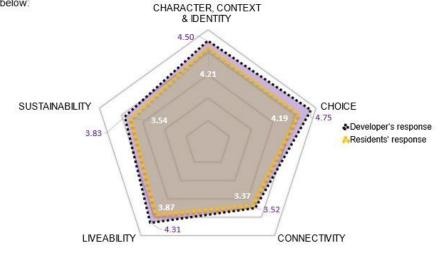


A comparison of resident and developer perspectives

Residents and developers were asked to rate a range of aspects relating to their site, building, living spaces, and access to key destinations. The residents' average score for each topic has been adapted from their survey responses, while the developer's scores were collected during an interview and informed by the independent site review process. Scores are from 1-5 and are presented for the following five sections:



A broad comparison of residents and developer scores for each category can be seen below:

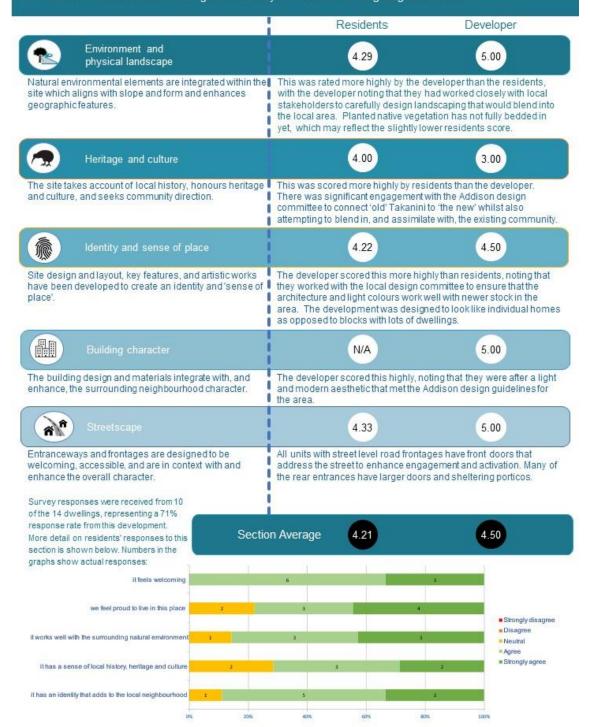


Each of the following sections outline the results in more detail with any additional information that was collected from residents, the developer, or during an independent site review.

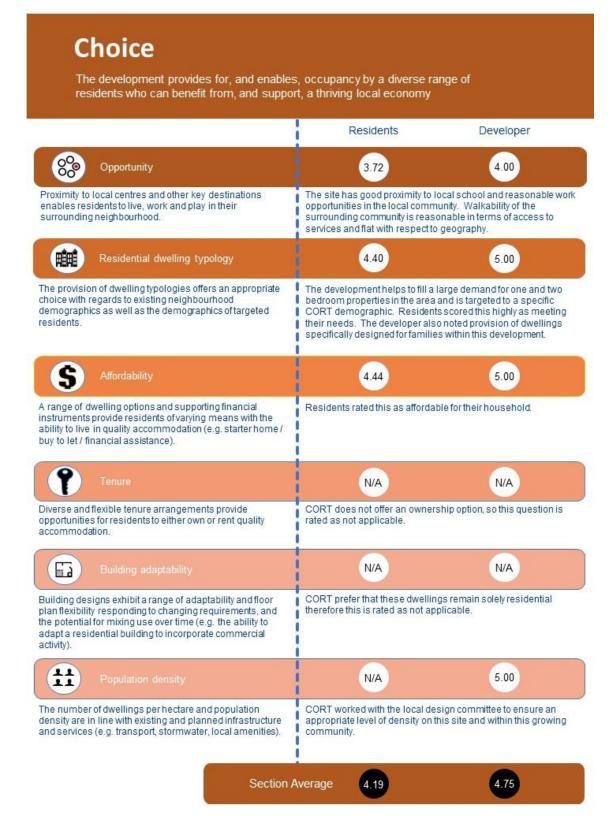


Character, context and identity

To develop a site and buildings that integrate with, or relate to, the existing natural and physical environment as well as building form and style in the surrounding neighbourhood





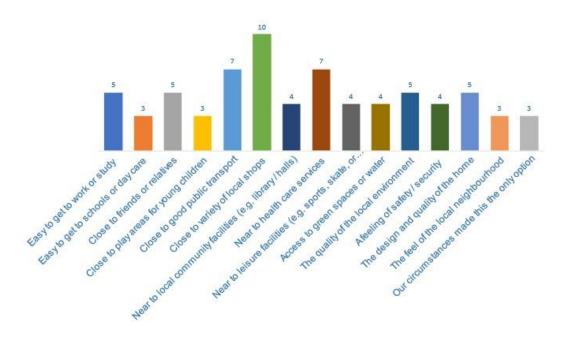




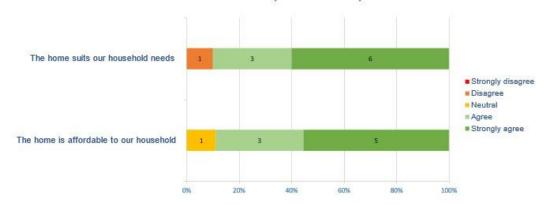
Choice

A more detailed look at residents' responses...

The first question in the section on 'Choice' asked residents to select the reasons that their household chose to live in the area. The graph below shows the numbers of respondents that selected each option.



Residents were asked about their home's suitability and affordability:





Connectivity

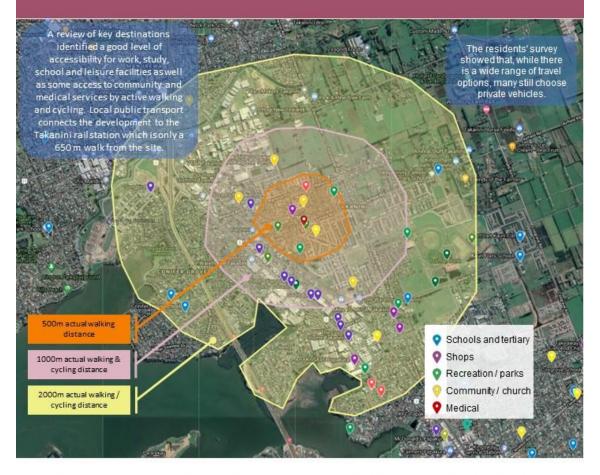
Connecting infrastructure enables safe, universal access using active, assisted mobility, shared, and private modes of transport within and through the site to identified key destinations

Developer Residents 3.72 1.74 Accessibility to key destinations The extent of accessibility to key destinations is based The two scores compare residents' current use of different on distance, infrastructure and services that enable safe travel options with a review of available accessibility to key destinations by different modes. This was achieved by mapping travel on foot, by cycle, on frequent public transport, by car, or with mobility aids. destinations and assessing the ease with which it could be accessed by active, shared, and private travel options. The difference in scores shows that the development is reasonably accessible to key destinations, but residents are not yet making the most of available options such as cycling, walking and good public transport. Permeability N/A N/A Permeability within and through the site supports wider N/A for this site due to size neighbourhood connectivity and facilitates access to surrounding destinations. (Note: May be N/A for smaller sites where this is impractical) 念久园 4.20 2.00 Residents considered the range of transport choice from The developer noted that there is nothing in place currently, but aspects such as electric car charging could be explored at a their home, while the developer scored the extent of proactive measures to encourage active and shared later stage possibly using the existing hard-wired bollards transport. which provide lighting. There is some space for bike parking. 1 3 60 4.00 Cars are parked in two main areas, one of which is corralled Design considerations reduce physical conflict between away from the houses to reduce conflict between pedestrians cars and other users within the site and at access points. and vehicles. Walking and driving are separated through surface treatments 3.00 Wayfinding and signage to and around the site facilitates The developer noted that more could have been done in the visitor movement and the identification of resident design to make wayfinding clearer and that the door numbering dwellings, while ensuring that designs and naming are can sometimes prove confusing to visitors. Site constraints appropriate to the site's overall identity. may cause some challenges for emergency vehicles needing to reverse from the parking area in order to exit (if car park full). P 3.68 4 40 The residents ranked a number of factors including The lower scores from the residents suggest that some find vehicle, moped, and cycle parking for residents and parking difficult, especially in relation to visitor parking and the visitors, and overall management of the site. overall management of parking on site. Section Average



Connectivity

More detail on residents' responses and the site review



Additional questions on travel options and parking were weighted to help to determine residents' average scores:





Liveability

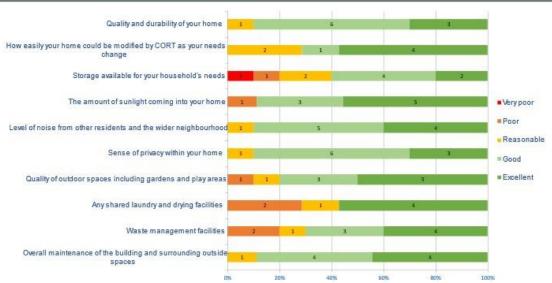
Providing quality facilities and facilitating positive interactions between residents and the wider community

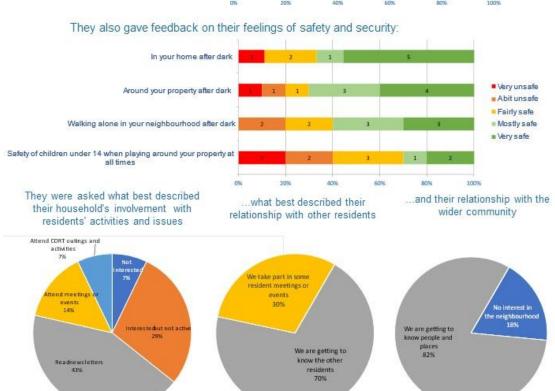
	Residents	Developer
Building quality	4.20	4.00
The building design and use of materials provide quality homes that are durable and easy to maintain.	Building quality and durability was re the developer. Due to the ground co mixture of weatherboard and brick to foundations – hence the current light	avoid costly, over-engineered
Personalised dwellings and storage	3.89	4.00
Dwellings and private spaces can be personalised or modified to account for changing needs overtime and have appropriate storage for lifestyle requirements.	but were generally happy about their	eloper also noted that all ground floor a range of universal design
Technological integration	N/A	5.00
Utilities are easily accessible enabling the integration of new technologies into buildings.	All technical infrastructure (fibre, wa in easy to reach locations.	iter, electric) has capacity for upgrade
Noise control and privacy	4.25	5.00
Design and ongoing management reduce noise to acceptable levels between dwellings as well as between dwellings and public spaces, while overall dwelling design provides adequate, quiet, private space allowing residents a sense of retreat.		nployed here. The developer control standards and all dwellings all sense of privacy was also scored
Interactive and outdoor space	4.13	4.50
Provision and maintenance of high quality internal and outdoor spaces where people are likely to interact (e.g. laundry, shared rooms or other communal spaces).	Residents' scores for shared interact were similar to the developer (both a commented favourably about the overand the surrounding outside spaces place.	above a 4). Residents scored and erall maintenance of the buildings
Security and emergency preparedness	3.48	3.00
Provision of security features, lighting, active and passive surveillance provides a safe environment for all residents within their homes and throughout the site.	Residents generally considered the voiced some concerns in the comme emergency plan for their developme only a few residents have a househo	ents. The developer has a generic nts but not a site-specificone, while
Engagement and satisfaction	3.25	4.67
Residents are encouraged to engage with issues affecting site operation and maintain active interactions with each other and the surrounding community. Resident satisfaction is regularly monitored.	Residents report slightly lower enga possibly in part due to the impact of specific residents' events. However Airfield 11 is good.	
Section	n Average 3.87	4.31



Liveability

Providing quality facilities and facilitating positive interactions between residents and the wider community - A closer look at residents' responses







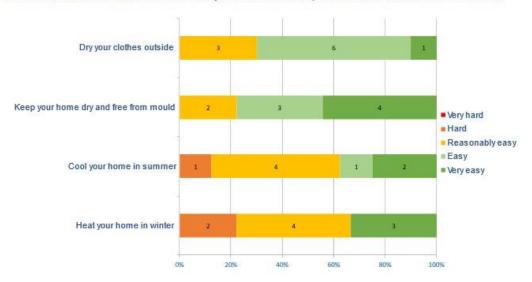
Sustainability Efficient and cost-effective resource use through design, behaviour and technological advancement Residents Developer Climate adaptability and 4.50 N/A stormwater management Design considerations account for extreme weather CORT are taking climate change into account and are looking at passive heating and cooling. Flooding was considered during variations (e.g. temperature, rainfall, wind), changing sea design as the overall area is prone to this. The development levels, flooding and wild fire where appropriate. utilises special on-site stormwater attenuation and has recharge pits that soak to the local aquifer. **Building materials** 4.00 N/A Building materials demonstrate durability and third party CORT specified a range of environmentally certified products. eco-labelling or responsible sourcing, while ensuring that Internal products were chosen with recycled content in mind and any waste is recycled and any soil contamination on site wool was used for the insulation. No specific plans were made to is remediated. deal with waste during construction. Solar gain 4.33 4.00 Building orientation takes account of seasonal variations The amount of sunlight coming into the homes was scored highly by residents and the developer. The potential for overheating was to minimise heating, cooling and lighting requirements not addressed specifically, but there have been no complaints to date 80 3.74 5.00 Despite higher levels of insulation than building code minimums. Building design maximises thermal efficiency and comfort, and effectively controls moisture through and good ventilation throughout, residents reported mixed results insulation, glazing and ventilation. in relation to keeping their homes warm in winter and cool in summer. They were more favourable about the ease of keeping their homes dry and free from mould. 3.75 3.33 Energy and water management maximises the use of There is no renewable energy but residents have outdoor clothes renewable supply as well as the use of efficient drying areas in shared and private locations. A majority of appliances where appropriate. tenants reported taking measures to save energy, reduce waste, and save water. A 'welcome home' pack is provided to explain key features of how to use the house. 3.57 4.00 Residents report high levels of reducing waste and recycling but fewer of them take the opportunity to compost. They reported that Provision and active management of waste, recycling and composting facilities to ensure appropriate site placement and ease of use waste management facilities were generally good. 2.00 2.31 Proactive attempts to enhance environmental quality and There is no monitoring of external air or water quality undertaken. biodiversity and provision of outdoor space for The few residents with access to private garden space are gardening, and food production. growing a small selection offood, but room is somewhat limited. Section Average



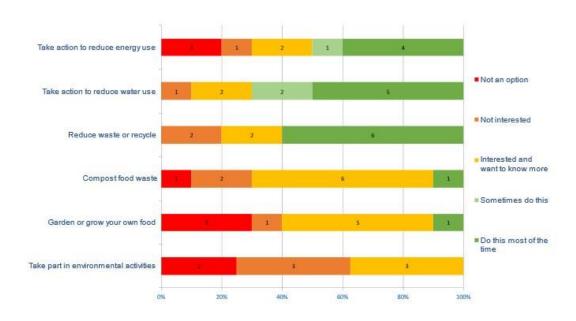
Sustainability

More information on residents' environmental behaviours

Residents stated the ease with which they could control temperature and moisture in their homes:



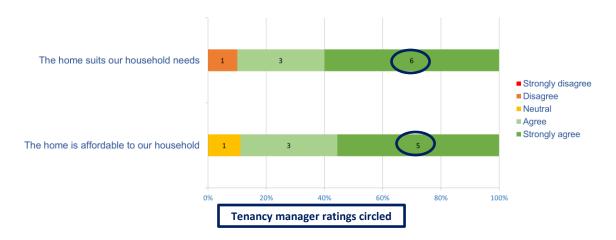
...and how often they engaged in some sustainable actions:





3.2 Feedback from tenancy manager

This section covers feedback from the tenancy manager for Airfield 11. The tenancy manager's survey responses are circled on the graphs generated by the tenant survey, to enable a visual comparison between tenancy manager and tenant responses.



The tenancy manager strongly agreed that the Airfield 11 homes suited household needs and were affordable, in line with the majority of tenants.

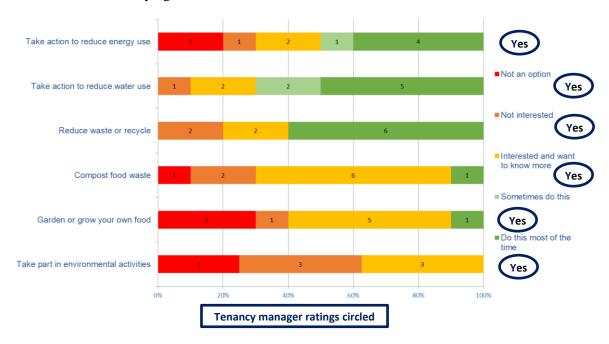


The tenancy manager rated all aspects of the house as 'excellent'. Both tenants and tenancy manager were positive about ease of modification, sunlight, noise, quality of outdoor space, shared facilities, waste management and maintenance. However, the tenancy manager was more positive than most of the tenants about storage, quality and durability, and privacy.





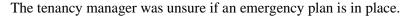
The tenancy manager rated both heating the homes and cooling in summer higher than most of the tenants. In terms of keeping homes free of mould, the tenancy manager's rating of 'very easy' was in line with tenants' positive responses. However, the tenancy manager's rating of 'very easy' for drying clothes outside was more positive than all but one tenant. Comments from the tenants indicate that clothes drying outside had been stolen.

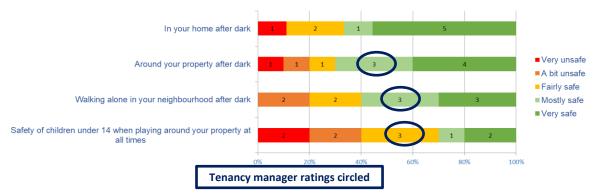


Opportunities are provided to reduce energy and water use, reduce waste, garden, compost and take part in environmental activities. Over half of the tenant are taking action to reduce their energy and water use and to reduce waste. Although only one tenant reports gardening and



composting, there is interest from the other tenants. No tenants are taking part in environmental activities available.

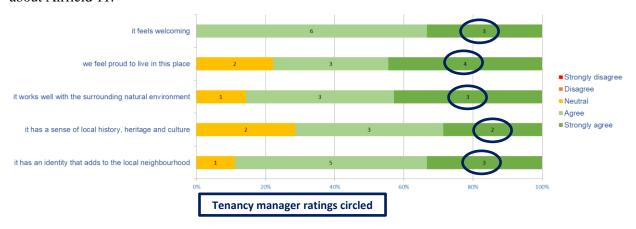




The tenancy manager rated Airfield 11 as mostly or fairly safe, in the middle of tenants' responses. With regard to the safety of children playing around the property, the tenancy manager said:

"As long as children are playing in their yards or neighbouring open spaces."

When asked what they liked most about Airfield 11, the tenancy manager said "*They look good [and] are affordable and warm and dry.*" The tenancy manager had nothing that they liked least about Airfield 11.



Both the tenancy manager and the tenants were positive about the development, with the tenancy manager's rating at the top end of the tenants. The tenancy manager commented:

"Yes it does [fit well with the neighbourhood], it's close to all amenities and blends in nicely with the neighbourhood"





The tenancy manager rated travel options, safety from cars and ease of finding the homes as 'excellent', higher than most of the tenants. Car parking for residents and visitors and overall parking management was rated as 'good', in the mid-range of tenants' responses.

3.2.1 General tenancy manager comments

The tenancy manager is relatively new and manages units in South Auckland, close to home.

She believes it's a good layout and easy to manage. The location is good; close to shops and amenities. When she shows people around the units, they "are wowed by the quality of the development". They come to the units feeling like they don't deserve them, then get healthy from living in a better environment and can hold their heads up high and look to the future.

In terms of things that could be changed, the tenancy manager thought it would be nice if each home had their own clothesline. Carparking is first come/first serve and could be nice if they had their own carpark. Although she noted that tenants forget about the carparks in the area adjacent Unit 14.



3.3 Feedback from tenants

3.3.1 Home comfort

Two respondents to this question found it 'hard' to heat their home, with seven finding it 'reasonably easy' to 'very easy'. Interestingly, within households, opinions could vary on the ease of heating and cooling. Respondents commented:

"Use oven to heat up - usually pretty fast. Don't have a heater."

Only one respondent found it 'hard' to cool their home in summer, with the majority finding cooling 'reasonably easy' to 'very easy'. Respondents commented:

"Shut curtains and open doors and this keeps downstairs cool. Upstairs is really hot as no airflow."

"Bedroom too hot in summer so sleep in the lounge. Use fans"

All respondents reported that it was 'very easy', 'easy' or 'reasonably easy' to keep their home free of mould.

All respondents reported that it was 'very easy', 'easy' or 'reasonably easy' to dry their clothes, using either a drying rack on the balcony or the clothesline outside. Tenants commented:

"Have hung out clothes on the line and they were stolen"

3.3.2 What the tenants like about living at Airfield 11

3.3.2.1 About the home

When asked what they liked most about their home, respondents answered:

"Comfortable and quiet, warm and dry

"My own space that has a large living space"

"Comfy"

"Love the area. Love everything about this house - everything that is inside"

"Like the beautiful house"

"Comfortable. Miss our house if we go out. No flies. Clean. Nice"

"It helped me out as I had nowhere to go"

"Safety, friendly"

"Feel blessed to be here"

3.3.2.2 About the development/neighbourhood

Tenants commented that they enjoyed:

"Nice and quiet area and close to shopping centre and school"

"Very good neighbourhood"

"Well done. very happy!! Blessed to be here thank you!!"

[&]quot;Would be good if there was carpet in the bedroom"

[&]quot;Open doors in lounge and it's cool."



3.3.3 What tenants don't like about living at Airfield 11

3.3.3.1 About the home

The majority of respondents had nothing they disliked about living at Airfield 11. Other comments were:

"Outside yard - for kids and for other reasons"

"No allocated parking. We were told when we moved in that the parking spot outside our unit was allocated to us. Later on, we were told it was shared parking"

"Nothing, still like this place. Noise from cars. Trucks shake house"

"The stairs"

"Oven light is not working. Bathroom door bolt is loose - needs a longer screw"

3.3.3.2 About the development/neighbourhood

Respondents made few negative comments on the neighbourhood and development area.

"Just the yard"

"Outside needs a clean & garden. People walking around who don't live here"

"Neighbours are great. Only one person is a problem"

3.3.3.3 About the design

When asked specifically about improvements to the design of the bathroom, laundry and kitchen, respondents commented:

"Kitchen, bathroom and laundry are suitable for the house. Although kitchen sink has been leaking since we moved in."

"Happy with bathroom. Child has smashed head on bench return a few times"

"Yes, we have issues in the laundry room where there's an overflow of water"

"One person wanted stove and sink swapped around - other was happy with how it is"

"Not enough space in laundry"

"Would like a bath in bathroom"

Two respondents rated storage 'poor' or 'very poor'; however, the majority were happy with the amount of storage available.

3.3.4 Involvement in residents' activities and community feel

In terms of interactions with other residents, seven respondents described themselves as 'Getting to know the other residents.' The other two respondents said they had attended residents' meetings or events. All but three residents read the newsletter, and two respondents were active in attending CORT events. Four other respondents described themselves as 'interested but not active'.

In terms of the wider neighbourhood, most respondents reported that they are 'getting to know people and places', and two had no interest in the neighbourhood. All but one respondent rated the neighbourhood 'reasonable' to 'excellent'.



3.3.5 Safety

Only one respondent felt 'very unsafe' in any of the situations (in their home, after dark, around the development and around the neighbourhood). Two respondents felt 'a bit unsafe' walking around the neighbourhood after dark and one felt 'a bit unsafe' on the property after dark. Four respondents felt that children under 14 were 'a bit unsafe' to 'very unsafe' playing around the property. One respondent believed a "fenced play area for kids, especially little ones" was needed.

Again, only one respondent felt unsafe from cars when walking or cycling; all others rated road safety 'reasonable' to 'excellent'. One respondent commented

"Have to watch kids when outside playing as people speed up street, even police without lights."

3.3.6 Transport and parking

All respondents were positive about the transport options, rating them between 'reasonable' and 'excellent'.

Eight respondents had a car, of which five rated parking for residents as between 'reasonable' and 'excellent'. Seven respondents found car parking for visitors 'good' or 'excellent', with two respondents reporting visitor parking as 'poor' or 'very poor'. Overall, only one respondent reported parking management was poor, compared to eight respondents who were positive. Comments about parking included:

"I was blocked into a park by another tenant. I talk[ed] with CORT and the problem was sorted."

"No parking at the carpark when it was raining....., it is a challenge getting [young kids] out of the car while road is busy."

"Some residents have more than 1 car and take up the limited parking space. Parking should be numbered and allocated to the unit to avoid problems. Visitors have nowhere to park and avoid coming because of it"

"Not enough spaces"

All respondents reported visitors could find the development/their home easily. Two reported that it can be difficult for delivery vehicles to find the development/their home.

3.3.7 Sustainability and emergency preparation

Five respondents were engaged in activities to save energy, four to save water, and six to reduce waste, either most or some of the time. Two respondents reported it was not possible to save energy. One respondent commented

"Some neighbours do everything right and some don't (stuff on ground, mixing waste in recycling bins). Would like own bin."

One respondent composted, five were keen to know more, and one thought composting was not possible. One respondent gardened, five were keen to know more, and three thought gardening was not possible. One commented that "CORT were talking about a communal vegetable garden."



No respondents were involved in wider sustainability activities with only three keen to know more.

Six respondents had made preparations for an emergency, two had made no preparations, and two didn't know.



4 Conclusions

The comparison of the resident and developer perspectives shows a reasonably close relationship between the developer rating and that of residents, although the residents rated each of the overall domains slightly lower than the developer.

The greatest variability was in Choice (the development provides for, and enables, occupancy by a diverse range of residents who can benefit from, and support, a thriving local economy) and Liveability (providing quality facilities and facilitating positive interactions between residents and the wider community). Despite being adjacent to Airfield 1, the respondents in Airfield 11 rated all domains higher than those at Airfield 1, except for Sustainability. This was also reflected in more positive comments about living in the development.

Overall, tenants rated living at Airfield 11 highly with nine of the ten respondents either agreeing or strongly agreeing that the home suits their household needs and eight of nine respondents strongly agreeing or agreeing that the home is affordable to their household. It was noted in comments that the two-bedroom units were not accessible, making it difficult for anyone with mobility issues.

Tenants rated access to different travel options highly, noting the close proximity of the Takanini train station and local bus stops. Despite 70% of respondents noting good public transport as one of the reasons that they chose to live in the area, travel but car remains the predominant mode for most trips. This highlights the reliance on private vehicles despite the efforts of CORT to situate these developments with very good levels of connectivity and local amenity / facilities close by. Parking provision and management was rated lower by respondents than the developer, with over 20% or respondents rating carparking for visitors either poor or very poor, despite a large amount of roadside parking adjacent to the development. One tenant noted that the smaller parking lot at the edge of the development was not used much.

The impact of COVID-19 on getting to know the local community and residents in the development was noted by tenants across all three developments assessed in April 2021. This is reflected in residents reported slightly lower engagement with their community. Both tenants and the tenancy manager noted the impact of COVID-19 on Airfield 11-specific events and its impact on tenants being able to interact within the development and broader community not long after moving in. However, overall satisfaction with living at Airfield 11 is good.



Several units had more than one adult involved in the response to the questionnaire, and it was interesting to note the variability of responses from people living within the same home, particularly around areas of personal comfort and health including warmth, cooling and amount of sunlight. Despite higher levels of insulation than building code minimums and good ventilation throughout, residents reported mixed results in relation to keeping their homes warm in winter and cool in summer. Two of nine residents reported it as hard to heat their home in winter, and one noted that they used their stove to heat their home. Tenants who are older or have health issues may need to keep their homes warmer for their health. While good insulation is important to keep the heat in, it is likely that some form of heating device is needed to maintain a healthy indoor temperature during colder months

In general, respondents were extremely positive about living in Airfield 11, and commented favourably on their interactions with CORT as an organisation. On many of the crucial aspects of post-occupancy feedback, CORT scores very highly.

"Good place to live"

"Excellent job. Keep up the good work!!!"



5 References

Ryan, V. and Smith, B. (2018). *Medium Density Housing Assessment Tools: Summary Report*. Report MDH/4.2 by Beacon Pathway.