

1. Introduction

Play is the way children interact with the world through physical activity which promotes creativity, imagination, cognitive development and independence (Blahey, 2021).

Unstructured play involves children having the freedom to navigate their own play, while structured play is when there are directions and rules given by parents on what they can do such as board games, puzzles, and team sports (Hargraves, 2019).

Considering this, it is essential communities can facilitate safe and accessible play spaces to allow children to grow and thrive in their neighbourhoods. With this, it is of interest to the CCC to determine factors that are limiting play, and how to improve it. Our brief for this project was to select a suburb in Christchurch, assess the current play situation, investigate the factors limiting play and identify ways to help improve how children play. As a result, we were tasked to provide the CCC with recommendations on how to improve play within an area in Christchurch.

Our community partner, Lou Van Tongeren, suggested Riccarton for this project. Riccarton is currently facing significant population growth and high housing density (Community Support Partnerships Unit, 2023). Lou indicated that Riccarton play facilities may be overcrowded and unsafe, and in need of change. The Riccarton ward boundary can be seen in Figure 1 which represents a mix of residential, commercial and educational facilities.

The Riccarton Ward population 842.04 24ao(i)5(99.04 426.9842.0o8t107.95 3)3(a83/Lang fnes, ged 008866 0 594.96 842.04 reW*BT/F3 9.024 Tf1

Figure 1: Map showing the Riccarton Ward boundary

2. Aim

Our project aims to identify the factors that are limiting outdoor play for primary aged children (5-14), within the Riccarton Ward and to develop a recommendation to enhance local streets by addressing these factors. From the research brief, the scope was narrowed, and the following research question was developed: “What is limiting children’s unstructured outdoor play in Riccarton and how can this be improved?”. This report aims to address this research question and provide recommendations to the Riccarton community and the CCC.

3. Context

Relevant literature was critically assessed to provide background information and draw on existing insights regarding children’s play. This was split into five themes.

3.1 Play in New Zealand is split into five themes.

3.3 Greenspaces

Greenspaces such as parks and playgrounds are influential to children's cognitive development, offering areas for play, exploration and physical activity (Dadvand et al., 2015). Traditionally, children's play has been centred around greenspaces, which offer great benefits compared to other play environments (Dadvand et al., 2015). However, increasing urbanisation has heightened parental concerns of traffic, safety, and transportation, leading to children's outdoors independence diminishing (Kingham et al., 2007; Tranter and Pawson et al., 2001; Witten et al., 2013). As a result, children are increasingly playing indoors (Witten et al., 2013). This trend is furthered by a lack of safe, clean, and well-maintained greenspaces (Hand et al., 2018). Addressing this issue goes beyond parental control and reflects a broader lack of community resources, a multidimensional problem that heavily influences children's access to outdoor play.

3.4 Community Diversity

Community diversity can significantly influence children's play, as cultural and socio-economic factors shape parental perceptions and opportunities for outdoor play (Foulds, 2022; Hyun et al., 2021; Witten et al, 2013). Play is perceived differently across cultures and communities. For instance, often parents within Asian cultures will prioritise academic success over play, viewing the two as separate activities. This contrasts Western views that integrate play into learning (Foulds, 2022; Hyun et al., 2021), resulting in children from Asian backgrounds experiencing less unstructured playtime, and thereby impacting their social interactions with peers. Additionally, a lack of cultural integration within communities can limit opportunities for play. Parents can be hesitant to allow cross-cultural interactions due to differing norms and concerns about supervision (Holden et al., 2011; Witten et al., 2011). This lack of integration can reduce children's ability to form diverse friendships within their community, further affecting their play experiences (Witten et al., 2013).

Socio-economic status (SES) can also impact children's play. In lower SES areas, financial stress and limited resources can reduce children's opportunities for outdoor play. Parents may lack the time, energy, or safe environments to support play (Aliyas et al., 2024; Foulds, 2022; Witten et al., 2013). As a result, children may spend more time indoors, leading to

2011). The survey was specifically designed for the target participants, parents and/or primary caregivers over the age of 18 and residing in Riccarton. Due to inconsistencies in

Table 1: Age and ethnicity of survey respondent’s children, alongside Riccarton Ward ethnicity distribution.

Ethnicity	Age Range (%)				Total (%)	Riccarton Ward (%)
	0-4	5-9	10-14	15-16		
European	15.79	42.11	21.05	5.26	84.21	57.70
M ori	5.26	5.26	0	0	10.53	7.20
Pacifica	0	0	0	0	0	3.60
Asian	0	0	0	0	0	34.90
MELAA	5.26	0	0	0	5.26	2.80
Other	0	0	0	0	0	1.10
Total	26.31	47.37	21.05	5.26	100	100

Note: Middle Eastern/Latin American/African (MELAA)

All respondents indicated their children play in greenspaces at least monthly, with 72.7% visiting weekly (Figure 2). In contrast, only 63.7% of respondent's children play on streets either weekly or monthly, while the rest (36.3%) never play on streets (Figure 2).

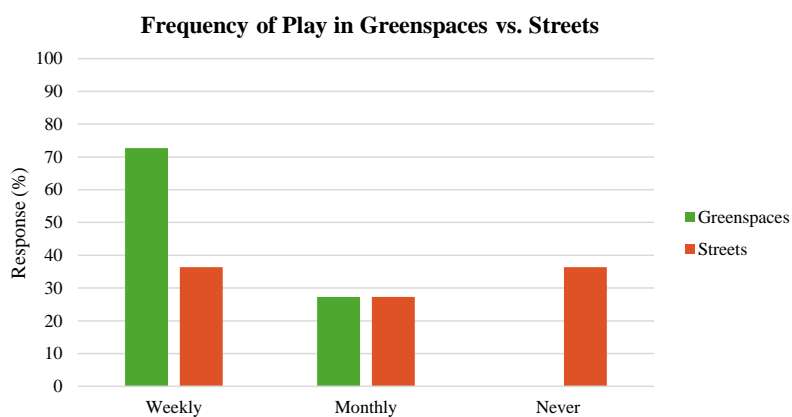
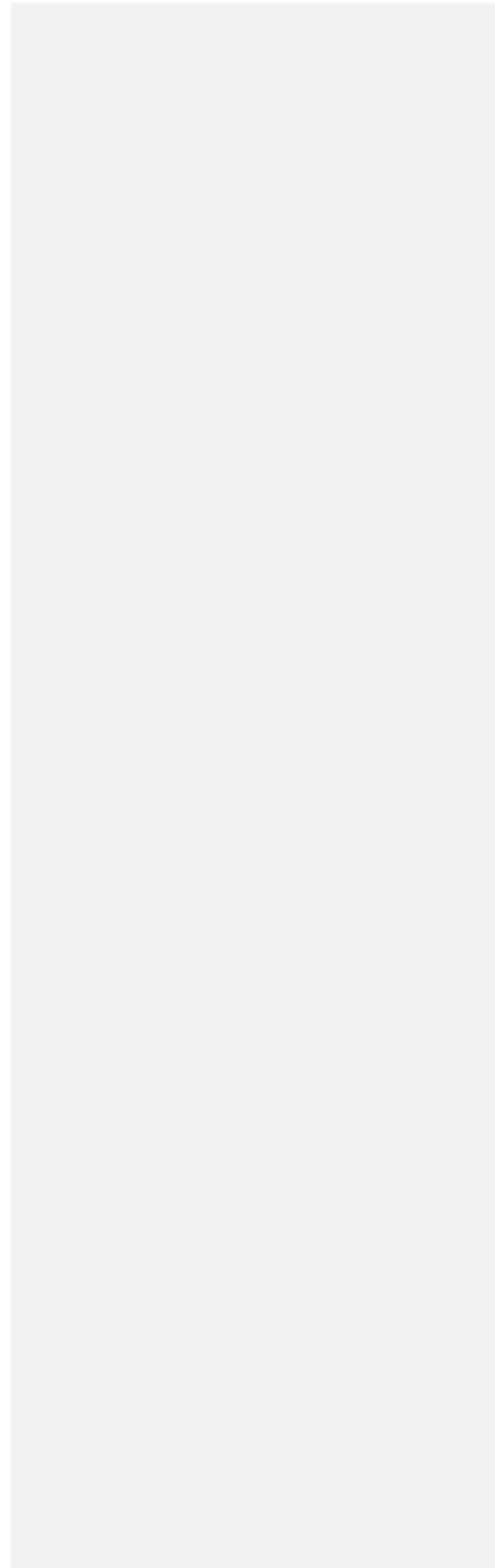


Figure 2: Frequency of play amongst children in Riccarton in greenspaces and streets.

Respondents indicated biking (33.3%), and chalked games (22.2%) were the most common forms of play on streets their children participate in (Figure 3). Ball games (16.7%) and skating/scooter (11.1%) were the less popular, but still participated in.

Figure 3

Classification: In-Confidence



6.5 Strengths & Limitations

The survey provided valuable insight into current perspectives within Riccarton, however a significant limitation stems from the low number of completed responses (11). The results would have been more accurate and representative with a higher participation rate. Although 9 additional respondents started but did not finish, these responses were not included to maintain consistency amongst results. The limited number of responses may be attributed to the survey's distribution being restricted to online and on Facebook, which confined participation to individuals with access to both.

In addition to the small number of survey respondents, their ethnic distribution did not reflect

Further investigations should go into reducing speeds limits in Riccarton from 50km/h to 30km/h. Across Europe, reducing road speeds to 30km/h have found no negative effects as well as “decreased road injuries, fatalities and crashes” (Yannis & Michelaraki, 2024). Pedestrian crossings and improved pathways may also improve safety (Stevens & Salmon, 2014) and were favoured by survey respondents. As such, implementation of these additions should be further investigated, specifically regarding their success in New Zealand.

Research has found that both greenspaces (Dadvand et al., 2015) and play streets (Umstadd Meyer et al., 2019b) encourage play. While greenspaces were the preferred play space for survey respondents, they are limited in Riccarton. Consequently, this paper investigates implementing a play street. Benefits of implementing a play street next to a greenspace, should be further researched as the combination of both may further increase play amongst children. Implementing community days at greenspaces may also enhance safety and play however this would need to be further researched.

Overall, this project along with our recommendation can be collectively used to inform policy on how to improve play within communities across the country. The guidelines provided by NZ Transport Agency (2021) in conjunction with our findings can be used to inform policymakers of the relevant requirements needed to implement a playstreet, along with providing essential data to improving traffic safety near play spaces. These findings can be integrated into future policy regarding children's play around New Zealand. However, further research will need to be done to assess the play situation in other areas of New Zealand.

8. Conclusion

The aim of this research was to understand how children play within Riccarton and the ways play can be improved. Survey results were consistent with literature, determining road safety as the primary barrier to play in Riccarton. While play in Riccarton is hindered, research found the implementation of a play street could improve it. Research has identified Broadbent Street as a suitable area for the implementation of a play street in Riccarton. Future research should be undertaken, to investigate how reducing traffic speeds within the Riccarton area will further promote safety.

9. Acknowledgements

We would like to acknowledge our community partner, Lou Van Tongeren as the Play Advisor for CCC for guiding us through this project and enlightening us on this issue. As well as our supervisor Phoebe Eggleton for her ongoing support through every aspect of this project. Additionally, we would like to thank both Sam Savage and Tyla Harrison-Hunt for helping distribute the survey to various community groups around Riccarton. Lastly, we would like to thank all survey respondents.

D'Haese, S., Van Dyck, D., De Bourdeaudhuij, I., Deforche, B., & Cardon, G. (2015).

Organizing “Play Streets” during school vacations can increase physical activity decrease sedentary time in children. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 14. <https://doi.org/10.1186/s12966-015-0171-y>

Egan, S., Pope, J. (2024). Streets ahead: Neighborhood safety and active outdoor play in early childhood using a nationally representative sample of 5 year olds. *Child development*. <https://doi.org/10.1111/cdev.14132>

Faulkner, G., Mitra, R., Buliung, R., Fusco, C., & Stone, M. (2015). Children's outdoor playtime, physical activity, and parental perceptions of the neighbourhood environment. *International journal of play*, 4(1), 84-97. <https://doi.org/10.1080/21594937.2015.1017303>

Foulds, K. (2022). Playful perceptions: the role of and barriers to play for parents of young children in diverse global contexts. *International Journal of Play*, 2, 1–18. <https://doi.org/10.1080/21594937.2022.2156040>

Gao, M., Zhu, X., & Cheng, X. (2024). Safety–Premise for play: Exploring how characteristics of outdoor play spaces in urban residential areas influence children's perceived safety. *Cities*, 152, 105236. <https://doi.org/10.1016/j.cities.2024.105236>

Hand, K. L., Freeman, C., Seddon, P. J., Recio, M. R., Stein, A., & van Heezik, Y. (2018). Restricted home ranges reduce children’s opportunities to connect to nature: Demographic, environmental and parental influences. *Landscape and Urban Planning*, 172, 69-77.

Hargraves, V. (2019, November 11). *What is play and why is it important for learning?* The

Education Hub 384 379.63 Tf.46 024 Tf1 0 0 1 164.02 36Qw4 1 164. 842.04 reW*49390520055>60046004B0e6007n0Qqh842 TJE.nz/wheW

Kingham, S., & Ussher, S. (2007). An assessment of the benefits of the walking school bus in Christchurch, New Zealand. *Transportation Research Part A: Policy and Practice*, 41(6), 502-510.

Ministry of Education. (2018). Learning through play – What’s it all about? / NZC Online blog / Curriculum resources / Kia ora - NZ Curriculum Online. Tki.org.nz.
<https://nzcurriculum.tki.org.nz/Curriculum-resources/NZC-Online-blog/Learning-through-play-What-s-it-all-about>

Minkler, M. (2005). Community-Based Research Partnerships: Challenges and Opportunities. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 82(2_suppl_2), ii3–ii12. <https://doi.org/10.1093/jurban/jti034>

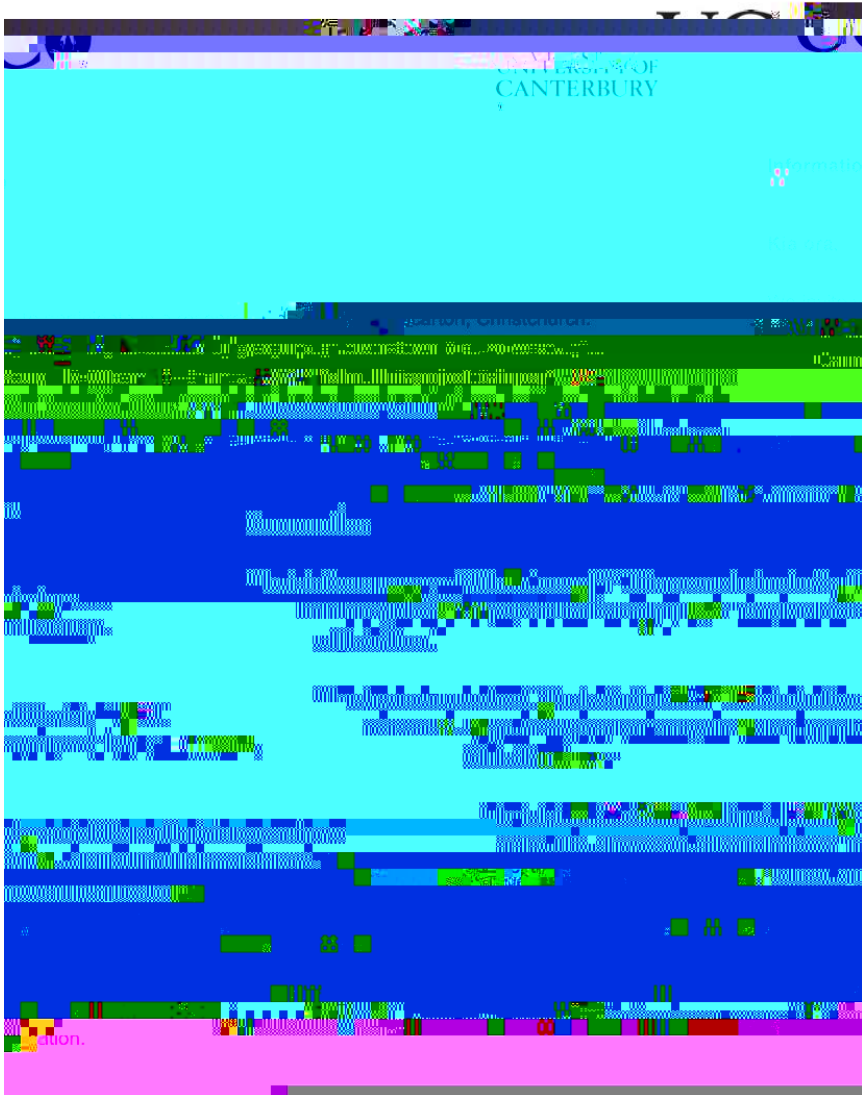
Nguyen, P.-Y., Astell-Burt, T., Rahimi-Ardabili, H., & Feng, X. (2021). Green Space Quality and Health: A Systematic Review. *International Journal of Environmental Research and Public Health*, 18(21), 11028. <https://doi.org/10.3390/ijerph182111028>

NZTA. (2021). *Guidelines for Restricting Traffic for Play Street Events*. Retrieved from <https://www.nzta.govt.nz/assets/resources/play-street-guidelines/Guidelines-for-restricting-traffic-for-Play-Street-events.pdf>

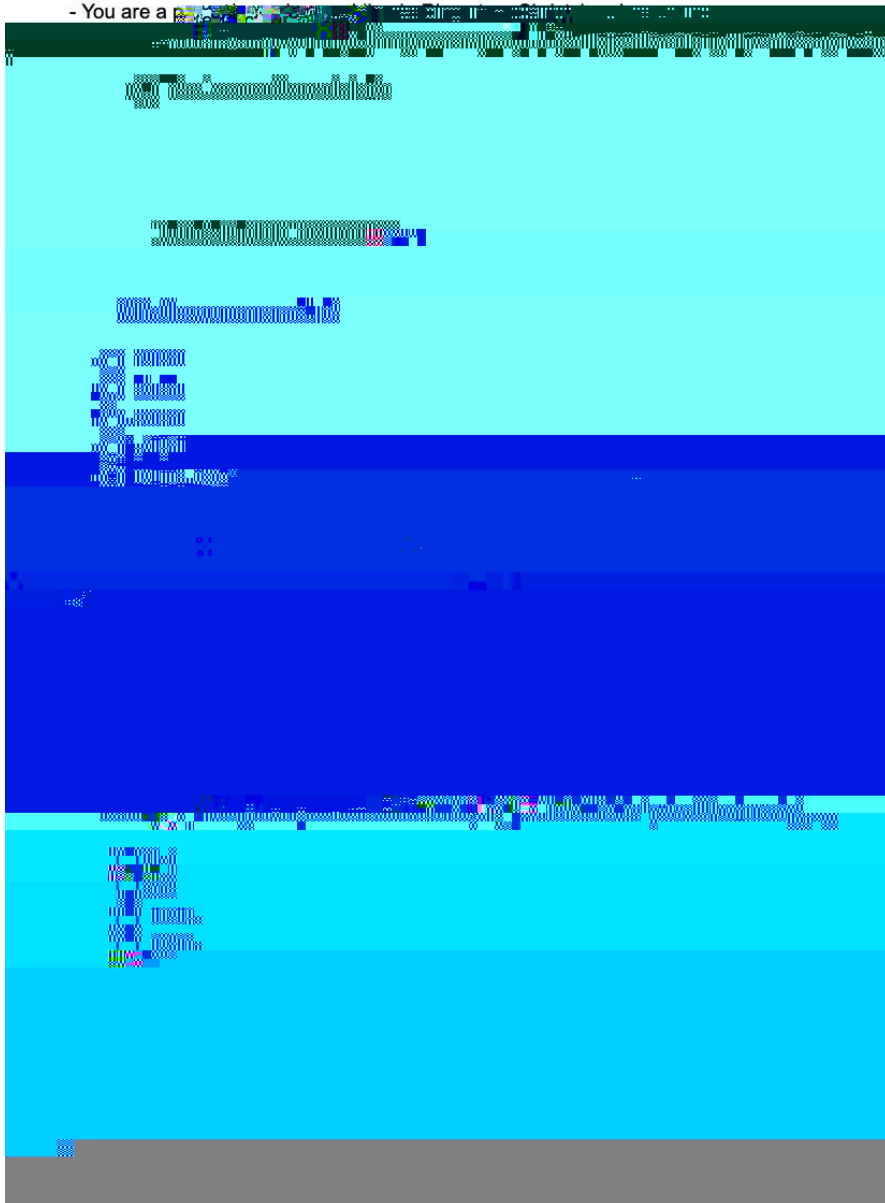
Solomon-Moore, E., Emm-Collison, L. G., Sebire, S. J., Toumpakari, Z., Thompson, J. L., Lawlor, D. A., & Jago, R. (2018). “In my day...”-Parents’ views on children’s physical activity and screen viewing in relation to their own childhood. *International journal of environmental research and public health*, 15(11), 2547.
<https://doi.org/10.3390/ijerph15112547>

SportNZil11 7.58 q4 re.99BDC q0.000008866 0 Prr S42.04 0 1Now Z1 0 al73.5.96 842.04 reW*BT/F3 9.024 Tf1 0 0 1 271.25 373.58 Tm0 g0 G(,)

Classification: In-Confidence



- You are a p



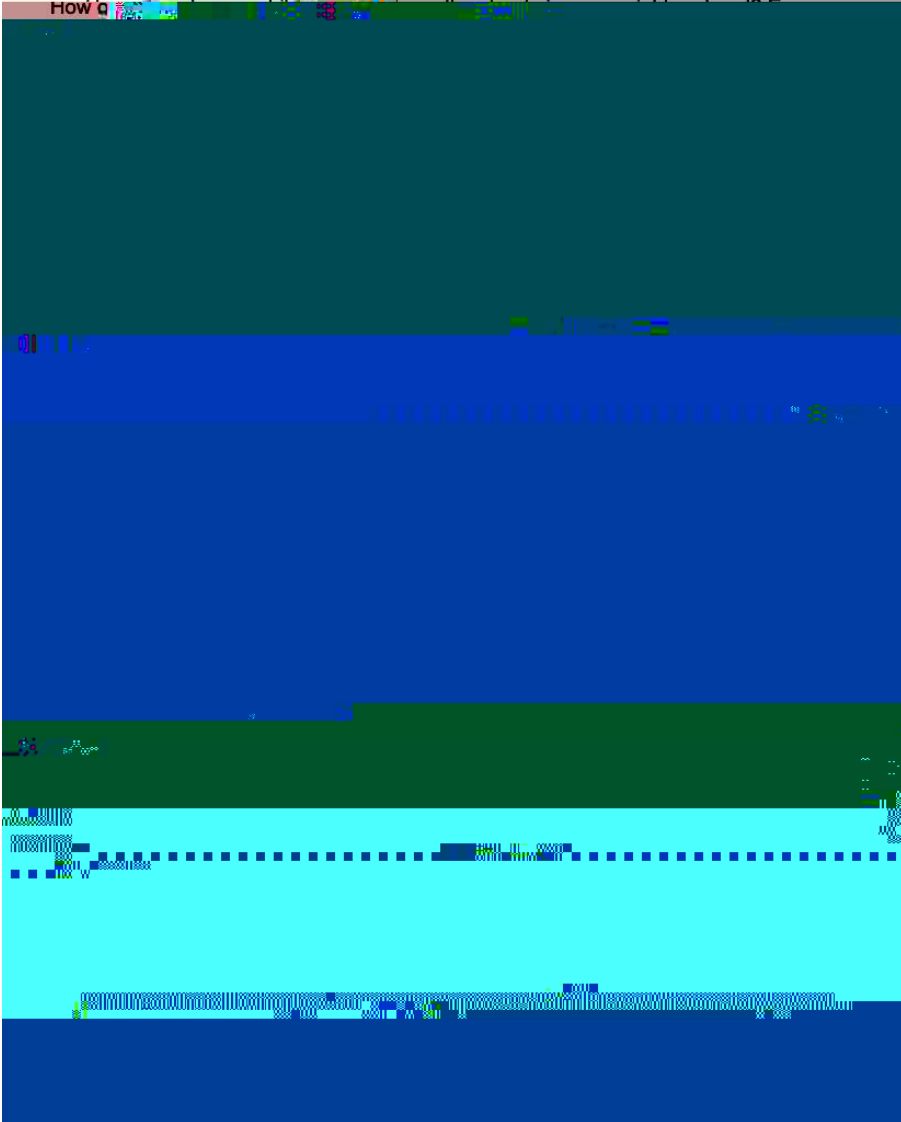
What ethnicity are you? (Select all that apply)

- Māori
- Pakehā / New Zealand European
- Asian
- Other (please specify):

Please enter your ethnicity in the box below.

Current Play Environment

How do we measure the current play environment?



Classification: In-Confidence

(Select all that apply)

...



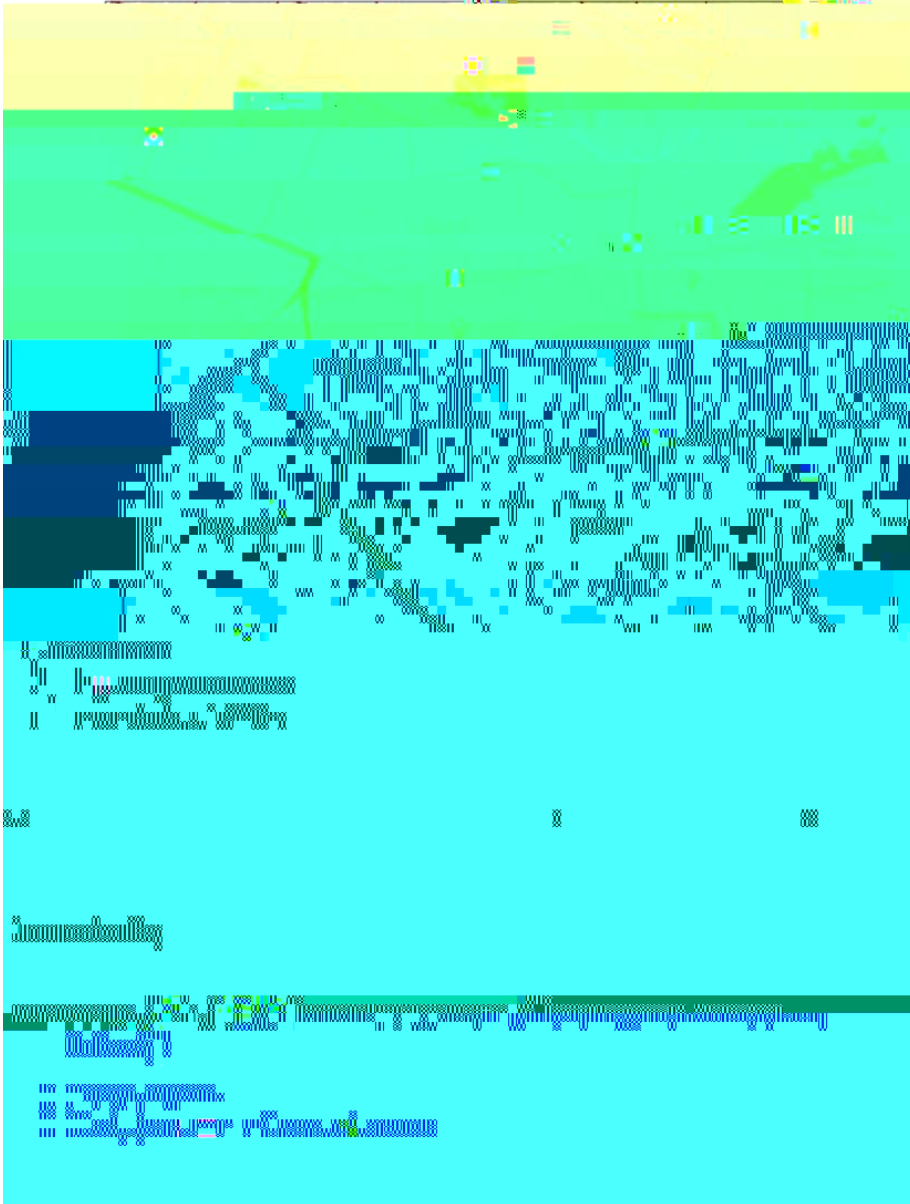
100%

100%



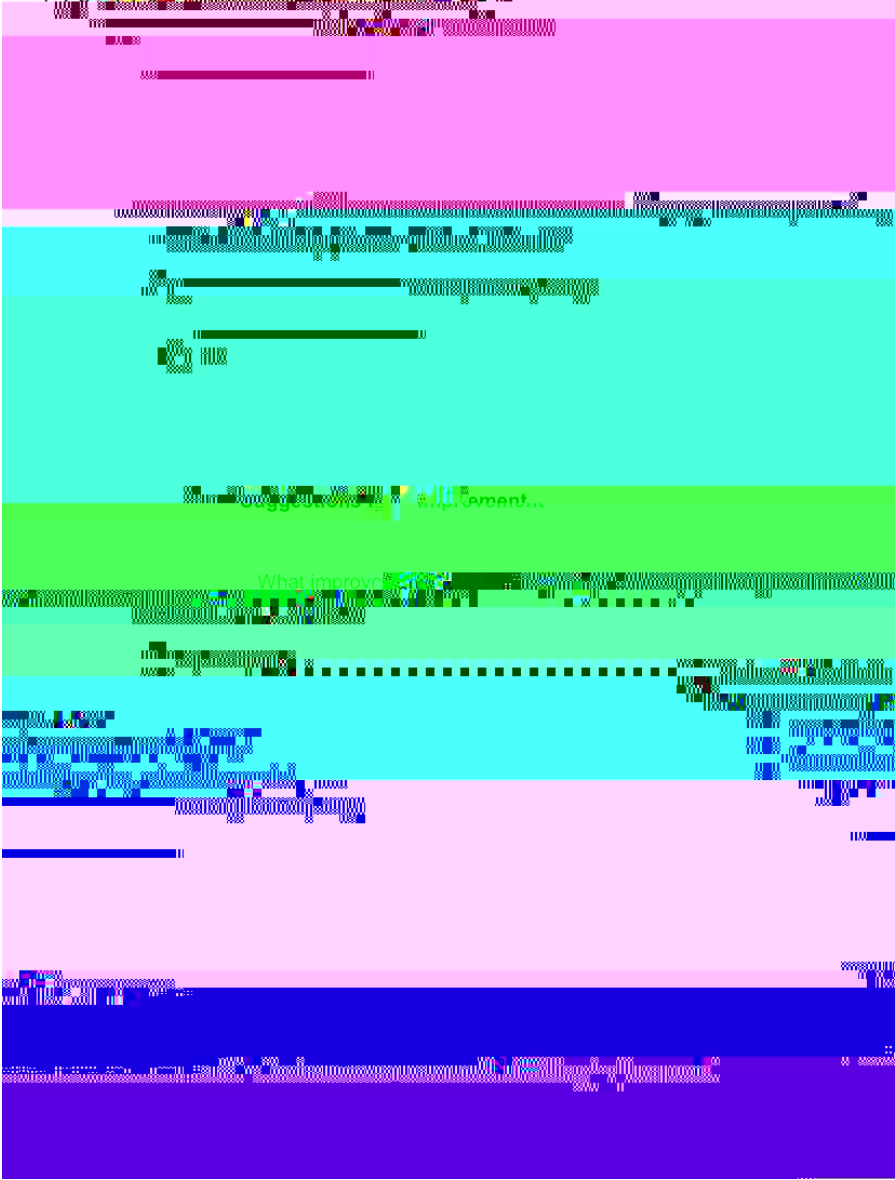
100%

Geographic Boundary Viewer Map

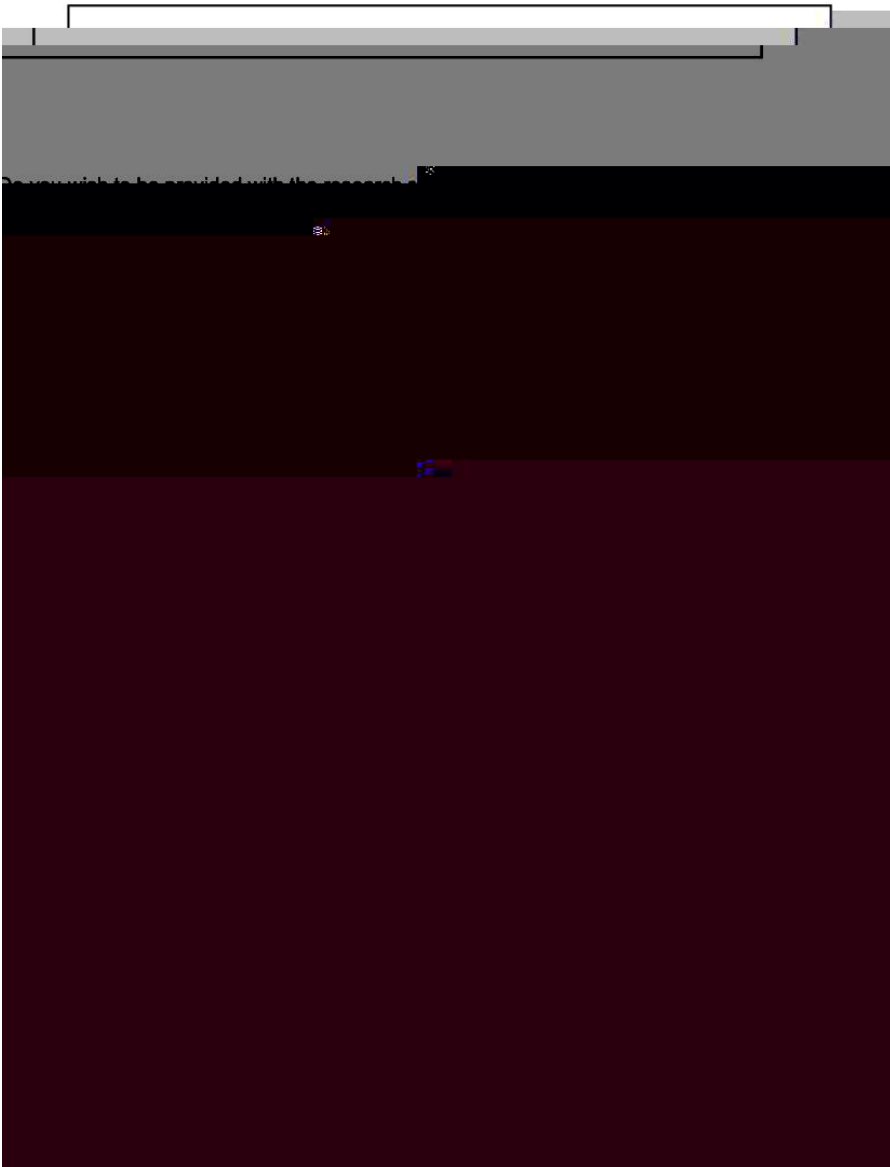


Poorly maintained playgrounds

Safety



in Riccarton:



Appendix B.

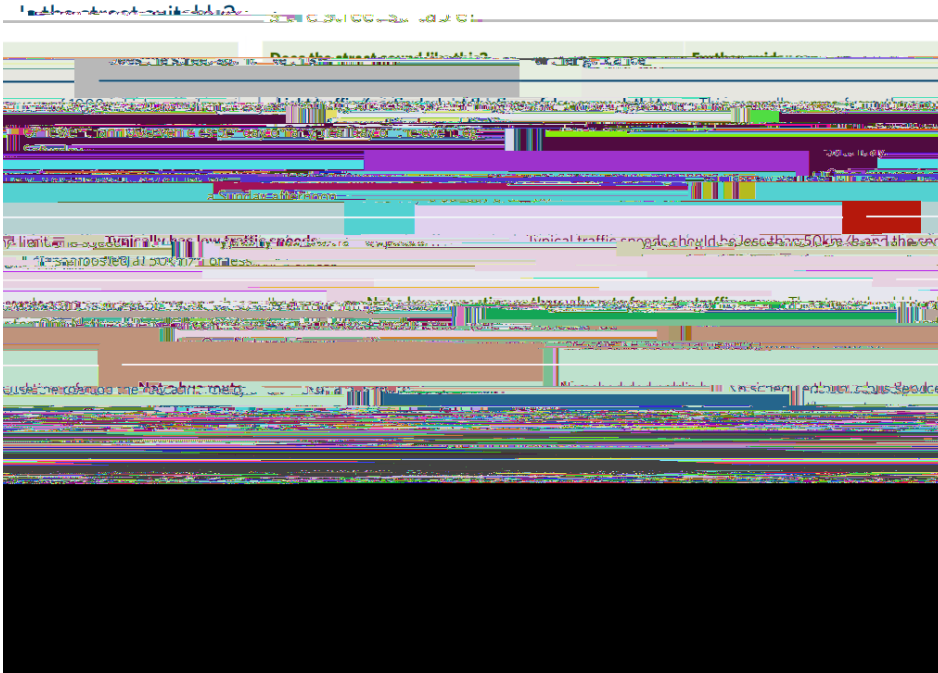


Figure B.1: NZTA (2021) guidelines for a suitable street for a play street.

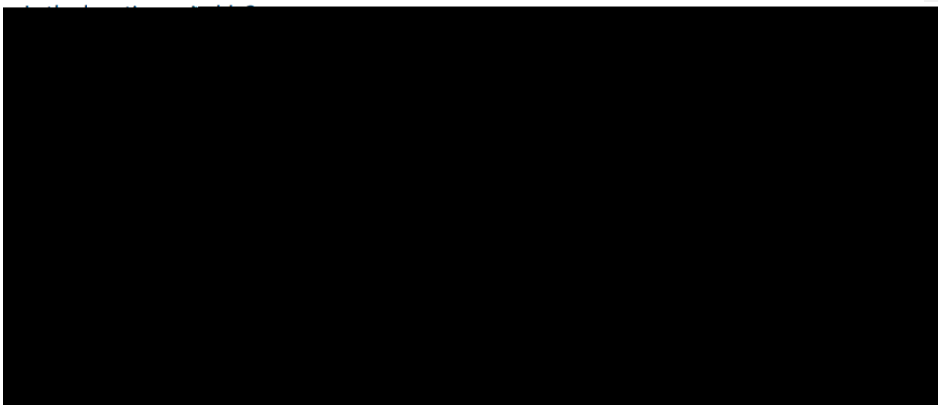


Figure B.1: NZTA (2021) guidelines for a suitable location for a play street.



Figure B.3: NZTA (2021) guidelines for whether a play street is a suitable event.

Appendix C.

Classification: In-Confidence