Notes and evidence for Dr Christina Stachurski's submission to the Independent Hearings Panel for Plan Change 14 on the Residential Zone topic.

1. Christchurch is unique. Our city's special history and needs should be addressed - and accommodated - in any changes to housing possibilities.

2. Research shows that living in such high-rise buildings would more than likely negatively affect the mental health of occupants.

3. Research also shows that children living in multi-story housing have a high chance of being disadvantaged in terms of their development and education.
....

4. My research for **E Q f@#ing C**

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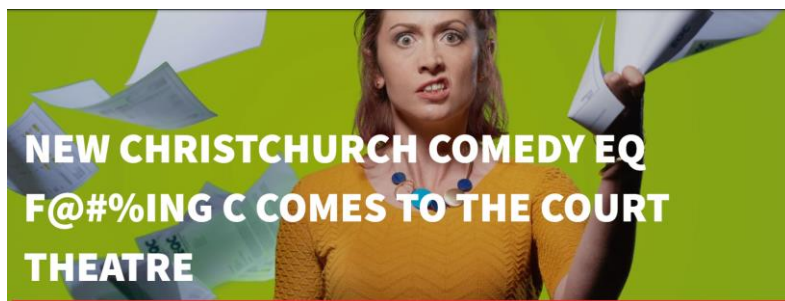
5. *Christchurch has Special Needs* (My letter to *The Press* published in May 2023)

Christchurch people were affected by the earthquake of 2010 and the fatal aftershock of 2011. EQC's mis-management and incompetence added to the psychological and emotional damage. Fifty-one of our citizens have been massacred. Into this volley of shocks and tragedies comes a North Island directive that 14m to 20m blocks may be built in our residential suburbs. No. We know that major earthquakes can happen. We know that multistorey buildings can fail due to errors of design, building or consent. I don't want ten storeys landing on our house. In the ex-swamp of Riccarton, we also don't want our foundations damaged by pile-driving in the neighbourhood. To prevent this unnecessary stress and anxiety, the Council must insist on getting Geotechnical Investigation Reports for all of the suburbs affected before the new 'law' can take effect here. And get those investigations done by 'independent' engineers.
....

6. From Treasury's *The Living Standards Framework 2021*.

Table 1: The three levels of the 2021 LSF

Level	Description
Our Individual and Collective Wellbeing	This level of the framework captures those resources and aspects of our lives that have been identified by research or public engagement as being important for the wellbeing of individuals, families, whānau and communities.
Our Institutions and Governance	This level captures the role our institutions play in safeguarding and building our wealth, as well as facilitating the wellbeing of individuals and collectives.

Notes and evidence of Christina Stachurski's submission to the Independent Hearings Panel (IPH) for Plan Change 14 (PC 14) on the Residential Zone topic.

Table 2: The wellbeing domains

Domain	Definition
Health	Being in good mental and physical health and exhibiting health-related behaviours and lifestyles that reduce morbidity and mortality, such as eating well and keeping active.
Housing	Having a place to call home that is healthy, suitable, affordable and stable.
Environmental amenity	Having access to and benefiting from a quality natural and built environment, including clean air and water, green space, forests and parks, wild fish and game stocks, recreational facilities and transport networks.

https://www.treasury.govt.nz/sites/default/files/2021-10/tp-living-standards-framework-2021.pdf

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7. HOUSING AND MENTAL HEALTH

From *High-Rise Apartments and Urban Mental Health—Historical and Contemporary Views.* *Challenges* **2019**, *10*(2), 34;   https://www.mdpi.com/2078-1547/10/2/34

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Abstract. High-rise apartment buildings have long been associated with the poor mental health of their residents. The aims of this paper are to examine whether this connection is necessarily so, by reviewing the evidence relating to the relationships between high-rise living and social wellbeing, occupant's stress levels, and the influence they have on mental health. From selected literature, psychological stress and poor mental health outcomes of the populations that live in high-rise apartments are indeed apparent, and this is particularly so for apartments in poor neighbourhoods.

. . .

1.2. Living Conditions

High-rise apartments of four stories and above [20] have been typically constructed to solve housing and land shortages, and create affordable residential spaces. While this might provide cheaper housing, it can also produce adverse living conditions: apartments can be isolated, difficult to access, hard to ventilate, more elevated from the earth (the soil), and more quarantined from a diversity of microbes, plants and animals than traditional housing [1,23].

. . .

This burden of adversity is often greatest in socio-economic disadvantaged communities in high-density areas whose circumstances also restrict access to parks, sporting complexes, gardens or other natural spaces, with consequences for both physical and mental well-being, as well as opportunities to meet and socialise with others. Astell-Burt and Feng [24] found that residents of poor socioeconomic areas were much less likely to exercise—a known predictor of positive mental wellbeing. Many apartment buildings also discourage or disallow pets, another factor increasing wellbeing. Dogs, for example, encourage physical and social activity (including visits to green spaces) and meeting other dog owners [25,26,27].

Notes and evidence of Christina Stachurski's submission to the Independent Hearings Panel (IPH) for Plan Change 14 (PC 14) on the Residential Zone topic.

. . .

The studies in Table 1 clearly show an exacerbation of mental health problems in high-rise buildings in comparison to low-rise or detached houses. Psychological problems (58%) and social isolation (35%) featured prominently in the literature as areas of difficulty for apartment dwellers, and contributing to this are socio-economic factors and building design.

. . .

Chile et al. [40] found consistent experience and expression of social isolation across all age groups. Although there are many factors that contribute to social isolation in high-rise apartment living, social isolation in itself is shown to be an important factor that contributes to mental health problems of high-rise dwellers [18,40]. It may be harder to form a community in high-rise apartments as it feels as if one is living with many strangers [18,50].

. . .

Many of the early study subjects of high-rise apartments were women, and Richman [56] found that complaints of depression were common. Gillis [43] found that higher floor levels predicted higher levels of emotion strain, and Littlewood and Tinker [13] found that women showed fewer symptoms of depression after moving out of high-rise apartments.

Citations in the above extracts.

1. Gifford, R. The Consequences of living in high-rise buildings. *Archit. Sci. Rev.* 2007, *50*, 2–17. [Google Scholar] [CrossRef]

13. Littlewood, J.; Tinker, A. *Families in Flats*; HMSO: London, UK, 1981.

18. Kearns, A.; Whitley, E.; Mason, P.; Bond, L. Living the high life? Residential, social and psychosocial outcomes for high-rise occupants in a deprived context. *Hous. Stud.* 2012, *27*, 97–126. [Google Scholar] [CrossRef]

20. Cappon, D. Mental health in the hi-rise. *Ekistics* 1972, *196*, 192–195. [Google Scholar]

23. IFLA. Disconnect from nature is apparent in high-rise apartment dwellers—How can we bring nature to apartment buildings? In Proceedings of the IFLA World Congress, Singapore, 18–21 July 2018. [Google Scholar]

24. Astell-Burt, T.; Feng, X. Investigating 'place effects' on mental health: Implications for population-based studies in psychiatry. *Epidemiol. Psychiatr. Sci.* 2015, *24*, 27–37. [Google Scholar] [CrossRef] [PubMed]

25. Christian, H.; Bauman, A.; Epping, J.N.; Levine, G.N.; McCormack, G.; Rhodes, R.E.; Richards, E.; Rock, M. Encouraging dog walking for health promotion and disease prevention. *Am. J. Lifestyle Med.* 2018, *12*, 233–243. [Google Scholar] [CrossRef] [PubMed]

26. Toohey, A.M.; McCormack, G.R.; Doyle-Baker, P.K.; Adams, C.L.; Rock, M.J. Dog-walking and sense of community in neighborhoods: Implications for promoting regular physical activity in adults 50 years and older. *Health Place* 2013, *22*, 75–81. [Google Scholar] [CrossRef] [PubMed]

27. Westgarth, C.; Christian, H.; Christley, R. How might we increase physical activity through dog walking? A comprehensive review of dog walking correlates. *Int. J. Behav. Nutr. Phys. Act.* 2014, *11*, 83. [Google Scholar] [CrossRef]

40. Chile, L.; Black, X.; Neill, C. Experience and expression of social isolation by inner-city high-rise residents. *Hous. Care Support* 2014, *17*, 151–166. [Google Scholar] [CrossRef]

43. Gillis, A. High-rise housing and psychological strain. *J. Health Soc. Behav.* 1977, *18*, 418–431. [Google Scholar] [CrossRef]

50. McCarthy, D.; Saegert, S. Residential density, social overload, and social withdrawal. In *Residential Crowding and Density*; Aiello, J., Baum, A., Eds.; Plenum: New York, NY, USA, 1979; pp. 55–76. [Google Scholar]

56. Richman, N. The effects of housing on pre-school children and their mothers. *Dev. Med. Child Neurol.* 1974, *16*, 53–58. [Google Scholar] [CrossRef] [PubMed]

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8. *The Child and Youth Wellbeing Strategy*

The Child Wellbeing and Poverty Reduction Group (est. 2018) sits within the Department of the Prime Minister and Cabinet.

Notes and evidence of Christina Stachurski's submission to the Independent Hearings Panel (IPH) for Plan Change 14 (PC 14) on the Residential Zone topic.

The Strategy sets out six high-level and interconnected wellbeing outcomes, that reflect what children and young people said was important to them. These outcomes signpost the social, economic and environmental factors needed for child and youth wellbeing.

1. Reduce child poverty and mitigate the impacts of poverty and socio-economic disadvantage

2. Better support those children and young people of interest to Oranga Tamariki and address family and sexual violence

3. Better support children and young people with greater needs, with an initial focus on learning support and mental wellbeing

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9. https://www.researchgate.net/publication/233490985_The_Consequences_of_Living_in_High-Rise_Buildings

The Consequences of Living in High-Rise Buildings

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Abstract: A full account of architectural science must include empirical findings about the social and psychological influences that buildings have on their occupants. Tall residential buildings can have a myriad of such effects. This review summarizes the results of research on the influences of high-rise buildings on residents' experiences of the building, satisfaction, preferences, social behavior, crime and fear of crime, children, mental health and suicide. Most conclusions are tempered by moderating factors, including residential socioeconomic status, neighborhood quality, parenting, gender, stage of life, indoor density, and the ability to choose a housing form. However, moderators aside, the literature suggests that high-rises are less satisfactory than other housing forms for most people, that they are not optimal for children, that social relations are more impersonal and helping behavior is less than in other housing forms, that crime and fear of crime are greater, and that they may independently account for some suicides.

Extracts from Gifford's paper are included below. Gifford's citations occur at the end of the extracts.

Children in High Rises

Numerous studies suggest that children have problems in high-rises; none suggest benefits for them. Early reviews are clear. One states flatly that "for...families with small children, the evidence demonstrates that high-rise living is an unsuitable form of accommodation" (Conway & Adams, 1977, p. 595.) Another concludes that "high-rise housing does not provide an appropriate living environment for preschool or school-age children because too few of the attributes of a single-family house have been accounted for..." (Cooper Marcus & Hogue, 1976, p. 34), although the authors did soften that by concluding that high-rise housing has both positive and negative features for teenagers. This has not changed much with time. Two of the more recent Israeli studies found that raising children in high-rises, especially on the higher floors, is problematic (Broyer, 2002; Landau, 1999). Children under 8 were not allowed to go downstairs by themselves, but after they were allowed to go down, parents found it difficult to supervise their play.

The problems range from fundamental child development issues to everyday activities such as play. For example, a Japanese investigation (Oda, Taniguchi, Wen & Higurashi, 1989) concluded that the development of infants raised above the fifth floor in high-rise buildings is delayed, compared to those raised below the fifth floor. The development of numerous skills, such as dressing, helping and appropriate urination was slower. Children who live on higher floors also go outside to play less often (Nitta, 1980, in Oda et al., 1989). A study in India recognized that children's difficulties are not solely a function of living in high rises (Oke, Khattar, Pant & Saraswathi, 1999). As the authors put it, "The ecological constraints of crowding, the high-rise buildings, unsafe streets, scarce open spaces, the preoccupation with the "idiot-box," all seem to conspire against the urban child's natural propensity to play with joyous spontaneity" (p. 207).

Learning to read may be affected by the floor level on which children live (Cohen, Glass & Singer, 1973). The researchers measured sound levels, ability to discriminate auditory stimuli, and reading skills in children who lived in high rises built above a major highway in New York. Children in lower-level apartments, which had higher sound levels from traffic, were less able to discriminate sounds and had poorer reading skills, than children who lived in higher floors. Apparently, where traffic noise is a considerable factor, high rises may be good for children who live higher up in high rises.

Children's play clearly is affected, as parents in high rises either keep their children indoors more often, which means close protection or over-protection in an indoor environment, or allow them outside, many floors away, which can result in under-supervision. One outcome is that children in high rises, on balance, spend more time playing alone and in restricted play (Gittus, 1976). Perhaps this is why there is evidence that high-rise raised children have lower levels of motor ability than children reared in single-family dwellings (Crawford & Virgin, 1971; cited in Michelson, 1977). Another outcome is that younger children, up to 20 minutes away from the home bathroom, have been reported to have many "bathroom accidents" in elevators and hallways of high rises (W. Moore, 1969).

Behavior Problems

Every study surveyed indicated that children who live in high rises exhibit more behavioral problems than children who do not. This includes studies that tried to control for some obvious potential alternative explanations, such as socioeconomic status. One presumes that this results from an odd combination of activity restriction within the residence and too little supervision of activity outside it.

Children in High Rises

No evidence we could find shows that high rises are good for children. The literature includes several studies that suggest high percentages of dissatisfaction among parents about the suitability of high rises for their children. Every study of behavioral problems finds more among children in high rises. There is some evidence that children in lower floors of high rises, where traffic noise is prominent, learn more slowly. Children in high rises may develop certain practical skills more slowly, according to Japanese studies. Long ago, Jephcott (1971) said, "Practically no one disputes that this form of home [the high rise] is unsatisfactory for the family with small children" (p. 130). Some have suggested that this need not be the case (e.g., van Vliet, 1983) but, more than 35 years later, no available evidence contradicts her conclusion.

General Conclusions

The consequences of living in high-rise buildings are many. A few may be caused by the building form itself, but many are moderated by non-architectural factors. Chief among these moderating factors are socioeconomic status, building location, parenting young children or not, gender, and stage of life. Although they have not been studied empirically in high-rises, whether one has a choice about housing form and indoor population density probably are also important.

Notes and evidence of Christina Stachurski's submission to the Independent Hearings Panel (IPH) for Plan Change 14 (PC 14) on the Residential Zone topic.

Irrefutable conclusions about the consequences of living in high rises cannot be drawn, because true experiments are virtually impossible in housing research and because outcomes are determined by multiple factors. Nevertheless, progress nevertheless can be made through careful studies that use good research methods, and by aggregating studies either qualitatively, as in this review, or quantitatively through meta-analyses, and by more and better theory construction and testing. Unfortunately, research on this topic appears to have slowed considerably.

Given these caveats, the best conclusions that one may hazard are the following. Many, but by no means all, residents are more satisfied by low-rise than by high-rise housing. High rises are more satisfactory for residents when they are more expensive, located in better neighbourhoods, and residents chose to live in them. Children are better off in low-rise housing; high rises either restrict their outdoor activity or leave them relatively unsupervised outdoors, which may be why children who live in high rises have, on average, more behavior problems. Residents of high-rises probably have fewer friendships in the buildings, and certainly help each other less. Crime and fear of crime probably are greater in high-rise buildings. A small proportion of suicides may be attributable to living in high rises.

Broyer, G. (2002). *The appropriateness of buildings over 20 storeys high for middle-class residents.* Research thesis, Technion, the Israeli Institute of Technology.

Cohen, S., Glass, D. C., & Singer, J. E. (1973). Apartment noise, auditory discrimination, and reading ability in children. *Journal of Experimental Social Psychology, 9,* 407-422.

Conway, J., & Adams, B. (1977). The social effects of living off the ground. *Habitat International, 2,* 595-614.

Cooper Marcus, C., & Hogue, L. (1976). Design guidelines for high-rise housing. *Journal of Architectural Research, 5,* 34-49.

Gittus, E. (1976). *Flats, families, and the under-fives.* London: Routledge & Kegan Paul.

(Crawford & Virgin, 1971; cited in Michelson, 1977).

Jephcott, P. (1971). *Homes in high flats: Some of the human problems involved in multi-storey housing.* Edinburgh: Oliver and Boyd.

Landau, G. (1999). *Living patterns in high-rise buildings in Israel.* Unpublished research thesis, Technion, Israeli Institute of Technology.

Michelson, W. (1977). *Environmental choice, human behavior, and residential satisfaction.* New York: Oxford.

Moore, W. (1969). *The vertical ghetto.* New York: Random House.

Nitta: see Oda.

Oda, M., Taniguchi, K., Wen, M.-L., & Higurashi, M. (1989). Effects of high-rise living on physical and mental development of children. *Journal of Human Ergology, 18,* 231-235.

Oke, M., Khattar, A., Pant, P., & Saraswathi, T. S. (1999). A profile of children's play in urban India. *Childhood: A Global Journal of Child Research, 6,* 207-219.

Van Vliet, W. (1983). Families in apartment buildings: Sad storeys for children? *Environment and Behavior, 15,* 211-234.

10.

From Meador, Derrick. "Solutions for Teaching in an Overcrowded Classroom." ThoughtCo, Apr. 5, 2023, thoughtco.com/teaching-in-an-overcrowded-classroom-3194352.

Overcrowded classrooms create a number of problems for modern school systems, including:

There is not enough of the teacher to go around. Students perform better when the teacher is able to give one-on-one or small-group instruction on a regular basis. As classroom size increases, this becomes increasingly difficult to do.

Overcrowding increases classroom discipline issues. Large classes packed with students provide more opportunities for personality conflicts, tension, and general disruptive behavior. Even the best teachers find it difficult to manage an overcrowded classroom successfully and can find themselves spending more time managing their classroom than they do teaching.

Struggling students fall further behind. Average and below-average students will struggle to advance in an overcrowded classroom. These students need more direct instruction, one-on-one instructional time and minimal distractions to maximize their learning potential.

Standardized test scores suffer. While many teachers would argue that there is an overemphasis placed on test scores especially in America's public schools, the chance of successfully improving proficiency on a standardized test decreases as the number of students in the classroom increases.

The overall noise level is increased. This is an expected result when you increase the number of students in the classroom. Louder classrooms translate to distractions making it more difficult for students to learn and for teachers to teach.

Teacher stress is increased often leading to <u>teacher burnout</u>. More students translate to more stress. Many excellent teachers are opting to leave the profession because it is not worth the stresses they deal with on a daily basis.

Overcrowding leads to less access to equipment and technology. Space is already at a premium for many schools and there often is not enough room to accommodate specialties such as science or a computer lab.

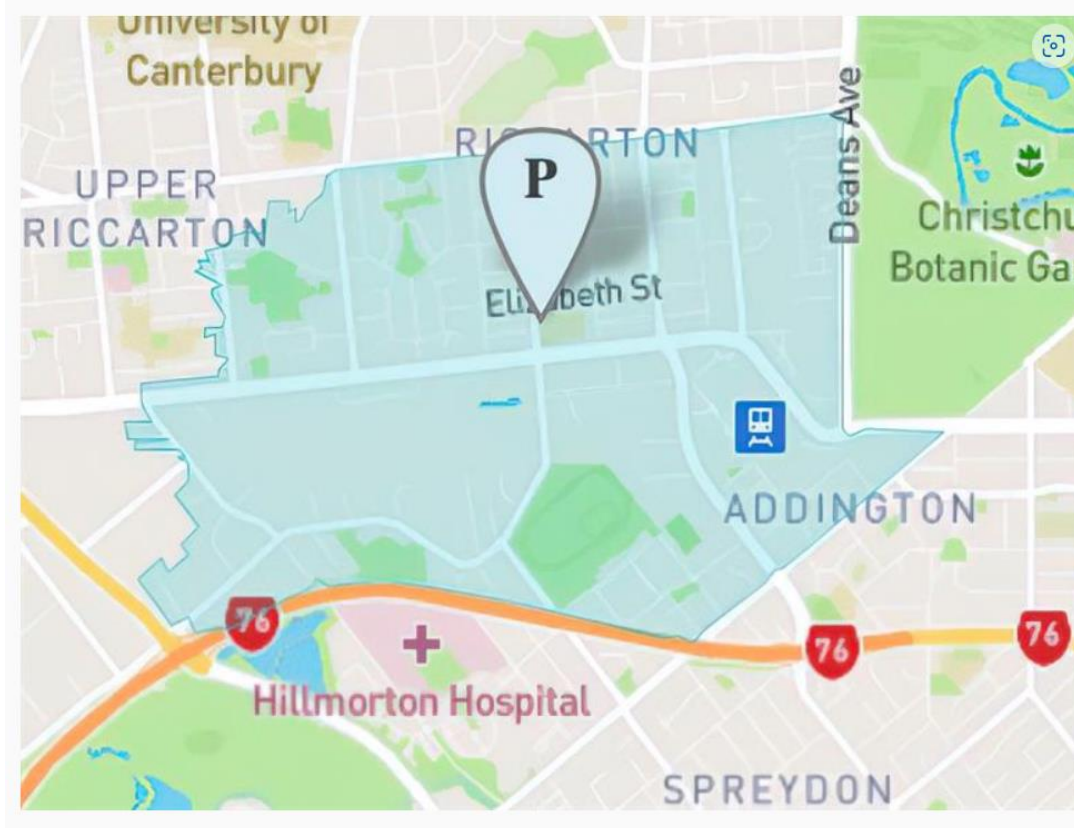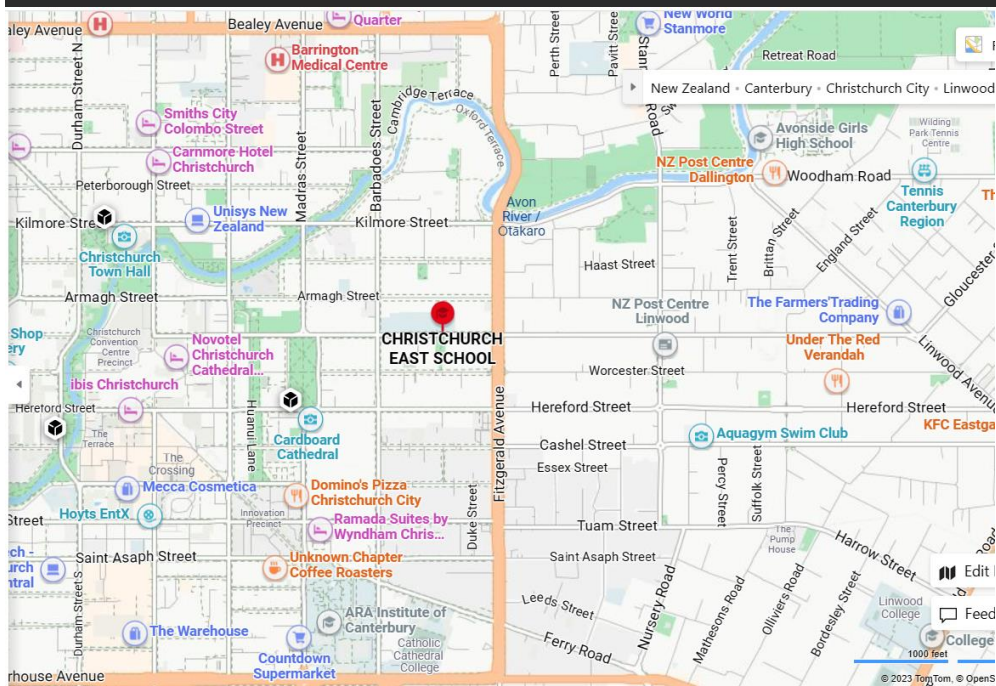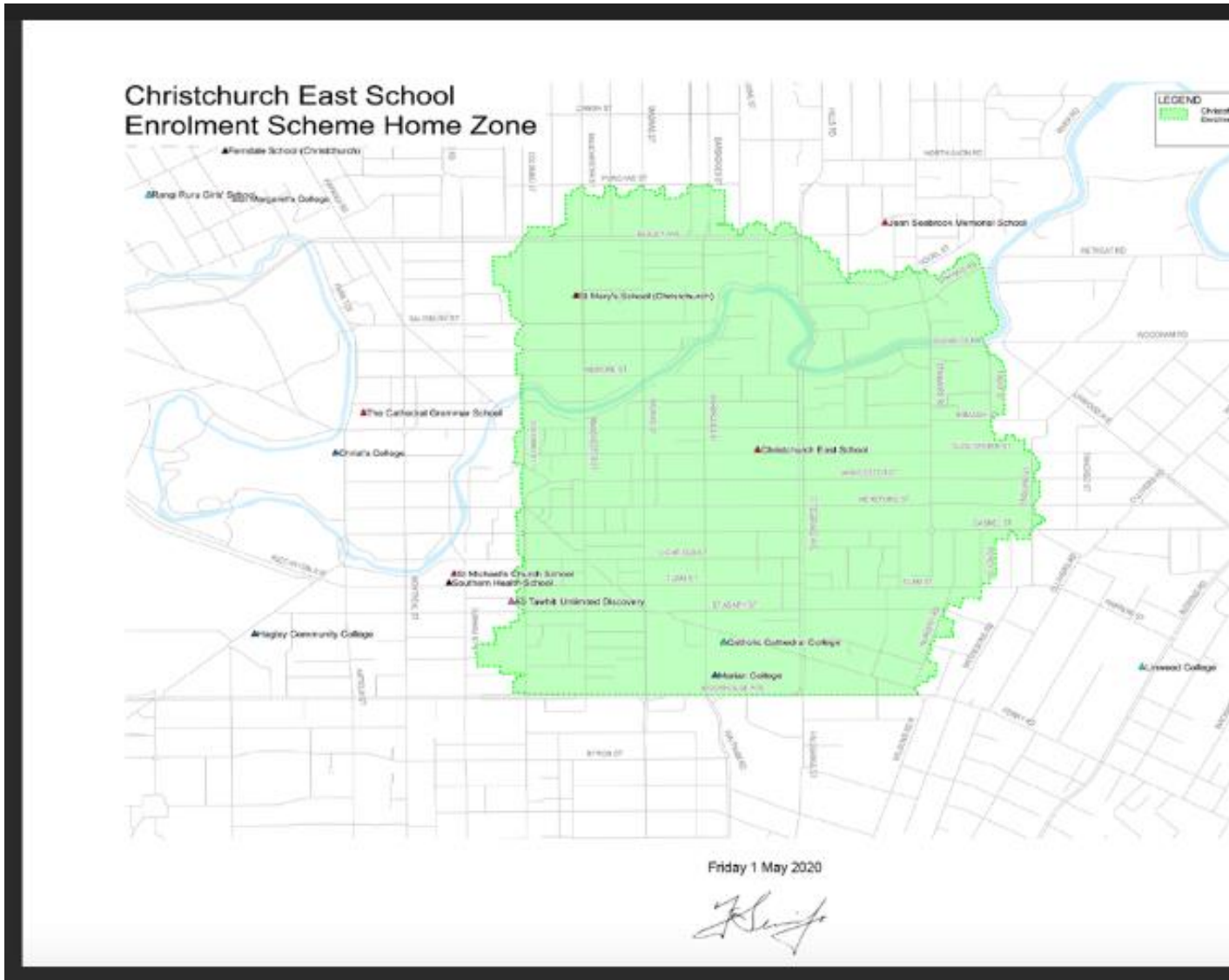..

11. Ministry of Education's Policy about Overcrowding

In the case of overcrowding, the Ministry of Education in New Zealand has a policy of **enrolling students in their local school** [4]. However, if a school is overcrowded, the Ministry may consider **re-zoning** the area to balance the student population across schools [4]. The Ministry may also consider **building new schools** or **expanding existing schools** to accommodate the growing student population [4].

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12. Wharenui and Christchurch East Schools.

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