



Department of Public Health, University of Otago, Wellington
Submission to Auckland Council on the Draft Unitary Plan
31 May 2013

Enquiries: Elinor Chisholm (PhD student) and Philippa Howden-Chapman

Introduction

1. The Department of Public Health of University of Otago, Wellington, works to improve, promote, and protect health, and to reduce health inequalities through research, teaching, and community service. The Department hosts researchers with expertise in urban design, housing and health, and environmental health, and includes *He Kainga Oranga*/Housing and Health Research Programme and the New Zealand Centre for Sustainable Cities, which leads a 'Resilient Urban Futures' work programme, based on the city as a complex system.
2. We support the Draft Unitary Plan's focus on compact cities, good urban design, and liveability. Liveability indicators, such as lifestyle opportunities, connectivity, physical appeal, environmental sustainability, quality housing, and economic prosperity, are critically linked to health. Liveable cities encourage exercise, healthy housing, green spaces, and clean air, which are closely linked to good health.
3. We share concerns expressed in the Unitary Plan about housing affordability issues in Auckland. Lack of housing affordability affects health in several ways, including:
 - Unaffordable housing means that many people are forced to live with others in crowded houses, increasing rates of serious infectious diseases causing hospitalisation.¹
 - The housing shortage forces people into poor quality housing, which has negative impacts on health.^{2 3}
 - Households living in unaffordable housing have less money to spend on other goods and services, such as food and electricity.
 - Households with cheaper housing in the outer suburbs are likely to have higher private transport costs.⁴ The isolation of those on low incomes from regular public transport and amenities can entrench poverty and residential segregation, which has negative impacts on public health.^{5 6}

Affordable housing

4. We believe affordable housing should be dispersed throughout the city. Residential segregation and reduced access to services occurs when people are driven out of city centres to the peripheries or to more provincial areas, where housing is cheaper, but there are fewer services and greater non-housing costs. This can be avoided by implementing 'inclusionary housing' policies such as reserving land for affordable housing in accessible locations, and explicit requirements that developers allocate a certain proportion of new developments as affordable housing, would prevent segregation, ensure adequate provision of services and assist community cohesion.⁷
5. While 'inclusionary housing' policies (e.g. mandating that a mix of housing types be represented in a single development) are thought by some to constrain the supply of new housing in some situations, it is likely that they do work to ensure a greater supply of housing for low-income households overall. There is a widespread use of such policies overseas. A US study of inclusionary policies in California between 1999 and 2006 found that a third of the state's jurisdictions had adopted inclusionary housing policies, housing 80,000 people of low and moderate incomes.⁸
6. We note that the recently negotiated Auckland Housing Accord has no provision for minimum proportions of affordable housing in new developments. This accord will be replaced by the Unitary Plan when it is operational. Under the Auckland Accord, there is no guarantee that consent conditions will include providing affordable housing: "conditions of consent *may* include requirements for a proportion of the development to include affordable housing" (emphasis added).⁹
7. To ensure that Auckland's new housing is accessible to all, we recommend that the Unitary Plan should require a minimum of 20-30% social and/or affordable housing in all new developments.

Housing quality

8. Poor quality housing has negative impacts on respiratory health.^{10 11} Unaffordable housing means that many people are forced to live with others in crowded houses, increasing rates of serious infectious diseases causing hospitalisation.¹²
9. We support the proposal that housing standards be required for resource consents for five or more dwellings. We submit that housing standards be required for all new dwellings, regardless of the number of dwellings in the development. Despite the initial higher cost, as energy prices rise ensuring houses are built to the highest standard will save money in the long term.
10. We do not support the selection of one particular housing rating tool. There should be a transparent assessment of which rating tool is most appropriate. There are other, evidence-based rating tools, such as the Healthy Housing Index, developed by the University of Otago, Wellington and BRANZ, which has been used in over 5,000 houses over the last decade.^{13 14 15}

11. We also submit that housing standards should be developed for existing as well as new buildings. We recommend that Auckland Council introduce and enforce as part of the Unitary Plan a scheme whereby all rental houses are required to be of a standard that provides for health. This 'Warrant of Fitness' could be based on our Healthy Housing Index, which is the only outcome-validated housing quality rating tool available.

Compact cities

12. We support the focus on a compact Auckland, and the development of housing within the existing city boundaries. While there is a place for some urban expansion, prioritising urban expansion over more compact, higher density cities would contribute to poorly functioning built environments in several ways, including:
 - *Increased car usage:* There is a close relationship between lower density development and more travel by car.¹⁶ More car travel leads to negative health outcomes:
 - Vehicle exhaust emissions are a major source of air pollution.¹⁷ Anthropogenic air pollution is responsible for around 1,175 premature deaths each year in New Zealand, and 607 extra hospital admissions for respiratory and cardiac illnesses;¹⁸
 - Transport is responsible for around 44% of New Zealand's carbon emissions.¹⁹ Carbon emissions contribute directly to climate change; their impact on the climate system is long-lasting and largely irreversible. Climate change will have a variety of negative health impacts, including an increased risk of infectious disease epidemics.²⁰
 - *Physical inactivity:* Low residential density has been associated with lower levels of physical activity, as people become more vehicle dependent.²¹ Physical inactivity is the fourth leading contributor to the global burden of disease, and is a major risk for preventable disease.²² Less than half of New Zealand's population exercises sufficiently to maintain good health.²³
 - *Residential segregation:* Low to middle income groups tend to live in outlying suburbs with fewer amenities. The distance from services, jobs and schools means they are reliant on either costly private or public transport.²⁴ Further release of land, rather than creation of infill housing throughout cities, may exacerbate this trend. Increasing residential segregation impacts negatively on social cohesion and the trust that has been identified as essential for a well-functioning society and a healthy population.²⁵
13. We note that there are several possible ways that the draft Unitary Plan could better encourage compact and healthy cities:
 - *Remove minimum parking requirements.* Minimum parking requirements have been widely discredited.²⁶ Poorly managed car parks tie up land that could otherwise be used for green space, productive economic activity, or housing. While it is excellent that the

Draft Unitary Plan removes minimum parking requirements in the CBD fringe, the mixed use zone, other centres, and the terraced housing and apartment zones, their retention for new developments in other areas merely leaves the problem for future generations.

- *Further promote active transport.* Walking and cycling have multiple health benefits. We support the Unitary Plan's rules on providing bike and shower facilities in new commercial buildings and encourage further consideration of the needs of people who use active transport.
- *Prioritise accessible public transport.*
- *Build greenfield developments at places accessible to public transport.* It is imperative that future occupants of housing have a range of transport options.
- *Balance resource consents.* Under the plan, resource consents are required for higher density and mixed-use developments in town centres, but not for lower density housing. This may prejudice against high-density development. Lower-density developments should require resource consents, reflecting the adverse environmental effects of low density.
- *Prioritise brownfield over greenfield development.* The Draft Unitary Plan forecasts that 30% of Auckland's future development will be outside the existing city boundaries. Brownfield development with many advantages, as discussed above, in terms of links to amenities. It should therefore occur most urgently. Higher density housing should be subject to good design criteria. We recommend that the Unitary Plan includes a commitment to develop minimum density targets for new developments.

Urban design

14. We agree that good urban design must be a high priority. Good urban design provides for public health, community vitality, and sustainability:

- Urban design has health impacts – good urban design enables more people to exercise.
- Good urban design offers significant benefits to the community, and poor design can negatively affect the environment, society, and economy.
- Good urban design only sometimes costs more upfront, and often avoids long-term costs (such as increased mortgagee sales in outer suburbs when energy costs increase,²⁷ or increased carbon emissions from greater car use).
- Communities value the better quality of life that good urban design can deliver.
- Urban design helps make cities safer and more secure.
- Urban design elements are interconnected – urban design is most effective when a number of elements come together (e.g. mixed use, density and connectivity).²⁸

15. We commend Auckland Council's creation of a Design Manual to encourage good urban design standards. However, we question the voluntary nature of the guidelines, and submit that avoiding mandating good design is encouraging bad design.

Conclusion

We support measures to improve housing affordability and housing quality, and to encourage good urban design and compact cities.

We applaud Auckland Council for its far sightedness in producing the unitary plan which recognises that the city is a complex system and that only by developing a strategic plan can Auckland develop sustainably –economically, environmentally, socially and culturally.

¹ Baker, M., Telfar-Branard, L., Kvalsvig, A., Verrall, A., Zhang, J., Keall, M., Wilson, N., Wall, T. Howden-Chapman, P. Increasing incidence and inequalities in infectious diseases in a developed country. *The Lancet*, February 20, 2012.

² Howden-Chapman P, Matheson A, Viggers H, Crane J, Cunningham M, Blakely T, et al. Retrofitting houses with insulation to reduce health inequalities: results of a clustered, randomised trial in a community setting. *British Medical Journal* 2007;334:460-464.

³ Howden-Chapman P, Pierse N, Nicholls S, Gillespie-Bennett J, Viggers H, Cunningham M, et al. Effects of improved home heating on asthma in community dwelling children: randomised community study. *British Medical Journal* 2008;337:852-855.

⁴ Center for Transit-Oriented Development and Center for Neighborhood Technology (2006). The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice. Urban Markets Initiative. The Brookings Institution. Washington.

⁵ Howden-Chapman P, Stuart K, Chapman R, editors. *Sizing up the City: urban form and transport in New Zealand*. Wellington: Steele Roberts Publishers, 2010.

⁶ Witten K, Abramhamse W, Stuart K, editors. *Growth Misconduct? Avoiding sprawl and improving urban intensification in New Zealand*. Wellington: Steele Roberts Aotearoa, 2011.

⁷ Howden-Chapman P, Stuart K, Chapman R, editors. *Sizing up the City: urban form and transport in New Zealand*. Wellington: Steele Roberts Publishers, 2010.

⁸ Non Profit Housing Association of Northern California (2007), *Affordable by Choice: Trends in California Inclusionary Housing Programs*, <http://www.wellesleyinstitute.com/wp-content/uploads/2013/01/NPH-IHinCA2006.pdf> p.5

⁹ Auckland Council and the Government, Auckland Housing Accord, 10 May 2013 <http://www.beehive.govt.nz/sites/all/files/Auckland%20Housing%20Accord%2010%20May%202013.pdf>

¹⁰ Howden-Chapman P, Matheson A, Viggers H, Crane J, Cunningham M, Blakely T, et al. Retrofitting houses with insulation to reduce health inequalities: results of a clustered, randomised trial in a community setting. *British Medical Journal* 2007; 334:460-464.

¹¹ Howden-Chapman P, Pierse N, Nicholls S, Gillespie-Bennett J, Viggers H, Cunningham M, et al. Effects of improved home heating on asthma in community dwelling children: randomised community study. *British Medical Journal* 2008;337:852-855.

-
- ¹² Baker, M., Telfar-Branard, L., Kvalsvig, A., Verrall, A., Zhang, J., Keall, M., Wilson, N., Wall, T. Howden-Chapman, P. Increasing incidence and inequalities in infectious diseases in a developed country. *The Lancet*, February 20, 2012.
- ¹³ Keall MD, Crane J, Baker MG, Wickens K, Howden-Chapman P, Cunningham M. A measure for quantifying the impact of housing quality on respiratory health: a cross-sectional study. *Environmental Health*. 2012;11(1):33.
- ¹⁴ Keall MD, Guria J, Howden-Chapman P, Baker MG. Estimation of the social costs of home injury: a comparison with estimates for road injury *Accident Analysis and Prevention*. 2011;43(3):998-1002.
- ¹⁵ Keall M, Crane J, Baker M, Wickens K, Howden-Chapman P, Cunningham M. The impact of housing quality on respiratory health. *BMC Environmental Health*. 2012;11(1):33.
- ¹⁶ For example: M.J. Trowbridge, N.C. McDonald. Urban sprawl and miles driven daily by teenagers in the United States. *American Journal of Preventive Medicine*; 34(3): 202-6; Frumkin, H., Cities, suburbs and urban sprawl: Their impact on health. In *Cities and the Health of the Public*, N. Freudenberg, S. Galea, and et al, Eds. 2006, Vanderbilt University Press: Nashville.
- ¹⁷ Howden-Chapman, P., Hales, S., Chapman, R. & Shaw, C. Improving air quality: co-benefits for the urban system, *Air Quality and Climate Change*, 2011, 45, 4, 19-23.
- ¹⁸ Gerda Kuschel, Jayne Metcalde, Emily Wilton, Jagadish Guria, Simon Hales, Kevin Rolfe and Alistair Woodward (2012). Updated Health and Air Pollution in New Zealand Study. Prepared for Health Research Council of New Zealand, Ministry of Transport, Ministry for the Environment and New Zealand Transport Agency. Available at:
http://www.hapinz.org.nz/HAPINZ%20Update_Vol%201%20Summary%20Report.pdf (accessed 27/3/13)
- ¹⁹ Ministry for the Environment. Environmental effects. Wellington.
www.mfe.govt.nz/issues/transport/environmental.html
- ²⁰ P. Howden-Chapman, R. Chapman, S. Hales, E. Britton, N. Wilson (2010). Climate change and human health: Impact and adaptation issues for New Zealand. In: *Climate change adaptation in New Zealand: Future scenarios and some sectoral perspectives*. Nottage, R.A.C., Wratt, D.S., Bornman, J.F., Jones, K. (eds). New Zealand Climate Change Centre, Wellington, pp 112 - 121.
- ²¹ R. Ewing, T. Schmid, R. Killingworth, A. Zlot, S. Raudenbush S. Relationship between urban sprawl and physical activity, obesity, and morbidity. *Am J Health Promot*. 2003 Sep-Oct;18(1):47-57.
- ²² World Health Organization. Global health risks Mortality and burden of disease attributable to selected major risks. Geneva: WHO, 2009
- ²³ Ministry of Health (2008). A Portrait of Health: Key results of the 2006/07 New Zealand Health Survey. 4 June.
- ²⁴ P. Howden-Chapman, K. Stuart, R. Chapman (Eds) 2010. *Sizing up the city: Urban form and transport in New Zealand*. Wellington: New Zealand Centre for Sustainable Cities. Witten K, Abrahamse W, Stuart K. (eds) 2011. *Growth misconduct? Avoiding sprawl and improving urban intensification in New Zealand*. Wellington: New Zealand Centre for Sustainable Cities.
- ²⁵ R. Wilkinson R and K. Pickett (2009). *The spirit level: Why equality is better for everyone*. London: Penguin Books.
- ²⁶ Litman, T. (2006). Parking management best practices. Chicago, Ill.: American Planning Association.
- ²⁷ Witten, K., W. Abramhamse and K. Stuart, Eds. (2011). Growth Misconduct? Avoiding sprawl and improving urban intensification in New Zealand. Wellington, Steele Roberts Aotearoa.

²⁸ Graeme McIndoe, Ralph Chapman, Chris McDonald, Gordon Holden, Philippa Howden-Chapman, Anna Bray Sharpin (2005). *The Value of Urban Design: the economic, environmental and social benefits of urban design*. June. Available at: <http://www.mfe.govt.nz/publications/urban/value-urban-design-full-report-jun05/value-of-urban-design-full-report-jun05.pdf>