Creating resilient, healthy, sustainable urban communities: lessons for rebuilding Christchurch’s communities

Prof Simon Kingham
Director of the Geospatial Research Institute and the Geohealth Laboratory, Department of Geography
University of Canterbury - Te Whare Wananga O Waitaha, Christchurch, NZ
Aim

• What can we learn from post-EQ Christchurch in terms of:
  • Building more resilient, healthy and sustainable urban communities?
  • Role of built and social environment?
  • Community development?
Why resilient urban communities?
And what is the connection to healthy and sustainable communities

• “having one friend or family member to confide in had the same effect on life satisfaction as a tripling of income”

• “psychotic disorders, including schizophrenia, are most common in neighbourhoods with the thinnest social networks”

• “the more connected we are with family and community, the less likely we are to experience colds, heart attacks, strokes, cancer & depression”

• “connected people sleep better at night. They are more able to tackle adversity. They live longer. They consistently report being happier.”

• “low-density sprawl puts residents at greater risk of arthritis, chronic lung disease, digestive problems, headaches & urinary tract infections.”
Features of good community

- Diversity of housing types
- Low or no fences
- Green (and blue) space
- Close proximity to facilities e.g. schools, shops, job
- Good public transport
- Walkable
- Low/slow traffic
- ‘Physical activity’ able
Traffic and Community

Mum, Why can't I walk to School?

'Cos there's too much traffic.

Donald Appleyard

Sustainable Cities
Traffic levels: 16,000, 8,000 and 2,000 vehs per day

Figure 2: This illustration shows how a resident's sense of their home territories shrinks as traffic grows heavier and faster.

Source: Figure 4, page 23, Livable Streets, Donald Appleyard, University of California Press, 1981.
Traffic levels: 16,000, 8,000 and 2,000 vehs per day

Figure 1: This image shows how community ties can actually be knit together by a street that is livable and inviting — or torn apart when auto traffic noise, pollution, and threats dominate the street environment.

Source: Figure 3, page 21, Livable Streets, Donald Appleyard, University of California Press, 1981.
Christchurch research 1

Residents surveys

• Barrington, Papanui
• Streetscape, traffic volume
Local Home Area

**LIGHT** (<150 vpd)

"We have adopted this street as our home"
"Quiet, clean and friendly"

**MODERATE** (500-2,500 vpd)

"Local parks host most of the leisure activities and games"
"I like the general ambience"

**HEAVY** (8,400-14,000 vpd)

"You don’t see many people"
"I would prefer not to live on such a busy and public street with noise, car fumes and dust"
Neighbourhood Connections

LIGHT (< 150 vpd)

5.1 average connections

“We have great neighbours and live in a safe street”
“I enjoy talking with my neighbours”

HEAVY (8,400-14,000 vpd)

2.1 average connections

“My street is a car thoroughfare”
“Lived here over 35 years, a decline in people talking to neighbours and children playing”

MODERATE (500-2,500 vpd)

5.9 average connections

“Most people get out and about and talk on the street”
“Family-orientated and friendly”
Christchurch research 2

Interviews with residents, leaders, stakeholders

- Included focus on Hoon Hay, Opawa, Phillipstown, Merivale
- Density, Socio-economic status, accessibility, environment, urban form

Karen Banwell
What we found: home & place

- Geographically defined - hills, river, parks, social boundaries
  - “Places like Sumner and Lyttelton got noticed because they are easy to know where they are, they have defined geography”
  - “I could ring and ask for help for my community because I know the area I am asking for”
  - “We are lucky we are defined area and so those that struggled are obscure areas, their geographic areas are not clear”
What we found: home & place

• **Housing stability** – often renting vs owning, longevity of tenure
  
  Owning or longevity of tenure provides permanency and sense of control
  
  Preference for neighbours who owned rather than rented to reduce transience of neighbours
  
  Neighbourhood churn has been stressful for many residents
  
  End of Housing NZ policy of ‘Housing for Life’
  
  Kids who move schools take 6 months to catch up

• “I have friends who are teachers at the local school and they tell you kids just disappear because families have lost their rentals”
• “It’s the churn in the tenancy that is the issue”
• “its those who have been living in one place who notice the difference with tenants and renting”
• “I have been renting for four years, and I don’t give a shit about my neighbours where I am because we are temporary campers”
What we found: home & place

• **Intimate streets** – cul-de-sacs, laneways, back sections

  Noticeable differences among street typology in fostering social connections.
  Home inextricably linked to place.
  Shift to private spaces – automatic garage door openers and fences

  • “I really think the type of street is important, the cul de sac behind us has been great for us”
  • “Our street is wide so we don’t know each other”
  • “People get into their cars and go to work and then come home press the little button for their garage door and they go inside to their private spaces never once turning around”
  • “I just wonder how lonely some people are behind their private spaces”
Back lanes, access ways

e.g. Montreal (google)
Back lanes as recreational areas

THE IPON City Council is mulling the idea of converting back lanes into recreational areas, similar to what is being done in many other countries.

Mayor Datuk Zaini Man said the council is studying the suitable locations at Ipoh Old and New Town areas.

He said either the back lanes could be converted to recreational areas or made into parking lots.

"Since we have limited places to construct recreational areas within the city, we need to enhance and upgrade the existing ones." he added.

Gardening? It's right up our alley! Community transforms Victorian passageway behind homes into oasis of greenery

- Once-dingy lane in Middlesbrough now haven of hanging baskets, trellises and trees with apples and pears
- Mavis Arnold has helped turn lane into a wonderland, while neighbouring alleys are still scruffy and rundown
- Alley was well-kept in 1960s but as the decades dragged on residents began to dump their rubbish on cobbles

NATIONAL POST

CANADA

Forgotten 'country lane' experiment could be answer to Vancouver's desire for more green space

Bungo in the Back Lanes, 2016 – THANK YOU!

A BIG THANK YOU from The Strathblungo Society to everyone who contributed to making Bungo in the Back Lanes 2016 a success!
What we found: home & place

• **Natural and Green** – presence of trees
  
  Natural places to walk and meander rather than greenspace alone
  Places to reflect and enjoy, walk the dog and bump into others

  • “Hagley [park] is soul food for me, the natural place, it is my replenishing time”
  • “My trees, I know them by name”
  • “I walk by the river everyday as I do my morning perambulation that cuts through a couple of parks that are a vital part of my life”

Established subdivisions and large trees – trees important

• “Over there all the houses are beautiful but you haven’t got all the big trees and there are so many rules and regulations you won’t get a big tree like that birch there”
Green streets and trees

e.g. Christchurch (SK)
Green streets and trees

e.g. Christchurch (google)
What we found: urban design

• **Walkable** – safe, attractive and connected
  Knowing those who live near

  • “Because walking somewhere you see people and that is really important to us to see people and have that eye contact and being human together”
  • “It can take a long time to get to the shops unlike the places with fences and garages”
  • “Because you walk past you know your neighbours so I know most of the people on my side of the street”
Walkable neighbourhoods
e.g. Silverstream

e.g. Vauban, Freiburg, Germany
(https://makinglewes.org/2014/01/26/vauban-freiburg-germany/)
What we found: urban design?

- **Local** - community hubs, library, pools, parks, recreation areas
  - “If you have to get in your car it’s not local”


What we found: urban design

• **Bumping spaces** - schools, shops, street furniture
  
  Need to be walkable.

  Local places where see others

  • “The school was the only bumping place for Phillipstown and then the Ministry closed it, the constancy in the children’s lives. The Ministry did not see the school as a community hub or the importance for the community”

  • “Schools pop up constantly as bumping places for mums and sometimes dads too”

  • “Yes bumping in people is so important I think is what I like and that is what I connect with”
Bumping spaces
e.g. Vancouver (SK)
Bumping spaces

e.g. Christchurch (SK)
Bumping spaces

e.g. Christchurch (Alan Jamieson)
What we found: urban design

- **Gathering places** - churches, pubs, cafes
  - “It’s hard for people to engage with each other when you don’t have a meeting place to come together”

http://localvanguard.blogspot.co.nz/2010/02/addington-coffee-coop-coffeeshouse-w.html

http://www.swbc.org.nz/community/events/light-party/
What we found: social connectedness

• Building and enhancing social connectedness through urban form
  Good for health and well being and also builds more resilient communities
  • “the people of Christchurch and the social and physical infrastructure are all connected, the libraries, pools parks and streetscapes all bring you joy of living within a community”
  • “I have a strong reaction to people saying it is the honeymoon period so that is only if you see that as special and unattainable when actually it really is what is underneath so lets make it the same for us all of the time”
What we found: initiatives

• Pre-existing community connectedness

• Pre-existing community development initiatives/programmes –
  Formal and informal e.g. council, central government, NGOs, marae, churches, residents groups
  • “living in a village is important which is why we call our community project the village project, it denotes some old fashioned values but they are wonderful, a church, and a pub and a school”
  • “I think a lot of it is about pre-existing community networks and community centre if there is an existing community hub and I think that is around schools too”
  • “Aranui really got together because they had that pre-existing community development stuff beforehand.
  • “Well I think it’s all about going back to the response being enabled by strong community organisations pre-existing in an area. So if you want if you had a good church in that it was functioning connectedly then it would do that.”
Implications & policy responses

• Streets
  • Reduce traffic – encourage social modes
  • Reduce traffic speed
  • Better design new streets of 3,000+ vehicles (or retrofit existing)
Implications & policy responses

• **Places**
  - Focus more on public but also recognise need for private space
  - Local access to amenity and social infrastructure
    - “If you have to get in your car it’s not local”
  - Design *bumping places* (shared space) in new (and existing) urban developments
  - Value community role of existing *gathering places* e.g. schools, churches
  - Invest in/empower communities
Co-benefits of community-driven policies

• Community-driven policies
  • Enhance health (& save $$)
  • Save money on infrastructure
  • Increase community resilience
Final thoughts

• Geography, traffic & streetscape affect community development in Christchurch

• We can plan to create resilient, sustainable urban communities

• Social infrastructure important for enhancing community (e.g. *bumping spaces* and *gathering spaces*)

• Multiple co-benefits of investing in community

• “If you have to get in your car it’s not local”
Acknowledgements

• Karen Banwell and Jesse Wiki
• Research participants
• MBIE
• Resilient Urban Futures (RUF) project and team, especially
  • Prof Philippa Howden-Chapman (Uni of Otago)
  • Lisa Early and Libby Grant (Uni of Otago)
  • Profs Karen Witten (Massey Uni) and Robin Kearns (Auckland Uni)
Thanks and questions