

# Integrated Assessment: evolving sustainability pillars

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Better Urban Planning,  
More Resilient Communities

# NZ's largest natural disaster

- 3rd largest insurance claim in the world
- 170,000 building claims – 19% over \$100,000 cap
- 7,187 properties 'red zoned' = 636ha of land
- Rebuild around \$45 billion (roughly 20% NZ GDP)
  - Tohoku, Japan earthquake – roughly 4.6% GDP
  - Queensland floods – roughly 1% GDP
- First major earthquake to hit an urban centre in NZ since Napier 1931
- Plans, strategies and programmes urgently needed to expedite recovery

# What is Integrated Assessment?

- A formal approach used to predict the potential effects of a policy, with particular attention paid to impacts on health and wellbeing; in addition to social, economic, cultural and environmental matters
- Designed to inform development of plans and policies through early iterations
- A collaborative multi-agency and cross disciplinary approach

# What's in a name?

- *Impact Assessment; Integrated Assessment; Sustainability Assessment; Strategic Environmental Appraisal; Regulatory Impact Statement; Section 32 Analysis; Health in all policies approach...?*
- Sustainability Appraisal recognised as having clear 'four pillar' approach as the foundation
- Integrated Assessment used as generic label



# The framework approach

- Developed for New Zealand application by Barry Sadler and Martin Ward.
- Sustainability Appraisal involves baseline tests relating to four pillars
  - **social**
  - **economic**
  - **environmental**
  - **cultural**
- A sustainability test is undertaken against both:
  - a top line of objectives/targets/norms to aim for, and
  - a bottom line of key thresholds (base minima) or warning signs to avoid.

# Integrated Assessment – basic steps

Establish assessment frame, what are we assessing for?

Develop assessment criteria

Workshop criteria, plus top & bottom lines

Testing' early iterations of the plan using criteria

Re-apply assessment criteria if useful to later draft (s)

# Integrated Assessment roll call:

1. Sustainability Appraisal of the Canterbury Water Management Strategy (CWMS), 2009  
*Canterbury Regional Council*
2. Wellbeing Assessment of the Castle Plaza Development Plan Amendment, 2011  
*City of Marion (Adelaide) and South Australia Department of Health*
3. Sustainability and Wellbeing Assessment of the Draft Christchurch Central City Plan, 2012  
*CERA, Christchurch City Council & CDHB*
4. Integrated Assessment of the Draft Land Use Recovery Plan, 2013  
*Canterbury Regional Council & CDHB*
5. Wellbeing Impact Assessment of the Draft Lyttelton Port Recovery Plan, 2014  
*Canterbury Regional Council, Port of Lyttelton & CDHB*
6. Integrated Assessment of the Draft Waimakariri Residential Red Zone, 2015  
*CERA, Waimakariri District Council & CDHB*
7. Integrated Assessment of the Otakaro/Avon River Corridor Plan, 2018  
*Regenerate Christchurch, CDHB & others*

# Developing assessment criteria

- Provisional work by a small specialist assessment team to:
  - Identify capital assets under four pillars
  - Develop assessment criteria to be used (from existing planning & policy framework)
  - Agree scale (e.g. -1 to +3)
  - Compose preliminary descriptors







# Workshops

- Agree capital asset sets and criteria elements
- Amend/confirm assessment criteria and scale descriptors
- Set top and bottom lines
- 'Score' the plan/project options
- One, two or three workshops have been used

Example ‘scoring’ of the draft plan

Red circle = bottom line;    Blue box = top line  
Green cross is where the participants ‘scored’ the draft plan

Guiding Principles	Criterion		Description	Small negative impact	Neutral impact	Small Positive impact	Moderate positive impact	Strong positive impact
				-1	0	+1	+2	+3
Support a balance between walking, cycling, public transport and driving	12	Public transport modes future-proofed	PT corridors able to cater for light rail or future transport systems	The plan takes light rail or future transport systems off the planning horizon	Light rail or future transport systems not addressed in the plan	Principal transport corridors provide for light rail or future transport systems	Light rail or future transport system proposed	Light rail or future transport system proposed and funding sources identified

1st iteration

2<sup>nd</sup> draft

Final draft

## Greater Christchurch Land Use Recovery Plan - summary of recommendations

Table 1 – Summary of recommendations from all parts of the assessment

Part One	Part Two	Part Three
<b>TRANSPORT</b> <ul style="list-style-type: none"> <li>Include public and active transport plans for all developments and centres</li> <li>Ensure employment centres are accessible via a full mix of transport modes</li> <li>Ensure land use patterns are integrated with transport infrastructure</li> <li>Protect key corridors for future public transport</li> </ul> <b>IMPLEMENTATION</b> <ul style="list-style-type: none"> <li>Consultation using broad community involvement</li> <li>Community, partners and stakeholders involved in monitoring/ implementation</li> <li>Use SMART indicators</li> <li>Need clear objectives that drive actions</li> <li>Leadership – clear decision making lines</li> <li>Consider agency or group targeted to facilitate change</li> <li>Delegate decision-making to appropriate scale</li> </ul> <b>HAZARDS AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>Explicit links to RPS on avoidance of natural hazards including planned retreat</li> <li>Acknowledge climate change and flooding</li> <li>Create green services - green roofs, walls, stormwater, buildings, natural corridors</li> <li>Integrate with the Natural Environment Recovery Programme (NERP)</li> <li>Provide context of the natural environment and reference existing strategies</li> <li>Explicitly protect aquifer recharge area</li> <li>Explicit links with CWMS Implementation Programmes</li> <li>Protect groundwater for drinking water refer to drinking water standards</li> <li>Acknowledge the potential for land use to affect water quality</li> <li>Minimise impacts on the environment to strengthen whakapapa</li> <li>Maintaining and securing productive land</li> <li>Ngāi Tahu involved at the top level for natural resources</li> </ul> <b>REBUILDING AND BUILDING COMMUNITIES</b> <ul style="list-style-type: none"> <li>Enable development in existing communities and how red zone community relocated</li> <li>Equity of accessibility a focus here for existing and new communities</li> <li>Strong centre-based policies in plans - local and key activity centres</li> <li>Local retail included in new subdivisions</li> <li>Strengthen the use of suburb master plans</li> <li>Incentivise and encourage mixed-use developments</li> <li>Health and social services in new developments</li> <li>Direct agencies to ensure social services provided in all communities</li> <li>Encourage the mix of mode use in retail areas to encourage interaction with the street</li> <li>Synchronise land use with community development</li> <li>Provide people with quality connections to the built environment where can express their interests</li> <li>Create a sense of belonging and identity and provide for community diversity</li> <li>Provide spaces for communities to gather</li> <li>Use surplus Crown land for social services including educational</li> </ul> <b>LOCATION AND QUALITY OF DEVELOPMENT AND BUILDINGS</b> <ul style="list-style-type: none"> <li>Target the quality design of buildings and standards and a systems approach to urban design</li> <li>Develop incentives necessary to improve more concentrated redevelopment of existing areas</li> <li>Integrate and design of the public space</li> <li>Health and wellbeing aspects to design should be central to building design and performance</li> <li>Integrate existing with new land-use and be clear about how to achieve this</li> <li>Guidance and incentives are put in place to encourage high energy rating rebuilding</li> <li>Dedicated development agency with a focus on brownfield development</li> <li>Provide a business tier to champion business needs</li> <li>Remove resource consent compliance costs for red zone businesses</li> <li>Brownfields development more explicitly supported through range of non-regulatory mechanisms</li> <li>Use existing infrastructure over building new</li> <li>Land availability lined up with market needs - staging and sequencing</li> <li>High level zoning for business - industrial (all), office (all) and other</li> <li>Name all Māori reserves</li> <li>Draw on and use local people and products</li> <li>Review criteria for a floating zone and see if it can be extended to other areas and types</li> </ul> <b>HOUSING</b> <ul style="list-style-type: none"> <li>Maximise the range of housing types and for elderly</li> <li>Subdivision covenants allow for a range of house sizes and types</li> <li>Partner to deliver social housing and residential care services</li> <li>Warrant of fitness scheme for rental housing</li> <li>Prepare affordable housing policies for new developments</li> <li>Housing meets current short term to be reused in the future</li> <li>Reuse building houses for workers eg affordable housing</li> </ul>	<b>TRANSPORT</b> <ul style="list-style-type: none"> <li>Specific requirements for active transport</li> <li>Refer to all transport documents \ strategies</li> </ul> <b>IMPLEMENTATION</b> <ul style="list-style-type: none"> <li>Increase emphasis on collaboration and community participation in implementation</li> <li>Strengthen way to work with industry and developers</li> <li>Firm commitment for active community involvement</li> <li>Take a long-term sustainable view to manage growth - Whakatauki</li> <li>Strengthen information on monitoring and reporting progress</li> <li>Leadership for implementation</li> <li>Institutional change monitoring and data sharing</li> <li>Ensure cultural and Māori concepts are included in the Plan and engage fully with Ngāi Tahu as a partner</li> </ul> <b>HAZARDS AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>Outline plan for flood management</li> <li>Natural green spaces and cover and access to green spaces and cover</li> <li>Maximise sustainable opportunities</li> <li>Improved and enhanced natural ecosystem health and biodiversity</li> <li>Advanced surface water management, including water harvesting and stormwater management</li> <li>Protect waterways for a variety of values</li> <li>Protection of quality and quantity of groundwater</li> </ul> <b>REBUILDING AND BUILDING COMMUNITIES</b> <ul style="list-style-type: none"> <li>Build communities and the concept of villages is visible</li> <li>Ensure health and social services</li> <li>are equitably located</li> <li>Social services are placed in new subdivision or centre developments</li> <li>Clarify the role and function and scale of centres</li> </ul> <b>LOCATION AND QUALITY OF DEVELOPMENT AND BUILDINGS</b> <ul style="list-style-type: none"> <li>Focus on vulnerable populations</li> <li>Development and financial contributions reviewed to how best utilised</li> <li>Specifics on OIC expiry - clarify responses to transitional processes for change</li> <li>Infrastructure is a community asset - ensure it is built to a high standard</li> <li>Lyttelton Port and town recovery issues added</li> <li>Toolbox for sustainable housing</li> <li>Evaluate the housing parks</li> <li>Insurance impediments to redevelopment especially multiple ownership</li> <li>Protect rural productive land and manage rural residential</li> </ul> <b>HOUSING</b> <ul style="list-style-type: none"> <li>Quality and repair of existing and new housing</li> <li>Warrant of fitness scheme for rental housing</li> <li>Include toolbox for sustainable housing</li> <li>Ensure transitional housing available locally for people awaiting a rebuild</li> <li>Minimum standards for temporary homes as may become more permanent housing stock</li> </ul>	<b>TRANSPORT</b> <ul style="list-style-type: none"> <li>Integrate active and public transport into new development and local retail centres</li> </ul> <b>IMPLEMENTATION</b> <ul style="list-style-type: none"> <li>Ensure community participation in monitoring and review of implementation</li> <li>Ensure wide range of community representation on the Strategic Implementation Forum</li> <li>Land use change part of annual monitoring and reporting</li> </ul> <b>HAZARDS AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>Address the implications of hazard and managed retreat from identified areas - this is not included and no exploration has been provided</li> <li>Ensure natural green spaces and cover (green roofs, stormwater, buildings, natural corridors)</li> </ul> <b>REBUILDING AND BUILDING COMMUNITIES</b> <ul style="list-style-type: none"> <li>Focus on building communities and urban villages- difficult but not included in actions</li> </ul> <b>LOCATION AND QUALITY OF DEVELOPMENT AND BUILDINGS</b> <ul style="list-style-type: none"> <li>Consider more mechanisms/ tools for intensification rather than regulatory mechanisms</li> <li>Clearly direct staging and sequencing of Greenfield land</li> <li>Review tenure issues to support intensification and multiple ownership</li> </ul> <b>HOUSING</b> <ul style="list-style-type: none"> <li>Transitional housing is not well developed</li> <li>Outline ways to integrate greater housing density into inner urban areas that are semi occupied or of poor quality to use existing infrastructure</li> <li>Ensure quality and repair of existing and new housing</li> </ul>

## Solutions

### Description of table:

Table 1 shows the list of recommendations for improvements to the Plan at each stage- Parts One, Two and Three.

Part One resulted in a long list of suggestions for improvements to the early draft of the Plan. The number of recommendations reduced significantly by Part Two (Preliminary Draft) and even further by Part Three.

While Table 1 does not show the extent to which each recommendation was incorporated into the Plan (for example some assessment participants may prefer the Plan to go further still, and some recommendations were not taken up but the reasons why were visible in the Plan), it does show that to a large extent, the draft Land Use Recovery Plan has addressed the concerns identified through the integrated assessment process.

## Issues

# IA was a success because:

- Early in the process
- Involved plan writers and those advising decision makers early (so not defending the plan, but open to ideas)
- Used pre-established criteria
- Efficient for testing early ideas (time, resourcing, budgets)
- Useful for defending challenges (legal, political, community)

# Lessons

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Allow lead in time

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Good facilitator is essential

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Need a 'champion' to promote/explain IA

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Collaboration/consensus building requires good relationships (trust & time/effort)

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Planning is inherently political

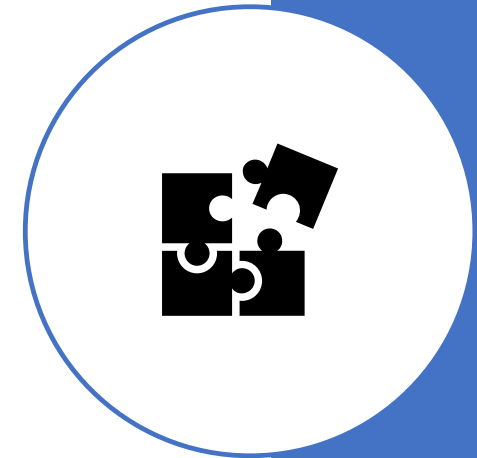


# Appropriate participation

- Compositional bias will introduce a content and outcome bias
- The most helpful participants are likely to be busy and will show participant fatigue
- Need to understand equity issues (and the social determinants of health and wellbeing)
- And 'speak' for future generations
- Need an understanding of resource (capital) asset management and the notion of capital substitution
- Mana whenua must be involved

# Legacy

-  A positive participative approach to plan making
-  More robust and transparent 'testing' of plan development
-  Saves time/money/resources (esp. post disaster)
-  Collaborative multi-agency planning processes
-  Mana whenua involvement now the norm
-  Contributes to better plans for health and wellbeing of community
-  Better urban planning, more resilient communities



# Where next for Integrated Assessment?

- Refine base methodology with interested practitioners
- Finalise a 'how to' guide
- Further promotion and capacity building for:
  - IA practitioners and potential exponents
  - Urban planners and allied professions
  - Management/commissioning decision makers
- Potential use in Australia and further afield



# Thank you

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