

Improving Earthquake Building Resilience in Provincial Towns – Adaptive Reuse Approach

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Abstract

A growing acceptance that property redevelopment and sustainable town centre regeneration is a responsive strategy to the regulatory demands of seismic strengthening in NZ. This project uses a precinct approach to examine financial, regulatory and property market arrangements that can best be practically applied to strengthening the building stock in several provincial towns in New Zealand.

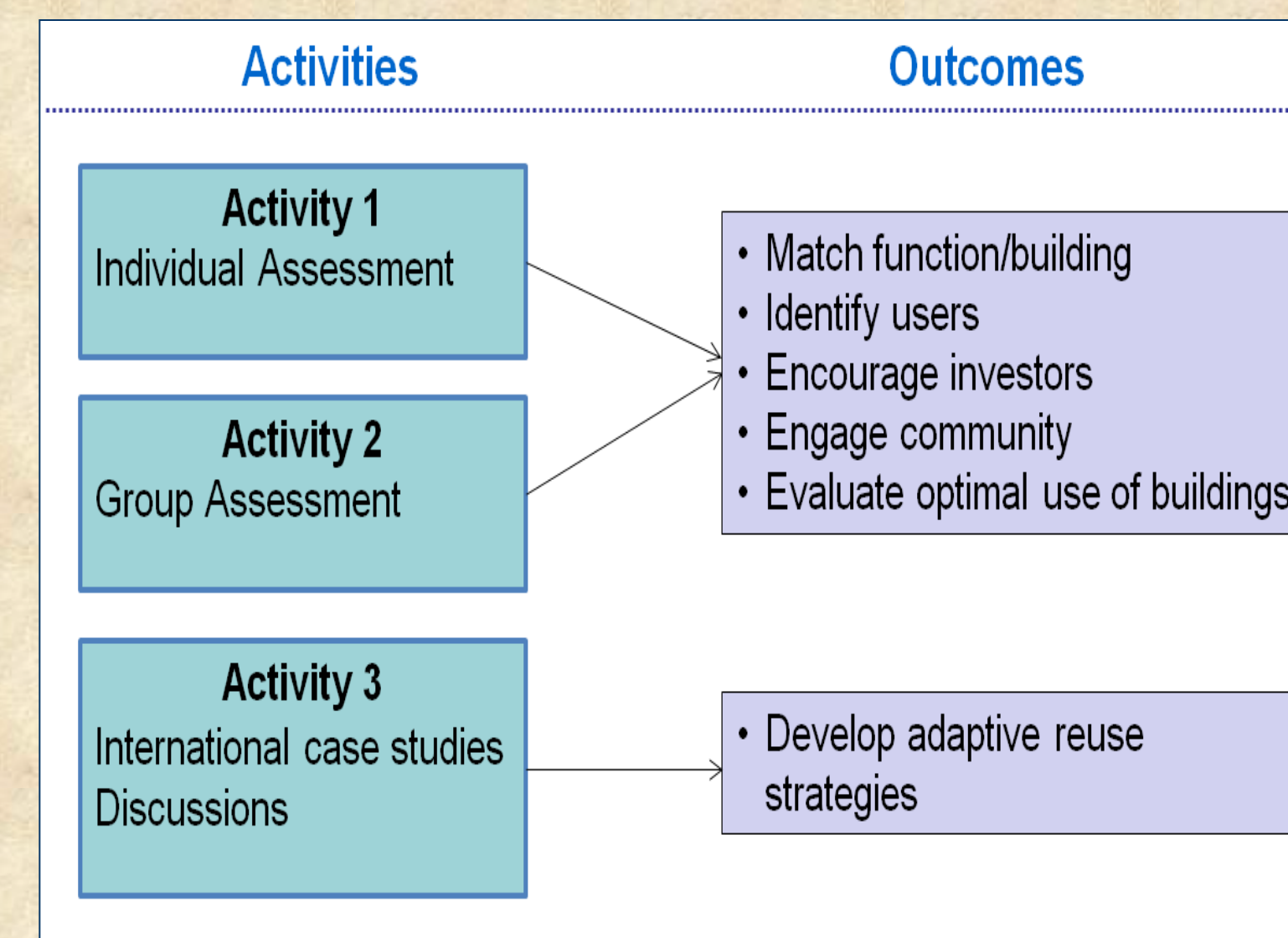
Objectives

- ❖ Examine building use/benefits of adaptive reuse to town centre regeneration
- ❖ Assessment of critical opportunities and risks factors
- ❖ Develop adaptive reuse strategies for selected buildings



Method - Workshop

- ❖ Focus Group workshop with community stakeholders; 22 Participants
- ❖ Face-to-face interviews with community members



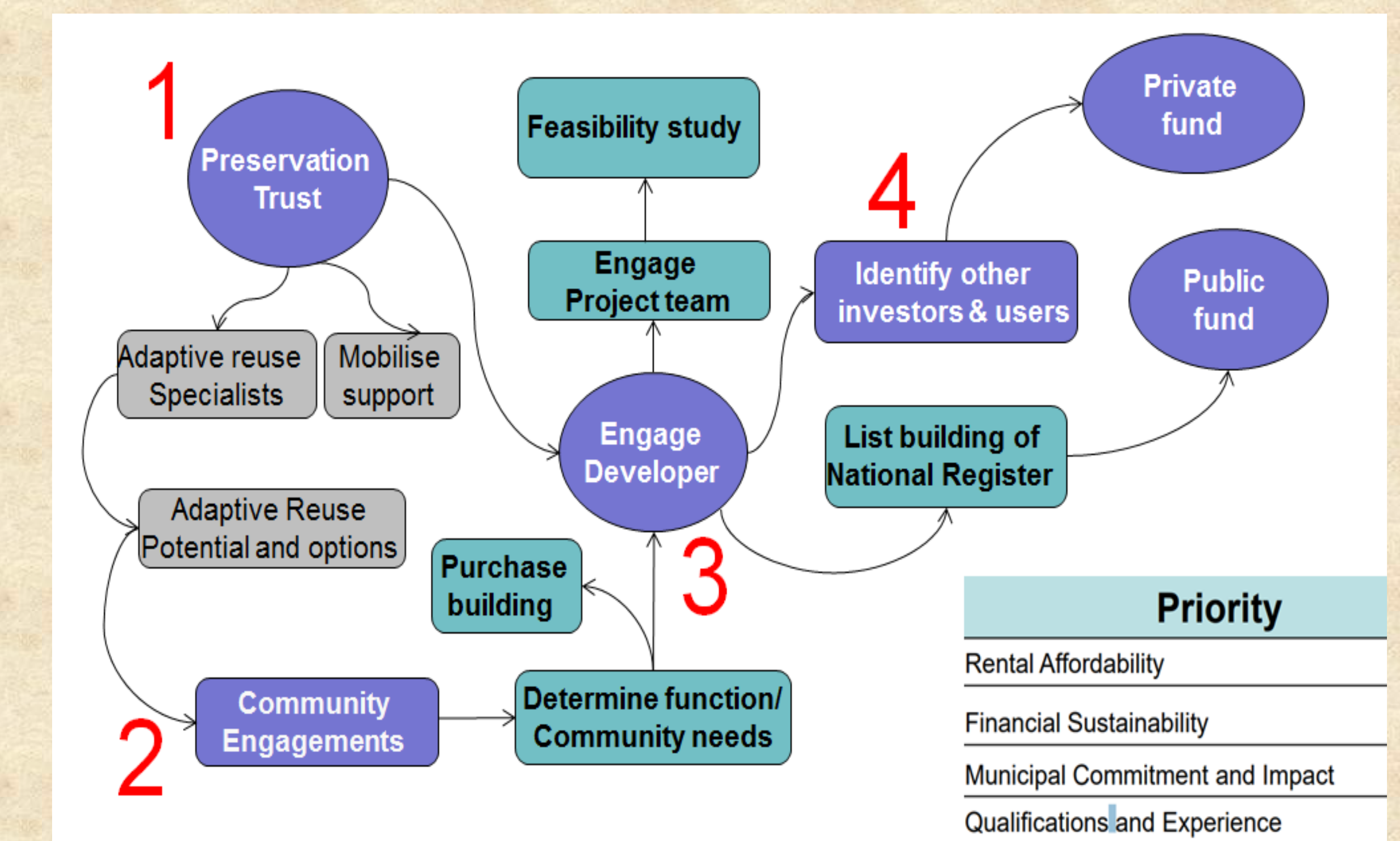
Case Buildings

- ❖ Built around pre-1930, Heritage Class B
- ❖ EQPB and Conner location



Adaptive Reuse Strategy

- ❖ Public-Private Partnership (PPP) approach
- ❖ Private entity with public incentives



Project Outcomes

- ❖ Develop adaptive reuse plan strategy
- ❖ Create a pathway for reuse and improved earthquake resilience of heritage buildings
- ❖ Provide recommendations for policy guidance to local authorities and key stakeholders involved in heritage preservation

References

1. Bullen, P. A., & Love, P. E. (2009). Residential regeneration and adaptive reuse: learning from the experiences of Los Angeles. *Structural Survey*, 27(5), 351-360.
2. Douglas, J. (2006). *Building adaptation* (Second ed.): Routledge.
3. Wilkinson, S. J., James, K., & Reed, R. (2009). Using building adaptation to deliver sustainability in Australia. *Structural Survey*, 27(1), 46-61.

