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# Foreword

The Australia and New Zealand Architectural Science Association (ANZScA) is an international organisation, the objective of which is to promote architectural science, theory and practice primarily in relation to teaching and research in institutions of higher education. ANZScA is a membership-based non-profit organisation that was formed on the initiative of Professor Henry (Jack) Cowan, Derrick Kendrick and other Architectural Science academics to enable them to meet, discuss, and exchange information about their research and teaching. The membership is drawn from architecture schools in Australia and New Zealand and is open to students and professionals who also contribute to the research and teaching of other technical subjects.

ANZScA has a membership of several thousand professionals, academics and students from many countries. The first meeting was held in 1963 in Adelaide. A few years later, annual conferences were introduced, hosted by one of the universities in the region. The annual conference brings together Architectural science researchers, educators, students, and industry from Australasia and other regions, and provides them with a robust platform for knowledge sharing, collaboration, disciplinary reflections, institutional exchange, and collective growth.

The 54th International Conference of the Architectural Science Association (ANZAScA) 2020 was held virtually, from 26th to 28th November 2020, under the auspices of the School of Future Environments, Auckland University of Technology, New Zealand. The conference theme was 'Imaginable Futures: Design Thinking, and Scientific Methods'. The theme explored various facets of explicit relevance and tangible contribution to the interdisciplinary areas of architectural design, building science and technology, healthy and intelligent buildings, digital environments, urban design, and future cities. The topic categories include: 'Acoustics', 'Architectural Science, Design and Environment Science, Urban Science', 'Building Case Studies and Post Occupancy Evaluation', 'Building, Tectonics and Energy', 'Carbon Reduction in Built Environments', 'Construction, Building Materials and Integrated Technology', 'Daylighting/Lighting', 'Design Education and Research', 'Design Thinking and Innovation', 'Digital Architecture, BIM and City Information Modelling (CIM)', 'History and Theory in Architectural Science', 'Modes of Production and Mass Customisation', 'Natural Ventilation', 'Practice-Based and Interdisciplinary Design and Research', 'Simulation, Prediction and Evaluation', 'Smart and Intelligent Cities', 'Thermal Comfort and Indoor Air Quality', 'Slow Urban Environments', and 'Social Cities - Inter-Generational Cities.

Each paper in these proceedings has undergone a rigorous peer review process. Following the call for abstracts in March 2020, a total of 291 abstracts were submitted for review. Each abstract was blind peer reviewed by two members of our International Scientific Committee, made up of 158 experts from 15 countries, across four continents. Of these, 188 abstracts were accepted for development into a full paper. Following this, 188 full papers were submitted, each of which was again blind peer reviewed by two to three members of our International Scientific Committee. Based on the reviewers' recommendations, 143 papers were accepted for presentation at the conference, and 140 are included in this publication.

To maintain and assure the quality of the conference proceedings, each abstract received was peer-reviewed. The authors received anonymous reviewers' comments on their abstracts and were invited to submit their initial full papers. All the initial full papers were peer-reviewed with anonymous reviewers' comments before final acceptance to the conference. The accepted final papers were included in the conference presentation programme and the proceedings.

**Ali Ghaffarianhoseini, Amirhosein Ghaffarianhoseini and Nicola Naismith**

***Auckland 2020***

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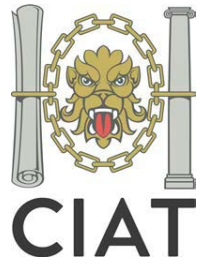

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# Preservation issues and controversies: Challenges of underutilised and abandoned places

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**Abstract:** Research and Enterprise Office at Unitec Institute of Technology focuses on opportunities, challenges, and problems in a wide variety of subjects. In 2019, a project of heritage digitisation in New Zealand was approved. The project aims to present vulnerable, underutilised, or abandoned historical heritage through a multimedia presentation on the one hand, and to set up an information tool for preservation, restoration, and maintenance, on the other. It aims to have both academic and practical value in advancing knowledge about heritage in New Zealand: to provide a means for establishing New Zealand's current state of knowledge in the practice of archiving heritage buildings; to be useful for the end-user; and to aid in learning about the built environment. This paper will present data collected in the first phase of the project. A literature review and data about New Zealand's current state of knowledge in the practice of archiving heritage buildings will be developed. International state of the knowledge in the field and the practice in Aotearoa New Zealand will be compared. The benefits of the project are expected to be wider than historical recording only and can be used for refurbishment of buildings, facility maintenance, etc.

**Keywords:** Heritage; preservation; New Zealand; recording.

## 1. Introduction

In 2019, a project of heritage digitisation in New Zealand was approved by Research and Enterprise Office at Unitec Institute of Technology. The project aims to set up an information tool for preservation, restoration, and maintenance. It aims to have both academic and practical value in advancing knowledge about heritage in New Zealand: to provide a means for establishing New Zealand's current state of knowledge in the practice of archiving heritage buildings and their possible adaptive reuse opportunities; to be useful for the end-user and to aid in learning about the built environment.

The undertaken literature review presented in this paper reflects on New Zealand's current state of knowledge by providing an overview of cultural heritage issues nationally and then more specifically in local areas. It includes information on legislative policies and regulations that are being followed at present along with highlighting key problems that arise. It then talks about the range of conservation methods available and the benefits or evaluation points for each, after analysing the different heritage conservation practices.

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The settlement of indigenous Māori and European to New Zealand has embedded a unique cultural and architectural heritage that is unlike anywhere else in the world. Although New Zealand's cultural heritage is relatively young in comparison to other larger European cities; its sites, landscapes, gardens, monuments, sacred places, buildings, and structures are assets with distinctive value that have developed meaning over time. At present, these national treasures are at serious risk of being lost as a result of inadequate heritage protection systems that are currently in place. Like the rest of humanity, New Zealand shares a general responsibility to safeguard its cultural heritage in the interests of present and future generations nonetheless the probability of permanently losing significant cultural heritage building and sites is a nationwide problem causing prevalent concern amongst the Tangata Whenua (people of the land).

International Council on Monuments and Sites (2010) notes that Tangata Whenua of Aotearoa New Zealand has particular methods and principles of observing, connecting to, and sustaining cultural heritage. A statement of these professional principles has been set out as a guide in the New Zealand Charter for the Conservation of Places of Cultural Heritage Value adopted from the International Charter for the Conservation and Restoration of Monuments and Sites (ICOMOS). The New Zealand charter provides the following definition of the purpose of conservation, "the purpose of conservation is to care for places of cultural heritage value," and includes specific information relating to indigenous cultural heritage. Acknowledging that indigenous cultural heritage has particular values, meanings, and associations with its ancestors; that carries the responsibility to uphold and pass on all related knowledge of information, skills, and practices.

Ministry for Culture and Heritage (2017) discuss that the Treaty of Waitangi is New Zealand's founding document, which was an agreement made between the British Crown and Māori rangatira (chiefs) in 1840. The document comprises three articles. ICOMOS (2010) has stated that in the second article, the Treaty identifies and assures the safeguard of tino rangatiratanga, and sanctions kaitiakitanga as accustomed guardianship over their taonga (anything valued highly for its historical, cultural, spiritual, economic or traditional value), to be employed by the Tangata Whenua.

Between 1994 and 1995 numerous individuals and community groups, and iwi brought forward several concerns to the attention of the Parliamentary Commissioner for the Environment (1996), these concerns indicated several problems regarding the state of New Zealand's heritage management systems. In 1996, Parliamentary Commissioner for the Environment published the report: Historic and Cultural Heritage Management in New Zealand. The Parliamentary Commissioner for the Environment (1996) presented in the report that "the Resource Management Act 1991 and the Historic Places Act 1993 established a new framework for the management of natural and physical resources, including our historical and cultural heritage." At the time of publication, it was the first report to evaluate the Government system to ascertain how heritage was being managed; however, it concluded that adequate heritage protection was not being achieved. Improved management of historical and cultural heritage along with written and spoken evidence, is urgently needed. Currently, the management of artefacts, places, sites, and surrounding landscapes are all interconnected but are the accountability of numerous, mostly uncoordinated organisations. The Parliamentary Commissioners report highlights the New Zealand Places Trust's increasing membership numbers between 1993-1996 and the growing amount of public visiting and seeking protection for heritage places. Due to the emergent of community engagement, there are now several positive stories of heritage conservation. Majority of which are at a local level which emphasises the level at which communities and people value their cultural heritage. Taylor *et al.* (1997) raise that at present, there is an inherent conflict concerning private ownership rights and public morals which is not able to be fixed easily. This problem is heightened by the fact that

due to the many different organisations that manage heritage in New Zealand, there is an apparent lack of synchronisation and direction for all types of protection over cultural heritage which is the country's biggest concern.

## 2. Context

### 2.1. Nationally

As Bower (2009) has pointed out, New Zealand is not as advanced as Europe when it comes to architectural heritage conservation. At the time that laws and regulations were devised in Europe concerning the preservation of cultural heritage buildings and sites, the arrival of European settlers to New Zealand was just starting. Until this day, an act that aims to protect conservation areas in New Zealand has yet to be passed by the government. Due to the lack of legislation around conservation areas, many significant cultural heritage buildings have been lost by demolition or unsympathetic developments.

Howse and Jadresin Milic (2019) discussed that modern-day New Zealand is aware that cultural heritage and heritage buildings and sites are integral components of the urban fabric of a city and have begun redefining its relationship between the present and the past through recognition of its heritage. Heritage New Zealand is a government organisation primarily focused on promoting the significance and relevance of cultural heritage. They are in charge of heritage building and site listings. Heritage listings are based on a building or site's cultural significance and are categorised as either Category 1 or Category 2 listings. Heritage places listed as Category 1 are deemed to have 'special' of 'outstanding' historical significance while those listed as Category 2 are deemed to have notable historical importance. There are various other categories which are employed to list heritage areas rather than buildings as well as Maori heritage. However, cultural heritage identified and listed by Heritage New Zealand is not automatically guaranteed security from demolition, or deterioration beyond repair that can be caused by buildings becoming redundant or neglected. Howse and Jadresin Milic (2019) also mention that at present, heritage protection from destruction is managed by New Zealand local councils. Local councils hold the highest authority to ensure the demolition protection of historical buildings as they include obligations under legislation for protection and management of cultural heritage. Legislative acts such as The Resource Management Act 1991, The Local Government Act 2002, The Building Act 2004, and Heritage New Zealand Act 2014.

### 2.2. Locally

While New Zealand heritage policies involve central and local actions, it is also worthwhile to evaluate key local policies. Howse and Jadresin Milic (2019) have found that in New Zealand's largest cities such as Auckland and Wellington, city development rates as a consequence of a significant increase in population at the end of the 20th century ultimately resulted in an exponential demolition of cultural heritage buildings.

Auckland Council (2020) has identified several important heritage sites that are currently under threat from insensitive development pressures in the Auckland Unitary Plan. The main objective of Auckland's heritage policy is to provide provision for the protection, restoration, conservation, and maintenance of its listed heritage places. The strategy aims to ensure that where building adaptation is

necessary, it will enable the development and use of the site so long as the significance of the place is not adversely affected. Auckland Council (2020) have also clarified that building adaptation must be carried out under good practice following conservation methods and principles that support long term viability. Although, in comparison with other local councils, Auckland's regulations concerning demolition are quite lenient. This leniency is stressed by Besen *et al.* (2020) findings that under 70% demolition of a heritage building is considered to be non-compliant activity but is not prohibited. As a result of this, there are many examples of where 'façadism' has been fostered. Façadism is the full or often partial retention of the external façade, while the interior and interior structure is removed to make way for new construction.

Wellington City Council (2020) recognises that heritage is a 'precious and finite resource' and has made prominent efforts to protect its cultural heritage. Wellington's City Council's policies aim to offer flexibility for activities of economic value which may benefit a site's conservation, such as that it enables users and owners to make financial or reasonable use of it. Besen *et al.* (2020) has discovered that the Wellington City District Plan selectively mentions the need to upgrade accessibility, fire escape means, and structural stability as it recognises the essential aspects to upgrade while minimising effects on heritage values.

The South Island city of Christchurch suffered an unprecedented loss of cultural heritage following the event of the 22 February 2011 earthquakes. Wilson (2013) highlighted the devastating circumstance that over 50% of listed heritage buildings located in the central city prior to the earthquakes had been lost by the end of the following year. The scale of loss over a short period is rare on both national and international terms. The experience of the earthquakes and in particular the loss of cultural heritage emphasised the limitations of listing as the sole offering for protection of heritage buildings, other items, and their values. The losses stress the need to adapt and take an alternative approach to continue telling the city's past despite the significant loss of heritage sustained. Wilson (2013) commented that the damage caused to heritage by this devastating event has highlighted that modifications to the City Plan should apply further consideration relative to the changed circumstances when managing of historic places.

Besen *et al.* (2020) also analysed the strategies of Dunedin City Council and found that the heritage strategy for Dunedin acknowledges the positive impact that heritage contributes to its tourism. The city council aims to protect its heritage assets to maintain the legacy and economic value of heritage sites. Dunedin City Council (2007) heritage strategy acknowledges that retention of built heritage and items are best facilitated by sustainable and economical use and in some cases may require building adaptation rather than the contrasting method of closure and uneconomical maintenance to provide preservation and protection.

## 3. Policy literature and legislation

In New Zealand, cultural heritage is managed through a large number of organisations and requires shared responsibility between both the local and central governments. This shared management of duty differs from many other countries that manage heritage under a centralised government agency. Besen *et al.* (2020) recognised that when it comes to historic preservation in New Zealand, preservation ordinances enacted by local governments typically hold the highest jurisdiction. As McClean (2007) pointed out, the Resource Management Act 1991 (RMA) provides for the protection of historic heritage from inappropriate subdivision, use, and development. The Resource Management Act supports the

sustainable management of natural and physical resources, and in 2003, Section 6(F) of the RMA improved the standard for heritage planning assessment by elevating the protection of historical heritage to a national importance matter.

The two leading national agencies that manage heritage protection here in New Zealand identified by Besen *et al.* (2020) are the Department of Conservation and the New Zealand Historic Places Trust/Pouhere Taonga. Following these leading agencies, Besen *et al.* (2020) conclude that there are numerous other organisations and regulations involved in cultural heritage management that creates a complex system lacking co-ordination and direction that is an apparent problem for heritage management in New Zealand. The need for heritage provisions within district plans to be more consistent is evident in heritage provisions, to ensure that uncertainty between all parties who are involved can be avoided within the process.

Identification and protection of New Zealand's cultural heritage are promoted by and managed by the New Zealand Historic Places Trust (NZHPT). The trust maintains a register of listed historical places, established under the Historic Places Act 1993 (HPA). As previously stated, ICOMOS (2010) outline that places of heritage value are listed under two categories by Heritage New Zealand - Category 1 and Category 2. Conversely, although the buildings scheduled in the heritage list are recognised, recognition in the way of listing does not ensure protection. Besen *et al.* (2020) have recognised that the protection of these buildings then falls on the measures included in local district plans.

The NZHPT is responsible for liaising with local councils to assist with the identification and protection of heritage sites within their governing districts. They are also responsible for monitoring and providing guidance to landowners and developers proposing development for sites and properties that are listed on the register of historic places. Many people are under the incorrect understanding that places and sites listed under the Historic Places Register are assured protection from modification or demolition which is dismally not the case. Heritage listing is solely acknowledgement that a site has significance and is worth protecting. Taylor *et al.* (1997) have exposed that even if a place is registered, the NZHPT does not possess the authority to prevent opposing historic preservations such as modification and demolition. However, if necessary, the trust has the power to issue a Heritage Order under the Resource Management Act 1991 (RMA).

The Department of Conservation (DOC) is, on the other hand, responsible for managing cultural heritage resources that are located on conservation estate. Resources located on the department's land are already under their protection, and this factor significantly restricts the role of the department. Taylor *et al.* (1997) have learnt that The Conservation Act 1987, on the other hand, states conflicting information which has sparked a great deal of debate over the department's role, as the act delegates the department the assignment of advocating for and safeguarding significant heritage resources that are found outside of conservation territory.

Under the Resource management act, local government plays a crucial role in cultural heritage management. Even so, the council's performance for safeguarding cultural heritage is highly variable as noted by the Parliamentary Commissioner for the Environment (1996). Taylor *et al.* (1997) also note that district plans of local authorities are prepared under the Resource Management act and must include all places listed under the Historic Places Act and although listing allows people the opportunity to express support for preservation, it does not guarantee protection.

Heritage Orders are another possible route provided under the Resource Management Act, which offers protection for places of cultural heritage. Revealed by Taylor *et al.* (1997) as a provision under the

district plan, the heritage order prevents action that may impact the heritage characteristics of a building or site unless granted written approval from the appropriate heritage protection authority such as the Historic Places Trust, local authority, or any other organisation permitted as a heritage protection authority approved under the RMA.

A noticeable heritage problem identified is the reality that the majority of registered heritage places in New Zealand are privately owned. This issue is highlighted by the understanding that heritage places and sites under heritage agency ownership, such as the NZHPT have the highest amount of protection. Taylor *et al.* (1997) has found that in some cases, local councils or heritage agencies may purchase a significant site to secure protection. Unfortunately, the number of places offered by this nature of security is limited due to arising challenges and significant costs associated with acquisition, conservation, maintenance, and management of the building or site.

## 4. Heritage conservation methods and practice

### 4.1. Overview of conservation methods

When dealing with existing heritage projects, a range of conservation processes may be employed. Conservation methods are measured by the degree of intervention with guidance from the conservation principles set out in the International Council on Monuments and Sites (2010) NZ Charter. The NZ charter states that any intervention that may compromise the cultural heritage value of a place is unfavorable and should not be undertaken. They advise that the minimum degree of intervention required for heritage conservation works is preferable in coherence with the charter. ICOMOS includes comments on the method of re-creation. They define re-creation, "meaning the conjectural reconstruction of a structure or place; replication, meaning to make a copy of an existing or former structure or place; or the construction of generalised representations of typical features or structures" however, do not consider this method a conservation process nor a desirable approach.

McClean (2007) trusts that efficient outcomes can be achieved when considering the current cultural heritage value of a site and identified policies for its management at the conceptual planning stage early on. ICOMOS (2010, p.1-6) advise that ideally all work dealing with heritage conservation should be subject to a conservation and maintenance plan with guidance from the New Zealand Historic Places Trust (NZHPT) or qualified heritage professionals. The ICOMOS NZ Charter provides support for those involved with the conservation and management of cultural heritage places and should be made an integral document regarding statutory and regulatory heritage policies, plans, and management. The charter outlines and defines the methods of heritage conservation in order of the level of intervention required, which includes; preservation, restoration, reconstruction, adaptation, and non-intervention.

### 4.2. Adaptive reuse

Kiroff and Tan (2015, p.1) describe adaptive reuse as "a process which changes or modifies a derelict building and repurposes it while retaining its cultural heritage value." They recognise that adaptive reuse is often recognised as a viable alternative method for demolition to safeguard losing existing cultural heritage. Many findings included in this paper discuss the juxtaposition of benefits (environmental, social, and economic) that adaptive reuse methods offer when dealing with cultural heritage. These methods are commonly considered as an alternative solution that can improve the

performance of a building while also reducing its environmental loading impact. However, Kiroff and Tan (2015, p.1) have found that there is little research published that investigates the intangible value added through the practice of building adaption and its significance as a resource for place-making and branding strategies.

Until recently, limited attention to adaptive reuse has been received in New Zealand as the result of the general perception that new construction is the single answer to meeting client demand. However, this is not necessarily the case as Kiroff and Tan (2015) deem that building adaptation proves itself to be a successful alternative for urban redevelopment movements through the sustainable opportunities it provides. Reid (2018) has defined adaptive reuse as a "process of retrofitting old buildings for new uses, which allows structures to retain their historic integrity while providing for occupants' modern needs". The ICOMOS (2010) New Zealand Charter lends support to this definition by stating that, “Proposals for adaptation of a place may arise from maintaining its continuing use, or from a proposed change of use.” The texts examined all refer to the benefits of adaptive reuse as an environmentally, economically, and socially viable option through retention and adaptation of older existing buildings as opposed to undertaking a new development.

The conversion of established industrial structures provides an alternative solution to the demolition of an existing structure that no longer meets expectations. Identification of heritage as a commodity in recent years has been described as a pervasive trend by Kiroff and Tan (2015) in the literature, Adaptive Reuse of Industrial Buildings in a New Precinct in Auckland's CBD. The text also mentions the limited published research that explores the intangible value added through building adaptation and its significance as an essential resource in place-making strategies and its role in place branding.

*4.2.1. Program*

The programmatic and typological approach are both adaptive reuse strategies that involve the adaption of a building to host a new program or function. Wong (2017) states that at the core of adaptive reuse is a change of use that gives a new purpose to an unused or underutilised structure. When exchanging one type of activity to another within a given structure or in the case of bringing an unused building or structure back to life, this can be referred to as change of use. The ICOMOS (2010) Charter advises that "Where the use of a place is integral to its cultural heritage value, that use should be retained. Wong (2017) concludes that "The design of these different spaces, their sizes, and relationships to each other is an interpretation of the architectural program, a document translating a client's needs for a building into spatial terms." Often adaptive reuse transformations include a mixture of different uses/types within a given structure. Wong (2017) defines mixed-use occupancy as the co- existence of several user groups within a single structure.

*4.2.2. Environmental benefits*

Many definitions of sustainability have been proposed. Rabun and Miles (2009) state that a generally accepted explanation for sustainability is, "Meeting today's needs without compromising the ability of future generations to meet their needs." The literature investigated are all informative of the strong link and benefits of adaptive reuse as a sustainable architectural approach to design. With a global focus in recent years, Wong (2017) acknowledges that with the effects of climate change and the recognition that buildings are the primary source of global demand for energy and materials that produce by- product greenhouse gases, adaptive reuse offers itself as a viable option under the circumstances.

Whilst Rabun and Miles (2009) comment that natural resources such as minerals, fossil fuels, and water are limited, and ultimately the growing population will exert pressure on the supply. In the long-range view, the earth's resources are finite, and it will be prudent to use as few new resources as possible. Conservation in place provides a better alternative than recycling or reuse of resources which is fundamental to the practice of adaptive reuse.

*4.2.3. Social benefits*

By retaining and reusing existing buildings, adaptive reuse can contribute to a sense of place and identity for a community who has experienced significant loss. Adaptive reuse can provide many benefits such as social, architectural, cultural, and historical advantages to aid in urban regeneration and community revitalisation. According to Kiroff and Tan (2015), when historical buildings are senselessly demolished, it is not only recognised as an ecological waste but also as a loss of local identity, cultural heritage, and socio-economic values. Retention of the style and character of a building can be maintained through building adaption. When restoring the cultural heritage significance of a building, there are potential twofold benefits for the communities that value them when executed well. Kiroff and Tan (2015) also state that "Buildings could be considered as a physical embodiment of cultural memory and historical narratives in terms of their conditions and materiality. Furthermore, it can contribute to the development of new stories and identities through the process of urban regeneration."

Urban heritage and adapted industrial buildings play a crucial role in place branding and are recognised as essential resources in place-making strategies. Kiroff and Tan (2015) claim that "The physical properties of the built form give identity to a city on a macroscale and contribute to a great extent to a sense of place on a micro-scale alongside wide-ranging economic activity. Heritage, which plays a key role by evoking images of a nostalgic past through the use of cultural and historical references, is seen as lending "a desired aura" to a place. The power to evoke memories outlines how distinctive characteristics of a building or place can be used as a powerful marketing tool associated with successful branding to create unique identities.

It is evident that the three aspects of sustainable thinking (economic, environmental, and societal), have the opportunities to be developed through an adaptive reuse project. As adaptive reuse is a process that is continually evolving, this gives end-users the ability to continue shaping and altering their immediate surroundings while the areas they inhabit can remain dependent on its city's development. Therefore, time is a new aspect that can be added to the list of concepts of sustainable thinking which adaptive reuse brings forward. It provides new possibilities and opportunities and demonstrates how sustainability itself can offer a developing process rather than a fixed and definitive proposition.

## 5. Conclusions

From the Literature Review, the research found that the main problem at present combines an inherent conflict concerning private ownership rights and the fact that there is an apparent lack of synchronisation and direction between many different organisations that manage heritage in New Zealand. From drawing this conclusion, we intend to transition from understanding what the current state of knowledge in literature is, to what is happening in practice currently. We want to investigate what is being practised by heritage professionals and the architectural/building industry. Future research will include conversations and interviews with architects and engineers from the sector, district

councils, and government organisations such as Heritage NZ, with the primary aim to learn how New Zealand could and may benefit from some modifications in policies it has at the moment. Private owners of heritage buildings will also be consulted, to gain an understanding of what would be valuable for them to help heritage buildings be retained and adaptively reused, and not demolished. Adaptive reuse of heritage buildings is directly connected with sustainability and environmental topics through related fields of the energy retrofit and seismic retrofit, and we see a lot of potentials for change that may improve our environment to help us all live in a healthier world. We strongly believe that schools of architecture in New Zealand should play a role in helping this happen and take responsibility for calling for the change/modifications in policies.

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