

Overcoming Economic Blind Spots in Adaptive Reuse: A Strategic Framework Illustrated through New Zealand Cases

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Abstract

Adaptive reuse of heritage buildings is increasingly recognized as a key strategy for sustainable urban development. Existing frameworks often consider political, social, cultural, architectural, and environmental factors but frequently overlook detailed economic analysis. This gap can lead to suboptimal reuse decisions, financial inefficiency, and reduced long-term sustainability of heritage projects.

This paper addresses these shortcomings by developing an enhanced adaptive reuse framework integrating a broader economic perspective, exploring alternative reuse options to achieve more sustainable outcomes. The framework emphasizes opportunity costs, economic networks, and sectoral influences, supporting informed decision-making that aligns heritage conservation with urban development strategies.

Auckland, New Zealand, serves as the case study. Despite being relatively young compared to ancient cities, it possesses historical dimensions rooted in Māori heritage alongside modern developments. Its simpler urban pattern and strategic plans provide a suitable context to investigate adaptive approaches without the complexities of older centers. The methodology involves qualitative analysis of existing adaptive reuse case studies, focusing on economic factors. Policy documents such as the Auckland 2050 Plan, sectoral economic data, and economic interdependencies were reviewed. Special attention was given to Building One, analyzing how economic considerations influence outcomes and identifying key factors affecting project effectiveness.

Findings indicate that embedding robust economic analysis—including opportunity costs, economic linkages, and sector-specific contributions—enhances competitiveness, viability, and sustainability. The refined framework adopts a multi-layered top-down approach, starting with governmental and economic contexts, moving through social and cultural considerations, and culminating in urban and architectural interventions, ensuring heritage assets actively contribute to the city's evolving economy.

Keywords

Adaptive reuse, Heritage buildings, Sustainable urban development, Economic analysis, Opportunity costs

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Introduction:

1- Defining Adaptive Reuse and Addressing Economic Gaps: Literature and Case Perspectives

Adaptive reuse is a transformative process that conserves existing buildings, especially those with historical or cultural significance, by strategically repurposing them to meet contemporary needs while conserving their value and character. Adaptive reuse not only extends the life of these structures but also supports the community's future, acting as a catalyst for sustainable growth.

This practice offers a wide range of benefits across environmental, social, cultural, economic, and other dimensions. Environmentally, it reduces demolition waste, lowers demand for new materials, and decreases energy consumption, while conserving

green spaces and limiting urban sprawl. Socially, it fosters community development, continuity, and identity by creating hubs for social interaction, cultural activities, and education. Culturally, it safeguards architectural heritage and intangible historical narratives, allowing future generations to connect with their past and ensuring that history remains an integral part of the urban fabric.

Economically, the benefits of adaptive reuse are increasingly recognized, though often underestimated. Such projects can stimulate local economies by increasing property values, attracting businesses, and drawing new residents. The unique character of conserved heritage buildings often creates distinctive commercial, residential, or cultural spaces that attract tourism and investment. All of these construction cost savings, asset

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retention, and enhanced place identity are well-known advantages of adaptive reuse. However, they are complemented by other, less frequently addressed economic dimensions. This research highlights that robust economic integration particularly through assessing opportunity costs, mapping economic linkages, and evaluating sector-specific contributions that can make adaptive reuse frameworks more competitive, viable, and sustainable. Such integration allows heritage buildings to become active contributors to a city's evolving economic networks rather than remaining isolated assets.

A significant element of the refined adaptive reuse framework is the Prevailing Value System, which conceptualizes heritage conservation as a value-driven, dynamic process shaped by evolving community values and external contexts. This holistic approach recognizes that heritage values are continuously influenced by social, political, economic, cultural, architectural, urban, environmental and other contexts, providing a comprehensive lens to guide adaptive reuse decisions. By framing conservation as an ongoing negotiation rather than a fixed outcome, the Prevailing Value System supports decision-making that balances historical integrity with contemporary needs, thereby enhancing sustainability and competitiveness in heritage projects (Moosa, 2018). Building on this framework, the following section offers an overview of selected adaptive reuse cases in New Zealand, illustrating diverse approaches to conserving heritage buildings while enabling their continued use. The review critically examines strengths and limitations in current practices, with particular attention to how economic considerations are addressed or overlooked within adaptive reuse strategies. Through the interdisciplinary lens of the Prevailing Value System, this analysis identifies persistent economic gaps and their influence on long-term project outcomes. Following the national overview, a detailed case study of Building One in Auckland—an extensively documented heritage site is presented to demonstrate the interaction of political, social, economic, architectural, and environmental contexts in practice, highlighting how addressing economic gaps can lead to more effective and sustainable adaptive reuse outcomes. This section draws on a study examining several adaptive reuse projects across New Zealand, utilizing published case studies that document their cultural and economic outcomes (New Zealand Historic Places Trust, 2011). Insights from individual cases inform one another, supporting the development of a flexible and adaptable framework. Key documents and data sources reviewed include:

Auckland Plan 2050: This foundational policy document was examined to understand the legislative, urban, and socio-economic objectives guiding development in Auckland. Its “six keys of progress” Belonging and Participation, Māori Identity and Wellbeing, Homes and Places, Transport and Access, Environment, and Cultural Heritage were analyzed as determinants for adaptive reuse strategies (Auckland Council, 2018). Auckland Economic Development Action Plan 2021–2024: This plan provided insights into the city's economic priorities, leading industries, and strategic growth areas, enabling identification of potential economic synergies for adaptive reuse projects (Auckland Council, 2021).

New Zealand Historic Places Trust publications: These sources offered context on heritage legislation, conservation principles, and established practices within New Zealand (New Zealand Historic Places Trust, 2011).

Infometrics reports: These reports were instrumental in understanding Auckland's leading industries and economic sectors, vital for aligning adaptive reuse with the city's economic strengths (Infometrics, 2024).

Other relevant literature: Including academic papers, books, and reports on New Zealand architecture, urban development, and Building One's history, these contributed to a comprehensive understanding of the case study.

The research also involved analysis of economic data related to key sectors such as technology and creative industries and mapping economic interdependencies. This comprehensive data collection facilitated robust identification of knowledge gaps in economic integration within existing adaptive reuse planning and informed how such gaps can be effectively addressed within the refined framework.

Note: Additional documents may be incorporated in further research as needed.

2- Adaptive Reuse Cases in New Zealand: Reviewing Economic Dimensions and Identifying Gaps

In New Zealand, the study of adaptive reuse cases reveals a variety of approaches and considerations, reflecting a growing understanding of heritage conservation beyond mere structural conservation. These cases, as detailed by the New Zealand Historic Places Trust (2011) and other sources, highlight several key themes (New Zealand Historic Places Trust, 2011):

- **Area-Based Approaches and Broader Regeneration:** Several instances demonstrate that adopting an area-based approach often yields significant benefits not only for heritage

conservation but also for the wider physical, economic, social, and cultural regeneration of urban areas. A notable example is the Dunedin City Council Planning for Adaptive Reuse (Hazelton, 2020). This case illustrates a comprehensive strategy that extended beyond heritage buildings to include non-heritage structures, aiming to provide a holistic strategic plan and maximize development opportunities alongside heritage conservation goals. This indicates an understanding of collective outcomes and the integration of adaptive reuse into larger urban planning efforts.

- **Integration of Contemporary Layers:** Many New Zealand adaptive reuse projects successfully integrate a "present-day layer" to rehabilitate and reactivate old uses in a contemporary manner. The example of Debrett's – a heritage chic boutique illustrates a successful rehabilitation for today's world. While high-value historic architectural elements are carefully conserved, the majority of cases incorporate contemporary elements, signifying a conscious awareness of adding a modern dimension to future heritage. This approach allows heritage buildings to remain relevant and functional in a contemporary context, attracting diverse users and ensuring their continued economic viability.
- **Identifying Embedded Values as a Sacred Objective:** A consistent and unwavering objective across adaptive reuse cases in New Zealand is the identification and respect for the values embedded in heritage buildings. These foundational principal guides interventions, ensuring that the unique historical, aesthetic, and cultural significance of each structure is recognized and conserved throughout the adaptive reuse process.
- **Heavy Integration of Cultural and Social Aspects:** The importance of cultural and social dimensions is heavily integrated into project requirements. For instance, the chapter titled "A Tasteful Conversion" highlights the profound impact of a church on its community and its successful incorporation into community life, demonstrating the conservation of collective memory. Similarly, the Frankton Junction Railway House Factory case, mentioned in the "Factory gets new lease on life" section, is cited as a significant example of conserving New Zealand's social and industrial. This underscores the vital role of social values as an essential factor in adaptive reuse. The Supreme Court case also provides a distinct perspective on community involvement, emphasizing the

importance of involving individuals who understand the processes and legislation to effectively achieve client objectives.

- **Community Participation and External Connections:** The concept of participation is clearly expressed, particularly in the chapter "Think about external connections". This highlights the necessity of involving various stakeholders, including property owners, developers, and enterprises, in the decision-making process to address difficulties and ensure optimal outcomes. Furthermore, the importance of public feedback on factors that would invite them to visit an area is recognized as a valuable input for project development, demonstrating a commitment to responsive and community-driven adaptive reuse.

2.1 Economic Aspects: Considerations and Measurable Advantages:

Regarding the economic aspect, several concepts have been explored across New Zealand cases, though some projects have focused more intensely on economic outcomes than others. The section titled "Buildings weren't constructed to be historic" discusses measurable economic advantages, including the creation of skilled and well-paid jobs, above-average property appreciation, and superior rates of return. It notes that investing in built heritage can yield higher gross returns, citing instances where returns in the capital city during the mid-1990s were 2% to 3% higher than contemporary equities. The case titled "The Economics of Napier's Heritage Buildings" specifically focused on various aspects of economic return, including the strategic importance of dealing with significant commercial zones (retail, cuisine, visitor accommodations, residential living, professional services, and government agencies). This case illustrates how such integration can improve direct and indirect business within the local economy's investment sector, attracting tourists and expanding the labor force. Moreover, local businesses and organizations view maintenance and enhancement of heritage assets as a source of revenue and opportunity, leading to the employment of full-time staff. Indirect contributions include the enhancement of business and labor force capacities (New Zealand Historic Places Trust, 2011).

New Zealand adaptive reuse approaches also consider regional development schemes and Collaborative Partnerships that aim to diversify regional economies or boost tourism-related economic growth as high-level development prospects. The importance of connecting with other initiatives, towns, and partners to maximize limited

resources is highlighted. Collaborating with various partners is seen as a means to generate new ideas, funding, and investment opportunities (New Zealand Historic Places Trust, 2011). Furthermore, the concept of municipalities, community providers, and private proprietors working together to improve collective outcomes is recognized, as seen in collaborations for affordable and social housing (Hazelton, 2020).

While these cases demonstrate a professional and nuanced handling of various complexities in adaptive reuse, a preliminary analysis indicates that despite these successful strategies, certain factors remain insufficiently considered. These "missing factors" are crucial for maximizing the economic potential and long-term sustainability of heritage conservation.

2.2 Identified Economic Gaps in Current Frameworks

Despite the existence of multi-contextual frameworks and the successful individual cases observed in the chosen cases, a critical examination of current adaptive reuse approaches, particularly within the New Zealand context, reveals significant "missing factors" that primarily pertain to a comprehensive economic understanding. While economic advantages like job creation and property appreciation are acknowledged, the deeper, more strategic economic considerations necessary for truly competitive and effective heritage conservation are often overlooked. These "economic blind spots" can lead to suboptimal decision-making, limiting the potential societal and financial returns from adaptive reuse projects.

The key economic knowledge gaps identified are:

- **Absence of Comprehensive Value Accounting:** Current frameworks often lack explicit mechanisms to ensure that "all values are accounted for" when identifying heritage building values. While cultural and social values are increasingly recognized, a robust methodology for quantifying or systematically integrating economic values, especially those beyond direct financial returns, remains underdeveloped. This leads to an incomplete understanding of a project's true holistic value proposition. There is "no reference that ensures all values are accounted for Identifying heritage building values."
- **Limited Understanding of Opportunity Cost:** This is one of the most important gaps in current adaptive reuse decision-making. Opportunity cost means considering the alternative ways resources could be used instead of the option chosen (Hazelton, 2020). In adaptive reuse, it

means evaluating whether there are better uses for a heritage building that could bring greater benefits. Without carefully assessing opportunity costs, decision-makers might choose reuse options that seem good but don't maximize economic, social, or environmental value. As a result, they could miss chances to achieve higher financial returns, stronger community benefits, or more sustainable outcomes. For example, while a selected reuse project might produce some positive results, a different approach might have delivered much greater benefits across many areas, ensuring the resources invested generate the best possible overall value.

- **Absence of Economic Chains/Networks for Regional Collaboration:** Modern urban economies operate as complex networks of interconnected activities and stakeholders. Current adaptive reuse frameworks often fail to adequately consider the role of "economic chains" or "networks" defined as "a group of agents pursuing enduring exchange relations" (Todeva, 2011)—in informing reuse decisions. This oversight means that projects are frequently planned in isolation, without fully leveraging potential synergies with regional economic development, existing industries, or inter-city collaborations. An adaptive reuse project, if integrated into a broader economic chain (e.g., tourism, creative industries, technology hubs), could multiply its economic impact, facilitate resource sharing, and ensure the reproduction of missing economic uses within a region. Without this consideration, projects risk becoming disconnected ventures that do not contribute optimally to the wider economic ecosystem. The "regional collaboration should be planned in terms of economic chains/network that not only allow for the reproduction of missing economic uses in different regions but also guarantee the utilization of a specific economic sector's functioning."
- **Insufficient Consideration of Top Economic Sectors and Leading Industries:** A generic approach to adaptive reuse, without specific consideration of a region's leading industries and top economic sectors, can undermine a project's long-term viability and financial independence from governmental support. Previous planning methodologies have often failed to account for these specific industrial strengths, which are crucial for ensuring that a proposed reuse aligns with existing market demands, labor pools, and innovative ecosystems. Ignoring these leading industries can lead to proposals that struggle to thrive independently, remaining reliant on

subsidies rather than becoming self-sustaining economic drivers.

- **Insufficient Integration of Participation with Cohesion Tools:** Community participation is important and involves diverse stakeholders such as owners, developers, businesses, and community members. However, without proper coordination and communication, these groups can become disconnected or develop conflicting priorities, which may lead to cultural separation over time. To prevent such outcomes, a structured, top-down process supported by tools that promote ongoing communication and collaboration across all parties is essential. Such tools enable consistent engagement and shared understanding, fostering cohesion and helping achieve the best possible results for everyone involved.

The cumulative effect of these gaps highlights the urgent need for an enhanced economic perspective within adaptive reuse frameworks. Treating economic factors as secondary or mere feasibility checks risks suboptimal outcomes that fall short of the full potential for competitive, viable, and sustainable urban development.

An enhanced economic perspective is critical to:

- **Optimize Resource Allocation:** Rigorous opportunity cost assessment ensures resources (financial, human, material) are directed to projects yielding the highest returns across all value dimensions, moving beyond feasibility to selecting the “best benefit ever” from every embedded value.
- **Foster Financial Self-Sufficiency:** Leveraging knowledge of top economic sectors and economic chains promotes reuse proposals that are financially robust and less dependent on ongoing government or charitable funding, embedding them within resilient economic ecosystems.
- **Drive Broader Urban Economic Development:** Situating adaptive reuse within wider economic networks transforms heritage assets into active contributors to urban economies stimulating related industries, fostering innovation, and enhancing regional competitiveness. The concept of “branding heritage areas” can be expanded by strategically linking cities and their local industries within these economic chains.
- **Ensure Competitive Viability:** Projects that demonstrate clear economic advantages, align with market trends, and understand their economic impacts are more likely to attract investment and long-term support.
- **Inform Policy and Planning:** A comprehensive economic framework equips policymakers and

planners with tools to craft effective incentives, regulations, and strategies aligning heritage conservation with broader urban economic objectives, including enabling the reproduction of missing economic uses across regions through well-planned collaboration.

In sum, integrating a detailed economic analysis elevates adaptive reuse from a conservation exercise to a strategic tool for urban regeneration. Heritage buildings are not merely cultural relics but dynamic assets with untapped economic potential capable of simultaneously conserving history and driving contemporary economic growth.

3- Building One (Carrington Hospital), Auckland: Case Study Selection and Economic Integration within Contexts

The selection of Building One, the former Carrington Hospital in Auckland, as the primary case study is central to this research. As a Category 1 historic building, it provides a well-documented example for examining the economic dimensions of adaptive reuse. Having undergone significant reuse as an educational institution, prior studies (Point Chevalier Social Enterprise Trust, 2020; Don, 2021) have identified critical gaps in economic considerations that affected project outcomes. More recently, Building One is being redeveloped as part of the Carrington Residential Development, a large-scale urban project aiming to create approximately 4,000 new homes and integrate the historic building into a modern urban village (HUD, 2025; Unitec, 2025; CFG Heritage, 2025; The Spinoff, 2020). While parts of the building have been demolished for infrastructure upgrades, its adaptive reuse remains central to plans for community, cultural, and commercial functions (ActionStation, 2025; Point, 2020; The Spinoff, 2022). This evolution underscores the relevance of Building One as an analytical case, demonstrating how heritage conservation, economic viability, and urban development intersect, and providing lessons that are applicable to other adaptive reuse projects in New Zealand and beyond.

Applying an interdisciplinary approach to identify the economic gaps in Building One and its surrounding context in Auckland highlights how earlier proposals could have been strengthened through a systematic opportunity cost analysis. The framework emphasizes evaluating alternative uses that align with Auckland’s key sectors, such as technology, the creative industries, and tourism.

This case also offers an opportunity to apply part of the prevailing value system (Moosa, 2018) through an interdisciplinary approach. Specific contexts are selected to illustrate the mutual influence between well-established frameworks and their perception within economic contexts, reinforcing the

applicability of the proposed framework even when redevelopment is already underway.

3.1 Political (Legislative) Context: Guiding Frameworks and Economic Implications

The political and legislative context forms the foundational layer for all adaptive reuse endeavors. Government policies, urban planning documents, and heritage protection laws directly shape the feasibility, scope, and direction of projects, thereby profoundly influencing their economic implications. In Auckland, New Zealand, the Auckland Plan 2050 stands as a primary and indispensable reference. This long-term strategic document outlines the vision for Auckland's development, presenting six "keys of progress" that serve as both rigid determinants and guiding frameworks for adaptive reuse: Belonging and Participation, Māori Identity and Wellbeing, Homes and Places, Transport and Access, Environment and Cultural Heritage, and Economy and Opportunities (Auckland Council, 2018).

These keys effectively define permissible "fields of reuse" for heritage buildings. For example, proposals must demonstrate contributions to Homes and Places through secure, affordable housing or to Transport and Access by integrating sustainably with infrastructure. Each key carries economic implications: strengthening Belonging and Participation fosters social capital and local economic activity; supporting Māori Identity and Wellbeing unlocks culturally aligned enterprises and tourism; Homes and Places influence housing markets and property values; Transport and Access enhances accessibility and commercial viability; and Environment and Cultural Heritage affects compliance costs, sustainable investment, and the unique value proposition of heritage properties.

The Auckland Plan also identifies key challenges as population growth, sharing prosperity, and reducing environmental degradation that drive economic innovation in adaptive reuse. Population growth fuels demand for diverse spaces, while sharing prosperity promotes equitable economic benefits, encouraging community-led or social enterprises within heritage sites. Environmental sustainability creates opportunities for green investments and innovative technologies, offering long-term savings and differentiation. Yet, the costs and benefits associated with these drivers require careful consideration to avoid underestimating expenses or overestimating returns.

Demographic data provide vital insights for tailoring reuse strategies. Auckland's Asian population, younger and well-educated but with lower labor force participation, exemplifies how culturally specific uses can foster niche markets and

inclusion. However, the complexities of community engagement and the timeframes for realizing benefits are frequently overlooked.

Spatially, strategic locations such as historic ports, ethnic concentrations, transportation hubs, and indigenous lands including those of Ngāti Whātua shape adaptive reuse opportunities. These areas demand sensitive planning that respects cultural rights and urban dynamics. Port regions may require partnerships, while transport-adjacent heritage buildings benefit from accessibility and commercial potential. However, navigating layered regulations and cultural protocols can introduce delays and unanticipated costs often underestimated in project planning.

Heritage protection laws advocate for high-quality design promoting economic development while conserving cultural values. Empowering partnerships with tangata whenua to practice kaitiakitanga (guardianship) fosters stewardship and may reduce costly retrofits as environmental impacts increase. Yet, economic evaluations may overlook these long-term social and financial benefits.

In sum, Auckland's political and legislative framework provides robust guidance for adaptive reuse but also contains economic blind spots—from underestimated regulatory costs and approval delays to undervalued cultural and social benefits—that can affect project viability. Addressing these gaps is critical to fully realizing adaptive reuse as a sustainable and economically viable strategy.

3.2 Economic Context: Strategic Analysis of Leading Sectors and Economic Blind Spots

The economic context is paramount to the success and sustainability of adaptive reuse. While the direct economic advantages of investing in heritage buildings—such as potentially higher gross returns, creation of skilled and well-paid jobs, property appreciation, and superior return rates are recognized, the true depth of economic analysis often falls short (Infometrics, 2024). Previous adaptive reuse cases in New Zealand, including those involving commercial zones, illustrate that such investments generate significant direct and indirect returns. However, many past proposals addressed economic contexts individually and lacked integration of critical economic dimensions.

This research specifically addresses the key "economic blind spots" identified in prior studies and reuse proposals, such as those related to Building One (Point Chevalier Social Enterprise Trust, 2020; Don, 2021), by integrating a more comprehensive understanding of opportunity costs, economic chains/networks, and the critical role of top economic sectors and leading industries within each city division.

Opportunity Cost: Maximizing Benefit from Every Embedded Value

The consideration of alternative uses for resources when deciding on a focal option is often absent from adaptive reuse frameworks. Without rigorous assessment, decision-makers risk settling for “good enough” reuse options rather than identifying those that generate the highest aggregate benefits economically, socially, culturally, and environmentally. For example, previous proposals for Building One considered uses such as an arts center without analyzing whether this represented the most economically efficient use given the division’s leading industries and the building’s potential. This omission can lead to financial dependency on government support and unaddressed feasibility gaps (Point Chevalier Social Enterprise Trust, 2020; Don, 2021). Therefore, the framework insists on systematic evaluation of all alternatives against broad benefit criteria.

Economic Chains/Networks: Fostering Regional Collaboration and Reproduction of Missing Uses

Adaptive reuse projects often operate in isolation, neglecting the vital role of “economic chains” or “networks,” defined as groups of agents maintaining enduring exchange relationships. This oversight weakens their potential economic impact. In Auckland, a strategic focus on linking reuse projects to economic chains that support missing or underrepresented uses is essential. For Building One, envisioning it as a hub for creative industries or sustainable design would require alignment with networks of local suppliers, specialized firms, and educational institutions. Similarly, the establishment of local and international marketing hubs exemplified by cities registered as Creative Cities of Crafts and Folk Art, such as Cairo can advance heritage-based industries beyond mere workshop proliferation, integrating environmental considerations such as emissions treatment as part of product development. These networks also foster inter-divisional and inter-city social and economic collaboration, strengthening resilience and sustainability (Moosa, 2017).

Top Economic Sectors and Leading Industries: Aligning Reuse with Regional Strengths

A critical blind spot in past adaptive reuse efforts is the failure to consider the specific leading industries of each city division. Reports such as Infometrics (2024) highlight that each region has its own dominant economic sectors, which must inform reuse proposals to ensure financial viability and independence from subsidies. For example, in areas with a strong technology sector, converting heritage buildings into co-working spaces or incubators aligns reuse with market demands. Prior proposals

for Building One did not adequately integrate this sectoral analysis, limiting their economic efficiency and sustainability (Point Chevalier Social Enterprise Trust, 2020; Don, 2021).

Analyzing Auckland's top economic sectors from 2022 to 2024 reveals crucial trends. While Professional, scientific, and technical services consistently remained the top contributor to GDP growth, its absolute contribution increased from \$1,626.0m in 2022 to \$3,103.1m in 2023, and further to \$3,266.1m in 2024. This consistent dominance signals a robust and expanding sector that should be a prime consideration for adaptive reuse projects. A heritage building could be reimagined as a modern co-working space, a research and development hub, or a specialized training facility, aligning its purpose with the city's leading industry and ensuring long-term financial viability.

Similarly, Transport, postal, and warehousing emerged as a significant contributor, with its absolute growth climbing from an unlisted position in 2022 to \$1,741.2m in 2023, and further to \$1,824.1m in 2024. This indicates a growing demand for logistics and connectivity infrastructure. An adaptive reuse project could capitalize on this trend by converting a suitable heritage building into a distribution hub, a logistics coordination center, or a specialized storage facility, thereby addressing a critical need within the city's economic chain. The increasing contribution of Health care and social assistance from \$556.9m in 2022 to \$1,536.3m in 2024 also presents an opportunity, where heritage buildings could be adapted for medical offices, specialized care facilities, or community health centers.

The consistent growth of these sectors—Professional, scientific, and technical services; Transport, postal, and warehousing; and Health care and social assistance—provides a clear indication for adaptive reuse planners. While the traditional approach might focus on converting a heritage building into a cultural center, a more strategic and economically sound approach would be to align the new use with these dominant sectors. Adaptive reuse can thus become a powerful tool to not only conserve heritage but also to actively support and accelerate the growth of a specific sector, fostering local economic resilience and reducing reliance on external subsidies. By transforming a building to serve a market-driven need within a leading industry, a project can move beyond simple conservation and become a catalyst for economic development, filling a “missing use” and strengthening regional networks.

Community Requirements and Participation

This framework also foregrounds the community's needs and participation as primary inputs, recognizing that favored economic sectors within the community and positive involvement in decision-making enhance project success. Unlike previous proposals that overlooked local development strategies, this approach ensures alignment with broader urban plans and evolving post-pandemic realities.

Anticipated Outputs of the Economic Framework

Based on the integration of opportunity cost, economic chains, leading industries, and community input, the framework aims to provide:

- Selection of appropriate investment level ranging from micro (local) to macro (national/international) scales.
- Identification of the user's optimal position within economic networks or chains to maximize connectivity and resource flow.
- Determination of potential local economic sectors suitable for launch, expansion, or servicing via adaptive reuse initiatives.

This refined framework transforms adaptive reuse from a passive conservation act into an active, economically strategic tool aligned with regional strengths, community needs, and networked economic development.

3.3 Urban Context: Site Valorization and Responsive Adaptive Reuse

A detailed urban analysis evaluates open and built spaces, focusing on heritage buildings. This informs site valorization and guides conservation and adaptive reuse proposals, based on data from government and other sources. Key references include the Grimshaw Reference Masterplan and Strategic Framework (Grimshaw, n.d.), Salmond Architects' report on the Former Carrington Psychiatric Hospital (Jadresin-Milic et al., 2022), and documents from Auckland Council, including the Auckland Plan 2050 and related local board strategy documents (Auckland Council, 2018).

Data formation for the site's urban conditions includes analysis of:

- Density parameters, percentage of built space, building heights and floor numbers, plot sizes, applicable regulations, and the relationship between built and unbuilt areas;
- The character and capacity of stationary traffic alongside pedestrian flow and road network analysis.
- Identification of places of intersection and conflict points.
- Determination of significant vistas, height relationships, site topography (flat or sloped), and

cultural mapping to understand heritage value within the urban fabric.

Applied to the case of Building One within the former Carrington Hospital grounds, specific inputs connect to broader urban development plans, existing potentials, and emerging community needs. The site benefits from excellent access to public transport and active transport networks, including proximity to two train stations, regular bus services, and direct access to the North-Western Cycleway (Auckland Council, 2018).

Auckland's large-scale urban development plans, supported by the Auckland Unitary Plan, anticipate the construction of approximately 4,000 new homes across a mix of housing types, including market-rate, Kiwi Build, affordable housing, purpose-built rentals, progressive home ownership, and public housing. This projected population growth will exert substantial pressure on existing community facilities, necessitating complementary adaptive reuse initiatives such as a primary school or other community services (Mobius Research and Strategy Ltd., 2019).

Moreover, the site's connections with natural features specifically Te Auaunga (Oakley) Creek and the Wairaka Stream contribute to the environmental quality of the area. The urban development strategy emphasizes vibrant and safe public open spaces, enhanced by extensive native plantings that expand the habitat of Te Auaunga/Oakley Creek (Tattico & Boffa Miskell, 2023).

This comprehensive urban context analysis provides the foundational understanding necessary for valorizing heritage assets like Building One. It guides conservation efforts and adaptive reuse strategies that respond effectively to both the existing urban fabric and anticipated future developments.

3.4 Architectural Context: Economic Constraints and Opportunities in Heritage Features

The architectural characteristics of heritage buildings critically shape the economic feasibility of adaptive reuse projects. Building One, as a late nineteenth-century institutional structure, features distinctive local brickwork with polychromatic detailing and retains original elements from multiple construction phases, contributing to its high heritage value and a heritage Category 1 historic building listed by Heritage New Zealand (Point Chevalier Social Enterprise Trust, 2020; Don, 2021). These architectural features demand careful conservation, as outlined in the Salmond Architects' Conservation Plan, which restricts alterations to significant facades, interiors, and

materials, (Jadresin-Milic, McPherson, McConchie, Reutlinger, & Singh, 2022).

Such conservation requirements often translate into economic constraints: the need for specialized materials, traditional craftsmanship, and compliance with heritage standards elevates restoration and maintenance costs beyond those of conventional developments. This raises economic blind spots when feasibility studies fail to fully account for these additional expenses or the long-term cost implications of conservation-sensitive interventions.

However, these architectural qualities also create economic opportunities that are frequently underappreciated in existing frameworks. The unique historical character and aesthetic appeal can attract niche markets such as cultural tourism, creative industries, or premium commercial tenants willing to pay higher rents for distinctive heritage environments. These factors enhance a heritage building's market value and competitive edge but require strategic economic analysis to quantify and leverage effectively.

Current economic assessments often overlook the balance between these costs and benefits, resulting in missed opportunities or overestimation of constraints

3.5 Environmental Context: Sustainable Economic Development and the Green Economy

The environmental context in adaptive reuse projects extends beyond regulatory compliance and building performance to encompass a wider business ecosystem connected to sustainability and recycling. While environmental inputs such as energy efficiency standards, environmental building guidelines, thermal comfort, and carbon footprint considerations directly influence the design and retrofitting of heritage buildings often requiring investments in insulation, renewable energy, and water conservation there is also significant economic potential in the associated business activities. This includes not only environmentally resilient construction but also enterprises centered around recycling materials, sustainable product development, and green technologies. Furthermore, a diverse network of professionals such as architects, legal experts, environmental consultants, and sustainability advisors plays critical roles in shaping these projects, providing specialized services that support compliance, innovation, and market positioning.

These interconnected businesses contribute to an evolving green economy, offering new job opportunities and fostering economic growth linked to sustainable heritage conservation. Thus, the environmental context informs adaptive reuse decisions not only through technical and regulatory

frameworks but also by catalyzing business models and professional services that collectively advance ecological goals while strengthening economic viability. This broader perspective aligns with policy frameworks such as the Auckland Plan 2050, which emphasize multi-hazard resilience, community health and safety, and sustainable urban development, underscoring the importance of integrating environmental sustainability with economic and social dimensions in adaptive reuse planning.

Key inputs such as energy efficiency standards, local and international environmental building guidelines, thermal comfort, and carbon footprint assessments guide the retrofitting of heritage buildings—often requiring investments in insulation, renewable energy, and water conservation. These measures may increase upfront costs but reduce long-term operational expenses and enhance market value.

Multi-hazard resilience is crucial, involving the identification of natural disasters, climate impacts, and socio-economic shocks. Tools like resilience indexes and assets such as green spaces and emergency plans support targeted resilience strategies. Ensuring health and safety remains fundamental, aligned with frameworks like the Auckland Plan 2050, which promotes sustainable urban development and community well-being.

Beyond technical and regulatory factors, significant economic opportunities arise from related business activities in sustainability and recycling. Enterprises focused on recycled materials, green products, and innovative technologies complement environmental retrofits. A diverse network of professionals including architects, legal experts, environmental consultants, and sustainability advisors—plays vital roles in ensuring compliance, innovation, and market positioning. These interconnected businesses foster a green economy, creating jobs and driving growth tied to heritage conservation.

Overall, the environmental context shapes adaptive reuse by embedding sustainability and resilience, unlocking funding streams like green finance, and advancing economic and social goals within a comprehensive framework.

3.6 Diverse Adaptive Reuse Scenarios: Strategic Alternatives for Building One

Previous studies (Don, 2021) documented Building One's adaptive reuse as a tertiary education facility, effectively conserving its historic fabric but overlooking key economic factors. This omission limited the project's potential for long-term financial sustainability and growth.

Applying the enhanced adaptive reuse framework shifts the focus from feasibility alone to strategic economic optimization. Central to this approach is

rigorous opportunity cost analysis, which involves evaluating multiple potential uses to identify the option that delivers the greatest economic, social, cultural, and environmental returns.

Within Auckland's diverse economic landscape characterized by leading sectors such as technology, creative industries, tourism, and social innovation a range of economically viable adaptive reuse alternatives emerges:

- **Technology Incubator and Innovation Hub:** Capitalizes on Auckland's expanding tech sector by offering start-up spaces, collaborative labs, and networking events. Embedding Building One within a robust economic chain involving suppliers, investors, and academic partners can enhance revenue streams and reduce financial risks.
- **Cultural Performance Venue with Integrated Digital Arts Academy:** Leverages heritage assets to attract tourism and local creative enterprises. By linking with regional arts networks, this use can generate consistent economic activity and diversify income sources.
- **Specialized Research and Training Centre:** Aligns with priority economic sectors such as sustainable building technologies or heritage management, fostering partnerships with national and international research institutions. This can open access to funding, grants, and collaborative ventures.
- **Social Enterprise Hub and Community Innovation Center:** Supports community-driven economic development through social entrepreneurship focused on local needs, creating inclusive job opportunities and attracting impact investment.
- **Heritage and Cultural Tourism Gateway:** Develops a sustainable tourism model centered on indigenous heritage, cultural experiences, and artisan markets. This diversifies Auckland's tourism offerings while embedding economic benefits within tangata whenua partnerships.
- **Health and Wellbeing Facility with Traditional Healing:** Taps into growing wellness markets by combining modern health services with Māori healing traditions, creating niche economic opportunities aligned with cultural values.
- **Sustainable Urban Agriculture and Food Innovation Center:** Supports local food systems and green economy initiatives, providing educational and commercial activities that contribute to environmental and economic resilience.
- **Creative Maker Space and Artisan Workshops:** Facilitates small-scale manufacturing and creative production, addressing market gaps and fostering entrepreneurship within Auckland's creative economy.

- **Co-living or Affordable Housing with Cultural Focus:** Addresses housing demand while incorporating cultural identity and community cohesion, potentially stabilizing local housing markets and generating steady rental income.

While the ongoing Carrington Residential Development incorporates parts of Building One within a housing-focused urban village, it primarily emphasizes residential and general community functions (HUD, 2025; Unitec, 2025). In contrast, the strategic alternatives proposed in this study extend beyond housing to systematically explore a diverse set of economically, socially, and culturally optimized uses. By evaluating opportunity costs, embedding the building within relevant economic networks, and aligning with Auckland's leading sectors, such as technology, creative industries, and tourism. This framework demonstrates pathways that could enhance long-term financial sustainability, sectoral integration, and community engagement. This comparison underscores that even amidst ongoing redevelopment, the enhanced adaptive reuse framework offers a distinct contribution by highlighting economically strategic and contextually responsive options that complement, rather than replicate, existing plans.

These alternatives vary in the degree to which they integrate Building One into broader economic networks and value chains. Some, such as the Technology Incubator and Specialized Research Centre, directly connect with established industry sectors, supply chains, and funding streams, enhancing economic resilience and scalability. Others, including the Social Enterprise Hub, Heritage Tourism Gateway, and Co-living housing, primarily foster localized economic activity and community-based partnerships, contributing to social and cultural sustainability while generating steady, context-specific economic benefits.

Each option corresponds with Auckland's economic strengths and regional development priorities. More importantly, they enhance project viability by tapping into appropriate markets, funding sources, and partnerships, reducing dependence on subsidies and supporting diversified revenue streams.

The enhanced framework thus transforms adaptive reuse from a conservation-focused endeavor into a dynamic economic strategy. By systematically comparing opportunity costs and embedding projects within relevant economic sectors and networks, it ensures heritage buildings like Building One function as sustainable economic assets and cultural landmarks.

These options provide a differentiated set of economically grounded pathways that warrant further detailed analysis to determine the most effective and sustainable use.

4. Key Outcomes from Case Studies and Building One Analysis

Table 1 demonstrates that the economic shortcomings identified in Building One mirror broader systemic gaps across New Zealand's adaptive reuse practice. This alignment indicates that insights drawn from a single site are not confined to its immediate context but can inform improvements to the wider planning and decision-making process. By exposing recurring blind spots

such as incomplete value accounting, weak sector alignment, poor integration into economic networks, and limited exploitation of locational or architectural advantages, the comparison provides a clear foundation for refining the enhanced framework. Addressing these issues at a structural level will enable heritage projects to deliver cultural and social value while also achieving economic competitiveness, resilience, and long-term sustainability.

Table 1: Table 1: Key Economic Gaps Observed in New Zealand Adaptive Reuse Cases and Building One

Gap Category	NZ Cases – Observations & Examples	Building One – Observations & Examples
Economic Evaluation & Strategic Positioning	• Absence of comprehensive value accounting; no mechanism to ensure economic, cultural, and social values are fully considered when defining heritage building values. • Partial monetization of indirect benefits; in Napier, heritage buildings stimulate tourism and business, but spillover effects are not quantified. • Lack of standardized economic metrics; some projects (e.g., Napier) cite return on investment, while others (e.g., Frankton Junction) emphasize social outcomes, limiting comparability. • Limited application of opportunity cost; Hazelton (2020) mentions the concept, but no NZ case shows structured multi-option evaluation. • Inconsistent sector demand testing; Napier demonstrates commercial integration but lacks sector-specific growth data. • No clear macro- versus micro-level investment positioning; regional development schemes are referenced but not linked to targeted scale.	• No systematic opportunity cost analysis; the selected reuse option was adopted without evaluating alternatives such as a technology incubator, cultural venue, or research hub. • No sector-specific market testing; no demand studies conducted to assess alignment with Auckland's growth industries. • Missed alignment with Auckland's priority sectors; project did not consider technology, creative industries, or tourism as defined in the Auckland Economic Development Action Plan. • No long-term resilience plan; tenancy-driven reuse lacks forward economic strategy. • Timing of urban growth not leveraged; Auckland 2050 population surge near the site not factored into functional choices.
Integration & Partnerships for Economic Cohesion	• Lack of embedding into sector chains and networks; integration with tourism and housing exists but not systematically applied. • Economic considerations often secondary to social/cultural aims (e.g., A Tasteful Conversion). • Regional development initiatives not consistently connected to reuse planning. • Participation strand: Insufficient integration of participation with cohesion tools; external engagement is encouraged but lacks a structured, ongoing alignment process.	• No integration with supply chains or industry clusters; project function remained isolated. • Limited capacity to stimulate related sectors or attract complementary investment. • Missed opportunities to align with Māori economic development under Auckland Plan 2050. • Participation strand: Limited strategic partnerships; few connections with industry, academia, or regional economic actors to support sustainability. • Participation strand: Lack of environmental-economic integration; sustainability measures not positioned as cost-saving or funding levers.
3. Leveraging Assets & Contextual Opportunities	• Insufficient alignment with top economic sectors; Debrett's boutique leverages tourism but lacks integration with the wider creative and retail networks. • Weak connection between environmental measures and economics; sustainable retrofits are not positioned as cost-saving or revenue-enhancing strategies.	• Underutilization of architectural uniqueness; distinctive polychromatic detailing not promoted for tourism or niche branding. • Missed opportunities to leverage urban context; proximity to transport and development areas not connected to economic function. • Weak environmental-economic linkage also evident; sustainability not framed as an economic driver within the reuse model.

Table 1 compares the economic gaps observed in New Zealand adaptive reuse cases with those identified in the Building One (Carrington Hospital) case, grouping them under three consolidated categories. While the New Zealand cases reveal systemic issues such as insufficient value accounting, lack of opportunity cost analysis, limited sector alignment, and weak embedding in economic chains, the Building One case reflects many of these same shortcomings at the project level. Both contexts show missed opportunities to strategically position heritage reuse within high-growth industries, to integrate projects into regional networks, and to leverage unique architectural or locational assets. This comparison highlights that the challenges seen in Building One are not isolated but reflect wider patterns across New Zealand, underscoring the need for the enhanced framework to address these recurring economic blind spots. sustainability.

6. The Enhanced Adaptive Reuse Framework

Building on the preceding contextual analysis and identified economic gaps, this section introduces an enhanced adaptive reuse framework that integrates the three consolidated categories: Economic Evaluation & Strategic Positioning, Integration & Partnerships for Economic Cohesion, and Leveraging Assets & Contextual Opportunities. The framework adopts a multi-layered, top-down approach, embedding these strategic economic considerations from the earliest governmental stages, through community engagement, and into tangible urban and architectural interventions.

This framework draws on both national and international experiences, adopting the Prevailing Value System as a guiding principle. Inspired by the highly interconnected network of contexts observed in the Auckland case, the framework follows a top-to-bottom flow, aligning with Auckland's urban, economic, and cultural characteristics, and ensuring that reuse decisions address both systemic and site-specific gaps.

6.1 Rationale for a Top-Down Approach

The top-down structure ensures that adaptive reuse initiatives are aligned with broader urban development goals, economic priorities, and legislative frameworks. At the governmental stage, projects are filtered according to strategic objectives, including housing, Māori wellbeing, cultural heritage, and economic growth. This ensures that only feasible options proceed to subsequent stages.

Economic analysis within the framework is structured according to the three consolidated categories:

1- Economic Evaluation & Strategic Positioning

- Opportunity Cost: Evaluate alternative uses rigorously to maximize economic, social, and cultural value.
- Sector Alignment: Ensure strategic alignment with dominant regional industries such as technology, creative industries, and tourism.
- Long-Term Planning: Anticipate urban growth trends and forward-looking economic scenarios to enhance viability and reduce dependency on subsidies.

2- Integration & Partnerships for Economic Cohesion

- Economic Networks: Embed projects in regional and inter-city supply chains to leverage synergies.
- Participation & Cohesion: Foster ongoing engagement with communities, industry actors, and academic institutions to strengthen social and economic collaboration.
- Environmental–Economic Linkages: Integrate sustainability measures as economic enablers, positioning heritage conservation as both culturally valuable and financially viable.

3- Leveraging Assets & Contextual Opportunities

- Architectural and Locational Assets: Utilize unique building features and site characteristics for tourism, branding, and niche economic activities.
- Urban Context: Connect heritage projects to nearby transport, development areas, and high-growth sectors to maximize local and regional impact.

6.2 Stages of the Framework

The framework unfolds in three interdependent stages, with each stage addressing one or more of the consolidated categories:

- 1- **Governmental Stage (Top-Down)** Defines overarching strategic priorities informed by political, legislative, and economic considerations, ensuring projects align with Economic Evaluation & Strategic Positioning.
- 2- **Community Stage (Balancing)** Balances macro-level objectives with community needs, participation, and cultural values. This stage strengthens Integration & Partnerships for Economic Cohesion by facilitating stakeholder engagement and aligning social and economic interests.
- 3- **Tangible Intervention Stage (Direct Intervention)** Focuses on urban, architectural, and environmental contexts. Interventions at this stage leverage assets and contextual opportunities to enhance heritage

value, sustainability, and economic impact.

6.3 The Communication Chart: Networks and Collaboration

The framework operates across multiple scales, from divisions and cities to national and international levels. A communication chart defines relationships and collaborative networks, enabling shared strategic alignment, opportunity cost evaluation, and ongoing integration of community, industry, and environmental inputs.

This approach links cities and their neighbors within economic chains and networks, maximizing both social and economic regional development potential while embedding heritage projects in wider systems of influence.

6.4 Flexibility and Adaptability of the Framework

The framework is inherently flexible and adaptable, accommodating evolving urban conditions, emerging opportunities, and shifting social and economic demands. Post-pandemic or other dynamic contexts can be integrated without compromising long-term sustainability.

By embedding the three consolidated categories, the framework ensures that heritage projects are economically viable, socially cohesive, and contextually optimized, providing a dynamic guide rather than a rigid blueprint for adaptive reuse.

Conclusion and Recommendations:

The application of the proposed enhanced adaptive reuse framework demonstrates that systematically integrating economic evaluation and strategic positioning, integration and partnerships for economic cohesion, and leveraging assets and contextual opportunities transforms adaptive reuse from a passive conservation approach into a strategic urban development tool. This approach ensures that heritage buildings serve as dynamic contributors to contemporary economic vitality, fulfilling the dual objectives of conserving cultural heritage while promoting economic growth.

Summary of Key Findings:

This study highlights the critical need to overcome persistent economic blind spots in heritage conservation strategies, particularly within the dynamic urban environment of Auckland, New Zealand. Examination of existing adaptive reuse practices revealed significant gaps in the integration of comprehensive economic considerations. The absence of rigorous economic analysis often leads to financially inefficient decisions, missed development opportunities, and reduced long-term sustainability for heritage projects.

To address these gaps, a multi-layered, top-down adaptive reuse framework was proposed, systematically incorporating illustrative factors

such as political, economic, social, cultural, urban, architectural, and environmental considerations, while remaining flexible to include additional dimensions as needed. Central to this framework is a robust economic component that explicitly considers opportunity costs, strategic integration with economic networks and chains, and alignment with top regional industries.

The case study of Building One in Auckland illustrates how economic factors influence every stage of adaptive reuse planning, from legislative mandates to tangible architectural interventions. The framework's inherent flexibility and emphasis on strong communication networks ensure adaptive reuse is a dynamic, responsive process aligned with broader urban development goals.

Embedding this comprehensive economic perspective enhances the competitiveness, viability, and sustainability of adaptive reuse projects, allowing heritage assets to actively contribute to the evolving economic landscape rather than remaining isolated relics. This approach effectively bridges heritage conservation with wider urban economic strategies, drawing valuable lessons from global contexts rich in ancient heritage.

Recommendations for Future Research and Application:

To advance the practical implementation and broader applicability of this enhanced framework, the following recommendations are proposed:

- Development of Practical Economic Tools:** Future research should focus on creating and validating quantifiable tools tailored to adaptive reuse projects. This includes metrics for opportunity cost assessment, methodologies for mapping and analyzing economic chains within urban heritage contexts, and guidelines to align reuse proposals with regional economic sectors. These tools should also capture labor contributions, local skills development, and other indirect economic impacts, ensuring that all facets of economic value—both formal and informal—are considered. Such tools will enable practitioners to undertake rigorous economic evaluations confidently.
- Broader Application Across Heritage-Rich Urban Contexts:** Given its adaptable design, the framework should be tested and refined through application in diverse heritage-rich urban environments, both in New Zealand and internationally. Comparative studies will help verify its versatility, identify region-specific adjustments, and foster wider adoption. Applications should explicitly consider all economic dimensions, including employment

generation, community-level economic benefits, supply chain effects, and local value creation, beyond traditional sector alignment.

- **In-Depth Contextual and Phase-Based Studies:** Subsequent studies should explore additional contextual dimensions in greater depth, including nuanced social and cultural factors, emerging technological influences on adaptive reuse, and detailed analyses of management and financing models. This iterative and inclusive approach will ensure the framework captures a holistic view of economic, social, and cultural outcomes.

By integrating these often-overlooked economic dimensions through the lens of strategic positioning, cohesive partnerships, and asset-context leverage, adaptive reuse can realize its full potential—conserving cultural heritage while simultaneously driving sustainable economic development and securing vibrant futures for heritage assets, local labor, and the wider community.

References:

- 1- ActionStation. (2025). Save all of our heritage Building One. Retrieved from <https://our.actionstation.org.nz/petitions/solution-vs-demolition-save-all-of-our-heritage-building-one-realign-the-road>
- 2- Auckland Council. (2018). Auckland Plan 2050: Developing the Auckland Plan 2050 (Auckland Plan, Strategy and Research Department). Auckland Council. ISBN 978-1-98-856441-8
- 3- Auckland Council. (2021). Auckland Economic Development Action Plan 2021–2024. <https://www.aucklandcouncil.govt.nz>
- 4- Belong – The Cohesion and Integration Network, & Council of Europe, Intercultural Cities Unit. (2022, January). Everybody's business: The role that business can play in supporting cohesive communities. Council of Europe. <https://www.coe.int/en/web/interculturalcities/everybody-s-business>
- 5- CFG Heritage. (2025). Carrington Hospital redevelopment project. Retrieved from <https://www.cfgheritage.com/projects/carrington>
- 6- Don, A. (2021). Feasibility study of adaptive reuse of old buildings. <https://journals.stmjournals.com/article/article=2023/view=89873/>
- 7- Don, L. K. (2021). The repurposing of former Carrington Hospital as a community hub (Master's thesis, Unitec Institute of Technology, New Zealand). Unitec Institute of Technology.
- 8- Environment Court of New Zealand. (2019, June 21). Joint witness statement: Redmond Retail Limited v. Ashburton District Council (ENV-2018-CHC-198). <https://www.ashburtondc.govt.nz/>
- 9- Hazelton, G., & Heritage New Zealand. (2020). Saving the town: Heritage toolkit (ISBN 9781877563430). Heritage New Zealand Pouhere Taonga. https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE57226382
- 10- Heritage New Zealand Pouhere Taonga. (n.d.). Heritage management and adaptive reuse guidelines. <https://www.heritage.org.nz>
- 11- HUD. (2025). Te Kukunga Waka: Carrington Residential Development. Retrieved from <https://www.hud.govt.nz/our-work/te-kukunga-waka-carrington-residential-development>
- 12- Infometrics. (2024). Growth industries in Auckland. <https://ecoprofile.infometrics.co.nz/auckland/Gdp/GrowthIndustries>
- 13- Jadresin-Milic, R., McPherson, P., McConchie, G., Reutlinger, T., & Singh, S. (2022). Architectural history and sustainable architectural heritage education: Digitalisation of heritage in New Zealand. Sustainability, 14(24), 16432. <https://doi.org/10.3390/su142416432>
- 14- Mobius Research and Strategy Ltd. (2019, August). Point Chevalier community needs assessment report. Auckland Council.
- 15- Moosa, H. (2017). Dis-integrity in national projects in Egypt: A special case on heritage character projects. Paper presented at the 1st International Conference on Towards a Better Quality of Life, 2017. <https://ssrn.com/abstract=3171831> or <http://dx.doi.org/10.2139/ssrn.3171831>
- 16- Moosa, H. (2018). Prevailing value system based context, adaptive reuse. Paper presented at the IEREK International Conference on Conservation of Architectural Heritage (CAH), 2nd Edition, Luxor and Aswan, Egypt.
- 17- Murovec, N., & Kavas, D. (2018). Strategy of management of cultural heritage using CCIs (D.T3.3.3 Document). Interreg: Central Europe, FORGET HERITAGE.
- 18- New Zealand Historic Places Trust Pouhere Taonga. (2011). Heritage redesigned: Adapting historic places for contemporary New Zealand. Wellington, New Zealand: New Zealand Historic Places Trust Pouhere Taonga.

- 19-Ngā Mana Whenua o Tāmaki Makaurau & Crown. (2019, February 4). A reference masterplan & strategic framework. Grimshaw Architects.
- 20-Ngāti Whātua Ōrākei. (n.d.). Treaty settlement and cultural heritage. <https://ngatiwhatuaorakei.com>
- 21-Point Chevalier Social Enterprise Trust. (2020). Building One Community Arts feasibility study. <https://static1.squarespace.com/static/5f8cbdb129733028deaef78f/t/6337a03c1dc68116f246181b/1664589944716/>
- 22-Point Chevalier Social Enterprise Trust. (2020). Carrington Hospital case study report.
- 23-Point. (2020). Building One redevelopment. Retrieved from <https://www.point.co.nz/mahi/building-one-2020>
- 24-Tattico, & Boffa Miskell. (2023). Te auaunga precinct open space final.
- 25-The Spinoff. (2020). Auckland's iconic building set for a new chapter. Retrieved from <https://thespinoff.co.nz/business/30-08-2020/aucklands-iconic-building-with-a-complex-history-is-set-for-a-new-chapter>
- 26-The Spinoff. (2022). Despite protests, bulldozers are coming for Carrington Hospital. Retrieved from <https://thespinoff.co.nz/business/19-10-2022/despite-protests-and-a-petition-bulldozers-are-coming-for-carrington-hospital>
- 27-Todeva, E. (2011). Economic networks. In G. Barnett (Ed.), Encyclopedia of social networks.
- 28-Unitec. (2025). Carrington Residential Development. Retrieved from <https://www.unitec.ac.nz/about-us/our-campuses/carrington-residential-development>
- 29-Whybrew, C., & Heritage New Zealand Pouhere Taonga. (2019). Statement of evidence of Christine Mary Whybrew.
- 30-Yung, E. H. K., & Chan, E. H. W. (2012). Implementation challenges to the adaptive reuse of heritage buildings: Towards the goals of sustainable, low carbon cities. Habitat International, 36(3), 352–361. <https://doi.org/10.1016/j.habitatint.2011.11.001>