

# Key Factors and Strategies for Implementing Property Reuse Systems in Age-Friendly Social Housing Development

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Adaptive reuse, age-friendly housing, community integration, key performance indicators, property reuse systems, social housing, stakeholder engagement, sustainable development, universal design, urban planning.

## Abstract

This review examines strategies for implementing property reuse systems in age-friendly social housing development. We analyse research on building selection, property evaluation, design principles, and implementation approaches. The findings emphasise the role of location, community integration, structural suitability, and regulatory compliance. Key success factors include stakeholder engagement, participatory planning, innovative financing and universal design principles, providing information for creating sustainable housing environments for older adults.

## Introduction

The growing demand for age-friendly social housing, coupled with the need for sustainable urban development, has led to increased interest in the adaptive reuse of existing properties [1]. As populations age around the world, cities face the dual challenge of providing suitable housing for older adults while also addressing the problems of urban sprawl and resource conservation [2]. In this context, effective property reuse systems have emerged as a promising solution, offering the potential to create age-appropriate living environments while revitalising existing urban structures.

Adaptive reuse, the process of repurposing existing buildings for new uses [3], presents a unique opportunity to address older adults' housing needs while contributing to sustainable urban development. However, the successful implementation of property reuse systems for age-friendly social housing requires careful consideration of various factors and strategies to ensure optimal outcomes.

This systematic literature review aims to identify and analyse key factors and strategies to implement property reuse systems in the context of age-friendly social housing development. By synthesising existing research and best practices, this review seeks to provide a comprehensive framework to understand the complexities involved in such projects and to offer guidance for their successful implementation.

This review addresses the following research questions:

1. What critical factors should be considered when selecting and evaluating adaptive reuse properties in age-friendly social housing projects?
2. What design and planning considerations are essential for creating suitable, age-friendly living environments through adaptive reuse?
3. What strategies are effective in implementing and managing property reuse systems for age-friendly social housing?
4. How can the success and impact of property reuse systems be measured and improved over time?

By answering these questions, this review contributes to the growing body of knowledge on adaptive reuse and age-friendly housing. This study aims to bridge the gap between theoretical concepts and practical implementation by providing information that can guide policymakers, urban planners, architects, and developers in creating sustainable and inclusive living environments for older adults.

Furthermore, by identifying best practices and innovative approaches, this review aims to stimulate further research and development in the field of age-friendly social housing through adaptive reuse. As cities around the world grapple with ageing populations and the need for sustainable urban solutions, the insights provided by this review can contribute to the development of more effective and responsive urban planning strategies.

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## 1. Methodology

This study employs a systematic literature review methodology to synthesise existing research on the implementation of property reuse systems for age-friendly social housing. The systematic approach used in the study [4] ensures a comprehensive and unbiased review of the available literature, thereby identifying key themes, trends, and best practices in the field.

The review process began with a comprehensive search of academic databases, including Google Scholar, Scopus, and the Web of Science. The search strategy used a combination of keywords and phrases such as 'adaptive reuse', 'property reuse', 'age-friendly housing', 'social housing', 'implementation strategies', 'urban planning', 'sustainable development', 'universal design', 'building renovation' and 'community engagement'. Boolean operators (AND, OR) were employed to combine these terms and improve search precision. To ensure the relevance and currency of the information, the search was limited to publications published within the last 20 years.

The inclusion criteria for the studies were carefully defined. Selected studies were required to meet specific conditions: (a) focus on adaptive reuse in housing or urban development, (b) discuss factors or strategies related to the implementation of property reuse systems, (c) be published in English, (d) be peer-reviewed journal articles, conference papers or book chapters, and (e) be published between 2003 and 2023.

A systematic method was used to decrease the initial selection of 380 unique articles to the final 40 studies in this review. A preliminary selection of articles was made by screening their titles and abstracts against the inclusion criteria, which resulted in the discarding of 120 articles that did not focus on adaptive housing reuse or property reuse systems. The evaluation phase determined which articles were relevant to age-friendly and social housing aspects, thus eliminating 140 articles. A review of 120 full texts analysed their methodology and research results according to their qualitative and methodological strength. The selection process excluded 80 articles because they (a) delivered a shallow analysis without meaningful field contributions, (b) lacked evidence and theoretical frameworks, or (c) demonstrated weak applicability to implementation approaches and practical applications. Two researchers independently evaluated the 40 selected articles to confirm their alignment with quality assessment criteria and their substantial contribution to answering research questions.

During the data extraction phase, relevant information was collected systematically from the selected studies. The extracted data encompassed a wide range of critical aspects, including factors affecting building selection for adaptive reuse projects, criteria for evaluating properties for adaptive reuse, design considerations for age-friendly

housing, implementation strategies for property reuse systems, challenges and solutions in adaptive reuse projects, methods for measuring the success and impact of property reuse systems, and case studies and best practises in age-friendly adaptive reuse projects.

The analysis involved a comprehensive synthesis of the extracted data to identify key themes, trends, and best practices for the implementation of property reuse systems for age-friendly social housing. This meticulous approach included categorising the information according to the research questions, identifying common factors and strategies in different studies, noting any conflicting findings or approaches, recognising innovative or particularly effective strategies, and identifying gaps in current research or practice.

The systematic process used to identify and select relevant studies for a literature review on the implementation of property reuse systems for age-friendly social housing. The initial database search identified 425 studies, which were reduced to 380 after removing duplicates. Of these, 260 studies were excluded, leaving 120 full-text articles to be evaluated for eligibility. The number of studies included in the synthesis was 40.

Figure 1 illustrates the systematic process used to identify and select relevant studies to review the implementation of property reuse systems for age-friendly social housing. The figure outlines the key steps from the initial database searches to the final selection of studies included in the synthesis.

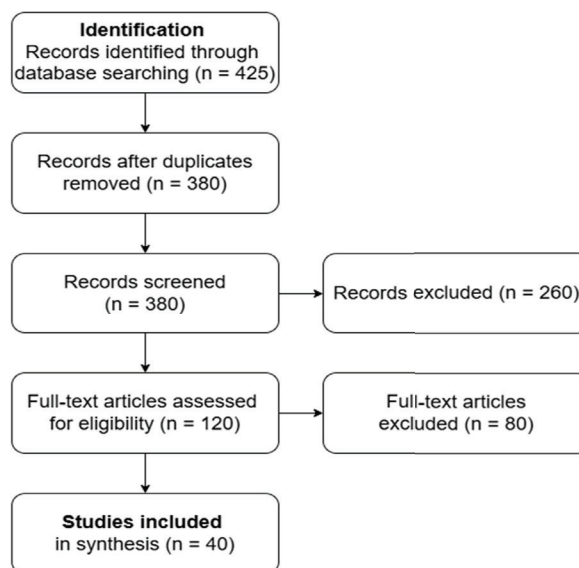


Fig. 1. Systematic literature review screening process (created by authors).

This systematic methodology ensures a comprehensive and objective review of the literature, providing a solid foundation for understanding key factors and strategies for implementing property reuse systems for age-friendly social housing development.

## II. Results

The reuse of property has become an increasingly important approach to sustainable urban development, particularly in the creation of age-friendly social housing solutions. This approach offers a way to reuse existing structures while addressing community needs and environmental concerns. A systematic framework is essential for the successful implementation of such projects.

Figure 2 illustrates an author-developed conceptual framework that provides a simplified overview for implementing a property reuse system, which is organised into four interconnected components. In the centre lies 'property reuse', which is influenced by four key areas: 'key factors' in blue, which includes location, zoning, and safety considerations; 'design considerations' in red, focussing on functional and community aspects; 'implementation strategies' in green, covering stakeholder engagement and project management; and 'monitoring and evaluation' in yellow, which tracks performance indicators and impacts.

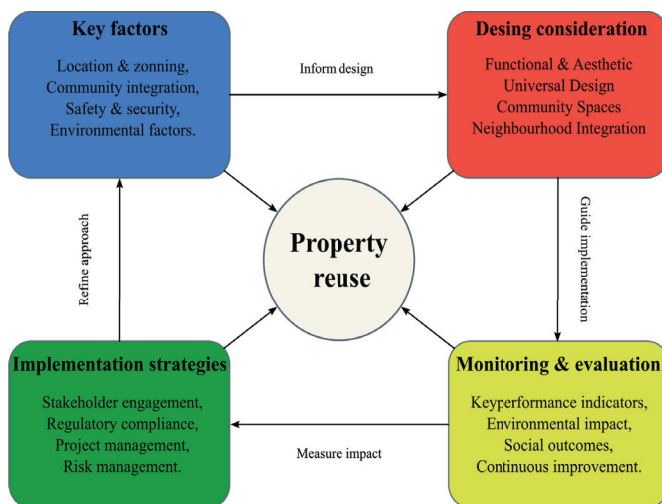


Fig. 2. Key factors and considerations for successful property reuse (created by authors).

The framework shows how these elements inform and influence each other through various relationships: key factors inform the design, implementation strategies guide the approach, and the impact of monitoring and evaluation measures. Together, these components create an integrated framework specifically designed for the development of sustainable social housing.

### A. Key Factors in Building Selection and Property Evaluation

The success of adaptive reuse projects for age-friendly social housing is heavily dependent on careful building selection and thorough property evaluation. Our review identified several critical factors that should be considered in this process.

Figure 3 illustrates the authors' developed schematic representation that summarises essential factors to be considered during the building selection process for property reuse projects. The central node, 'key factors in building selection', is connected to seven critical elements: location and zone, community integration, environmental considerations, legal considerations, economic feasibility, structural suitability, and safety and security.



Fig. 3. Key factors in the building selection process (created by authors).

Each of these factors represents a crucial aspect that must be evaluated to ensure the successful selection and development of a property reuse site. The radial arrangement highlights how these elements are equally important and interconnected in the decision-making process.

#### A.1. Location and Zoning

The literature on location and zoning for senior living emphasised several key considerations. The proximity to essential services is consistently highlighted as critical, and researchers in [5] and [6] noted the importance of easy access to healthcare facilities and shopping centres to maintain the independence and quality of life of older residents. Equally important is access to public transport, as identified in the study [7], which argues that good transport links are essential to ensure mobility and social connectivity for older adults who may no longer drive. Researchers in [8] also recommend sites that offer a mix of occupancy usage, promoting social interaction and community integration through a mix of residential, commercial and recreational uses. Furthermore, study [9] stresses the importance of compatibility with existing zoning regulations, suggesting that properties should be

located in areas where residential use is allowed or where rezoning is feasible.

#### A.2. Community Integration

Community integration is a crucial factor in the selection of senior living sites. Study [10] emphasises the importance of proximity to community facilities, such as community centres, parks and recreational facilities, which foster a sense of belonging and support active ageing. Study [11] highlights the importance of areas with diverse demographics and existing community networks, which offer better opportunities for older adults' social inclusion. Furthermore, the Institute for the Study of Labour underscores the importance of considering current and projected demographic trends to ensure that development meets long-term community needs [12].

#### A.3. Safety and Security

Safety and security are paramount considerations when selecting residential sites for older adults. Study [13] emphasises the critical importance of low crime rates and a general perception of safety in the neighbourhood, which directly impacts the well-being of older residents. In addition, infrastructure quality plays an important role in creating secure environments. Well-maintained infrastructure, including properly constructed sidewalks, adequate street lighting, and well-designed public spaces, contributes substantially to both the safety and accessibility of the environment for older people.

#### A.4. Environmental and Socio-economic Considerations

Environmental and socioeconomic factors are critical in selecting sites for the development of senior living. Study [14] stresses the importance of thoroughly assessing potential environmental impacts, including detailed evaluations of soil quality, flood risks, and local biodiversity, which are essential to ensure sustainable development. Study [15] stresses the need to evaluate the socioeconomic uplift potential of the project, specifically its ability to contribute to local economic development and improve social cohesion. Furthermore, research conducted in [8] highlights the importance of evaluating the existing structure for improvements in energy efficiency, which is crucial for ensuring long-term sustainability and maintaining affordability for elderly residents.

#### A.5. Structural Suitability

A comprehensive evaluation of the characteristics of the existing building is essential in the selection of the site for developments in senior living. Study [16] emphasises the critical importance of conducting a thorough evaluation of the structural condition of the building to determine the feasibility and potential costs of adaptation. Complementing this perspective, study [17] highlights the need to evaluate the potential for upgrading to meet

current standards of safety, accessibility, and energy efficiency, ensuring that the structure can be effectively modified to meet the specific needs of older residents.

#### A.6. Economic Feasibility

Economic considerations play a crucial role in adaptive reuse projects for senior living developments. The research in [8] emphasises the critical importance of comparing renovation costs with new construction costs to determine the viability of the project. However, study [18] emphasises the importance of assessing the potential value addition of the project, both in the property and in the surrounding area. Complementing these economic perspectives, study [19] stresses the need to consider long-term financial sustainability, including a comprehensive evaluation of ongoing operational and maintenance costs, to ensure the economic feasibility of adaptive reuse projects.

#### A.7. Legal Considerations

Regulatory compliance is a critical factor in adaptive reuse projects for senior living developments. Study [20] highlights the crucial importance of ensuring that buildings comply with current building codes and regulations. For buildings of historical significance, study [21] emphasises the need to carefully consider and adhere to heritage protection guidelines. Research [22] further underscores the essential requirement of complying with accessibility laws for people with disabilities, which is particularly important in age-friendly housing projects. These regulatory considerations are fundamental to ensure the legal, safety, and inclusive aspects of adaptive reuse development.

### B. Design and Planning Considerations

Creating suitable age-friendly living environments through adaptive reuse requires careful design and planning considerations. Our review identified several key aspects.

Figure 4 illustrates an author-interpreted visualization that synthesises the key design and planning considerations that should guide the development of property reuse projects. The centre is 'design and planning considerations,' which is influenced by four interconnected factors. 'Functional and aesthetic design' focuses on preserving heritage features, integrating visual elements, and incorporating modern functionality. 'Universal design and accessibility' emphasises barrier-free design, sensory considerations, and integration of the smart home to ensure inclusivity. 'Community spaces and amenities' highlights the importance of social interaction spaces, health facilities, and green spaces. 'Integration with the neighbourhood' addresses community connectivity, cultural context, and local integration. Underpinning these design considerations are four key principles: preservation, accessibility, community integration, and sustainability.

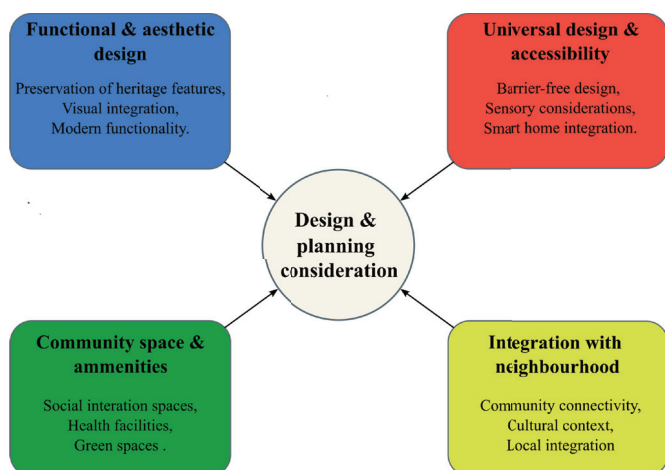


Fig. 4. Key factors in the design and planning consideration (created by authors).

This framework highlights the holistic approach required to create successful property reuse projects that cater to the needs of the community and promote inclusive, sustainable development.

#### B.1. Functional and Aesthetic Design

The architectural approach to adaptive reuse projects requires a nuanced balance between preservation and modernisation. Study [16] identifies the key challenge of preserving historically significant architectural features while ensuring modern functionality. Study [20] emphasises the importance of achieving visual integration, where original architectural elements harmoniously coexist with newly introduced components, maintaining the unique character. Study [18] further highlights the critical need for design flexibility, stressing that age-friendly housing must incorporate adaptable designs capable of accommodating evolving needs over time. These architectural considerations are essential for creating spaces that respect the historical context while satisfying contemporary living needs.

#### B.2. Universal Design and Accessibility

Universal design and accessibility are fundamental principles for creating age-friendly housing environments. Study [23] emphasises the critical importance of implementing universal design principles to create barrier-free spaces that accommodate various physical abilities. However, study [22] highlights the importance of sensory considerations, stressing the need to design environments that address varying sensory needs, including optimal lighting, acoustics, and strategic use of tactile cues for older adults with different abilities. Furthermore, study [24] contributes to this approach by advocating the integration of smart home technologies and assistive devices, which can significantly improve the independence and safety of older residents. These comprehensive design strategies

ensure that housing environments are not only accessible but also supportive of diverse needs and preferences.

#### B.3. Community Spaces and Amenities

Design considerations for senior living environments extend beyond physical infrastructure to address social and wellness needs. Study [25] emphasises the critical importance of designing communal spaces that actively encourage social interaction and community building, which are essential strategies to combat social isolation among older adults. Research [26] highlights the significant benefits of incorporating on-site health services or wellness facilities that can directly support residents' healthcare needs. Furthermore, study [13] underscores the positive impact of access to green spaces and gardens, demonstrating their substantial contributions to the physical and mental well-being of older residents. Together, these design elements create a holistic living environment that supports social connectivity, health maintenance, and overall quality of life for seniors.

#### B.4. Integration with Surrounding Neighbourhoods

Successful adaptive reuse projects for older living require careful consideration of community connectivity and the cultural context. Study [6] emphasises the importance of establishing strong physical and social connections between the project and the surrounding area, which is crucial for effective community integration. Complementing this perspective, study [27] highlights the importance of cultural sensitivity, arguing that respecting and reflecting the cultural context of the neighbourhood can significantly improve community acceptance and promote a more seamless integration of senior living development within the existing social fabric.

### C. Implementation Strategies

Effective implementation of property reuse systems for age-friendly social housing requires comprehensive strategies that address various aspects of the project lifecycle.

Figure 5 outlines an author-developed conceptual diagram that summarises the essential implementation strategies that guide the successful execution of property reuse initiatives. The centre is the overarching 'implementation strategies' component, which is supported by various interconnected elements. 'Civics and stakeholder participation' emphasises the importance of involving the community and key stakeholders throughout the process. 'Participatory planning' highlights the need for collaborative planning efforts between public and private entities. 'Risk management' involves identifying and mitigating potential risks. 'Phased implementation' indicates a step-by-step project implementation. 'Project planning and execution' focuses on the overall planning and execution of the property reuse initiative. 'Navigating

regulatory frameworks’ underscores the importance of understanding and adhering to relevant regulations. ‘Compliance strategies’ ensures compliance with the necessary guidelines. ‘Policy advocacy’ emphasises the role of advocating for supportive policies and regulations

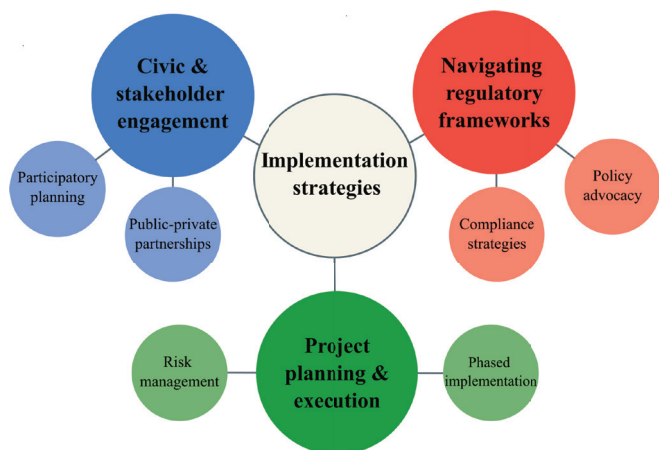


Fig. 5. Key factors in the implementation strategy (created by authors).

This comprehensive framework demonstrates the multifaceted and collaborative approach required to effectively implement successful property reuse projects.

### C.1. Civics and Stakeholder Engagement

Successful adaptive reuse projects for senior living depend on collaborative and inclusive approaches to planning and implementation. Study [28] emphasises the critical importance of participatory planning, highlighting that the participation of local communities and potential residents in planning and decision-making processes can significantly improve acceptance and success. Another study [29] suggests the value of forming public-private partnerships as a strategic method for leveraging various resources and expertise for more effective project implementation. Complementing these approaches, research [30] stressed the need for education and awareness programmes that can help build greater support for adaptive reuse and age-friendly housing by informing stakeholders about the inherent benefits of such innovative development strategies. These collaborative and educational methodologies represent key strategies for creating more responsive and community-oriented senior living environments.

### C.2. Navigating Regulatory Frameworks

Navigating the complex regulatory landscape is essential for successful adaptive reuse projects in the development of senior living. Study [31] emphasises the importance of policy advocacy, highlighting the need to collaborate with policymakers to develop supportive policies and regulations that can facilitate the implementation of the

project. Furthermore, study [32] suggests the value of advocating for streamlined permitting processes, which can significantly reduce project delays and associated costs. Study [9] emphasises the critical need to develop comprehensive compliance strategies that effectively address a wide range of regulatory requirements, including complex building codes, zoning laws, and accessibility standards. These strategic regulatory navigation approaches are fundamental to creating a more efficient and supportive environment for adaptive reuse projects targeting senior living accommodations.

### C.3. Planning and Execution

Effective project execution in adaptive reuse development requires sophisticated management strategies. Study [33] emphasises the critical importance of implementing robust project management methodologies to ensure successful implementation. Complementing this perspective, study [34] highlights the necessity of comprehensive risk management, stressing the crucial role of identifying and mitigating potential risks throughout the project lifecycle. Research [35] recommends adopting a phased implementation approach that allows more effective resource management and provides opportunities to make strategic adjustments based on ongoing learning. These integrated management approaches are essential for navigating the complex challenges inherent in adaptive reuse projects for senior living developments.

### C.4. Finance and Economic Sustainability

Financial strategies play a key role in the success of adaptive reuse projects for senior living developments. Study [36] underscores the importance of exploring innovative funding models, highlighting the potential of diverse funding sources, including government grants, private investments, and community funding initiatives, to improve the viability of the project. Research [37] emphasises the critical necessity of adopting a life-cycle costing approach that considers long-term operational and maintenance expenses in a comprehensive way to ensure economic sustainability. Furthermore, study [38] further contributes to this financial perspective by advocating for value-capture strategies that can leverage the increased property values resulting from adaptive reuse to fund ongoing maintenance and community services. These sophisticated financial approaches provide a robust framework for addressing the economic challenges inherent in adaptive reuse projects.

## D. Monitoring and Evaluation

Ensuring the long-term success of property reuse systems for age-friendly social housing requires ongoing monitoring and evaluation.

Figure 6 outlines an author-interpreted schematic representation that synthesises the key components of

the monitoring and evaluation framework for property reuse initiatives. In the centre are the key performance indicators (KPIs), which are divided into four categories: environmental KPIs (e.g., carbon footprint, energy savings, water conservation), economic KPIs (e.g., ROI, investment cost savings, lifecycle cost), social impact KPIs (e.g., community engagement, job creation, neighbourhood vitality), and operational KPIs (e.g., building performance, adaptability, maintenance efficiency).

KPIs drive continuous improvement, including feedback loops, adaptive management, and technology integration. Finally, the foundation of the framework is the regular assessment, data-driven decision-making, stakeholder feedback, and continuous improvement processes. This comprehensive framework ensures that property reuse projects are closely monitored, evaluated, and continuously improved to maximise their environmental, economic, and social impact.

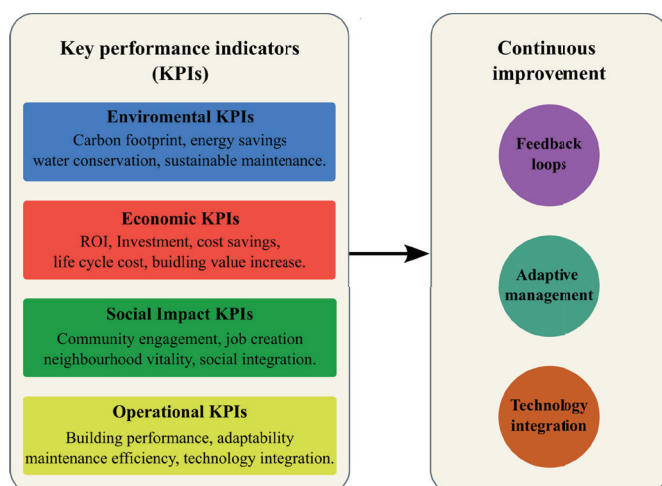


Fig. 5. Monitoring and evaluation framework for property reuse system (created by authors).

Ensuring the long-term success of property reuse systems for age-friendly social housing requires ongoing monitoring and evaluation.

#### E. Key Performance Indicators (KPIs)

Our review identified several categories of KPIs that are crucial for assessing the success of adaptive reuse projects.

Key performance indicators (KPIs) for adaptive reuse projects in senior living encompass multiple dimensions of sustainability, economic viability, social impact, and operational effectiveness. Environmental KPIs, as highlighted in [39] and [40], focus on critical metrics such as reduction of carbon footprint, energy savings compared to new construction, water conservation, and sustainable maintenance practises. Economic KPIs evaluate financial performance through indicators such as return on investment (ROI), internal rate of return, investment cost savings, life cycle cost, and potential increase in

building value. Social impact KPIs measure community participation, job creation or retention, and improvements in neighbourhood vitality.

KPIs for operational efficiency assess building performance, including energy efficiency and maintenance costs, while also evaluating the space's adaptability to new technologies and uses. Regulatory compliance KPIs track compliance with building codes and regulations, such as the timeline of permits and success rates.

Continuous improvement strategies are crucial for long-term success. Study [41] emphasises the importance of implementing feedback loops that allow regular input from residents and stakeholders to inform ongoing improvements. Furthermore, study [42] advocates for an adaptive management approach that provides flexibility in responding to changing needs and circumstances. Study [24] highlights the importance of continuous technology integration to improve the living experience of older adults and overall operational efficiency. These comprehensive approaches ensure that adaptive reuse projects remain responsive, sustainable and aligned with the evolving needs of senior residents and the broader community.

### III. Discussion

This systematic review of key factors and strategies for the implementation of property reuse systems in the development of age-friendly social housing reveals the complex and multifaceted nature of such projects. The findings highlight the need for a holistic approach that considers various interconnected aspects, from building selection and design to implementation and ongoing evaluation.

One of the key themes that emerged from this review is the critical importance of location to the success of adaptive reuse projects for age-friendly housing. The proximity to essential services, public transport and community facilities is not just a matter of convenience but a fundamental factor in promoting older residents' independence, social participation and general well-being. This aligns with the broader concept of 'ageing in place,' which emphasises the importance of creating environments that allow older adults to remain in their communities as they age [43].

The review also underscores the importance of community integration in these projects. The success of age-friendly housing goes beyond the physical adaptation of buildings; it requires careful consideration of how the development will integrate with and contribute to the existing community fabric. This finding supports the growing recognition of social determinants of health in older populations and the role of the built environment in promoting social connectivity and reducing isolation among older adults [44].

In terms of design considerations, the review highlights the need to balance the preservation of architectural heritage with the requirements of age-friendly design. This presents both challenges and opportunities. On the one hand, older buildings may require significant modifications to meet accessibility standards and incorporate modern amenities. On the other hand, the character and history of these buildings can contribute to a sense of place and community identity, which are valuable assets in age-friendly environments [45].

The emphasis on universal design principles in adaptive reuse projects is another significant finding. Although universal design is increasingly recognised as best practice in new construction, its application in adaptive reuse contexts presents unique challenges. However, the review suggests that creative approaches to universal design can not only improve accessibility but also contribute to the overall quality and appeal of living environments for all residents [46].

The implementation strategies identified in this review highlight the importance of stakeholder engagement and participatory planning approaches. This aligns with the growing recognition in urban planning of the value of co-creation and community-led development [47]. In the context of age-friendly housing, older adults' participation in the planning and design process can lead to solutions that better meet their needs and preferences while also fostering a sense of ownership and community.

This review also reveals the complexity of navigating regulatory frameworks in adaptive reuse projects. Although regulations are essential to ensure safety and quality, they can also present barriers to innovative solutions. This suggests the need for more flexible and adaptive regulatory approaches that can accommodate the unique challenges of adaptive reuse while maintaining the necessary standards [31].

The identification of comprehensive key performance indicators (KPIs) to evaluate the success of adaptive reuse projects is a significant contribution of this review. The multidimensional nature of these KPIs, encompassing environmental, economic, social, and operational factors, reflects the complex nature of these projects and the need for holistic evaluation approaches. This aligns with broader trends in sustainable development and impact assessment, which increasingly recognise the interconnectedness of social, economic and environmental outcomes [48].

However, the review also revealed several gaps and areas for further research. While there is a growing body of literature on adaptive reuse and age-friendly housing separately, there is limited research that has specifically addressed the intersection of these two fields. More empirical studies are needed to evaluate the long-term results of adaptive reuse projects for age-friendly housing, particularly in terms of resident satisfaction, health outcomes, and community impact.

The review suffers from a major drawback because it does not examine the intricate administrative obstacles that arise during age-friendly social housing through adaptive reuse. Age-friendly social housing projects require coordinated efforts between multiple public entities, such as health authorities, together with social services departments and housing authorities due to their independent mandates and budget constraints and operational limitations. The dispersal of duties across multiple government agencies produces operational challenges that can create coordination problems and competing priorities and cause delays in project execution. The housing authority normally prioritises physical infrastructure development and housing affordability, but health authorities emphasize medical facilities accessibility and social services centre on community support programmes. Research currently shows an absence of extensive evaluation of effective models which support inter-agency cooperation within this domain. The lack of integrated solutions for age-friendly housing remains striking because effective approaches must combine housing infrastructure with health services, social support systems, and community care networks. Future research needs to develop governance models along with organisational frameworks to enhance collaborative efforts between stakeholders, especially when working on adaptive reuse projects where existing buildings create additional coordination challenges.

Furthermore, while the review identified several innovative financing models, more research is needed on sustainable funding mechanisms for these projects, particularly in the context of social housing, where affordability is a key concern. This could include exploring new forms of public-private partnerships, social impact investing, or community-based financing models.

Finally, the review highlights the need for more interdisciplinary approaches to research and practice in this field. Successful implementation of property reuse systems for age-friendly social housing requires expertise from various domains, including architecture, urban planning, gerontology, public health, and social work. Encouraging more collaborative and interdisciplinary research could lead to more comprehensive and effective solutions.

## CONCLUSIONS

This systematic literature review provides a comprehensive overview of key factors and strategies to implement property reuse systems in age-friendly social housing development. The findings underscore the complexity of such projects and the need for a holistic approach that considers location, design, community integration, regulatory compliance, and long-term sustainability.

Several key conclusions can be drawn from this review.

Location is critical. The success of adaptive reuse projects for age-friendly housing is highly dependent on location, particularly in terms of access to services, public transport, and community facilities. This highlights the need for careful building selection processes that consider both the physical attributes of properties and their broader urban context.

Community integration is essential. Successful age-friendly housing through adaptive reuse goes beyond the physical adaptation of buildings; it requires thoughtful integration with existing community structures and networks. This highlights the importance of community engagement and participatory planning approaches.

Universal design principles are crucial. While challenging to implement in adaptive reuse contexts, universal design principles are essential for creating truly age-friendly environments. Creative universal design approaches can improve accessibility while preserving the character of existing buildings.

Stakeholder involvement is key. Involving several stakeholders, including older adults, in the planning and implementation process can lead to more successful and accepted projects. This highlights the importance of co-creation and community-led development approaches.

Regulatory frameworks require flexibility. Although necessary to ensure safety and quality, rigid regulatory frameworks can hinder innovative adaptive reuse solutions. More flexible regulatory approaches that can accommodate the unique challenges of adaptive reuse projects are needed.

A comprehensive evaluation is necessary. The success of these projects should be evaluated using a comprehensive set of KPIs that considers environmental, economic, social, and operational factors. This reflects the multifaceted nature of age-friendly housing development through adaptive reuse.

Interdisciplinary approaches are needed. Successful implementation of these projects requires expertise from various fields, highlighting the need for interdisciplinary collaboration in both research and practice.

These insights will guide policymakers, urban planners and developers in creating effective strategies for adaptive reuse projects aimed at developing age-friendly social housing. By considering these factors and implementing the identified strategies, stakeholders can improve the success and impact of their projects, contributing to more sustainable and inclusive urban environments for ageing populations.

Future research should focus on addressing identified gaps, particularly in terms of long-term outcome evaluations, sustainable financing models, and interdisciplinary approaches. Additionally, successful implementation case studies could provide valuable

practical insights to complement the theoretical framework presented in this review.

In conclusion, as cities worldwide face the dual challenges of ageing populations and the need for sustainable urban development, the adaptive reuse of existing properties for age-friendly social housing presents a promising solution. By carefully considering the factors and strategies identified in this review, stakeholders can work towards creating housing solutions that not only meet the needs of older adults but also contribute to vibrant, inclusive and sustainable urban communities.

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