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Designing Against Isolation: Urban Planning, Public Space, and Social Connection at Elizabeth Quay, Perth, Australia

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Abstract

This paper examines how urban design can function as **social infrastructure** by fostering belonging, wellbeing, and community engagement. Using Elizabeth Quay in Perth, Australia as a case study, it explores how waterfront redevelopment can move beyond aesthetics to address the growing global challenge of **social isolation**. Drawing on observational and spatial analysis, the study evaluates how key design and planning features, cross-sector partnerships, mixed-use development, walkability, cultural programming, public art, green and blue infrastructure, and intergenerational activities, shape the social value of the built environment. It argues that these elements contribute to social cohesion, a sense of safety, and more inclusive forms of public life, while also highlighting the importance of **built environment**. The findings suggest that successful public spaces are defined not only by visual quality, but by their capacity to support accessibility, lingering, physical activity, and informal social interaction. The paper argues that **human-centered urban design** can strengthen civic identity, public health, and community wellbeing while also supporting economic and cultural vitality.

Keywords

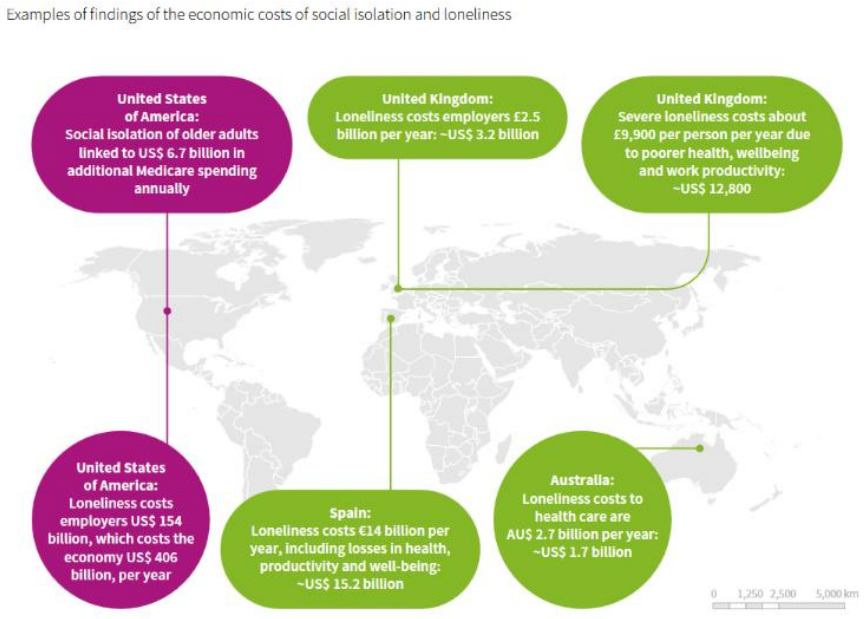
- Built Environment
- Social Connection
- Public Space
- Urban Design
- Social Infrastructure
- Third Space
- Placemaking

- Wellbeing
- Waterfront Redevelopment
- Social Isolation

Introduction

Contemporary urban life is shaped by a striking paradox: while cities continue to grow in population, social isolation, and loneliness are emerging as defining conditions of the urban experience. According to a 2020 report by the World Health Organization, an estimated 871,286 deaths globally each year between 2014 and 2019 were associated with loneliness. Public health research has associated loneliness with anxiety, depression, cardiovascular disease, cognitive decline, diminished community resilience, and increased mortality risk.[1] (Fig 1, 2)

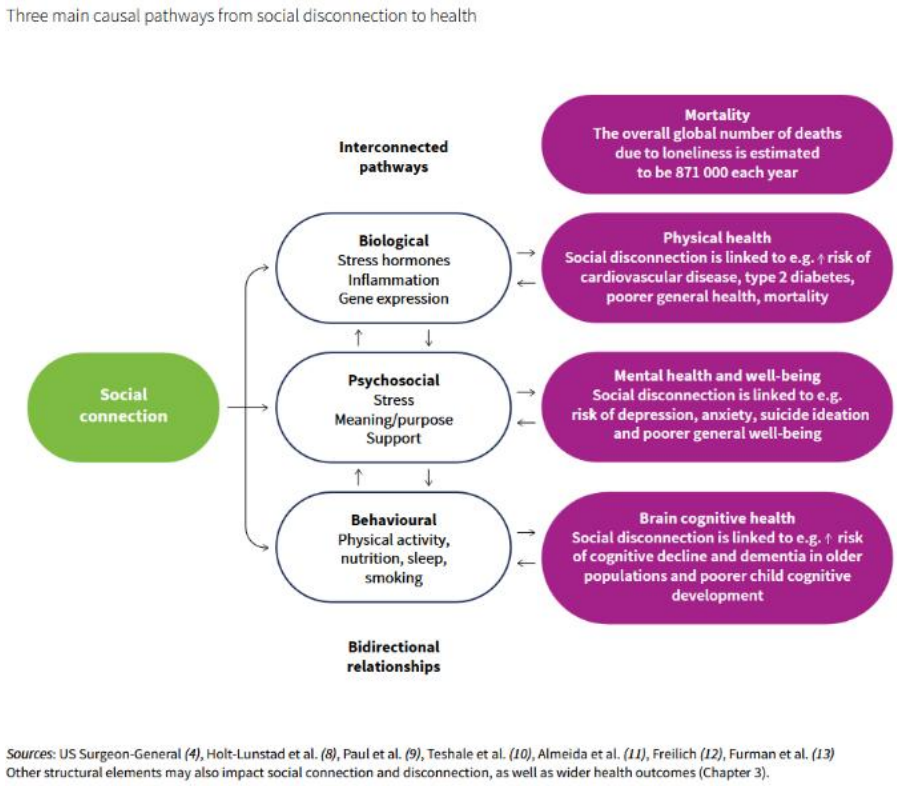
(Fig 1). Economic Cost of Social Isolation



Note: As different methods were used for measurement, the costs presented are not comparable.

Sources: Rodriguez et al. *(109)*, Jeffrey et al. *(110)*, Flowers et al. *(111)*, Bowers et al. *(112)*, Blake *(113)*, The Cigna Group *(114)*, Peytrignet et al. *(115)*. Equivalent costs in US$ are based on the exchange rates in March 2025.

(Fig2). Social Disconnection and Health



Against this backdrop, urban planning and design scholarships have begun to reconsider public space not simply as an aesthetic amenity or functional infrastructure, but as a form of preventative social infrastructure capable of supporting everyday social connection.[2]

This paper examines the redevelopment of Elizabeth Quay (EQ) in Perth as a case study in how waterfront urbanism can be mobilized to address social disconnection. Situated on the Swan River, Elizabeth Quay reconnects Perth's city center to the waterfront through pedestrian-oriented planning, mixed-use programming (luxury apartments, hotels, and commercial activity), cultural activation, and public art. The precinct, opened in 2016, has transformed a formerly underutilized waterfront into a prominent public destination. Yet beyond its visibility as an urban

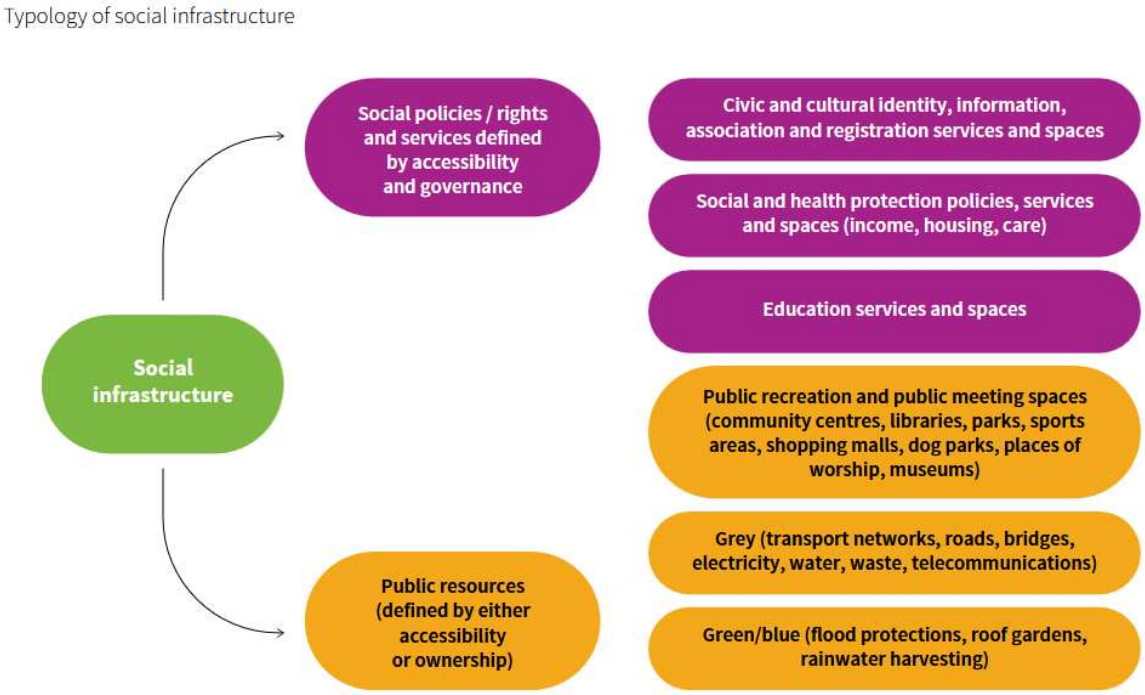
redevelopment project, its analytical value lies in the way it brings to gather spatial design, programming, and symbolic identity within a single public landscape, creating conditions in which participation can remain optional, and spontaneous.

The incorporation of placemaking strategies during the redevelopment has helped Elizabeth Quay position itself as a major destination. At the same time, the project has generated debate about privatization and the extent to which an economically successful waterfront can remain genuinely public. Rather than treating this redevelopment as a success only in visual or economic terms, this study asks how specific spatial and programmatic conditions shape opportunities for interaction, wellbeing, and social participation. Elizabeth Quay is significant not because it resolves urban isolation in any simple or totalizing way, but because it demonstrates how human-scale environments, walkability, visual permeability, recreational activity, and cultural accessibility can lower barriers to participation and support social connection in an open public setting. In this respect, the case also echoes Jane Jacobs's emphasis on mixed urban vitality, pedestrian life, and the everyday social value of streets and public spaces.[3] The case therefore provides a useful basis for examining broader questions of belonging, including whether urban activation enhances inclusion or merely increases commercial value.

The article situates this case within wider debates on social infrastructure, third places, intergenerational urbanism, public art in civic space, and public health-oriented urban design. In doing so, it responds to a recurring limitation in urban redevelopment discourse: the tendency to

evaluate public space primarily through visual quality, economic return, or iconic appeal, while giving less sustained attention to its social and relational capacities. The paper argues that successful public spaces should be assessed not only by how they look, but by the extent to which they enable accessible, spontaneous, and inclusive forms of social interaction. (Fig 3)

(Fig 3). Typology of Social Infrastructure



Source: World report on social determinants of health equity (3).

This position also resonates with Matthew Carmona's argument that the quality of public space depends not only on design form, but on how publicness is produced, governed, and maintained through broader urban processes.[4] By framing Elizabeth Quay as a site of both opportunity and tension, the study contributes to ongoing discussions about how intentional urban design can function as a practical response to isolation, while also revealing the social and political stakes of contemporary waterfront redevelopment. (Table 1)

(Table 1) A Timeline of Urban Social Theory

A TIMELINE OF URBAN SOCIAL THEORY			RELEVANCE TO BUILT ENVIRONMENT FRAMEWORK		
YEAR	THEORIST	KEY CONTRIBUTION			OUTCOMES
1961	Jacobs	**Importance of pedestrian life and social value of streets** Emphasizes vibrant, diverse streets and every day social interactions.	**PEOPLE-ORIENTED DESIGN** Pedestrian Activation Placemaking and Sense of Place		Stronger Communities Enhance Wellbeing
2000	Oldenburg	**Third Places** Places to connect outside home and work.	**PEOPLE-ORIENTED DESIGN** Third Place Creation Placemaking and Sense of Place		Stronger Communities Enhance Wellbeing
2012	Francis & Giles-Coti	**Public Space** Role of public space in creating a sense of community and supporting health.	**PEOPLE-ORIENTED DESIGN** Inclusivity & Equitable Creation Accesible and Universal Design Health Wellbeing & Safety	**SOCIAL INFRASTRUCRURE** Strengthens Communities Supports Public Life	Enhance Wellbeing Inclusive & Equitable Places
2021	Carmona	**Quality of public space as a reflection of the proces:** How publicness is produced, governerned, and maintained.	**EVIDENCE-BASED DESIGN** Data & Analytics Believes and Values Community Insights	**SOLUTION-ORIENTED DESIGN** Functional & Feasible Implementable Solutions Measurable Impact	Environmental Stewarship Economic Vitality
2021	Klinenberg	**Social Infrastructure** Role of public space as preventive social infrastructure that builds resilience.	**SOCIAL INFRASTRUCTURE** Preventative Social Infrastructure Resilient & Future-Ready Communities		Resilient & Future-Ready Cities Stronger Communities

Methodology

This paper uses a qualitative, observational case study methodology focused on Elizabeth Quay redevelopment project in Perth from an urban design perspective. The analysis evaluates the impact of urban design strategies utilized in Elizabeth Quay's redevelopment on belonging, wellbeing, and community engagement. Specific methods include direct spatial observation, experiential urban analysis, and a review of urban planning and public health literature related to social infrastructure, loneliness, and community wellbeing. Select urban design concepts utilized to analyze the social value of the development include shared urban investment, mixed-use development, human-scale design, spaces for rest, public programming and art, intergenerational urbanism, green and blue infrastructure, and economic and civic impact. The selected case study is analyzed on the extent to which interventions in each of these spheres support community wellbeing and participatory urbanism.

The case study was selected based on its relevance to contemporary urban design challenges, including walkability, placemaking, sustainability, and mixed-use development. Selection criteria included:

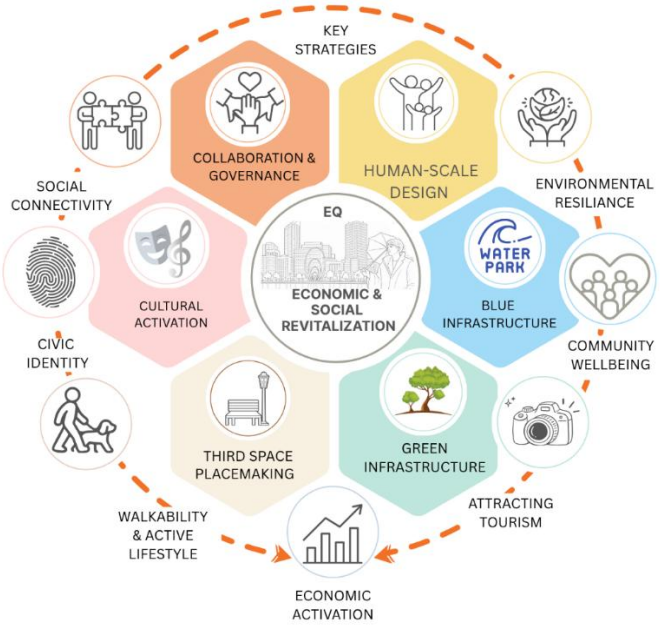
- Significance of the project within the urban context
- Availability of primary and secondary data
- Evidence of measurable social, environmental, or spatial outcomes
- Relevance to current debates in urban design literature

The site was analyzed within its geographic, historical, and socio-economic context through direct observation and supplementary third-party observation conducted over the past year. Observations were conducted over two fieldwork periods at Elizabeth Quay. The first phase, undertaken in October 2025, consisted of third-person observational analysis across multiple visits. The second phase, conducted in January 2026, involved in-person observation over four days while staying at the Ritz-Carlton, Perth, providing continuous views of public activity and interaction within the precinct. Across more than ten visits, observations were carried out during mornings, midday, evenings, weekdays, and weekends, focusing on pedestrian flow, lingering behavior, seating occupancy, intergenerational interaction, and patterns of public activity. During this period, particular attention was given to placemaking strategies related to pedestrian activation, experience-oriented design, and economic and social revitalization, including the following: (Fig 4)

- Pedestrian circulation, walkability, and physical activity
- Visual identity
- Cultural heritage
- Public seating and opportunities for lingering

- Cultural programming
- Integration of public art strategies
- Green and blue infrastructure
- Accessibility and inclusivity of public spaces
- Intergenerational participation in recreational activities
- Recreational experiences
- Use of lighting
- Event spaces and entertainment
- Spatial conditions that encourage spontaneous social interaction
- Public interactions across various times of the day
- Waterfront promenades and views
- Elizabeth Quay Bridge

(Fig 4). Built Environment: Elizabeth Quay Economic Social Revitalization



Data was collected through qualitative and visual research methods, including the following:

- Site observations and photographic documentation
- Review of planning documents, master plans, and policy reports
- Review of academic literature and archival sources
- Maps, diagrams, and urban morphology analysis
- Informal interviews and stakeholder perspectives referenced from reports and articles published in 2026 to commemorate the 10-year anniversary of EQ.

Field observations focused on pedestrian activity, accessibility, patterns of public space use, circulation, and human interaction across the site. Scholarly sources were selected through Scopus, Google Scholar, and publisher databases, with attention to peer-reviewed journals and comparable case study research in urban design and public space.

The study analyzes Elizabeth Quay through Eric Klinenberg's concept of social infrastructure, which provides a useful framework for examining how this redevelopment shapes the relationship between built form, programming, and community participation.[2] It also draws on Ray Oldenburg's theory of "third places" to interpret the role of informal gathering spaces within the waterfront precinct.[5] In methodological terms, the observational approach is further informed by behavioral analysis method for studying public spaces, particularly his attention to sitting, lingering, pedestrian movement, and the social effects of spatial design features.[6]

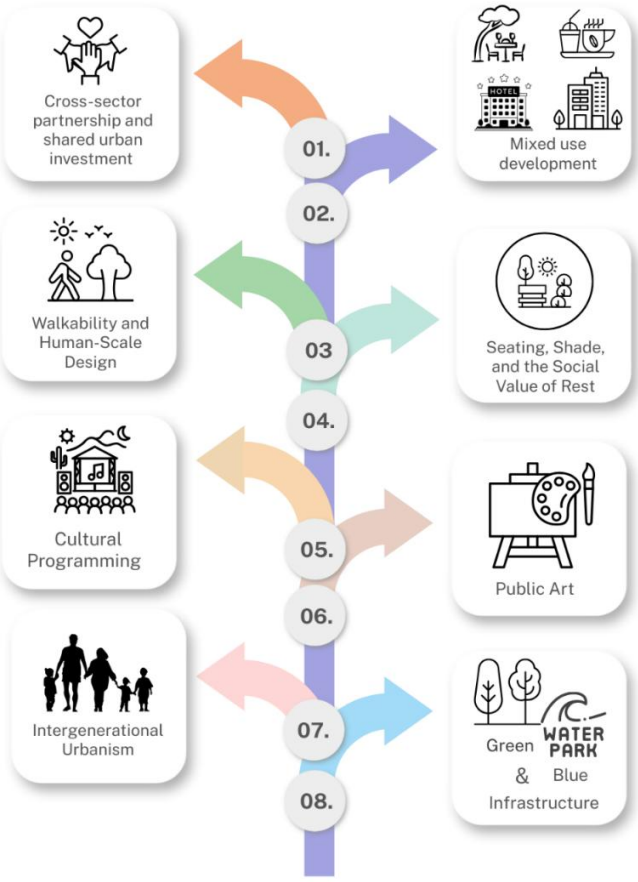
Secondary references included public health literature on loneliness and wellbeing, as well as urban planning discussions surrounding preventative social infrastructure, walkability, and social

prescribing. The research framework positions urban design not only as a physical intervention, but as a contributor to civic identity, emotional wellbeing, and community development.

Results

The findings indicate that Elizabeth Quay functions as an active form of social infrastructure that supports belonging, wellbeing, and community engagement through thoughtful spatial design and cultural programming. (Fig 5)

(Fig 5). Elizabeth Quay Preventative Social Infrastructure



Cross-sector partnership and shared urban investment

The redevelopment of Elizabeth Quay was enabled through cross-sector collaboration and a multi-stage governance framework that linked strategic planning, regulatory approval, public

consultation, design review, and private investment. Initial master planning and urban design studies focused on reconnecting Perth's central business district to the Swan River, while subsequent government approvals addressed land use, infrastructure provision, environmental impacts, and transport integration. Public consultation introduced an important arena of contestation, with residents, architects, environmental advocates, and business stakeholders voicing divergent views on cost, prioritization of tourism, heritage, environmental change, and public access. At the same time, design competitions and architectural review processes shaped the project's formal and spatial identity, while private investment agreements secured the commercial components are necessary to realize the broader redevelopment agenda.

Taken together, these stages demonstrate that Elizabeth Quay was developed not through design alone, but through an extended process of institutional negotiation in which civic aspirations, regulatory constraints and market priorities were continuously mediated. In this respect, the case reflects Carmona's argument that public space is shaped not only by physical form, but also by governance and place-production processes that influence how publicness is realized in practice.[4]

Mixed-use development

Elizabeth Quay's mixed-use composition is significant not merely as a planning strategy, but as a social and spatial conditions that sustain continuous public life along the Swan River. By integrating residential, commercial, cultural, recreational, hospitality, transport, and civic functions within a walkable waterfront precinct, the development attracts diverse users across various times of day and generates repeated opportunities for visibility, encounter, and informal participation. In this respect, the precinct reflects Eric Klinenberg's concept of social

infrastructure, which emphasizes the importance of physical environments that shape how people interact and whether social ties can form in everyday life.[2] The concentration of apartments, offices, restaurants, cafés, ferry services, public art, water park, playgrounds, event spaces, and pedestrian-oriented amenities reduces functional segregation and supports low threshold forms of urban sociability. (Fig 6)

(Fig 6).



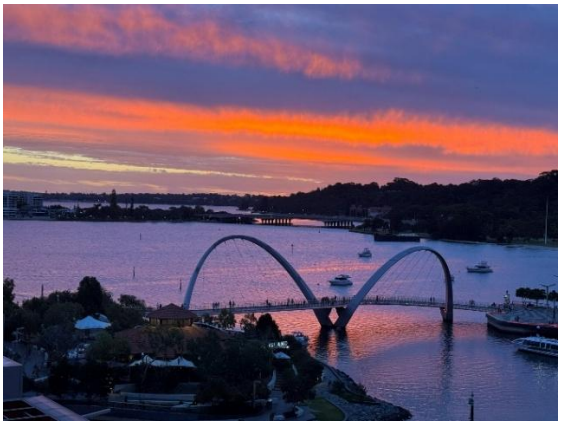
Rather than serving a single purpose, the mixed-use environment enables Elizabeth Quay to operate as a connective civic landscape in which routine movement, leisure, and public gathering intersect, thereby strengthening the conditions for belonging, social cohesion, and everyday social interactions.

Walkability and Human-Scale Design

Elizabeth Quay's waterfront prioritizes pedestrian movement through wide promenades, accessible circulation routes, the **Elizabeth Quay Bridge,** and continuous pathways along the riverfront. These design strategies do more than facilitate movement: they slow the pace of circulation, encourage lingering, and create conditions for repeated low-threshold encounters among users. In this respect, the precinct aligns with studies that have shown how walking neighborhood fosters incidental sociability and strengthens social connectedness by increasing opportunities for everyday interaction among residents and strangers alike.[7] It also echoes Jane Jacobs's classic argument that lively, walkable urban environments support public life by sustaining continuous pedestrian presence and everyday contact in shared space.[3] (Fig 7a, 7b)



(***Fig 7a).***



(Fig 7b).

The Elizabeth Quay bridge, the riverfront esplanade, and recreational paths encourage outdoor activity and promote physical activity as a visible and collective urban practice. This dynamic can be understood in relation to Bogotá's Ciclovía and Cicloruta model, which demonstrates how pedestrian and cycling-oriented infrastructure can increase physical activity while also supporting safety, equity, and social capital.[8] Although Elizabeth Quay operates on a different scale and context, its walkable and cycle-friendly environment similarly demonstrates how active urban design can support both health and sociability by making movement publicly shared, accessible, and socially meaningful.

Seating, Shade, and the Social Value of Rest

A further finding of the redevelopment is the importance of benches, shaded seating, and other places to pause within the waterfront environment. These features do more than provide physical rest. They support observation, appreciation of the surroundings, quiet reflection, and low-pressure forms of social presence, such as casual encounters and the simple act of seeing and being seen. Together, these experiences help foster a sense of belonging in public space. This reading is consistent with William H. Whyte's observations that successful public spaces depend heavily on sitability, comfort, and the invitation to linger.[6] (Fig 8)

(Fig 8).



Cultural Programming and Public Participation

Elizabeth Quay demonstrates the importance of cultural programming in activating public space and expanding opportunities for public participation. Markets, dance sessions, outdoor cinema screenings, festivals, and live performances repeatedly draw diverse user groups into the same shared environment, transforming the waterfront into a socially legible and collectively experienced public setting. Rather than functioning as isolated events, these programs help structure rhythms of return and repeated co-presence, through which familiarity, recognition, and community attachment can gradually develop.

This is significant because such activities lower barriers to participation by requiring minimal planning, cost, or social obligation, thereby making public life more accessible across social and economic differences. (Fig 9)

(Fig 9).



In this respect, Elizabeth Quay reflects the work of Francis and Giles-Corti, who argue that public space plays a key role in creating a sense of community when it supports opportunities for social interaction, shared experience, and everyday belonging.[11] The result is a civic environment in which participation remains optional yet consistently available, allowing social connection to emerge through casual, repeated, and inclusive forms of encounter.

Public Art

Art@TheQuay integrates public art directly into the urban landscape through an "arts without walls" approach, in which artistic works are embedded within everyday movement rather than confined to formal cultural institutions. This is significant because the incorporation of art into public space extends the social and cultural function of the waterfront beyond recreation and circulation alone. At Elizabeth Quay, art installations such as *Spanda***,** *First Contact*



(Fig 10a)

and the Statue of Bessie Rischbieth among others, operate as both a visual landmark and a medium of historical and cultural interpretation. References to Aboriginal and Noongar culture, contribute to a layered civic environment in which art honors heritage. Public art, combined with nighttime lighting displays, contributes to placemaking by encouraging exploration, conversation, and ongoing engagement throughout the day and at night.

(Fig 10a)

(Fig 10b).



The incorporation of light at night highlights the iconic architectural design and installations also provide the space with a sense of safety. (Fig 10b)

In this sense, art strengthens the symbolic dimension of public space: it gives people something to notice, interpret, remember, and discuss, while reinforcing the cultural meaning of place. By making heritage and identity visible within the everyday landscape, the Art@TheQuay strategy helps transform the waterfront into a more culturally resonant and socially meaningful civic setting.

Intergenerational Urbanism

Observations revealed sustained intergenerational use of the waterfront, with children, students, retirees, workers, and tourists occupying the same public spaces through walking, cycling, dancing, recreation, dining, and cultural participation. Elizabeth Quay's shared spaces and recurring programs create conditions in which people of different ages can encounter one another through low-threshold, everyday activities rather than through highly structured or exclusive events. (Fig 11)

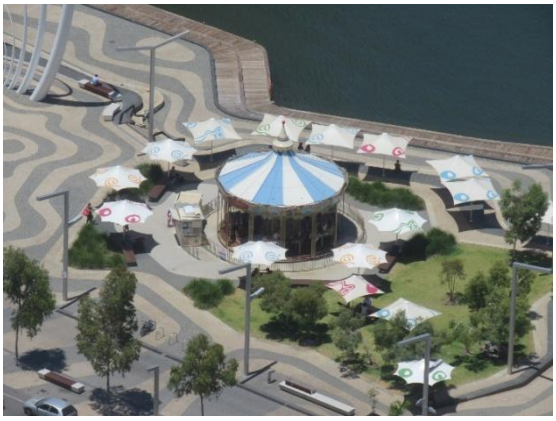
(Fig 11).



This is significant because intergenerational contact in public space can reduce age segregation and expand opportunities for social connection across the life course. In this respect, the section aligns with the work of researchers who emphasize that intergenerational programs are most effective when they create meaningful opportunities for conversation, shared activity, and reciprocal recognition between older adults and younger participants.[10] At Elizabeth Quay, visible and collective forms of participation, from waterfront dance sessions to family-oriented recreation, kid's activities and community events, help make physical activity socially accessible while also supporting empathy, familiarity, and a broader sense of public belonging. This shared use supports social cohesion while challenging the age segmentation that often characterizes contemporary urban life. (Fig 12a, 12b)

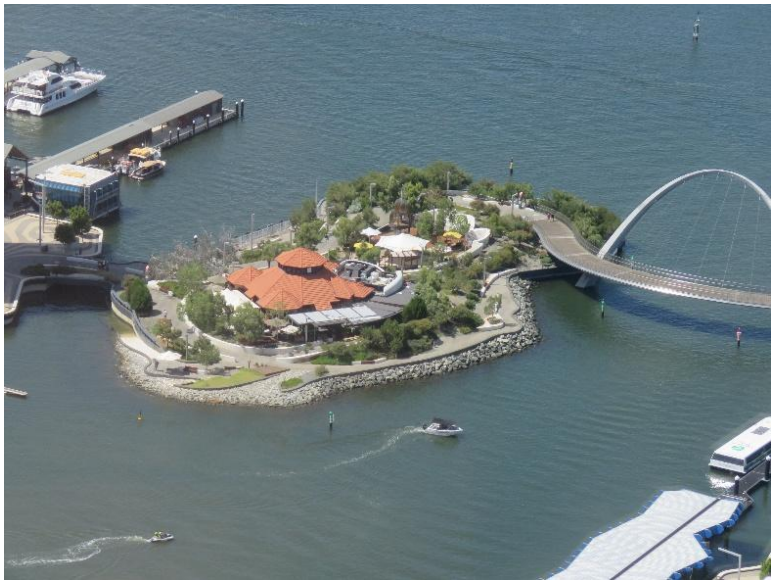
(Fig 12a). ***(Fig 12b).***





Green and Blue Infrastructure

The integration of the Swan River with the surrounding public spaces contributes to psychological restoration and wellbeing while enhancing the attractiveness and usability of the waterfront. The swan River connects to water features, landscaped edges, open recreational areas and the Elizabeth Quay man-made island ***(Fig 13)*** maximizing the waterfront's social and recreation potential. This finding is especially relevant in the Perth context, where studies have shown that the quality and attributes of public open space are closely related to mental health outcomes.[11] At Elizabeth Quay, blue and green infrastructure therefore functions not only as environmental amenities, but also as part of the social and therapeutic capacity of the precinct. (Fig 14)



(Fig 13)

(Fig 14).

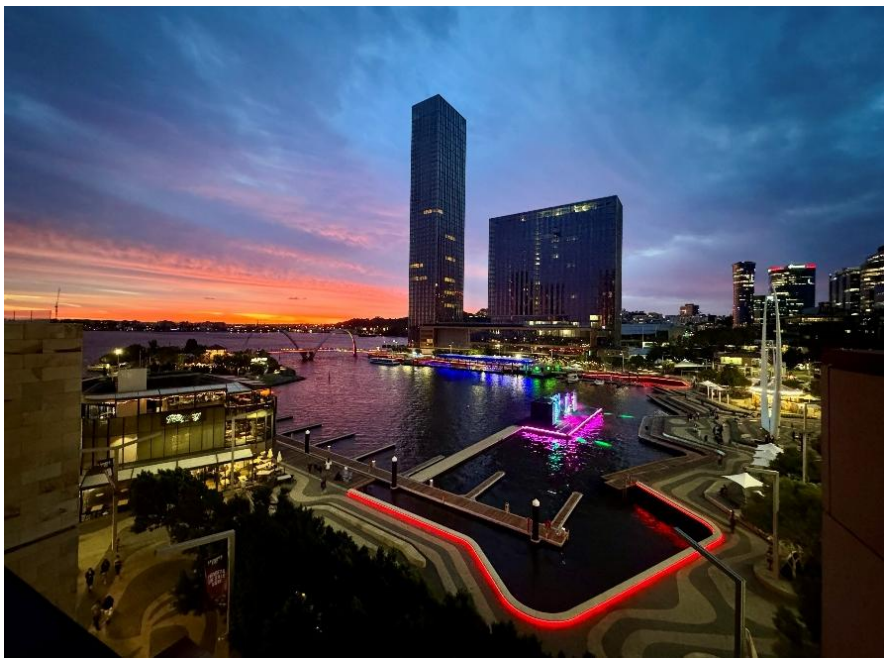


Economic and Civic Impact

The economic significance of socially connected public space extends beyond tourism and amenity value. Social isolation is associated with higher healthcare costs, increased demand for mental health services, and reduced workplace productivity, whereas connected communities tend to demonstrate stronger civic participation, greater resilience, and more robust local economies. Investment in inclusive public space can be understood not only as a cultural or design intervention, but also as a social and economic strategy with broader civic value. Within this framework, Elizabeth Quay contributes to tourism, local business activity, and the city's identity by sustaining continuous public use throughout the day and evening. Restaurants, cafés, recreational facilities, ferry connections, and cultural events generate a diverse pattern of occupation that reinforces the waterfront as both an economic destination and a public gathering

place for residents, workers, and visitors. More broadly, the redevelopment reflects Perth's changing urban identity as a growing yet spatially dispersed city seeking to strengthen its relationship to the river and to cultivate a more connected society. (fig 15)

(Fig 15).



Discussion

The Elizabeth Quay redevelopment demonstrates how urban design can operate as preventative social infrastructure. The project moves beyond aesthetic enhancement by creating spatial conditions that support connection, participation, and wellbeing.

In Klinenberg's terms, the value of such spaces lies not only in their physical presence, but in their capacity to structure repeated everyday encounters through which trust, familiarity, and civic connection can gradually emerge.[2]

A key finding is the importance of low-threshold participation. At Elizabeth Quay, people can engage with the space without tickets, memberships, or formal invitations. This accessibility allows social interaction to emerge organically through proximity, visibility, and repeated exposure to shared activity, in contrast to the restrictions often associated with privately owned public spaces. Here again, Carmona's framework is useful because it highlights how publicness depends not only on formal access, but on the governance, management, and design conditions that make participation feel genuinely open in practice.[4] The project also reinforces the importance of "third places," as described by Ray Oldenburg.[5] Cafes, waterfront promenades, recreational areas, and public gathering spaces create informal environments where social interaction occurs outside home and work. These spaces are increasingly significant in cities where loneliness and social fragmentation are becoming public health concerns.

Social isolation raises the risk of developing cardiovascular disease and Alzheimer's.
It increases mortality risk by as much as smoking 15 cigarettes per day. Bradley Holst, assistant teaching professor at Georgetown University's McCourt School of Public Policy, notes, "Social isolation also lurks behind today's high rates of anxiety among adolescents as well as the wave of deaths of despair among our economically displaced neighbors."[12]

The serious health risks associated with social isolation have prompted some physicians to embrace "Social prescribing" as a model of care in their clinics. Urban designers can do something similar for cities, creating urban public spaces as preventative social infrastructure for the city's residents.[13] (Table 2)

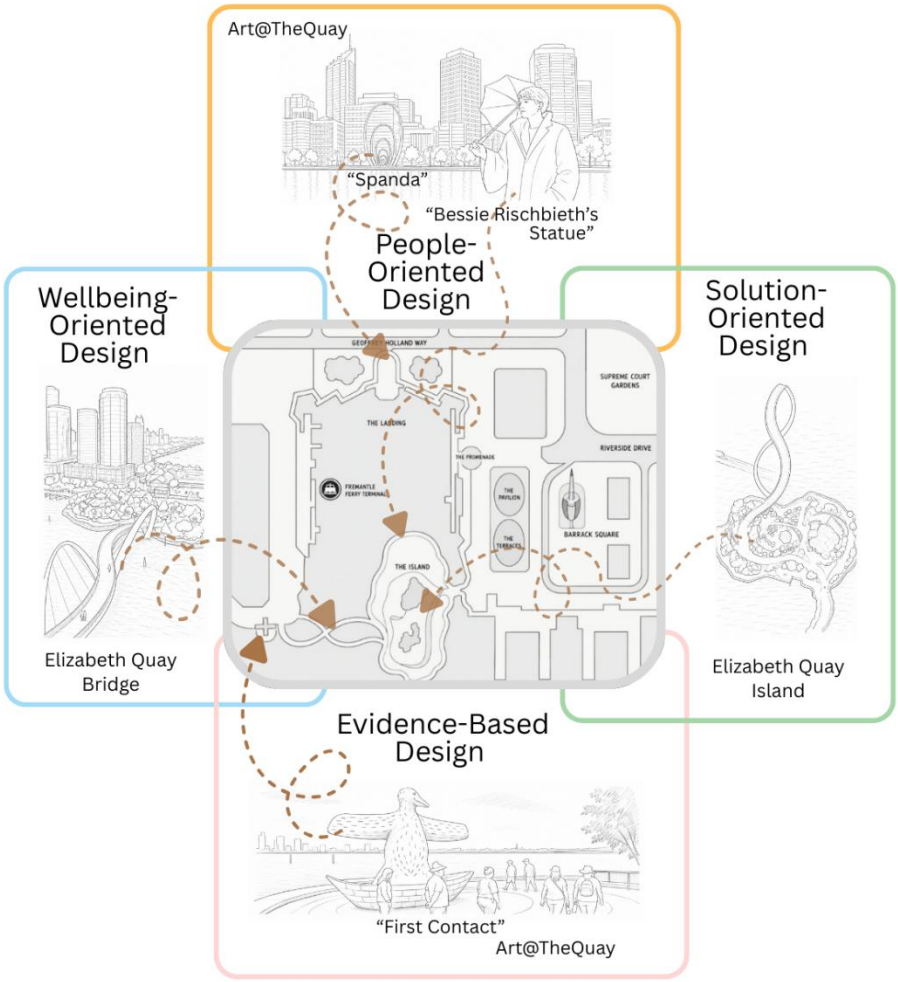
(Table 2) Key Points for a Preventative Social Infrastructure

TABLE 2			
KEY POINTS FOR A PREVENTATIVE SOCIAL INFRASTRUCTURE			
	CHALLENGE	DESIGN INTERVENTION	RESULTS
1	Social Isolation and Loneliness as a defining condition of modern urban life	People-oriented urban design and creation of inclusive and engaging public spaces that fosters social connection	Improved public health, social interaction & wellbeing
2	Lack of belonging	Placemaking environment that encourages interaction, maintain low threshold participation, honor history, heritage and values	Increased civic identity and tourism
3	Underutilized public spaces	Active programming and mix-used development	Greater social cohesion
4	Social fragmentation	Inclusive and accessible public spaces combined with diverse cultural programming that encourages interaction among different social, cultural, and age groups.	Reduce social barries, & fosters cross-cultural understanding
5	Physical inactivity	Walkable environments and recreational amenities	Encourage healthier lifestyles
6	Disconnection from nature	Incorporation of green and blue infrastructures	Reduced stress and improved mental health
7	Inequitable access to public space	Universal design and accessibility measures	Greater social equity and inclusion
8	Safety concerns and perceived insecurity	Incorporation of light, active frontages, visibility, and pedestrian activity	Increased comfort and use of public spaces
9	Economy stagnation	Vibrant mixed-use districts and public destinations, collaborative team work with stake holders and public sector	Stronger local economies & communities
10	Climate and environmental pressures	Sustainable and resilient urban design	Environmental and community resilience

Elizabeth Quay uses effective treatments; access to green and blue spaces predicts lower levels of loneliness. Walkable environments enable iterated, low-stake interactions that foster neighbor recognition and social trust. Further, this precinct illustrates the relationship between physical activity and social well-being. By making routine movements accessible and socially visible, spaces such as Elizabeth Quay may help reduce stress, support cardiovascular health, lower the risk of depression, and mitigate isolation through repeated opportunities for shared activity and informal intergenerational encounters. These encounters play a significant role in society, particularly among younger and older populations.[14]

The case study also highlights the role of programming in successful public space design. Several urban spaces fail not because of poor architecture, but because they lack human experience, cultural activation, seating, flexibility, and inclusive programming. Elizabeth Quay succeeds by combining permanent infrastructure with recurring social events that continually reactivate the space. (Fig 16)

(Fig 16). Elizabeth Quay Case Study: Four Pillars of Human-Centered Design



This interpretation is supported by systematic review evidence indicating that improvements to community infrastructure and shared public spaces can strengthen social relations by expanding opportunities for encounter, participation, and local engagement.[15]

At the same time, the project reveals tensions common in large-scale waterfront redevelopment projects.

Critics questioned whether the development prioritized tourism and commercial privatization over every day local use. Even if spaces are visible, accessible, open to the public, and offer free public programming, they can become unwelcoming to residents if they do not feel that the space is “for” them. Certain physical built environment and economic indicators such as the presence of luxury hotels and businesses may signal to local residents that tourists and new residents are the priority and that developers only make public concessions to ensure a project can go through. Social indicators can also influence residents’ views on new developments—if the people who use public space are not representative of the area’s broader demographics; this can be an early indicator of rising housing and land values which can lead to gentrification and displacement if unaddressed through housing policy. In the case of Perth, however, longer-term observations suggest that the waterfront has become integrated into the daily life of Perth residents rather than functioning solely as a tourist destination. The findings of this study emphasize the importance of public participation throughout redevelopment processes—from planning to site specific design and placemaking placemaking—to ensure that redevelopment serves the broader interests of the community.

This study is limited by its focus on a particular case study. Although Elizabeth Quay provides a useful example of how urban design, programming, and public accessibility can contribute to social connection, the findings remain specific to this site and its local context. The redevelopment is shaped by geographic, political, cultural, and economic conditions that may not

be replicable elsewhere. For this reason, the paper does not claim universal generalizability but instead offers an interpretive case that highlights broader themes and mechanisms relevant to public space design. Further comparative research across multiple sites would be needed to determine how far these findings apply in other urban contexts.

Conclusion

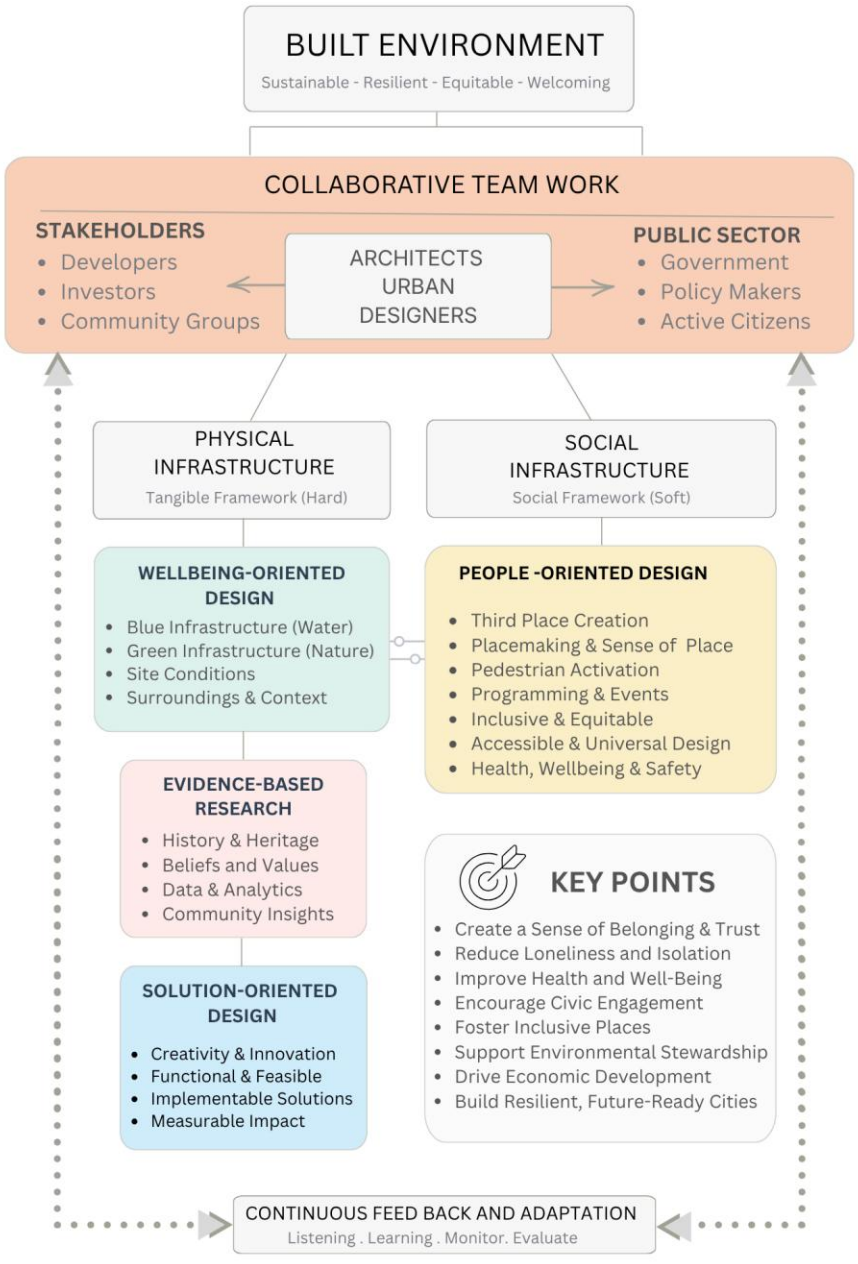
Elizabeth Quay demonstrates how urban design and planning can directly support community wellbeing, social connection, and civic identity through the thoughtful shaping of the built environment. Informed by evidence-based research and responsive public policy, the redevelopment shows how public space can serve the broader interests of the community by becoming an ideal destination for an informal encounter. By designing environments that prioritize proximity, visibility, and comfort, cities can create conditions for connection to emerge organically. In this sense, the project does not solve loneliness directly, but it makes isolation harder to sustain, and shared life easier to access.

In contrast to privately owned public spaces that limit seating, discourage informal activity, or prioritize control over participation, Elizabeth Quay offers a more open model for contemporary urban development. By inviting movement, conversation, and shared experience, the precinct demonstrates how public space can function as preventative social infrastructure capable of reducing social isolation and creating conditions that support belonging.

As cities worldwide confront rising loneliness, mental health challenges, and social fragmentation, urban planners and designers must increasingly understand public space as part of

the city's public health framework. This is a call for new public policy and a rethink of the way public space is designed. (Fig 17a)

(Fig 17a). Built Environment Proposed Chart



Elizabeth Quay suggests that designing for connection is not simply a cultural or aesthetic ambition; it is a social, economic, and civic necessity. The success of the project lies in its ability to make participation effortless while reflecting collaboration among government, stakeholders, private investors, developers, designers, and public interests. In this respect, Elizabeth Quay serves as a strong model of urban design that promotes belonging. Participation does not depend on consumption, membership, or formal obligation. Simply showing up is enough. (fig 17b) ***(Fig 17b).***



List of Abbreviations

EQ = Elizabeth Quay

Declarations

Ethics approval and consent

This study did not involve human participants and thus no ethics approval or consent to participate was required.

Consent for publication

This case study does not involve human participants and no consent for publication was required.

Availability of data and material

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Competing Interest

The authors of this manuscript declare that they do not have any conflict of interest. There are no affiliations, memberships, funding, or financial holdings that might affect the objectivity of this manuscript.

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Authors' contributions

Study concept and design, and data acquisition: Katherine Vernot-Jonas. Analysis and interpretation: Katherine Vernot-Jonas and Maggie Szabo. Drafting of the manuscript: Katherine Vernot-Jonas and Maggie Szabo.

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Additional Resources:

https://iris.who.int/items/39134dc6-4753-4900-b942-b7e0e16f5758

https://www.social-connection.org/wp-content/uploads/2024/05/The-SOCIAL-Framework-Built-Environment-Spring-2024-v4.pdf

https://armarchitecture.com.au/news/boomtown-city-making-in-the-west/

https://developmentwa.com.au/news/news-elizabeth-quay/school-holidays

https://developmentwa.com.au/news/news-elizabeth-quay/stories-of-elizabeth-quay

https://www.npr.org/2023/05/02/1173418268/loneliness-connection-mental-health-dementia-surgeon-general

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Attribution: World Health Organization (2025). From loneliness to social connection: charting a path to healthier societies: report of the WHO Commission on Social Connection. World Health Organization. https://www.who.int/publications/i/item/978240112360

Fig 2 (Graphic 2) Title: Social Disconnection and Health
Attribution: World Health Organization (2025). From loneliness to social connection: charting a path to healthier societies: report of the WHO Commission on Social Connection. World Health Organization. https://www.who.int/publications/i/item/978240112360

Fig 3 (Graphic 3) Title: Typology of Social Infrastructure
Attribution: World Health Organization (2025). From loneliness to social connection: charting a path to healthier societies: report of the WHO Commission on Social Connection. World Health Organization. https://www.who.int/publications/i/item/978240112360

Fig 4 (Graphic 4) Title: Elizabeth Quay Built Environment: Economic & Social Revitalization
* Elizabeth Quay

Legend: Together these interconnected strategies create a thriving waterfront that drives economic prosperity, strengthens social cohesion, and enhances quality of life for current and future generations.

Fig 5 (Graphic 5) Title: Elizabeth Quay Case Study: Preventative Social Infrastructure
Legend: Belonging = Active Social Spine acting as an Infrastructure to bring us together

Fig 6 Title: Elizabeth Quay Waterfront seen from Central Park
Legend: Mixed-Used redevelopment open to the public in 2016.

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Fig 7a Title: Elizabeth Quay Pedestrian Bridge at Night
Legend: A 65-feet curved-pedestrian bridge has become one of Perth's most recognizable landmarks that encourages physical activity all day long.

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Fig 7b Title: Elizabeth Quay Pedestrian Bridge at Sunset
Legend: EQ Bridge not only improves walkability and access to public space but also attracts

tourism, contributing to the Perth's economic vitality.
Credits: Katherine Vernot-Jonas

Fig 8 Title: Elizabeth Quay "Spanda" Artist: Christian de Vietri – ART@THEQUAY
Legend: Focal point for community engagement
Attribution: DevelopmentWA

Fig 9 Title: Elizabeth Quay Temporary Floating Stage inside the Swan River
Legend: The success of cultural programming at EQ demonstrates how the built environment can serve not only as a space for movement and access, but also as preventative public health infrastructure
Credits: Katherine Vernot-Jonas

Fig 10a Title: Elizabeth Quay "First Contact" Artist: Laurel Nannup – ART@THEQUAY
Legend: 16.4 feet (5meters) high, cast aluminum sculpture honors the Noongar people and celebrates Aboriginal Heritage welcoming and introducing visitors to culture and history.
Attribution: DevelopmentWA

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Legend: "Four Winds" Artist: Penny Bovell took the inspiration by the winds in Perth.

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Fig 11 Title: Elizabeth Quay Commitment to Wellbeing Through Community Engagement at the Esplanade – Temporary Floating Stage
Legend: Intergenerational Urbanism intentionally encourages social interaction, creating spaces where different generations mix, learn from each other and strengthen community bonds.
Credits: Katherine Vernot-Jonas

Fig 12a Title: Elizabeth Quay "Spanda" and Carousel for the kids - ART@THEQUAY
Legend: 95-feet (29 Meters) tall "Spanda" Symbolizes ripples of connection.
Artist: Christin de Vietri

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Fig 12b Title: Elizabeth Quay Carousel: Aerial View and Shaded Seating Areas Seeing from Central Park

Legend: Children are welcome to participate and engage in several activities around the waterfront.

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Fig 13 Title: Elizabeth Quay EQ Man-made Island Seeing from Central Park
Legend: EQ Island is a landmark destination on Perth's Swan River, housed in the restored 1929 Florence Hummerston heritage building, relocated during the Elizabeth Quay redevelopment. It is a vibrant public space for gatherings, dining, and events, blending history with contemporary design. Family-oriented areas include a pirate-themed playground for children.

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Fig 14 Title: Elizabeth Quay BHP Water Park "Pinjah"- Artist: Sandra Hill & Jenny Dawson-– ART@THEQUAY
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Credits: Katherine Vernot-Jonas

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Credits: Katherine Vernot-Jonas

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Legend: Design for People, Wellbeing, and Impact
* Elizabeth Quay

Fig 17a (Graphic 7) Title: Built Environment Proposed Chart

Fig 17b Title: Elizabeth Quay Island, EQ Bridge and Waterfront Pathways
Legend: The paving patterns along EQ Island paths are an integral part of Elizabeth Quay's design identity, not just decorative elements. They support wayfinding and place-making, reflect concepts of water, movement, and the Swan River landscape, and express heritage and storytelling. They also enhance accessibility and pedestrian comfort.
Attribution: DevelopmentWA

Tables

Table #1 Title: A Timeline of Urban Social Theory

Table #2 Title: Key Points for a Preventative Social Infrastructure

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- ElizabethQuayDancingVideo.mov