

Adaptive Reuse of Abandoned Rail Infrastructure Playbook

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Acknowledgements

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Abbreviations

AMC – Always Market Cooperative
APUR – Atelier Parisien d’Urbanisme
CAGRC – Citizen’s Action for Gyeongui Railway Commons
CLT – Community Land Trust
DTPS – Design Trust for Public Space
FHL – Friends of the High Line
FORC – Friends of Rail Corridor
GIS – Geographical Information System
GSM – Green Space Manager
HIIT – High-Intensity Interval Training
JTC – Jurong Town Corporation
KPI – Key Performance Indicators
KTM – Keretapi Tanah Melayu
LTA – Land Transport Authority
MP4 – Making Places Profitable
NGO – Non-Governmental Organization
NPARKS – National Parks Board
NSS – Nature Society (Singapore)
PID – Participate in Design
RCP – Rail Corridor Partnership
ROS – Recreation Opportunity Spectrum
SAM – Singapore Art Museum
SEMAEST – Société d’Économie Mixte d’Aménagement de l’Est Parisien
SHS – Singapore Heritage Society
UK – United Kingdom
UNESCO – United Nations Educational, Scientific and Cultural Organization
URA – Urban Redevelopment Authority
USA – United States of America
ZAC – Zone d’Aménagement Concerté

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Introduction

What is This Playbook About

Advancements in technology, digitalisation and the Internet of Things have significantly transformed how people and goods move within and across cities. In this increasingly digital society, many of the earlier industrial infrastructure—such as railways and canals—have become obsolete and fallen into disuse.¹ At the same time, rapidly growing urban populations have heightened the demand for accessible and inclusive public spaces.² Since the launch of the High Line in New York City, USA, a growing number of cities have begun to adaptively reuse abandoned rail infrastructure, converting them into public spaces that conserve past heritage while reimagining and giving new use and life to meet modern needs and reconnect surrounding communities.³ Adaptive reuse, however, requires planning and partnership to build competitive advantage.⁴

The playbook supports the successful transformation of disused railway infrastructure by outlining key interrelated dimensions of placekeeping—the long-term care, governance, and stewardship of public spaces. These dimensions, together with a set of key considerations, guide an integrated approach to transforming disused industrial infrastructure into meaningful, inclusive, and sustainable places. They encompass:

- Partnership and Governance.
- Policy.
- Design and Management.
- Resourcing.
- Programming.
- Evaluation.

Synthesising insights from an empirical study of Rail Corridor (Box 1.0) and international case studies of placemaking and placekeeping of disused rail infrastructure, this playbook offers pathways for enhancing adaptive reuse—one that integrates cultural, environmental, and economic values while promoting transparent and collaborative planning processes. Grounded in the principles of placekeeping—and recognising that placekeeping responds

1 Brown, B. (2001). Reconstructing the Ruhrgebiet. *Landscape Architecture*, 91(4), 66–75.; Koekebakker, O. (2004). *Westergasfabriek Culture Park: Transformation of a Former Industrial Site in Amsterdam*. NAI Press.; Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280-291.

2 Kaw, J. K., Lee, H., & Wahba, S. (Eds.). (2020). *The hidden wealth of cities: Creating, financing, and managing public spaces*. World Bank Publications.

3 Ben Ghida, D. (2024). Revitalizing urban spaces: Ten key lessons from the “Viaduc des arts” adaptive reuse and placemaking. *Frontiers of Architectural Research*, 13(5), 1095–1112. <https://doi.org/10.1016/j.foar.2024.03.011>

4 Kato, Y., Ho, D., Chan, F., Yu, W. L., Yuen, B., (2024). *Placekeeping and the adaptive reuse of disused railway infrastructure: Four case studies*. Lee Kuan Yew Centre for Innovative Cities.; Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City’s High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743-1761.

to local contexts—the playbook presents a suite of tools, methods, and strategies to support practitioners and policymakers in translating these insights into meaningful action.

Box 1.0. Placekeeping of Rail Corridor, Singapore Study

Placekeeping of the Rail Corridor is a two-year study conducted from January 2024 to December 2025. Addressing research gaps in understanding multi-stakeholder collaboration in placekeeping, the study aims to examine the mechanisms and factors driving effective multi-stakeholder collaboration in the context of Rail Corridor in Singapore. The study adopts a sequential mixed-methods approach, integrating:

- Review of local and international case studies of adaptive reuse of disused railway infrastructure.
- Archival research and social network analysis of actors involved in the Rail Corridor’s placekeeping from 2010 to 2024.
- Intercept surveys (N=205) and on-site observations at two study sites along the Rail Corridor to examine usage patterns and user perceptions.
- Key informant interviews (N=10) with experts from public, private, and community-sector organisations involved in the development and management of the Rail Corridor.



Source: Lee Kuan Yew Centre for Innovative Cities, Singapore University of Technology and Design. (n.d.). *Placekeeping of Rail Corridor*. <https://lkycic.sutd.edu.sg/research/urban-innovation/placekeeping-of-rail-corridor/>

Playbook Structure

The playbook is organised into 8 chapters, following this Introduction.





Chapter 1

Why Adaptive Reuse of Abandoned Railway Infrastructure

In recent years, adaptive reuse of disused railway infrastructure has emerged as an urban strategy to enhance urban liveability, resilience and sustainability. The key driver is the multitude of benefits of adaptive reuse when compared to demolish-and-build. These benefits include environmental (e.g., reducing embodied and operational carbon, promoting principles of circular economy, enhancing active mobility) to social (e.g., preserving historical architecture and community narratives, improving community well-being) and economic (e.g., revitalising local economy and neighbourhood).⁵ The High Line has attracted more than US\$2 billion in private investment since its opening in 2009 and 8 million visitors annually by 2019, becoming a catalyst for economic development in surrounding West Chelsea.⁶ In Asia, Gyeongju Line Forest Park in Seoul has cooled urban temperatures and revitalised adjacent neighbourhoods through increased commercial footfall and green infrastructure.⁷ The development has catalysed a shift in national urban policy framework that now recognises disused railway infrastructure as cultural heritage with regeneration potential.

However, these initiatives are not without their challenges. Gentrification and displacement have been documented in several cases, including the High Line and Gyeongju Line Forest Park. In these projects, rising property prices and commercial transformation have created concerns about equity and the displacement of long-time residents and small businesses. Issues of park maintenance, governance, and user conflicts—such as between pedestrians and cyclists—have also emerged post-implementation.⁸ These tensions highlight the need for robust placekeeping strategies that ensure inclusive, long-term stewardship beyond initial development phases. Despite increasing awareness of these issues, few projects undertake post-occupancy evaluations or long-term monitoring of placekeeping performance.⁹ Knowledge gaps remain. Further research is needed to assess the economic and social impacts of reuse on smaller cities and communities, where the political will and financial capacity to undertake such projects may be more constrained.¹⁰ There is scant research on community ownership models, inclusive governance frameworks, and multi-stakeholder collaboration processes though they are essential for ensuring the equitable evolution of reused spaces.¹¹

5 Tan, S. N. (2018). Co-creating the Rail Corridor's future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/>; Peng, M. L. K., Hon, M. T. W., Keang, M. T. Y., Chan, M. J., Min, G., Lum, S., Hall, M. M., Chew, H. H., Owyong, M. A., & Seow, M. G. (2010). *The Green Corridor: A proposal to keep the railway lands as a continuous green corridor*. Nature Society (Singapore).

6 Lee Kuan Yew World City Prize. (2019, November 8). *New York City – Innovative zoning tools in West Chelsea & High Line Plan*. <https://leekuaneyewworldcityprize.gov.sg/resources/case-studies/west-chelsea-high-line-plan/>

7 Jung, E. A., Choi, Y. W., & Yoon, H. Y. (2016). The impact of the Gyeongui Line Park project on residential property values in Seoul, Korea. *Habitat International*, 58, 108–117. <https://doi.org/10.1016/j.habitatint.2016.10.002>

8 Kato, Y., Ho, D., Chan, F., Yu, W. L., Yuen, B., (2024). *Placekeeping and the adaptive reuse of disused railway infrastructure: Four case studies*. Lee Kuan Yew Centre for Innovative Cities.

9 Kato, Y., Ho, D., Chan, F., Yu, W. L., Yuen, B., (2024). *Placekeeping and the adaptive reuse of disused railway infrastructure: Four case studies*. Lee Kuan Yew Centre for Innovative Cities.

10 Eizaguirre-Iribar, A., & Grijalba, O. (2020). A methodological proposal for the analysis of disused railway lines as territorial structuring elements: The case study of the Vasco-Navarro railway. *Land Use Policy*, 91, 104406. <https://doi.org/10.1016/j.landusepol.2019.104406>

11 Zhang, C., Dai, S., & Xia, H. (2020). Reuse of abandoned railways leads to urban regeneration: A tale from a rust track to a green corridor in Zhangjiakou. *Urban Rail Transit*, 6, 104–115. <https://doi.org/10.1007/s40864-020-00127-2>; Della Spina, L., & Lanteri, C. (2024). A collaborative multi-criteria decision-making framework for

The adaptive reuse of railway infrastructure presents significant opportunities for sustainable urban transformation, but it also requires nuanced, inclusive, and context-sensitive approaches to governance, design, and management. Addressing knowledge gaps in literature and practice—particularly around multi-stakeholder collaboration, long-term stewardship, and participatory governance—will be essential to ensuring these projects serve as endearing, enduring public assets.

1.1. Typologies of Adaptive Reuse

Adaptive reuse of disused railway infrastructure takes various forms, reflecting not only the physical characteristics of the sites but also their social, cultural, and ecological contexts as well as the intended objectives and the planning and design approaches adopted. In this study, we examined 10 internationally recognised adaptive reuse of railway projects. Identified through a desktop review, the case projects span different geographic and temporal contexts and encompass a range of objectives and functions. The 10 projects can be broadly grouped into three typologies: elevated linear parks, integrated mobility corridors, and multifunctional corridors, each differing in form and primary focus (Table 1.1). Together, these adaptive reuse cases demonstrate the evolving ambitions and challenges of transforming former rail infrastructure.

Table 1.1. Typologies of Disused Railway Infrastructure

| Place | Location | Year Opened | Length | Typology | Key Focus |
|-----------------------|------------------------------|-------------|---------|------------------------------|--|
| Promenade Plantée | Paris, France | 1993 | 4.7km | Elevated linear park | Elevated linear park with focus on urban retreat and heritage. Combines greenery with artisan workshops and galleries at street level. |
| High Line | New York City, United States | 2009 | 2.3km | Elevated linear park | Curated elevated park, blending native plantings with industrial infrastructure to create visual and experiential spectacle. Advocacy and management by Friends of Highline anchor governance and maintenance. |
| Djerring Trail | Melbourne, Australia | 2018 | 17km | Integrated Mobility Corridor | Shared-use corridor built beneath elevated rail infrastructure, connecting 13 train stations through active mobility and sports facilities. |
| Vasco-Navarro railway | Basque Country, Spain | 2023 | 124.8km | Integrated Mobility Corridor | Rural-urban greenway promoting sustainable access, local heritage and multi-modal travel. Uses spatial zoning to differentiate leisure and transit functions. |

the adaptive reuse design of disused railways. *Land*, 13(6), 851. <https://doi.org/10.3390/land13060851>

| | | | | | |
|---------------------------|------------------------|-----------|--------|------------------------------|---|
| Noto-Pachino Greenway | Sicily, Italy | 2025-2026 | 27.5km | Integrated Mobility Corridor | Disused railway corridor converted into a long-distance greenway connecting towns, reserves, and rural landscapes; supports slow tourism and heritage-based local development through adaptive reuse of historic rail infrastructure. |
| Katy Trail | Dallas, United States | 2000 | 5.6km | Multifunctional Corridor | At-grade rail turned into recreational greenway, linking central urban neighbourhoods, parks, and commercial areas through off-road paths. Trail is known for passing through historically black neighbourhoods. |
| BeltLine | Atlanta, United States | 2005 | 35km | Multifunctional Corridor | Large-scale trail network linking residential and commercial nodes through active transport, especially in historically disinvested neighbourhoods. |
| Rail Corridor | Singapore | 2011 | 24km | Multifunctional Corridor | Ground-level linear park transforming former rail infrastructure into an active mobility and ecological corridor. It integrates biodiversity conservation, pedestrian and cycling routes, and adaptive reuse of heritage nodes. |
| The 606 | Chicago, United States | 2015 | 4.3km | Multifunctional Corridor | Rail-to-trail greenway built on an elevated path, linking diverse urban neighbourhoods, as well as schools, parks and commercial nodes through active transport. |
| Gyeongui Line Forest Park | Seoul, South Korea | 2016 | 6.4km | Multifunctional Corridor | Linear park developed along disused rail infrastructure, linking urban neighbourhoods with commercial areas through parks, commercial nodes, and recreational spaces. Known for economic revitalisation of surrounding districts. |

Source: Various Sources¹²

12 City of Paris. (n.d.). *Coulée verte René-Dumont*. <https://www.paris.fr/lieux/coulee-verte-rene-dumont-1772>; New York City Department of Parks & Recreation. (n.d.). *The High Line*. NYC Parks. <https://www.nycgovparks.org/parks/the-high-line>; Level Crossing Removal Project. (2018, September 26). *Djerring it is*. Victoria's Big Build. <https://bigbuild.vic.gov.au/news/level-crossing-removal-project/djerring-it-is>; Ministerio de Agricultura, Pesca y Alimentación. (n.d.). *Camino Natural Vía Verde del Ferrocarril Vasco-Navarro*. <https://www.mapa.gob.es/es/desarrollo-rural/temas/caminos-naturales/caminos-naturales/sector-noreste/ferrocarril-vasco-navarro/default.aspx>; Quattrone, M., Tomaselli, G., D'Emilio, A., & Russo, P. (2018). Analysis and evaluation of abandoned railways aimed at greenway conversion: A methodological application in the Sicilian landscape using multi-criteria analysis and geographical information system. *Journal of Agricultural Engineering*, 49(3), 151-163; Katy Trail Dallas. (n.d.). *About the Trail*. Katy Trail. <https://katytraildallas.org/>; Atlanta BeltLine, Inc. (n.d.). *About the BeltLine*. Atlanta BeltLine. <https://beltline.org/about-us/>; Urban Redevelopment Authority. (2025, June 6). *Rail Corridor – URA Master Plan 2019 Urban Transformations*. <https://www.ura.gov.sg/Corporate/Planning/Master-Plan/Master-Plan-2019/Urban-Transformations/Rail-Corridor>; The Trust for Public

Elevated Linear Parks

Elevated linear parks are characterised by their elevated form, repurposing disused railway infrastructure into linear public spaces. They often retain industrial elements such as former tracks and bridges, offering elevated views of the surrounding urban landscape. Leveraging their elevation, these spaces provide unobstructed pathways, enhancing pedestrian connectivity across the city while offering venues for arts and cultural programming, and opportunities for urban gardening.

Paris' Promenade Plantée is one of the earliest cases of adaptive reuse that has inspired subsequent initiatives around the world.¹³ Opened in 1993, it combines an elevated walkway with artisan workshops located on the level below (Box 1.1). Through dense urban planting, the elevated level offers green respite, separating the repurposed green space from street level motorised traffic, while the space underneath generates lively public-private partnerships that support creative production and local commerce.¹⁴

The High Line in New York City is a well-known example that has received multiple international awards.¹⁵ Opened in 2009, the project has transformed obsolete industrial infrastructure through the integration of native vegetation to create a curated visual and walking experience (Box 1.2).¹⁶ The Friends of High Line play an instrumental role in the park's management, overseeing programming, maintenance and community engagement, and shaping their distinctive blend of public space, art installations, and social events.¹⁷

Land. (n.d.). *The 606: Frequently Asked Questions*. <https://www.the606.org/resources/frequently-asked-questions/>; Seoul Metropolitan Government. (n.d.). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>

13 Daul, K. (n.d.) *Promenade Plantée*. Britannica. <https://www.britannica.com/place/Promenade-Plantee>

14 Gastil, R. (2013). Prospect parks: Walking the Promenade Plantée and the High Line. *Studies in the History of Gardens & Designed Landscapes*, 33(4), 280–289. <https://doi.org/10.1080/14601176.2013.807650>; Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280-291.

15 Diller Scofidio + Renfro. (n.d.). *High Line, New York, NY*. <https://dsrny.com/project/the-high-line?index=false§ion=contact&tags=publications&search=%20of%20&sort=alphabetic&view=list>

16 Bell, F., & de Kerret, G. (2020, December). Ambulatory ambiance: A comparative analysis of three elevated linear parks. *Proceedings of the 4th International Congress on Ambiances, Alloaesthesia: Senses, Inventions, Worlds* (2), 316. <https://doi.org/10.48537/hal-03220268>

17 Kim, H. J., Chae, B. K., & Park, S. B. (2018). Exploring public space through social media: An exploratory case study on the High Line New York City. *Urban Design International*, 23(1), 69–85. <https://doi.org/10.1057/s41289-017-0050-z>

Box 1.1 Promenade Plantée, Paris, France

Opened in 1993, the Promenade Plantée is an early example of adaptive reuse, transforming a disused railway viaduct into a 4.7km green linear park and in the process, revitalising the 12th arrondissement. The viaduct's elevation allows pedestrians to move continuously above street-level traffic, providing uninterrupted pathways and unique vantage points and views of the city. Dense plantings along the walkway create a contemplative escape from urban life, while the "Viaduc des Arts" below hosts artisan workshops and galleries. By pairing the elevated park with active ground-level studios, the project combines leisure, active transport, creative production, and local commerce within a single linear space.

The City of Paris' partnership with APUR (Atelier Parisien d'urbanisme)—an urban planning agency with private status—and Semaest (Société d'économie mixte d'aménagement de l'Est Parisien)—a semi-public agency—has facilitated long-term maintenance, curated tenancy, and recurring community programming, balancing historic preservation with contemporary economic needs. Studies credit the Promenade Plantée with catalysing local economic revitalisation and introducing innovative public-private management. But it has also contributed to rising property values and the displacement of local businesses and residents, leading to the loss of the area's working-class heritage.



Source: Gastil, R. (2013). Prospect parks: Walking the Promenade Plantée and the High Line. *Studies in the History of Gardens & Designed Landscapes*, 33(4), 280–289; Bell, F., & de Kerret, G. (2020, December). Ambulatory ambiance: A comparative analysis of three elevated linear parks. *Proceedings of the 4th International Congress on Ambiances, Alloaesthesia: Senses, Inventions, Worlds* (2), 316. <https://doi.org/10.48537/hal-03220268>; Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280-291.; Brunton, J. (2017, June 7). A magical, green walk along Paris's Promenade Plantée. *The Guardian*.

Box 1.2 High Line, New York City, United States

The High Line, inaugurated in 2009, transformed an abandoned freight rail viaduct into a celebrated 2.3km urban park, combining native plantings with preserved rail infrastructure for a unique urban spectacle. The park's elevation allows pedestrians to move continuously above street level, providing safe passage over intersections and offering unique views of the city. Multiple access points and broad walkways ensure that users can easily enter and traverse the park, supporting both leisurely strolls and active commuting.

Along its length, the High Line supports a variety of uses, from passive recreation to art installations, community events, and neighbourhood gathering spaces, blending mobility with cultural and social functions. While widely acclaimed as a model for urban adaptive reuse, the High Line has also driven substantial increases in property values and is disproportionately used by wealthier white visitors. This dynamic has raised concerns about gentrification and limited access for lower-income or minority communities.



Source: Bell, F., & de Kerret, G. (2020, December). Ambulatory ambiance: A comparative analysis of three elevated linear parks. *Proceedings of the 4th International Congress on Ambiances, Alloaesthesia: Senses, Inventions, Worlds* (2), 316. <https://doi.org/10.48537/hal-03220268>; Kim, H. J., Chae, B. K., & Park, S. B. (2018). Exploring public space through social media: An exploratory case study on the High Line, New York City. *Urban Design International*, 23(2), 69–85.; Nguyen, D. (2012, August 18). *Visitors stroll the first section of the High Line Park, over the 18th Street crossing. Frank Gehry's IAC building is in the background.* Flickr. <https://flickr.com/photos/zokuga/7860320800/>

Integrated Mobility Corridors

Integrated active mobility corridors are typically situated alongside or beneath active or disused rail lines, combining pedestrian and cycling paths with landscaping and social amenities. These corridors prioritise connectivity and active mobility, while helping to stitch together fragmented urban or suburban environments.

The Djerring Trail in Melbourne repurposes the former rail infrastructure to connect thirteen train stations, threading through residential neighbourhoods and urban centres (Box 1.3). Physically, the trail features separated cycling and pedestrian paths, playgrounds, fitness stations, and landscaped gardens. It serves as both an active commuting route and a recreational greenway, though concerns remain around noise management, graffiti, and ongoing maintenance.¹⁸

18 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.

Box 1.3 Djerring Trail, Melbourne, Australia

Djerring Trail, opened in 2018, is a 17km shared-use corridor beneath elevated rail infrastructure in Melbourne. By elevating the rail line, the state's railway improvement project reclaims the ground plane for uninterrupted pedestrian and cycling movement, enabling seamless transfers between rail and active travel. The corridor not only connects commuters to 13 train stations, but also embeds social and recreational spaces, including sports courts, skate parks, and playgrounds within the mobility network. While still preliminary, one study notes its benefits for neighbourhood connectivity and physical activity, but also concerns related to noise, graffiti, and vegetation maintenance.



Source: Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26–33.

The Vasco-Navarro Greenway in the Basque Country, Spain, transforms 124.8km of disused railway into a long-distance non-motorised trail (Box 1.4). Traversing both rural and urban landscapes, the route uses zoning and participatory GIS mapping to balance heritage conservation with access for cyclists and pedestrians. The adaptive reuse strategy supports regional tourism, connects scattered villages and towns, and preserves historical railway features along the way.¹⁹

The Noto-Pachino Greenway in south-eastern Sicily, adapts 27.5km of abandoned railway into an off-road route for cycling, walking, and slow tourism (Box 1.5). The greenway links the UNESCO-listed town of Noto with Pachino and neighbouring nature reserves, crossing agricultural archaeological and coastal landscapes. Its design supports non-motorised mobility, while integrating local heritage, new uses for historical stations and rural economic development. Early research on the greenway suggests its impact on lessening car-dependency across the area and enabling varied access to surrounding beaches and amenities.²⁰

19 Eizaguirre-Iribar, A., & Grijalba, O. (2020). A methodological proposal for the analysis of disused railway lines as territorial structuring elements: The case study of the Vasco-Navarro railway. *Land Use Policy*, 91, 104406. <https://doi.org/10.1016/j.landusepol.2019.104406>

20 Ronzoni, M. (2018). The railway Noto-Pachino as a transport solution for a better tourism. In G. Pezzagno & S. Tira (Eds.), *Town and Infrastructure Planning for Safety and Urban Quality* (pp. 309–315). CRC Press.

Box 1.4 Vasco-Navarro Railway Greenway, Basque Country, Spain

The Vasco-Navarro Greenway, opened in 2023, converts 124.8km of disused railway into a rural-urban greenway dedicated to non-motorised travel, enabling long-distance cycling, walking, and horse riding across varied landscapes. Since its opening, the greenway has hosted community and arts interventions such as mural painting with regional heritage imagery in the tunnel of Leorza-Cicujano in the municipality of Alava. Local reporting suggests that the greenway attracts up to 200,000 visitors annually, with arts programming transforming the greenway into a vibrant space for culture, recreation, and rural celebration.



Source: Iralekue. (2023, September 29). *The artistic interventions conclude in the tunnel of Cicujano in the Green Route of the Vasco Navarro*. <https://iralekue.com/en/portfolio-item/the-artistic-interventions-conclude-in-the-tunnel-of-cicujano-in-the-green-route-of-the-vasco-navarro/>; Euskadi Basque Country Grand Tour. (n.d.). *Vasco-Navarro Railway Greenway*. <https://www.euskadibasquecountrygrandtour.eus/en/what-to-do-in-euskadi/cultural-heritage/vasco-navarro-railway-greenway>

Box 1.5 Noto-Pachino Greenway, Sicily, Italy

The Noto-Pachino Greenway in south-eastern Sicily is an adaptive reuse project slated to open in 2025-2026, converting a 27.5 km disused railway into a continuous, gently graded corridor for cycling, walking, and slow tourism. The route plans to connect the UNESCO-listed baroque town of Noto with Pachino and the Vendicari Nature Reserve, leveraging the former railway's separation from main road traffic to provide safe, non-motorised mobility and long-distance connectivity across agricultural, archaeological, and coastal landscapes. Planning has involved local stakeholders in identifying new uses for historic stations and integrating agricultural, heritage, and tourism functions along the line.



Source: Della Quattrone, M., Tomaselli, G., D'Emilio, A., & Russo, P. (2018). Analysis and evaluation of abandoned railways aimed at greenway conversion: A methodological application in the Sicilian landscape using multi-criteria analysis and GIS. *Journal of Agricultural Engineering*, 49(4), 173–182. <https://doi.org/10.4081/jae.2018.744>; Finestre sull'Arte. (2022). *Sicily, tourist and cultural train will be born between Noto and Pachino*. <https://www.finestresullarte.info/en/tourism/sicily-tourist-and-cultural-train-will-be-born-between-noto-and-pachino>

Multifunctional Corridors

While many of the elevated linear parks and integrated mobility corridors provide multi-functions, e.g., contact with nature, public space for leisure and walking, multifunctional corridors are larger in expanse and provide a wider range of functions. Multifunctional corridors convert disused rail infrastructure into linear, connective, green spines that serve multiple functions, including recreation, transportation, economic revitalisation, urban greening, and social integration. These corridors often traverse diverse neighbourhoods and land uses, integrating the corridor with surrounding housing, parks, and commercial areas.

Katy Trail in Dallas, USA, is a 5.6km ground-level greenway created from a disused rail corridor and designed for walking, running, and cycling (Box 1.6) The trail runs through diverse urban neighbourhoods and connects parks, commercial areas, and residential districts via a continuous off-road path, improving accessibility across the city's core. However, studies show that trail use is disproportionately concentrated among wealthier and white residents, despite the route's proximity to lower-income and Black neighbourhoods. Persistent barriers such as perceptions of safety, cultural fit, and social exclusion have limited equitable participation, highlighting the challenge of inclusive access in urban greenway projects.²¹

Box 1.6 Katy Trail, Dallas, United States

Katy Trail, opened in 2000, is a 5.6km recreational greenway, repurposing a historical rail line through diverse Dallas neighbourhoods. The trail provides a continuous, off-road path for walking, running, and cycling, linking diverse neighbourhoods through the city's core. Along its length, the trail serves as a linear park for recreation, daily exercise and community events, promoting both health and neighbourhood connection. While the trail supports active transportation and social integration, research shows that actual use is skewed towards wealthier, white residents. The project highlights how perceptions of safety, cultural fit, and urban barriers can limit participation despite physical accessibility.



Source: Lindsey, G., Maraj, M., & Kuan, S. (2001). Access, equity, and urban greenways: An exploratory investigation. *The Professional Geographer*, 53(3), 332–346. <https://doi.org/10.1111/0033-0124.00287>; Downtown Dallas Parks Conservancy (2019, February 25). *Iconic Dallas Park: Katy Trail*. <https://downtowndallasparcs.org/iconic-dallas-park-katy-trail/>

21 Lindsey, G., Maraj, M., & Kuan, S. (2001). Access, equity, and urban greenways: An exploratory investigation. *The Professional Geographer*, 53(3), 332–346. <https://doi.org/10.1111/0033-0124.00288>

Singapore's Rail Corridor is a 24km ground-level linear park that transforms former rail infrastructure into a continuous green connector across the island. The project traverses both dense urban neighbourhoods and patches of secondary forest, connecting Bukit Timah Nature Reserve, residential estates, and industrial areas (Box 1.7). The corridor features restored heritage railway bridges and stations, continuous pedestrian and cycling paths, and naturalised landscapes that promote regional biodiversity. Its key functions include supporting recreation and active mobility, facilitating daily commutes, conserving ecological corridors, and preserving Singapore's railway heritage through adaptive reuse of historic infrastructure.²²

Box 1.7 Rail Corridor, Singapore

Singapore's Rail Corridor, opened in phases since 2011, repurposes 24 km of former railway to create a continuous linear park that integrates heritage reuse and ecological conservation. As a ground-level green space, the project creates an uninterrupted corridor for walking and cycling, as well as recreation journeys from north to south Singapore through 10 planned community nodes; it takes about 6-6.5 hours to walk the entire trail. Each node serves distinct functions, reflecting the surrounding context and needs of its visitors. For example, the Bukit Timah Railway Station node integrates heritage restoration, adaptive reuse, nature and community spaces to provide surrounding residents and visitors with enhanced accessibility, connectivity, and engaging space for all. The Rail Corridor is designed with numerous access points and clear wayfinding signage throughout its entire length.



Source: Urban Redevelopment Authority. (2025, June 6). *Rail Corridor – URA Master Plan 2019 Urban Transformations*. <https://www.ura.gov.sg/Corporate/Planning/Master-Plan/Master-Plan-2019/Urban-Transformations/Rail-Corridor>

Atlanta's Beltline is a large-scale urban redevelopment project converting 35km of former railway into a multifunctional network of trails and parks (Box 1.8). The corridor links residential neighbourhoods, commercial hubs, and parks across the city, physically reconnecting historical disinvested areas. Key features include continuous walking and cycling paths, public art installations, and adaptive reuse of former industrial spaces. The BeltLine is celebrated for catalysing green urban redevelopment, encouraging new investment and economic activity. However, the rapid rise in property values around the trail has outpaced the delivery of affordable housing, intensifying concerns about displacement and "green

22 Urban Redevelopment Authority. (2025, June 6). *Rail Corridor – URA Master Plan 2019 Urban Transformations*. <https://www.ura.gov.sg/Corporate/Planning/Master-Plan/Master-Plan-2019/Urban-Transformations/Rail-Corridor>

gentrification”, a process where environmental improvements make neighbourhoods less affordable for existing residents.²³

Box 1.8 BeltLine, Atlanta, United States

Atlanta’s BeltLine is a large-scale urban redevelopment, transforming 35km of rail corridor into a multi-use trail network, linking housing and commercial nodes. The project reclaims former rail lines as a citywide network of continuous trails, designed for walking, running, and cycling, and provides direct links between neighbourhoods, parks, transit, housing, and commercial hubs. Beyond active transport, the BeltLine weaves together public art installations, parks, and gathering spaces, aiming to create not just a mobility corridor, but a space for community life, recreation and economic revitalisation. However, the BeltLine has accelerated property value increases and redevelopment in adjacent neighbourhoods, while the delivery of affordable housing is falling behind original goals. This dynamic has intensified gentrification and raised concerns that lower-income residents are being displaced as the area becomes less affordable.



Source: Immergluck, D., & Balan, T. (2017). Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta BeltLine. *Urban Geography*, 39(4), 546–562. <https://doi.org/10.1080/02723638.2017.1360041>; Immergluck, D. (2023, January 25). Atlanta’s BeltLine shows how urban parks can drive ‘green gentrification’ if cities don’t think about affordable housing at the start. Urban Institute. <https://urbaninstitute.gsu.edu/2023/01/25/atlantas-beltline-shows-how-urban-parks-can-drive-green-gentrification-if-cities-dont-think-about-affordable-housing-at-the-start/>; Southern Living (n.d.). *16 Things To Eat And Do On Atlanta’s BeltLine*. <https://www.southernliving.com/travel/georgia/atlanta-beltline>

In Chicago, the 606 overlays former rail infrastructure with a 4.3km greenway designed for physical activity and recreation (Box 1.9). The trail consists of an uninterrupted, elevated path for walking, running, and cycling, with ramp and stair access connecting adjacent neighbourhoods. The greenway runs through diverse urban communities, connecting schools, parks, and commercial nodes along its route. Its core functions include promoting active mobility and recreation, providing public art and community gathering spaces.²⁴ The trail has been linked with reductions in violent and property crime, particularly in lower-income areas, suggesting a role in improving neighbourhood safety.²⁵

23 Immergluck, D., & Balan, T. (2017). Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta BeltLine. *Urban Geography*, 39(4), 546–562. <https://doi.org/10.1080/02723638.2017.1360041>

24 The 606. (n.d.). *The 606 – Chicago’s Trail*. <https://www.the606.org/>

25 Harris, B., Larson, L., & Ogletree, S. (2017). Different views from The 606: Examining the impacts

Box 1.9 The 606, Chicago, United States

The 606, opened in 2015, overlays a disused railway in Chicago with a 4.3km multifunctional greenway designed for physical activity and recreation. The project transforms a stretch of elevated freight rail into a continuous off-road route, enabling safe, uninterrupted walking, running, and cycling across multiple neighbourhoods. The development of this greenway is associated with a significant reduction in violent, property, and disorderly crime rates in lower-income neighbourhoods adjacent to the trail post-construction. However, it has also been linked to rising property values and displacement pressures, as higher-income residents have moved into areas near the trail, intensifying concerns about gentrification and equitable access.



Source: Harris, B., Larson, L., & Ogletree, S. (2017). Different views from The 606: Examining the impacts of an urban greenway on crime in Chicago. *Environment and Behavior*, 50(1), 1–30. <https://doi.org/10.1177/0013916517690197>; American Planning Association. (2016, April 4). *The 606 – Taking Chicago’s legacy of great parks to new heights [National Planning Excellence Award for Urban Design]*. American Planning Association.

The Gyeongui Line Forest Park in Seoul, South Korea, is a 6.4km ground-level linear park that repurposes the former Gyeongui railway corridor (Box 1.10). The park runs through urban neighbourhoods and commercial districts, reconnecting areas once separated by rail infrastructure. The development has increased foot traffic and youth-oriented recreational activity but also contributed to significant rises in housing prices within 600m of the park. These changes have resulted in the erosion of neighbourhood identity and the displacement of lower-income retailers due to rising rents and commercial pressures.²⁶

of an urban greenway on crime in Chicago. *Environment and Behavior*, 50(1), 1–30. <https://doi.org/10.1177/0013916517690197>

26 Cho, W., Kim, M., Kim, H., & Kwon, Y. (2020). Transforming Housing to Commercial Use: A Case Study on Commercial Gentrification in Yeon-nam District, Seoul. *Sustainability*, 12(10), 4322. <https://doi.org/10.3390/su12104322>; Dai, W. A., & Lee, J. Y. (2023). Implications of Renovated Buildings in Yeonnam-Dong, Seoul, an Area under Commercial Gentrification. *Sustainability*, 15, 1960. <https://doi.org/10.3390/su15031960>

Box 1.10 Gyeongui Line Forest Park, Seoul, South Korea

Gyeongui Line Forest Park is a prominent linear park extending from the Mapo district to the Yongsan district in Seoul, South Korea. The park is strategically aligned with seven Seoul Metropolitan subway stations, including five situated along the Gyeongui-Jungang Line, which runs underground beneath the park.

In response to the deterioration of disused railway infrastructure and growing commuter demand, a multi-agency agreement was established in mid-2000s. Key stakeholders—including the Seoul Metropolitan Government, Korea Railroad Authority, Ministry of Land, Infrastructure and Transport, and the Mapo-gu Office—collaborated to construct an underground electric double-track subway line in 2006 and to transform the ground area into a public park in 2007. Guided by the vision of creating a “fascinating place where citizens want to go as a path of humans and nature”, the park was developed in multiple phases between 2011 and 2016.

Since its completion, Gyeongui Line Forest Park has emerged as a vibrant public space, attracting both residents and tourists. It features continuous walking and cycling paths, landscaped gardens, public plazas, and integrated amenities such as cafés, markets, and event spaces. Its multifunctional design supports recreation, active mobility, urban ecological enhancement, and local economic revitalisation though there are rising concerns of green gentrification and displacement of lower-income retailers from the area.



Source: Seoul's Mountains and Parks. (2016). *Gyeongui Line Forest Park*. https://parks.seoul.go.kr/maps/gyeongui/gyeongui_map_ENG.pdf; Seoul Metropolitan Government. (2022). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>. LUCI Association. (2016). *Annual Report 2016*. <https://www.luciassociation.org/winners-2022/>. Seoul Metropolitan Government. (2022). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>

1.2. Defining Placekeeping

Placekeeping aims to complement placemaking; it encompasses a process of transforming space into place and engaging people who ascribe meaning and value to it by sustaining and enhancing the benefits of place for future generations,²⁷ and strengthening people–place connections. The need for placekeeping has grown in tandem with increasing global emphasis on sustainability, exemplified by the United Nations Sustainable Development

27 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20.

Goals.²⁸ The concept of placekeeping addresses the persistent gap in attention and resources needed for the long-term management of place, which has historically been overshadowed by the focus on placemaking.²⁹

The idea of placekeeping has evolved to include various urban contexts. Wild et al. (2008)³⁰ first coined the term “placekeeping” in response to the challenges of urban riverside management in Sheffield, UK. Specifically, that study aims to address the complex and fragmented ownership, which hinders effective and efficient management of urban rivers. Reflecting this context, Wild and colleagues defined placekeeping as “the long-term management and maintenance of high-quality environments”, proposing that establishing partnership organisations—encompassing government, private, and community stakeholders—can facilitate effective placekeeping. Dempsey and Burton (2012)³¹ further expanded the definition by adding a long-term perspective, conceptualising placekeeping as an approach to ensure that the social, economic, and environmental benefits of a place are “enjoyed by future generations”. To extend the scope of placekeeping from large-scale blue and green infrastructure to multiple scales—including site, neighbourhood, city, and region—they also identified six interrelated dimensions: maintenance, partnership, governance, policy, investment, and evaluation.

Although numerous viewpoints describe the relationship between placemaking and placekeeping, the prevailing perspective conceptualises them as two components of a continuous, dynamic process.³² From this viewpoint, placekeeping supports and enhances the outcomes of placemaking, cultivating a sustainable, high-quality environment that local communities value and frequently visit.³³ It is important to note that the notions of “high-quality”, “sustainability”, and “value” are context-dependent, shaped by the specific circumstances in which placekeeping is practised. This implies that each place entails different uses and users, each of which comes with distinct requirements³⁴ (Box 1.11).

28 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20.; United Nations. (2015). *Global Sustainable Development Report 2015*. <https://sdgs.un.org/publications/global-sustainable-development-report-2015-advance-unedited-version-gsdr-2015-17874>

29 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20.

30 Wild, T. C., Ogden, S., & Lerner, D. N. (2008, September). An innovative partnership response to the management of urban river corridors: Sheffield’s River Stewardship Company. In *11th International Conference on Urban Drainage*, 31.

31 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20.

32 Dempsey, N., & Smith, H. (2014). Understanding place-keeping of open space. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 13–29). Routledge.

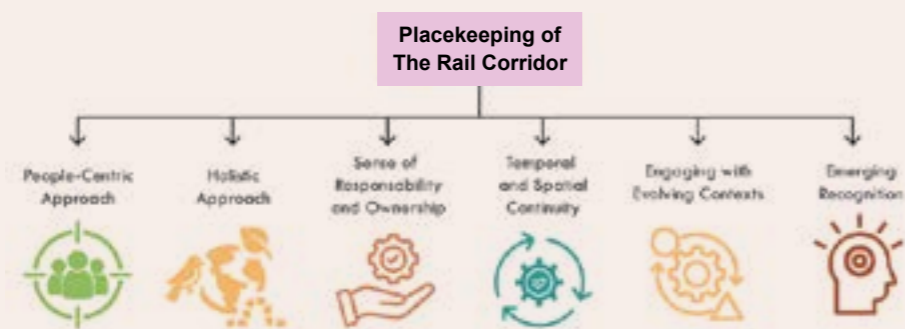
33 Dempsey, N., & Smith, H. (2014). Understanding place-keeping of open space. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 13–29). Routledge.

34 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20.; Dempsey, N., & Smith, H. (2014). Understanding place-keeping of open space. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 13–29). Routledge.

Box 1.11 Placekeeping in the context of Rail Corridor, Singapore

The Placekeeping of Rail Corridor study identified six key characteristics of placekeeping, grounded in insights shared by key informants from the public, private, and community sectors involved in developing and managing the Rail Corridor in Singapore (N=10). These characteristics include:

- **People-Centric Approach** emphasises continuous active engagement of the community from the design and planning stages through to the management process to address communities' interests and needs, and to ensure the space is accessible to them.
- **Holistic Approach** extends beyond a people-centric focus by incorporating ecological considerations and recognising the needs of animals and other living organisms. Placekeeping thus creates spaces that serve both social and ecological functions, supporting community resilience and biodiversity.
- **Sense of Responsibility and Ownership** highlights the need to cultivate stewardship among those involved in placekeeping. As stewardship encourages sustained engagement with a space and contributes to its identity as a meaningful place, it can serve as a key indicator of success.
- **Temporal and Spatial Continuity** underscore placekeeping as a long-term, evolving process shaped by ongoing multi-stakeholder collaboration and the physically expansive nature of the Rail Corridor, which spans diverse geographies and adjacent communities.
- **Engaging with Evolving Contexts** highlights the importance of context-sensitivity in embracing organic interactions with the place. It helps avoid over-programming that can displace everyday vernacular use, allowing placekeeping to remain flexible and responsive to changing needs.
- **Emerging Recognition** highlights the limited awareness and early-stage development of placekeeping in Singapore, underscoring the need for greater conceptual clarity, awareness-building, and knowledge exchange to integrate it into mainstream urban planning discourse and policy.



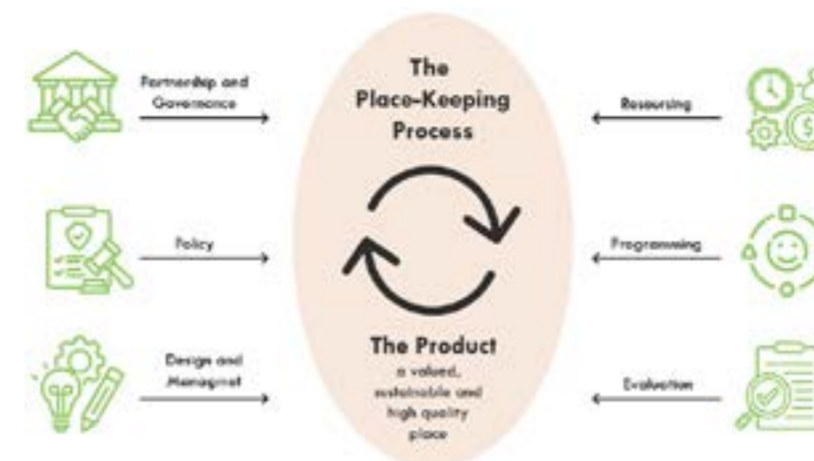
Source: Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)

1.3. Key Dimensions of Placekeeping

Scholars have identified six interrelated dimensions of placekeeping: governance, partnership, policy, finance, design and management, and evaluation.³⁵ A growing body of empirical research has employed this framework to analyse placekeeping initiatives in diverse contexts, ranging from European countries to Singapore. These studies have generated both theoretical insights and practical lessons, highlighting, for instance, the importance of adaptive capacity in sustaining community engagement; the crucial role of government actors in facilitating community-led initiatives and ensuring financial viability; the need to balance community autonomy with appropriate government involvement; and the value of mosaic governance in coordinating stakeholders with varied motivations and interests across sectors.³⁶

In this playbook, we adapt these dimensions to distil key considerations for the adaptive reuse of abandoned railway infrastructure into community spaces (Figure 1.1). Each dimension is summarised below and further illustrated with international case studies in the chapters to follow.

Figure 1.1. Six Interrelated Dimensions of Placekeeping



Source: Adapted from Dempsey and Burton (2012)³⁷

35 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20.; Dempsey, N., & Smith, H. (2014). Understanding place-keeping of open space. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 13–29). Routledge.

36 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62.; Dempsey, N., Burton, M., & Duncan, R. (2016). Evaluating the effectiveness of a cross-sector partnership for green space management: The case of Southey Owlerton, Sheffield, UK. *Urban Forestry & Urban Greening*, 15, 155–164.; Gopalakrishnan, S., & Chong, K. H. (2020). The prospect of community-led place-keeping as urban commons in public residential estates in Singapore. *Built Environment*, 46(1), 115–138.; Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136.; Mattijssen, T. J. M., Van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping?. *Urban Forestry & Urban Greening*, 26, 78–84.

37 Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces.

- **Partnership and Governance:** Departing from traditional top-down governance and partnership models, placekeeping involves an increasingly diverse range of actors. A key principle in the choice of decision-making processes and partnership arrangements is to reflect local contexts, and the specific configurations of actors involved, including their resources, expertise, and interests. In repurposing disused railway infrastructure, various governance models have been employed, ranging from collaborative governance and government-led approaches to community-led initiatives and mosaic governance.
- **Policy:** Clear and comprehensive policies are essential for creating and sustaining high-quality built environments. Policies articulate the overarching vision for adaptive reuse and community spaces, specifying how they are planned, designed, governed, maintained, and financed. Local and national frameworks—such as master plans, environmental legislation, and biodiversity strategies—provide the regulatory basis for this process. Although government actors typically lead policy development and implementation, a key principle for effective policy process is to incorporate the perspectives and contributions of private and community stakeholders.
- **Design and Management:** Design and management are interrelated aspects of placekeeping as certain design decisions—such as the choice of landscapes and built environment features—significantly influence how a space is managed over time. This dimension underscores the importance of an integrated and holistic approach that connects design and planning with maintenance and management and fosters collaboration among the stakeholders involved in these processes to develop a shared understanding.
- **Resourcing:** Resources encompass various forms of support essential for the long-term stewardship of a place. These may include financial capital, manpower, tools and equipment, knowledge and expertise, and networks of collaborators and stakeholders, all of which are required to carry out tasks ranging from daily maintenance to programme implementation. While government actors typically play a central role in resourcing placekeeping initiatives, community and private actors can also contribute by mobilising their own resources.
- **Programming:** The playbook treats programming as a standalone dimension, whereas in the original placekeeping framework, it is conceptualised as a subset interlinked with other dimensions. This distinction reflects the essential role programming plays in animating and enhancing built environments.³⁸ Programming is closely connected to governance and partnership, design and management, and resource mobilisation. Together, these dimensions support the implementation of a diverse range of programmes—ranging from one-off events to regular activities with varying objectives—by leveraging stakeholder expertise, available resources, and spatial design features. Effective programming can be guided by careful consideration of its purpose, arrangement, and contextual fit.
- **Evaluation:** Monitoring and evaluation are vital to determine whether a revitalised community space achieves its intended objectives. Systematic assessment can help mitigate unintended negative impacts on surrounding communities such as gentrification, displacement, and loss of heritage. The scope of evaluation extends beyond tangible aspects such as physical attributes, to include intangible considerations such as visitors' attitude and satisfaction, their sense of attachment to the place, and broader social, ecological, and economic impacts. A key principle in the evaluation and monitoring is to align with the overarching vision for the adaptive reuse project and the priorities of relevant stakeholders, guiding the selection of suitable indicators and methodologies.

Urban Forestry & Urban Greening, 11(1), 11–20.

³⁸ Glover, T. D. (2019). The transformative (and potentially discriminatory) possibilities of animating public space. *World Leisure Journal*, 61(2), 144-156.



Chapter 2

Partnership and Governance

The adaptive reuse of disused railway infrastructure has been carried out through a spectrum of governance models, including collaborative, government-led, and community-led, each shaping how projects are envisioned, implemented, and sustained over time (Table 2.1). These models influence the degree of stakeholder involvement, the distribution of decision-making power, and the types of partnerships formed throughout the placekeeping process. By comparing these approaches, it becomes clear that governance models deeply shape the social, spatial, and ecological outcomes of disused railway park transformations.

Table 2.1. Disused Railway Case Studies

| Features | Djerring Trail | Gyeongui Line Forest Park | Rail Corridor | Promenade Plantée | The High Line |
|--|---|--|---|---|--|
| City | Melbourne | Seoul | Singapore | Paris | New York |
| Governance model | Collaborative | Collaborative | Collaborative | Government-led | Community-led |
| Collaborative mechanism in design and planning | Community engagement staff; local councils developed separate design frameworks | Government-led public consultation in phase two | Proposal by civil society to conserve railway lands; government-led public consultation | Indirect input from residents, public-private partnership through Semaest | Ideas competition, FHL collaborated with government on design |
| Collaborative mechanism over long-term | None/unknown | Community Council oversees maintenance | FORC as advisory group, NParks-led maintenance | None/unknown | FHL-led maintenance, programming |
| Strengths | Continuous community engagement | Integrated community engagement after learning from initial phase | Established long-term collaborative mechanism | Strong government involvement | Initiated the 2011 listening initiative to improve engagement and communication with residents |
| Limitations | Lacking a long-term collaborative mechanism | Lack of integration with existing community-led placekeeping efforts | Lack of integration with existing community-led placekeeping efforts | Lack of community engagement | Failure to meaningfully address concerns like gentrification |

2.1. Collaborative Governance Model

This approach engages multiple stakeholders, including government, businesses, community groups, the public or experts, to combine their strengths.³⁹ They may participate at any point in the placekeeping process, from early planning to implementation and assessment.

39 Nearing, C., Kato, Y., & Yuen, B. (2024). *A Systematic Scoping Review of Placekeeping in Singapore and the Rail Corridor*. (Unpublished technical report)

Although collaboration can improve outcomes through shared knowledge and resources, it can be challenging to align differing interests and responsibilities. For instance, government actors may prioritise regulatory compliance and visitor safety, private sector stakeholders may pursue profit-oriented objectives, while community actors often seek autonomy to enable more flexible and context-sensitive uses of space.

Djerring Trail, Melbourne

The Djerring Trail in Melbourne exemplifies collaborative governance in the adaptive reuse of railway infrastructure, particularly during the planning and design stages. Developed under the Caulfield to Dandenong Level Crossing Removal Project—part of Victoria’s broader infrastructure strategy—the initiative was led by the state government, with strong coordination among local councils, design consultants, and community stakeholders.⁴⁰

From the outset, the visioning process was collaborative. Rather than imposing a fixed design, the project team worked with local authorities and residents to develop tailored design frameworks for each station and surrounding area. A dedicated community engagement lead from the design team helped facilitate dialogue, ensuring that local perspectives influenced the shaping of the trail. Urban design frameworks were co-developed with local councils to ensure that upgrades to stations and surrounding areas reflected local needs. Community concerns, particularly around the safety and aesthetics of elevated rail, were taken seriously, resulting in thoughtful public realm improvements including seating, lighting, and shared cycling and pedestrian paths.⁴¹

Spanning 17km and linking 13 stations, the final outcome included an 8.4-km elevated line integrated with over 22 hectares of new open space.⁴² The trail features walking and cycling paths, recreational zones, and landscape elements such as rain gardens and wetlands. Public amenities reflect the specific needs and identities of surrounding communities, shaped through input gathered during planning and design stages.

Gyeongui Line Forest Park, Seoul

The Gyeongui Line Forest Park in Seoul illustrates the collaborative design and management of disused railway infrastructure and demonstrates how collaborative governance can evolve throughout a project’s lifecycle. The initial plan for the lightly used railway in 1990s was to build a new line but residents were opposed to this.⁴³ This led to a new plan to reroute the train underground and create a linear park to support revitalisation of the surrounding neighbourhoods.⁴⁴

The park was developed in two phases. Phase 1 was government-led with minimal public input, limited to a survey (questionnaire) and one hearing.⁴⁵ Under Mayor Park Won-Soon,

40 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, 163, 26–33.

41 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, 163, 26–33.

42 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, 163, 26–33.

43 Jung, E., Choi, Y., & Yoon, H. (2016). The impact of the Gyeongui Line Park project on residential property values in Seoul, Korea. *Habitat International*, 58, 108–117.

44 Jung, E., Choi, Y., & Yoon, H. (2016). The impact of the Gyeongui Line Park project on residential property values in Seoul, Korea. *Habitat International*, 58, 108–117

45 Centre for Liveable Cities. (2017). *Planning for Communities: Lessons from Seoul and Singapore*. <https://>

Phase 2 introduced broader community engagement, leading to key design changes: more open spaces with minimal facilities to allow flexible use, better integration with surrounding areas through improved access, and enhanced ecological and historical features reflecting the site's railway heritage.⁴⁶

Following the park's completion, the Seoul Metropolitan Government established the Gyeongui Line Forest Park Council, a public-private management body, comprising a civic council and four local councils.⁴⁷ Co-led by a park official and a resident, the councils include city officials, experts, and community representatives. The council focuses on citizen-driven projects and addresses issues from increased park use such as littering, noise, and damage to facilities through initiatives, including etiquette campaigns, educational eco-tours, and community activities involving recycling, traffic safety, and conflict resolution.

While the Gyeongui Line Forest Park is often seen as a successful example of collaborative governance involving government agencies, experts, and local communities, the Always Market episode reveals important limitations.⁴⁸ Always Market, a popular space for citizen-led activities and interaction, was organised by the Always Market Cooperative (AMC) and operated successfully for two years. With plans to redevelop the adjacent site into a 20-storey office and commercial building, the local government entered into an agreement with AMC to use the site from 2013 to 2015.⁴⁹ After the agreement ended, the group renamed itself Citizen's Action for Gyeongui Railway Commons (CAGRC) and continued to occupy the site, hosting a range of activities including discussions, outdoor food gatherings, flea markets, yoga sessions, podcasts, and a newsletter. Despite its success, the local district office abruptly terminated the group's use of the site without meaningful dialogue or the offer of an alternative location. This incident exposed unequal power relations and a lack of communication, highlighting the need for clearer processes, mutual accountability, and stronger safeguards for citizen initiatives within collaborative governance frameworks.

The Rail Corridor, Singapore

The Rail Corridor in Singapore is a 24km public recreational space that exemplifies a collaborative governance approach in its planning and ongoing placekeeping. It reflects efforts by multiple stakeholders, government agencies, NGOs, experts, and residents, to shape its development.

The collaborative process between the government and the public first took place between 2011 and 2016 with the Urban Redevelopment Authority (URA) undertaking one

of Singapore's most extensive public consultations to date. To understand and meet the needs of the community, a wide range of engagement avenues and formats were used, including guided walks, exhibitions, and workshops; the government invited a diverse range of people, including students, residents, experts, to participate in shaping the future of the Rail Corridor.⁵⁰ Since 2017, agency leadership of the Rail Corridor shifted to the National Parks Board (NParks), marking the second phase of public engagement. NParks organised exhibitions to inform residents of upcoming developments and maintenance works, using these platforms to gather public feedback and to increase transparency, ensuring that residents and stakeholders were informed throughout.⁵¹

Community involvement in the Rail Corridor had been a defining feature of the Rail Corridor, even predating government plans. In 2010, Nature Society Singapore (NSS), an environmental NGO run by volunteers, and their collaborators launched the Green Corridor Proposal, advocating for the conservation of the railway lands.⁵² The campaign by NSS garnered strong public support and helped catalyse institutional action. Initially, a fully independent initiative known as Friends of Green Corridor, the group evolved through several iterations before becoming Friends of the Rail Corridor (FORC) in 2017, a formalised collaboration between civic actors and the government.

Today, NGOs remain involved in the long-term placekeeping of the Rail Corridor. For instance, the NSS launched the Rewilding Rail Corridor initiative in 2023, focusing on involving the public in the ecological restoration of the Kranji area.⁵³ Collaborative governance strengthens placekeeping by leveraging the different strengths of government agencies, civil society, and experts. In the case of the Rail Corridor, collaboration has enabled long-term sustainability through institutional backing such as land access, funding, and technical expertise provided by agencies like the URA and NParks. These partnerships facilitate the implementation of key initiatives, including the Rewilding Programme and community node development, while platforms like FORC ensured some continuity in civil society engagement.

However, the model also reveals limitations: though collaboration enhances legitimacy and resource access, it often stops short of genuine power-sharing. FORC, for instance, operates mainly as an advisory body with limited influence over land use decisions or design outcomes. The NSS has formalised its partnership through a restrictive contractual agreement that curtailed its autonomy over site selection and species planting, reflecting the enduring power imbalances between civil society and the government. While collaborative governance promises inclusivity, it can reproduce hierarchical dynamics unless there are deliberate mechanisms that support the redistribution of power.

knowledgehub.clc.gov.sg/publications-library/planning-for-communities-lessons-from-seoul-and-singapore

46 Kim, S.S., Lee, K.Y., Lim, J., & Ha, T. (2020). Seoul, Republic of Korea: Rejuvenating neighbourhoods by creatively repurposing urban infrastructure and buildings. In J. K. Kaw, H. Lee, & S. Wahba (Eds.), *The hidden wealth of cities: Creating, financing, and managing public spaces* (pp.321-348). World Bank Publications.

47 Centre for Liveable Cities. (2017). *Planning for Communities: Lessons from Seoul and Singapore*. <https://knowledgehub.clc.gov.sg/publications-library/planning-for-communities-lessons-from-seoul-and-singapore>

48 Centre for Liveable Cities. (2017). *Planning for Communities: Lessons from Seoul and Singapore*. <https://knowledgehub.clc.gov.sg/publications-library/planning-for-communities-lessons-from-seoul-and-singapore>

49 Park, I. K., Shin, J., & Kim, J. E. (2020). Urban Commons as a Haven for the Excluded: An Experience of Creating a Commons in Seoul, South Korea. *International Journal of the Commons*, 14(1). <https://doi.org/10.5334/ijc.1038>

50 Tan, S. N. (2018). Co-creating the Rail Corridor's Future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/>

51 Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)

52 Peng, M. L. K., Hon, M. T. W., Keang, M. T. Y., Chan, M. J., Min, G., Lum, S., Hall, M. M., Chew, H. H., Owyong, M. A., & Seow, M. G. (2010). *The Green Corridor: A proposal to keep the railway lands as a continuous green corridor*. Nature Society (Singapore).

53 Nature Society Singapore. (n.d.). *NSS Rewilding – Nature Society Singapore*. <https://www.nss.org.sg/nss-rewilding/>

Elsewhere, others have implemented collaborative governance through, e.g., lease-based stewardship model in Milan and Berlin, or community land trusts (CLT) in the United States, Canada, and United Kingdom. In Milan's Boscoincittà, long-term leases supported by modest municipal funding have enabled a non-profit organisation to manage a large public park while coordinating with the city.⁵⁴ In Berlin's Volkspark Lichtenrade, annual management contracts and flexible agreements support volunteer-led stewardship without requiring land ownership.⁵⁵ Similarly, CLT serves as a mechanism for removing land from speculative markets, preventing gentrification, and allowing local stewards to adapt the space to community needs.⁵⁶ Through lease, donation, or below-market sale, governments can transfer land to CLT to support inclusive, community-led placekeeping. Long-term tenure security encourages communities to invest time and resources in improvements, knowing their efforts will be preserved for future generations.

2.2. Government-led Governance Model

The government takes the lead in decision-making, funding, and management of public space, often without much input from others.⁵⁷ While effective in mobilising resources, the public spaces may not be as responsive to the local context and the needs of residents.

Promenade Plantée, Paris

The government-led approach is well illustrated by the Promenade Plantée, a 4.7km linear green space in Paris, where the state played a dominant role in both planning and implementation with limited public involvement. The project emerged in the early 1980s as part of a broader effort by the City of Paris to redevelop its eastern districts through the Plan-programme Est de Paris, a major urban renewal initiative.⁵⁸ The urban renewal programme was driven by Mayor Jacques Chirac's administration and executed through Société d'économie mixte d'aménagement de l'Est Parisien (Semaest), a semi-public development agency established in 1983 to manage redevelopment and facilitate public-private partnerships.⁵⁹

Planning authority is vested with the Atelier Parisien d'Urbanisme (APUR), the municipal

planning office responsible for shaping the master plan, land use regulation, and zoning.⁶⁰ Through tools such as zones d'aménagement concerté (ZACs), the city leveraged public investment and zoning flexibility to attract private capital and reshape the urban fabric. While the reuse of the disused Bastille–Vincennes railway was ultimately integrated into the plan, it was driven by planners and political elites rather than by a community-led initiative.

While initially shaped by technocratic priorities, citizen concerns in the 12th arrondissement over the lack of green space eventually influenced the city's decision to repurpose the former Bastille–Vincennes railway line into a public park.⁶¹ Studies conducted by APUR in the late 1970s and early 1980s identified this area as the most deficient in green space citywide, prompting a strategic pivot to preserve the viaduct rather than demolish it.⁶² The project introduced the Viaduc des Arts, a curated series of artisan workshops beneath the viaduct's 72 vaults, rehabilitated between 1990 and 1996. Semaest continues to manage these vaults, leasing them under strict conditions that prioritise established artisans and maintaining the space as an arts and heritage hub.⁶³

Today, the Promenade Plantée is managed by the Paris Council, the deliberative assembly of the City of Paris.⁶⁴ They are responsible for the regulation of the space, setting guidelines for park users and employing surveillance officers to maintain order.⁶⁵ Semaest has established and continues to play a key role in managing the Viaduc des Arts, situated beneath the Promenade Plantée, through acquiring and leasing abandoned shops and spaces (Box 2.1).⁶⁶

Government-led governance offers clear advantages in terms of resource mobilisation, regulatory power, and large-scale planning ability. In the case of the Promenade Plantée in Paris, the state played a decisive role in transforming the disused Bastille–Vincennes railway into a linear park as part of a broader urban renewal strategy for Eastern Paris. Tools such as the ZAC enabled planners to strategically deploy zoning flexibility and public investment to attract private capital. However, the top-down nature of this governance model also introduced limitations. While the decision to preserve the viaduct was partially informed by studies showing a green space deficit in the 12th arrondissement, public involvement was limited to indirect influence rather than formal consultation. Community members were not engaged as co-creators in either the design or governance of the park, leading to criticisms

54 Mattijssen, T. J. M., Jagt, S. van der, Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry and Urban Greening*, 26, 78–84. <https://doi.org/10.1016/j.ufug.2017.05.015>

55 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62.

56 Bunce, S., & Aslam, F. C. (2016). Land trusts and the protection and stewardship of land in Canada: Exploring non-governmental land trust practices and the role of urban community land trusts. *Canadian Journal of Urban Research*, 25(2), 23–34.

57 Nearing, C., Kato, Y., & Yuen, B. (2024). *A Systematic Scoping Review of Placekeeping in Singapore and the Rail Corridor*. (Unpublished technical report)

58 Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280–291.

59 SEMAEST (n.d.). *Nos missions*. <https://www.semaest.fr/la-semaest/semaest-description/nos-missions>; C40 Cities. (2021). *Reinventing Retail to foster green & thriving neighbourhoods*. https://www.c40reinventingcities.org/data/knowledge_0bb42/fiche/292/reinventing_retail_c40_webinar_presentation_0ba22.pdf

60 Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280–291.

61 Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280–291.

62 Ben Ghida, D. (2024). Revitalizing urban spaces: Ten key lessons from the “Viaduc des arts” adaptive reuse and placemaking. *Frontiers of Architectural Research*, 13(5), 1095–1112. <https://doi.org/10.1016/j.foar.2024.03.011>

63 Ben Ghida, D. (2024). Revitalizing urban spaces: Ten key lessons from the “Viaduc des arts” adaptive reuse and placemaking. *Frontiers of Architectural Research*, 13(5), 1095–1112. <https://doi.org/10.1016/j.foar.2024.03.011>

64 Conseil de Paris (n.d.). *Conseil de Paris*. <https://www.paris.fr/le-conseil-de-paris>

65 City of Paris. (2018). *Réglementation générale des parcs, jardins et espaces verts de la Ville de Paris*. <https://cdn.paris.fr/paris/2019/07/24/1094dc2227da266ccbe6f8648a8e3b3d.pdf>; City of Paris (n.d.). *Parcs, jardins, squares et espaces verts*. <https://www.paris.fr/pages/espaces-verts-139>

66 Urbact (n.d.). *Social media to strengthen local commerce: The case of the Semaest in Paris*. <https://urbact.eu/articles/social-media-strengthen-local-commerce-case-semaest-paris>

Box 2.1 Semaest and Public–Private Collaboration in Viaduc des Arts, Promenade Plantée, Paris, France

Semaest is a semi-public development agency set up in 1983 by the City of Paris to support urban redevelopment and promote public-private partnerships. Its broader role includes revitalising commercial areas, supporting traditional trades, and managing regeneration projects.

The agency works to improve quality of life in Paris by acquiring, renovating, and managing commercial units on behalf of the city. It also handles the marketing and leasing of these spaces, working with both private landlords and municipal authorities. At the Viaduc des Arts along the Promenade Plantée, Semaest helped transform the vaulted spaces under the former railway into a stretch of artisan workshops and shops.

Semaest is also responsible for preserving and promoting traditional artisanal crafts, ensuring that the Viaduc des Arts serves not only as a retail destination but also as a cultural and heritage corridor. While the redevelopment brought improved amenities, it also raised property values and changed the district's social mix.

Source: The Viaduc des Arts. (2022). *Viaduc des Arts*. <https://www.leviaducdesarts.com/en/the-viaduc-des-arts>; Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280-291.

of it as a bourgeois park,⁶⁷ a place that reflects the interests of the upper classes rather than the broader public.

2.3. Community-led Governance Model

Community-led governance occurs when local communities take charge of placekeeping with limited outside involvement.⁶⁸ This approach fosters strong ownership and responsiveness to local needs but often faces challenges in sustaining efforts over time due to limited resources and technical capacity.

The High Line, New York

The High Line is a 2.3km elevated green public space, established in 2009, in New York City, USA. The project emerged amidst broader efforts to revitalise underutilised industrial infrastructure in West Chelsea and to support the area's growing identity as an art and cultural district.⁶⁹ The High Line is owned by the City of New York, following its donation in

2005 by CSX Transportation, the previous railway operator.⁷⁰ While under the jurisdiction of the New York City Department of Parks and Recreation, it is maintained and operated by the Friends of the High Line (FHL) through a license agreement. The High Line embodies a prominent community-led model, in which the FHL plays a central role in advocating for the transformation of the disused railway infrastructure into a linear park, and in its ongoing management.⁷¹ The FHL is also in charge of the financing and programming of the High Line.⁷² The FHL was founded in 1999 by local residents, Robert Hammond and Joshua David who were professionals with access to financial and political networks.⁷³

Although community-led, the High Line's development was significantly shaped by local government. The New York Department of City Planning established a special zoning district and floor area transfer mechanism, which introduced innovative land use and design regulation.⁷⁴ These policies led to intensive development around the park, resulting in a mix of uses and architecturally prominent buildings. The park design was led by James Corner Field Operations and Diller Scofidio + Renfro, in collaboration with FHL with some community input.⁷⁵

Beyond infrastructure development, the High Line has pursued various programming efforts. An early example was the 2003 Ideas Competition, which invited submissions from the public and international designers.⁷⁶ Today, the FHL continues to involve local communities in its placekeeping efforts. Volunteers can participate in gardening tasks such as spring trimming, watering, and weeding, or help engage visitors through walking tours, greeter roles, and ambassador programmes.⁷⁷ A range of initiatives also support residents through paid job opportunities for youth, wellness activities for older adults, and partnerships with schools.⁷⁸

Despite extensive community-led efforts, the High Line has been widely criticised for contributing to gentrification. Researchers have pointed to the use of environmental branding to boost economic growth at the cost of ecological and social considerations.⁷⁹ Local residents have expressed concerns over the lack of affordable housing and limited

70 The High Line. (n.d.). FAQ. <https://www.thehighline.org/faq/>

71 Yamamoto, Y. (2019). Hai Rain to jentorifikēshon: Futari no seinen kara hajimatta keikan hozon [The High Line and gentrification: Landscape conservation initiated by two young men] [In Japanese]. In R. Yamazaki (Ed.), *BIOCITY: Shakai o kaeru kurieitibu sorūshonzu no genba* [BIOCITY: Creative solutions on the ground that change society] (pp. 42–43). Bookend.

72 The High Line. (n.d.). FAQ. <https://www.thehighline.org/faq/>

73 Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761.

74 Lee Kuan Yew World City Prize. (2019, November 8). *New York City – Innovative zoning tools in West Chelsea & High Line Plan*. <https://www.leekuaneyeworldcityprize.gov.sg/case-studies/west-chelsea-high-line-plan/>

75 The High Line. (n.d.). Design. <https://www.thehighline.org/design/>

76 The High Line. (n.d.). Design. <https://www.thehighline.org/design/>

77 The High Line. (n.d.). Volunteers. <https://www.thehighline.org/volunteers/>

78 The High Line. (n.d.). Programs. <https://www.thehighline.org/programs/>

79 Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761.

67 Heathcott, J. (2013). The Promenade Plantée: Politics, planning, and urban design in postindustrial Paris. *Journal of Planning Education and Research*, 33(3), 280-291.

68 Nearing, C., Kato, Y., & Yuen, B. (2024). *A Systematic Scoping Review of Placekeeping in Singapore and the Rail Corridor*. (Unpublished technical report)

69 Lee Kuan Yew World City Prize. (2019, November 8). *New York City – Innovative zoning tools in West Chelsea & High Line Plan*. <https://www.leekuaneyeworldcityprize.gov.sg/case-studies/west-chelsea-high-line-plan/>

recreational spaces for children.⁸⁰ The park is seen by some as an exclusionary space that promotes upscale development under the guise of urban greening.⁸¹

Early community engagement efforts have also been criticised for falling short in engaging certain groups in the community, including the 5000 low-income residents living in nearby public housing.⁸² The FHL became aware of the project's role in accelerating gentrification and responded by re-centring its mission on equity, inclusive programming, and community outreach.⁸³ In 2011, the FHL hired a community outreach coordinator to undertake a yearlong Listening initiative to rebuild trust and understand the needs of the public housing residents.⁸⁴ A survey conducted with 800 residents found that many were unfamiliar with the park, or knew about it but did not feel engaged with it.⁸⁵ Research from 2014 further supports this concern, showing that 83 percent of High Line visitors were White, a figure significantly above both city and borough averages and far less diverse than other comparable parks in Manhattan.⁸⁶

The challenges faced by the High Line highlight that creating an inclusive community space requires sustained engagement with local communities and ongoing monitoring of both the intended and unintended consequences of adaptive development. Achieving this typically requires consistent resources, an element that many grassroots initiatives struggle to secure.⁸⁷ The High Line, however, has raised its own funding from the beginning and illustrates how a community-led model can successfully achieve financial stability. From the onset, the FHL strategically framed its advocacy in economic terms by commissioning a feasibility study projecting significant tax revenues, enabling the group to persuade city officials and secure political support.⁸⁸

Today, it receives no public subsidy despite generating over US\$64 million in tax revenue

80 Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761.

81 Littke, H., Locke, R., & Haas, T. (2016). Taking the High Line: Elevated parks, transforming neighbourhoods, and the ever-changing relationship between the urban and nature. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 9(4), 353–371

82 Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761.

83 Davis, D. E., & Gray, S. F. (2019). Beyond appearances: Community activism and New York City's High Line. *Journal of Landscape Architecture*, 14(3), 74–81.

84 Sherman, D. (2017, March 1). High Line Magazine: Creating a More Equitable High Line. *The High Line*. <https://www.thehighline.org/blog/2017/03/01/high-line-magazine-creating-a-more-equitable-high-line/>

85 Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761.

86 Reichl, A. J. (2016). The High Line and the ideal of democratic public space. *Urban Geography*, 37(6), 904–925.

87 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62.; Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136.

88 Davis, D. E., & Gray, S. F. (2019). Beyond appearances: Community activism and New York City's High Line. *Journal of Landscape Architecture*, 14(3), 74–81.

Box 2.2 The High Line Listening Initiative, New York City (2011)

In 2011, Friends of the High Line (FHL) launched a yearlong Listening initiative to build stronger relationships with residents of the nearby Fulton and Elliott-Chelsea public housing complexes. This was in response to criticism that the FHL received for its role in High Line, in accelerating gentrification and falling short of engaging nearby low-income public housing residents.

Consultant Lisa Yancey led the initiative, which involved door-knocking and conversations with residents about their daily lives and perceptions of the High Line. A survey of 800 residents from the public housing complexes revealed that many were unfamiliar with the park, or aware of it but did not feel engaged. While many expressed interests in getting involved, they also shared feelings of exclusion. In response, the FHL introduced new programmes designed to engage this segment of the community including community events and a youth employment initiative.

One result of the listening is the High Line Fellows: Emerging Leaders Program, a paid opportunity for local youth aged 15 to 18, to serve as a “best first job”. Fellows receive mentorship, build professional networks, and can work up to 200 hours a year for up to three years. As of 2025, 30 young people were listed as Fellows on the official FHL website.



Source: Sherman, D. (2017, March 1). High Line Magazine: Creating a More Equitable High Line. *The High Line*. <https://www.thehighline.org/blog/2017/03/01/high-line-magazine-creating-a-more-equitable-high-line/>; Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761.; Davis, D. E., & Gray, S. F. (2019). Beyond appearances: Community activism and New York City's High Line. *Journal of Landscape Architecture*, 14(3), 74–81.; Friends of the High Line. (n.d.). Photos. <https://www.thehighline.org/photos-videos/>

annually, representing more than 10 percent of New York City's parks budget.⁸⁹ Instead, it relies on a diversified funding model that includes private philanthropy, corporate sponsorships, merchandise sales, events, and over 10,000 individual donors each year.⁹⁰ This self-sustaining model has enabled the FHL to maintain independence while also expanding inclusive programming and outreach, particularly in response to criticism that the park fuelled gentrification and excluded nearby low-income communities (Box 2.2). Importantly, the FHL has extended its community-led ethos through the creation of the High

89 Davis, D. E., & Gray, S. F. (2019). Beyond appearances: Community activism and New York City's High Line. *Journal of Landscape Architecture*, 14(3), 74–81.

90 The High Line. (n.d.). Corporate Support. <https://www.thehighline.org/programs/>; Davis, D. E., & Gray, S. F. (2019). Beyond appearances: Community activism and New York City's High Line. *Journal of Landscape Architecture*, 14(3), 74–81.

Line Network, a coalition that shares knowledge on equitable infrastructure reuse with peer projects worldwide. This illustrates how a community initiative can not only endure but also scale its influence internationally.

2.4. Mosaic Governance Model

Mosaic governance builds on the foundation of collaborative governance but goes further by recognising the complementary strengths and inherent limitations of both government-led and community-led approaches to placekeeping. In contexts where government takes the lead, it is important to embed meaningful community participation to ensure responsiveness to local needs and long-term stewardship. Conversely, in community-led settings, government involvement can offer technical support, policy alignment, and institutional continuity. Mosaic governance is grounded in the understanding that effective governance relies on shared responsibility, with diverse actors working together to sustain urban environments.

As seen in previous cases, each governance model brings unique capacities but also faces critical challenges. The government-led Promenade Plantée benefited from strong institutional control and regulatory tools like zoning overlays, yet its limited community involvement led to critiques of social exclusion and top-down planning. Conversely, the High Line's community-led governance enabled strong public engagement and financial independence, but required privileged access to political networks and had to respond reactively to concerns about gentrification and social exclusion. Collaborative models like the Rail Corridor and Seoul's Gyeongui Line Forest Park enabled broad-based partnerships, but often struggled with unequal power relations, fragmented agency coordination, and the lack of clear mechanisms for sharing authority.

Mosaic governance provides a framework to address these limitations. It offers a way to integrate bottom-up community knowledge with top-down institutional support, allowing for more resilient and inclusive forms of placekeeping. As Figure 2.1 illustrates, mosaic governance seeks to connect multi-actors and multi-scales to manage shared resources like urban green space. That is, under a mosaic governance model can be various partnerships with different levels of capacity and resources. While community groups are often deeply rooted in local knowledge and care, they may face limitations such as a lack of technical expertise, financial resources, and volunteer capacity. Their efforts can be highly localised, which can make it difficult to contribute to broader planning and environmental goals. Government agencies hold planning authority and resources but may be unable to build meaningful relationships with communities and lack knowledge about how to meet their needs. Mosaic governance addresses these limitations by linking grassroots initiatives with institutional frameworks, enabling local actions to contribute meaningfully to wider objectives. This can be accomplished through flexible, negotiated arrangements that can adapt to site-specific conditions and evolving needs.

Figure 2.1. Mosaic Governance Model Demonstrating Examples of Various Partnerships



Source: Adapted from Buijs et al. (2016)⁹¹

Mosaic governance is underpinned by clear 'rules of the game', formal and informal mechanisms that guide how different actors interact and make decisions (Box 2.3).⁹² These include legal tools such as co-management agreements, lease contracts, or land use regulations as well as informal norms such as mutual trust, shared values, and accountability. Effective green space governance requires structures that are responsive to local conditions, including variations in community capacity, spatial setting, and project goals. In Singapore, Gopalakrishnan and Chong (2020) propose a mosaic governance model in which community gardens in public housing estate are managed through flexible partnerships between government and community actors. Their study highlights how each garden can be differently organised and supported, shaped by local capabilities, site characteristics, and specific needs, underscoring the importance of context-sensitive governance.⁹³

91 Buijs, A. E., Mattijssen, T. J., Van der Jagt, A. P., Ambrose-Oji, B., Andersson, E., Elands, B. H., & Steen Møller, M. (2016). Active citizenship for urban green infrastructure: Fostering the diversity and dynamics of citizen contributions through mosaic governance. *Current Opinion in Environmental Sustainability*, 22, 1–6.

92 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62.

93 Gopalakrishnan, S., & Chong, K. H. (2020). The prospect of community-led place-keeping as urban commons in public residential estates in Singapore. *Built Environment*, 46(1), 115–138.

Box 2.3 Mosaic Governance in Boscoincittà, Milan, Italy

Formerly an abandoned agricultural area with a longstanding history as a wooded landscape, the 120-hectare Boscoincittà park has since 1974 been managed by non-profit organisation, Italia Nostra under a renewable lease contract with the local government of Milan. Originally a cultural association focused on protecting historical and architectural heritage, Italia Nostra has since the 1970s shifted to environmental advocacy in response to worsening ecological conditions in Milan.

Italia Nostra manages the park through a combination of formal and informal “rules of the game”. The lease contract offers a legal framework and long-term stability, while enabling flexible, community-led programming. Formal responsibilities are clearly defined: the municipality retains ownership of the land and provides funding, while Italia Nostra is responsible for daily operations and community engagement. The lease grants Italia Nostra authority to plan, maintain, and run programming in the park. Italia Nostra receives resources to support its work, while additional needs are met through private donations, sponsorships, and small-scale economic activities. Informal norms such as trust, volunteer commitment, and shared environmental values, sustain the collaboration. Together, these legal mechanisms and relational practices enable long-term placekeeping that is both accountable and responsive to local conditions.

Today, the park features woods, meadows, wetlands, waterways, and 200 vegetable gardens allocated to residents. In response to the COVID-19 pandemic, gardeners launched an initiative to donate a portion of their harvest to organisations supporting vulnerable families. Volunteers take part in regular seasonal activities such as cleaning, planting, renovating, and tending the gardens, fostering a sense of belonging and stewardship of the park.



Source: Buijs, A., Hansen, R., Van Der Jagt, S., Ambrose-Oji, B., Elands, B., Lorance Rall, E., Mattijssen, T., Pauleit, S., Runhaar, H., Stahl Olafsson, A., & Steen Møller, M. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62.; Fini, G. (2017). Boscoincittà: nature, agriculture, spaces of freedom. Dialogue with Silvio Anderloni about the construction of a peri-urban park. In A. Bruzzese & A. Lapenna (Eds.), *Linking Territories: Rurality, Landscape and Urban Borders* (pp.49-58). Planum.; Italia Nostra Urban Forestry Center. (2023). *Boscoincittà – Official Website Boscoincittà*. <https://www.boscoincitta.it/>

Operationalising mosaic governance often requires intermediary roles that can link sectors and scales of action. In the UK, for instance, local authorities like the City of Sheffield employ several green space managers who function as such contact points.⁹⁴ These managers facilitate coordination between community groups and government authorities in the management of urban green spaces. Additionally, they can act as brokers who strengthen collaborative networks by mobilising community members, connecting otherwise disconnected actors, and disseminating information and knowledge.⁹⁵ In New York, the Design Trust for Public Space (DTPS) serves as a prominent intermediary, coordinating public, private, and community actors to create vibrant public spaces such as Times Square and High Line (Box 2.4).⁹⁶

94 Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136.

95 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62. <https://doi.org/10.1016/j.ufug.2018.06.011>; Jasny, L., & Lubell, M. (2015). Two-mode brokerage in policy networks. *Social Networks*, 41, 36–47. <https://doi.org/10.1016/j.socnet.2014.10.002>; Brandenberger, L., Ingold, K., Fischer, M., Schläpfer, I., & Leifeld, P. (2022). Boundary spanning through engagement of policy actors in multiple issues. *Policy Studies Journal*, 50(1), 35–64. <https://doi.org/10.1111/psj.12404>

96 Yamamoto, Y. (2019). Hai Rain to jentorifikēshon: Futari no seinen kara hajimatta keikan hozon [The High Line and gentrification: Landscape conservation initiated by two young men] [In Japanese]. In R. Yamazaki (Ed.), *BIOCITY: Shakai o kaeru kurieitibu sorūshonzu no genba* [BIOCITY: Creative solutions on the ground that change society] (pp. 44–45). Bookend.

Box 2.4 Design Trust for Public Space: A Catalyst for Civic-Led Activation

The Design Trust for Public Space (DTPS) is a non-profit organisation with a mission to “unlock the potential” of public spaces in New York City by providing coordination support to government and community stakeholders. DTPS issues an annual public call for projects, inviting residents to propose ideas for public space improvements. Selected proposals receive a range of support, including capacity building for resident groups, connections to built environment professionals and relevant local authorities, development of detailed proposals, and assistance with funding applications for implementation.

Since 2000, DTPS has supported the founders of Friends of the High Line (FHL), most notably through their co-authored report, *Reclaiming the High Line*—a comprehensive feasibility study that evaluated reuse scenarios, including demolition, transit, commerce, and public open space. Conducted over 12 months, the study assessed the railway’s historical, physical, and policy context, ultimately demonstrating that adaptive reuse as a pedestrian-oriented greenway offered the greatest public value. It was instrumental in persuading the city to rescind the demolition order, enabling FHL to advance its vision. DTPS also supported application submissions, organised design and implementation competitions, convened public forums, and published summary documents to build broader public and political support. Many of the study’s recommendations were incorporated into the final design of the High Line.

Figure. Cover page of *Reclaiming the High Line* (left) and the High Line in the 1990s (right)



Source: Design Trust for Public Space. (n.d.). *Reclaiming the High Line 1999-2002*. How a derelict railway became open space. <https://www.designtrust.org/projects/reclaiming-high-line/>. Yamamoto, Y. (2019). Hai Rain to jentorifikeshon: Futari no seinen kara hajimatta keikan hozon [The High Line and gentrification: Landscape conservation initiated by two young men] [In Japanese]. In R. Yamazaki (Ed.), *BIOCITY: Shakai o kaeru kurieitibu sorūshonzu no genba* [BIOCITY: Creative solutions on the ground that change society] (pp. 44–45). Bookend.



Chapter 3

Policy

The adaptive reuse of rail corridors requires more than just spatial reconfiguration. It is shaped through thoughtful, inclusive, and evolving planning frameworks, collaboration and commitment to long-term community value. The successful transformation of abandoned railways into vibrant public spaces relies on a strong foundation of policy and visionary planning. These frameworks articulate overarching visions for adaptive reuse and community spaces, outlining how such spaces are to be planned, designed, governed, maintained, and financed. Policies at multiple levels influence the regulatory foundations that shape and sustain placekeeping efforts. These include global, national, and local policies such as United Nations Agenda 21, Sustainable Development Goals, national and city master plans, environmental regulations, and biodiversity strategies.⁹⁷ While government actors typically lead the development and implementation of these policies, effective policymaking requires the inclusion of perspectives and contributions from private and community stakeholders.⁹⁸ This process is often iterative, blending top-down strategies for regeneration with bottom-up community feedback.

3.1. The Rail Corridor Visioning Process

Adaptive reuse project takes time and effort to accommodate and balance the diverse needs and interests of stakeholders. Figure 3.1 illustrates the timeline on visioning and implementation for the Rail Corridor in Singapore. The key milestones from the announcement of the return of railway land to Singapore in 2010 to the creation of a NGO-led green corridor proposal (Box 3.1) and government master plan (Box 3.2) and implementation demonstrates the continuous and dynamic nature of policy formulation, shaped by government-led, community-led, and collaborative efforts.

Figure 3.1. Timeline of Rail Corridor Concept Master Plan (2010 to 2016)



Source: Various Sources⁹⁹

⁹⁷ Lindholst, A. C., Dempsey, N., & Kreutz, S. (2014). The politics of place-keeping. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 30-51). Routledge.

⁹⁸ Lindholst, A. C., Dempsey, N., & Kreutz, S. (2014). The politics of place-keeping. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 30-51). Routledge.

⁹⁹ Tan, S. N. (2018). Co-creating the Rail Corridor's Future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/>

Box 3.1 NSS Green Corridor Proposal (2010)

Following the announcement that the Keretapi Tanah Melayu (KTM) railway lands would be returned to Singapore, the Nature Society Singapore (NSS) released a proposal to preserve the entire line as a continuous green corridor. This became the first major public call to conserve the space as a shared ecological and civic asset. Key aspects of the proposal include:

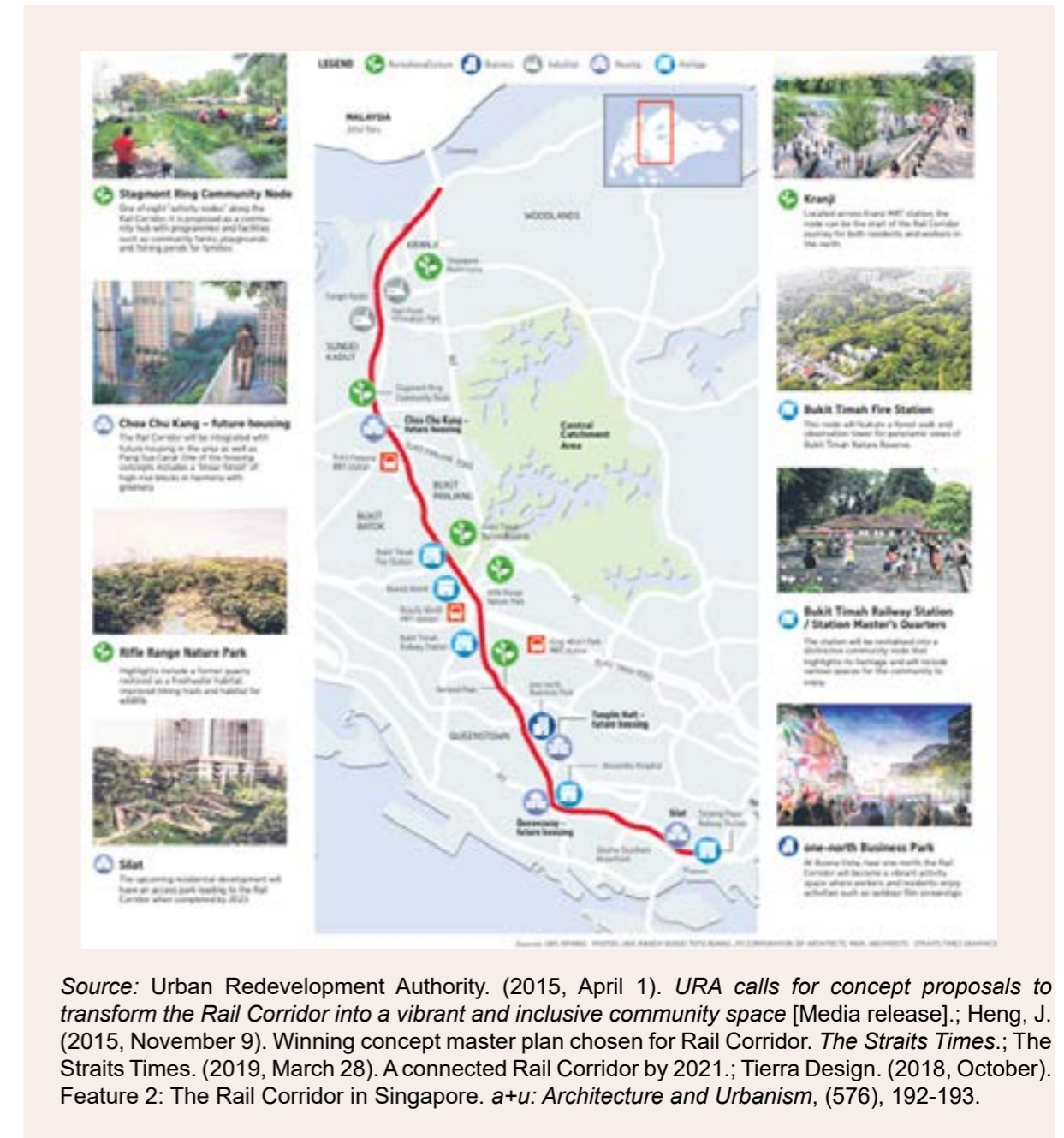
- Retain the full length of the railway lands as an unbroken green corridor.
- Protect biodiversity and natural habits, especially along disused Jurong Line.
- Connect major parks and nature reserves into coherent ecological network.
- Preserve historical features such as railway stations and cast-iron bridges.
- Enable green mobility through walking and cycling paths.
- Avoid piecemeal development or land fragmentation.

The proposal sparked early public enthusiasm, with strong media attention and grassroots mobilisation through exhibitions, community events, and online platforms. The proposal influenced the government's vision for the Rail Corridor through a closed-door meeting with the Minister of State for National Development and sustained advocacy, ultimately contributing to the preservation of the Rail Corridor as a single, uninterrupted green spine.

Source: Peng, M. L. K., Hon, M. T. W., Keang, M. T. Y., Chan, M. J., Min, G., Lum, S., Hall, M. M., Chew, H. H., Owyong, M. A., & Seow, M. G. (2010). *The Green Corridor: A proposal to keep the railway lands as a continuous green corridor*. Nature Society (Singapore).; Chua, G., & Feng, Y. (2011, June 30). Nature lovers push harder for Green Corridor. *The Straits Times*.

Box 3.2 Rail Corridor Concept Master Plan (2016)

In 2015–2016, the URA initiated a Concept Master Plan competition where the winning proposals were displayed in community centres near the Rail Corridor, and feedback was collected through public workshops. The final plan was refined through collaboration between the URA and selected consultants, Nikken Sekkei and Tierra Design. The winning proposal features 122 access points and 21 “platforms” with toilets and rest areas. It includes ten special activity nodes, infrastructure upgrades, and extensions of natural greenery. The master plan seeks to establish a distinct, inspiring identity for the Rail Corridor and its neighbourhoods by preserving and exhibiting railway heritage to anchor collective memory. The route ensures seamless and equitable access for all users across the corridor, prioritising comfort, safety, and amenities for walking, cycling, and recreation. Biodiversity and ecological education were implemented throughout the corridor, with management promoting long-term stewardship and community partnership. As of July 2025, the Concept Master Plan has yet to be fully realised. Currently, URA has planned for ten community nodes along the corridor, with four already implemented, including Kranji Node and the PIE Viaduct.



Source: Urban Redevelopment Authority. (2015, April 1). *URA calls for concept proposals to transform the Rail Corridor into a vibrant and inclusive community space* [Media release].; Heng, J. (2015, November 9). Winning concept master plan chosen for Rail Corridor. *The Straits Times*.; The Straits Times. (2019, March 28). A connected Rail Corridor by 2021.; Tierra Design. (2018, October). Feature 2: The Rail Corridor in Singapore. *a+u: Architecture and Urbanism*, (576), 192-193.

3.2. Iterative and Collaborative Process

As detailed in Chapter 2 on Partnership and Governance, strong policy environments begin with coordinated leadership and inclusive governance. By establishing cross-sectorial collaborations early, roles can be formalised for community representatives, agencies, and private sector stakeholders. Role clarity enables visions to materialise in tandem with relevant policies from the onset:

[ethos-issue-19/co-creating-the-rail-corridors-future/](#); Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)

- Seoul formed inter-agency agreements involving national and local authorities to enable redevelopment of underground transit and aboveground green space.¹⁰⁰
- Melbourne’s Djerring Trail was led by the Victorian Government but executed in partnership with expert private firms, ensuring operational capacity and innovation (see Chapter 2.1).¹⁰¹
- Singapore’s Rail Corridor institutionalised community participation early through the Rail Corridor Consultation Group (later Friends of Rail Corridor), bringing together civic groups and government agencies under one formal framework.¹⁰²

A compelling vision is not a fixed, unchangeable starting point. It is a living document that evolves and is refined through stakeholders’ co-imagination and collaboration of what the future is.

- In Seoul, initial plans were top-down, but the project focus was changed after public concerns were voiced by the mayor. The Gyeongui Line Forum shifted the focus to a citizen-led, participatory park vision (see Chapter 2.1).¹⁰³
- Djerring Trail’s vision evolved through on-the-ground consultation and design adaptation, responding to community concerns about safety, integration, and aesthetic quality.¹⁰⁴
- Singapore’s “Journey of Possibilities” ideas competition and subsequent RFP process allowed public imagination and design innovation to directly influence the masterplan.¹⁰⁵

3.3. Integrating Cultural, Ecological, and Community Identities

Creating resonant reuse projects involve early efforts to scope a project, which speaks to local identity and integrates socio-cultural values with ecological priorities. Past projects have incorporated principles of cultural expression and environmental sustainability in early policy documents and design goals, allowing local identity to shape project tone and spatial experiences (Figure 3.2):

- Seoul envisioned a “park of learning and art” embedded in daily life, integrating public art, flexible spaces, and local culture.¹⁰⁶

100 Seoul Metropolitan Government. (2022). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>

101 Landezine. (n.d.). *Caulfield to Dandenong Level Crossing Removal Project*. <https://landezine-award.com/caulfield-to-dandenong-level-crossing-removal-project/>

102 Tan, S. N. (2018). Co-creating the Rail Corridor’s Future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/>

103 Seoul Metropolitan Government. (2022). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>

104 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.

105 Tan, S. N. (2018). Co-creating the Rail Corridor’s Future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/>

106 Seoul Metropolitan Government. (2022). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>

- Djerring Trail’s use of glazed tiles in a yellow, orange, and blue colour palette, referencing artist Arthur Boyd, illustrated how small design choices can root projects in cultural memory.¹⁰⁷
- Singapore’s Rail Corridor was conceptualised as a green spine celebrating natural heritage and rail legacy. Extensive engagement shaped it into a space that reflects Singaporeans’ shared heritage and future aspirations, with input from diverse demographics, including older adults, families, and accessibility advocates.

Figure 3.2. Integration of Cultural and Historical Narratives: Gyeongui Line Forest Park (left) and Djerring Trail (right)



Source: Various sources¹⁰⁸

To create culturally relevant and resonant places, it is important for public involvement to go beyond one-off consultations and be embedded throughout all phases of planning and policymaking. This includes everything from pre-design visioning to post-construction stewardship. Meaningful engagement can be achieved by assigning dedicated staff to manage community relationships and by promoting inclusive outreach through a mix of digital platforms and in-person forums:

- In Seoul, though public input came later in the process, it proved pivotal to transitioning the park into a community-oriented space with themes like the “unfinished park” that could evolve through citizen participation (Box 3.3).¹⁰⁹
- Djerring Trail appointed a full-time landscape architect to liaise with stakeholders, ensuring real-time response to concerns and changes.¹¹⁰
- In Singapore, public engagement was foundational, beginning in 2011 and

107 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.

108 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.; Desautels, S. (2025, March 5). *A day in Western Seoul: Nature walks in the city*. *Flying Fourchette*. <https://www.flyingfourchette.com/2025/03/05/a-day-in-western-seoul-nature-walks-in-the-city/>

109 Seoul Metropolitan Government. (2022). *Gyeongui Line Forest Park*. <https://english.seoul.go.kr/gyeongui-line-forest-park/>

110 Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.

continuing through exhibitions, online platforms, and design workshops. This iterative outreach ensured widespread community support and ownership.¹¹¹

Box 3.3 Gyeongui Line, “Yeontral Park”

Established on the former Gyeongui line, this 6.3km green corridor was designed to remain incomplete, inviting ongoing citizen participation to shape its future use. Nicknamed “Yeontral Park”, the space has become a key example of successful urban regeneration and participatory design.



Its success can be traced to a combination of intentional design choices and evolving public engagement, including:

- Transform underutilised infrastructure to vibrant pedestrian corridor linking different neighbourhoods.
- Facilitate resident participation through informal performances, temporary installations, and casual pop-up activities.
- Boost surrounding businesses and visitor activity, especially around Yeonnam-dong.
- Integrate into broader green mobility plans, enhancing walkability and ecological links across central Seoul.

Source: Park, J., & Kim, J. (2019). Economic impacts of a linear urban park on local businesses: The case of Gyeongui Line Forest Park in Seoul. *Landscape and Urban Planning*, 181, 139-147.; Visit Seoul. (n.d.). *An urban respite: The Gyeongui Line Forest Park.*; Yoon, M-S. (2022, November 27). Old railway turns into urban park. *The Korea Herald*. <https://www.koreaherald.com/article/3008915>

3.4. Policy as a Tool for Placekeeping

Effective adaptive reuse does not end with construction; it depends on long-term stewardship to ensure spaces continue to evolve with community needs. It is important for policy to extend beyond project delivery and actively support the ongoing care, management, and cultural activation of these spaces. This means shifting from short-term, project-centric frameworks

¹¹¹ Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)

to place-based policies that embed durability, flexibility, and participation. The Placekeeping Charter, developed through the Making Places Profitable project, serves as an example of an overarching vision that guides long-term place management (Box 3.4). Across Seoul, Singapore, and Melbourne, placekeeping is similarly enabled through policy frameworks that embed governance, funding, and citizen involvement into the management of the place.

Box 3.4 Placekeeping Charter

Making Places Profitable (MP4) was a European Union-funded project (2008–2012) that sought to demonstrate how improvements to open spaces (placemaking) can generate positive socio-economic outcomes, and how these benefits can be sustained over time (placekeeping). The initiative comprised nine pilot projects focused on placemaking and placekeeping across five cities: Sheffield (England), Hamburg (Germany), Bruges (Belgium), Emmen (Netherlands), and Gothenburg (Sweden). One of MP4’s key outcomes was the development of the Placekeeping Charter, designed to guide stakeholders involved in the long-term management of public spaces:



Source: Dempsey, N., Smith, H., & Burton, M. (2014). From space to place: the importance of place-keeping. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 1-12). Routledge.; Smith, H., Dempsey, N., & Burton, M. (2014). Coordinating place-keeping: Towards more sustainable places. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 173-185). Routledge.

Seoul – Gyeongui Line Forest Park: Institutional and Civic Stewardship

Seoul’s Gyeongui Line Park embraced the principle of a “citizen-participation park”, a vision that was supported not only in design but also in its post-opening operations. A key actor in the long-term stewardship of the park is the Friends of Gyeongui Line Forest Park (also known as the Gyeongui Line Forest Trail Keepers), a citizen-led non-profit established in 2014, even before the park’s official opening. This group played an active role in shaping the park’s design, hosting public discussions, publishing construction updates, and organising post-opening events such as picnics, guided walks, and art tours in collaboration with local government.¹¹²

Additionally, under Korea’s Urban Regeneration New Deal, multiple placekeeping initiatives were launched, reinforcing local ownership of the park (Table 3.1).¹¹³

Table 3.1. Placekeeping Initiatives Conducted by Gyeongui Line Forest Trail Keepers*

| Placekeeping Initiatives | Activities |
|---|---|
| Gyeongui Line Archiving | Manuscript writing, photography, booklet and video production |
| White Butterfly Project | Resident-participatory public art installation activities |
| Planning and implementation of Gyeongui Line Forest Trail cultural events | A village market that promotes friendship between neighbours Cultural events and exhibitions utilising local resources of the Gyeongui Line Forest Trail, etc. |
| Development of Gyeongui Line Forest Trail website | Introduction and delivery of news about the Gyeongui Line Forest Trail information and participation in park citizens participation activities |
| Resident participation in landscaping activities | Gardening and environmental beautification of parks and alleys with resident participation |

Source: Urban Regeneration New Deal. (2018)¹¹⁴

Note: *translated from Korean using Google Translate.

112 Gyeongui Line Forest Trail Keeper. *Upcoming Activities and Events*. <https://nadri123.wixsite.com/gyeonguiline/blank-5>

113 Urban Regeneration New Deal. (2018). *[Urban Regeneration Story] Abandoned Railroad Returned to Citizens, Gyeongui Line Forest Trail*. <https://blog.naver.com/newdeal4you/221382322650>

114 Urban Regeneration New Deal. (2018). *[Urban Regeneration Story] Abandoned Railroad Returned to Citizens, Gyeongui Line Forest Trail*. <https://blog.naver.com/newdeal4you/221382322650>

Melbourne – Djerring Trail: Community Embedded in Cycling Culture

In Melbourne, the Djerring Trail is a key example of placekeeping embedded in transport and public realm policy. As part of Victoria’s Level Crossing Removal Project, the trail is integrated into broader urban mobility strategies, ensuring sustained investment and cross-agency coordination.¹¹⁵ Post-completion, the trail has become a cycling superhighway, used daily for both commuting and leisure even in cold and wet weather. Community placekeeping takes the form of frequent events and advocacy led by cycling groups such as:

- Australian Cycle Alliance, which helped launch the trail with a Big Bike Ride in 2018.¹¹⁶
- Monash and Glen Eira Bicycle User Groups (McBUG and Glen Eira BUG), which promote regular trail use.¹¹⁷
- Critical Mass Melbourne, which incorporates the trail into monthly cycling events that double as social and political statements for better bike infrastructure.¹¹⁸

Singapore – Rail Corridor: Evolving Placekeeping Through Community and Policy

Since its inception, the Rail Corridor has been constantly evolving through collaborative visioning and sustained community involvement. Recent developments have sustained it as a dynamic public space that combines heritage, nature, and community activities.¹¹⁹

- Community Nodes: New nodes like Buona Vista and the upcoming Queensway and Stagmont Ring offer spaces for play, events, and biodiversity enhancement.
- Civic Participation: Groups like Nature Society Singapore (NSS) and Singapore Heritage Society (SHS) conduct habitat restoration, heritage documentation, and community events.
- Public Art: Art exhibitions such as “Singapore Deviation” activate the corridor as an open-air cultural space.
- Urban Integration: The corridor is being integrated into broader developments and public transportation access points, improving accessibility for residents and visitors.

115 On Yer Bike U3A. (2020). *Djerring Trail, Caulfield to Yarraman*. <https://onyerbike-u3a.org.au/our-latest-rides/2020/3/27/caulfield-to-dandenong-via-djerring-trail>

116 Bicycle Network. (2018). *Ride the rail: Yarraman to Caulfield Big Bike Ride*. <https://bicyclenetwork.com.au/newsroom/2018/10/25/ride-the-rail-yarraman-to-caulfield-big-bike-ride/>

117 Monash community Bicycle User Group. (2022). *Ride 2 Work Day*. [Facebook post]. Facebook. <https://www.facebook.com/photo?fbid=471079451725685&set=a.465118552321775>

118 Stonnington Bicycle User Group, Port Phillip Bicycle User Group. (2024). *Critical Mass March*. [Facebook event]. Facebook. <https://www.facebook.com/events/289998247447616>

119 Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)



Chapter 4

Design and Management

Public spaces are a feature of many repurposed disused railways. These spaces are an integral part of urban residents' everyday life. They are sites for transit, walking, resting, physical activity, social interaction, and participation in cultural and artistic programmes (see Chapter on Programming). The design and management of these spaces play a crucial role in accommodating the diverse activities and needs of everyday users. From a placekeeping perspective, design and management are closely interconnected as intentional design anticipates long-term management, supporting functionality, durability, and ease of care throughout a project's lifecycle.¹²⁰ In particular, effective design provides a variety of recreational options that cater to different needs and interests, while also considering the long-term costs of maintaining and managing the space. Good management, in turn, ensures that the space remains clean, safe, and physically well-maintained in day-to-day use.

4.1. Design and Planning

Design and planning of public spaces considers how the spaces will be used, managed and maintained over time from the outset. Without this foresight, even a well-designed space can become difficult to use or maintain, leading to its unuse and reduced user satisfaction.¹²¹

A space can be aesthetically beautiful but impractical if its planting and material choice needs extensive maintenance, raising maintenance demands, higher costs, and potential deterioration if resources for upkeep are lacking. Another pitfall is the lack of functionality, if the space does not provide comfortable seating, clear pathways, or enough provision to support the daily life activities and well-being of the community.

A strategy is to involve the community, not only to understand evolving needs over time but also to identify maintenance issues early, ensuring the space remains safe and efficient for users (Box 4.1). Community engagement in the design and planning stage brings benefits—helps create a sense of ownership, belonging, and care among participants and users, which can translate into support for space maintenance and management (see Chapter 4.2). In essence, the community becomes a key agent in the protection and conservation of the public space, contributing to its management and maintenance.

Good design involves understanding the 'why'—why is this public space being created and for who. A key principle to ensure the public space resonates with people and provides value is for the design to respond to and be integrated with its local context and community. Well-designed places prioritise people's needs, offering a variety of choices in terms of experience and use, and they possess a distinct identity. Gyeongui Line Forest Park, for example, encompasses four different zones, each with a distinct theme, including areas focused on former railway heritage, public art and book-themed sculptures, children's play, an artificial stream, and an observation deck (Figure 4.1).¹²²

¹²⁰ Burton, M., Dempsey, N., & Mathers, A. (2014). Connecting making and keeping: Design and management in place-keeping. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 125-150). Routledge.

¹²¹ Burton, M., Dempsey, N., & Mathers, A. (2014). Connecting making and keeping: Design and management in place-keeping. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 125-150). Routledge.

¹²² Kato, Y., Ho, D., Chan, F., Yu, W. L., Yuen, B., (2024). *Placekeeping and the adaptive reuse of disused railway infrastructure: Four case studies*. Lee Kuan Yew Centre for Innovative Cities.

Box 4.1 Buona Vista Community Node, Singapore

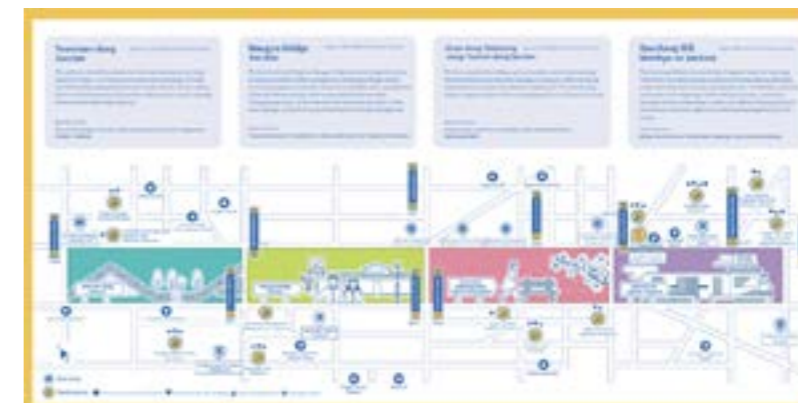
In 2024, the Urban Redevelopment Authority (URA) announced the opening of a new community node at Buona Vista, along the Rail Corridor, between the Metropolis and Elementum, near Buona Vista mass rapid transit station. This node is designed to create an inclusive public space for play, nature-based recreation, and social interactions. Its ideation engages the collective effort of agencies (JTC, NParks, URA), stakeholders and the public as well as private sector (developed by Ho Bee Land). The process includes extensive consultations with Friends of the Rail Corridor, residents, students, heritage and nature groups, and industry.

The outcome is a space with facilities and flexibility to meet the needs of surrounding community. The node features a children playground with biophilic elements inspired by the Rail Corridor's wilderness, fitness areas accessible via barrier-free ramps, a 900 sq m 'plug-and-play' open area under the mass rapid transit viaduct for fitness (HIIT) and a community activity, as well as a 500 sq m community garden that offers a flexible outdoor event space surrounded by nature.



Source: Urban Redevelopment Authority. (2024, April 22). New Buona Vista community node along Rail Corridor offers inclusive space for play, nature recreation and bonding. <https://www.ura.gov.sg/Corporate/Media-Room/Media-Releases/pr24-16>; National Parks Board. (2024, April 22). New Buona Vista community node along Rail Corridor offers inclusive space for play, nature recreation and bonding. <https://railcorridor.nparks.gov.sg/buonavistacomunitynode/>

Figure 4.1 Four Segments of Gyeongui Line Forest Park



Source: Seoul's Mountains and Parks. (2016)¹²³

¹²³ Seoul's Mountains and Parks. (2016). *Gyeongui Line Forest Park*. https://parks.seoul.go.kr/maps/gyeongui/gyeongui_map_ENG.pdf

A strategy is to assume people seek to participate in preferred activities in preferred settings to achieve a preferred experience. Australia, New Zealand and USA have applied the Recreation Opportunity Spectrum (ROS) framework for inventory, planning, and management of outdoor recreation resources, especially in natural settings, to offer a range of recreation opportunities in diverse spaces.¹²⁴ Originally developed as a US Forest Service framework in the 1970s, the Recreation Opportunity Spectrum classifies areas based on their settings, activities, and user experiences.¹²⁵ This approach emphasises the provision of a diverse array of experiences for visitors by ensuring that the appropriate setting, activities, and level of management are available for delivering satisfying experiences. The framework typically defines several recreation opportunity typologies that form a continuum from least developed to most developed (Table 4.1).

Besides supporting user activities and experience, good design is robust, adaptable, and fit for purpose, with the capacity to accommodate new uses over time. This adaptability is essential to placekeeping, which emphasises longevity and the creation of quality spaces that endure. Ultimately, well-designed people-centric places are more likely to become well-used and cared for by their users.¹²⁶

4.2. Maintenance and Management

The success of urban open spaces is determined not only by their initial planning and design but also by effective management and maintenance over time.¹²⁷ Maintenance and management involve both short- (day-to-day operations) and long-term planned actions (like preventive, predictive, and reliability-centred maintenance) that shape how places are used and developed. Maintenance and management are key components within placekeeping. The task is more than routine cleaning and upkeep for “neat and tidy” spaces; long-term maintenance management involves a holistic approach and more comprehensive maintenance and management process that includes the physical, social, and cultural dimensions of managing a place over the long term.¹²⁸

Maintenance directly reflects the physical condition and cleanliness of the space. A lack of maintenance is often the most immediate and visible sign that placekeeping is not in place, e.g., overflowing rubbish bins, uncut grass, or graffiti.¹²⁹ The level of maintenance significantly affects not only how frequently people use a space but also how an area is

124 Brown, P. J., Driver, B. L., & McConnell, C. (1978). *The Opportunity Spectrum – Concept and Behavioural Information in Outdoor Recreation Resource Supply Inventories: Background and Application*. Forest Management Faculty Publications. 31. https://scholarworks.umt.edu/forest_pubs/31

125 Joyce, K., & Sutton, S. (2009). A method for automatic generation of the Recreation Opportunity Spectrum in New Zealand. *Applied Geography*, 29(3), 409–418. <https://doi.org/10.1016/j.apgeog.2008.11.006>

126 Cowan, R., Hill, D., & Campbell, K. (2005). Start with the park: Creating sustainable urban green spaces in areas of housing growth and renewal. *CABE Space*.

127 Carmona, M., De Magalhaes, C., Blum, R., & Hopkins, J. (2004). *Is the grass greener...? Learning from international innovations in urban green space management*. CABE Space.

128 Burton, M., Dempsey, N., & Mathers, A. (2014). Connecting making and keeping: Design and management in place-keeping. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 125-150). Routledge.

129 Burton, M., Dempsey, N., & Mathers, A. (2014). Connecting making and keeping: Design and management in place-keeping. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 125-150). Routledge.

perceived, particularly in terms of its investment potential—a tidy, well-maintained landscape contributes to a positive business image.¹³⁰

Table 4.1. Recreation Opportunity Spectrum

| Opportunity Class | Experience Opportunity | Physical, Social, and Managerial Setting |
|-------------------------------------|--|---|
| Primitive (P) | Offers a strong sense of remoteness with minimal human presence, emphasising solitude, self-reliance, and high levels of challenge and risk through outdoor skills. | Located in expansive, untouched natural areas with virtually no visible development. User presence is very low. Facilities are limited strictly to those essential for protecting natural resources. No motorised access is allowed. |
| Semi-primitive non-motorised (SPNM) | Provides some isolation and close interaction with nature, requiring moderate outdoor skills and offering a sense of adventure without the use of motorised equipment. | Set in mostly unaltered environments with low visitor numbers. Facilities are minimal, designed mainly to preserve natural resources and support user safety. Built features often use natural, on-site materials. No motorised use permitted. |
| Semi-primitive motorised (SPM) | Similar to SPNM in terms of natural immersion and moderate challenge, but allows for limited motorised access, offering a slightly more accessible experience. | Environments are still largely natural, with low user densities. Some development and minimal oversight exist. Motorised recreation is allowed but remains limited in scope. |
| Rustic I | Strikes a balance between solitude and social interaction, allowing both motorised and non-motorised use. Requires moderate outdoor skill levels | Features moderately altered landscapes with medium visitor densities. Basic, rustic amenities are provided for user comfort and safety. Motorised access is considered in both site design and infrastructure. |
| Concentrated I | Prioritises convenience and social experiences over solitude or outdoor skill. Low-risk activities are common. | Environments are significantly modified to support moderate to high visitor use. Recreational areas are enhanced through landscape modification. Facilities and designated activity zones are prevalent. Motor vehicle access and parking are available. |
| Modern Urbanised (MU) | Designed for high levels of social engagement with minimal need for outdoor skill or exposure to risk. | Situated in urban or suburban settings, featuring dense infrastructure and manicured landscaping. Surfaces are often paved to protect soil and accommodate high traffic. Facilities support large groups and offer modern amenities such as electricity, sanitation, and public transport access. |

Source: Adapted from Brown et al. (1978)¹³¹

User perception is vital in maintenance and management as well. From a management

130 Burton, M., Dempsey, N., & Mathers, A. (2014). Connecting making and keeping: Design and management in place-keeping. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 125-150). Routledge.

131 Brown, P. J., Driver, B. L., & McConnell, C. (1978). *The Opportunity Spectrum – Concept and Behavioural Information in Outdoor Recreation Resource Supply Inventories: Background and Application*. Forest Management Faculty Publications. 31. https://scholarworks.umt.edu/forest_pubs/31

perspective, it is crucial to recognise that user perceptions of a space are shaped by cultural norms, personal experiences, and learned expectations. Understanding user perception reveals user needs, preferences, and experiences, which helps to optimise space design, promotes usage, improves visitor satisfaction and community well-being.

A strategy is to engage the community through feedback, co-creation, and stewardship as part of the placekeeping process to raise awareness and foster shared understanding (Box 4.2).

Box 4.2 NSS Rewilding Project, Singapore

The NSS Rewilding Project is a flagship initiative by Nature Society Singapore (NSS), conducted in collaboration with the National Parks Board (NParks) as part of the One Million Trees Movement in Singapore. This project focuses on transforming the Rail Corridor (North) into a vibrant ecological corridor that supports both plant and wildlife biodiversity. Key Objectives:

- Ecological connectivity: Establishing a continuous canopy along the Rail Corridor to serve as a conduit for flora and fauna, enhancing habitat connectivity across Singapore.
- Biodiversity restoration: Reintroducing native tree species to attract and support rare and native wildlife.
- Carbon sequestration: Contributing to climate change mitigation by increasing carbon storage through expanded green cover.

The project actively engages both NSS members and the public in various stages of the rewilding process, including Grass and Weed Clearance, Site Maintenance and Tree Planting. The collaborative efforts are designed to support meaningful ecological restoration, aligning with broader goals of sustainability and biodiversity conservation in urban settings. These activities not only foster a sense of ownership and stewardship among participants but also contribute to the long-term success and sustainability of the rewilding efforts. By involving the community in hands-on conservation work, the NSS Rewilding Project promotes environmental awareness and education.



Source: Nature Society (Singapore). (n.d.). NSS rewilding. <https://www.nss.org.sg/nss-rewilding/>

A common action includes the development of awareness-raising and public education to help users understand unfamiliar maintenance choices. For instance, allowing grass to grow longer for biodiversity and cost-saving reasons might conflict with conventional views of what a well-maintained grass lawn should look like.¹³² Without clear communication, such environmentally beneficial maintenance decisions can result in user dissatisfaction and increased complaints. Adopting a people-centric management approach helps ensure that environmental priorities and human needs are balanced harmoniously within the space. It calls for individual responsibility from the earliest stages of placemaking, where management is seen as an integral part of space design.

To facilitate community engagement and foster a sense of stewardship in long-term maintenance and management of a place, capacity building is essential (see Box 4.3 and Box 7.2). For example, in Milan, the Boscoincittà project is managed by a non-profit organisation that acts as a hub, coordinating activities, developing volunteer skills, and maintaining relationships with local authorities and funders. In Berlin, civic associations involved in green space stewardship often operate within umbrella networks that facilitate knowledge exchange and advocate for community needs at the city level.

Enhanced skills and knowledge, stronger internal structures, or greater access to external guidance can enable and empower community groups to engage in green space management, e.g., secure more consistent volunteer participation, manage resources and spaces more effectively, and attract additional funding and institutional backing.¹³³ Such initiatives may include training programmes, toolkits, mentorship that links newer groups with more established ones, or peer learning networks. Mattijssen et al. (2017)¹³⁴ highlight the importance of building cross-sector networks that bring together community groups, civil society organisations, public agencies, and private sector actors. These networks enable shared learning and collaboration, allowing smaller initiatives to benefit from wider expertise, policy support, and access to resources.

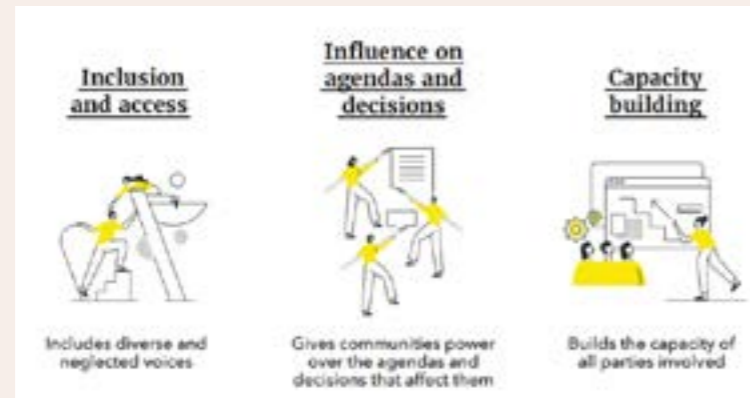
132 Burton, M., Dempsey, N., & Mathers, A. (2014). Connecting making and keeping: Design and management in place-keeping. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 125-150). Routledge.

133 Gopalakrishnan, S., & Chong, K. H. (2020). The prospect of community-led place-keeping as urban commons in public residential estates in Singapore. *Built Environment*, 46(1), 115–138.; Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.02.010>

134 Mattijssen, T. J. M., Van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforzezza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry & Urban Greening*, 26, 78–84.

Box 4.3 Does Participation Make a Difference?

In 2023, Participate in Design (PID), a non-profit organisation based in Singapore, published *Does Participation Make a Difference? Critical Reflections on 10 Years of Community-based Participatory Design Practice (2013-2022)*. The report looks back on ten years of work in community-based design and explores how participation can move beyond surface-level involvement to truly empower communities. It introduces a framework with three key areas: (1) Inclusion and Access, (2) Influence on Agendas and Decisions, and (3) Capacity Building.



PID contends that genuine participation extends beyond soliciting feedback—it involves equipping all stakeholders, including residents, public agencies, and facilitators, with the skills, tools, and confidence necessary for meaningful engagement. To this end, PID employed visual guides, training, and hands-on methods to demystify planning processes and enable participants to articulate their needs effectively. These approaches not only amplified less-heard voices but also enhanced institutional capacity to engage more responsively with the communities they serve.

Source: Lim, J. H. M., Lean, Q., & Yeung, L. (2023). *Does participation make a difference? Critical reflections on 10 years of community-based participatory design practice (2013–2022)*. Singapore: Participate in Design.



Chapter 5

Resourcing

Under-investment in public spaces, exacerbated by funding challenge, is a threat to both the value and functionality of these spaces.¹³⁵ In many cities, high-profile public spaces can often attract more funding than neighbourhood-level, local public spaces.¹³⁶ Globally, there is a notable absence of statutory obligations to maintain quality public space at local level, making such areas vulnerable to budget cuts. Resources for placekeeping is a recurrent challenge often documented in placekeeping studies and literature. A focus on placemaking alone often overshadows placekeeping needs. Resources can be defined more broadly, as encompassing not only funding but also human capital, local knowledge, equipment, and land.

5.1. Common Challenges

The implementation of placekeeping is not without challenge. Many of these challenges are interlinked, revolving around a lack of consistent funding and resources, land access, e.g., difficulty in obtaining long-term land use contracts, and organisational issues like limited community engagement, particularly with diverse users.

Lack of Funding

Funding can be seen as both a start-up cost and a long-term commitment to secure. Funding challenges for public spaces include insufficient funding for placekeeping, limited public budgets, and difficulty securing funds for long-term maintenance. A major challenge is to view placemaking and placekeeping as joined-up concepts rather than as separate, sequential activities. It is important for placemaking to incorporate placekeeping from the outset. Crucially, placemaking is not short-term event but a long-term strategy that requires sustained funding. Yet, for many projects, public funding is often characterised by a fragmented, short-term structure. Capital and revenue are allocated differently, sometimes with no budget increases for newly created public space, leading to strained maintenance resources.¹³⁷ Placekeeping studies indicate that initiatives may have difficulty expanding or continuing without consistent resources.¹³⁸

Take the Rail Corridor, many actors, especially from the third sector, largely depend on ad-hoc funding sources. They face persistent challenges like inadequate funding and staffing shortages, all of which hamper their ability to implement and sustain interventions. Some

¹³⁵ Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

¹³⁶ Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

¹³⁷ Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

¹³⁸ Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62. <https://doi.org/10.1016/j.ufug.2018.06.011>; Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.02.010>

groups rely heavily on short-term government grants and academic partnerships in the absence of stable financing schemes, making long-term planning difficult. Others draw on larger membership bases, donations, and sponsorships. Yet, they continue to face difficulty in maintaining consistent volunteer engagement, particularly among younger adults.¹³⁹ As Carmona and Magalhães (2006) noted elsewhere, such piecemeal support undermines the long-term viability of placekeeping.¹⁴⁰

Many projects including the High Line draw on a mix of funding sources including grants, donations, and volunteers for sustainability. Similar challenges prevail in Europe. While many European initiatives benefit from reliable income sources such as membership fees and donations, they still stress the need for supplementary funding through grants and sponsorships to weather uncertainties.¹⁴¹ Flexible and sustained funding from government agencies, private sponsors, or community contributions can provide support for ongoing maintenance, programming, and volunteer participation (see Chapter 5.3).

Land Access

Even when initiatives are adequately funded, there are place-based challenges. Mainly local in nature, place-based challenges include, e.g., a lack of identity, competition for space, limited access to services and land, difficulty in obtaining long-term land use contracts. Increased density in cities and diversity of users heighten the importance of land access—how to use the land and for who. Current real estate business models often look at quick and immediate creation of returns on investment, overlooking possible returns in long-term heritage conservation, which can lead to an over-reliance on quantifiable metrics like footfall, and discourage more creative or long-term projects.

Regulatory and land access challenges include fragmented governance, insecure tenure, incomplete land records, conflicting stakeholder interests. Weaknesses in land administration and inadequate government capacity at the local level can often hinder the implementation of land management and placekeeping. When land ownership and jurisdiction are fragmented or unclear, this could bring a need to obtain official permissions from various government agencies. A challenge is in coordinating diverse stakeholders, including different levels of government, private sector, and community groups. The lack of coordination among different government agencies and sectors can hamper effective placekeeping, disrupt heritage conservation, or worse, lead to the demolition of heritage assets before proper documentation could occur. Over-management of land access by government bodies can result in homogenised spaces and constrain community autonomy.¹⁴² Equally, under-management can lead to unsafe or unused spaces (Box 5.1).

¹³⁹ Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)

¹⁴⁰ Carmona, M., & de Magalhães, C. (2006). Public space management: Present and potential. *Journal of Environmental Planning and Management*, 49(1), 75–99. <https://doi.org/10.1080/09640560500373162>.

¹⁴¹ Mattijssen, T. J. M., van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry & Urban Greening*, 26, 78–84. <https://doi.org/10.1016/j.ufug.2017.05.015>

¹⁴² Mattijssen, T. J. M., van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry & Urban Greening*, 26, 78–84. <https://doi.org/10.1016/j.ufug.2017.05.015>

Box 5.1 Contested Land and Spatial Equity in Gyeonguiseon Commons

Access to land remains a critical barrier to placemaking and spatial equity in Seoul, particularly for ground-up initiatives and small-scale businesses. The Gyeonguiseon Commons illustrates how railway land, once slated for public use, was swiftly earmarked for commercial development through opaque state-corporate agreements, sidelining civic participation and democratic planning. Despite temporary grassroots activation—such as the Always Market and later squatting by Citizens' Action for Gyeongui Railway Commons—these efforts faced legal precarity, eviction threats, and limited institutional recognition.

The commodification of urban space, driven by rent-seeking and redevelopment logics, systematically excludes marginalised groups, including evictees, street vendors, and youth entrepreneurs, who lack formal tenure or capital leverage. Even under Seoul's post-2010 urban regeneration policies, land access remained tethered to ownership, leaving renters and informal actors outside decision-making processes. This imbalance was critiqued to be an infringement of spatial justice and curtails the sustainability of bottom-up commons, which often rely on provisional arrangements and are vulnerable to displacement once land values rise.

Source: Exner, A., Kumnig, S., & Hochleithner, S. (Eds.). (2021). *Capitalism and the commons: Just commons in the era of multiple crises*. Routledge. <https://doi.org/10.4324/9780367822835>; Choe, H., Kim, J. K., Jang, H. G., Yoon, Y. Y., & Park, S. H. (Eds.). (2022). *Commons Perspectives in South Korea: Context, Fields, and Alternatives*. Routledge.; Park, I. K., Shin, J., & Kim, J. E. (2020). Urban Commons as a Haven for the Excluded: An Experience of Creating a Commons in Seoul, South Korea. *International Journal of the Commons*, 14(1), 508–524. <https://doi.org/10.5334/ijc.1038>

Volunteer Capacity, Equity and Inclusion

Another challenge is organisational, which can encompass issues with funding and resource, organisational arrangements, bureaucratic processes, poor communication, resistance to change, and difficulties in stakeholder coordination. A major challenge is the lack of long-term commitment and ownership. Limited or lack of community representation can lead to reduced community engagement and unmet community needs, reinforcing existing social inequality and making placekeeping in some areas challenging. Unequal participation can translate into unequal outcomes. The broader impacts include the absence of volunteers and community representation, contributing to a vicious circle of loss of a sense of ownership and difficulty in scaling placekeeping efforts. A lack of volunteering capacity in placekeeping may also lead to increased burden on paid staff, loss in community engagement and upkeep of local areas, and ultimately, a decline in public spaces—a park in Berlin once supported by a strong volunteer base saw participation collapse from 200 to fewer than 10, putting the park at risk of closure.¹⁴³

Mathers, et al. (2015) found that in many placekeeping initiatives in England, participants were predominantly White, female, and over age 60, with minimal engagement from young

143 Mattijssen, T. J. M., van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry & Urban Greening*, 26, 78–84. <https://doi.org/10.1016/j.ufug.2017.05.015>

people, particularly teenage boys.¹⁴⁴ The Rail Corridor also faces difficulty in sustaining long-term volunteer involvement, particularly among younger adults.¹⁴⁵ Like England, visitors to the High Line in New York City are predominantly White though it is adjoining low-income communities; many of the 5000 low-income residents living in adjacent public housing felt unfamiliar with or excluded from the park.¹⁴⁶ In 2011, Friends of the High Line launched a yearlong Listening Initiative—involving door-knocking and conversations, the FHL identified barriers to participation, and introduced targeted programmes, including a paid youth leadership initiative (Box 2.2).

A related concern is that public spaces may reflect the values, preferences, and capacities of some rather than the needs of all, especially lower income and marginalised groups, limiting the inclusiveness and accessibility of these spaces. The implication is a need to better understand community needs and interests and bring different groups together through clear communication. Another strategy is to enable them through targeted capacity building, involving all people rather than some. Intentional outreach and inclusive engagement methods, e.g., meet people where they are, use multiple languages, blended engagement approaches to reach and involve diverse stakeholders, recognise and value local knowledge, are some ways to lower barriers and support broader participation.

5.2. Significance of Government's Role in Resourcing

As the case studies illustrate, governments can resource placekeeping in several ways,

- Governance includes establishing clear governance structures that define the roles and responsibilities of key stakeholders in the placekeeping effort.
- Partnerships may range from traditional top-down management to more collaborative models that involve private sector, community, and civil society to share responsibility and resource.
- Funding, resources, and infrastructure for placekeeping activities, e.g., budget allocation for maintaining public spaces or supporting community-led projects. Unlike third-sector actors who often face limitations in resources, government agencies possess internal capacities such as funding, manpower, and land ownership that enable them to support both state-led and collaborative placekeeping initiatives.
- Policy, rule, and regulation can be created to embed placekeeping principles into urban planning and design policies and plans, e.g., develop long-term strategies and master plans to provide a vision and guide resource allocation, implementation and maintenance. Regulations, e.g., for health and safety, can be implemented to help manage potential conflicts and ensure long-term positive use of a space.

144 Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.03.004>

145 Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished technical report)

146 Sherman, D. (2017, March 1). High Line Magazine: Creating a More Equitable High Line. *The High Line*. <https://www.thehighline.org/blog/2017/03/01/high-line-magazine-creating-a-more-equitable-high-line/>

In some European cities, authorities have gone further by helping community groups access external funding.¹⁴⁷ Crucially, government support can help address equity gaps by ensuring that marginalised groups who may lack resources, time, or confidence, have pathways to participate meaningfully in placekeeping. The absence of structured government mechanisms to connect community groups to sustainable funding streams continues to be a critical challenge in both past and ongoing placekeeping efforts.

5.3. Funding Sources

Effective placekeeping requires financial support that is not only sufficient but also secure, flexible, and consistent, whether from public agencies, private sponsorships, or community-driven contributions. Such funding is essential for maintaining physical infrastructure, supporting programming and activities, and ensuring volunteer engagement over time. Research consistently shows that even the most promising initiatives risk stagnation or collapse without stable financial support.¹⁴⁸ A variety of traditional and newer funding sources are available in most cities to access for capital and revenue funding (Table 5.1). When seeking funding, it is important to assess the strengths, weaknesses, opportunities, and threats associated with each funding model.

Table 5.1. SWOT Analysis of funding models

| Funding Model | Strengths | Weaknesses | Opportunities | Threats |
|----------------|---|---|--|--|
| Public Sector | Provides relatively long-term and stable financial support and is often embedded within institutional systems | Susceptible to political changes and often suffers from separation of capital and maintenance budgets | Potential to integrate placekeeping with broader policy agendas such as health and sustainability, and to promote collaboration across government agencies | Prone to policy shifts and funding cuts; may limit innovation |
| Private Sector | Offers strong financial capacity and can promote efficiency and innovation | May prioritise commercial interests over public value with a focus only on economically attractive areas or high-profile projects | Established mechanisms such as Business Improvement Districts, corporate sponsorships, and naming rights for green space assets | Risk of commercialising public spaces, volatility from shifting business interests |

147 Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.03.004>

148 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62. <https://doi.org/10.1016/j.ufug.2018.06.011>; Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.02.010>

| | | | | |
|----------------------|---|--|---|--|
| Third Sector | Encourages grassroots engagement in placekeeping | Typically small-scale, under-resourced, and heavily dependent on volunteer labour and temporary grants | Harness emerging tools like crowdfunding and social enterprise models while strengthening social cohesion | Vulnerable to volunteer burnout, inconsistent capacity, exclusion of underrepresented groups |
| Mixed Funding Models | Enhances financial resilience and leveraging diverse capabilities | Requires complex governance structures and careful coordination among stakeholders. | Enables flexible, adaptive management approaches and support inclusive co-management of spaces. | Prone to conflicts between stakeholders and unclear divisions of responsibility |

Source: Adapted from Dempsey et al. (2014)¹⁴⁹

Public Sector Funding

Public sector sources remain foundational to placekeeping, often providing initial capital for development and infrastructure. This may apply at a variety of scales and levels with different sources, characteristics, opportunities but also limitations (Table 5.2). They may face limitations when it comes to long-term maintenance due to the typical separation between capital and revenue budgets. Funding tends to be short-term and politically sensitive, often lacking the continuity necessary for sustained stewardship.¹⁵⁰

Table 5.2. Public Funding options

| Funding Source | Strengths | Weaknesses | Opportunities | Threats |
|-----------------------------|--|---|---|---|
| Local Authority Funding | Public responsibility, embedded governance | Limited flexibility, funding often reduced | Scope to partner across departments | Cuts due to budget cycles, annual allocation only |
| Taxation Initiatives | Draws private sector support, can create policy incentives | Can be complex to implement and politically sensitive | Potential for legislative support and predictable revenue | Risk of public resistance or revenue instability |
| Planning Gains & Agreements | Ties funding to development, adds value to public spaces | Only applies to new developments, does not support existing sites | Can improve infrastructure through policy mechanisms | Market fluctuations may limit contributions |
| Income Generation | Earned income through events or space rentals | Not always reliable, may restrict inclusive access | Adds flexibility and financial resilience | Over-commercialisation and reduced public accessibility |

Source: Adapted from Dempsey et al. (2014)¹⁵¹

149 Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

150 Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

151 Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N.,

Public sector funding might face limitations on its intended purpose, with many long-term strategies using a combination of different funding sources, especially to sustain maintenance and ongoing activities. The High Line began with public sector funding when it was originally slated for demolition. Friends of the High Line advocated for its preservation, with their efforts to halt demolition and transfer ownership from CSX Transportation Inc. to the city. They utilised the federal “rail banking” programme to enable the rails-to-trails conversion. To justify receiving public sector funding, FHL, with support from urban development consultants, demonstrated to city officials that converting the rail line into a park would generate substantial increases in property, sales, and income tax revenues, far exceeding the city’s costs for preservation and development. This financial analysis persuaded the city to invest in the project, highlighting the fiscal benefits of public investment in open space.¹⁵²

Private and Third Sector Funding

Private and third sector actors contribute significantly to the funding and management of public spaces, often providing innovative and place-sensitive solutions in contexts where public funding is constrained. Often, these contributions operate within the city’s policy framework to ensure public spaces remain vibrant and well-kept by private developers and owners. In the United States, planning policies encourage private provision of public space by offering developers incentives such as floor area bonuses for creating accessible open spaces.¹⁵³ This has led to the introduction of innovative solutions such as the High Line (Box 5.2). These agreements, however, often favour new developments and placemaking projects, potentially limiting their applicability to long-term management or existing sites.

The third sector including not-for-profit, voluntary groups, and local collectives—are increasingly relied upon for placekeeping (Box 5.3). These groups are well-positioned to raise funding that is not always accessible to government entities, especially where funding eligibility depends on fostering community involvement. However, the funding environment for these groups can be difficult to navigate. Access to resources is frequently tied to demonstrating “matched funding” or public sector endorsement, which may not always be feasible. Moreover, grants often prioritise short-term, visible outcomes (like placemaking) over long-term maintenance, leaving community groups without sufficient flexibility to respond to ongoing needs.¹⁵⁴

The trust model is an important mechanism in the third sector, with organisations like the UK’s National Trust and local land trusts managing land or green spaces long-term, often as non-profits or charities. These trusts can access legal protections and funding, generate revenue from assets, and sometimes partner with local authorities (see Chapter 2.1).

Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

¹⁵² Bowen, T. S., & Stepan, A. (n.d.). *Public-Private Partnerships for Green Space in NYC | Public-Private Partnerships for Green Space in NYC*. Case Consortium @ Columbia and the Picker Center for Executive Education, SIPA. https://ccnmtl.columbia.edu/projects/caseconsortium/casestudies/128/casestudy/www/layout/case_id_128.html

¹⁵³ Németh, J., & Schmidt, S. (2011). The privatization of public space: Modeling and measuring publicness. *Environment and Planning B: Planning and Design*, 38(1), 5–23. <https://doi.org/10.1068/b36057>

¹⁵⁴ Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

Box 5.2 Land and zoning policies for sustained funding and maintenance of the High Line

The High Line is anchored in a public-private partnership, with Friends of the High Line collaborating closely with city agencies. The partnership leveraged private fundraising and advocacy alongside public sector support and regulatory action, where the High Line relies on private donations for its US\$18.4 million annual operating budget as of 2019.

When Mayor Bloomberg took office in 2002, his administration actively supported the overhead park concept, viewing it as integral to lower Manhattan’s recovery and economic development. The city then rezoned the area to create the Special West Chelsea district, allowing for a mix of residential, commercial, and manufacturing uses. This rezoning enabled the transfer of development rights from properties under or adjacent to the High Line to parcels along 10th and 11th Avenues, providing financial incentives for property owners to support the park’s preservation.

Additionally, the city introduced a bonus incentive, allowing developers to pay a fee to build higher than zoning allowed, with proceeds directed to the High Line Improvement Fund for park amenities. This fund supported features such as elevators, stairways, and public restrooms, and developers like Chelsea Market leveraged the incentive to expand, with a portion of the fees earmarked for affordable housing and educational programs. Together, these measures ensured that increased tax revenues from new development would offset the city’s costs for renovating and maintaining the High Line. The city’s approach combined regulatory tools, targeted incentives, and partnership models to secure both initial capital and ongoing revenue streams, enabling the long-term stewardship and success of the High Line as a public space.

Source: Wiggins, J. (2019, April 14). *Get the money, then get the people: Lessons from NYC’s High Line*. Australian Financial Review. <https://www.afr.com/companies/infrastructure/get-the-money-then-get-the-people-lessons-from-nyc-s-high-line-20190412-p51dkc>; Bowen, T. S., & Stepan, A. (n.d.). *Public-Private Partnerships for Green Space in NYC | Public-Private Partnerships for Green Space in NYC*. Case Consortium @ Columbia and the Picker Center for Executive Education, SIPA. https://ccnmtl.columbia.edu/projects/caseconsortium/casestudies/128/casestudy/www/layout/case_id_128.html

Trusts, ranging from national institutions like the UK National Trust to local land trusts and charitable foundations take on long-term custodianship of land or green space assets. These organisations are usually non-profit entities that hold leases or management responsibilities, sometimes in partnership with local authorities. Trusts benefit from legal protections and can access financial support more easily if they attain charitable status. Their ability to hold and manage assets enables them to generate revenue through rents, service agreements, and trading activities.¹⁵⁵

In New Zealand, the QEII National Trust supports landowners in protecting ecologically

¹⁵⁵ Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

or culturally significant spaces through open space covenants.¹⁵⁶ While the trust model provides long-term financial sustainability and promotes community empowerment, it also raises concerns about equity. Trusts often thrive in wealthier areas with access to donations and legacies. Smaller or less-resourced trusts may struggle to compete for funds, administer large-scale responsibilities, or raise the capital needed to establish endowments.¹⁵⁷

Box 5.3 Public-Non-Profit Partnership in Bentway, Toronto

The Bentway in Toronto demonstrates how hybrid funding models can sustain public spaces over time. Once part of the Canadian National Railway lands, the area beneath the Gardiner Expressway has been transformed into a multi-use public realm managed through a public–nonprofit partnership between the City of Toronto and the Bentway Conservancy, an independent charitable organisation.

The government retains ownership of the land and provides planning oversight and financial support through grants. The Conservancy manages operations, programming, and fundraising, supported by philanthropic donations, sponsorships, government grants, and earned income from events and partnerships. A CAD 25 million donation from philanthropists Judy and Wilmot Matthews in 2015 catalysed redevelopment for the first phase.

Like New York City's High Line, the Bentway follows a conservancy model where a non-profit organisation manages a publicly owned space. This approach mobilises resources beyond limited municipal budgets and ensures continuous programming, maintenance, and community engagement over the long run.



Source: City of Toronto & The Bentway Conservancy. (2024). *Under Gardiner Public Realm Plan*. https://undergardinerprp.ca/wp-content/uploads/2024/04/Under-Gardiner-PRP-Vision-and-Opportunities-Report_2024.pdf; Urban Land Institute. (2021). *The Bentway*. <https://americas.uli.org/wp-content/uploads/2022/08/ULI-The-Bentway.pdf>

156 QEII National Trust. (n.d.). *Annual Reports*. <https://qeiiinternationaltrust.org.nz/publications-and-resources/annual-reports/>

157 Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

Mixed Funding

Hybrid approaches that combine public, private, and third sector funding may offer greater resilience. These models require high levels of coordination, clear governance, and often complex legal frameworks, but they can mitigate the weaknesses of relying on a single source.¹⁵⁸ Take Milan's Boscoincittà project, hybrid funding is implemented through a combination of municipal and community support—municipal authorities offer land and modest funding to the non-profit organisation managing the public space, and this public support is then complemented by sponsorships, volunteer labour, and small-scale revenue-generating activities. In Berlin, national programmes such as Stadtumbau Berlin and Soziale Stadt further show how programme-based grants can be designed to support community-led green projects, extending beyond traditional infrastructure funding frameworks.¹⁵⁹

Authorities in the UK are actively encouraging community involvement through the establishment of Friends Groups. These groups, supported initially by local authority staff, can secure external funding for projects beyond what is covered by core council services. Funding sources include membership fees, national lottery grants, and other external programmes. The success of this model depends on collaboration between community members (Friends Groups), local authority staff like green space managers (GSMs), and external funders. However, the distribution of successful groups and funding is uneven across different areas, often reflecting local priorities and resource availability.¹⁶⁰ Similarly, Dutch municipalities often provide seed grants, co-financing, or targeted subsidies to encourage grassroots greening efforts, which demonstrates the importance of initial public investment to empower local action.¹⁶¹ While mixed funding, involving both public sector support and community-led fundraising, can attract additional investment and enhance placekeeping, they require ongoing coordination and capacity from all parties involved.

5.4. Volunteering

Volunteer manpower is an essential and multifaceted resource in placekeeping efforts, providing not only labour but also local expertise, advocacy, and long-term commitment to stewardship. Volunteers often assume roles as planners, educators, and informal co-managers of the spaces they help shape. Campbell et al. (2022)¹⁶² argue that volunteering

158 Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

159 Mattijssen, T. J. M., van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry & Urban Greening*, 26, 78–84. <https://doi.org/10.1016/j.ufug.2017.05.015>

160 Mathers, A., Dempsey, N., & Frøik Molin, J. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.03.004>

161 Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62. <https://doi.org/10.1016/j.ufug.2018.06.011>.

162 Campbell, L. K., Svendsen, E., Johnson, M., & Landau, L. (2022). Activating urban environments as social infrastructure through civic stewardship. *Urban Geography*, 43(5), 713-734. <https://doi.org/10.1080/02723638.2021.1920129>

has the potential to evolve into a more structured form of civic leadership. In the case of the Rail Corridor, the Nature Society Singapore volunteers include community members, students, and corporate teams contributing time and effort through activities like clearing overgrown vegetation and planting saplings (see Box 4.2).

Formal and informal agreements between volunteers and public authorities help to structure and legitimise these contributions. Rather than requiring a transfer of land ownership, many initiatives operate under cooperative agreements or management contracts that outline shared responsibilities.¹⁶³ For instance, in Sheffield, England, long-standing groups like Friends of Firth Park collaborate informally with local authorities to manage and activate green spaces.¹⁶⁴ This flexible agreement can evolve over time, adapting to the shifting capacities and needs of each partner, and often delineate the balance between community-supplied labour and state-provided access, technical support, or materials.¹⁶⁵

The impact of volunteering extends far beyond the direct tasks performed. It improves the resilience of local organisations and communities, enabling charitable organisations to achieve more without significantly increasing staff costs, while simultaneously strengthening the community through increased social connection as well as providing personal growth and a sense of purpose for the volunteer. The intrinsic and long-term value of volunteer contributions often defies simple quantification.¹⁶⁶

Even so, volunteering is not without challenge. While volunteers provide essential labour and expertise, managing volunteer-based programmes involves unavoidable financial considerations. These include costs for training, transportation, equipment, and materials as well as adherence to health and safety regulations and the need for on-site coordination. Importantly, reliance on volunteers should not be viewed as a substitute for professional expertise as volunteers bring distinct capacities and limitations.¹⁶⁷ The full potential of volunteer-driven placekeeping is often constrained by gaps in technical knowledge, leadership capacity, and organisational infrastructure.

163 Mattijssen, T. J. M., van der Jagt, A. P. N., Buijs, A. E., Elands, B. H. M., Erlwein, S., & Laforteza, R. (2017). The long-term prospects of citizens managing urban green space: From place making to place-keeping? *Urban Forestry & Urban Greening*, 26, 78–84. <https://doi.org/10.1016/j.ufug.2017.05.015> ; Burton, M., & Mathers, A. (2014). Burton, M., & Mathers, A. (2014). Collective responsibility for place-keeping: Are partnerships the solution for open space management? In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 76-99). Routledge.

164 Burton, M., & Mathers, A. (2014). Collective responsibility for place-keeping: Are partnerships the solution for open space management? In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 76-99). Routledge.

165 Burton, M., & Mathers, A. (2014). Collective responsibility for place-keeping: Are partnerships the solution for open space management? In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 76-99). Routledge.; Buijs, A. E., Hansen, R., Van der Jagt, A. P. N., Ambrose-Oji, B., Elands, B. H. M., Rall, E. L., ... & Møller, M. S. (2019). Mosaic governance for urban green infrastructure: Upscaling active citizenship from a local government perspective. *Urban Forestry & Urban Greening*, 40, 53–62. <https://doi.org/10.1016/j.ufug.2018.06.011>

166 Kreutz, S., Dempsey, N., & Lindholst, A. C. (2014). Resourcing place-keeping: Fighting for funding. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 100-124). Routledge.

167 Smith, H., Dempsey, N., & Burton, M. (2014). Coordinating place-keeping: Towards more sustainable places. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 173-185). Routledge.

Volunteers may face challenges in applying for funding, managing projects, or navigating bureaucratic systems. These challenges can weaken morale and limit sustained involvement.¹⁶⁸ Addressing these challenges requires targeted capacity-building efforts (see Chapter 4.2). Providing structured training, accessible resources, mentorship opportunities, and creating dedicated peer learning networks can empower volunteers and community groups alike. These measures not only bolster confidence and leadership capacity but also amplify the resilience of volunteer efforts, enabling long-term stewardship of public spaces and fostering strong connections between people and place.

168 Bennett, N. J., Whitty, T. S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S., & Allison, E. H. (2018). Environmental Stewardship: A Conceptual Review and Analytical Framework. *Environmental Management*, 61(4), 597–614. <https://doi.org/10.1007/s00267-017-0993-2> ; Mathers, A., Dempsey, N., & Burton, M. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136. <https://doi.org/10.1016/j.landurbplan.2015.03.004>



Chapter 6

Programming

While the physical characteristics and infrastructure of public spaces such as accessibility, inclusivity, and flexibility, are important, programming plays a crucial role in animating and improving the space to meet community needs. It is an integral component of transforming space into an inclusive place and supporting its long-term management.¹⁶⁹ Programming can help foster people-place connection.¹⁷⁰ Programming can take many forms, including formally and informally organised activities. They can range from, e.g., cycle sport along the Djerring Trail, guided walks and heritage tours on the Promenade Plantée to volunteer-led initiatives and community events on the High Line, and participatory opportunities, including designated open spaces for citizens to organise their own activities in Gyeongui Line Forest Park.¹⁷¹

Programming is not just about organising activities and events. Rather, it involves building on the existing strengths and character of a place, and adopting a vision, holistic and layered approach, and creative and tactical implementation to build community and revitalise the public space. Programming facilitates coordination, collaboration, and partnerships among diverse stakeholders.¹⁷² To support diverse programming—a varied and yet consistent programme of activities and events that celebrate the local context and community engagement, it is important to consider three key components:

- **Purpose:** What is the intended goal and who is the target audience?
- **Arrangement:** How is the programme organised? Is it a formal or informal initiative, and are there collaborations among stakeholders?
- **Context:** How does it fit the local setting and community needs? When and how frequently should the programme be organised?

6.1. Purpose

Programming is widely regarded as an affordable and effective means to create vibrant, welcoming environments that encourage use and engagement.¹⁷³ Programming can take various forms and for various purposes (Table 6.1). This involves, e.g., introducing diverse activities, events, and uses, from small-scale experiments like pop-up events to more permanent installation, to bring life to a space, encourage social connection, and give people a reason to engage with and care for the space. A common goal is to develop inviting, inclusive programmes, activities, and spaces that address local community needs.

169 Glover, T. D. (2020). Bringing public spaces to life: The animation of public space. In V. Mehta, & D. Palazzo. (Eds.). In *Companion to public space* (pp. 414-425). Routledge.

170 Mateo-Babiano, I., & Lee, G. (2019). People in place: Placemaking fundamentals. In D. Hes & C. Hernandez-Santin (Eds.), *Placemaking fundamentals for the built environment* (pp. 15–38). Springer. https://doi.org/10.1007/978-981-32-9624-4_2

171 Kato, Y., Ho, D., Chan, F., Yu, W. L., Yuen, B., (2024). *Placekeeping and the adaptive reuse of disused railway infrastructure: Four case studies*. Lee Kuan Yew Centre for Innovative Cities.

172 Mateo-Babiano, I., & Lee, G. (2019). People in place: Placemaking fundamentals. In D. Hes & C. Hernandez-Santin (Eds.), *Placemaking fundamentals for the built environment* (pp. 15–38). Springer. https://doi.org/10.1007/978-981-32-9624-4_2

173 Glover, T. D. (2019). The transformative (and potentially discriminatory) possibilities of animating public space. *World Leisure Journal*, 61(2), 144-156. <https://doi.org/10.1080/16078055.2018.1550438>

Table 6.1. Diverse Objectives and Audiences Served by Major Adaptive Reuse Projects

| Programme | Objectives | Target Audience |
|---|--|---|
| Wellness Programs (High Line, NYC) | To facilitate learning, physical exercise, and social connection among neighbours through wellness activities, educational sessions, and cultural engagements such as Tai Chi, Zumba, and Afro-Brazilian dance. | Adults of all ages, with a focus on older adults and residents. |
| Mapo 5 million tree planting project (Gyeongui Line Forest Park, Seoul) | To mitigate against urban heat and control dust pollution by planting trees along the former railway corridor, fostering environmental stewardship as well as community-led and private-led greening. | Residents, schools, businesses. |
| Arts and Cultural Events (Promenade Plantée, Paris) | To reuse the railway arches for art exhibitions and craft fairs (e.g. European Artistic Crafts Days) that preserve artisan trades, support small creative businesses, and attract visitors to the neighbourhood. | Residents, artisans, small businesses, and tourists. |
| Active-Mobility Programmes (Djerring Trail, Melbourne) | To encourage walking and cycling through community rides and guided events such as Family Ride the Djerring Trail (2023), which introduce new users to the corridor and promote safe, sustainable travel. | Cyclists, commuters, families, and residents. |
| Art on the Atlanta BeltLine Programme (Atlanta, United States) | To activate the multi-use trail through temporary art installations, performances, and community festivals that showcase local artists and strengthen neighbourhood identity. | Artists, residents, and visitors. |

Source: Various sources¹⁷⁴

In some cases, programming involves regular events and community activities. High Line offers regular arts and cultural events like concerts as well as seasonal celebrations such as Halloween, and fitness and wellness classes. In others such as the Viaduc des Arts in Paris’ Promenade Plantée, programming is built into the design and management of the space itself, where artisan workshops and cultural uses keep the area active year-round. The target audience primarily includes local communities—residents in surrounding neighbourhoods—but also attract visitors and tourists. For example, the High Line draws millions of tourists annually and is internationally recognised for its innovative design and programming.¹⁷⁵ The Rail Corridor in Singapore activates public art programme to offer a platform for creative self-expression and enliven underused spaces (Box 6.1).¹⁷⁶

174 High Line (n.d.). *Wellness Programs*. <https://www.thehighline.org/wellness/>; Mapo-gu. (2019). Mapo-gu promotes 10-year master plan to plant 5 million trees. *DDM News*. http://www.ddmnews.co.kr/news_gisa/gisa_view.htm?gisa_category=01110000&gisa_idx=18978; Le Viaduc des Arts. (2024). *Meet us at the Viaduc des arts for the European Artistic Crafts Days 2024*. <https://www.leviaducdesarts.com/en/news/article/viaduc-des-arts-european-artistic-crafts-days-2024>; The Viaduc des Arts. (n.d.). *The Viaduc des Arts*. <https://www.leviaducdesarts.com/en/the-viaduc-des-arts>; City of Monash (2023). *Family Ride the Djerring Trail returns*. <https://www.monash.vic.gov.au/About-Us/News/Family-Ride-the-Djerring-Trail-returns>; Atlanta BeltLine, Inc. (2024, October 23). *Atlanta BeltLine Art announces spring installations, activations & calls for art*. <https://beltline.org/press-release/atlanta-beltline-art-announces-spring-installations-activations-calls-for-art>

175 Lee Kuan Yew World City Prize. (2019, November 8). *New York City – Innovative zoning tools in West Chelsea & High Line Plan*. <https://leekuaneyeworldcityprize.gov.sg/resources/case-studies/west-chelsea-high-line-plan/>

176 Tan, S. N. (2018). Co-creating the Rail Corridor’s future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/>

Box 6.1 Street Art Initiative along the Rail Corridor, Singapore

In 2014, as part of public engagement efforts along the Rail Corridor, the Singapore Urban Redevelopment Authority (URA) partnered with the National Arts Council and RSCLS, an urban art collective, to create a legal graffiti space beneath the Buona Vista viaduct, making it one of the first legal graffiti sites in Singapore. Two 40-metre by 5-metre walls under the viaduct were transformed into an art destination, offering artists a platform for creative expression while addressing concerns about illegal graffiti. The space also hosted an international art festival in 2014, and art and music events in 2015 and 2016.



Source: Tan, S. N. (2018). Co-creating the Rail Corridor's future. *ETHOS*, (19). <https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/>; Hamarian, T. (2013, December 24). New space for street artists along Rail Corridor. *Today Online*. <https://www.todayonline.com/singapore/new-space-street-artists-along-rail-corridor>

Central to its purpose is inclusive programming. A key principle for inclusive programming is to begin with a community-oriented approach—lead with people, not design.¹⁷⁷ A key strategy is to activate community insight gathering to understand the needs and aspirations of the community for the space. The guiding principle is to ensure that the programming is informed by the space context, and needs of users and local stakeholders, including minority groups.¹⁷⁸ The experience of the High Line in New York underscores the importance of this approach: after recognising its role in accelerating gentrification, Friends of the High Line re-centred its mission on equity by undertaking a yearlong Listening initiative to rebuild trust and engage nearby public housing residents.¹⁷⁹ This case reminds that inclusive programming depends not only on consultation during design but also on continuous dialogue and responsiveness.

Another key principle and step is vision development to support a structured yet flexible framework for programme planning and delivery. While one-off activations may generate buzz, it is often temporary. A key approach is to develop consistent, strategically aligned experiences to build people-place connection and place identity. Integral to this approach is an understanding of the space context, rhythms, and social dynamics. A strategy is to

[ethos-issue-19/co-creating-the-rail-corridors-future/](https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/)

177 Project for Public Spaces (2012). *7 ways to disrupt your public space*, <https://www.pps.org/article/7-ways-to-disrupt-your-public-space>

178 Loukaitou-Sideris, A., & Mukhija, V. (2019). Promoting justice for underserved groups in periurban parks: the potential of state-community partnerships. *Leisure Studies*, 38(1), 43-57. <https://doi.org/10.1080/02614367.2018.1544656>

179 Sherman, D. (2017, March 1). High Line Magazine: Creating a More Equitable High Line. *The High Line*. <https://www.thehighline.org/blog/2017/03/01/high-line-magazine-creating-a-more-equitable-high-line/>

offer multiple ways for people to engage—from passive appreciation to active contribution. A challenge is to programme out competition and conflict between different uses and user groups. Although multiple programmes can complement one another, a lack of curation and coordination based on their intended purpose may lead to tensions among users.¹⁸⁰

While programming can enhance the appeal and use of public spaces, focusing on activities alone is insufficient to deliver lasting transformation. Cultural events can celebrate diversity and encourage participation from under-represented groups, but studies suggest they do not automatically generate lasting social connections across different communities.¹⁸¹ Similarly, short-term activities can make spaces lively but often do little to improve their long-term usability or inclusiveness. As Klineberg (2018) notes, parks may occasionally offer activities for older adults, yet their design rarely accommodates the everyday needs of an ageing population.¹⁸² It is important for programming to reinforce, rather than substitute, design, which ensures universal access.

6.2. Arrangement

Programmes can be organised through formal or informal means, guided by clearly defined vision and purposes. Understanding how programmes are structured—who initiates, plans, and implements them, and through what forms of collaboration—is essential for ensuring that activities are inclusive, responsive to community needs, and aligned with the intended functions of the space. The arrangement of programmes varies widely. Some are formal, led by government agencies or non-profit organisations (e.g., Friends of the High Line, Seoul Metropolitan Government), while others involve informal community groups and interest-based clubs (e.g., bicycle user groups along the Djerring Trail, art workshops in Gyeongui Line Forest Park).

Formal Programme

Formal programmes are planned, scheduled, and facilitated activities or events. They may be organised by government organisations, private, and/or community groups. The scale of these programmes may differ from small, pop-up activities like temporary food trucks, pop-up art installations to larger scale events like ideas competition, seasonal cultural festivals, farmers' markets, art and music performances, and sporting events.¹⁸³ The Singapore URA, e.g., organised an ideas competition, 'From Dreams to Rail-ity' from April to June 2024 to invite the community—individuals and design teams from Singapore and the world to reimagine the former Tanjong Pagar Railway Station of the Rail Corridor into a multi-functional space

180 Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces?. *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

181 Grodach, C. (2010). Art spaces, public space, and the link to community development. *Community Development Journal*, 45(4), 474-493. <https://doi.org/10.1093/cdj/bsp018>; Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces?. *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

182 Klineberg, E. (2018). *Palaces for the people: How to build a more equal and united society*. Random House.

183 Daniels, R. (2018, July). Reimagining Singapore: Placemaking through Arts and Culture. *ETHOS*, (19). <https://knowledge.csc.gov.sg/ethos-issue-19/reimagining-singapore-placemaking-through-arts-and-culture/>

and vibrant community hub. A total of 93 proposals were received, and the winning proposals will help shape the detailed plans for the transformation of the disused station. In New York City, the Friends of High Line organises a year-round calendar of activities, including guided walks, horticulture and art workshops, wellness sessions, and seasonal festivals, which foster public participation and strengthen the park's community network.¹⁸⁴

Larger programmed events like festivals, markets, live performances often require advance logistical arrangements such as securing permissions to reserve and use spaces. These programmes are typically designed to attract large crowds, often accompanied by food and beverage stalls that contribute to revenue generation. Consequently, they may involve entry restrictions through pre-registration or ticketing as well as physical delineations such as fenced-off venues.¹⁸⁵ Such arrangements tend to draw clear distinctions between organisers and participants. In contrast, community-led formal programmes—such as guided walking tours, gardening initiatives, creative expressions, and arts performance—often blur this distinction as they are typically initiated and facilitated by local volunteers and involve more participatory forms of engagement (Box 6.2).

Informal Programme

Informal programmes are typically unstructured or loosely organised, allowing participants to come and go freely, and often require minimal resources or official oversight. These are generally smaller scale or ad hoc activities initiated by local residents or regular park users.¹⁸⁶ They tend to be spontaneous or recurring neighbourhood gatherings that rely on existing social relationships and community initiative, rather than top-down organisation. Examples include,¹⁸⁷

- Impromptu pickup sports games (e.g., casual basketball or football matches),
- Group bike rides or runs organised among friends,
- Community walking groups,
- Skateboarding gatherings,
- Volunteer-led clean-up days, and
- Playful acts of 'pop-up' placemaking such as public chalk art.

Such activities are sustained by local participation and often foster meaningful social interaction among regular users of the space.

¹⁸⁴ Friends of the High Line. (2023). *Programs and Events*. <https://www.thehighline.org/programs/>

¹⁸⁵ Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces?. *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

¹⁸⁶ Glover, T. D. (2019). The transformative (and potentially discriminatory) possibilities of animating public space. *World Leisure Journal*, 61(2), 144-156. <https://doi.org/10.1080/16078055.2018.1550438>

¹⁸⁷ Villani, C., Yin, I. Z., & Siu, K. W. M. (2025). Dancing on the asphalt: extending the bodies and materialities of chromatic leisure in Hong Kong. *Leisure Studies*, 44(5), 858-874. <https://doi.org/10.1080/02614367.2025.2486089>; Peinhardt, K., & Storing, N. (2019, July 2). *Programming for Inclusion: Enhancing Equity through Public Space Activation*. Project for Public Spaces. <https://www.pps.org/article/programming-for-inclusion-enhancing-equity-through-public-space-activation>

Box 6.2 Project Mending Sky: US, Rail Corridor, Singapore

Project Mending Sky: US (2012) was a community art project produced and performed by Drama Box, a theatre company in Singapore. As the final episode of a three-part series—following Project Mending Sky: ME (2008) and YOU (2009)—the project aimed to engage members of the public to reflect on their relationship with nature. Set along the Rail Corridor at Bukit Timah Railway Station from 31 August to 29 September 2012, the inclusive, immersive art performance, involving installations, puppetry, movement choreography, and performance by older residents (reciting nursery rhymes), took the audience on a 1.5 km journey through the forest to search for the mythological Bukit Timah Monkey Man. The route was creatively integrated into the performance to evoke imagination and deepen the audience's connection to place. Puppet theatre was intentionally used to minimise environmental impact.

The performance was based on research on local folklore gathered through interviews with former railway workers and nearby residents. The project involved over 70 community members, including older adults from a senior community theatre group and students to take active stewardship of public spaces through creative expression. In addition, 30 audience participants were involved in each performance.



Source: Drama Box. (n.d.). *Project Mending Sky: US – Man, the forest, the Monkey Man, the tigers and the elephants*. <https://www.dramabox.org/eng/productions-pmsus.html>

Looser Approach

Regardless of whether formally or informally organised, and who initiates the programmes, it is important to recognise that the act of programming inherently introduces change to the regular spatial and social patterns of public spaces. The change may unintentionally generate friction with existing users and risk excluding certain groups. For instance, there is concern that large-scale, revenue-generating events may occupy public spaces for extended periods—from preparation through to execution and eventual dismantling—disrupting smaller, bottom-up initiatives and everyday use of the space.¹⁸⁸ Blurring the lines between formal programming and everyday use can help mitigate this issue. A key strategy

¹⁸⁸ Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces? *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

is to adopt a “looser approach” that facilitates spontaneous and impromptu activities within formal programmes, e.g.,¹⁸⁹

- Adopting a fence-free setup,
- Opening selected stalls or activities to non-registered or walk-in participants, and
- Organising programmes at the periphery of public spaces to minimise potential disturbances to existing patterns of use.

6.3. Context

Contextually, programmes are tailored to fit local settings and community needs. The Djerring Trail responds to Melbourne’s demand for safe, connected cycling infrastructure; the Promenade Plantée revitalises a historic Parisian neighbourhood with arts and crafts spaces; Gyeongui Line Forest Park addresses Seoul’s need for green space and community engagement; and the High Line integrates art, nature, and public events in a dense urban environment. Programme frequency ranges from regular events (e.g., weekly walking tours, monthly cycling rides, seasonal art exhibitions) to ongoing activities (e.g., open-access parks and art spaces, daily recreation, pop-up markets). The diversity of programmes ensures that these spaces remain vibrant and relevant to both locals and visitors, supporting recreation, culture, heritage, and biodiversity.

People visit public spaces for a variety of reasons, with walking, and jogging being the most common purposes, followed by resting and relaxation, appreciating nature, and socialising.¹⁹⁰ Conversely, there are various contextual factors that may prevent people from visiting public space and participating in its programmes. These encompass intrapersonal barriers (e.g., a lack of perceived sense of belonging), interpersonal barriers (e.g., limited social networks), and structural barriers (e.g., time and financial resources).¹⁹¹ If these barriers are not adequately considered, programming risks excluding certain groups while privileging others.¹⁹² Inclusive and accessible programming addresses relevant needs and barriers within the surrounding context. Key strategies include promoting programme frequency and regularity, enabling meaningful community engagement, and fully utilising the legacy and assets of disused railway infrastructure.

Promoting Frequency and Regularity

Frequent and regular programmes such as weekly farmers’ markets and seasonal festivals,

contribute to establishing a rhythm of the public space—patterns of movement, activity, and social interaction that become associated with a particular space over time. Recurrent events provide a familiar spatial setting for local residents, enabling them to integrate this predictable space rhythm into their daily routines.¹⁹³ Studies have found that frequent and regular visits to public spaces are often associated with enhanced well-being and health.¹⁹⁴ Such sustained use also facilitates spontaneous rhythms and social processes of repeated engagement with a space that contribute to value creation and, ultimately, the formation of meaningful place. Surveys of Rail Corridor users indicate that those who visit frequently and consistently exhibit the strongest attachment to the space, along with a heightened sense of stewardship towards the corridor (see Box 6.3 and Box 7.5).

Despite the benefits of regularity, it is important that programme organisers avoid over-programming, which can disrupt everyday use and constrain the potential for bottom-up initiatives. A strategy is to study existing rhythms of life in and around the space and harmonise the frequency and regularity of programming with these existing rhythms by adopting a looser approach to balance formal programming with organic, everyday use of the public space.¹⁹⁵

Enabling Meaningful Engagement

It is essential for programmes to target and enable all users, not some, to develop meaningful engagement with the public space. A key approach is to develop programmes that reflect or meet community needs. The goal is to encourage people to use and care for the public space. A well-used strategy is to create opportunities for people to feel more connected to the space by, e.g.,

- Involving them in the design process, programming, and curation of how the space can be used,
- Identifying and addressing the barriers that prevent them from visiting and engaging with the space,
- Empowering local people to become experts and champions of the public space, e.g., building their capacity to act as guides for nature walks that can contribute to continued activation and ownership of the place.

Research on nature connectedness reports that programmes incorporating rich sensory experiences, beyond mere physical interaction, can foster a stronger sense of connection with nature.¹⁹⁶

189 Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces?. *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

190 Wong, G. K., Ma, A. T., Cheung, L. T., Lo, A. Y., & Jim, C. Y. (2024). Visiting urban green space as a climate-change adaptation strategy: Exploring push factors in a push–pull framework. *Climate Risk Management*, 43, 100589. <https://doi.org/10.1016/j.crm.2024.100589>

191 Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces?. *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

192 Glover, T. D. (2020). Bringing public spaces to life: The animation of public space. In V. Mehta, & D. Palazzo. (Eds.). In *Companion to public space* (pp. 414-425). Routledge.

193 Glover, T. D. (2020). Bringing public spaces to life: The animation of public space. In V. Mehta, & D. Palazzo. (Eds.). In *Companion to public space* (pp. 414-425). Routledge.

194 Twohig-Bennett, C., & Jones, A. (2018). The health benefits of the great outdoors: A systematic review and meta-analysis of greenspace exposure and health outcomes. *Environmental research*, 166, 628-637. <https://doi.org/10.1016/j.envres.2018.06.030> ; Mouratidis, K. (2021). Urban planning and quality of life: A review of pathways linking the built environment to subjective well-being. *Cities*, 115, 103229. <https://doi.org/10.1016/j.cities.2021.103229>

195 Smith, A., Osborn, G., & Vodicka, G. (2024). Programming parks. How do organized events and activities affect the inclusivity of urban green spaces?. *Journal of Leisure Research*, 55(3), 344-362. <https://doi.org/10.1080/00222216.2023.2210563>

196 Lumber, R., Richardson, M., & Sheffield, D. (2017). Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. *PLoS one*, 12(5), e0177186. <https://doi.org/10.1371/journal.pone.0177186>

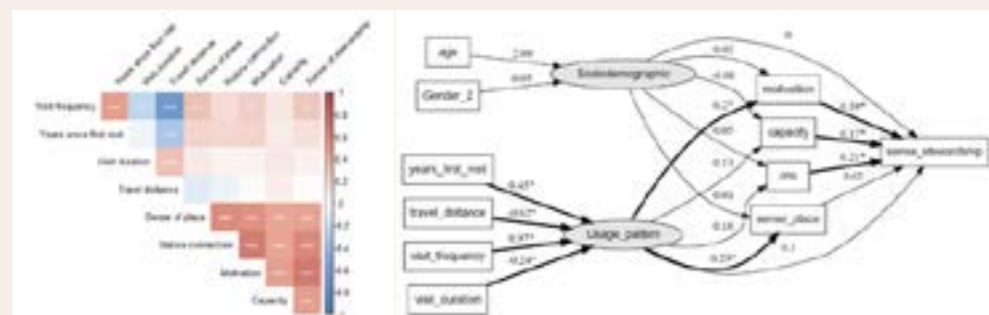
Another strategy is using awareness-raising and educational programmes about public spaces to cultivate a sense of care that is rooted in deeper place-based knowledge and understanding. This enhanced awareness builds not only the ability to name, locate, and describe a place but also to recognise its historical, ecological, social, and aesthetic assets and features.¹⁹⁷ Measures include the development of railway-oriented programming like interpretive signage that presents the site's history, guided tours that explore these layers of meaning to foster stronger people-place connection.

Box 6.3 Sense of Stewardship among Rail Corridor Visitors in Singapore

An intercept survey was conducted in 2024 at two sites along the Rail Corridor in Singapore, gathering responses from 205 visitors. The survey aimed to examine what facilitates or hinders visitors' sense of stewardship towards the corridor. It assessed both behavioural factors (e.g., frequency of visits, visit duration, travel distance, and years since first visit) and perceptual factors (e.g., sense of place, connection to nature, and motivation and capacity for preserving the corridor).

Analysis of the survey data indicates that certain user groups—including Frequent Cyclists and Corridor Stewards—demonstrated high levels of engagement with the corridor, accompanied by a stronger sense of place and connection to nature. These patterns are supported by correlation analyses, which show that stewardship is positively associated with more frequent visits, stronger nature connection, higher motivation, and greater perceived capacity. Structural Equation Modelling further reveals that motivation, capacity, and nature connection are significant predictors of stewardship, even when controlling for sociodemographic factors such as gender and age. Notably, increased Rail Corridor use—reflected in frequent visits and longer dwell times—is shown to enhance users' motivation, which in turn contributes to a stronger sense of stewardship. These findings underscore the importance of promoting routine and meaningful engagement with the corridor to foster a sustained sense of care and responsibility.

Figure. Correlation Analysis and Structural Equation Modelling



Source: Kato, Y., Chan, F., Waldeck, F., & Yuen, B. (2024). *Intercept Survey Technical Report*. (Unpublished technical report)

Leveraging Legacy of Disused Railway Infrastructure

Programming can help to leverage and activate disused railway lines and infrastructure into public spaces, e.g., parks, trails, and greenways, for a range of purposes, including non-motorised transport (e.g., for walking, cycling), recreation, tourism and commerce opportunities, and cultural initiatives that create community spaces while preserving heritage. These activations require an understanding of the site's history, physical characteristics, and evolving urban context, while involving a diverse range of stakeholders. The High Line exemplifies this approach, where year-round activities are organised, building upon its heritage and legacy. The Spur—its newest section at 30th Street and 10th Avenue—is designed as a natural gathering space that provides artists with the opportunity to create ambitious works that engage the city's skyline and stimulate public dialogue around contemporary art and monuments.¹⁹⁸ The Spur hosts regular community programmes such as free weekly drop-in art workshops. Open to all ages and supported by the Friends of High Line's education team, these sessions invite visitors to paint, draw, sculpt, and express their creativity without prior registration—reinforcing the inclusive and participatory spirit of the space.¹⁹⁹

Each case study demonstrates a creative approach to leveraging the legacy of disused railway infrastructure for multiple urban objectives. Melbourne's Djerring Trail converted a former rail corridor into an extensive network of walking and cycling paths, integrating playgrounds, fitness stations, and community spaces, thus enhancing connectivity and recreational opportunities for residents.²⁰⁰ Seoul's Gyeongui Line Forest Park revitalised an underused railway by creating a green urban trail with themed segments, art installations, and community event spaces, directly responding to local needs for green space and social engagement.²⁰¹ These adaptive reuse projects not only preserve historic assets but also stimulate tourism, support local economies, and contribute to urban regeneration, sustainability, and the creation of eco-friendly public spaces.

However, sustaining the intent and initiative of such historic spaces can be a challenge. Despite the initial success of the Promenade Plantée in repurposing the elevated viaduct and its arches for public and artisan use, recent redevelopment efforts have prioritised upscale commercial establishments, leading to the displacement of traditional workshops and local businesses. This shift has undermined the original goals of inclusive urban regeneration and heritage preservation, resulting in tensions between planners and the area's historically diverse community.²⁰²

198 Plit, A. (2019, June 10). The Highline Spur, the final section of the elevated park, opens. *Curbed New York*. <https://ny.curbed.com/2019/6/10/18651140/high-line-new-york-park-spur-photos>

199 Friends of the High Line. (n.d.). *Saturday Art Workshop*. <https://www.thehighline.org/events/saturday-art-workshop>

200 On Yer Bike U3A (2020). *John*. <https://onyerbike-u3a.org.au/our-latest-rides/2020/3/27/caulfield-to-dandenong-via-djerring-trail>; Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.

201 Jung, E. A., Choi, Y. W., Yoon, H. Y. (2016). The impact of the Gyeongui Line Park project on residential property values in Seoul, Korea. *Habitat International*, 58, 108-117. doi: <https://doi.org/10.1016/j.habitatint.2016.10.002>.

202 Akbar, P. N. G., & Edelenbos, J. (2021). Positioning place-making as a social process: A systematic literature review. *Cogent Social Sciences*, 7(1), 1905920.; Urbact (n.d.). *Social media to strengthen local commerce: The case of the Semaest in Paris*. <https://urbact.eu/articles/social-media-strengthen-local-commerce-case-semaest-paris>



Chapter 7

Evaluation

7.1. Why Evaluation Matters in Placekeeping

Evaluation is essential in ensuring that placekeeping efforts, including those involving adaptive reuse of disused railway infrastructure, result in meaningful, lasting transformation. As former transport corridors are converted into public green spaces such as Djerring Trail, High Line, Gyeongui Line Forest Park, and Singapore's Rail Corridor, their long-term success depends not just on the vision, design, and programming but on sustained care and continued relevance of the space to people. Yet, as Dempsey and Burton (2012) have observed, monitoring and evaluation are often overlooked or insufficiently resourced, especially once initial implementation milestones are attained.²⁰³ While evaluation assesses whether a project is achieving its intended outcomes and long-term impacts, monitoring refers to an internal process that tracks whether resources are used as planned, outputs are delivered on time and within budget, and implementation is efficient.²⁰⁴

A robust evaluation approach is both systematic and adaptive. Smith et al. (2014) provide a useful starting point with their placekeeping framework that outlines six key dimensions, including governance, funding, policy, design, maintenance, and partnership, along with relevant indicators and methods for each (see Chapter 1.3).²⁰⁵ These include both quantitative and qualitative tools such as surveys, staff retention data, participatory observation, and award schemes. The guiding principle is that the evaluation is integrated from the start of a placemaking project and revisited regularly throughout its lifecycle. Doing so helps ensure not only accountability but also ongoing learning and the ability to adapt, both of which are essential for maintaining the relevance and responsiveness of placemaking and placekeeping efforts over time.

7.2. Quantitative or Qualitative Indicators

Quantitative key performance indicators (KPIs) are often prioritised in the evaluation of public space interventions to assess their social, environmental, and economic impacts over time (Box 7.1).²⁰⁶ These metrics can help track progress and identify unintended consequences such as gentrification. For example, visitor numbers, event frequency, and changes in property values are commonly used to assess social vibrancy and economic growth in revitalised spaces. While these metrics demonstrate tangible outcomes, they often fail to account for less visible yet equally important aspects of place transformation. Key informant interviews from our Rail Corridor research found that an emphasis on numerical indicators such as audience size in assessing arts initiatives, can obscure more meaningful

outcomes related to cultural meaning, identity, and lived experience.²⁰⁷ Markusen (2013) argues that many indicators used in creative placemaking are based on “fuzzy concepts” like vibrancy and liveability, which lack shared definitions and rely on proxy data disconnected from specific project aims.²⁰⁸ Generic indicators risk favouring already advantaged places, distorting funding decisions, and sidelining communities where transformation is slower but potentially more meaningful. Instead, there is a need for project-specific evaluations that are co-designed with community partners and grounded in both quantitative and qualitative measures that reflect local values and context.

Box 7.1 Quantitative Indicators for evaluating public space interventions

Social Impacts: Social outcomes can be measured through visitor numbers, diversity, and participation in public programmes. The High Line in New York City attracted 7.6 million visitors in 2015, with 31 percent from the city, 6 percent from nearby neighbourhoods, and the remaining from rest of America and other countries. It hosts over 26,000 people annually in events, educates 12,000 children through 400 sessions, and draws 2,500 participants to 130 free tours.

Environmental Impacts: Environmental outcomes can be measured through indicators such as reduced impervious surfaces, lower pollution levels, cooler temperatures, and enhanced ecological connectivity. Thermal imaging before and after the redevelopment shows that the Gyeongui Line Forest Park now maintains significantly cooler surface temperatures than its surroundings, creating a defined cooling footprint that extends approximately 300 metres into adjacent neighbourhoods.

Economic Impacts: Economic indicators include changes in property values and the growth of innovation districts. In Seoul, property values along the Gyeongui Line Forest Park increased by 6.7 percent within a year of project completion, doubling the average growth of other areas. Between 2015 and 2017, the number of nearby businesses grew by 101 percent. However, increased property values often lead to subsequent displacement of lower income residents who can no longer afford to live in the area.

Source: Lee, H., & Kaw, J. K. (2020). Framing The Public-Space Case Studies. In J. K. Kaw, H. Lee, & S. Wahba (Eds.), *The hidden wealth of cities: Creating, financing, and managing public spaces* (pp.161-190). World Bank Publications.; Landscape Performance Series. (n.d.). *High Line – Case Study Brief*. Landscape Architecture Foundation. <https://www.landscapeperformance.org/case-study-briefs/high-line>; Kim, K., Yi, C., & Lee, S. (2019). Impact of urban characteristics on cooling energy consumption before and after construction of an urban park: The case of Gyeongui line forest in Seoul. *Energy and Buildings*, 191, 42–51. <https://doi.org/10.1016/j.enbuild.2019.03.011>

²⁰³ Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20. <https://doi.org/10.1016/j.ufug.2011.09.005>

²⁰⁴ Bamberger, M., & Hewitt, E. (1986). *Monitoring and evaluating urban development programs: a handbook for program managers and researchers*. World Bank. <https://documents1.worldbank.org/curated/en/380361468137717922/pdf/multi-page.pdf>

²⁰⁵ Smith, H., Pereira, M., Roe, J., Sosenko, F., & Lindholst, A. C. (2014). The evaluation of place-keeping: Unrealised potential. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 171–192). Routledge.

²⁰⁶ Lee, H., & Kaw, J.K. (2020). Framing The Public-Space Case Studies. In J. K. Kaw, H. Lee, & S. Wahba (Eds.), *The hidden wealth of cities: Creating, financing, and managing public spaces* (pp.161-190). World Bank Publications.

²⁰⁷ Kato, Y., Nearing, C., Chan, F., Waldeck, F., & Yuen, B. (2025). *Key Informant Interview Technical Report*. (Unpublished Technical Report)

²⁰⁸ Markusen, A. (2013). Fuzzy concepts, proxy data: Why indicators would not track creative placemaking success. *International Journal of Urban Sciences*, 17(3), 291–303.

7.3. Beyond Metrics: Evaluating Process and Capacity

To meaningfully assess placekeeping, it is necessary to go beyond outcome-based metrics, and consider how shared spaces are co-created, maintained, and experienced over time. Smith et al. (2014) draw a critical distinction between the product and process of placekeeping, noting that while physical outcomes often receive attention, the processes through which these outcomes are achieved remain important but understudied.²⁰⁹ Evaluating process involves asking whether stakeholders have the skills, resources, and influence needed to sustain placekeeping efforts in the long term.

Recent studies offer new frameworks for addressing this gap. Mathers et al. identify six interrelated factors of capacity that support collaborative place stewardship²¹⁰ (Box 7.2). Although Mathers et al. (2015) framework addresses the conditions necessary for robust stakeholder capacity, it places less emphasis on how values, identity, and cultural relationships shape engagement with place.

Box 7.2 Evaluating placekeeping process in Sheffield, England

In their study of multi-stakeholder partnerships managing local green spaces, Mathers et al. (2015) developed a framework to assess the capacity of stakeholders involved in placekeeping. They identified six interrelated factors that influence the effectiveness and sustainability of collaborative efforts:

- Capital: The availability of financial and material resources to support ongoing maintenance and programming.
- Commitment: The dedication of individuals and organisations to the long-term care and development of the space.
- Skills base: The knowledge and expertise available within the partnership to plan, manage, and adapt the space.
- Motivation: The underlying drivers that encourage continued engagement, such as personal interest or shared goals.
- Communication: The quality and openness of dialogue among stakeholders, enabling transparency and mutual understanding.
- Political influence: The ability to influence decision-making processes and secure institutional support for the project.

Source: Mathers, A., Dempsey, N., & Frøik Molin, J. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136.

In response to the lack of holistic evaluation methods, Hes et al. (2020) propose a socio-ecological approach that embeds place evaluation within the evolving relationships between

209 Smith, H., Dempsey, N., & Burton, M. (2014). Coordinating place-keeping: Towards more sustainable places. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 173-185). Routledge.

210 Mathers, A., Dempsey, N., & Frøik Molin, J. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136.

people, place, and ecosystems.²¹¹ The Four Dimensions of Place Framework includes: physical, social, cultural, and environmental dimensions, to create meaningful environments. It moves beyond end-of-project scoring to view evaluation as an ongoing process that supports the project's evolution and responsiveness to community needs, emphasising the use of technology and designing with rather than for people. The evaluation framework was applied in the Living Pavilion in Melbourne to assess intangible outcomes such as care and identity (Box 7.3).

While Hes et al. (2020) emphasise relational and ecological connections, Healey (2022) extends this by linking public value to both physical conditions and the social and political capacities that sustain placekeeping.²¹²

Box 7.3 Evaluating the Living Pavillion, Melbourne

The Living Pavilion was a temporary event space held in 2019 on the future site of the New Student Precinct at the University of Melbourne. Co-created by Indigenous knowledge holders, artists, academics, and local communities, it featured over 40,000 Indigenous plants, installations, and performances.



Hes et al. (2020) applied their evaluation framework for this project, unpacking the relationships between people, place, and ecosystems. An important process was the development of community-defined values to evaluate a place through community and expert input. These values include identity, equity, connection to country, attachment, economic viability, and alignment with nature. Instead of relying solely on traditional metrics, the evaluation employed qualitative tools such as narrative interviews. Two other tools involving surveys and questionnaires were used: Lovability Index and Connection to Nature Index. The Lovability Index assesses the relationship between people and the built environment by asking people to map the things they love the most about their public space. The Connection to Nature Index measures people's affective attitude towards the natural environment. These methods captured intangible outcomes such as cultural identity, care, stewardship, and a sense of belonging.

Source: Hes, D., Hernandez-Santin, C., Beer, T., & Huang, S. W. (2020). Place evaluation: measuring what matters by prioritising relationships. In D. Hes & C. Hernandez-Santin (Eds.), *Placemaking fundamentals for the built environment* (pp. 275-303). Springer.; Ecoscenography. (2019). *The Living Pavilion, Melbourne, 2019*. <https://ecoscenography.com/the-living-stage/the-living-pavilion-melbourne-2019/>

211 Hes, D., Hernandez-Santin, C., Beer, T., & Huang, S. W. (2020). Place evaluation: measuring what matters by prioritising relationships. In D. Hes & C. Hernandez-Santin (Eds.), *Placemaking fundamentals for the built environment* (pp. 275-303). Springer.

212 Healey, P. (2022). *Caring for Place: Community Development in Rural England*. Routledge. <https://doi.org/10.4324/9781003112501>

Their framework highlights how material assets, social ties, civic habits, and governance influence the ability of communities to shape and care for their environments (Box 7.4). Together, these approaches support more holistic evaluations of placekeeping initiatives and deserve further consideration.

Box 7.4 Public Value of Community-led Initiatives

Healey (2022) explores the public value of community-led initiatives based on her experience as a resident and activist involved in her small town in rural England. Her framework for determining the public value of these initiatives includes four key dimensions:

- **Material value:** Refers to tangible assets such as repurposing empty buildings into community centres, creating green spaces, offering services, and supporting local economic activity. Examples include facilities for all, including youth, knowledge sharing, social events, building refurbishment, and affordable housing.
- **Social infrastructure:** Emphasises networks, mutual support, and volunteerism. It focuses on the relationships that sustain collective life. Social infrastructure enables communication, knowledge sharing, and daily social activities. Community centres with libraries or tourist information counters serve as key sources of information. Other examples include newsletters, social media, and neighbourhood groups that promote inclusion and interaction beyond a usual circle of friends and family.
- **Socio-cultural habits and potentialities:** Community-led efforts foster new behaviours and civic capacities. These include improved physical and mental well-being, reflective learning, and non-hierarchical collaboration. Self-organisation cultivates care and respect, encouraging more constructive responses from those who tend to complain. Working together supports respectful communication, shared understanding, and collective action.
- **Governance capacity:** Concerns who shapes decisions and how communities participate in governance and policy-making. Empowered participation enables communities to create public value by self-organising and taking on governance roles. Effective initiatives often draw on existing local organising experience.

Source: Healey, P. (2022). *Caring for Place: Community Development in Rural England*. Routledge. <https://doi.org/10.4324/9781003112501>.

7.4. From Awareness to Stewardship: A Place Caring Framework

Given the centrality of community stewardship to effective placekeeping, the degree of care among community members can serve as a key indicator of placekeeping success. Drawing on scholarship in placemaking, environmental conservation, and community development²¹³,

213 Bennett, N. J., Whitty, T. S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S., & Allison, E. H. (2018). Environmental stewardship: A conceptual review and analytical framework. *Environmental management*, 61, 597-614.; Healey, P. (2022). *Caring for Place: Community Development in Rural England*. Routledge. <https://doi.org/10.4324/9781003112501>

this playbook proposes a Place Caring Framework. The framework outlines three overlapping stages of community capacity development: place knowing, place understanding, and place caring (Figure 7.1) (Box 7.5).

- **Place knowing** refers to the ability to identify and describe a place—by naming, locating, or characterising it. Sustained interest at this stage may develop into place understanding.
- **Place understanding**, in which individuals acquire a more holistic, though still partial, awareness of a place’s nature, characteristics, governance structures, and functioning. This includes familiarity with its historical, ecological, social, political, and aesthetic dimensions. Enhanced place understanding—cultivated through participation in collective practices such as community gardening, heritage walking tours, or joining local stewardship group (e.g., Friends of High Line)—can lead to place caring.
- **Place caring** involves an emotional attachment and a sense of interdependence fostered through regular or ritual use and acts of care. Individuals begin to develop a sense of ownership and responsibility for the place—one that extends to fellow users and non-human life. This sense of care nurtures a collective spirit and lays the foundation for shared stewardship.

The framework provides a structured approach to monitoring and evaluating placekeeping by assessing users’ place attachment, sense of community, spatial preferences, and behavioural patterns. Fostering a stronger sense of care requires promoting meaningful people–place interactions through frequent use, sensory immersion, collaborative engagement, and enhanced understanding of the place and its diverse stakeholders. Interventions such as establishing community care groups, organising heritage walks, installing interpretive signage, and conducting tree-planting workshops can help foster deeper place-based connections.

Figure 7.1. Place Caring Framework

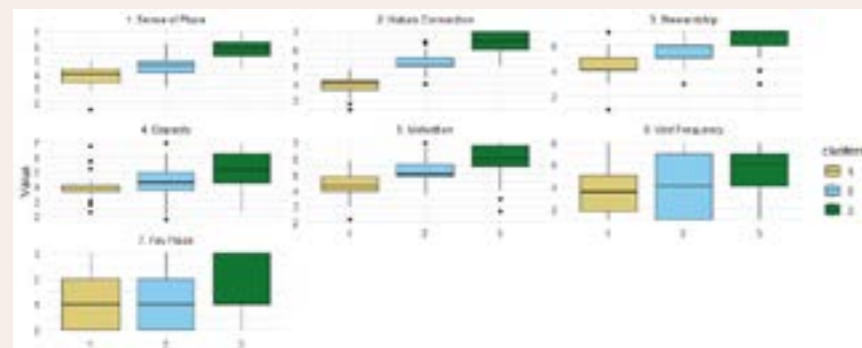


doi.org/10.4324/9781003112501; Hes, D., Hernandez-Santin, C., Beer, T., & Huang, S. W. (2020). Place evaluation: measuring what matters by prioritising relationships. In D. Hes & C. Hernandez-Santin (Eds.), *Placemaking fundamentals for the built environment* (pp. 275-303). Singapore: Springer Singapore. http://dx.doi.org/10.1007/978-981-32-9624-4_13

Box 7.5 Grounding the Place Caring Framework: Empirical Insights from the Rail Corridor Study

Empirical evidence from the Rail Corridor study lends support to the proposed Place Caring Framework. From the survey of 205 Rail Corridor visitors, three user profiles are identified based on individuals' sense of place and nature connection. The sense of place scale (adapted from Jorgensen & Stedman, 2001) captures dimensions of identity, attachment, and functional dependence on a specific location, while the nature connection scale (adapted from Mayer & Frantz, 2004) assesses feelings of belonging to, identification with, and care for the natural environment. Cluster analysis revealed three distinct user groups corresponding to varying degrees along the continuum of place knowing (Cluster 1), place understanding (Cluster 2), and place caring (Cluster 3). Notably, individuals in the 'place caring' group—characterised by high levels of place and nature connection—were more likely to identify favourite locations, express willingness to engage in stewardship, and report elevated perceptions of capacity, motivation, and visit frequency.

Figure. Perceptions and Behaviours of three user groups



While these findings offer preliminary validation of the framework, further research is required to assess the extent to which attitudinal measures of care and stewardship are reflected in sustained, tangible actions that benefit both place and community.

Source: Jorgensen, B. S., & Stedman, R. C. (2001). Sense of place as an attitude: Lakeshore owners attitudes toward their properties. *Journal of environmental psychology*, 21(3), 233-248. <https://doi.org/10.1006/jevnp.2001.0226>; Kato, Y., Chan, F., Waldeck, F., & Yuen, B. (2024). *Intercept Survey Technical Report*. (Unpublished technical report); Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of environmental psychology*, 24(4), 503-515. <https://doi.org/10.1016/j.jenvp.2004.10.001>

7.5. Strategies for Evaluating Placekeeping in Repurposed Railways

Drawing on insights from the literature on evaluating placekeeping and empirical findings from our Rail Corridor study of key informant interviews, we identify five key strategies to guide evaluation of placekeeping in repurposed railways:

- **Embed monitoring and evaluation from the start:** Effective monitoring and evaluation are integrated early in the planning and design stages of placekeeping initiatives. Smith et al. (2014) stress that evaluation should not be an afterthought, but a continuous process embedded across the project

lifecycle.²¹⁴ This allows stakeholders to monitor progress against intended goals, adapt plans when necessary, and ensure long-term accountability.

- **Go beyond quantitative KPIs:** While quantitative indicators (visitor numbers, event frequency, and property value changes) provide useful metrics, they are insufficient on their own. Although economic and environmental metrics can reveal growth and sustainability benefits, they may overlook outcomes related to place identity, inclusion, and care, which can be captured through qualitative tools such as narrative interviews as demonstrated by Hes et al. (2020).²¹⁵
- **Co-develop indicators and make evaluation participatory:** Engaging the community in defining the values from which to evaluate the project and processes can support the redistribution of power. Through participatory methods, communities can co-develop indications and define the success and meaning of a place in terms of connection, care, and cultural identity.²¹⁶ This approach not only captures intangible values, also ensures that evaluation reflects a diversity of perspectives—place and people. When embedded within broader mosaic governance arrangements, these community-defined values can complement government-set plans and policies, providing grounded insights that help tailor planning objectives to local contexts.
- **Evaluate the placekeeping process by assessing stakeholder capacity:** Evaluation considers not only the end-product but also the process. This means assessing the capacity of stakeholders, especially in multi-sector partnerships, to contribute meaningfully to implementation and decision-making. Mathers et al. (2015) highlight six critical factors: capital, commitment, skills, motivation, communication, and political influence, shaping whether partnerships can sustain the long-term stewardship of spaces.²¹⁷
- **Support adaptive learning and reflective governance:** Evaluation is an ongoing, dynamic process rather than a one-time assessment. Adaptive reuse of disused railway like the High Line, Gyeongui Line Forest Park, and Singapore's Rail Corridor are large-scale placekeeping projects that evolve over years or even decades. These spaces require longitudinal monitoring frameworks that can adapt to changes in use, users, and environmental conditions. Longitudinal evaluation and monitoring enable planners and communities to track how repurposed spaces mature over time and respond to shifting needs. This approach encourages a participatory process of learning by doing over time, involving institutionalising new insights, supporting adjustments that keep the space continuously meaningful, inclusive, and resilient.

²¹⁴ Smith, H., Pereira, M., Roe, J., Sosenko, F., & Lindholst, A. C. (2014). The evaluation of place-keeping: Unrealised potential. In N. Dempsey, H. Smith, & M. Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 171–192). Routledge.

²¹⁵ Hes, D., Hernandez-Santin, C., Beer, T., & Huang, S. W. (2020). Place evaluation: measuring what matters by prioritising relationships. In D. Hes & C. Hernandez-Santin (Eds.), *Placemaking fundamentals for the built environment* (pp. 275-303). Springer.

²¹⁶ Cousins, J. B., & Earl, L. M. (1992). The case for participatory evaluation. *Educational evaluation and policy analysis*, 14(4), 397-418.

²¹⁷ Mathers, A., Dempsey, N., & Frøik Molin, J. (2015). Place-keeping in action: Evaluating the capacity of green space partnerships in England. *Landscape and Urban Planning*, 139, 126–136.



Chapter 8

Moving Forward

The playbook presents a suite of approaches, strategies, tools, and empirical cases to support the adaptive reuse of disused railway infrastructure, structured around key interrelated dimensions of placekeeping—the long-term care, governance, and stewardship of public spaces. As Chapters 2 to 7 demonstrate, the different dimensions of partnership and governance, policy, design and management, resourcing, programming, monitoring and evaluation are highly interdependent. For example, an inclusive community gardening programme is supported by governance structures and partnerships that enable cross-sector collaboration, policy frameworks that legitimise implementation, and resources—both financial, physical, and people—to sustain ongoing maintenance and operations. Additionally, monitoring and evaluation are essential for assessing programme outcomes and informing future improvements. Interlinkages underscore the importance of cross-dimensional and cross-sectoral coordination, which requires an understanding of each dimension individually and in relation to one another, tailored to the opportunities and challenges of specific local contexts.²¹⁸

While the cases presented in this playbook offer valuable insights, they are not exhaustive or prescriptive. Each adaptive reuse project has to be preceded by an understanding of its context and community. Contextual adaptation is critical. Turning former disused railway into public spaces is an evolving process that includes placekeeping at the outset. The checklist in Table 8.1 offers the foundational principles of placekeeping, which advocate for engaging with public space in an incremental, participatory, multidisciplinary, multi-agency, and long-term manner.²¹⁹ The goal is to pivot towards the development and management of public spaces that not only endure over time but also endear themselves to people’s everyday lives. Emphasising coordination and collaboration, the playbook supports Jane Jacobs’ fundamental rule of fostering good urbanism—public spaces can serve the needs of all people, “only because, and only when, they are created by everybody.”²²⁰

Table 8.1. Recommended Practices

| Dimensions | Recommended Practices |
|--|---|
| Partnership and Governance | |
| Operationalising Mosaic Governance | Ensure alignment between grassroots initiatives and broader planning goals by establishing clear rules, shared values, and coordination mechanisms across formal and informal actors. |
| Allowing Flexible Land Use Permissions | Enable communities to steward underutilised land through leases, cooperative agreements, or community land trusts, ensuring long-term investment while maintaining public oversight. |
| Establishing Steady Funding Schemes | Provide consistent and accessible funding through government grants, community contributions, or sponsorships to support maintenance, programming, and volunteer retention. |

218 Smith, H., Dempsey, N., & Burton, M. (2014). Coordinating place-keeping: Towards more sustainable places. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 173-185). Routledge.

219 Smith, H., Dempsey, N., & Burton, M. (2014). Coordinating place-keeping: Towards more sustainable places. In N., Dempsey, H., Smith, & M., Burton (Eds.), *Place-keeping: Open space management in practice* (pp. 173-185). Routledge.

220 Jacobs, J. (1961). *The death and life of great American cities*. Random House.

| | |
|--|---|
| Providing Multi-modal, Continuous Engagement Opportunities | Facilitate ongoing participation through varied and accessible formats, both formal and informal, to build trust, sustain momentum, and adapt to evolving community needs. |
| Policy | |
| Policies for long-term management | Embed placekeeping principles and long-term management strategies into policy and planning frameworks from the outset. |
| Inclusive infrastructure and accessibility | Establish policies that require inclusive infrastructure and accessibility for diverse user groups, including people with limited mobility. |
| Community consultation and participation | Mandate community consultation and participation in policy processes for the design, use, and ongoing management of public spaces. |
| Cross-sector collaboration | Develop cross-sector collaboration policies that facilitate partnerships between government, civic groups, and private stakeholders. |
| Regular policy reviews and evaluation | Institute regular policy reviews to ensure adaptability to changing community needs, budgets, and priorities. |
| Design and Maintenance | |
| Design for enduring management and use | Consider the management and maintenance of a space from the outset of the design process, engaging the community to address evolving needs and identify maintenance issues early, ensuring long-term safety and functionality. |
| Design for diverse and evolving needs | Integrate the design with its local context to offer diverse experiences and reflect a unique identity. Good design is context-sensitive, robust, and adaptable—capable of accommodating evolving uses and changing community needs over time. |
| Facilitate phased implementation and user adaptation | Develop short- and long-term action plans to guide the use and evolution of the space, while incorporating education and awareness initiatives to help users know and adapt to new, unfamiliar or innovative design features. |
| Strengthen community stewardship | Support community groups with training, peer learning, and partnerships to strengthen skills, improve governance, and connect with experts and wider institutional support. |
| Resourcing | |
| Diversify funding sources | Combine public, private, and community sector funding to ensure resilience and reduce dependency on a single stream. Integrate both initial capital and ongoing maintenance costs through whole-life costing models and structured but flexible financial planning. |
| Foster volunteer engagement | Build and sustain a strong volunteer base with targeted training, clear agreements, and ongoing support to supplement staff resources. |
| Enhance collaboration and partnerships | Establish cooperative frameworks among stakeholders—including government, private sector, and community groups to share responsibilities and pool resources effectively. |
| Promote equity and inclusion | Ensure resource allocation supports diverse participation and meets the needs of underrepresented groups for equitable placekeeping outcomes. |
| Programming | |
| Set clear purpose | Clearly define the intended goals of the programme and identify the target audience. A well-articulated purpose guides programme design and stakeholder involvement, ensuring responsiveness to local needs and contextual conditions. |

| | |
|---|---|
| Integrate formal and informal programme | Strike a balance between structured, top-down initiatives and spontaneous, community-led activities. This integration supports a more inclusive and dynamic public space that caters to diverse user needs and preferences. |
| Enable meaningful engagement | Foster deeper connection to place through sensory experiences and educational and awareness-raising programme. These approaches strengthen place care and attachment by encouraging emotional resonance, place-based understanding, and appreciation of a site's ecological, cultural, and historical dimensions. |
| Embrace contexts | Design programmes that respond to local contexts by aligning frequency, location, and activity type with community needs and participation barriers. Leverage the unique physical, historical, and social features of disused railway infrastructure to enhance relevance. |
| Evaluation | |
| Embed monitoring and evaluation from the start | Ensure monitoring and evaluation are integrated from the early stages of planning and continue throughout the project lifecycle to track progress, adapt strategies, and uphold accountability. |
| Go beyond quantitative KPIs | Capture a fuller picture of placekeeping outcomes by combining quantitative data with qualitative tools, such as narrative interviews, to reflect values like identity, care, and inclusion. |
| Co-develop indicators and make evaluation participatory | Empower communities by co-developing indicators that reflect local values, ensuring evaluations are inclusive, context-specific, and aligned with diverse definitions of success. |
| Develop stakeholder capacity | Develop ability of stakeholders to contribute meaningfully to implementation and evaluation through factors such as skills, motivation, communication, and partnerships. |
| Support adaptive learning and reflective governance | Establish evaluation as a dynamic, long-term process that enables stakeholders to reflect, respond to change, and institutionalise lessons for more resilient, inclusive outcomes. |