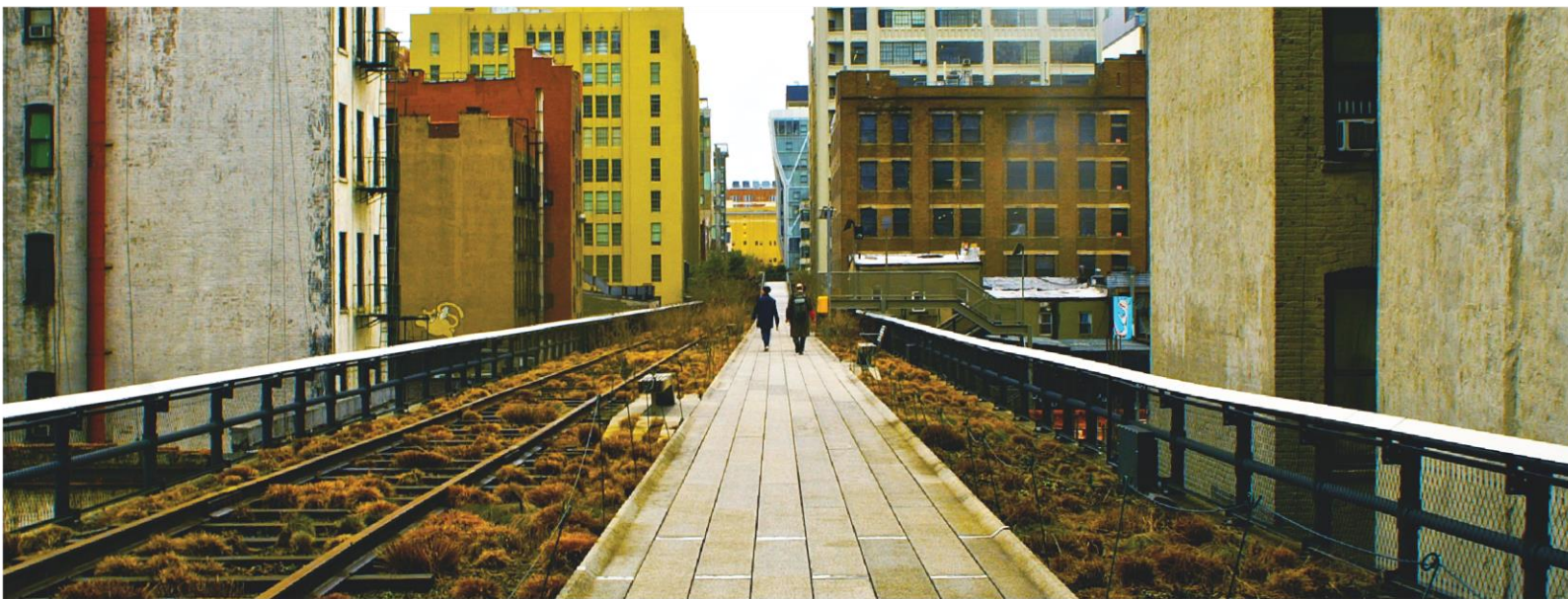


Revitalising Disused Railway

Remaking disused rail infrastructure into people places

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July 2024

Abstract

Although interest in placekeeping and adaptive reuse of disused railway heritage to revitalize urban economy and local community is growing, few have examined the multi-stakeholders involved in the redevelopment, their collaboration and partnership strategies and enabling factors. To address this gap, this study based on literature review examined four major repurposed railway infrastructure: Djerring Trail (Melbourne, Australia), Promenade Plantée (Paris, France), Gyeongui Line Forest Park (Seoul, South Korea) and High Line (New York, USA). The study highlights four key aspects of collaborative placekeeping: integration of diverse programmes and activities, use of various approaches in multi-stakeholder collaboration, importance of balancing diverse interests and needs evaluation in placekeeping initiatives.

Keywords

Collaborative Placekeeping, Disused Railway Infrastructure, Urban Revitalisation, Adaptive Reuse, Multi-stakeholder Collaboration

Research Area

Urban Innovation

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Introduction

Placemaking and placekeeping—the continuous processes of making, remaking, and maintaining places—are increasingly used for creating and sustaining quality-built environment in cities. These processes can help address complex urban issues, enhance quality of life and well-being for local communities, and provide various ecological and economic benefits.¹ With digitalisation and the internet of things, technological progress has profoundly changed the transportation modes of people and goods within cities and an increasing amount of infrastructure from the industrial age has become obsolete and fallen into disuse.² Particularly since the launch of the High Line in New York City, many cities have started to adaptively reuse such disused infrastructure, e.g., railway, road, and canal into greenspace as part of their built heritage enhancement to revitalize urban environments and surrounding communities.³

This study aims to examine four international practices of repurposed abandoned railway infrastructure into greenspace: Djerring Trail (Melbourne, Australia), Promenade Plantée (Paris, France), Gyeongui Line Forest Park (Seoul, South Korea) and High Line (New York, USA) (Table 1. Case Studies). These initiatives are widely regarded as successful conversions of railway infrastructure into linear parks. High Line has won multiple international awards, while Djerring Trail ranks amongst Australia’s best placemaking efforts, and Gyeongui Line

¹ Dempsey, N., & Burton, M. (2012). Defining place-keeping: The long-term management of public spaces. *Urban Forestry & Urban Greening*, 11(1), 11–20. Carmona, M. (2019). Place value: Place quality and its impact on health, social, economic and environmental outcomes. *Journal of Urban Design*, 24(1), 1–48. Akbar, P. N. G., & Edelenbos, J. (2021). Positioning place-making as a social process: A systematic literature review. *Cogent Social Sciences*, 7(1), 1905920.

² Brown, B. 2001. “Reconstructing the Ruhrgebiet.” *Landscape Architecture* 4: 66–75. Koekebakker, O. 2004. *Westergasfabriek Culture Park: Transformation of a Former Industrial Site in Amsterdam*. 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.

³ Ghida, D. B. (2024). Revitalizing urban spaces: Ten key lessons from the “Viaduc des arts” adaptive reuse and placemaking. *Frontiers of Architectural Research*.

Forest Park has won a national award for its walkway lighting design. High Line and Promenade Plantée were featured by the Urban Redevelopment Authority on a dedicated Rail Corridor website as successful examples of repurposed disused infrastructure.⁴ They were also included in the Green Rail Corridor proposal, developed by the Nature Society Singapore.⁵

Table 1. Case Studies

| Features | Djerring Trail | Promenade Plantée | Gyeongui Line Forest Park | High Line |
|----------------|---|---|---|--|
| Location | Melbourne, Australia | Paris, France | Seoul, South Korea | New York, USA |
| Year Opened | 2018 | 1993 | 2016 | 2009 |
| Length | 17 kilometres | 4.7 kilometres | 6.3 kilometres | 2.33 kilometres |
| Major Facility | Playground, fitness station, bike repair station, Dog park, wetland swale, garden, war memorial | Central Lawn, climbing structures, pool, food and beverage facilities, artisan workshops, boutiques, and galleries | Green park, rest areas, observation decks, Art Village, Book Street, food and beverage facilities, retail facilities, reproduction of old railroad crossing | The Spur, garden zones, open plazas, seating, art and performance spaces, food and beverage facilities, retail facilities, pop-up event spaces |
| Stakeholder | Victoria State Government, Victoria's Big Build the Caulfield to Dandenong Level Crossing Removal Alliance, Aspect Studios, Monash Community Bicycle User Group | City of Paris, SEMAEST, Paris Université Club, French Ministry of Culture, British and Commonwealth Women's Association | Seoul Metropolitan Government, Korea Rail Network, Mapo-gu Office, Korean Publishers Cooperative, Sunjin Engineering, Kyungho Engineering, Dongsimwon Landscape, Gyeongui Line Forest Trail Keepers | City of New York, NYC Parks, Friends of the High Line, CSX Transportation, Brookfield Properties |

⁴ Tan See Nin. (2018). Co-creating the Rail Corridor's Future. ETHOS Issue 19 Retrieved 3 July 2024, from <https://knowledge.csc.gov.sg/ethos-issue-19/co-creating-the-rail-corridors-future/>

⁵ 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. Singapore: Nature Society (Singapore).

| | | | | |
|-------------------------------|--|---|--|--|
| Collaboration/ Partnership | Consultations with residents facilitated by an architecture firm, Caulfield to Dandenong Level Crossing Removal Alliance (PPP) | Arts programme and revitalisation efforts by led SEMAEST and City of Paris, through acquiring and leasing estates (Viaduc des Arts) | Seoul Metropolitan Government led the Gyeongui Line Forum and several resident briefing sessions to collect public opinion, which then informed supplementary design and construction, in collaboration with various experts, NGOs and residents living nearby. Gyeongui Line Forest Trail Keepers | Art projects/commissions and community partnerships led by Friends of the High Line, maintenance of the High Line led by Friends of the High Line and NYC Parks, Funding and support provide by City of New York and Brookfield Properties, education partnerships with nearby schools |
| Programme | Events for bicycle users | Guided walking tours, heritage tours, Nature in Paris | Walking challenges, running interest groups, art workshops and exhibitions, ecological tours, flea markets, book-related events, tourist walks | Walking tours, mindfulness/wellness sessions, youth development, in-school/after school activities, art programme |

The literature review involved searching Google Scholar and the websites of relevant government agencies using the names of the linear parks as keywords. The inclusion criteria were peer-reviewed academic articles, white papers, newspaper articles, and reports issued by government agencies or research institutes, all written in English. The review covers the stakeholders involved in each development, the arrangements for multi-stakeholder collaboration, the strategies used to promote partnerships and identify factors contributing to their implementation. The review was conducted as part of the LKYCIC *Placekeeping Rail Corridor* research. These findings provide a reference point for stakeholders' engagement in placekeeping initiatives in Singapore.

Djerring Trail

The Djerring Trail is a 17 km long shared pedestrian and bicycle path in south-eastern Melbourne, Australia. It was created as part of the Level Crossing Removal Project (LXRP), an A\$1.6 billion infrastructure upgrade project developed by the Victoria State Government. Historically, Melbourne's flat landscape and low population density led to the construction of many road-railway intersections as level crossings rather than bridges or underpasses. As traffic volumes grew, these crossings soon became significant bottlenecks for both road and rail, hindering the efficiency, frequency, and safety of train services.⁶

In 2015, the Level Crossing Removal Authority was created to oversee the execution of the LXRP with the objective of removing 50 level crossings across Melbourne.⁷ This project involved the removal of nine dangerous and congested level crossings between Caulfield and Dandenong by raising the railway lines.⁸ The project also created five new train stations and 22.5 hectares of public open space for residents in the south-eastern suburbs of Melbourne.⁹ This integrated urban design approach aimed to enhance connectivity, safety, and recreational opportunities for the communities along the railway corridor. Completed in 2018, the trail runs alongside the Cranbourne and Pakenham railway lines, linking many shorter shared-use paths and spanning 13 stations from Caulfield to Dandenong (Figure 1). Figure 1. Djerring Trail

⁶ Gbban, A. M., Kamruzzaman, M., Delbosc, A., & Coxon, S. (2023). The wider barrier effects of public transport infrastructure: The case of level crossings in Melbourne. *Journal of Transport Geography*, 108, 103554.

⁷ Victoria's Big Build (n.d.). Project Overview. Retrieved 30 July 2024, from <https://bigbuild.vic.gov.au/projects/level-crossing-removal-project/about/project-overview>

⁸ Victoria's Big Build (n.d.). Level Crossing Removal Project. Retrieved 20 Feb 2024, from <https://bigbuild.vic.gov.au/projects/level-crossing-removal-project>

⁹ Beza, B., & Ricardo, R. R. (2019). Beneath the rail line. *Landscape Architecture Australia*, (163), 26-33.



Source: Beza & Ricardo (2019)).¹⁰

¹⁰ Waking Maps (n.d.). Djerring Trail - Caulfield to Oakleigh. Retrieved 20 Feb 2024, from <https://walkingmaps.com.au/walk/4166>

Figure 1. Djerring Trail



Source: Beza & Ricardo (2019)

Physical Characteristics and Facilities

Central to the trail is the creation of a linear park, extending 8.4 kilometres from Carnegie to Hughesdale, Clayton, and Noble Park, alongside twelve kilometres of new pathways for shared use and the planting of thousands of new trees.¹¹ The redevelopment project covers diverse areas, including residential, commercial, transport, and parkland zones, posing a challenge for the project team in developing a cohesive theme across several kilometres.¹² Scholars described the open public spaces within the Djerring Trail as human-scale, achieved through the strategic placement of various benches and furniture pieces, selection of plant varieties, and a unified colour scheme throughout the trail's diverse areas and surroundings.¹³ The trail offers a range of experiences, through passive to active areas for residents, including small-scale interventions with revegetation areas to larger activation nodes, ensuring the spaces are utilized consistently

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

from morning to evening (Figure 2). These spaces also incorporate reused materials, such as historic steel trusses from the demolished stations, which were converted into boomerang-shaped seats, alongside new and colourful sporting areas and courts.

Figure 2. Major activity nodes within Djerring Trail



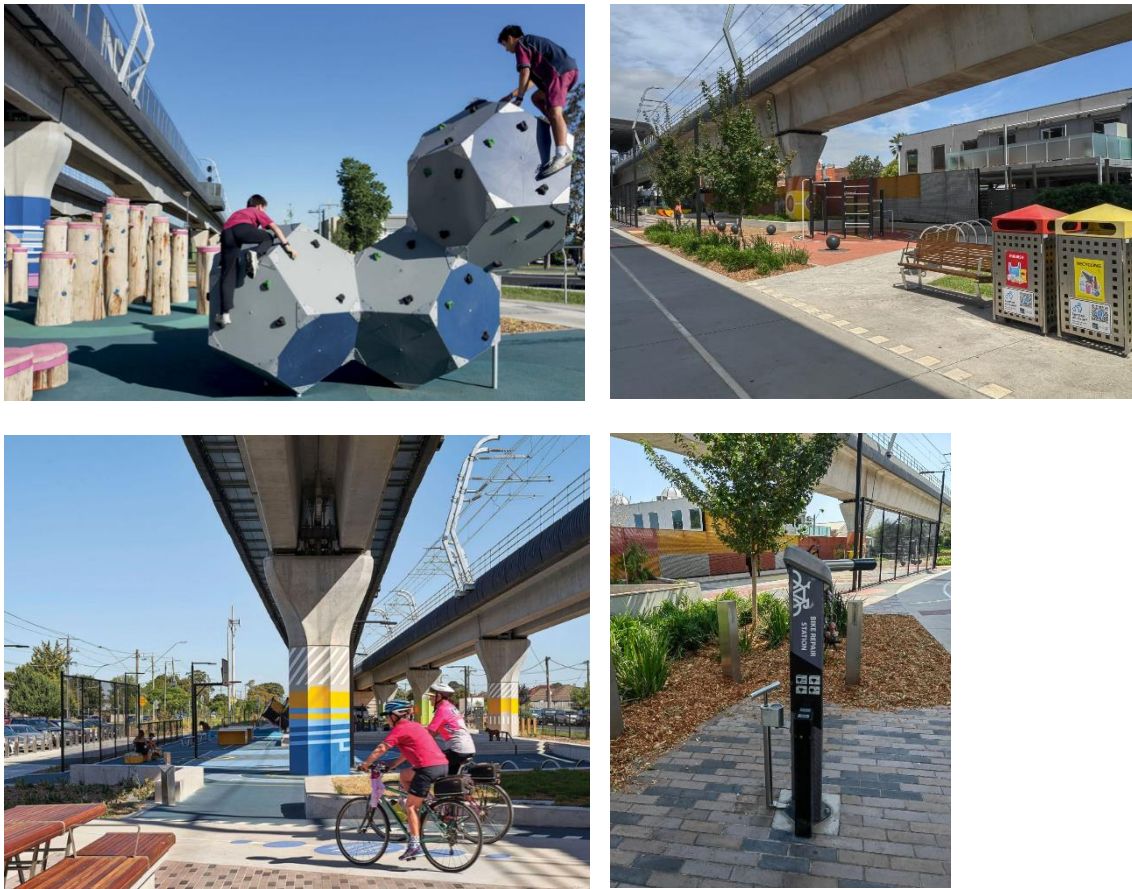
Source: Beza & Ricardo (2019)

Public amenities commonly found along the path include playgrounds, parkour equipment, fitness stations, bike repair stations, dog parks, basketball courts, wetland swales, gardens, tree plantings, a war memorial, car parks, and bus turnaround lanes, drinking fountains and seating (

Figure 3). The guiding design principle is to enable all ages to walk its path in comfort. Public toilets can be accessed at the railway stations across the Djerring Trail, which are clean and well-maintained.¹⁴ The path also passes through points of interest, such as community spaces, exercise stations and recreational/sporting facilities, which further connects and encourages residents living near the path to pursue an active lifestyle.

¹⁴ On Yer Bike U3A (2020). John. Retrieved 20 Feb 2024, from <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.

Figure 3. Various Facilities within Djerring Trail



Source: Beza & Ricardo (2019) and author

Programme and Interest Groups

Due to the length of the Djerring Trail, most if not all users who commute the entire length of the path are cyclists, who use it as a 'super-highway' for leisure rides even in cold, wet weather.¹⁵ Riding events are frequently held along the Djerring Trail, with a Big Bike Ride organised by the Australian Cycle Alliance and the Level Crossing Removal Authority when the trail first opened in October 2018, between Caulfield and Yarraman.¹⁶ Bicycle User Groups

¹⁵ On Yer Bike U3A (2020). Djerring Trail, Caulfield to Yarraman. Retrieved 20 Feb 2024, from <https://onyerbike-u3a.org.au/our-latest-rides/2020/3/27/caulfield-to-dandenong-via-djerring-trail>

¹⁶ Ride the rail: Yarraman to Caulfield Big Bike Ride (2018). Retrieved 11 Apr 2024, from <https://bicyclenetwork.com.au/newsroom/2018/10/25/ride-the-rail-yarraman-to-caulfield-big-bike-ride/>

(BUG), such as the Monash community Bicycle User Group (McBUG) and Glen Eira BUG use the Djerring trail to commute to work¹⁷ and for leisure rides.¹⁸ Critical Mass Melbourne, a cycling advocacy group based in Melbourne, also hosts bicycling events on the last Friday of every month around the city of Melbourne, including sections of the Djerring trail (Figure 4).¹⁹

Figure 4. Bicycling activities involving Djerring Trail



Source: McBUG, Glen Eira BUG

Stakeholders and Placekeeping Strategies

The development of Djerring Trail was spearheaded by the Level Crossing Removal Project, a government-led initiative under the Victorian Government 'Victoria's Big Build' programme. This project involves collaboration with several private companies that provide specific services and expertise. For instance, AECOM and GHD formed a joint venture to provide technical advisory services, and companies such as Lendlease, CPB Contractors, WSP, and Metro Trains Melbourne collaborated with Aurecon on specific sections of the Djerring Trail.²⁰

¹⁷ Facebook (2022). Monash community Bicycle User Group (McBUG). Retrieved 11 Apr 2024, from <https://www.facebook.com/photo?fbid=471079451725685&set=a.465118552321775>

¹⁸ Facebook (2024). Glen Eira Bicycle Users Groups (GEBUG). Retrieved 11 Apr 2024, from <https://www.facebook.com/photo/?fbid=1546754202565464&set=gm.7579284792095510&idorvanity=794249190599138>

¹⁹ Facebook (2024). Critical Mass March. Retrieved 11 Apr 2024, from <https://www.facebook.com/events/289998247447616>

²⁰ Landezine. (n.d.). Caulfield to Dandenong Level Crossing Removal Project. Retrieved 10 June 2024, from <https://landezine-award.com/caulfield-to-dandenong-level-crossing-removal-project/>

Design and architecture were led by Aspect Studios and Cox Architect, in collaboration with graphic design practice, Double-A.²¹ Additionally, local residents and community groups were consulted throughout the design and construction process, facilitated by Aspect Studios.²² This arrangement allows the government to retain overall control and direction of the project while leveraging the skills, technologies, and efficiencies offered by experienced private-sector partners.

A crucial part of the design process involved addressing and incorporating the concerns of the project's extensive list of stakeholders including residents and businesses. The design lead, Aspect Studios, engaged a full-time landscape architect whose main responsibility was to ensure that stakeholder approvals were obtained efficiently, thereby allowing the physical design process to move forward smoothly.²³ For example, initially, residents around the trail were concerned that the elevated rail might create unsafe, graffiti-covered spaces. These concerns were taken seriously in the design process, resulting in a public space that is open, spacious, and well-maintained. Since its opening, many locals who originally opposed the project have now embraced it.²⁴

In addition, the design team collaborated closely with local councils along the trail to develop urban design frameworks tailored to each of the neighbourhoods. This collaboration facilitated more integration of local insights into the immediate sites and the entire project. The results of consultations with the local community can be seen in the five station entrance areas—these spaces adopt a consistent design approach, though with minor variations tailored to each

²¹ Beza & Ricardo op. cit.

²² Ibid.

²³ Ibid

²⁴ The Age (2019). More than a year on, has 'sky rail' turned suburbs into ghettos?. Retrieved 20 Feb 2024, from <https://www.theage.com.au/national/victoria/more-than-a-year-on-has-sky-rail-turned-suburbs-into-ghettos-20190509-p511qm.html>

specific location. To add colour and warmth to the predominantly grey rail infrastructure, glazed tiles were incorporated into the urban furniture. Their colour scheme, featuring shades of yellow, orange, and green, drew inspiration from the works of renowned artist Arthur Boyd, who was raised in the nearby area of Murrumbena (Figure 5).²⁵

Figure 5. Common Colour Scheme



Source: Beza & Ricardo (2019)

Despite the space popularity and positive feedback from residents, there is concern for the maintenance of the trail. Within a year of the trail's opening, scholars noticed weeds taking root in some areas and overhead lights not functioning properly. These maintenance issues, if left unaddressed, may undermine the cohesive theme of the trail and perceived safety in these areas,

²⁵ Beza & Ricardo op. cit.

especially at night. Although A\$15 million project budget was set aside in 2017 for the maintenance of the trail, there is concern about how long this level of care will be sustained.²⁶

²⁶ Ibid.

Promenade Plantée

The Coulée verte René-Dumont, or the Paris Promenade Plantée (French for ‘planted walkway’) as it is more commonly known, is an elevated green walkway found in the 12th arrondissement of Paris (Figure 6). It was created as part of the Eastern Paris Programme Plan, or the *Plan-programme Est de Paris*, a city transformation plan approved by the Paris municipal council in 1983, which involved the development of new green spaces, including the Paris Promenade Plantée. The Paris Promenade Plantée, designed by landscape architect Jacques Vergely and architect Philippe Mathieux,²⁷ was built on the Paris-Vincennes section of the old mid-19th-century Vincennes railway line and officially opened in 1993.²⁸

Prior to its transformation, the Paris-Vincennes section was an abandoned railway viaduct since 1969, when it ceased operations following its integration with another commuter rail line serving Paris (Réseau Express Régional).²⁹ Originally scheduled to be demolished, it was instead adaptively reused as a linear park above the railway viaduct, while spaces beneath the viaduct arches (Viaduc des Arts) are occupied by shops, providing amenities, from food and drink to arts and culture.³⁰ As the first park space in the world to be built on a disused, elevated railway viaduct, the Paris Promenade Plantée sets the precedent for converting obsolete railway

²⁷ Creating a Sense of Place (n.d.). Promenade Plantée. Retrieved 8 Feb 2024, from <https://www.creatingasenseofplace.com/place/302/promenade-plantee>

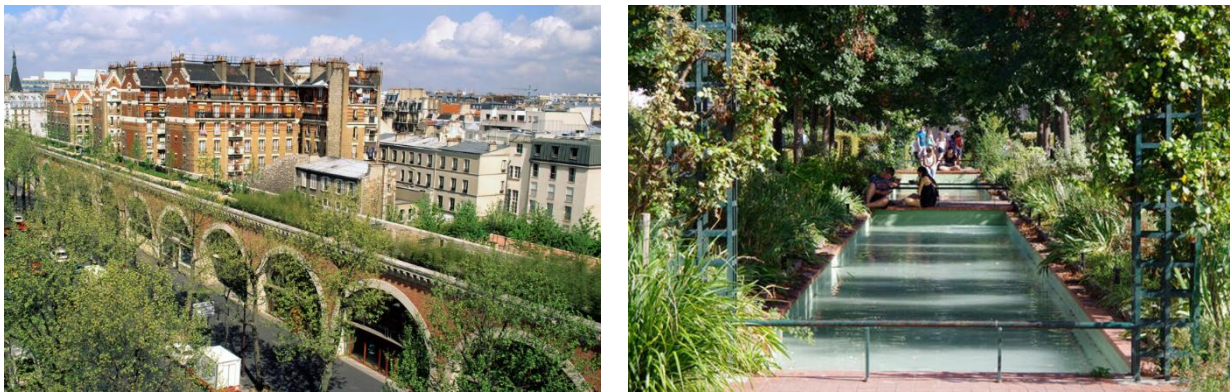
²⁸ The Guardian (2017). A magical, green walk along Paris's Promenade Plantée. Retrieved 6 Feb 2024, from HYPERLINK "<https://www.theguardian.com/travel/2017/jun/07/paris-promenade-plantee-free-elevated-park-walkway-bastille-bois-de-vincennes>"<https://www.theguardian.com/travel/2017/jun/07/paris-promenade-plantee-free-elevated-park-walkway-bastille-bois-de-vincennes>

²⁹ Association Sauvegarde Petite Ceinture (2003). La coulée verte (ou promenade plantée) de la Bastille n'utilise-t'elle pas déjà une partie de la Petite Ceinture ferroviaire ? Retrieved 6 Feb 2024, from <https://archives.petiteceinture.org/La-coulee-verte-ou-promenade-199.html#gsc.tab=0>

³⁰ The Boston Globe (2002). A Paris match? Retrieved 6 Feb 2024, from https://web.archive.org/web/20141024183246/http://www.boston.com/beyond_bigdig/cases/paris/index.shtml

infrastructure into public green spaces.³¹ Most notably, the Paris Promenade Plantée is the key inspiration for the High Line, an elevated park space in New York City, which opened in 2009 and similarly built upon a previously abandoned railway viaduct.

Figure 6. Paris Promenade Plantée



Source: The Guardian³²

In the 1970s, before the transformation, the abandoned railway trail was used by various groups including bird watchers, underage drinkers, drug dealers, and urban explorers. Small enterprises also occupied the spaces, such as makeshift auto repair shops, studios, and eateries. Simultaneously, frustrations grew among the residents living nearby the abandoned rail line, calling for various solutions, ranging from its demolition to the development of new commuter lines and the restoration of train services. Motivated by anti-establishment politics and nostalgia for an imagined pre-capitalist Paris, some citizen groups opposed large-scale state-led redevelopment.³³

³¹ Britannica (n.d.) Promenade Plantée. Retrieved 6 Feb 2024, from <https://www.britannica.com/place/Promenade-Plantee>

³² John Brunton (June 2017). A magical, green walk along Paris's Promenade Plantée. Retrieved Apr 18, 2024, from <https://www.theguardian.com/travel/2017/jun/07/paris-promenade-plantee-free-elevated-park-walkway-bastille-bois-de-vincennes>

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

Against this backdrop, the abandoned railway track was redeveloped as part of a broader initiative aimed at converting the Right Bank of eastern Paris from a working-class industrial landscape to an upscale district attracting professionals seeking upward social and economic mobility.³⁴ The development of Promenade Plantée was conducted in three phases between 1988 and 1994. Phase 1 focused on the design and implementation of the landscape programme for the western elevated section, which comprises over one-third of the entire greenway's length. Phase 2 involved the restoration of the viaduct to establish the Viaduc des Arts, a dedicated space for arts and crafts (Figure 7). Phase 3 saw the design team's integration of the Promenade with the ongoing redevelopment of the Reuilly site, classified as a concerted development zone (ZAC, Zones D'aménagement Concerté), extending the greenway eastward to its endpoint.³⁵

³⁴ Ibid.

³⁵ Ibid.

Figure 7. Viaduc des Arts



Source: The Viaduc des Arts³⁶

Physical Characteristics and Facilities

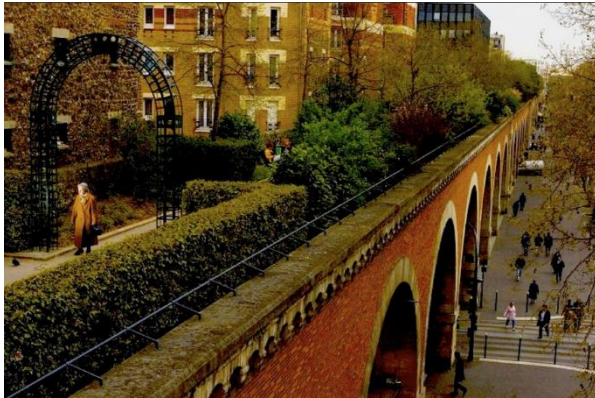
The Paris Promenade Plantée is a 4.7 km long elevated park, which spans 9 metres above the street level, running through the eastern side of the Opera Bastille to the Boulevard Périphérique.³⁷ The architects and landscape architects transformed the rail bed into a classic linear promenade, featuring plantings, benches, pergolas, and arbours. They strategically incorporated pauses along the route, where greenery recedes to create spaces for small ponds, plazas, niches, and seating areas, inviting visitors to linger and enjoy the surroundings (

³⁶ The Viaduc des Arts (n.d.). The major place of art & crafts. Retrieved 19 Apr 2024, from <https://www.leviaducdesarts.com/en/the-viaduc-des-arts>

³⁷ Cool Stuff in Paris (n.d.). La Promenade Plantée. Retrieved 22 Feb 2024, from http://www.coolstuffinparis.com/bat_watching_promenade_plantee.php

Figure 8). Eleven arches still allow traffic to pass through, while the other sixty arches now have matching glass walls and rules for signs, colours, and purposes. These spaces are now used as open, bright stores for crafts, small restaurants, and design companies.

Figure 8. Various Open Spaces within Promenade Plantée



Source: Well Traveled and Google Photos³⁸

Heathcott (2013) noted that the elevated nature of the promenade offers a fresh perspective on the city, creating what can be termed as “elevated urbanism”.³⁹ Positioned above the second floors of buildings, the promenade directs attention to architectural details that are often overlooked at street level. By repurposing the infrastructure of old, planners facilitate the smooth flow of non-motorized traffic across a significant stretch of the city.⁴⁰ In the process,

³⁸ Well Traveled (n.d.). Coulée Verte René-Dumont, retrieved May 31, 2024, from, <https://cityseeker.com/paris/400591-jardin-de-reuilly>

Google Photos (n.d.) Coulée Verte René-Dumont, retrieved May 31, 2024 from https://www.google.com.my/travel/entity/key/ChYIg_H9dq8-46WARoJL20vMDZocG52EAQ/photos?utm_campaign=sharing&utm_medium=link&utm_source=htls&ts=CAEaBAoCGgAqBAoAGgA

³⁹ Ibid.

⁴⁰ La Rocca, R. A. 2010. “Soft Mobility and Urban Transformation: Some European Case Studies.” *Journal of Mobility, Land Use and Environment* 3: 85–90.

the Promenade establishes a novel urban environment—a linear combination of architecture, ground, and sky—that not only improves people's movement through the area but also stimulates the formation of a unique place. As of April 2021, the Paris Promenade Plantée remains Europe's longest and sole elevated park.⁴¹ The elevated park is situated along some Parisian landmarks, such as the Gare de Lyon, 12th arrondissement's Police station and Jardin de Reuilly. The Jardin de Reuilly encompasses a large central lawn, climbing structures, a pool, and various plants for public enjoyment (Figure 9).⁴²

Modern landscaping and green spaces are prominent features of the Paris Promenade Plantée. The park includes facilities, such as toilets positioned throughout the linear park, along with public Wi-Fi access.⁴³ Food and beverage options, along with arts and crafts experiences, are available at the Viaduc des Arts. This area houses cafes and restaurants beneath its arches and offers storefronts selling jewellery, porcelain painting, flowers, antiques, and art pieces.⁴⁴

⁴¹ French moments (2021). La Promenade Plantée: a lovely stroll in Paris. Retrieved 22 Feb 2024, from <https://frenchmoments.eu/la-promenade-plantée-paris/#t-1708588561235>

⁴² Cityseeker (n.d.). "Crossed by the Promenade Plantée". Retrieved 12 Apr 2024, from <https://cityseeker.com/paris/400591-jardin-de-reuilly>

⁴³ Paris (n.d.). Coulée verte René Dumont. Retrieved 12 Apr 2024, from <https://www.paris.fr/lieux/coulee-verte-rene-dumont-1772>

⁴⁴ Paris je T'aime (n.d.). Le Viaduc des Arts. Retrieved 12 Apr 2024, from HYPERLINK "https://parisjetaime.com/eng/shopping/le-viaduc-des-arts-p3733" <https://parisjetaime.com/eng/shopping/le-viaduc-des-arts-p3733> .

Figure 9. Jardin de Reuilly



Source: cityseeker⁴⁵

Programme and Interest Groups

For the Promenade to thrive, it requires continuous people presence—through physicality, emotions, paths, and memories. The Promenade accommodates and benefits from various activities, including walking, jogging, picnicking, bird watching, and socialising. It serves as a valuable city amenity for residents, a destination for Parisians and tourists, and a learning ground for horticulturalists and landscape students. Guided tours of the Paris Promenade Plantée are offered by the City of Paris administration, specifically by the Direction des Espaces Verts et de l'Environnement (Management of Green Spaces and the Environment).⁴⁶ Similarly, the Paris Université Club (PUC) hosts monthly Walking and Heritage tours to the

⁴⁵ cityseeker (n.d.) Jardin de Reuilly retrieved May 31, 2024, from, <https://cityseeker.com/paris/400591-jardin-de-reuilly>

⁴⁶ Paris je T'aime (n.d.). Coulée verte René-Dumont. Retrieved 12 Apr 2024, from <https://parisjetaime.com/eng/culture/coulee-verte-rene-dumont-p977>

12th arrondissement of Paris, which includes the Paris Promenade Plantée, which is supported by the French Ministry of Culture.⁴⁷

On a communal level, the British and Commonwealth Women's Association (BCWA) of Paris also organises free monthly walks to the Paris Promenade Plantée,⁴⁸ though only BCWA members have access to such walks from March 2024 onwards.⁴⁹ Private, fee-paying tours are organised by travel and tourism firms, such as Tripadvisor⁵⁰ and CitySeeker.⁵¹ By offering opportunities for a broad range of usage and users, the originally designed space for movement and connectivity now offers an additional public space for tranquillity and reflection in the city.⁵²

Stakeholders and Placekeeping Strategies

The Paris Promenade Plantée is managed by the Paris Council (Conseil de Paris), the deliberative assembly of the City of Paris.⁵³ The Paris Council is responsible for the general regulation of the Paris Promenade Plantée, including guidelines for users of Parisian green spaces,⁵⁴ as well as deploying surveillance officers and other public officials to enforce such

⁴⁷ Allevents (n.d.). Marche & Patrimoine en avril. Retrieved 12 April 2024, from HYPERLINK "<https://allevents.in/paris/marche-and-patrimoine-en-avril/10000875141179827>"<https://allevents.in/paris/marche-and-patrimoine-en-avril/10000875141179827>

⁴⁸ The British Commonwealth Women's Association (n.d.). Free monthly walk discovering the 12th arrondissement. Retrieved 12 April 2024, from HYPERLINK "<https://www.bcwa.org/event-4404304>"<https://www.bcwa.org/event-4404304>

⁴⁹ The British and Commonwealth Women's Association (n.d.). Calendar. Retrieved 12 Apr 2024, from HYPERLINK "<https://www.bcwa.org/calendar>"<https://www.bcwa.org/calendar>

⁵⁰ Tripadvisor (n.d.). Private Bastille and Aligre market walking tour with the highline. Retrieved 12 Apr 2024, from https://www.tripadvisor.com.sg/AttractionProductReview-g187147-d11454713-Private_Bastille_and_Aligre_market_walking_tour_with_the_highline-Paris_Ile_de_Fra.html

⁵¹ Cityseeker (n.d.). Private Bastille and Aligre market walking tour with the highline. Retrieved 12 Apr 2024, from HYPERLINK "<https://cityseeker.com/paris/tour/463483028-bastille-district-food-tasting-promenade-plant%C3%A9e-and-viaduc-des-arts-walking-tour>"<https://cityseeker.com/paris/tour/463483028-bastille-district-food-tasting-promenade-plant%C3%A9e-and-viaduc-des-arts-walking-tour>

⁵² Heathcott op cit.

⁵³ Conseil de Paris (n.d.). Conseil de Paris. Retrieved 8 Feb 2024, from <https://www.paris.fr/le-conseil-de-paris>

⁵⁴ Paris (2018). Réglementation générale des parcs, jardins et espaces verts de la Ville de Paris. Retrieved 8 Feb 2024, from <https://cdn.paris.fr/paris/2019/07/24/1094dc2227da266ccbe6f8648a8e3b3d.pdf>

regulations.⁵⁵ Volunteers from the Paris Council, specifically from the Department of Green Spaces and Environment (Direction des Espaces Verts et de l'Environnement),⁵⁶ provide guided tours and lectures at green spaces in Paris, including the Paris Promenade Plantée,⁵⁷ as well as a variety of workshops and activities as part of the Nature in Paris (Nature à Paris) programme.⁵⁸

The Promenade's overall development was guided by the French landscape philosophy of Préverdissement. This philosophy urges architects and planners to project the city's development using adaptable and versatile strategies. Rather than imposing rigid and definitive plans on urban landscapes, architects and planners approach reclamation and revitalisation efforts within a framework that links present conditions to future expansion, fostering opportunities for social interaction and innovation.⁵⁹ This adaptable and flexible placekeeping strategy is reflected in the development of the Viaduc des Arts, situated beneath the viaduct arches of the Paris Promenade Plantée park. This project was executed by SEMAEST and architect Patrick Berger between 1990 and 2000⁶⁰ SEMAEST, a semi-public company, collaborates closely with the City of Paris to acquire real estate and lease it to suitable tenants, including social housing owners (Figure 10)⁶¹

Figure 10. SEMAEST Intervention Methods

⁵⁵ Paris (n.d.). Parcs, jardins, squares et espaces verts. Retrieved 8 Feb 2024, from <https://www.paris.fr/pages/espaces-verts-139>

⁵⁶ Paris je T'aime (n.d.). Coulee verte René-Dumont. Retrieved 8 Feb 2024, from <https://parisjetaime.com/eng/culture/coulee-verte-rene-dumont-p977>

⁵⁷ Paris (n.d.). Parcs, jardins, squares et espaces verts. Retrieved 8 Feb 2024, from <https://www.paris.fr/pages/espaces-verts-139>

⁵⁸ Paris (n.d.). Nature à Paris : le programme . Retrieved 8 Feb 2024, from <https://www.paris.fr/evenements/nature-a-paris-le-programme-13407>

⁵⁹ Heathcott op cit.

⁶⁰ The Viaduc des Arts (n.d.). The major place of arts & crafts. Retrieved 8 Feb 2024, from <https://www.leviaducdesarts.com/en/the-viaduc-des-arts>

⁶¹ C40 Cities (2021). Reinventing Retail to foster green & thriving neighbourhoods. Retrieved 8 Feb 2024, from https://www.c40reinventingcities.org/data/knowledge_0bb42/fiche/292/reinventing_retail_c40_webinar_presentation_Oba22.pdf

SEMAEST becomes SEM Paris Commerces

Our Vocation

- Improving the quality of life in the capital's neighbourhoods
- Encouraging innovative, ethical and sustainable initiatives
- Preserving local commerce and craft activities

Our methods of intervention

- Acquisition of commercial premises, renovation, installation of local merchants and management on behalf of the City of Paris: **Vital'Quartier** and **Contrat Paris Commerces** operations.
- Marketing and management of premises on behalf of public and private landlords and the City of Paris, via emphyteutic leases: **Bréguet** (11th), **Cour de l'industrie** (11th), **Viaduc des arts** (12th), **Château Rouge** (18th), **Claude Bernard** (19th), **Avenue du Maine** (15th), **Treillard Market** (8th), **premises of the City of Paris**.

Source: SEMAEST⁶²

Additionally, SEMAEST engages in the acquisition and subsequent leasing of abandoned shops and spaces at affordable market rates, as part of the revitalization that is aimed at promoting local businesses and craftsmanship in disadvantaged or declining areas of Paris.⁶³ These initiatives by the Viaduc des Arts have reshaped the commercial landscape of East Paris, featuring numerous upscale artisanal shops and boutiques. Although the intention was to preserve traditional artisanal practices in the surrounding areas, officials also removed makeshift artisanal workshops and squatters that previously occupied the viaduct spaces, making way for high-end establishments. This action has created tension between the planners' imposition of a uniform aesthetic and the area's historically diverse and adaptive architectural style, rooted in its working-class heritage. The resultant change suggests that the placemaking

⁶² SEMAEST (n.d.). Nos missions. Retrieved 19 Apr 2024, from <https://www.semaest.fr/la-semaest/semaest-description/nos-missions>

⁶³ Urbact (n.d.). Social media to strengthen local commerce: The case of the Semaest in Paris. Retrieved 8 Feb 2024, from <https://urbact.eu/articles/social-media-strengthen-local-commerce-case-semaest-paris>

efforts in the Promenade Plantée might be classified as “conventional placemaking,”⁶⁴ which, while capable of strengthening the local economy at the city level, imposes significant strains on city budgets and leads to substantial displacement of residents and local businesses.

⁶⁴ Akbar, P. N. G., & Edelenbos, J. (2021). Positioning place-making as a social process: A systematic literature review. *Cogent Social Sciences*, 7(1), 1905920.

Gyeongui Line Forest Park

Gyeongui Line Forest Park is a popular linear park stretching 6.3km from the district of Mapo to the district of Yongsan in Seoul, South Korea (

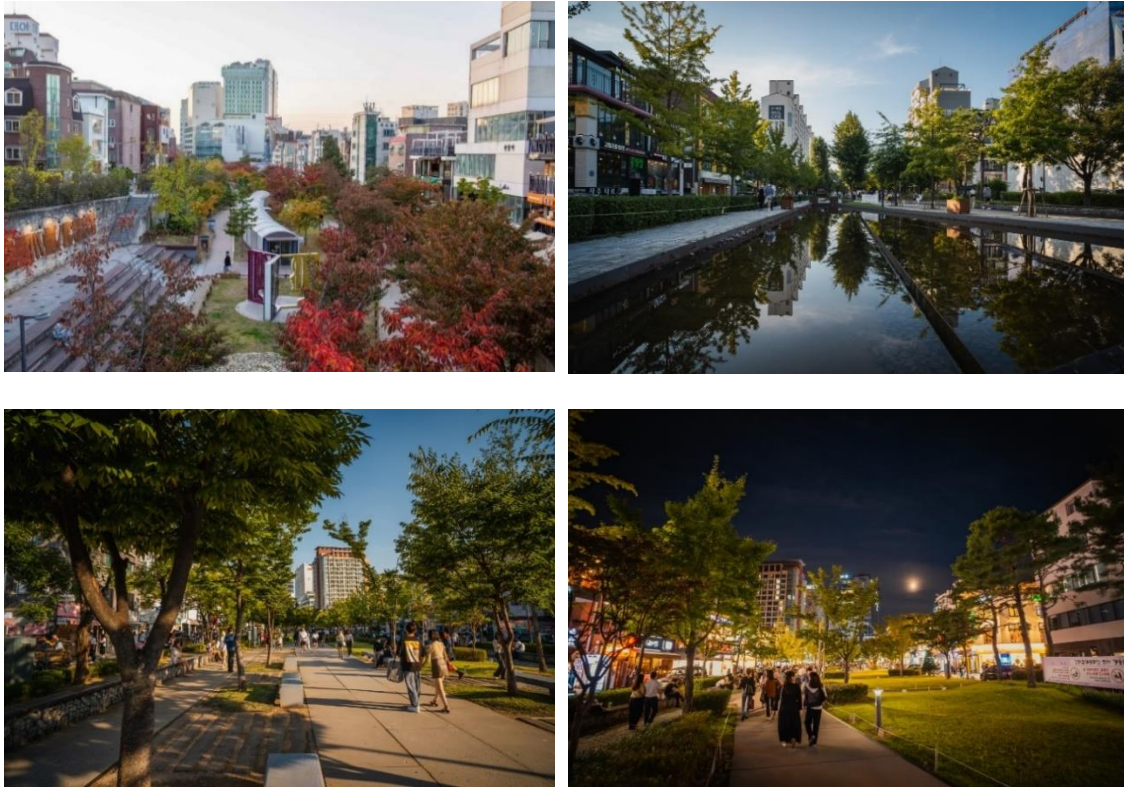
Figure 11). Seven different Seoul Metropolitan Subway stations line the railway, including five along the Gyeongui-Jungang line, which runs beneath the linear park.⁶⁵ Part of the Incheon International Airport Railway also passes deep beneath the park. Since its completion in 2016, this green urban trail has become a vibrant attraction for both local and domestic visitors and tourists. It has even earned the nickname “Yeon-tral” park amongst young locals, who view the Yeonnam-*dong* segment of the park as the Central Park of Seoul⁶⁶ The linear park has won second prize at the LUCI Cities and Lighting Awards for its walkway lighting design in 2016.⁶⁷

⁶⁵ Seoul’s Mountains and Parks. (2016). Gyeongui Line Forest Park. Retrieved 25 Jun 2024, from https://parks.seoul.go.kr/maps/gyeongui/gyeongui_map_ENG.pdf

⁶⁶ Seoul Metropolitan Government. (2022). Gyeongui Line Forest Park. Retrieved 25 Jun 2024, from <https://english.seoul.go.kr/gyeongui-line-forest-park/>

⁶⁷ LUCI Association. (2016). Annual Report 2016. Retrieved 5 Jul 2024, from <https://www.luciassociation.org/winners-2022/>

Figure 11. Gyeongui Line Forest Park



Source: Korea Tourism Organisation⁶⁸, Seoul Metropolitan Government⁶⁹

The original Gyeongui Line linked Seoul to Pyongyang since its opening in 1906 but became disconnected upon the separation of South and North Korea. As the logistics-transportation railway line became underutilised, the disused railway began to impact surrounding neighbourhoods, creating lower property values and fewer new developments, despite its location in Seoul city centre and near the busy Hongik University commercial zone.⁷⁰ In response to the urban decay of railway sites and to meet commuter demand, agreements were made between multiple agencies, including the Seoul Metropolitan Government, Korea

⁶⁸Korea Tourism Organisation. (2024). Gyeongui Line Forest Park (Yeontral Park) (경의선숲길(연트럴파크)). Retrieved 1 Jul 2024, from <https://english.visitkorea.or.kr/svc/contents/contentsView.do?vcontsId=14663>

⁶⁹ Seoul Metropolitan Government. (2022). Retrieved 1 Jul 2024, from <https://english.seoul.go.kr/gyeongui-line-forest-park/>

⁷⁰ 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. doi: <https://doi.org/10.1016/j.landurbplan.2018.10.001>

Railroad Authority, the Ministry of Land, Infrastructure and Transport, and the Mapo-*gu* Office to construct an electric double-track subway line below ground in 2006, and a public park above ground in 2007.⁷¹ According to the Gyeongui Line Forest Park white paper, the original construction project goals were to establish a transportation system for the western urban subway network, to promote regional development, and to provide transportation for residents in the North-west region. The line capacity was projected to increase from 26 times per day to 288 times per day.⁷²

The linear park was constructed in three separate phases, between 2011 and 2016. At the outset, the vision for the park was to create a “fascinating place where citizens want to go as a path of humans and nature”, and park that could be utilised harmoniously by people from all walks of life. It aimed at being a “beautiful natural space in the city”, as well as a “place of learning where you can enjoy nature, culture and art”.⁷³ The park plan also included a directive to be a “citizen-participation park, actively accepting local culture and revitalising surrounding areas”.

Responding to concerns raised by the mayor of Seoul, Phase 2 and Phase 3 of the design process began involving the citizens and consulting experts as part of the Gyeongui Line Forum. The public consultation processes led to a renewal of the original park masterplan, and transition from a commercial-centred development project to a “project for citizens”. Numerous design considerations were noted during the resident engagement sessions, including the need to manage bicycle lanes and nighttime use of the park. Another is the theme of an “unfinished park” where white spaces could be further developed by citizens, and ideas of fostering

⁷¹ Seoul Metropolitan Government. (2022). Op. cit.

⁷² Ibid.

⁷³ Ibid.

programmes for residents to participate in park operations emerged during the Gyeongui Line Forum.⁷⁴

This urban regeneration project, which involved a total project investment of 45.7 billion won⁷⁵ (\$44.5 million), has since created diverse opportunities for locals to interact with both community and nature, and led to the reinvigoration of the retail environment in surrounding neighbourhoods,⁷⁶ with food and beverage facilities sprouting up along the trail, especially around the “Yeontral Park” area in Yeonnam-dong.

Physical Characteristics and Facilities

Gyeongui Line Forest Park runs 10-20 metres above the *Gajwa* station to *Yongsan* station segment of the Gyeongui-Jungang KORAIL line. It extends 6.3 km from Yeonnam-dong in Mapo-gu to the Yongsan Culture and Sports Centre, with a varying width of 10–20 metres along its length. The entire park has been developed with a railway theme, and has a variety of facilities, art installations and heritage-related structures on its grounds. It is immediately adjacent to seven subway stations and nine bus stations, and the public restroom facilities close to the park are well-documented by the park management agency, with each restroom accessibility status clearly marked.⁷⁷ During the park’s design, the width of cycle paths and walkways were determined with wheelchair-accessibility in mind, and resting facilities were installed every 50 metres along a continuous walkway. Walkways were designed in an undulating zig-zag pattern to leave community spaces on either side of the path (Figure 12).

⁷⁴ Ibid.

⁷⁵ Kim, E. Y., & Hong, Y. S. (2019). Op. cit.

⁷⁶ Sim, J. S. (2020). Seeing Impacts of Park Design Strategies on Local Economy through Big Data: A Case Study of Gyeongui Line Forest Park in Seoul. *Sustainability*, 12(17), 6722. <https://doi.org/10.3390/su12176722>

⁷⁷ Seoul’s Mountains and Parks. (2016). Op. cit.

Nighttime lighting was planned for the convenience of park users, and a cut-off type streetlight was used to minimise light pollution.⁷⁸

Figure 12. Zig-zag patterned path creating green pockets for communal use



Source: ArcGis Storymaps⁷⁹, Seoul's Mountains and Parks⁸⁰

For the park's landscape, representative species, such as Gingko trees, Zelkovas and Japanese cherry trees were selected and planted according to the theme of each park section.⁸¹ Man-made streams, which channel up to 4500 tonnes of high-quality underground discharge water form a unique physical element of the park. The water flows through the park into the Hongje Stream following the natural landscape gradient, and is an addition welcomed by citizens.⁸² Given its linear span, the forest trail's offerings are designed to change with its surrounding neighbourhood context; four different segments can be identified (

Figure 13).

⁷⁸ Seoul Metropolitan Government. (2022). Op. cit.

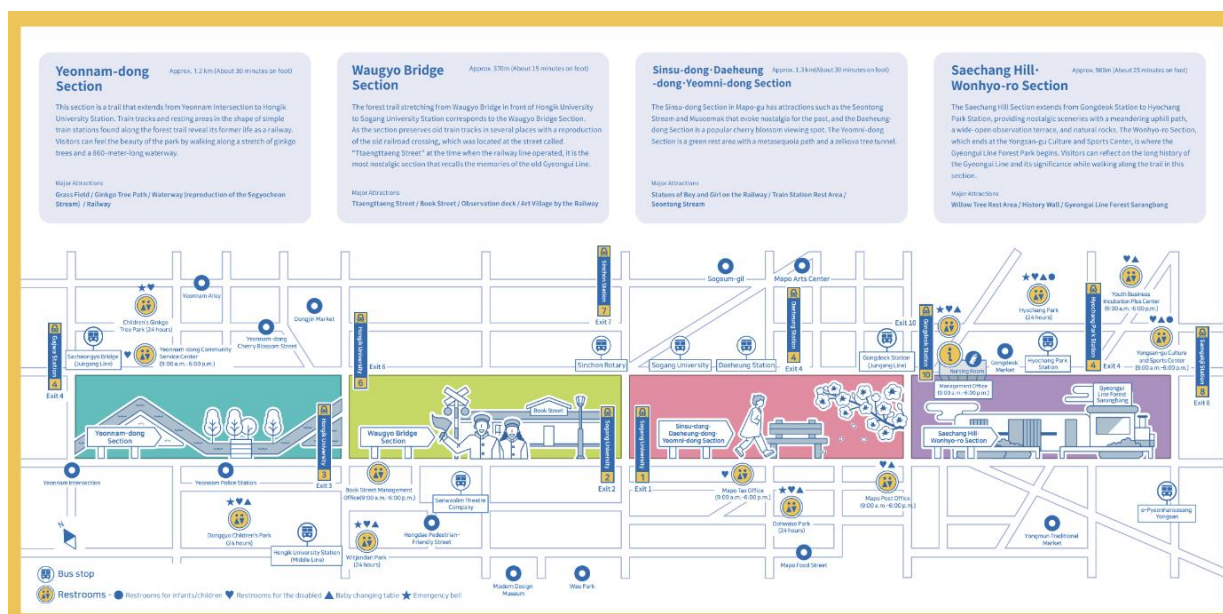
⁷⁹ Her, W. (2023, April 6). Gyeongui Line Forest Park. . Retrieved 9 Jul 2024, from <https://storymaps.arcgis.com/stories/dd306335b5a647efa16d3e2cb51533c9>

⁸⁰ Seoul's Mountains and Parks. (2016). Op. cit.

⁸¹ Ibid.

⁸² LAFENT. (2016). Park walk with a designer 2_Gyeongui Line Forest Park. Retrieved 1 Jul 2024, from https://www.lafent.com/inews/news_view.html?news_id=117648&psnwrt=%EA%B9%80%EC%A7%80%ED%95%99

Figure 13. Four Segments of Gyeongui Line Forest Park



Source: Seoul Mountains and Parks Agency⁸³

The Yeonnam-*dong* section is approximately 1.2 km in length, and popularly referred to as “Yeontral Park” (

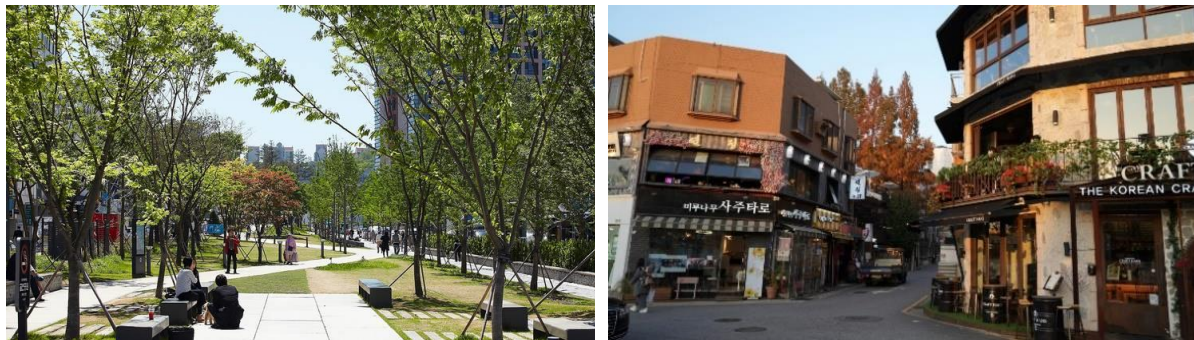
Figure 13). Located in the Hongdae area of Seoul, which is known for its youth culture, nightlife, and shopping street, this section is accessible from the Hongik University Station and Gajwa Station. This section of the park provides a thematic experience of the former railway development, with resting areas shaped as train stations placed along a man-made waterway simulating the Segyocheon Stream.⁸⁴ This area also features an open grass field and a Gingko tree path. Scholars note that the construction of Gyeongui Line Forest Park has erased the physical divide caused by the old railroad and led to the expansion and revitalization of the

⁸³ Seoul’s Mountains and Parks. (2016). Op. cit.

⁸⁴ Ibid.

commercial districts in the area.⁸⁵ This has in turn led to the proliferation of food and beverage businesses in the once residential district of Yeonnam-dong.⁸⁶ Both sides of the park are now lined with trendy restaurants, bars and cafes (Figure 14).⁸⁷ The construction of the Yeonnam-dong segment of the park has created a notable cooling effect on the urban temperature in the area.⁸⁸

Figure 14. Yeonnam-dong section



Park area of Yeonnam-dong

Food and beverage establishments alongside Yeonnam-dong

Source: Time Out⁸⁹, The Korea Herald⁹⁰

Waugyo Bridge section stretches 370 metres from Waugyo Bridge to Sogang University Station. It is the most heritage-rich segment of the Forest Trail, featuring the “Ttaeng-Ttaeng” path, a reproduction of the railroad-crossing gate from the historical railroad, as well as preserved segments of the railway tracks itself. The Waugyo area itself is known for being an

⁸⁵ 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>.

⁸⁶ Ibid.

⁸⁷ The Korea Herald. (2022). [Subway Stories] Old railway turns into urban park. Retrieved 25 Jun 2024, from <https://www.koreaherald.com/view.php?ud=20221127000092>

⁸⁸ Kim, K. J., Yi, C. H., Lee, S. G. (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. doi: <https://doi.org/10.1016/j.enbuild.2019.03.011>.

⁸⁹ Time Out. (2016). Hot spot: The new kids of Yeonnam. Retrieved 1 Jul 2024, from <https://www.timeout.com/seoul/things-to-do/hot-spot-the-new-kids-of-yeonnam>

⁹⁰ The Korea Herald. (2022). Op. cit.

artsy district in Seoul, with galleries and museums, such as Seoul’s Modern Design Museum, housed nearby. The trail itself features the Gyeongui Line Book Street (Figure 15), which was particularly requested for by the Mapo-gu Office during the planning of the trail. Bookstores, book-themed sculptures, and resting areas line the trail, which hosts various events that encourage reading throughout the year.

Figure 15. Rest area of Book Street



Source: Korea Tourism Organisation⁹¹

The Sinsu-Daeheung-Yeomni-dong section is positioned in a quieter and mostly residential area, with some office areas alongside the trail. It is connected to the Wangyo Section by the Sogang Sky Bridge. An artificial stream—Seontong Stream—flows along the path, and the railway theme is maintained in this section with statues of children playing on the railway (Figure 6) and a train station themed rest area. Some Korean traditional houses can be found by the park, a few of which are operated by cafes and restaurants (Figure 16). The Jeongjang

⁹¹ Korea Tourism Organisation. (2024). G-line Book Street (경의선책거리). Retrieved 1 Jul 2024, from <https://english.visitkorea.or.kr/svc/whereToGo/locIntrdn/rgnContentsView.do?vcontsId=64574&menuSn=351>

cultural marketplace as well as an old salt-making village can be found adjacent to the park. This section of the park is also a popular cherry blossom viewing spot during spring.

Figure 16. Sinsu-Daeheung-Yeomni-dong section



A hanok-themed café in Daeheung section

Statues of children playing at old railroad stand

Source: The Korean Herald⁹²

The Saechang Hill and Wonhyo-ro section retains a park-like atmosphere in another residential area. Its terrain is steeper than other sections of the park and has an observation deck with a view of Seoul Tower. The trail ends at the Yongsan-gu Culture and Sports Centre.

Programme and Interest Groups

The programme and user demographic of the area surrounding Gyeongui Line Forest Park has changed significantly since its construction and throughout its operation. The thematic and vibrant design of the Gyeongui Line Forest Park has created an appealing environment for young people in Seoul. Research has shown that people in their twenties and thirties form the majority of visitors in the park.⁹³ Another analysis of the usage of the park using text-mining has shown that dining continues to be the major activity in the vicinity of the Yeonnam-dong section of the park, and highlighted the expansion of leisure activities to include picnic, walking,

⁹² The Korea Herald. (2022). Op. cit.

⁹³ D. W. An and J.-Y. Lee, "Implications of Renovated Buildings in Yeonnam - Dong Seoul an Area under Commercial Gentrification", *Sustainability* 2023, vol. 15, pp. 1950, 2023.

taking pictures, shopping at flea markets, and visiting the various attractions along the Forest Trail.⁹⁴ Other quieter sections of the park, especially adjacent to office buildings, have become a place for office workers to have their lunch.⁹⁵

The programme of the park has changed in other ways since opening. Although cyclists were initially allowed on the trail, the usage of bicycles and electric scooters has since been banned due to the danger posed to pedestrians. Visitors are no longer allowed to sit in the open grass fields in the Yeonnam-dong section now due to frequent complaints of littering and noise pollution from the residents in the vicinity.⁹⁶

The park has provided a conducive green space in the heart of the city for recreation and social activities, promoting healthy and active lifestyles. Some of these are organised by the Seoul Metropolitan Government itself, such as the “Walking Properly Health Classroom” organised along the Gyeongui Line Forest every Tuesday and Thursday from March to June 2018.⁹⁷ In 2021, the Mapo-gu Office organised the “Mapo 10 Paths I Want to Walk Challenge”, a monthly asynchronous relay event that encourages people to walk ten of Mapo-gu’s trails, with prizes for people who complete the challenge using the “Walk On App”. In the same year, the Sinsu, Daeheung and Yeomni-dong sections of the park hosted a “Mapo 5 million tree planting project”⁹⁸ as part of Mapo-gu’s “5 Million Tree Planting Project.”⁹⁹ The Seoul City West Park

⁹⁴ Kim, S.-R., Choi, Y., & Yoon, H. (2019). The Analysis of the Visitors’ Experiences in Yeonnam-dong before and after the Gyeongui Line Park Project - A Text Mining Approach -. Han’gug Jo’gyeong Haghoeji/Han-Guk Jogyong Hakoeji, 47(4), 33–49. <https://doi.org/10.9715/kila.2019.47.4.033>

⁹⁵ The Korea Herald. (2022). Op. cit.

⁹⁶ Ibid.

⁹⁷ Seoul Metropolitan Government. (2018). Various Programs at Parks in Seoul during Spring. Retrieved 1 Jul 2024, from <https://english.seoul.go.kr/various-programs-parks-seoul-spring/?cat=29>

⁹⁸ Media Hub. (2021). Challenge yourself to walk the ‘Gyeongui Line Forest Trail’! Take care of your health and participate in events. Retrieved 1 Jul 2024, from <https://mediahub.seoul.go.kr/archives/2001673>

⁹⁹ Mapo-gu. (2019). Mapo-gu promotes 10-year master plan to plant 5 million trees. Retrieved 1 Jul 2024, from http://www.ddmnews.co.kr/news_gisa/gisa_view.htm?gisa_category=01110000&gisa_idx=18978

Leisure Centre also conducted sketching classes along the park, and exhibited the resulting citizen artwork along the forest trail in 2023.¹⁰⁰

Interest groups utilise the park space as well, such as running groups like the SeoulShare Runners, and nature groups like “Forest for Life (생명의숲)”, a non-profit organisation that organised a “Gyeongui Line Forest Trail Ecological Story Tour” in collaboration with the Seoul Metropolitan Government Western Park and Open Space Management Office.¹⁰¹ Various vendors also utilise the park space for pop-up events, such as the annual Bookflow Festival Book Market jointly organised by the Korea Macrame Association, the Burmilla Macrame Academy and the Gyeongui Line Book Street (Korean Publishers Cooperative).¹⁰²

Stakeholders and Placekeeping Strategies

Discussions about the future of the original Gyeongui Line and how it could meet the growing demand for commute options in the region began as early as 2001. Two public hearings were conducted in 2001 and 2002 to discuss the reconstruction of the railroad as part of an underground subway line. The construction was approved by the Ministry of Land, Infrastructure and Transport, and the Korea Railroad Authority (KORAIL) in 2006.

In 2007, plans to turn the area aboveground into a park were proposed by the City of Seoul, and upon the signing of an agreement between KORAIL and the Mapo-gu Council, the masterplan and design for the park were drafted, but with minimal public input. In 2009, the Gyeongui double-track underground subway line opened, and the proposed Gyeongui Line

¹⁰⁰ LAFENT. (2023). Enjoy a park drawn by citizens while walking along the Gyeongui Line Forest Trail. Retrieved 1 Jul 2024, from http://www.lafent.com/inews/news_view.html?news_id=133256

¹⁰¹ Forest for Life (2016). The story of plants at Gyeongui Line Forest Park that we slowly encounter one by one!. Retrieved 1 Jul 2024, from https://forest.or.kr/activity_stories/179

¹⁰² Bookflow. (2019). Book Festival Introduction. Retrieved 1 Jul 2024, from <https://bookflow.bumilla.com/festival/>

Forest Park was officially announced. By 2012, Phase 1, a 760 metres segment of the line between Daeheung Station and Gongdeok Station was completed.

In 2011, concerns about the quality of the park were raised by the newly elected mayor, and the Seoul Metropolitan Government initiated the Gyeongui Line Forum to review the masterplan. The forum was conducted over three days and involved professionals from multiple disciplines, including architects, urban planners, and non-government organization leaders, as well as residents living in the vicinity. Residents' opinions were collected through a series of resident briefing sessions. Their feedback, along with expert advice from the Gyeongui Forum, was considered in the supplementary design of the park, which was subsequently implemented by Dongsimwon Landscape Design and Construction Co.

Phase 2 (Saechanggogae, Yeonnam-dong, and Yeomri-dong) was constructed in 2015, while Phase 3 (Changjeon-dong, Sinsu-dong, and Wonhyo-ro) was completed in 2016. A park walk organised by the Seoul Metropolitan Government with the help of Big by Small event company was held on 1 October 2016. During the walk, interested citizens were given a tour around the park by Director An Gye-dong and Deputy Director Lee Nam-jin of the Dongsimwon Landscape Architecture Office. Media reports on the event highlighted that the park design strategy was to be “unfinished” to provide white space for citizen activities.¹⁰³

Since opening, the Gyeongui Line Forest Park has been managed by the Gyeongui Line Forest Park Management Office under Seoul's Mountains and Parks agency and the Western Park and Green Space Office. The Book Street in particular, is managed by the Korean Publishers Cooperative, which was commissioned to do so by the Mapo-gu Office.¹⁰⁴ Encouraged by the

¹⁰³ LAFENT. (2016). Op. cit.

¹⁰⁴ The Dong-A Ilbo. (2016). 'Book street' is ready to attract visitors in Hongik Univ. area. Retrieved 1 Jul 2024, from <https://www.donga.com/en/article/all/20161027/768919/1>

City of Seoul, a non-profit organization, “Friends of Gyeongui Line Forest Park,” also known as the “Gyeongui Line Forest Trail Keepers,” was formed in 2014 before the park’s official opening. The organization conducted meetings, activities, and petitions to influence the design process of the park. It also ran a website¹⁰⁵ and Facebook page¹⁰⁶ publishing updates on the Gyeongui Line Park construction progress and described itself as a “gathering of people who love Gyeongui Line Forest Park”. Post-opening, the group organised several events, including picnics, walks and tours, in collaboration with the Seoul Metropolitan Government and the Mapo-*gu* Council.¹⁰⁷

The official government blog of “Urban Regeneration New Deal” described several community activities. One of the activities was the White Butterfly Project, where residents were involved in the creation of art along the park, the initiation of events, and the organization of gardening and maintenance activities¹⁰⁸ (Table 2).

Table 2: 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 |

¹⁰⁵ Website of the Gyeongui Line Forest Trail Keeper. Retrieved 1 Jul 2024, from <https://nadri123.wixsite.com/gyeonguiline/blank-5>

¹⁰⁶ <https://www.facebook.com/groups/gyeonguiline/>

¹⁰⁷ Gyeongui Line Forest Trail Keeper. (2014). Retrieved 6 Jun 2024, from <https://nadri123.wixsite.com/gyeonguiline>

¹⁰⁸ Urban Regeneration New Deal. (2018). [Urban Regeneration Story] Abandoned Railroad Returned to Citizens, Gyeongui Line Forest Trail. Retrieved 1 Jul 2024, from <https://blog.naver.com/newdeal4you/221382322650>

Source: Urban Regeneration New Deal. (2018)¹⁰⁹

Note: *translated from Korean using Google Translate.

Impacts and Challenges

The Gyeongui Line Forest Park can be seen as a successful example of regeneration of an abandoned railway track from several perspectives. In terms of the local economy, various studies show that the new park has created a greater retail transaction volume of up to 1.8 times in the surrounding neighbourhoods;¹¹⁰ while total sales per business¹¹¹ and card transactions¹¹² have increased significantly following the opening of the park. This increase was observed to be particularly prominent on the eastern side of the railway area, where connectivity has improved through the removal of the physical barrier caused by the abandoned railway between the Hongik University commercial area and the residential east side.¹¹³

In terms of citizen satisfaction, studies on sentiment analysis of social media posts and text-mining have shown predominantly positive reactions to the park amongst locals;¹¹⁴ users of the park have enjoyed an expansion of experiences with the proliferation of activities conducted on the park grounds.¹¹⁵ The park is promoted as a tourist attraction by Korea's tourism departments. In terms of climate action, the urban cooling effect created by the park has produced positive impacts on the city.

¹⁰⁹ Ibid.

¹¹⁰ Yoon, S. (2018). Spatially varying effects of Gyeongui Line Forest Park on Retail Types and Location. *Graduate School of UNIST*. <https://core.ac.uk/download/pdf/151737553.pdf>

¹¹¹ Park, J., & Kim, J. (2019). Op. cit.

¹¹² Sim, J. S. (2020). Op. cit.

¹¹³ Park, J., & Kim, J. (2019). Op. cit.

¹¹⁴ Sim, J. S. & Miller, P. (2019). Understanding an urban Park through Big Data. *Int. J. Environ. Res. Public Health*, 16(20), 3816. doi: <https://doi.org/10.3390/ijerph16203816>

¹¹⁵ Kim, S.-R., Choi, Y., & Yoon, H. (2019). Op. cit.

However, these positive impacts have been accompanied by concerns about gentrification and deterioration of living environment in the neighbourhoods adjacent to the park. Since the announcement of the park construction in 2006, residential property values in the vicinity have risen significantly. Jung et al (2016) found that one year after Phase 1, surrounding land prices had increased “from 0.75 to 1.21 million Korean won per square metre”.¹¹⁶ Similarly, through the analysis of housing property sale price data along the park, Kwon et al (2017) found that the rise in prices was positively correlated to proximity to the park, with many areas experiencing a change at least three times of the average rate of change of real estate transactions in Seoul between 2010-2015. The study determined a zone of around 600 metres around the park that was affected by this gentrifying effect.¹¹⁷

A conversion of land use around the park from residential to commercial was also observed. Through analysing the change in commercial building use, Cho et al (2020) concluded that food and beverage commercial gentrification had occurred around the Yeonnam-*dong* park section.¹¹⁸ Dai and Lee (2023) discuss the loss of identity and authenticity around Yeonnam-*dong* due to extensive building renovations to the originally lower-middle class, low-rise residential area.¹¹⁹ Another study on the entire stretch of the park showed that high productivity retail types, such as bars and restaurants had crowded out lower productivity but essential retail types, such as butcher shops and convenience stores, which had decreased within the 0-100m distance from the park, while increasing in quantity 100-200 metres away.¹²⁰ This study

¹¹⁶ Jung, E. A., Choi, Y. W., Yoon, H. Y. (2016). Op. cit.

¹¹⁷ Kwon Y, Joo S, Han S, Park C. (2017). Mapping the Distribution Pattern of Gentrification near Urban Parks in the Case of Gyeongui Line Forest Park, Seoul, Korea. *Sustainability*, 9(2):231. doi: <https://doi.org/10.3390/su9020231>

¹¹⁸ 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>

¹¹⁹ An, D.W. & Lee, J. Y. (2023). Implications of Renovated Buildings in Yeonnam-Dong, Seoul, an Area under Commercial Gentrification. *Sustainability*, 15, 1960. doi: <https://doi.org/10.3390/su15031960>

¹²⁰ Yoon, S. (2018). Op. cit.

concluded that eco-gentrification was occurring along the park and local retailers were being displaced by rental changes.

Aside from gentrification, the proximity of this public, 24-hour park adjacent to housing estates has led to concerns by residents about noise, maintenance of the park environment and regulation of park usage. Studies that interviewed various park stakeholders have discovered overarching concerns about park maintenance.¹²¹ ¹²² Interviews of park officials highlighted that noise, litter, smoking, pet waste and intoxication behaviour were frequent complaints, leading to stricter regulations on organising events in the park. Residents who were interviewed highlighted that noise pollution was particularly problematic at the Yeonnam-*dong* area near Hongik University. Some visitors also noted that the park condition had deteriorated visibly since it opened, and that there was a lack of maintenance of waterways, trails and restrooms.¹²³ Observations by activists in the Gyeongui Line Forest Trail Keeper group, park visitors, and maintenance teams also point towards a lack of clear avenues for the public to approach park management for information or problem resolution.¹²⁴

Against the vision and directives of the masterplan, the Gyeongui Line Forest Park project has achieved its goals of revitalising the local economy and providing a greenspace in the city for citizens. The 2019 study by Sim and Miller on citizen sentiments towards the park based on social media posts shows that the park retains a positive image amongst citizens.¹²⁵ However, the concerns and negative sentiments of nearby residents revealed in the studies by Go¹²⁶ and

¹²¹ Go, N. Y. (2017). The outstanding problem caused by the different cognition among the users of Gyeongui-Line Park. *University of Seoul Graduate School*.

¹²² Heo, Y. K. (2018). A Study on the Regeneration Policy of Urban Park in Seoul from a Perspective of Environmental Justice Focused on Gyeongui-Line Forest Park. *University of Seoul Graduate School*.

¹²³ Go, N. Y. (2017). *Op. cit.*

¹²⁴ Heo, Y. K. (2018). *Op. cit.*

¹²⁵ Sim, J. S. (2020). *Op. cit.*

¹²⁶ Go, N. Y. (2017). *Op. cit.*

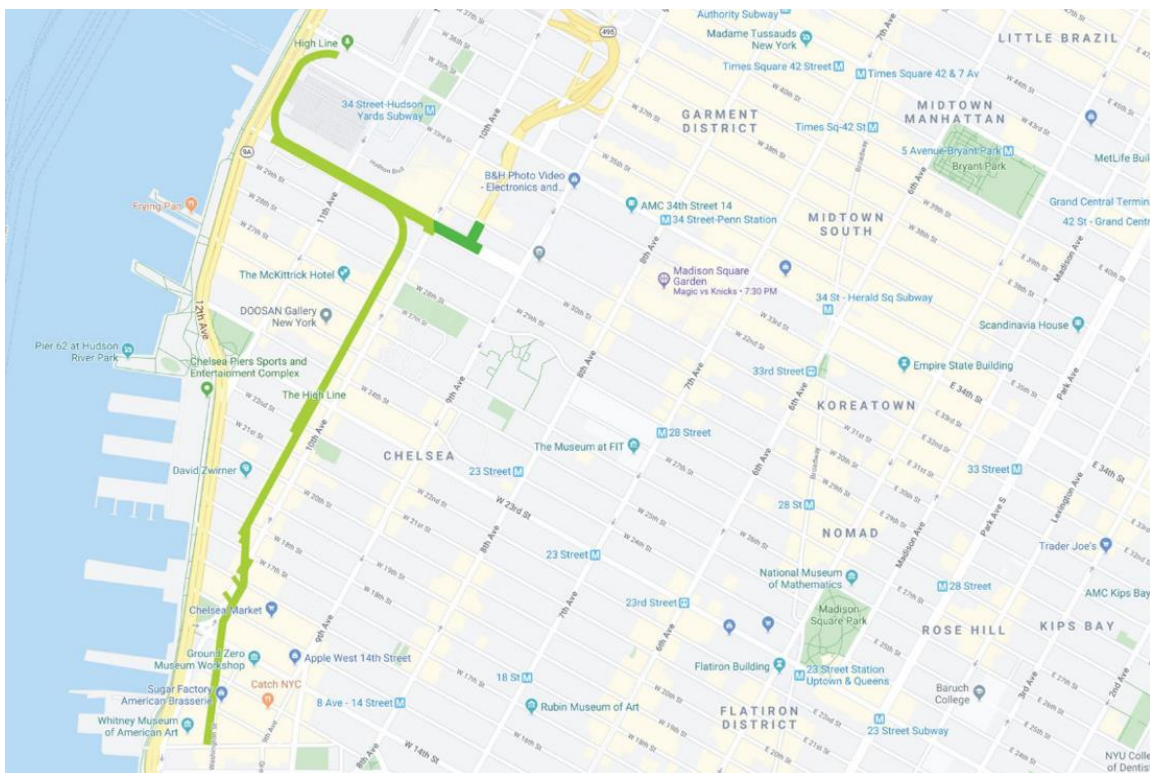
Heo¹²⁷ underline how, despite a citizen-engagement process during the planning stage, sustained efforts to maintain a harmonious park environment has fallen through, leading to negative effects on some residents. These issues underscore the need for effective management and placekeeping in Gyeongui Line Forest Park.

¹²⁷ Heo, Y. K. (2018). Op. cit.

High Line

The High Line is an elevated freight rail line, which was transformed into a public park in the West Side of Manhattan. The repurposed High Line connects three neighbourhoods along Manhattan’s West Side—Meatpacking District, Chelsea, and Hudson Yards (Figure 17). The High Line is intended to be more than a park. Besides gardens, art exhibitions and performances are hosted within the High Line, with zones of food and drink outlets, pop-up markets, and social gathering spaces (Figure 18).¹²⁸

Figure 17. Map of High Line, Manhattan NYC – Built Paths (2024)



Source: Google Maps

¹²⁸ The High Line Organization. (n.d.). The High Line. About. Retrieved February 23, 2024, from <https://www.thehighline.org/about/>

Figure 18. The High Line



Source: The High Line

The elevated freight railway line ceased operation in 1980, with one stretch of the abandoned line demolished in 1990-1991. The remaining abandoned tracks became a naturalised meadow of plants seeded by birds and windborne organic matter (Figure 19). In 1999, Friends of the High Line started as a ground up by residents who met at a committee board meeting and advocated for preserving, repurposing and transforming the High Line, instead of demolition.¹²⁹ CSX Transportation, the railway operator, issued a request for proposals to repurpose the rail line. This gained city approval and support from West Chelsea property owners, who had been pressuring for its demolition to make way for new development despite the abandoned rail line being considered a neighbourhood landmark; they were offered up-

¹²⁹ Ibid

zoned development rights alongside the structure with redevelopment. With the support of the city, Friends of the High Line became the officially sanctioned non-profit conservancy body working with NYC Parks to maintain the repurposed High Line (

Figure 20).¹³⁰

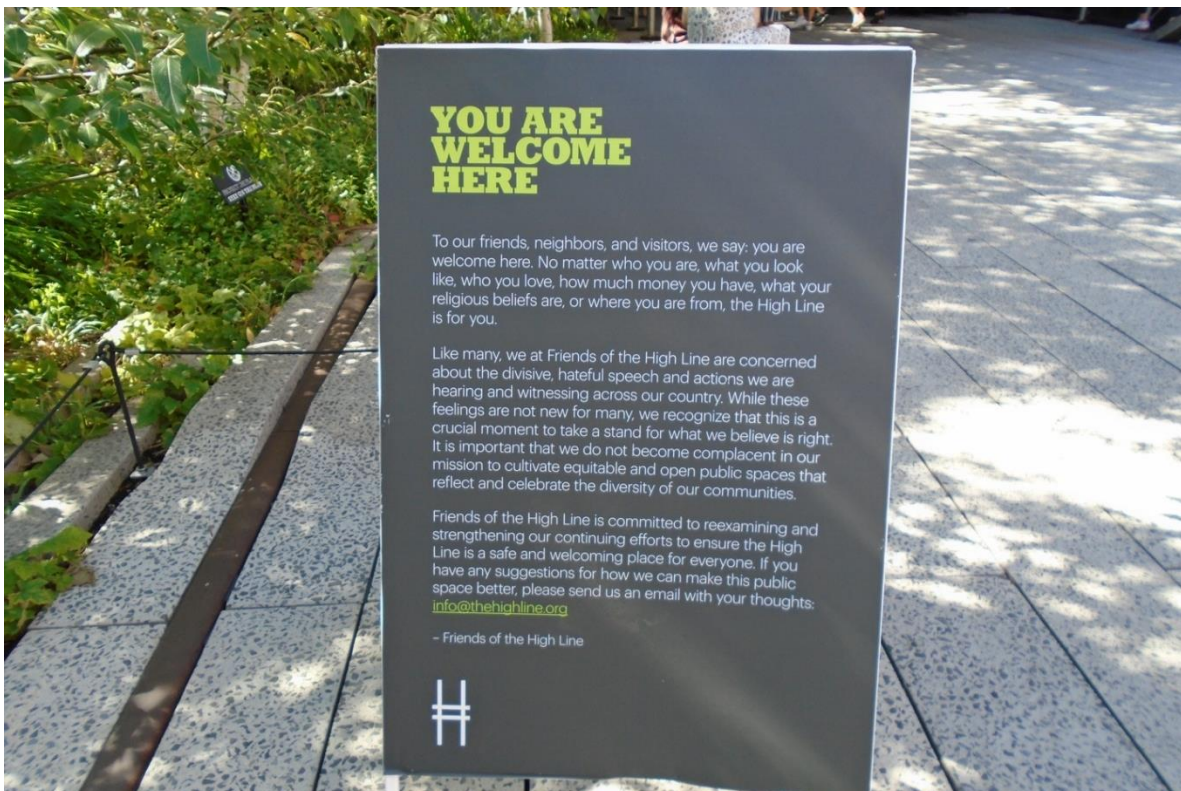
Figure 19. The High Line, c.1933



Source: The High Line

¹³⁰ NYC Parks. (n.d.). *The High Line: NYC Parks*. Official Website of the New York City Department of Parks & Recreation. Retrieved February 23, 2024, from <https://www.nycgovparks.org/parks/the-high-line>

Figure 20. Friends of the High Line



Source: Author

The West Chelsea/High Line Plan was initially launched as a Special Zoning District, designating the High Line as a public park and aiming to introduce an innovative combination of regulatory and urban design strategies. This plan focuses on developing new affordable housing while preserving the city's leading art gallery district. Before this plan, West Chelsea had underutilised buildings and parking lots due to its light manufacturing zoning, which

prevented the vibrant residential core of Chelsea from expanding westward, compounding the critical need for new affordable housing.

The Department of City Planning established a special development corridor with innovative land use and design rules, resulting in the unique design of the High Line and its mixed-use surroundings. They collaborated with the community to create a new special zoning district and a floor-area transfer mechanism, balancing the goals of preserving neighbourhood identity, fostering development potential, and maintaining light, air, and views around the open space.¹³¹ During the design and construction of the High Line, the committee and designers sought community input for each section of the park. Additionally, the designers thoughtfully designed the park to pay homage to the site's history and unique identity. They went as far as to tag, survey, and restore each section of rail track and other artefacts to their original locations and integrate them into the landscape design (Figure 21). They also took note of health considerations as the historic track was painted with hazardous lead paint, which had to be removed by building a containment tent.¹³²

¹³¹ Lee Kuan Yew World City Prize. (2019, November 8). New York City – Innovative zoning tools in West Chelsea & High Line Plan. Lee Kuan Yew World City Prize. <https://leekuaneyeworldcityprize.gov.sg/resources/case-studies/west-chelsea-high-line-plan/>

¹³² The High Line Organization. (n.d.). The High Line. Design. Retrieved February 23, 2024, from <https://www.thehighline.org/design/>

Figure 21. Integrating rail infrastructure into walking path



Source: Author

CSX Transportation donated ownership of the railway structure to the City of New York in 2005, and construction of Phase 1, between Gansevoort and 20th Streets, began in 2006 (Figure 22).¹³³ The first phase was completed and opened in 2009, followed by the second phase in 2011. The third and final phase was opened to the public in September 2014.

¹³³ The High Line Organization. (n.d.). *The High Line*. History. Retrieved February 23, 2024, from <https://www.thehighline.org/history/>

Figure 22. Artist Impression of Phase 1



Source: The High Line

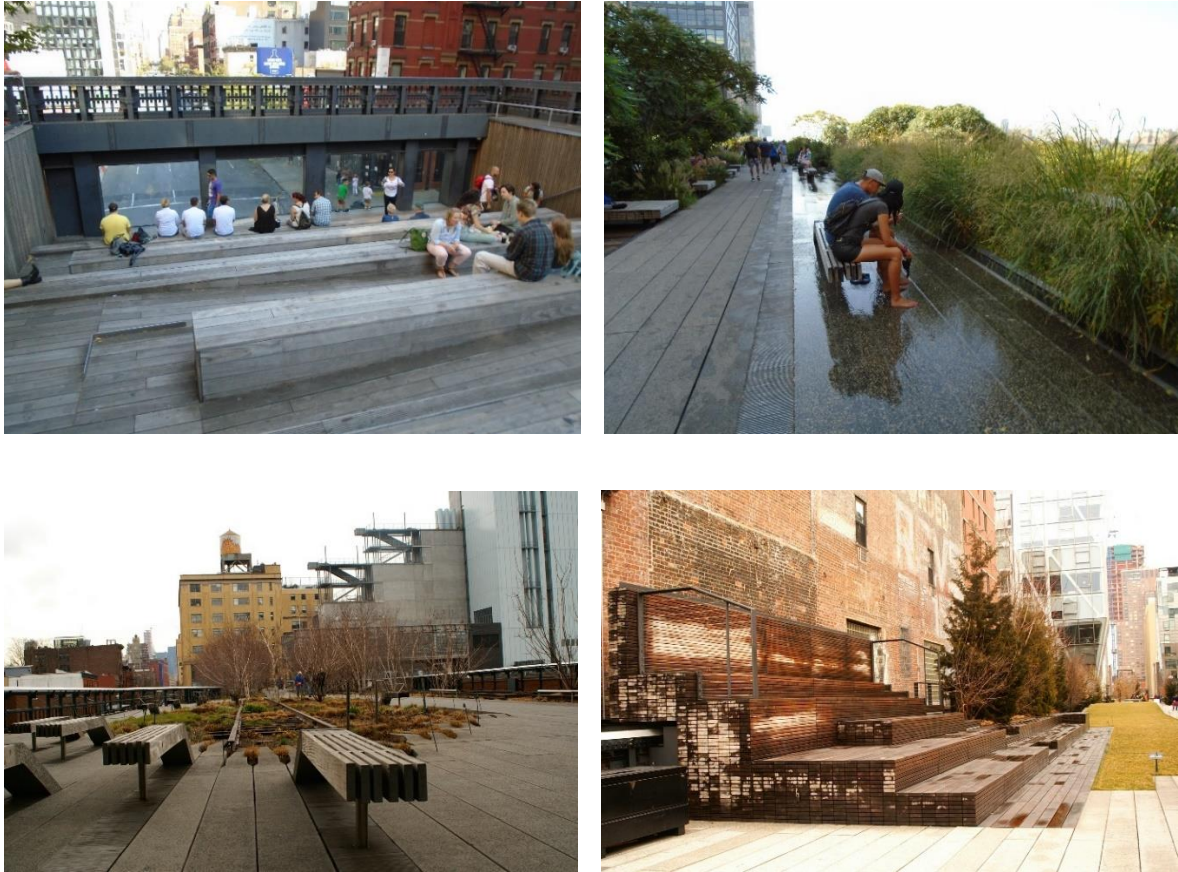
Physical Characteristics and Facilities

The High Line community park spans 2.33 km and 6.73 acres with 13 access points, which cater for both elevator and ramp access at some locations. The park is wheelchair accessible, with restrooms available at three points and Wi-Fi Hot Spots.¹³⁴ The High Line capitalises on its prime location and pedestrian traffic by offering a variety of open spaces and areas for free public seating (Figure 23), and stall areas surrounding that for short-term commercial rent. Commissioned artwork and murals can also be found along the community park and surrounding buildings (Figure 24). This is part of the public engagement strategy to host a variety of public-facing events including retail pop-ups. Private events can be held for crowds

¹³⁴ NYC Parks. (n.d.). *Op cit.*

of different sizes. This strategy allows the High Line to not only expand its series of public engagement activities, but also gain revenue for its sustained upkeep.¹³⁵

Figure 23. Public Seating Areas



Source: Author

¹³⁵ The High Line Organization. (n.d.). *Venue Rentals*. The High Line. Retrieved March 8, 2024, from <https://www.thehighline.org/venue-rentals/>

Figure 24. Art Along the High Line Route



Source: Author

High Line considered pedestrian comfort, taking safety and accessibility into account with handicap-friendly access points, furnishings, and energy-efficient LED lighting. A sustainable irrigation system was also installed, utilising the same underlying technology as green roofs for reducing storm-water runoffs, and mediating the heat island effect generated by the city.¹³⁶ Sustainable landscaping of the High Line was introduced by Dutch planting specialist Piet Oufolk, who conducted 200 plant species into the linear park. Selected foliage favours native, drought-tolerant, and low-maintenance species, allowing them to survive naturally and with minimal water consumption (Figure 25). Selected species also served to restore Manhattan's

¹³⁶ High Line. (2023, October 1). *The High Line as a Green Roof*. The High Line. <https://www.thehighline.org/blog/2023/10/01/the-high-line-as-a-green-roof/>

natural ecosystem, providing food and shelter for wildlife species, including native pollinators.¹³⁷ Maintenance of the High Line Park includes components such as irrigation and drainage, wildlife considerations, composting, pest management, and infrastructural upkeep.¹³⁸ The High Line also established key rules to maintain order and ensure sustained upkeep, including orderly conduct, spatial accessibility, pedestrian safety, environmental upkeep, organised activities, and cleanliness.¹³⁹

Figure 25. Planted Railway Tracks Along the High Line



Source: Author

Following the success of the High Line, additional funding and support have been provided in recent years (2022 onwards) by New York State and local developer Brookfield Properties. This new contribution and partnership, which is still being managed by Friends of the High Line, plans to expand the park's pedestrian connection to Penn Station through a new Moynihan Connector to Moynihan Train Hall via public space in Manhattan West. The pedestrian connection was completed in 2022. The new construction prioritises using sustainably sourced wood and deep soil beds to allow for the planting of trees. This extended

¹³⁷ NYC Parks. (n.d.). *The High Line Highlights: NYC Parks. History*. Retrieved February 23, 2024, from <https://www.nycgovparks.org/parks/the-high-line/history>

¹³⁸ The High Line Organization. (n.d.). *The High Line. Sustainable Practices*. Retrieved February 23, 2024, from <https://www.thehighline.org/sustainable-practices/>

¹³⁹ NYC Parks. (n.d.). *Op cit.*

pedestrian network includes a new public plaza and is intended to create safer and better access to public transportation and cultural institutions, linking existing public spaces in the adjoining neighbourhoods (Figure 26).¹⁴⁰

¹⁴⁰ NYC Parks. (n.d.). *Op cit.*

Figure 26. Pedestrian Walkways Along the High Line



Source: The High Line

Programme and Interest Groups

To garner public interest, Friends of the High Line launched an open, international ideas competition to build excitement and demonstrate the High Line's potential as a public space. The Ideas Competition in 2003 solicited innovative potentials for the reuse and redevelopment of the High Line. Entries were encouraged to be bold—creating visions that did not have to be practical or realistic. This competition gained submissions from 720 individuals and teams, representing 36 countries. Ideas ranged from giant roller coasters or a mile-long lap pool with four principal winners, three special awards and ten honourable mentions given out (Figure 27). These proposals were displayed at the Grand Central Terminal over the summer of 2003.¹⁴¹

¹⁴¹ The High Line Organization. (n.d.). *The High Line*. Design. Retrieved February 23, 2024, from <https://www.thehighline.org/design/>

Figure 27. The Big Apple Roller Coaster ideas competition entry

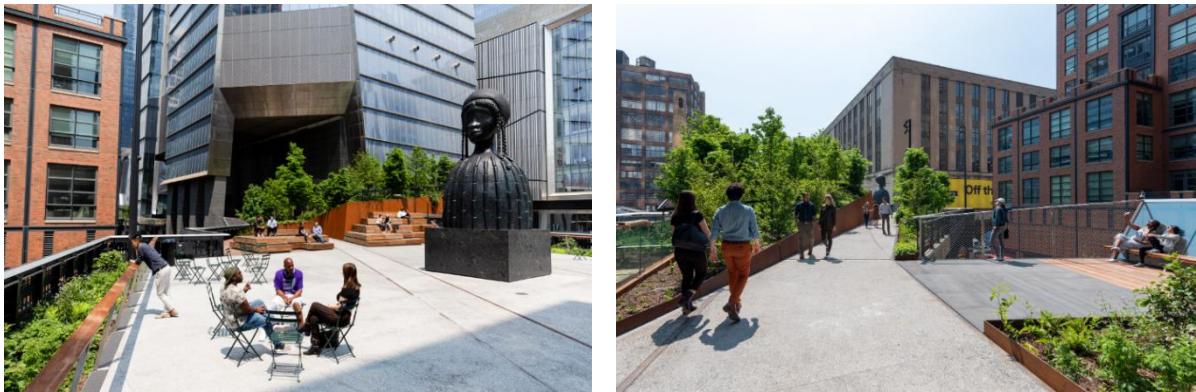


Source: The High Line

In 2008, an advocacy campaign titled “Save the Spur” was launched to save the last remaining section of the original rail structure (Figure 28). A rally in favour of preserving the Spur was organised by Friends of the High Line in 2008, supported by hundreds of people. Due to the vision put forth by community leaders, the city acquired the Rail Yards section of the High Line in 2012 for public use. The campaign was successful and led to the establishment of the Spur, a new public space, which opened in 2019. The Spur is designed for public programming to create moments of interaction with public rest stops, amenities, artwork and nature.¹⁴²

¹⁴² High Line. (n.d.). *The Spur*. The High Line. Retrieved March 8, 2024, from <https://www.thehighline.org/design/spur/>

Figure 28. The Spur



Source: The High Line

In 2009, High Line Art was founded as a dedicated multimedia contemporary art programme based in the High Line, to provide free artwork for visitors. Since then, it has been commissioning artwork in and around the High Line on an annual basis (

Figure 29). National and international artists at various stages of their careers were commissioned by an in-house curatorial team. The goal was to engage with the architecture, history and design of the High Line in unique ways to create dialogue with surrounding neighbourhoods and urban residents. Current and archived works are featured on the High Line website for online outreach and documentation.¹⁴³

¹⁴³ The High Line Organization. (n.d.). *Art*. The High Line. Retrieved March 8, 2024, from <https://www.thehighline.org/art/>

Figure 29. Secondary Forest by Giulia Cenci, High Line Art Commission (2024-2025)



Source: The High Line

In 2015, Friends of the High Line realised 37 art projects, fostered community partnerships, and engaged over 40,000 scheduled visitors through diverse programmes and activities.¹⁴⁴ The park also participated in a variety of public and private programmes for fundraising, charitable causes and activation of the park.

Stakeholders and Placekeeping Strategies

The High Line is currently owned by the City of New York and maintained and operated by Friends of the High Line under a license agreement with NYC Parks. The High Line operates as both a non-profit organization and a public park, which works with communities on and off

¹⁴⁴ GuideStar.org. (2022). *FRIENDS OF THE HIGH LINE, INC.* - *GuideStar Profile*. Retrieved 25 Apr 2024, from <https://www.guidestar.org/profile/31-1734086#operations>

the High Line. Their goal is to reimagine the role which public spaces play in creating connected, healthy neighbourhoods and cities.¹⁴⁵ Friends of the High Line and the City of New York partnered to redesign the High Line in 2004, and jointly selected experts from various fields including architecture, landscape architecture, engineering, art, urban planning, and horticulture to redevelop the elevated railway site. Diverse public partners and city agencies also collaborated on the High Line park's planning and design. These stakeholders include the NYC Department of City Planning, the Park Department, Friends of the High Line and the city's Economic Development Corporation, with strong support from the Bloomberg administration.

After the completion of the High Line in sectioned parts between 2009 to 2014, Friends of the High Line continued to oversee the maintenance, operations, and public programming for the park. The non-profit also raises funding to maintain and operate the High Line and its programmes.¹⁴⁶ Nearly 100% of the High Line's annual budget comes through public donations, which help them operate, maintain, and programme the park.¹⁴⁷ Maintenance of the High Line is led by an in-house team of horticulturalists, but regularly holds volunteer programmes to recruit help for larger-scale initiatives. Examples include a yearly programme called "Spring Cutback" to trim past year vegetation growth for the upcoming growing season. Additionally, between March through September, volunteers are recruited to work alongside horticulturalists for watering and weeding plants (Figure 30).¹⁴⁸ Paths and seating areas are regularly cleaned and maintained with green-seal-certified cleaning products that are environmentally sound. Snow removal is another important aspect due to the elevated structure,

¹⁴⁵ NYC Parks. (n.d.). *Op cit.*

¹⁴⁶ Ibid

¹⁴⁷ The High Line Organization. (n.d.). *The High Line*. About. Retrieved February 23, 2024, from <https://www.thehighline.org/about/>

¹⁴⁸ The High Line. (n.d.). *Volunteers*. The High Line. Retrieved March 11, 2024, from <https://www.thehighline.org/volunteers/>

e.g., a walking path is created by hand-removing snow, while an eco-friendly ice-melting product is used when needed in the colder months.

Figure 30. Friends of the High Line volunteers during Spring Cutback



Source: The High Line

Ongoing volunteer-based programmes have been established over the years to make the High Line an engaging place for visitors (Figure 31).¹⁴⁹ Docents act as knowledgeable volunteers who lead public and private tours, sharing the history and stories of the High Line. Information carts are managed by greeters, which open Wednesdays through Sundays from early May to the end of October to enrich the experience of park visitors, sharing print materials and

¹⁴⁹ Ibid

information about the High Line, its neighbourhood and New York City. High Line ambassadors further support organised activities such as fitness classes, seated conversations and other community-based events. For targeted activities focusing on youth development and education, outreach groups such as Play Partners organise on-park family events, host art and science projects (Figure 25), and help guests with check-in and wayfinding. Ambassadors also work alongside the Community Engagement Team, High Line ambassadors support organised activities such as fitness classes, seated conversations and other community-based events.

Figure 31. Stargazing Event at the High Line



Source: The High Line

Impacts and Challenges

Since its opening in 2009, the High Line has hosted over 450 programmes and activities, drawing more than 20 million visitors, nearly half of whom are New York City residents and attracting over US\$2 billion in private investment. The area saw the creation of 43 new buildings, including 1,400 housing units and 700,000 square feet of commercial space, within

the first six years. This is enabled by the floor area transfer mechanism that allows property owners at the High Line to transfer their development rights to designated sites, thereby maximizing development potential and fostering growth within the district, while preserving views around the High Line. Additionally, the zoning offers floor area bonuses for the restoration of structures, development of new open spaces, and provision of stair and elevator access at key locations. Framed as an economic revitalization project, the High Line has made West Chelsea an international draw, with renowned architects eager to contribute to the neighbourhood. Resultingly, this project has inspired cities across the United States to repurpose obsolete infrastructure into public spaces.¹⁵⁰

The High Line won the 2012 Lee Kuan Yew World City Prize Laurate City for its innovative redevelopment policy and transfer corridor concept to convert elevated rails-to-trails in the city. In 2022, Friends of the High Line won the Bronze Candid Award for their 2021 achievements. The award noted that Friends of the High Line excelled in park operations by having excellent safety records, even during the COVID-19 pandemic as they remained in operation. Other studies have shown that the surrounding community and residents are crucial in creating great places.¹⁵¹

Despite its overall impact on building a vibrant space, recent studies have shown a disconnect between the High Line and its surrounding functions. There is an absence of physical connections to supporting buildings and activities, highlighting the need for better spatial integration.¹⁵² The impact of the High Line has also led to gentrification and increased property

¹⁵⁰ Lee Kuan Yew World City Prize. (2019, November 8). *New York City – Innovative zoning tools in West Chelsea & High Line Plan*. Lee Kuan Yew World City Prize. <https://leekuaneyeworldcityprize.gov.sg/resources/case-studies/west-chelsea-high-line-plan/>

¹⁵¹ 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. <https://doi.org/10.1080/17549175.2015.1063532>

¹⁵² Ibid

values in the surrounding neighbourhoods.¹⁵³ High levels of racial homogeneity have been observed among users of the High Line, which significantly exceeds that of other comparable parks in Manhattan, suggesting racial exclusion.¹⁵⁴ Findings from stakeholder meetings in 2011 to 2014, consisting of visitors, staff, and local business owners suggested that there was a divide between the economic aspirations of the High Line and the sentiments of the local community. Social equity was found to be neglected as local neighbourhood groups and organisations expressed negative reactions to the High Line's facilitation of gentrification, prioritising real estate interests over community needs.¹⁵⁵ This further supports concerns about displacement and the exclusion of certain communities from the transformed neighbourhood and indicates the risk of eroding High Line as a democratic space.¹⁵⁶ This threat of spatial and racial exclusion of the High Line could potentially hinder successful placekeeping.¹⁵⁷

Another study into the institutional narratives driving the development of the High Line revealed that stratified economic and cultural resources have produced a spectrum of unevenly developed public spaces. The High Line, initially a grassroots effort to save an old, derelict railroad had been transformed into a privileged public space due to significant private investment and economic growth in the surrounding areas, including the construction of deluxe

¹⁵³ Ibid

¹⁵⁴ Reichl, A. J. (2016). The High Line and the ideal of democratic public space. *Urban Geography*, 37(6), 904-925. <https://doi.org/10.1080/02723638.2016.1152843>

¹⁵⁵ 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. <https://doi.org/10.1177/0308518X16677969>

¹⁵⁶ Littke, H., Locke, R., & Haas, T. (2016). Op cit.; 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. <https://doi.org/10.1177/0308518X16677969>; The High Line and the ideal of democratic public space. (2016). *Urban Geography*, 37(6), 904-925. <https://doi.org/10.1080/02723638.2016.1152843>

¹⁵⁷ 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>

apartment buildings, art galleries, restaurants, and boutiques.¹⁵⁸ Critics of the High Line Park also argued that the pre-renovation space had transgressive socioecological potentialities that were lost in the redesign process.¹⁵⁹

¹⁵⁸ Loughran, K. (2014). Parks for Profit: The High Line, Growth Machines, and the Uneven Development of Urban Public Spaces. *City & Community*, 13(1), 49–68. <https://doi.org/10.1111/cico.12050>

¹⁵⁹ Millington, N. (2015). From urban scar to ‘park in the sky’: Terrain vague, urban design, and the remaking of New York City’s High Line Park. *Environment and Planning A: Economy and Space*, 47(11), 2324–2338. <https://doi.org/10.1177/0308518X15599294>

Conclusion

This paper reviewed four major repurposed railway infrastructure from different cities around the world—Djerring Trail (Melbourne, Australia), Promenade Plantée (Paris, France), Gyeongui Line Forest Park (Seoul, South Korea) and High Line (New York, USA). The Paris Promenade is the oldest of the four developments (1993), followed by High Line (2009), Melbourne’s Djerring Trail (2015), and Gyeongui Linear Forest Park being the most recent (2016). While academic studies on the High Line and the Gyeongui Linear Forest Park are extensive, there is limited English literature available for Promenade Plantée and Djerring Trail, indicating an opportunity for more post-implementation research on these redevelopments.

The literature scan identified four key aspects to effective placekeeping that require closer attention.

1. Integration of Diverse Programmes and Activities

Multi-stakeholder collaboration is essential to the effectiveness of placekeeping initiatives. The many programmes and activities conducted through such collaborations are important for the continued success of the regenerated place. Placemaking literature emphasizes that programmes and activities play a crucial role in transforming space into place.¹⁶⁰ The four projects exemplify this by implementing an array of programmes specific to their urban contexts. These programmes range from, e.g., bicycle leisure rides along the lengthy Djerring Trail to guided walks and heritage tours along the Promenade Plantée, volunteer-based programmes and community-based events in the High Line, and participatory activities, including white space for citizens to organize activities in Gyeongui Line Forest Park. Diverse

¹⁶⁰ Akbar, P. N. G., & Edelenbos, J. (2021). Positioning place-making as a social process: A systematic literature review. *Cogent Social Sciences*, 7(1), 1905920. <https://doi.org/10.1080/23311886.2021.1905920>

stakeholders are involved in organizing and overseeing these programmes, from individual volunteers, local interest groups, community organizations and operator of the place (e.g. Friends of the High Line) to government departments.

The diversity of programmes and organizers necessitates careful coordination. A critical consideration is that the programmes and activities respond to the range of needs and contexts across different sections of the repurposed park. Because of their length, these parks often encompass various cultural, social, and spatial contexts in their surrounding areas. As demonstrated by the four projects, different sections of the linear park can be invested with different thematic focus, programmes and activities, reflecting its history and cultural heritage, e.g., arts, sports, nature contact as well as wider economic and community interests.

2. Various Approaches to Multi-Stakeholder Collaboration: From Partnerships to Top-down

A common approach is for adaptive reuse of existing stock of buildings, tracks and other rail infrastructure into strategic economic and/or community resources to generate area transformation according to urban development and enhancement objectives. The infrastructure conditions and community needs are essential to guide reuse choices. While using adaptive reuse, the four projects have activated different multi-stakeholder collaboration. The differing stakeholders and subsequent collaboration efforts in each case have resulted in varying degrees of placekeeping. As the primary driver leading the development of Djerring Trail, the Victoria State Government and its subsidiary infrastructure agencies closely engage with the private sector—architects and designers of the trail and the community. These private sector collaborators are enabled to outreach and consider the views and inputs of adjacent local communities during the trail’s design process. This has fostered a greater sense of ownership

and integration with users and nearby sites along the trail, promoting positive perceptions and stewardship within the community.

The collaboration between stakeholders of High Line's placekeeping initiatives follows a more bottom-up approach, where the City of New York largely delegated the everyday operations and maintenance to the Friends of the High Line, a non-profit organization, which engages closely with local schools, artists and performers in the curation of the High Line's many activities. Gyeongui Line Forest Park has implemented multi-stakeholder collaboration by establishing the Gyeongui Line Forum during the review of the park's masterplan. Driven by the strong leadership of the city mayor and the Seoul Metropolitan Government, the forum has unified insights and perspectives from professionals—architects, urban planners, and non-government organization leaders, as well as residents living in the vicinity. In contrast, the Paris Promenade Plantée is managed almost exclusively by the Paris Council via a top-down approach, engaging its own volunteers in the everyday operations and enforcement of its placekeeping initiatives. The reshaping of the commercial landscape along the Paris Promenade Plantée is largely delegated to SEMAEST, a semi-public organization affiliated with the City of Paris. The reuse of abandoned railway infrastructure, following a largely top-down enhancement approach focused on economic revitalization and tourism development has led to new activities that changed the social and economic dynamics of the area—makeshift artisanal workshops and squatters, which previously occupied the space, are replaced by high-end artisanal shops and boutiques.

The choice of collaboration approach entails consideration of both the characteristics of the resources to be reused as well as the local context and mode of governance. These different conditions offer different opportunities for reuse and collaboration, including blended solutions. For example, depending on context, each section or subsection of the park may consider different approaches to collaboration—one section can be managed by community

organizations and users to integrate and promote everyday social practices, while other sections can be developed through public-private partnerships to support larger scale infrastructure and commercial activities.

3. Importance of Balancing Diverse Interests

Each of the four placemaking initiatives has testified to the diverse stakeholders' interests to be managed in the redevelopment of disused railway, including previously unforeseen consequences. For example, even though multi-stakeholder collaboration has provided greater opportunities for the local community to shape the urban design elements of these linear parks, maintenance issues, including overgrown landscaping, unrepaired lighting, and noise could detract the park experience, especially if there is inadequate budget allocation. Gentrification and rising property prices from the revitalization project are another challenge that have led to an increasing disconnect between stakeholders, particularly between community stakeholders and public/private sector, especially when commercial interests are prioritized over existing genius loci and historical value of the place. These development outcomes are evidence of some of the tension between different stakeholders and competing interests in adaptive reuse of disused railway infrastructure.

While commercial redevelopment is important in stimulating the local economy and increasing visitors and tourism to the repurposed park, it has also, in many places, led to the displacement of local businesses and residents who are unable to keep up with rising costs resulting from the redevelopment. The inevitable gentrification following urban renewal would need to be carefully managed to reduce and buffer its potential displacement effects and tensions between stakeholders with differing interests. If not addressed, these tensions may erode the power of

multi-stakeholder collaboration.¹⁶¹ Further research is required in this area as balancing diverse interests is a critical, non-trivial task of an integrated (physical/cultural, economic, social) and sustainable redevelopment that combines use and conservation purposes.¹⁶²

4. Evaluation of Needs for Placekeeping Initiatives

While there is a large body of studies on the sentiments and narratives surrounding the High Line and the Gyeongui Linear Forest Park, the same cannot be said for the Djerring Trail and the Paris Promenade Plantée. Apart from some historical accounts and records prior to their redevelopment into linear parks, there is scant literature on the latter two cases. Although the Gyeongui Linear Forest Park has been well-studied, there is limited literature in English on the efforts and challenges related to its placekeeping, as well as how the park is continually viewed by citizens. Smith and colleagues have observed a lack of interest in conducting evaluation of placekeeping due in part to the absence of such requirements and in part to limited academic research on evaluation methodology.¹⁶³ This is a knowledge gap, and more studies could be conducted to generate a more comprehensive understanding of placekeeping—its stakeholders, initiatives, and impacts. This is a timely reminder to study and document the development of placekeeping initiatives in Singapore, their stakeholders, strategies, and impacts to facilitate monitoring and maintenance activities and ensure the protection of a sense of place with reuse intervention.

¹⁶¹ Ibid

¹⁶² Di Ruocco, G.; Sicignano, E.; Fiore, P. & D'Andria, E. (2017). Sustainable reuse of disused railway. *Procedia Eng.*, 180, 1643–1652.

¹⁶³ Smith, H., Pereira, M., Roe, J., Sosenko, F., & Lindholst, A. C. (2014). The evaluation of place-keeping: unrealised potential. In *Place-keeping* (pp. 171-192). Routledge.