

A blue-tinted photograph of a busy greenway path. In the foreground, a woman in a blue tank top and patterned shorts is riding a bicycle away from the camera. To her left, a man in a dark t-shirt and shorts is running towards the camera. The path is paved and has a light blue directional arrow painted on it. In the background, other people are seen walking and cycling. The path is lined with trees and modern streetlights. A large building is visible in the distance on the right side.

GREENWAY MASTERPLAN
APPENDIX B
BENCHMARK REPORT

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INTRODUCTION

The Inner West is not unique in feeling a shortage of open space and a need for open space to work “harder” to accommodate multiple uses and competing demands. The GreenWay, as a linear park in a transport corridor in Sydney’s dense urban Inner West, needs to accommodate multiple uses and competing demands - social, cultural, ecological and economic. The following page illustrates the set of principles that McGregor Coxall have developed for such a linear park.

The following key elements, derived from those principles, represent a set of objectives that the GreenWay Masterplan aims to integrate, while allowing for a consistent measure to compare case studies from around the world:



Active transport: a route for walking and cycling, accommodating a range of users and linking multiple places



Multi-purpose recreation: a linear park providing a range of recreational opportunities including sports, skating, dog-walking, play, picnicking, bushcare, bird watching



An ecological corridor: a connected habitat corridor for locally-native fauna



Arts and culture: interpretation of a multi-layered history, celebration of local culture, supporting local artists



Sustainability education: a place for school groups and others to learn, forge a connection with the local environment and be inspired to engage in sustainable behaviours

This report presents a selection of “benchmark” projects which integrate one or more of these elements into public spaces. Examples were selected from relatively dense urban environments, similar to the Inner West. All of the examples have been selected based on the ways in which multiple elements are integrated into a design. An icon has been used to represent the presence of each element within the benchmark projects.

Many of the examples illustrate projects which help forge connections between people and their community, their culture, their place, and their environment. Referring to an urban infrastructure site highly comparable to our GreenWay, Ryan Gravel, founder of the Atlanta Beltline project, said:

“... infrastructure is not only a tool for moving people, water, or information around. It’s the foundation for our economy, for our social and cultural life. It matters what kind of infrastructure we build. It affects how we live our lives... In every city I go to, people are reclaiming obsolete infrastructure—from old railroads to degraded waterways and obsolete roadways—as new conduits for urban life. When these efforts embrace a broad, inclusive vision for what this infrastructure might mean for their lives, they are tapping into the real opportunity for infra-culture” (CityLab.com 2016)

The Atlanta Beltline project is a classic benchmark for the GreenWay, but across the world there are numerous examples of similar projects at various stages of gestation. Many of the US examples have a strong community-building theme and many, like the GreenWay, have their genesis as grassroots community projects.

ATLANTA BELTLINE

Overview



First conceived as a 1999 Master's thesis by Georgia Tech student Ryan Gravel, the Atlanta BeltLine evolved from an idea to a grassroots campaign of local citizens and civic leaders. It is now a linear trail with similar urban context, development time frame, and conception, and incorporating many of the same concepts and elements as the GreenWay.

Guided by a Master Plan and Implementation Plan, it will open in phases through to anticipated completion in 2030. As of 2016, the Atlanta BeltLine has four open trails, with two trails under construction.

LOCATION
ATLANTA

YEAR
1999 - 2030

SIZE
35.4 KM

BUDGET
\$246 MILLION USD

Lessons for the GreenWay

- It meets multiple objectives and is described as an "integrated approach to transportation, land use, greenspace, and sustainable growth."
- Being a "living, breathing part of our community", it is not simply a means of getting somewhere, but a "destination unto itself".
- Although there was a strong grassroots campaign and ongoing community involvement, as the project has scaled up, community voices have diminished, and the focus has shifted towards economic development. The project's founder Ryan Gravel is concerned that it's not doing enough to deliver its intended social outcomes
- Its completed stages and Master Plan and Implementation Plan, which sets out plans for phased completion through to 2030, establish strong precedents.





Active & Sustainable Transport

The Atlanta BeltLine is both an active transport and transit corridor, including a 33 miles of multi-use trails and 22 miles of "modern streetcar" in a loop around the city. Like the GreenWay it uses old rail corridors.



Ecological Corridor

The project includes a linear arboretum, envisaged as "an elaborately curated, city-scale mix of existing and cultivated tree species that is at once an urban forest, an ecological connector, a corridor for scientific research, and a collection of remarkable public spaces."



Arts & Culture

A strong sense of art and culture is present throughout the BeltLine, contributed to by its street art. It boasts the largest temporary public art exhibition in the American south.



Sustainability Education

The arboretum has a focus on education for a range of ages, with a program run by Trees Atlanta.



Multi-Purpose Recreation

Part of the role of the Atlanta BeltLine project is to increase the area of parks and green space in Atlanta. Seven new parks are open so far including a range of recreational facilities.

CHICAGO 606

Overview

Similar in urban context and concepts as the GreenWay, the Chicago 606 trail is a former rail corridor which “brings together arts, history, design, trails for bikers, runners, and walkers, event spaces, alternative transportation avenues, and green, open space”. One of the key drivers for its implementation was a lack of open space in this part of Chicago.

Community involvement has been strong, with the “Friends of the Bloomingdale Trail” championing the project over a decade. Ongoing input from the community has also led to a strong art program of installations both temporary and permanent, which define the visitor experience and make it a dynamic destination for all.

Lessons for the GreenWay

- The vision for The 606 balances local community needs with attracting visitors. The 606, while busy, achieves this. However, there are community concerns about gentrification in the vicinity of the trail.



LOCATION
CHICAGO

YEAR
2003 - 2015

SIZE
4.3 KM

BUDGET
\$95 MILLION USD



Active & Sustainable Transport

The 606 includes a shared path which accommodates cyclists, walkers, runners and dogwalkers. “Sure, the trail can be busy — Cyclists, runners, dog walkers and others mostly coexist peacefully. There are no stop signs or traffic lights.” (The Chicago Tribune)



Multi-Purpose Recreation

As part of the 606, a series of new parks are being developed. Park 567 is one of these.



Arts & Culture

Described as a "living work of art", the 606 also includes embedded artworks, event facilities, temporary artworks, and programs. The 606 has a strong theme of community-building using events designed to connect people to the trail, the parks along it and their neighbours. The strong arts program defines the trail as a destination.

INDIANAPOLIS CULTURAL TRAIL

Overview



In car-dominated Indianapolis, the city-wide cycle and pedestrian Cultural Trail is a strong move in a new direction. The trail connects emerging cultural districts to downtown and the Indianapolis Canal, featuring strong signage, pavement markings and furniture to give it the look and feel of a high-quality and safe space. Like the GreenWay and others, the project had a long incubation time before being fully funded, and the project was realised over a 14-year period.

Increasing numbers of apartment dwellers in the local area have created greater need for multi-use outdoor space and opportunities for walking and cycling.

The trail reflects Indianapolis' reputation as a leader in the arts, with public art an important feature of the trail. Approximately \$4 million was invested in public art as part of the trail's construction, and there is an ongoing public art program. The canal also features strongly and was the subject of a separate \$61 million investment.

LOCATION
INDIANAPOLIS

YEAR
1999 - 2013

SIZE
12.9 KM

BUDGET
\$63 MILLION USD

Lessons for the GreenWay

- Indianapolis exemplifies the benefits of defining a clear civic vision and sticking to it across election cycles.
- Defining the trail as a clear destination and programming events along its length have been reported by the city to be challenges.



Active & Sustainable Transport

The trail is designed to accommodate a range of different active modes and features generously wide road crossings. Pavement markings indicate where to ride/walk and provide a unifying theme.



Ecological Corridor

Stormwater treatment is integrated into the design. Rain gardens along the trail create greener streets and improve water quality.



Arts & Culture

Art and culture are a central theme, with the trail connecting six cultural districts around the city. There are artworks integrated into the design.

THE HIGH LINE

Overview

An elevated freight rail line transformed into a public park on Manhattan's West Side, the High Line is owned by the City of New York, and maintained and operated by the non-profit and grassroots conservancy Friends of the High Line along with the New York City Department of Parks & Recreation. Founded in 1999 by community residents, Friends of the High Line fought for the High Line's preservation and transformation at a time when the historic structure was under the threat of demolition and saw it through a long incubation time.

After the trains stopped running, plants self-seeded on the High Line. Varied conditions of light, shade, exposure, wind, and soil depth on the High Line led to a variety of growing conditions - a landscape that became inspiration for plant selection in the design.

The High Line has become a prime example of a trail as destination, so much so that it has become a victim of its own success and its use as a thoroughfare and as a local community space might be diminished by the high number of tourists.

Lessons for the GreenWay

- Nearby public housing tenants have been squeezed out of the neighbourhood financially and socially, by gentrification and the lack of welcoming spaces. Solutions include more meaningful input from local residents during planning and design and smarter financial models to capture and redistribute the value generated by similar projects.



Ecological Corridor

Whenever possible, plants have been sourced from within a 100-mile radius. Almost half of the High Line's plants are native species.

The High Line's ecosystem provides food and shelter for a variety of wildlife species, including native pollinators.



LOCATION
NEW YORK CITY

YEAR
2006 - 2014

SIZE
2.3 KM

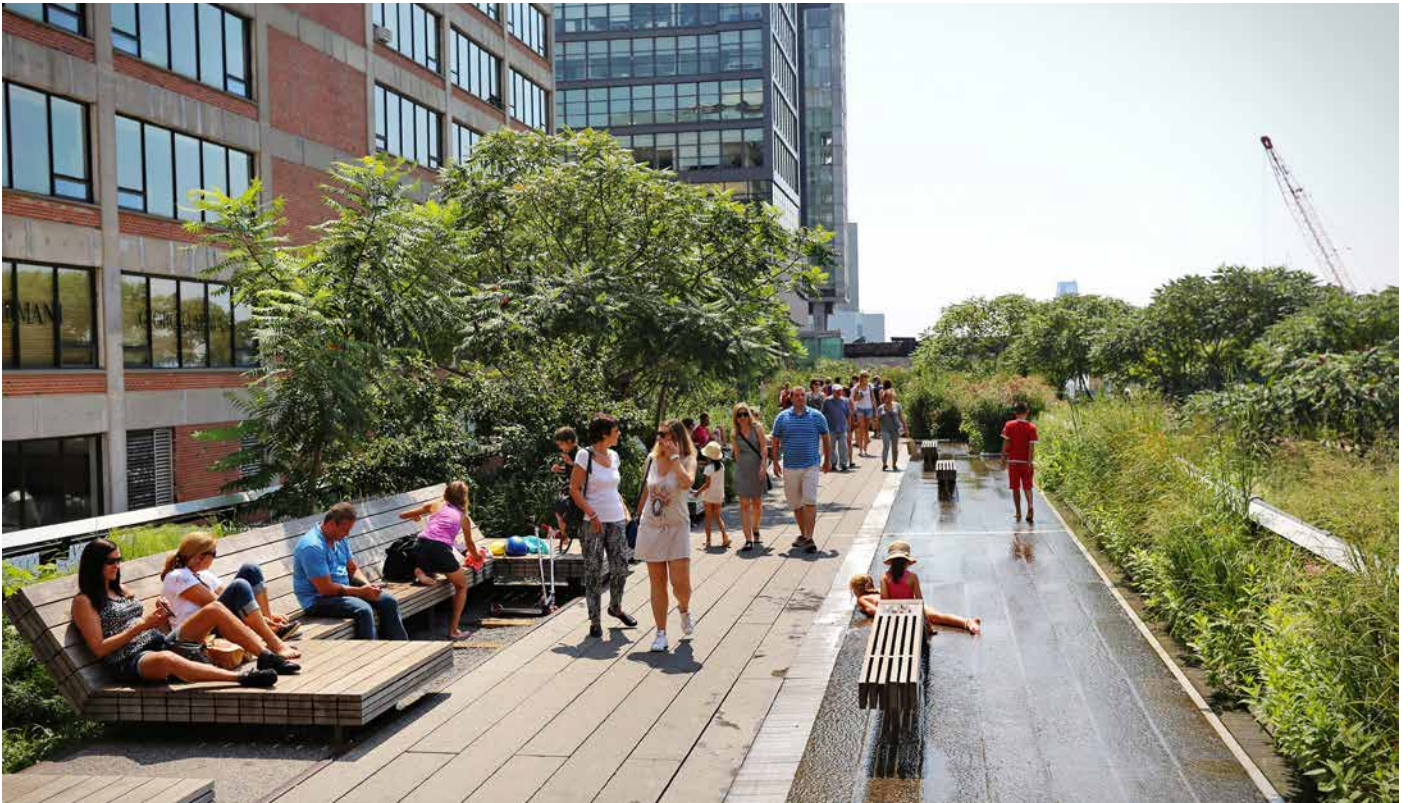
BUDGET
\$152 MILLION USD

- Its staged implementation has meant that latter stages benefit from increased publicity and increased funding.



Arts & Culture

High Line Art presents a wide array of artwork including site-specific commissions, exhibitions, performances, video programs, and a series of billboard interventions. Artists have been encouraged to think of creative ways to engage with the uniqueness of the architecture, history, wildlife and design of the High Line.



Sustainability Education

Friends of the High Line run education programs serving 10,000 students annually through guided field trips, after-school programs, teaching artist residencies and school partnerships.



Multi-Purpose recreation

The highline offers multipurpose space for community and cultural use. Pictured, a meditation group.

SUPERKILEN

Overview

Superkilen encompassed a neighbourhood upgrade made up of three main areas - a red square, a black market and a green park - and provides lessons to the GreenWay on how to creatively integrate multiple recreational uses into a relatively small urban space. One of its objectives was an urban development standard liable to inspire other cities and districts.

Multifunctional spaces have been incorporated to accommodate different things at different times, for example, a large area in the square which is covered by a rubber surface to enable variety of use such as ballgames, markets, parades, and skating rinks in winter.

Each of the areas was designed to reflect the diversity of the local neighborhood and to help immigrants feel more at home - by including familiar cultural objects, and providing spaces where the local community could gather.

Lessons for the GreenWay

- It has been criticised for lacking the intimacy and welcoming feeling that it was trying to create.
- Some of the cultural objects were poorly integrated in the space (such as an incongruous lone steel bull).

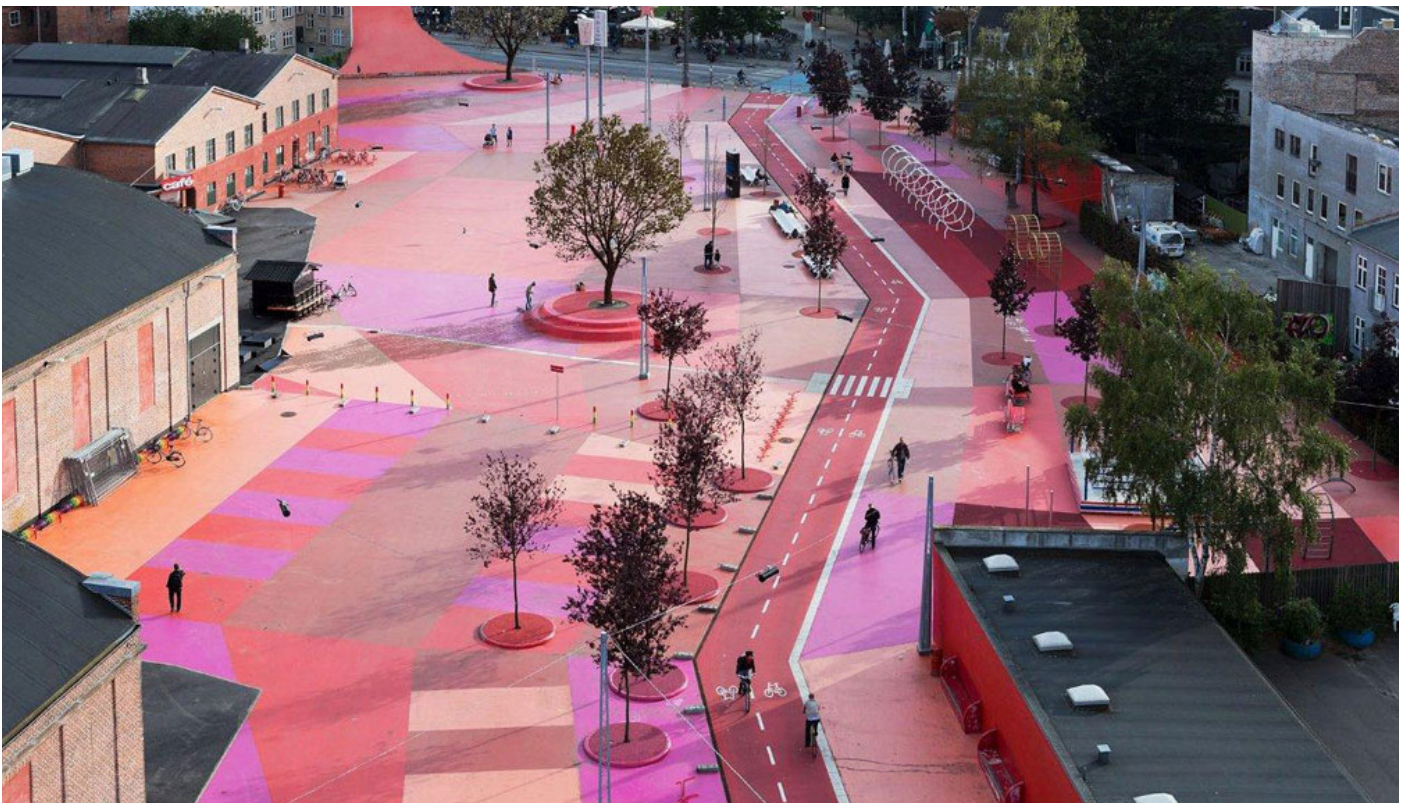


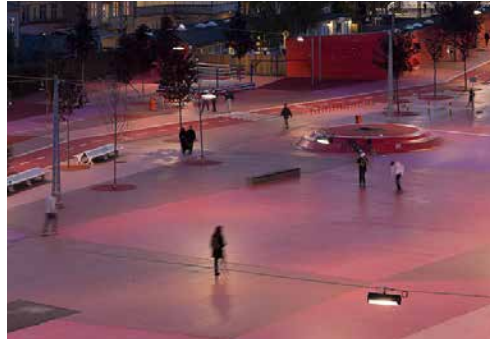
LOCATION
COPENHAGEN

YEAR
2007 - 2012

SIZE
750 M WIDE / 30,000 M²

BUDGET
\$11 MILLION USD





Active & Sustainable Transport

A cycleway is designed as an integrated element in the park.



Multi-Purpose Recreation

The green park provides unprogrammed space which can be used for large scale events or for small groups and individuals to occupy daily.



Multi-Purpose Recreation

The park integrates multiple uses into tight spaces.



Multi-Purpose Recreation

Throughout consultation, "skateable" elements throughout the site were a recurring suggestion, and now is characteristic of the Superkilen. A skate park doubles as a basketball court where the slopes for skating provide separation between spaces.



Arts & Culture

The park itself is a work of art. Filled with objects from around the globe, the local inhabitants (covering over 60 nationalities) have been able to contribute their own ideas and artifacts to the project as a kind of world exposition.

BISHAN PARK (KALLANG RIVER NATURALISATION)

Overview



At its centre, Bishan Park includes a restored naturalised stream where a fenced concrete drainage channel which previously divided the park has been demolished, serving as a useful precedent for the GreenWay's Hawthorne Canal precinct.

The 2.7 km long channel was restored to a sinuous, natural river 3 km long. 62 hectares of park space have been redesigned to accommodate the dynamic processes of a river system (which include fluctuating water levels) while providing maximum benefit for park users. A comprehensive river monitoring system provides early warning in the event of impending heavy rain or rising water levels.

The park serves a densely-populated neighbourhood and there is a sense of community stewardship, built on strong community involvement during design and an active Friends of Bishan Park group. School field-trips are organised there. The park has more than 3 million visitors annually.

LOCATION
SINGAPORE

YEAR
2007 - 2012

SIZE
3 KM LONG / 62 HECTARES

BUDGET
\$50 MILLION USD

Lessons for the GreenWay

- The project benefitted from extensive stakeholder collaboration.



Active & Sustainable Transport

Bishan Park includes a shared path which links into the city's network of cycle infrastructure.



Multi-Purpose Recreation

The park includes a series of spaces which provide for different recreational needs, including playgrounds, dog runs and themed "gardens" such as the therapeutic garden, canopy garden, pond garden and butterfly garden. There are spaces for tai chi and exercise groups.



Ecological Corridor

The naturalised stream is the most significant feature of the ecological corridor. Although no wildlife was introduced into the park, biodiversity is estimated to have increased by 30% with the naturalisation of the river, including a family of otters. Bishan Park also includes bird habitat and a butterfly habitat garden.

ROSE FITZGERALD KENNEDY GREENWAY

Overview



With echoes of our GreenWay, the Rose Kennedy Greenway is a series of interconnected parks, each designed separately, which occupy the space along a transport corridor (in this case, above an underground freeway). Several downtown neighbourhoods are connected via this linear park.

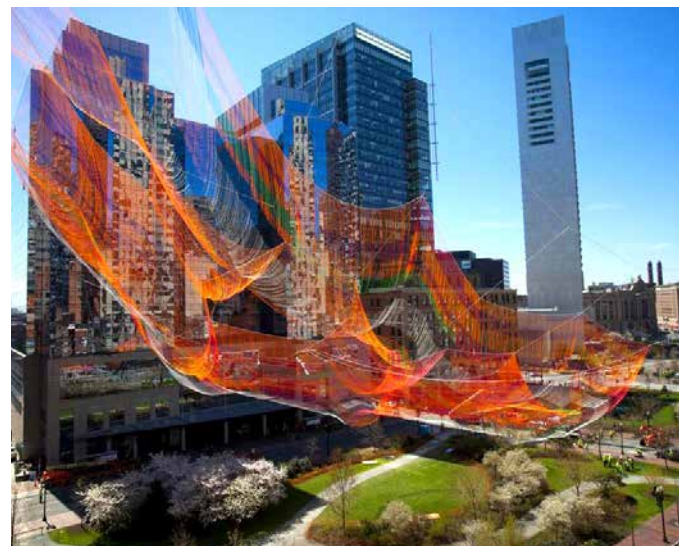
LOCATION
BOSTON

YEAR
2008

SIZE
2.4 KM

Lessons for the GreenWay

- During its early stages, it was widely criticised for its 'placeless' character and largely unpopulated space, but has now become a beloved oasis for workers in nearby office buildings, tourists and residents. A 2012 public art strategy was instrumental in placemaking and activating the site. This included rotating exhibitions of contemporary public art which provide a sense of place and identity, and provide a reason for the visitors to return time and again.
- Its planning process has been criticised for disconnecting different players.
- Initial funding only covered a basic build; it was challenging to secure funding for further works.



Multi-Purpose Recreation

The Rose Kennedy Greenway links a "ribbon" of parks through the city, with a focus on informal gathering spaces, passive recreation and play.



Arts & Culture

Free, temporary exhibitions on the Greenway encourage people to engage in experiences, interactions and dialogue with art and each other.

LA RIVER REVITALISATION (in development)

Overview



Like the GreenWay Masterplan, Los Angeles' fledgling LA River Revitalization scheme is an example of an ambitious attempt to create an ecological corridor around a restored waterway, currently a large concrete channel. The plans include ecosystem restoration, the LARiverWay active transport corridor and riverside parklands.

LOCATION
LOS ANGELES

YEAR
1996 - ONGOING

SIZE
82 KM

So far, a 2007 masterplan sets out the vision for river revitalisation, but built outcomes remain meagre. Plans are progressing in smaller sections and a few smaller scale projects have been completed, such as the recently-completed Zev Yaroslavsky Greenway trail and the LA Riverfront Greenway Phase II, a half-mile trail that *"provides much-needed river access and recreational opportunities for the community, treats stormwater, improves air quality, increases habitat, and provides a beautiful river edge in what was an unused maintenance corridor"*.

Lessons for the GreenWay

- The long-term goal of restoring the river's riparian corridor and ecological function may indeed take generations to achieve. There is a need for short-term wins to maintain momentum and demonstrate benefits to an sometimes-impatient populace.



Active & Sustainable Transport

Work has begun on the LA River trail system of bikeways and greenways. Despite the highly-modified urban environment of Los Angeles, there is an ambition to restore habitat corridors and provide connected active transport infrastructure.



Ecological Corridor

There are plans to restore sections of the river to a more natural form, integrating green and grey elements. The Tujunga Wash Greenway and Stream Restoration Project is an example of such a small completed project. Meanwhile, the LA River Revitalisation Master Plan includes a plan to improve habitat and connectivity for key species.

PLAYA VISTA PARKS

Overview

The Playa Vista parks are made up of Ballona Discovery Park, Playa Vista Central Park and the Playa Vista dog parks. Although useful for the GreenWay as an example of a series of parks which integrate a variety of uses into relatively small areas, they sadly do not form a linked parkland as they are only connected by road.

On the other hand, each of three dog parks along with sporting facilities such as tennis courts and soccer fields have been spread throughout the parks, rather than containing them within one, allowing for a more equal distribution of users across all parks and an increased variety of uses.

Lessons for the GreenWay

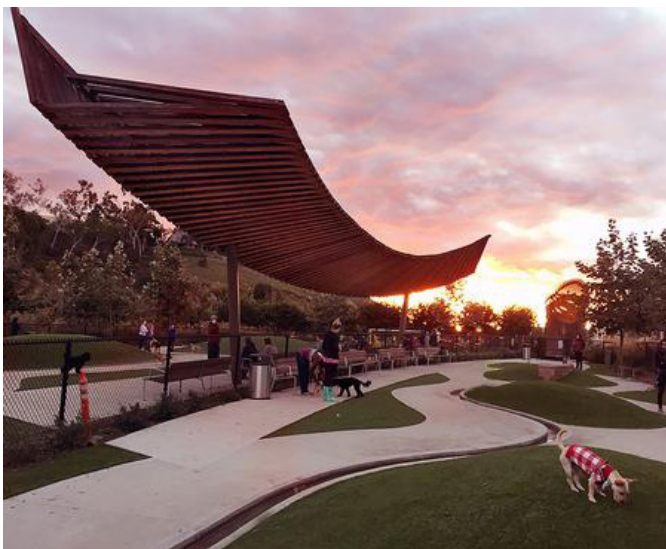
- Despite being situated in a linear corridor, the parks are not well linked to walking or cycling routes. The broader Playa Vista development has been criticised for failing to deliver on a pedestrian-friendly master plan, and instead delivering typical car-oriented outcomes – a risk when public spaces are delivered by private interests.



LOCATION
LOS ANGELES

YEAR
2010-2012

SIZE
4 HA



Multi-Purpose Recreation

Playa Vista Central Park provides a rich diversity of recreation, community and green infrastructure within a relatively small space. The parks encompass dog parks, play spaces, sports fields, basketball courts, an amphitheatre, as well as quiet places to relax or interact with natural elements - particularly interesting to note in relation to potential uses for the parkland at Iron Cove.



Sustainability Education

Ballona Discovery Park is intended to be a "museum without walls" interpretive centre to explain to children and their parents the natural and cultural history of the Ballona Wetlands. The site features a model catchment reinterpreted as a play space, with blocks for buildings, and different surfaces representing different pervious and impervious areas in the city.



“The Park is not a mimetic representation of nature, but is instead defined by activity, utility, and performance. Rather than creating a series of static scenes in relationship to a fixed linear narrative, the Park encourages a multiplicity of simultaneous itineraries, experiences, and encounters through its function and form” - The architect



Sustainability Education

Visitors are engaged to learn about catchments, runoff and urban wetlands in creative ways. The “watershed walk” shows the movement of water from the mountains, through an urbanised city into a freshwater estuary, saltwater marsh, mudflat, sand dune and finally the ocean. Where signs are used, they are located at child height and include playful elements for preschoolers.



Arts & Culture

The site’s “Ki” structure, reminiscent of a structure that the native Tongva tribe may have used, functions as an outdoor learning space. The site’s “watershed walk” is also a piece of public art. The site’s “watershed walk” is also a piece of public art.

PRINCE ALFRED PARK

Overview

Comparable to the GreenWay's Johnson Park in size and elements, Prince Alfred Park is a popular local example located adjacent to Central Station in Surry Hills. It is located on a busy active transport route (with a busy shared path running through it) and accommodates a range of active and passive uses within a relatively small space including basketball courts, play equipment, exercise equipment, open space and a pool. Play equipment is spread around the park, with certain elements appealing also to bigger kids such as a big slide.

Lessons for the GreenWay

- Because of its central location and the varied facilities arranged around the park, the park is well activated and feels safe even at night.
- The main shared path is 5m-wide and is busy at peak times but accommodates cyclists and pedestrians without demarcating them.
- Native long grasses work well around the edge of the park to block out the view and noise of traffic from the busy roads adjacent to the park.



LOCATION
SYDNEY, NSW

YEAR
2013

SIZE
7.5 HA

BUDGET
**\$30 MILLION,
INCL. \$18 MILLION FOR POOL**



Active & Sustainable Transport

The park's 5 m shared path accommodates cyclists and pedestrians without demarcating them. Path users need to slow down and negotiate the shared space.



Multi-Purpose Recreation

The park's arrangement of different uses, including spaces for sports (tennis and basketball courts), a kick-about/dog off-leash area, BBQ's, fitness and play equipment, helps to ensure that the park feels active and safe even at night.

PLAN DEL VERDE Y DE LA BIODIVERSIDAD DE BARCELONA

Overview



- "(1) To preserve and enhance the natural heritage of the city and avoid the loss of species and habitats;*
 - (2) To make the most from green surface and work on their connectivity through green corridors;*
 - (3) To maximize environmental and social services from green and biodiversity and to enhance the value which society assigns to them; and*
 - (4) To make the city more resilient to emerging challenges such as climate change."*
- Greenery and Biodiversity Plan for 2012-2020

LOCATION
BARCELONA

YEAR
2012 - 2020

SIZE
2.7 KM

The underlying drivers of Barcelona's city-wide greenery and biodiversity plan are both ecological and social. While aiming to preserve and improve green infrastructure, the plan has resulted in the redesign of city streets - making it of great relevance to a GreenWay masterplan.

Barcelona City Council, for example, has transformed Glòries square, a major traffic node of the city, into a large urban park of 13 hectares. The Canòpia urbana (urban canopy) project won an international design contest for going beyond traditional park design by incorporating micro-climate regulation and biodiversity as key design aspects.

Lessons for the GreenWay

- Major cities elsewhere in the world are using biodiversity strategy as a key driver to inform the planning and design of urban green infrastructure



Ecological Corridor



Ecological Corridor

An element of the biodiversity plan is an Urban Green Corridors program.

An example of a Green Corridor project, the Passeig De St Joan Boulevard is pictured.

GLENORCHY ART & SCULPTURE PARK

Overview

GASP! (Glenorchy Art and Sculpture Park), a place where art meets park meets people, shares commonality with the vision for the GreenWay in that it is a linear park with a strong arts and cultural theme.

GASP! is approximately 3km from Montrose Bay to Wilkinson's Point, a linear 9 hectare public space with open parkland, wetlands and bird habitat. Connecting the foreshore edge is a crescent shaped boardwalk in four parts with three public pavilions.

A post-industrial landscape has been repositioned as an innovative setting for new art and experiences that invite people to imagine and engage with the nature, character and heritage of Wilkinsons Point and the broader Derwent River environs. GASP!'s industrial heritage has been retained through design strategies such as reuse of the existing concrete wharf and its supporting infrastructure, and the reclamation and refinishing of sea wall piers for seating.

Lessons for the GreenWay

- The project relied on a clearly-defined master plan strategy to create a strong vision for the site and attract funding to build it.



LOCATION
GLENORCHY, TAS

YEAR
2012

SIZE
2.3 HA

BUDGET
\$2.2 MILLION AUD



Arts & Culture

GASP! is a place for art projects - GASP commissions and produces both temporary and permanent international art projects in all forms. Contemporary artists respond directly to the site, its unique environment and the local community. Art is integrated into the design with elements like the boardwalk and the "room".



LA PROMENADE PLANTEE

Overview



LOCATION
PARIS, FRANCE

YEAR
1988-1993

SIZE
4.5 KM

Paris' Promenade Plantée is often cited as an important model for New York's famous Highline. La Promenade Plantée is also based on a former elevated railway line, converted into a linear park. It extends over approximately 4.5 km through Paris' 12th arrondissement. As well as the elevated section, it also includes a substantial section at-grade, which also passes through several tunnels. Two distinct sections are:

- The Viaduc des Arts, an elevated structure with a planted walkway on top and a series of artists' studios, galleries, shops and cafés in the spaces underneath.
- La Coulée verte, a series of trenches and tunnels under the city. This section includes separate walking and cycling paths.

The route links a couple of significant open spaces including the Jardin de Reuilly and Jardin Charles Péguy. These spaces feature multiple recreational uses.

The whole route is well-vegetated, and offers a lush green escape from the city, but has not been created with a particular focus on its role as an ecological corridor. Plantings are varied but not necessarily native; the Promenade attracts birds and insects but was designed before there was significant awareness of urban ecology.

Lessons for the GreenWay

La Promenade Plantée features high quality design, which creates a varied, interesting experience with moments of delight, surprise and awe. It features:

- Careful restoration of heritage structures
- Varied formal and informal plantings and water features
- Well-lit tunnels
- Bold architecture

La Promenade Plantée is often described as an oasis, an escape from the city and a world apart from its urban surrounds. Lush vegetation is a central feature which helps to create this feeling, but another important factor is that the Promenade, being a former railway line, is grade-separated from the surrounding city and its busy streets.



Active & Sustainable Transport

While mainly designed for recreational use, la Promenade Plantée attracts active transport use including walking and cycling (in the low-level section).



Arts and culture

The restoration of la Promenade Plantée created spaces for artists' studios, workshops and galleries in the spaces beneath the railway viaduct. This feature is one element that has helped to revitalise the neighbourhood.



Multi-Purpose Recreation

As well as obvious opportunities for walking, jogging and biking, la Promenade Plantée features rest stops and varied places to pause along its route.

CITY OF ADELAIDE BIKE ART TRAIL

Overview

Large scale sculptural works have been developed for eleven locations around the city, which either sit alongside or incorporate a public bike rack, forming a unique cycling art trail through the CBD and North Adelaide.

The bike art trail encourages active transport by drawing attention to bike facilities and celebrating bicycle culture in Adelaide. The bike art trail connects cultural destinations around the city and several of the sculptures take inspiration from their site.

Lessons for the GreenWay

- Public art can help forge connections between different ideas, draw attention to ideas, and/or increase usage, patronage, and affinity for them.



LOCATION
ADELAIDE, SA

YEAR
2013

BUDGET
\$183 THOUSAND AUD



Active & Sustainable Transport

"Fork!" is located among Melbourne Street eateries, acknowledging its surrounding context.



Arts & Culture

Rundle Street is fast becoming a high street fashion shopping destination. The pair of interlinked coat hangers is intended to acknowledge and celebrate this.

WINDSOR STREET LINEAR RESERVE

Overview



This project was an initiative of the local council to turn a concrete stormwater culvert into a linear reserve that provides a spine to the city of Unley. It also restores and preserves the rare and endangered plants indigenous to the area and is a small-scale example of urban habitat restoration in a streetscape context.

The reserve makes for a pleasant and informative kilometre walk through native vegetation. A variety of seating at various points along the reserve as well as thoughtfully-placed signage and artwork add to the user amenity.

LOCATION
UNLEY, SA

YEAR
2000 - 2007

SIZE
1 KM LONG / 7.5 HA

Lessons for the GreenWay

- The link is identified in the Unley Walking and Cycling Plan as a lost opportunity to install a shared path, highlighting the benefit of integrated planning.



Ecological Corridor

Changes in materiality along the path reflect the walks immediate surrounds, drawing attention to the varied habitats and ecology along its length.



Ecological Corridor

Informative signage is integrated with sculpture along the reserve.

HIGHBURY AQUEDUCT RESERVE

Overview



Highbury Aqueduct Reserve is located on the eastern outskirts of Adelaide, along the River Torrens. It is a linear reserve approximately 14 km long. The land was formerly used by SA Water to accommodate an open channel that transferred water from the River Torrens to the Hope Valley Reservoir. When the land was no longer required for this purpose, the South Australian government purchased the land from SA Water in order to create a public reserve.

LOCATION
ADELAIDE, SA

YEAR
2012-2033

The project was launched in 2012 and public access has been opened progressively, guided by a Master Plan prepared in 2013. The Master Plan establishes the following objectives:

SIZE
14KM

- Open up the Highbury Aqueduct Land to provide physical access and improve visual access for the local community
- Provide a range of spaces that accommodate informal active recreation, social activities and peaceful reflection
- Provide diverse opportunities for members of the local community to participate in developing, managing and maintaining the Park
- Develop, manage and maintain vegetation within the park to contribute to biodiversity, visual amenity and safety
- Address existing stormwater management issues and introduce innovative water sensitive design approaches to support effective stormwater management in the future
- Provide new links that increase people's opportunities to walk or cycle to work, school or recreation facilities
- Design to reduce risk and enable efficient maintenance
- Identify, protect and interpret natural, cultural and built heritage feature

BUDGET
\$12 MILLION AUD

The Master Plan proposes a hierarchy of paths and a series of projects to restore vegetation, manage stormwater, remediate creeks, conserve heritage features, and provide community infrastructure such as productive gardens and play spaces.

Unlike the GreenWay, the Highbury Aqueduct Reserve includes a large area of open space, and faces the challenge of developing and maintaining a large park with infrastructure and points of interest spread out along its length. However there are similarities in the mix of uses proposed within the reserve.

Lessons for the GreenWay

Like the GreenWay, some of the tensions in developing the Highbury Aqueduct Reserve are:

- Accommodating a range of different recreational users on shared paths and in open spaces, including walkers, cyclists, people walking dogs on leads and people on scooters and skateboards
- Potential impacts of dogs on native fauna – the Master Plan recommends that dogs are permitted on leads
- Balancing access and biodiversity, including whether or not to include low-key paths through remnant vegetation, with seating for reflection to provide a “bush” experience in an otherwise urban environment

However in the Master Plan, the major threats to biodiversity are identified as weeds, feral animals and erosion, and recreational users are not seen as a significant threat. Instead, opening the reserve to public access is seen as an opportunity to get more people involved in restoring native vegetation and managing weeds.



Ecological corridor

















































































While much of the corridor has been planted with introduced Aleppo pines, it also includes small remnants of SA Blue Gum woodland and Red Gum woodland, as well as scattered patches of native grasslands. Fauna is dominated by species common in Adelaide's urban environments (e.g. Australian Magpie, Magpie Lark, Noisy Miner) but also includes Ringtail Possums, Brush-tailed Possums and Yellow-tailed Black Cockatoos (which feed on the Aleppo pines).



Multi-purpose recreation

The Master Plan for Highbury Aqueduct Reserve proposes a main shared path as well as fine grain walking trails, BMX and mountain bike tracks. Spaces are also proposed for nature play and community gardening, and vegetation conservation is an important recreational activity in the reserve.

SUMMARY TABLE

Example	Elements	Why is it a good example for the GreenWay?
Atlanta Beltline	    	Three classic examples of linear trails in similar urban contexts and incorporating many of the same concepts as proposed in the GreenWay
Chicago 606	    	
Indianapolis cultural trail	    	
The High Line	    	A high quality outcome integrating locally native ecology and strong public art and education programs
Superkilen	    	Creative integration of multiple recreational uses into a relatively small space
Bishan Park	    	The naturalised stream is a good precedent for the Hawthorne Canal precinct
Rose Fitzgerald Kennedy Greenway	    	An example where a strong public art program has played a key activation role
LA River Revitalization	    	A fledgling example attempting to create an ecological corridor around a restored waterway
Playa Vista parks	    	A high quality example of a series of parks which integrate a variety of uses into relatively small areas
Prince Alfred Park	    	A local example of a highly active park with a busy shared path running through it
Plan del Verde de la Biodiversidad de Barcelona	    	An high quality example of an urban biodiversity strategy which is driving the redesign of city streets
Glenorchy Art and Sculpture Park (GASP!)	    	A high quality example of a linear park with a strong arts and cultural theme
La Promenade Plantée	    	La Promenade Plantée features high quality design, which creates a varied, interesting experience
City of Adelaide bike art trail	    	An example of public art which highlights and celebrates bicycle facilities as well as local culture
Windsor Street linear reserve	    	A small-scale example of urban habitat restoration in a streetscape context
Highbury Aqueduct Reserve	    	Highbury Aqueduct Reserve is located on the eastern outskirts of Adelaide, along the River Torrens. It is a linear reserve approximately 14 km long, along a former open channel.

CONCLUSION

Across the sixteen global examples, the following common key success factors have emerged as themes:

'High-performing' infrastructure

As cities around the world face greater densities and increased pressures on open space, the concept of "high-performing" public spaces has emerged to describe spaces which generate multiple social, environmental and economic benefits to local communities. The benchmark examples, especially the Atlanta Beltline, Chicago's 606 and the Indianapolis cultural trail, Superkilen, Playa Vista Parks, and local heroes Prince Alfred Park and Sydney Park wetlands, represent "high-performing" infrastructure which meet multiple objectives.

Trail as a destination in itself

A key message from international examples is that linear trails are seen as not just movement corridors but as seen as linear open space which, done well, are significant attractions in their own right. The most popular recreational activities in urban areas are walking and riding, and attractive destinations that target these activities can encourage participation. Destination trails, such as the Atlanta Beltline, Chicago's 606 and the Indianapolis cultural trail, can also deliver strong economic benefits.

Community, culture and placemaking

Strong community involvement helps to create an outcome which works in the local context and delivers strongly on social benefits. Cultural activity and placemaking also encourage ongoing community participation, as seen at the Atlanta Beltline, the Chicago 606 and the Highline.

Environmental sustainability principles

Public spaces have a role in both creating habitat in which urban ecosystems can flourish and in creating opportunities for people to connect with nature close to where they live. Where environmental sustainability principles underpin design, projects deliver strongly on environmental benefits, such as at the Highline, Singapore's Bishan Park and Sydney Park wetlands.

Staged implementation

Linear open space infrastructure is typically large-scale with relatively long lengths of the corridor. They also cross other transport and infrastructure corridors (necessitating consideration of connectivity and accessibility) and a diverse range of adjacent land uses.

Development in multiple stages with a clear vision and objectives ensures a desired quality of the infrastructure, despite this complexity and scale.

High-quality outcomes have been achieved by projects delivered in multiple stages, where each stage, while being a short section of a longer trail, is a complete piece of infrastructure in itself integrating all the elements of the project. A short section delivered well can also attract further funding and publicity for the next section, most famously at New York's Highline and also in Indianapolis and Atlanta.

