GOVERNMENT OF
WESTERN AUSTRALIA
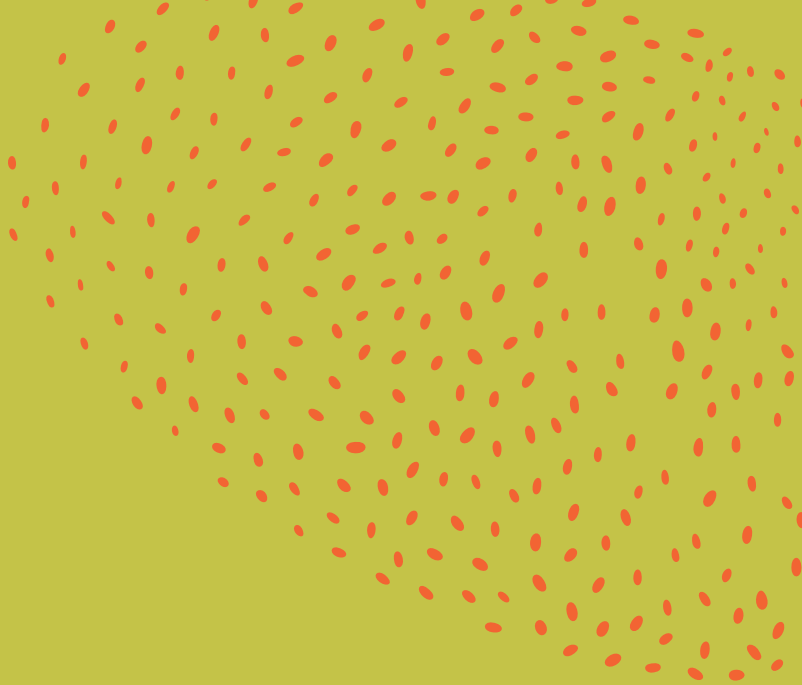
BOTANIC GARDENS
& PARKS AUTHORITY

Movement Network Strategy
2022–2032

Kings Park Education and Learning programs share traditional ways of life and the value of caring for Country. Photo: BGPA

Acknowledgement of Country

We acknowledge and respect the Whadjuk Noongar people as the traditional custodians of Kings Park and Bold Park.

We seek to preserve, celebrate and learn from their culture and knowledge.

Kings Park and Botanic Garden, or Kaarta Koomba, is a highly significant place to Whadjuk Noongar people. Noongar names for Kings Park include Kaarta Koomba, Kaarta Gar-up, Mooro Kaarta and Kata Moor. Kings Park lies at the natural heart of Whadjuk Noongar culture, located at a key junction of the river and a chain of lakes, all of which are linked by songlines.

Bold Park is a significant place to Whadjuk Noongar people. The Park is a Registered Aboriginal Site (Site 20178) and the listing for the site recognises associations as being historical, mythological, a location for camps, a hunting place, a place for plant resources and a lookout point.

Community consultation

This strategy has been prepared in consultation with key stakeholders, including government and private organisations and the general community. Botanic Gardens and Parks Authority (BGPA) thanks everyone who contributed to the development of this strategy, including members of the community and stakeholder organisations who participated in workshops, completed surveys or provided submissions.

This collaboration has been significant in shaping the direction and focus of this strategy and will guide the improvement of the movement network and placemaking infrastructure in Kings Park and Bold Park.

More information

For further information regarding Kings Park and Botanic Garden and Bold Park please visit www.bgpa.wa.gov.au.

For information regarding specific management or operational matters please email planning@bgpa.wa.gov.au or telephone (+61 8) 9480 3600.

Cover photo - An aerial view of transport lines in Kings Park. Photo: Jason Thomas/BGPA

Back page photo – Pedestrians on paths in Kings Park. Photo: Jason Thomas/BGPA

Contents

Visitors are able to actively engage with a variety of nodes in Kings Park. Photo: Jason Thomas/BGPA

At a glance

Cultural heritage:

A number of established Western Australian transport links pre-date colonial occupation. Colonial settlers made use of some of the Aboriginal movement networks around and through Kings Park and Bold Park. Many of their paths and routes have evolved into the transport network we know today. Some of these transport links have deeper histories and have an important continuing cultural significance for the Noongar people. The placemaking framework referenced in the strategy incorporates and pays respect to Whadjuk Noongar cultural heritage values.

The localities we manage:

The Botanic Gardens and Parks Authority supports a diverse range of functions and activities across Kings Park and Bold Park.

Kings Park encompasses a number of unique precincts including the Western Australian Botanic Garden, the State War Memorial, May Drive Parkland, Saw Avenue Parkland, Rio Tinto Naturescape Kings Park, the Fraser Avenue Precinct as well as destinations and nodes such as Wanju Marr volunteer centre, Biodiversity Conservation Centre, Kings Park Education Centre, a tennis and health club as well as restaurants and cafes, retail businesses and commercial tourism operators.

Bold Park comprises a number of conservation precincts, Western Australian Ecology Centre and nodes such as key lookout points and track junctions.

Bushland precincts in Kings Park and in Bold Park host important threatened ecological plant communities and provide important habitat for fauna.

Within the localities, movement is facilitated by a network of roads, paths and trails.

The Movement Network Strategy (MNS) is a response to a rapidly changing operating environment.

Factors influencing planning decisions include climate change, population growth and urban infill in areas surrounding our parks. Diversified recreation and tourism interests in the community also create new demands on the parks and related transport infrastructure.

An improved movement network considers a wider range of transport modalities and associated support services. Responsive planning will create more accessible and welcoming destinations, reduce car dependence, facilitate connectivity and foster more immersive nature-based recreational and tourism experiences for visitors as well as improved heritage, conservation, biodiversity and sustainability outcomes.

The Strategy

Vision

The strategic vision is an efficient and integrated movement network supporting an equitable, safe, and seamless access to all precincts, destinations, and nodes within the localities we manage. This reflects our core values and enhances a sense of place within our parks and botanical gardens.

A CONNECTED AND ACCESSIBLE PARK

A SUSTAINABLE PARK

A WELCOMING PARK

A SAFE AND HEALTHY PARK

Aims

Aims established for the MNS have been distilled from the analysis of themes emerging from the extensive public consultation process undertaken in 2021. BGPA aims to:

- Develop a movement network reflecting a holistic approach to placemaking and ensure movement connections are fit for purpose.

- Create journeys and facilitate opportunities for people to meet, linger and move through, rather than just provide corridors for transport.

- Deliver a well-designed model prioritising pedestrians and bike riders with an emphasis on immersing visitors in nature.

- Explore opportunities to improve linkages with our neighbours and adopt a tenure-neutral approach to planning decisions.

Our Vision supports a connected and accessible park. Photo: Jason Thomas/BGPA

Our Approach

Effectively planning for a movement network is a complex and collaborative process. BGPA's approach aims to create open dialogue between the Authority, neighbours, stakeholders and all Western Australians to help guide future planning decisions. The approach considers:

4 Evaluation

Measuring the ongoing outcomes of all actions with opportunities to review action plan and vision.

1 Discovery

- Invite traditional custodians, communities and other stakeholders into the process.
- Analyse past consultation to capture the history of a place.
- Build shared ownership and a local narrative for a precinct.

2 Vision

- Engage and define area characteristics.
- Scaffold and identify guiding principles from the model.
- Develop a precinct vision and objectives to help prioritise actions.

3 Action

- Action plan detailing management, events, and engagement.
- Identify effectiveness measures and process for evaluation.
- Action delivery, experimentation, and pilot projects.

Phase	Results
DISCOVERY	• In excess of thirty stakeholder meetings resulted in new data, review of masterplans and archival information, and 'visioning' exercise outcomes. • BGPA engaged WSP consultancy to prepare a technical report to inform an Integrated Transport Strategy, forming the basis of the Movement Network Strategy. • A community survey received 774 submissions. • Data collated included Main Roads incident data, Strava™ data, and visitation surveys. • BGPA investigated innovative practices applied by Main Roads and Urban Mobility Unit, and consulted with the Road Safety Commission.
VISION	The breadth of information generated during the discovery phase guided the aim, vision, and objectives outlined in the MNS.
ACTIONS	The development of the MNS guided: • development of the placemaking model, place and network taxonomy and mode hierarchy • adoption of a 'tenure neutral' policy approach to addressing movement and transport challenges shared with neighbours • shared path negotiations with the City of Perth on Kings Park Road for improved safety and experience outcomes • collaboration with neighbouring authorities to explore shared E-scooter hire scheme opportunities • research on innovative strategies applied in WA and in other jurisdictions with regard to movement planning.
EVALUATION	BGPA will adopt a monitoring and evaluation process as it continues to implement the MNS and placemaking models by preparing relevant metrics and measures of success for future projects.
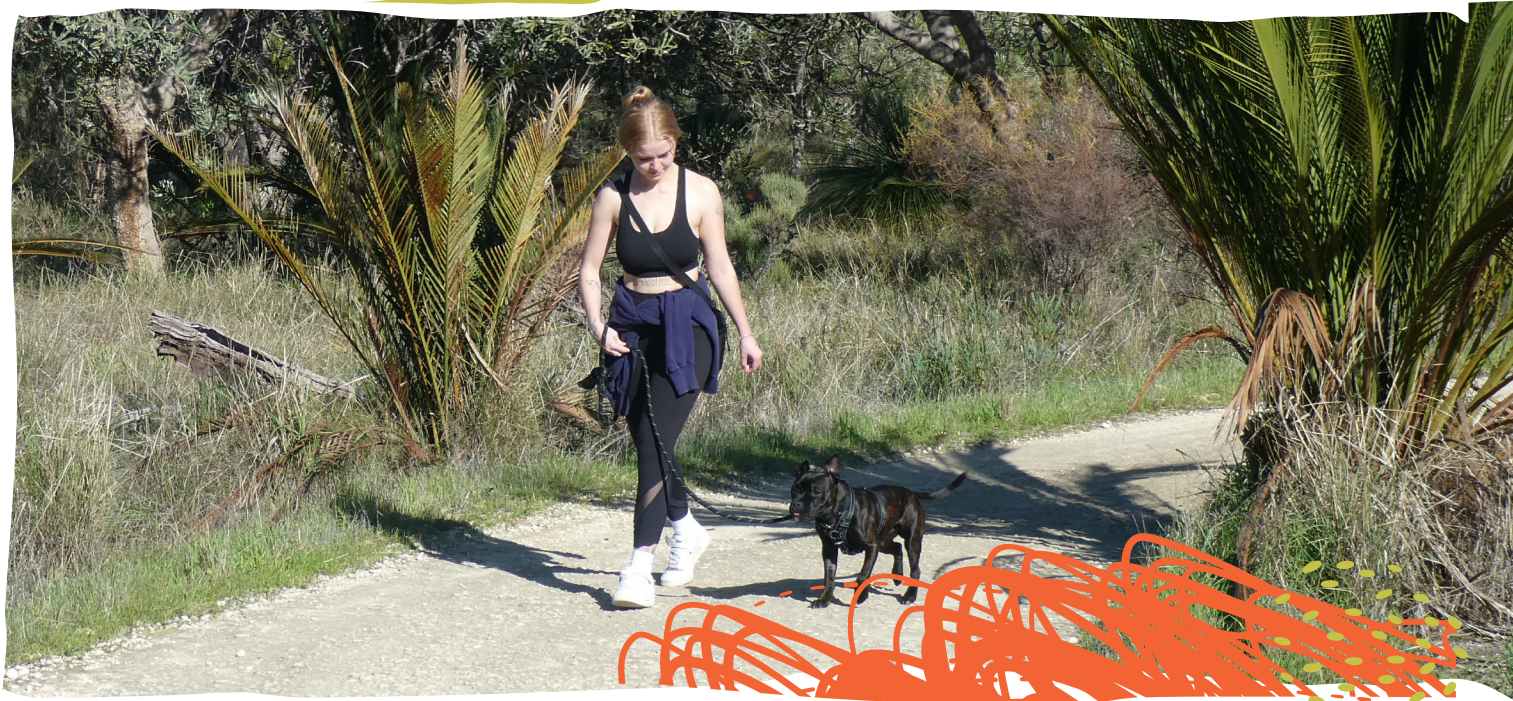
Bold Park tracks provide a location for exercise. Photo: BGPA

Importance of place and movement

BGPA aspires to have an efficient and purposeful movement network. Decisions about how the network operates and the nature of journeys need to be subject to the same considerations required when creating great places.

Placemaking is a collective process to better understand, plan, and design public spaces reflecting community aspirations. BGPA will integrate the natural, cultural, economic, and social values held by the community when making decisions on the movement network.

BGPA approaches placemaking with the five principles detailed in the Placemaking Model. Planning the movement network will consider access, amenity, accommodation, activation, and attentiveness to unique area characteristics during the decision-making process.

Places are accessible and well connected both within, and adjoining to, surrounding destinations.

Places are well designed to create welcoming, safe, sustainable, and attractive spaces for people to visit.

ACCESS

AMENITY

PLACE

ATTENTIVE

ACCOMODATE

ACTIVATE

Places emphasise and leverage the unique area characteristics informed by its identity and long-term vision.

Places offer people the facilities and infrastructure required to recreate and explore safely and sustainably.

Places attract people and are active with visitors wanting to engage, socialise, learn, and reconnect with nature.

Planning framework and policies

The BGPA Placemaking Model guides master planning processes and addresses development considerations such as tourism and recreation opportunities, biodiversity conservation and heritage objectives, as well as transport improvements within and between the parks. The Placemaking Model helps plan and design destinations and nodes within precincts to be consistent with the values and unique characteristics of the precinct and locality. The diagram below illustrates and defines the elements used to describe places and connections in the MNS.

Legend:

- **......** - Localities
- ▨ - Precincts
- 📍 - Destinations
- 📍 - Nodes
- ↷ - Movement Network

Localities and Precincts

Localities are the largest spatial element in this strategy. Kings Park and Bold Park are the two localities covered by the MNS.

Precincts are areas identified based on shared area characteristics including social, economic, heritage, cultural, and environmental values.

Destinations and Nodes

Destinations within a precinct attract visitors due to the facilities offered, a particular attraction, or popular experience.

Nodes are treated as lower-tier destinations. They offer fewer facilities or attract less visitors but are valuable for safety, amenity, connectivity, and wayfinding purposes and may develop into destinations over time.

Movement Network

Movement networks connect precincts, destinations, and nodes. Elements in the movement network include roads, paths and tracks as well as infrastructure supports such as vehicle and bicycle parking. Networks also support transport services and employ management approaches like speed controls, paid parking, regulation, and enforcement policies.

Each of these elements can be biased towards experiential outcomes, sustainability, or transport efficiency. The movement network comprises of connections linking destinations and nodes within and around the park.

Connections can vary in elemental design due to the intended user. A collection of interlinked connections can create journeys with unique qualities and identities.

Movement network hierarchy

Fundamental to the MNS is the adoption of a movement network hierarchy to prioritise the safety and experience of visitors in the context of cultural heritage and conservation values.

The movement hierarchy illustrates how BGPA will better accommodate walking, cycling, micro-mobility and public transport with the intent of reducing reliance on private vehicles to get to and travel within our parks.

The hierarchy is described in terms of six types of infrastructure and two types of services.

PEDESTRIANS

- Pedestrian only paths meet accessibility standards.
- Pedestrian only tracks meet accessibility standards where possible.
- In some situations, optimising the accessibility of the pedestrian track network may involve the provision of mobility aids rather than by infrastructure changes to preserve unique natural experience values or particular cultural narratives.

BIKES AND ERIDEABLES

- Open standards shared paths (or marked lanes) meet external standards and are suitable for use by transport focussed bicycle commuters, eRideable users as well as 'sportif' modes of recreational cycling.
  Transport and sportif-style recreational cycling will be encouraged on main circulation roads.
- Local shared paths have safe and appropriate speed limits for all users. These paths are suitable for users with mobility impairments, prioritise the pedestrian experience but are accessible for passive / casual recreational cycling, for Segway tour operators and hire scheme eRideables.

TRANSPORT SERVICES

- Public transport services connect localities and/or precincts.
- Tour, shuttle, hire and other bespoke tourism and transport services are available (typically run by commercial operators or volunteer groups).

CARS

- Main road network connecting precincts will apply a motor vehicle speed limit of 30 km/h and will use safe active zones through precincts where speeds are restricted to 15 km/h.
- Special purpose or restricted access roads may only be open to traffic at certain times or for events. These roads will be accessible to bikes and eRideables and will apply speed limits for vehicles at (or below) 25 km/h.
  Service vehicles will be considered outside of the movement taxonomy on an as-needs basis.

Movement matrix

The MNS recognises movement efficiency and experiential values are fundamentally inter-linked and can be utilised as a means to guide planning decisions. The matrix will underpin transport planning to improve the safety and amenity of the park, particularly where a road (or path) passes through precincts, destinations, or nodes with high interaction between different transport modes.

Movement Efficiency			
	High	**High Traffic Connection** Roads accommodate bikes and eRideables with vehicle traffic speed at an appropriate level for user safety. Shared paths for pedestrian, eRideables, and cyclists are designed to ensure pedestrian safety as a priority.	**Pedestrian Priority Connection** Pedestrain only paths prioritise pedestrians with a focus on young people, older people, and people with a disability. Bikes and eRideables are not permitted. Roads abutting pedestrian only areas have strict speed limits and safety interventions.
	Low	**Mixed Mode Connection** On local shared paths the pedestrian experience is the priority with recreational bike riders permitted. The use of eRideables will be considered with interventions limiting speed.	**Special Purpose Connection** Some paths or tracks offer unique experiences for targeted user groups and are not considered from a movement efficiency perspective.
		Low	**High**
		Experiential Value	

Roads accommodate cyclists and vehicle traffic speeds are enforced to ensure rider safety. Photo: Jason Thomas/BGPA.
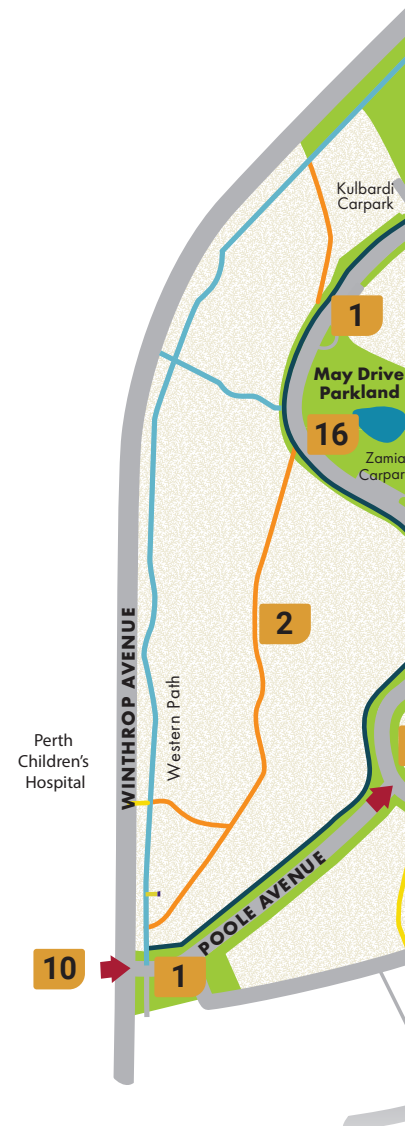
Movement connectivity

The public consultation process informing the strategy assisted to identify some areas in the movement network that have limited access and perceived safety risks in both Kings Park and Bold Park. The table below describes the current connectivity between different places with reference to the place definitions. Particular attention is required for open standard shared paths, local shared paths, and public transport.

		Planning Definitions				
		Locality to locality*	Precinct to precinct	Intra-precinct	Destination to node	Node to node
Movement network hierarchy	**Pedestrian Paths**	Not applicable	Available for both localities			
	Pedestrian Tracks	Not applicable	Available for both localities			
	Open standards shared paths	Partial route coverage between the two localities	Not present in either locality		Not considered essential in most cases	
	Local shared paths	Not applicable	Present, but variable quality in Kings Park		Not considered essential in most cases	
			Not present within Bold Park			
	Public and hire transport services	Present but not efficiently connected	Limited availability in Kings Park	Not available	Not avialable	
			Not available in Bold Park			
	Main road network	Continuous between the two localities	Available for both localities	Not considered essential in most cases		
	Special purpose or restricted access roads	Not applicable		Available for both localities		

*Relies on external authorities

Kings Park Initiatives

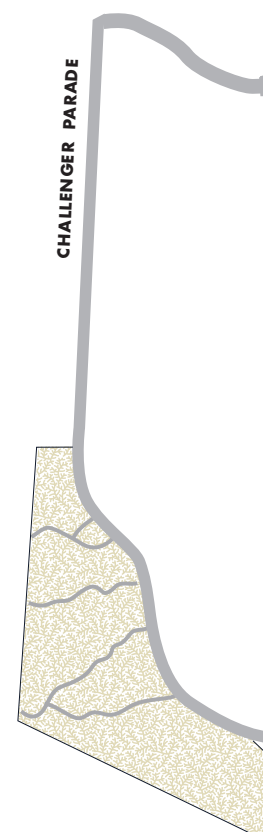| Strategic Aim	Indicative Actions
SAFE	1. Introduce pedestrian and cycle-friendly speed limits, pedestrian priority crossings and safe active zones where roads pass through precincts. 2. Improve path and road surface quality. 3. Develop and implement path and track management standards for safety and security. 4. Embed personal security risk mitigation into the network - including lighting - for safer movement at night.
CONNECTED	5. Optimise traffic circulation for visitation rather than movement through the park. 6. Optimise path alignment for safety. 7. Enhance the alignment of paths and non-vehicle entry points for connectivity, efficiency and to improve ecological integrity within bushland precincts. 8. Implement a clear hierarchy of path types to support higher levels of efficiency and accessibility between precincts, destinations and nodes.
WELCOMING	9. Design places and movement networks to reflect cultural and experiential values and to leverage tourism opportunities. 10. Enhance entry statements and simplify wayfinding. 11. Ensure movement networks support diverse recreational interests.
SUSTAINABLE	12. Respect cultural values and sites in placemaking processes, in journey narratives and in the design and interpretation of the movement network. 13. Reduce long-term impacts on the bushland and improve ecological integrity. 14. Promote and prioritise sustainable transport solutions. 15. Promote and incentivise safe, positive and sustainable visitor movement choices. 16. Ensure infrastructure and engineering solutions in the movement network benefit ecosystem function.

Kulbardi Carpark

1

May Drive Parkland

16

Zamia Carpark

WINTHROP AVENUE

Western Path

2

Perth Children's Hospital

10   1

POOLE AVENUE

ap

KINGS PARK ROAD

Speargrass Path

Prionotes Path

Magpie Path

THOMAS STREET

3

4

Poolgarla Family Area

Tennis Club/ Next Generation

10

10

4

10

To Perth city

10

8

Biodiversity Conservation Centre

Jorang Carpark

1

FRASER AVENUE

BELLEVUE TCE

May Circle

MAY DRIVE

Western Path

MAY DRIVE (HONOUR AVENUE)

2

Boomerang Path

Wren Path

16

3

7

Marri Walk (Honour Ave.)

Rio Tinto Naturescape Kings Park

Kings Park Education

4

14

Wardong Bus park

Reservoir

Mt Eliza House

1

Wadjuk Way

Kaarta Gar-up Lookout

Kings Park Administration

10

15

Saw Avenue Picnic Area

SAW AVENUE

1

5

Tobruk Precinct

Goanna Path

LOVEKIN DRIVE [HONOUR AVENUE]

2

1

Pines Carpark

Nature Trail

6

Volunteer Hub

Wadjuk Carpark

4

Botanic Garden Carpark

5

Mt Eliza Escarpment

STATE WAR MEMORIAL

Kennedy Fountain

BROADWALK VISTA

1

9

DNA Tower

12

WESTERN AUSTRALIAN BOTANIC GARDEN

BROADWALK VISTA

11

Serventy Path

13

7

Roe Carpark

Place of Reflection

2

Law Walk

MAY DRIVE

Zamia Path

1

5

5

FORREST DRIVE

Balga Carpark

1

Swan Carpark & Dryandra Lookout

Baird Path

Crawley Steps

PARK AVENUE

MOUNTS BAY ROAD

to Perth city

Swan Canning Riverpark

Legend
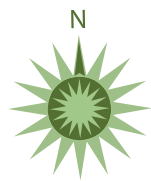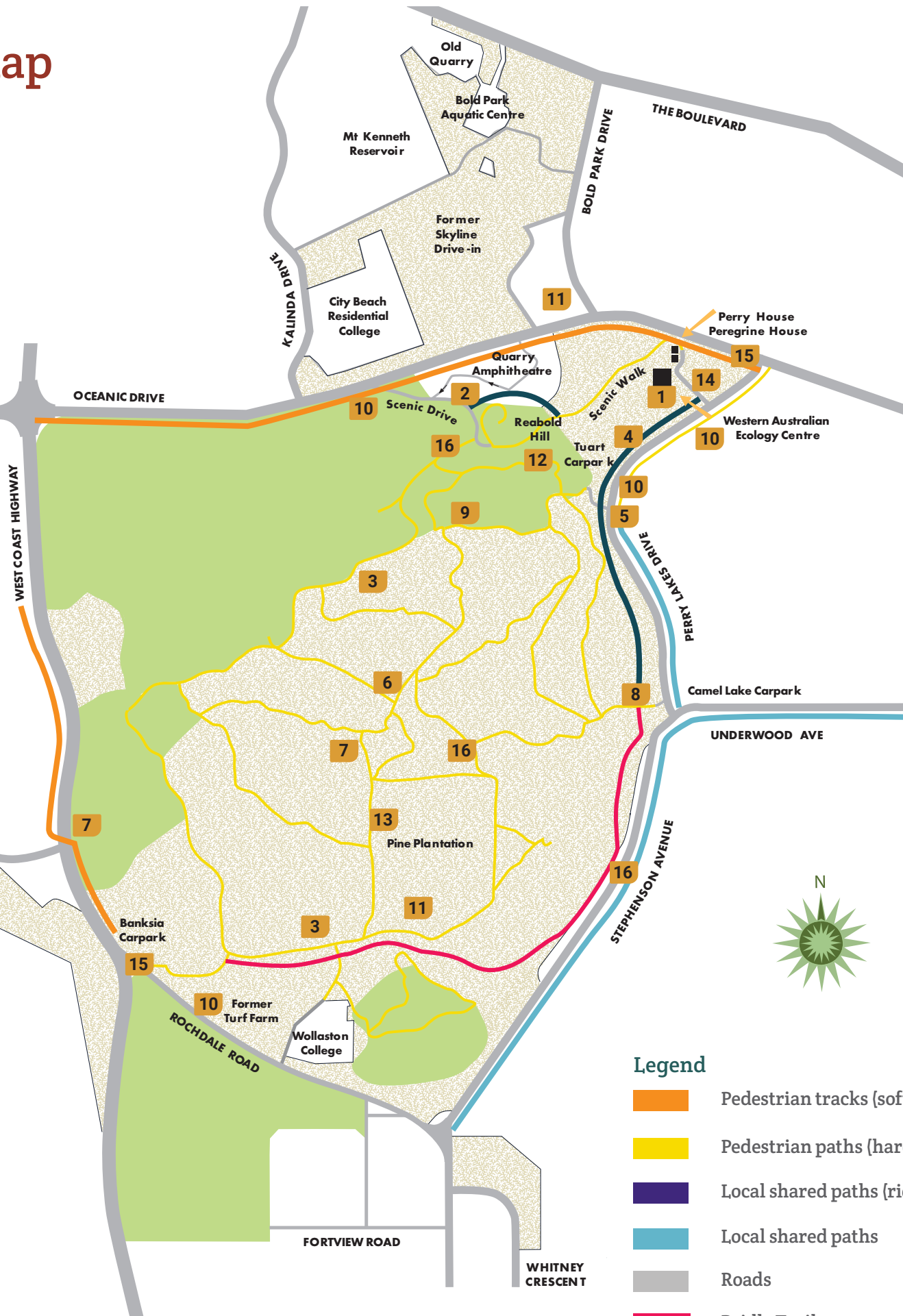
Pedestrian tracks (soft)

Pedestrian paths (hard)

Local shared paths (ride on road)

Local shared paths

Roads

Bold Park Initiatives

Strategic Aim	Indicative Actions
SAFE	1. Introduce pedestrian and cycle-friendly speed limits, pedestrian priority crossings and safe active zones where roads pass through precincts. 2. Improve path and road surface quality. 3. Develop and implement path and track management standards for safety and security. 4. Embed personal security risk mitigation into the network - including lighting - for safer movement at night.
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CHALLENGER PARADE

ap

Old Quarry

Bold Park Aquatic Centre

Mt Kenneth Reservoir

Former Skyline Drive-in

City Beach Residential College

THE BOULEVARD

BOLD PARK DRIVE

KALINDA DRIVE

OCEANIC DRIVE

11

Perry House Peregrine House

Quarry Amphitheatre

Scenic Walk

15

2

10

Scenic Drive

Reabold Hill

1

14

16

12

Tuart Carpark

4

Western Australian Ecology Centre

10

9

10

WEST COAST HIGHWAY

5

3

PERRY LAKES DRIVE

6

8

Camel Lake Carpark

7

16

UNDERWOOD AVE

13

Pine Plantation

7

16

STEPHENSON AVENUE

11

16

Banksia Carpark

3

15

10

Former Turf Farm

ROCHDALE ROAD

Wollaston College

N

FORTVIEW ROAD

WHITNEY CRESCENT

Legend

▬	Pedestrian tracks (soft)
▬	Pedestrian paths (hard)
▬	Local shared paths (ride on road)
▬	Local shared paths
▬	Roads
▬	Bridle Trail