Connectivity Strategy 2024

Walkways, Cycleways & Bridle Trails

Waikato
District Council
Te Kaunihera aa Takiwaa o Waikato

Contents

Introduction

Walking, cycling, mountain biking and bridle trails serve an important recreational, commuter and micro-mobility purpose as well as providing access to nature and open spaces. Tracks and trails provide many benefits for our communities, particularly for their health and wellbeing. Offering offroad and commuter connections, as well as providing links between green spaces and encouraging increased park usage, these popular facilities are sought after by communities. The provision of connectivity also contributes to alternative modes of transport, a healthy community and reduced traffic congestion on roads.

The Waikato district has made a commitment to improving connectivity through the development of this Strategy. To create the Strategy, which provides an overview of the existing network, community engagement was sought to identify future opportunities, priorities, and potential future linkages (which have been spatially mapped via a live database).

The Strategy acknowledges it is not financially viable for all improvements and track expansions to be undertaken by Council. As a result, it also provides guidance to assist communities in situations where there is local desire for new, improved and/or expanded connectivity networks.

Adoption of this Connectivity Strategy will provide for a range of opportunities for local communities and the wider district.

Purpose

The Connectivity Strategy aims to promote recreational connectivity through all active modes of transport – walking, cycling, and riding. Active modes of transport provide alternative ways for members of the community to get to school, exercise and connect socially with others. This strategy focuses on the district's off and on road linkages (trails and footpaths). It guides decision-making about the provision, development and management of trails and connections to ensure they are suitable and well used, in the right locations, and managed in the right way to meet the needs of our communities.

This Connectivity Strategy is a review of the original Trails Strategy 2016. It incorporates objectives and proposed trails from the Te Kauwhata Cycling and Walking Assessment 2016, the Tamahere Cycle Strategy 2016, projects which were identified through our Blueprints process, and community aspirations. The adoption of this strategy will replace the Trails Strategy 2016, however the community led documents will remain in their own right and, where necessary, will give effect to the overarching Connectivity Strategy.

A significant review aspect of the Strategy is the creation of the live spatial database and project prioritisation matrix. This spatial database remains in continuous review, enabling new connections, recommended paths, and ground truthing to be kept in a central location. The spatial database is then able to be used as the basis for future studies, district and strategic planning and residential development connection guidance.

Ultimately, this Strategy will provide positive guidance to Council and the community on how best to promote, manage, plan, and provide for trails and connections in the Waikato district.

Vision

The vision of this strategy is:

A safe, sustainable, and well-planned trail network provided in partnership with our community that connects places and people together.

This vision is in align with Waikato District Council's vision of Liveable, Thriving and Connected Communities. To realise this vision, the Strategy has several objectives and policies.

Structure of the Strategy

Connectivity Strategy

- This document discusses the benefits of connections in our district and outlines how they fit in to national, regional, and local context. It provides a clear definition of connectivity via trails and identifies the benefit this infrastructure has for our community and the objectives in developing the network. This document categorises trails, defines the level of service, and provides a prioritisation matrix for proposed trails.

Spatial Mapping

- Supporting this document is a live spatial dataset. This dataset maps all the current, proposed, and aspirational connections identified throughout the Waikato district. The information in the dataset was provided through existing tools and information Council holds, and community engagement.

- The live spatial maps are supported by a prioritisation table which categorises what connections are existing, what are proposed to be completed in the Long-Term Plan (LTP) and other connections yet to be included in the LTP and completed.

Mana Whenua

As Treaty Partners, Council will work with Mana Whenua to implement the principles of kaitiakitanga (guardianship) of reserves and recognise Mana Whenua's connection to the land. The values held by Kaitiaki (guardians or protectors) include their environmental and spiritual ties to ancestral lands, water, sites, wāhi tapu (sacred areas) and other taonga (treasures), as well as the wellbeing of the community. Council will work with Mana Whenua to understand their aspirations and priorities on how our connections and trails are planned, developed, and managed. Additionally, Council will work together with Mana Whenua to address access to wāhi tapu and restore ancestral trails and access to sites of cultural significance such as ururpa. Kaitiakitanga invites people to form and maintain relationships with the environment in which they live. These values will be incorporated into trail development projects.

By nature of these principles, we will work together to address access to sites and resources to support cultural practices and incorporate sites of significance to Mana Whenua.
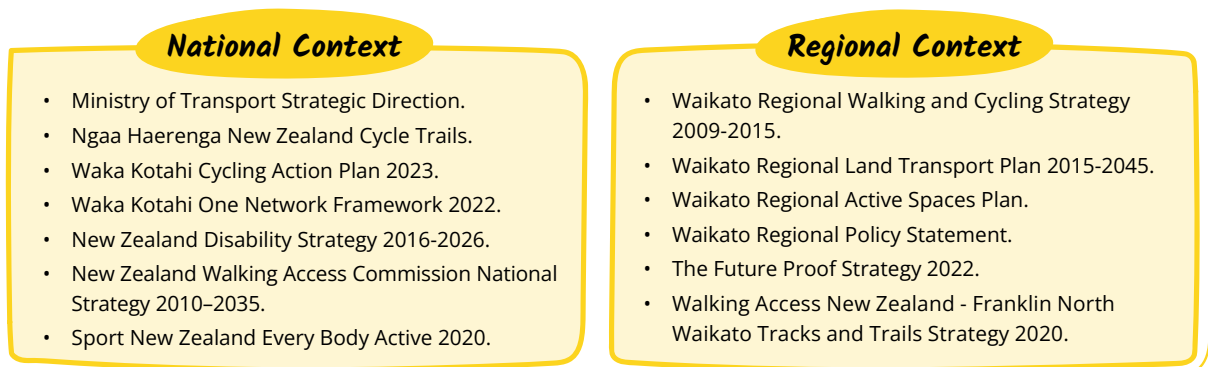
Strategic Context

The Connectivity Strategy needs to be aligned with other national and regional connectivity strategies, policies, and frameworks to clearly align with Council's broader priorities. This section outlines the setting of the Connectivity Strategy within these documents.

The main pieces of legislation affecting the provision and/or management of trails and connections include:
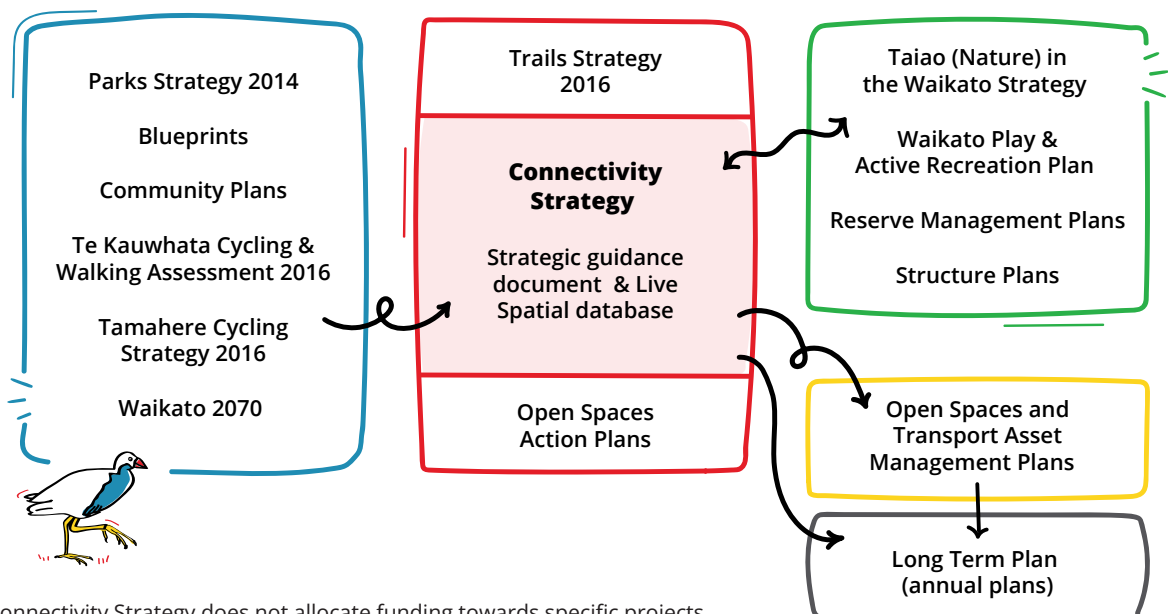
- Reserves Act 1977.
- Local Government Act 2002.
- Resource Management Act 1991.
- Conservation Act 1987.
- Government Policy Statement on Land Transport.
- Walking Access Act 2008.
- Heritage New Zealand Pouhere Taonga Act 2014.
- Climate Change Response (Zero Carbon) Amendment Act 2019.

National Context

- Ministry of Transport Strategic Direction.
- Ngaa Haerenga New Zealand Cycle Trails.
- Waka Kotahi Cycling Action Plan 2023.
- Waka Kotahi One Network Framework 2022.
- New Zealand Disability Strategy 2016-2026.
- New Zealand Walking Access Commission National Strategy 2010–2035.
- Sport New Zealand Every Body Active 2020.

Regional Context

- Waikato Regional Walking and Cycling Strategy 2009-2015.
- Waikato Regional Land Transport Plan 2015-2045.
- Waikato Regional Active Spaces Plan.
- Waikato Regional Policy Statement.
- The Future Proof Strategy 2022.
- Walking Access New Zealand - Franklin North Waikato Tracks and Trails Strategy 2020.

Local Context

The following table lists the key strategic documents which will form a foundation for the Parks and Facilities activity in terms of forward planning and direction. It shows how the Connectivity Strategy fits into the Open Spaces Action Plans. All strategies and specific management plans fall under the Parks Strategy which is our guiding document in terms of park provision.

Parks Strategy 2014

Blueprints

Community Plans

Te Kauwhata Cycling & Walking Assessment 2016

Tamahere Cycling Strategy 2016

Waikato 2070

Trails Strategy 2016

Connectivity Strategy

Strategic guidance document & Live Spatial database

Open Spaces Action Plans

Taiao (Nature) in the Waikato Strategy

Waikato Play & Active Recreation Plan

Reserve Management Plans

Structure Plans

Open Spaces and Transport Asset Management Plans

Long Term Plan (annual plans)

The Connectivity Strategy does not allocate funding towards specific projects or programmes – this is done through the Long-Term Plan (LTP). The Local Government Act 2002 requires Council to develop an LTP. An LTP outlines Councils plans and priorities over the next ten years, highlighting timelines, budgets, and funding opportunities.

Benefits of Active Movement

- Promotes healthy living, improved fitness, and wellbeing, which contributes to increased productivity.
- Enjoyable activity and exercise that can be done by the whole family including pets.
- Increases social interaction through creating vibrant streets which are socially safe, promotes social inclusion and community life as they are available to everybody regardless of age, gender, education, or income.

- Increases access to and appreciation of our surrounding environments.
- Connects people with significant ecological and heritage areas, promoted by mana whenua.
- Improves the environmental sustainability of the transport system – micro-mobility has a limited carbon footprint with no harmful emissions, less space per person used by vehicles, and modest infrastructure requirements.

- Reduces the pressure on road space.
- Safety from road crashes (more so for walking than cycling).
- Passive surveillance can help reduce crime.

- Promotes tourism and a range of leisure and outdoor experiences.
- Economic benefits arising from greater use of tracks and trails.

What are the key issues we face?

For this Strategy to reach its full potential, we need to acknowledge and address some key issues. There are a variety of existing issues and challenges listed below which need to be considered as part of the Connectivity Strategies development.

Meeting community needs

- Respecting property rights of private landowners whilst encouraging enduring access agreements.

- Enabling better support for community led projects to achieve project management, health and safety requirements and volunteer organisation.

- Balancing the needs of different user groups, a variety of fitness levels, mobility impaired and age groups. Some tracks will cater for a wide range of user abilities, and other trails will meet highly targeted user groups e.g. downhill mountain bike tracks.

- Changing community demographics with an aging population, and the vast spectrum of demographics across the WDC community.

- National trends and publicity - i.e. increasingly other districts and regions are developing great trails which can raise the interest of our rate payers for linkages, commuter paths, off road routes, etc.

- Volunteer disenfranchisement.

Strategic planning
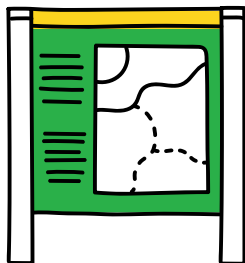
- Maintaining awareness of national and regional efforts to promote and map walking, cycling, mountain biking and horse riding, including how these efforts can link to local goals.

- Accurately mapping both existing trails and connections and future opportunities.

- Identifying strategic opportunities for connectivity, land acquisitions, esplanade reserves, opportunities to utilise unformed legal roads.

- Multimodal connectivity supports climate change initiatives to reduce vehicle kilometres travelled and the consideration of evolving multimodal technology.

- The vast area WDC covers, the connections between townships and cross boundary linkages.

- New residential growth cells, often with challenging terrain and/or the separation from existing residential centres.

Health and safety

- Terrain.

- Ensuring maintenance of connections and user safety are priorities.

- Crime Prevention through Environmental Design (CPTED) and general safety concerns.

- Providing adequate connectivity information, particularly through signage.

- Crossing points of major arterial roads, e.g. Waikato Expressway and rail corridor.

- Barriers, both physical and safety related that prevent users from utilising connections.

Financial

- Producing a framework to prioritise future trails, extensions, and connections to ensure maximum value for money.

- Funding for new trail development is generally easier to attract than funding for ongoing maintenance. As the connectivity throughout the district expands, the maintenance budget must also increase. Awareness of the true cost to create and maintain trails must be considered.

- The additional consideration of supporting infrastructure to enable trail usage and promote economic potential (i.e. car parking, boating jetties).

Objectives and Policies

Objective One: Our trail network will be safe and promote the mental and physical health benefits of connecting people and places together.

Exercise and a connection with nature has been proven to increase mental and physical wellbeing. To sustainably achieve access to both recreation and a connection to nature, balanced consideration of the whole trail network needs to take place. These considerations will ensure that the trails provide amenity as well as connection opportunities through facilitated targeted investment. By carrying out this work, betterment in the mental and physical wellbeing of communities can be achieved.

Policies:

1 Our trail network will support, stimulate, and encourage **current and future use** of our trails, promoting the improved physical, mental and social wellbeing of our community.

2 A connectivity network will endeavour to cater for **all fitness levels and for mobility impaired users** where practicable.

3 Identify and remove **barriers** for users to access connections.

4 **Build and maintain trails** and connections to ensure the surface is appropriate and that New Zealand standards have been met to **ensure safety and usability** for intended users.

5 Promote **education initiatives** that increase physical safety for trail users.

6 Invest in maintenance and **supporting infrastructure** appropriate to intended trail use.

Objective Two: Strengthen partnerships to enable growth of the district's connectivity network.

Partnerships contribute to the success of the trail network for our communities. Collaborating with and empowering communities will help us achieve our vision by contributing financially and allowing us to incorporate the values of the community in our work.. This type of partnership also ensures that we can create a strong and connected network that caters to all user groups.

Policies:

1   Encourage and enable **community involvement** in trail design, construction, and trail maintenance,

2   **Partner with mana whenua** and communities about the location, history, and purpose of the trail. Where appropriate, acknowledge and encourage **connections to cultural and natural areas, significant areas, or landmarks** along the trail to ensure access, protection, and maintenance.

3   Advocate and liaise with private landowners to establish trails.

4   Actively seek user groups input to identify and **overcome trail utilisation issues**.

Objective Three: Environmentally sustainable design is at the heart our connected network.

Well planned trails can help connect people to public transport and community hubs, reducing the need to use private cars for short journeys such as getting to work, school or services. Rural trails also have the potential to reduce emissions. Trails that connect towns to recreation areas or provide an easily accessible recreation option can reduce the need to drive locally.

Policies:

1   Prioritise connecting trails that allow for **commuting options** to community and transportation hubs.

2   Ensure transport and land use planning, particularly proposals for **new subdivisions**, facilitate trails being **well integrated** into the active transport network.

3   Ensure that trails are well maintained for the enjoyment and accessibility of the community. Preference for trail design with low maintenance associated costs.

4   **Reduce carbon emissions** in communities through responsive trail planning.

5   Maximise **environmentally sustainable** materials and construction design.

6   Ensure that coastal inundation and the **effects of erosion** are considered in the scoping process for new trails.

Objective Four: Continue to evolve a well-planned network to meet our community needs.

The Waikato district is experiencing significant growth in many townships which changes how our communities move around their town and access open spaces. The current and future trails network must plan for growth to ensure opportunities are realised in an efficient and timely manner for our existing and growing communities.

Policies:

1   Adopt a **forward-thinking approach** to trail design and proposed network linkages that are safe and consider **urban growth and intensification.**

2   A **staged approach** is considered for trail designs (such as poled routes) that encourage the creation of trails that can be upgraded later. Recognise that not all trails require formation to be valuable.

3   Maintain and continuously review this strategy and associated documents to **remain relevant to the community's needs**, new technology and best practice.

4   **Require residential development to meet the strategy's vision.**

5   The trail network will endeavour to provide more **access to public land** and consider how to improve access to unformed legal roads and areas of significance.

6   Recognise the **economic benefits** that can arise from a strong trail network for both domestic and international tourism.

Categories

Tracks and pathways enable people to access and enjoy reserves. Reserves can also form part of the district wide walking and cycling network linkages and are destination points within the network. Different grades of tracks or pathways can facilitate enjoyment of reserves for people with different levels of mobility and can provide a range of opportunities and challenges from wide open paths through to cycle paths, mountain biking opportunities, and bush walks.

Some benefits of accommodating for different user groups include improving adverse environmental effects, facilitating positive health outcomes, increasing connectivity for communities, and connecting communities without the need for a car. Improved access to and within reserves has the potential to increase the use by people of all abilities, noting that different degrees of accessibility will be achievable at different reserves.

For the purpose of this Strategy, different types of connections include pathways and trails, cycleways, shared paths, mountain biking trails and bridle paths.

Paths (walking)

Walking paths cater for users ranging from people of all ages and mobility. Walking paths may take the form of a concreted path through a neighbourhood park, to a gravel track through a nature reserve. A path should be well defined so that it is easy to follow in either direction, in all weather, and in low light conditions. Markers will not usually be required, and the paths may include access for disability where suitable.

User access to pathways	Steps, stiles, turnstiles and/or kissing gates will be included on paths where the location is unsuitable for mobility access. Pathways can be developed for people with mobility difficulties if the path meets the disability access requirements. Paths may be clearly labelled at entry points by use of appropriate signage outlining the suitability of the path for different users.
Design	The minimum trail width and maximum gradient may be reduced for environmental or aesthetic reasons for short sections provided there is a low risk to user safety. Low use paths may have a low level of surface (loose surface material, poled routes) however if they increase in popularity the level of service may be increased.
Surface	Walking paths must be well-formed and even. They are made of durable materials such as concrete, chip seal, asphalt, or compacted gravel. A track surface must be able to be walked on comfortably in both dry and wet weather. The surface shall allow users to walk without having to constantly look down at where they place their feet.
Structures	Boardwalks shall be used over wet, swampy, sandy, or muddy land to achieve a stable dry surface for visitor comfort and/or to protect the environment. All watercourses shall be bridged. Where a significant hazard exists, a barrier or guardrail shall be provided. Barriers and guardrails shall extend for the full length of the path where the significant hazard exists. Supporting infrastructure may include seating, drinking fountains, and viewing platforms. Paths should be evaluated as to whether play or playful opportunities can be provided outside of formal playground settings.
Vegetation	Vegetation shall be maintained as part of the Council's routine maintenance schedule. All cut vegetation shall be removed from the path surface and disposed of out of sight of path users. Opportunities will be provided for community groups to plant and maintain areas of native habitats or exotic environments. Thisincreases biodiversity and creates more enjoyable travel opportunities.
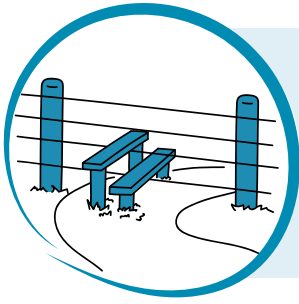
Off-road trails

Off-road trails focus on users enjoying recreational activities or exercise. Off-road trails will likely be located in natural or rural areas. These trails shall be well defined to allow inexperienced users to easily find their way in either direction in all weather conditions. Markers will not usually be required.

User access to trails	Steps, stiles, turnstiles and/or kissing gates will be included on paths where the location is unsuitable for mobility access. Pathways can be developed for people with mobility difficulties if the path meets the disability access requirements. If applicable, the trail shall be clearly labelled as one suitable for people with mobility difficulties by using appropriate symbols and words at track entrances and at junctions with other tracks.
Trail width	The minimum width may be reduced for environmental or aesthetic reasons provided there is minimal risk to visitor safety.
Surface	The trail surface shall be well formed and even (wet areas drained). They will be suitable for walking shoes and provide reasonably firm footing in wet weather conditions.
Structures	Boardwalks may be used over wet, swampy, sandy, or muddy sections of the track to achieve a mainly dry surface and/or protect the environment. Alternatives to boardwalks such as drainage of wet areas or raised, hardened sections of track, may also be use. All watercourses shall be bridged. Guardrails or barriers shall be constructed where a significant hazard to inexperienced visitors (including children) exists. Accompanying infrastructure may include seating, viewing platforms or carparks. The level of service of the trail may increase if patronage rises, which may see additional infrastructure included.
Vegetation	Vegetation shall be maintained as part of Council's routine maintenance schedule. Significant tree limbs and trunks may intrude into or above the track provided these do not obstruct users or place them at risk. All cut vegetation shall be removed from the track surface and where practicable, be out of view of the track. Opportunities will be provided for community groups to plant and maintain areas of native habitats or exotic environments. This provides increased biodiversity and create more enjoyable travel opportunities.

Multi-use tracks

Tracks and paths can provide recreation opportunities for a variety of different users. Multiple use of tracks and paths can be cost-effective as one track or path can potentially fulfil the needs of a variety of users. Some uses are more compatible than others and in some cases, shared paths can lead to conflict or safety issues.

Walkers and cyclists can often share the same track provided it is wide enough and has good sightlines. Walkers can sometimes share mountain bike tracks, but not always. If the mountain bike track is relatively flat, wide enough and has good sightlines it may be suitable for sharing but if it is steep, narrow and has many corners, it may not be suitable for shared use.

Horses also require dedicated trails, although sharing with walkers can sometimes be practicable (such as the use of former forestry roads or routes through open pasture). It is important that track/path use is regulated to minimise potential conflicts and promote public safety and enjoyment.

User access to trail	Multiple access points (i.e. commuter trail).
	Steps, stiles, turnstiles and/or kissing gates will be included on paths where the location is unsuitable for mobility access but is suitable for more than one use. Pathways can be developed for people with mobility difficulties if the path meets the disability access requirements.
	If applicable, the trail shall be clearly labelled as one suitable for people with mobility difficulties by using appropriate symbols and words at track entrances and at junctions with other tracks.
Trail width	The minimum width may be reduced for environmental or aesthetic reasons provided there is minimal risk to visitor safety.
	Trail width is to meet best practice standards for the identified multiple user groups.
Surface	The track surface shall be well compacted to reduce degrading of the surface.
Structures	Boardwalks may be used over wet, swampy, sandy, or muddy sections of the track to achieve a mainly dry surface and/or protect the environment. Alternatives to boardwalks such as drainage of wet areas or raised, hardened sections of track, may also be use.
	Structures designed primarily for pedestrians and bicycles are not strong enough for horses and mules, because the decking cannot withstand the force of horseshoes or the point load per hoof. If trail use includes horses, bridges must be engineered to withstand the vibration caused by single or multiple animals.
	All major or minor watercourses shall be bridged.
	Guardrails or barriers shall be constructed where a significant hazard to inexperienced visitors (including children) exists.
	Accompanying infrastructure may include seating, viewing platforms or carparks. The level of service of the trail may increase if patronage rises, which may see additional infrastructure included.
Vegetation	Vegetation clearance, especially on corners, shall be sufficient to allow good visibility for all users. Vegetation shall be maintained as part of Council's routine maintenance schedule.
	Opportunities will be provided for community groups to plant and maintain areas of native habitats or exotic environments. This increases biodiversity and creates more enjoyable travel opportunities.

Cycle and mountain biking trails

Cycling has the potential to make a significant contribution to an integrated and sustainable transport system. Cycling has little impact on the built and natural environment, particularly in relation to pollution, making it an environmentally friendly form of transport. It is also a healthy form of transport, providing an alternative to the car, and is a popular activity for families and sports enthusiasts.

Mountain bike trails nationwide are graded to help people choose the right ride of their fitness and ability. Grades start from Grade 1 (easiest) and move through to grade 6 (extreme) in alignment with Department of Conservation standards.

User access to trail	Multiple access points (i.e. commuter trail).
	Pathways can be developed for people with mobility difficulties if the path meets the disability access requirements. Development will also consider the use of bike trailers.
	If applicable, the trail shall be clearly labelled as one suitable for people with mobility difficulties by using appropriate symbols and words at track entrances and at junctions with other tracks.
Trail width	The minimum width may be reduced for environmental or aesthetic reasons provided there is minimal risk to visitor safety.
Surface	The track surface shall be prepared to reduce degrading of the surface.
Structures	Boardwalks may be used over wet, swampy, sandy, or muddy sections of the track to achieve a mainly dry surface and/or protect the environment. Alternatives to boardwalks, such as drainage of wet areas or raised, hardened sections of track, may also be use.
	All major watercourses shall be bridged.
	Guardrails or barriers shall be constructed where a significant hazard to inexperienced visitors (including children) exists.
	Accompanying infrastructure may include seating, viewing platforms or carparks. The level of service of the trail may increase if patronage rises, which may see additional infrastructure included.
Vegetation	Vegetation clearance, especially on corners, shall be sufficient to allow good visibility for all users. Vegetation shall be maintained as part of Council's routine maintenance schedule.
	Opportunities will be provided for community groups to plant and maintain areas of native habitats or exotic environments. This increases biodiversity and creates more enjoyable travel opportunities.

Bridle/horse riding trails

Bridle trails provide recreational opportunities for horse riders to enjoy and exercise their horses. In addition to the standards listed for multi-use tracks, bridle trails need further consideration in terms of their design and infrastructure. This is to ensure the safety of riders, horses, and other trail users,

User access to trails	Parking must be available, with space for a horse float to be manoeuvred. Access needs to be made available without impediments such as stiles, turnstiles, and kissing gates. Horse stiles can be installed that prevent motorbikes from accessing bridle trails. Access to bridle trails may be via locked gates where users can hire a key for access. If applicable, trails shall be clearly labelled as one suitable for horse riding, with signage installed at track entrances and junctions with other tracks.
Surfaces	Material with good grip is recommended such as crushed rock OR 2-meter-wide strip.
Structures	Structures designed primarily for pedestrians and bicycles are not strong enough for horses and mules because the decking cannot withstand the force of horseshoes or the point load per hoof. In addition, bridges must be engineered to withstand the vibration caused by single or multiple animals. Bridges are not typically required to cross minor water ways, however, they will be required for major waterways or to improve safety. Mounting blocks should be located in suitable places along the trails. Accompanying infrastructure may include seating, viewing platforms or carparks. The level of service of the trail may increase if patronage rises, which may see additional infrastructure included.

How will this strategy be implemented?

The implementation of the Connectivity Strategy requires co-ordination and collaboration across Council infrastructure activities (roading and open spaces), planning (District Plan and Structure Planning), key funding agencies, developers, and the community.

This Strategy identifies a strategic approach for prioritising future track upgrades, expansions, and connections. A **live spatial dataset** is used to identify future priorities for new connections. These priority projects will be driven by Council as funding allows. In some cases, they may also be considered high priority to members of the community, individuals and groups. These groups may play a role in bringing projects forward by taking the lead in connectivity planning and obtaining funding.

Priority projects are identified and prioritised using the assessment criteria (Section 10) and the live spatial dataset. Non-priority projects are those that are not identified as 'high priority' in the live spatial dataset. These projects are likely to be locally driven by individuals or community groups and will still be beneficial to the advancement of the Waikato district connectivity network. In these scenarios, due to financial constraints and the desire to strategically prioritise projects, the local community will need to play a leading role in achieving their local aspirations. However, Council will endeavour to enable the activity, and offer advice and support.

Council's primary funding mechanism is the Long Term Plan. The LTP provides long-term direction and priorities for Council funding and identifies key projects. Funding from Council is critical in the delivery of connectivity infrastructure, as well as in supporting programmes to promote uptake of walking, cycling, mountain biking and horse riding.

Generally, Council will be responsible for the planning, physical works, and ongoing maintenance of priority projects. However, it is not imperative that this process is Council driven. Where priority projects align with the visions of individuals, community groups or Trusts, the opportunity exists for these projects to be led outside of Council. Where the likes of Trusts are able to obtain outside funding and undertake project management, this will be encouraged (with Council input) to allow Council's budget to go further in advancing the connectivity network. If appropriate, Council will consult with the community and other organisations at a level considered suitable for each specific project. The community will have the ability to input proposed trails that can overlap with the Strategy's assessment criteria.

The roles of Council and the community will vary depending on whether a project has been identified as a priority and Council has the budget to drive it. Working collaboratively with developers and community volunteer groups provides the opportunity to complete segments of the connectivity infrastructure and will enable Council to connect segments within a reasonable timeframe.

Kept Live

The biggest benefit of the **live spatial database** is the ability to capture all new information as we receive it. This includes new trails proposed by the community, project identification and ground truthing through specific location assessments and expanding connections through growing residential developments. These new connections will be added to the dataset at the time of review and will be allocated a project priority.

The Connectivity Strategy will also be the base for any transport or multimodal assessment, providing a starting point for connections already identified and prioritised. It will be utilised in structure planning, residential development assessment, district planning and strategic planning projects.

Connective Network Management

The success of a well-connected and utilised network requires ongoing maintenance, assessment, and investment. There are five management principles (Figure 1) for the connectivity network including:

- **Maintenance and repairs.**
- **Increased levels of service.**
- **Supporting infrastructure.**
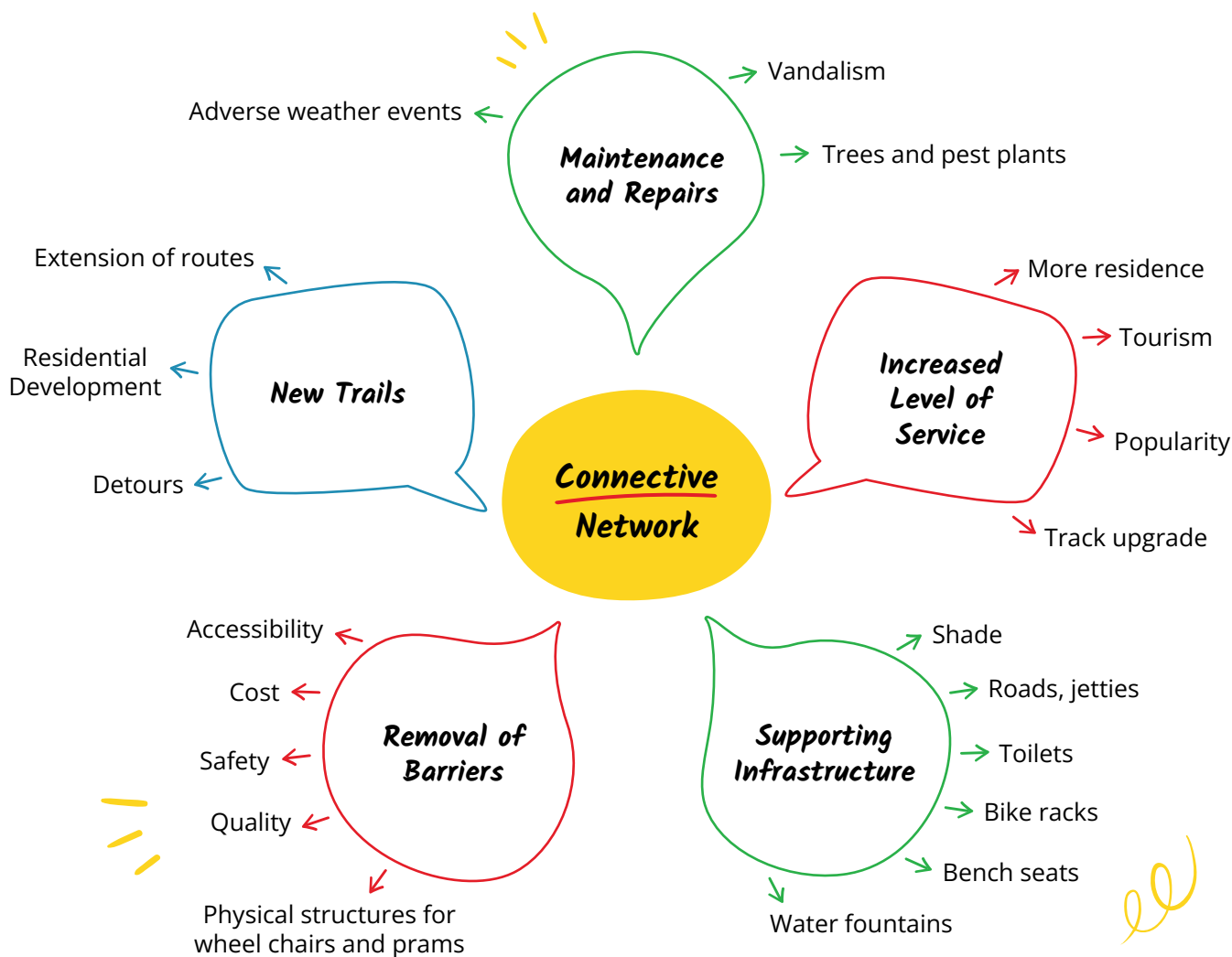- **Removal of barriers.**
- **New trails.**

Figure 1: Connective Management Principles

Each of these principles require consideration and investment to meet the clearly outlined vision, objectives, and policies. Council is undertaking the STRATEGIC ACTIONS outlined in Appendix 1 which addresses the further and ongoing investigations required to continue enhancing the connectivity network. Project identification to either enhance the existing network to meet the Strategy's vision or to invest in new trails are documented in Action Plans. They are then further prioritised and recommended for LTP funding in association with the Open Spaces Asset Management Plan.

While Council acknowledged improvements relating to all five management principles across the existing connectivity network, a further prioritisation to 'new trails' (Section 10) is needed to support the associated spatial mapping for proposed trails.

Prioritisation of Future Connectivity Projects

The following is the method for prioritising connections. It is based on the 2016 criteria as well as other district council trail strategies from around Aotearoa. Each assessment criteria are weighted according to the importance for overall trail feasibility. The prioritisation assessment criteria are created on quantifiable attributes of proposed trails.

Stage 1 - Prioritisation assessment criteria

Assessment criteria	Weighting	Assessment criteria and weighting analysis
Enduring legal access	0.08	Who owns the land? If no easements or access ways are required for the construction of the connection, it can decrease the cost, time and effort involved. **POINTS:** 3 – Ownership or legal accessibility established can be achieved. 2 – Partial ownership or legal accessibility. 1 – No accessibility/privately owned. **WEIGHTING:** If the connection is supported by the community and landowners, easements might not be a barrier. Alternative routes could also be sought. Adversely, in this situation one landowner could prevent the whole connection.
Connectivity	0.15	Does the trail connect communities and other trails (DOC, Te Araroa, Te Awa) within the Waikato and other districts? The more connected a trail is the more potential there is for use of the trail and associated benefits. **POINTS:** 3 – Connects to existing trails (including sidewalks and community hubs). 2 – Connects to proposed trails. 1 – Connects to no other trails. In town commuter sidewalks end up being ranked higher than possibly scenic recreation trails. **WEIGHTING:** The more the trail connects to other trails the more utilised it becomes.
Modes of transport	0.04	What type of user can the trail accommodate for? Can it be shared with other users? **POINTS:** 2 – Multi-use. 1 – Single use. **WEIGHTING:** There are already a number of walking and cycling trails in the district. Preference is given to other modes or joint modes. There are few trails dedicated to mountain biking in the Waikato district. Mountain biking activity is increasing in popularity. Mountain bike trails are not easily shared with other modes. This needs to be noted in any plans to develop mountain biking trails nationwide There are few trails dedicated to horse riding in the Waikato district. When horse trekking areas are identified, Council can assess whether these trails are suitable for walkers as well.

Presence/ absence in Council and community documents e.g. Blueprints, Reserve Management Plans, community group documents, iwi, hapu and Maaori, management and environmental plans etc.	0.12	Active community interest in developing their townships means there is a drive to complete the trail, possibly providing volunteers and fundraising for the construction. **POINTS**: 3 – Supports a Blueprint/Structure Plan initiative. 2 – Supports a community lead document. 1 – Not currently detailed anywhere. **WEIGHTING:** If the community is willing to take on responsibility of some trail construction and/or help with funding, it can make the trail much more feasible. Delivering on community initiatives such as blueprint projects and community lead documents is a priority Council is committed to.
Benefits of the connection	0.13	What benefits does the trail bring to the local community? **POINTS:** 3 – Connection creates a direct link to a park/open space, township centre, school, or transport links e.g. boat ramp. 2 – Connection through space that allows people to be within nature or for recreational activity. 1 – Connection that is an additional supporting route. **WEIGHTING:** Trails have the potential to improve health, safety, and recreation, provide economic opportunity for a community. The importance of these contributions is reflected in the weighting.
Significance	0.07	Does the trail provide amenity value and who is likely to use it? **POINTS:** +1 point for each of the following Trail follows natural features (waterway/ forest/ coast) for most of the way. Trail follows or passes cultural sites of significance. Trail is nationally significant (part of or connecting to Te Araroa or a Great Ride which are likely to get international visitors). Trail is regionally significant (part of or connecting to well established and popular trails in the greater Waikato and Auckland Regions which are likely to get visitors from around the region). Trail is locally significant (provides community connections and commuting possibilities which are unlikely to get non-local visitors). Safer alternative to an existing route **WEIGHTING:** The potential significance of a trail can make it more likely to attract the target users (maximum 5 points).

Stage 2 – Scoping Assessment

The following is a list of other criteria that can be considered in relation to each connection *after* the initial prioritisation using the weighted assessment criteria. By considering these criteria after the initial prioritisation, it allows the high priority trails to be more accurately considered.

Other considerations

Topography and detailed design	Does the physical terrain impact trail construction negatively? Is it physically possible to have a trail along this route? Is extensive detailed design required? (Ideally this assessment would have been done when the trail was first submitted)
Part of another project	Can the construction of the trail easily be added to another project that is happening in the area? This might include riparian planting, esplanade, and gully rehabilitation.
Known obstacles (excluding easements)	Are there significant obstacles that would stop trail construction? I.e., the trail is proposed to go over a culturally significant site/near wetlands. Discuss with iwi, hapu, and Maaori at the outset of new trail considerations.
In progress	Is the trail or parts of the trail already underway?
Pivotal linkage	Will the construction of the trail directly contribute to a level of service increase in an area or remove a blockage to non-motorised transport? i.e., significant crossings of railway or highway.
Funding availability	Co-funded projects often have associated timeframes. Where additional funding can be sought for a particular project, that project may be prioritised to meet funding deadlines.
Volunteers	Is there volunteer interest in the construction and maintenance of the trail?
Maintenance	Can this trail and associated assets be feasibly and affordably maintained? Does topography and/or location create future maintenance issues?

Monitoring and Review

This Strategy will guide staff with day-to-day decisions relating to connectivity maintenance and development, as well as offering guidance to the community and developers. Council will review the Strategy from time to time, in response to changing circumstances or better information, to ensure it remains up to date and relevant. Council intends to review it five years from when it was adopted, unless circumstances warrant an earlier review.

The following specific actions will support the objectives and policies in this Strategy and feed into future reviews of the document:

- Identifying external connection development funding sources.
- Undertaking assessments of all our tracks (in accordance with SNZ HB8630:2004 standards) and preparing an improvement schedule.
- Identifying costs of implementing the high priority connectivity projects and using this information to guide a works schedule.
- Keeping a record of any connectivity issues as they arise that can be addressed in future updates.

Amendments and Updates

Updates and corrections that do not change the intent of the plan e.g., name changes to organisations or other documents mentioned in the text, may be made without public engagement as they do not change the intent or meaning of the document. Major amendments to the document should be approved by Council and be subject to public engagement in alignment with the significance and engagement policy.

Appendix 1 Strategic Actions

The connective network management (Section 9) identifies five management principles. For each of the five principles the following questions have been raised:

1   Maintenance and repairs
   a.   Are existing trails being maintained to a good standard?
   b.   Are there appropriate budgets for adverse events?
   c.   Is there untapped volunteer support for ongoing repairs and maintenance and how can Council help enable and mobilise these volunteers?

2   Increased levels of service
   a.   What are the measures/triggers to invest in upgrading a track to meet a higher level of service?
   b.   What could be done to increase popularity of connections?

3   Supporting infrastructure
   a.   Is there appropriate supporting infrastructure currently? What can be improved?
   b.   What design guidelines can be implemented to avoid retrofitting infrastructure in the future?

4   Removal of barriers
   a.   Are the existing trails accessible for its intended users?
   b.   How can we make connections safer?
   c.   Is there educational or clear messaging opportunities?
   d.   Why are some connections poorly utilised?
   e.   What design guidelines can be put in place?

5   New trails
   a.   Forward planning for residential growth areas.
   b.   What detours away from busy roads are needed?
   c.   Opportunities for access into public spaces i.e. bush walks.
   d.   How are people moving around their town and arriving at key destinations?

To address the management principle questions above, the following strategic actions have been identified for further and ongoing investigation:

- Develop and maintain additional spatial data that assists in prioritisation of trails, working in collaboration with key partners to keep the dataset in continual review and improvement. Include a network map that provides a hierarchy of provision, reflecting access, proximity, and challenge of each track and trail.

- Create a comprehensive list of supporting infrastructure and assets encouraging support connection usage (bike stands etc.).

- Review the signage and wayfinding policy, including implementation action plan. Implementation of new trails to include any trail limitations to accessibility (i.e. seasonal closures, difficulty, physical structures, and trail type by infographic).

- Align development planning through township structure planning and the District Plan.

- Create promotion and education initiatives of walking and cycling to increase participation.

- Align project scoping to meet external funding criteria (i.e. NZTA).

- Support councils and relevant authorities and organisations in maintaining and making improvements to the existing in walking, cycling and bridle trail infrastructure.

- Support for the Regional Bridle Facilities Strategy led by Sport Waikato.

- Encourage and support partnerships with local communities, clubs and groups for trail management and maintenance.

- Review and streamline Councils volunteer on-boarding process.

- Promote innovation in retrofit and new design to improve accessibility and inclusion of a range of trial types.

Appendix 2 Stakeholders

In formulating this strategy, Council has sought input from the following stakeholders:

- Community Boards and Committees.
- Bike Waikato.
- Bikes in Schools.
- Department of Conservation.
- Hamilton City Council.
- Horongarara Ratepayers Association (Te Akau South).
- Island Child Charitable Trust NZ.
- Iwi and Hapu, with ongoing partnership which will be undertaken at specific locations.
- Herenga ā Nuku Aotearoa (Outdoor Access Commission).
- HAAWI (Horse Access Advocates Waikato Incorporated).
- HORSE Club (Hamilton Older Riders Social Equitation).
- Huntly Rotongaro Pony Club.
- NZ Riding Clubs & Bridleways NZ Inc.
- Pirongia Horse Riders Club.
- Raglan Mountain Biking Club.
- Raglan Ramblers.
- Sport Waikato.
- Waikato Regional Council.
- Waikato River Authority (WRA).
- Weekday Horse Trekkers group.
- Whaingaroa Raglan Destination Management Organisation (DMO).
- FAWN (Franklin Access Walking Network).
- Tamahere Mangaone Restoration Trust.
- Known local developers and project groups.
- Landowners.
- Waikato District Council internal teams:

  - Roading team
  - Open Spaces team
  - Strategic Planning team

The feedback that has been received from stakeholders and the wider community has contributed to the final makeup of this strategy.

Appendix 3 Live Spatial Database

Supporting this document is a live spatial map. This dataset maps all the current, proposed, and aspirational connections identified throughout the Waikato district. Additionally, base layers outline formed and unformed legal roads and reserve land. The information in the dataset was provided through existing tools, information held by Council, and community engagement.

Each current and proposed trail has information regarding its purpose. This includes:

- Identification name (e.g. Port Waikato to Raglan)
- Category (e.g. Cycling, Off-road Trail)
- Surface Type (e.g. Paved, Grass)
- Priority (Low, Medium, High)
- Location Start/End
- Source (Internal, External, Strategic Document)
- Trail status (Conceptual, Planned,)
- Legal Access (Full, partial, incomplete)
- Strategic Alignment (e.g. referenced in a Blueprint or Structure Plan)
- Significant Features (e.g. Environmental, Commuter)

The live spatial database will capture all new information as we receive it. This includes new trails proposed by the community and through additional township planning. Each new trail will be recorded with information regarding its source and its key purpose. This will ensure that the database will remain live, with a record of key information.

The live spatial database will be publicly accessible on Council's website, alongside this document. There will also be contact information available to allow the public to continue to put forward ideas for future proposed trails.