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HOCKEY IN NEW ZEALAND

NATIONAL SPACES AND PLACES STRATEGY 2024

Document Information and Acknowledgements

Document version:	Final Draft
Date:	December 2024
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Acknowledgements

RSL would like to thank the following people and organisations for their input in developing this plan:

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James Sutherland – Auckland Hockey
Simon Battrick – Queenstown Lakes District Council
Shane Brodie – Sport Waikato
Rachel Minton-Smith – Hockey New Zealand
Ken Maplesden – Hockey New Zealand

With Thanks To

Hockey Associations
Hockey New Zealand
Sport New Zealand Ihi Aotearoa
International Hockey Federation
Territorial Authorities (Councils)
Regional Sport Trusts

About RSL Consultancy

RSL Consultancy undertakes projects and offers strategic advice throughout Aotearoa to enable community well-being. We support organisations to make informed decisions when it comes to their people, facilities, places and spaces. RSL carries out a range of pre-planning work from needs assessments and feasibility reports to business cases. We also work on a range of organisational strategic and operational projects.

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Foreword from Hockey NZ

Tēnā koutou katoa, nau mai haere mai –

Welcome to Hockey New Zealand's National Spaces & Places Strategy, a comprehensive and forward-thinking framework designed to challenge the way we think about facilities so that we can amplify, open and grow the game of hockey across our nation. This strategy marks a significant milestone in our journey to make hockey more sustainable, accessible, inclusive, and engaging for all New Zealanders.

In recent years, the landscape of sport and recreation has evolved dramatically, and so has Hockey in New Zealand. Hockey's National Strategic Direction, an integrated strategy that connects all part of the game is at the heart of this transformation, delivered and inspired by a connected hockey network with sustainability and people at its heart. Focus on these areas ensures that we create a solid foundation to enhance the overall hockey experience.

This strategy is not just about building new facilities; it is about challenging how and where we play our game to meet the diverse needs of our communities. We have adopted a holistic approach, moving beyond traditional centralised facility models to embrace innovative, flexible, and sustainable solutions.

This strategy is based on evidence-based decision-making, community engagement, and a commitment to sustainability. It provides a clear framework for understanding our communities, auditing current facilities, exploring new opportunities, and fostering inclusivity. By leveraging best practices and innovative thinking, we aim to create a connected game delivery network that supports our vision, contributing not only to shaping the future of our sport but also making a meaningful contribution to the wellbeing of all New Zealanders.

We will continue to evolve the strategy over time and produce further guides and documentation to accompany this framework. In the meantime, we invite you to join us on this exciting journey as we work together to grow, inspire, and enrich our hockey whānau so that more Kiwis see, love and experience hockey.

Thank you for your mahi, support and commitment to the game we all love.

Ngā manaakitanga,

Hockey New Zealand

Foreword from Sport New Zealand

Hockey New Zealand's new Spaces and Places Strategy marks a fresh start. It acknowledges the hockey community and the time it has spent growing the sport and its facilities but also recognises that there is now a need for a future-focused approach. This is part of a broader transformation for the organisation and aligns with global trends, recommendations from the International Federation of Hockey, and Hockey New Zealand's 2022 strategic priority to 'Open and Grow the Game'.

Hockey is genuinely a global sport. It is unique in its ability to attract equal participation from males and females across a broad age range. It has provided participants with the opportunity to play on world-class hockey-specific surfaces. However, this has come at the expense of the wider experience and access to the sport. The primary goal of this strategy is to understand the key shifts that will enable better quality experiences for current participants and that will attract new participants. The strategy helps provide that clarity to the sector. To ensure equitable access and support for further growth, there needs to be more innovation on where hockey is played and the overall experience it provides, especially for tamariki and community-level participants.

This strategy comes at a challenging time with economic pressures and the impact of climate change being felt. Financial and environmental sustainability can be achieved by decentralising provision and working with others to optimise a broader network of facilities. We appreciate that change can be uncomfortable and takes time; but current hockey infrastructure is expensive, limits access and experiences, and does not meet modern environmental expectations.

Sport NZ commends Hockey New Zealand's commitment towards a more flexible, sustainable, responsive, and connected hockey network. We will continue to stand alongside Hockey New Zealand as they lead the implementation of this strategy. Thanks to everyone involved in its development, especially the regional hockey associations, councils, regional sports trusts, and facility providers.

Raelene Castle, ONZM
Group Chief Executive
Sport New Zealand Ihi Aotearoa

Contents

1 Executive Summary

Since the development of the 2016 National Facility Strategy, Hockey New Zealand (HNZ) has transformed significantly. In 2022, HNZ launched the 'Taking Our Game Forward' National Strategic Direction, focusing on opening and growing the game and guiding the community towards this new vision.

To successfully 'open and grow' the game of hockey, HNZ needs to examine the Connected Hockey Network carefully. HNZ defines its Connected Hockey Network as where and how it sustainably organises and participates in hockey in order to meet the needs of a wide variety of New Zealanders and realise their strategic outcomes. The Connected Hockey Network encompasses the following:

· The places and spaces where we can participate

· The formats/versions we play and the opportunities on offer

· The people we need to organise and deliver our opportunities

The first phase of the Open and Grow the Game strategic priority is the refresh and renewal of the current National Spaces and Places Strategy, focusing on alternatives to the centralised model and traditional facility thinking.

The approach to the 2024 National Hockey Spaces and Places Strategy (the Strategy) is a departure from previous strategies, there is a desire to have a more holistic view of hockey participation and to make the sport accessible to all, which means hockey in New Zealand needs to take a different approach. A change in the way the game of hockey is delivered will enable its community to realise its new direction.

1.1 Key Findings

1.1.1 Participation Trends

Hockey in New Zealand sees a strong base of young players, with the majority in the primary school age bracket. Despite this, the sport faces challenges in maintaining participant satisfaction, as indicated by a slight decline in the Net Promoter Score. The rising membership in hockey associations and steady growth in the School Sports Census reflect a positive trend in participation.

1.1.2 Spaces and Places Context

Hockey in New Zealand faces significant challenges with the over-specification of its turfs for community use, inadequate facility amenities, high provision costs, and a notable lack of sustainability awareness. With only a small fraction of the population engaged in elite hockey, the focus on high-performance turfs is not only disproportionate to participation needs but also financially and environmentally unsustainable. Addressing these issues requires a strategic re-evaluation to better align the facilities with community needs and 'open and grow' the game.

1.1.3 Sustainability Context

Hockey in New Zealand faces significant sustainability challenges that require urgent attention. With only one hockey association having a sustainability plan, the sport is ill-prepared to tackle the environmental issues posed by water-based turfs, microplastics, carbon emissions, and inundation. Additionally, the financial sustainability of maintaining and operating hockey facilities is a major concern, with high operational and disposal costs. Developing comprehensive sustainability plans and adopting environmentally friendly practices are essential steps toward ensuring the long-term viability and environmental responsibility of hockey in New Zealand.

1.1.4 Ownership Model

Hockey in New Zealand operates under diverse and mixed ownership models, including turf trusts, councils, schools, and hockey associations. Most hockey associations do not own their facilities directly, relying on land provided by third parties, often at minimal cost.

Turf trusts, as not-for-profit entities, play a crucial role in subsidising costs through third-party funding, which helps reduce expenses for users.

Councils and schools are particularly significant in this landscape, providing facilities that are more community-focused and aligned with International Hockey Federation (FIH) turf recommendations. The high level of commitment to sustainability, both environmental and financial, by both councils and schools, positions them as key contributors to the growth and long-term success of hockey in New Zealand.

There is no single best practice model, as each ownership model has its own strengths and weaknesses.

However, the key elements to ensure the success of any ownership model are:

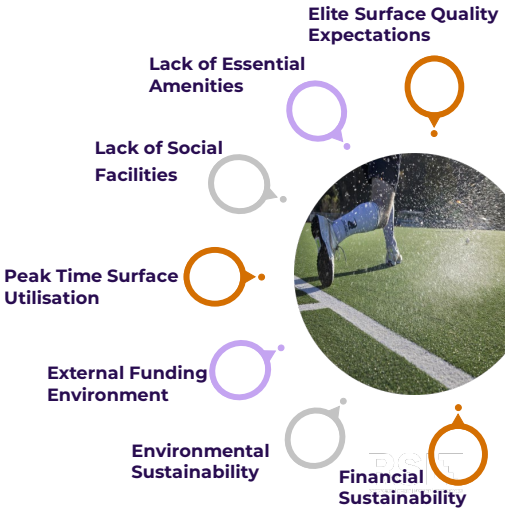
- Strong Relationships and Aligned Vision: Building strong relationships and ensuring that vision and values are aligned, along with strategic direction, are key to success.
- Financial Sustainability: Ensuring financial sustainability for the hockey community is essential, ensuring the full life cycle of turfs and venues has been costed.
- Accessibility and Affordability: Preventing barriers to entry and keeping hockey as affordable as possible is vital for widespread participation.

1.2 Challenges, Strengths and Opportunities

Hockey is often seen as a sport for the white middle class, perceived as insular and unwelcoming to newcomers. It's also considered less accessible and more expensive than other team sports, partly due to the belief that it requires resource-intensive, centralised facilities. While HNZ and the hockey community are proud of the gender balance hockey achieves in participation, there is still work needed to improve diversity and inclusion in participation, coaching and administration, making hockey in New Zealand truly representative and welcoming to all.

Following stakeholder interviews and analysis of insightful survey responses in the development of this Strategy, it has become evident that the game of hockey confronts a series of pressing issues and challenges. The summary below encapsulates the pivotal concerns and obstacles that have been identified through these investigative processes.

The Challenges



In contrast to some of hockey's challenges, hockey stands out for its commitment to gender equity, offering a platform where both men and women can compete and excel equally. As an innovative sport, hockey continually adapts its game and rule formats to enhance accessibility and excitement. Innovations such as smaller game formats and the removal of the offside rule have modernised the sport, making it more engaging for players and spectators alike.

These strengths underscore hockey's progressive approach and its ability to adapt and respond to the nation's communities.

Through stakeholder engagement and analysis of hockey association facilities survey data, a number of opportunities have been identified aimed at mitigating the challenges currently confronting the hockey community. From initiatives promoting different hockey delivery models and surfaces to sustainable practices and partnerships, these opportunities present a roadmap for overcoming obstacles and steering the hockey community towards a sustainable future.

1.3 Guiding Principles for this Strategy

1.3.1 Principles

The following principles have been crafted to establish a comprehensive framework that prioritises opening and growing the game, fostering inclusivity, sustainability, and community involvement in terms of facility provision.

These principles will:

- Drive decisions based on achieving the best possible overall outcome
- Ensure investment decisions will provide the best 'bang for buck'.
- Best match supply with demand.
- Help decision-makers understand and manage risk.
- Ensure decisions are made with the best available information so all parties understand costs and benefits.
- Build trust with stakeholders through showing credibility, legitimacy and responsibility in planning and prioritisation of needs.

The following principles have been derived from conversations with HNZ, and the Project Steering Group and key strategic documents utilised throughout this review.

'Open & Grow the Game'
Promoting accessibility, inclusivity, diversity, and equitable access to hockey.

Meeting an Identified Need
An evidence-based approach to identifying needs, ensuring adaptable and appropriate solutions.

Connected Networks
Partnering and collaborating to ensure spaces and places are well used, maximising return (social and financial) on investment.

Sustainability
Develop and operate sustainable provisions and practices encompassing environmental and economic dimensions.

Social Value of Hockey
Promotes and develops positive impacts on individuals, communities, and society, beyond the realm of physical health, contributing to New Zealander's well-being.

Engagement with Mana Whenua
Ensure the mana of Te Tiriti o Waitangi is recognised and upheld.

1.4 Supply and Demand

1.4.1 National Summary

In developing the national summary and individual association dashboards, various key indicators were examined to provide the hockey community with a comprehensive view of its landscape.

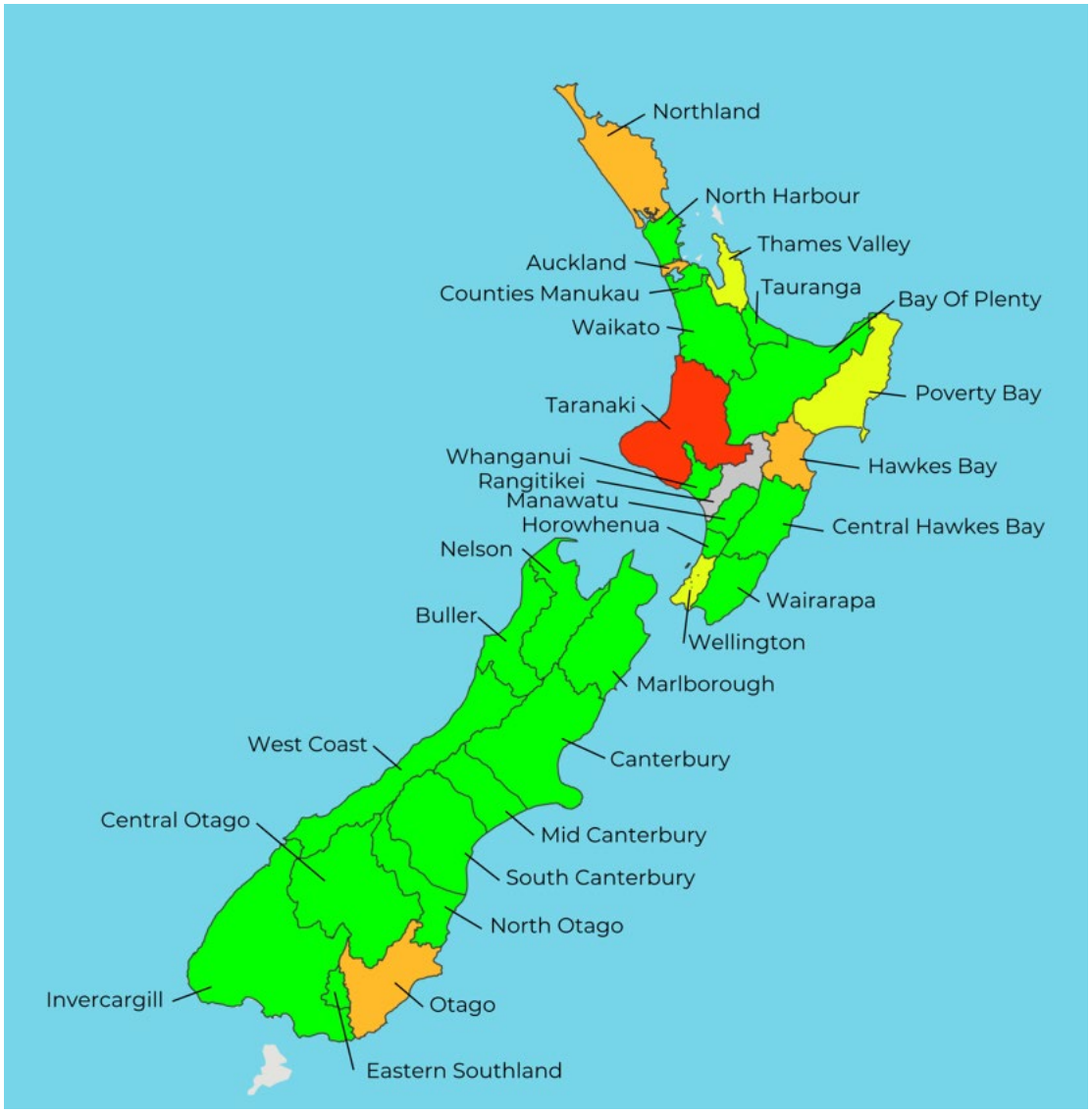
The national map and association dashboards are designed to reflect the challenges, opportunities, and principles outlined in this Strategy. The map and dashboards encompass several critical areas, including:

- Membership Participation and Categories: Tracking current and forecasted participation rates across different membership categories to monitor growth and engagement within the community.
- Turf Capacity: Assessing supply, availability, and demand for turfs to ensure adequate resources for training and programmes.
- Venue Information: Detailing locations, ownership, age, renewal schedules, development plans, and sustainability initiatives for hockey venues to support strategic planning and resource allocation

The National Summary Map 2023 presents a summary of national information using a traffic light system that has been employed to categorise the 32 hockey associations, with colours indicating different levels of demand and required action:

- Demand threshold met or exceeded, likely requiring immediate action.
- Demand parameters approaching the threshold, planned action should be considered.
- Pressure is increasing, suggesting the need to begin investigating future options.
- No obvious areas of concern
- No data

Figure 1.1: National Summary Map 2023[1]



[1] No data was available for Malvern, Rangitīkei and Ruahine-Dannevirke

The majority of associations, over 75% in New Zealand, are categorised as green, indicating no immediate concerns, demand and capacity are currently within the optimal range.

- ·Taranaki is classified as red, indicating the demand has been met and actions are required to investigate options.
- Auckland is classified as orange, with increasing pressure necessitating investigation into future options. This does not include future developments, such as Colin Maiden and The University of Auckland.
- Three areas, Northland, Otago and Hawkes Bay, are identified as orange, nearing the threshold where planned action should be considered.
- Three areas, Thames Valley, Poverty Bay, and Wellington, are classified as yellow, indicating pressure is increasing.

The association dashboards provide additional information that helps understand the specific challenges faced by the seven associations categorised under yellow, orange, and red.

1.4.2 Association Dashboards

The association dashboards provide a summary of some key information that directly relates to the principles of the Strategy, including financial and environmental sustainability, membership information, playing age brackets, population data for now and the future and turf availability.

In developing the association dashboards, various key indicators were examined to provide the hockey community with a comprehensive view of its landscape. By covering these areas, the dashboards aim to provide valuable insights and facilitate informed decision-making for the hockey community.

To effectively cater to the distinct needs of each region, it is advised to undertake comprehensive, localised facility planning utilising the association dashboard as a starting point. While the regional summary data provided in this National Strategy offers valuable insights, it cannot replace the necessity for detailed, association-level analysis to precisely identify and address the unique priorities of each area prior to initiating any projects.

1.5 Strategic Approach – The Way Forward

Hockey New Zealand's primary goal is to expand the reach and inclusivity of the game, rather than increasing the number of premium hockey turfs.

The focus is on broadening participation and introducing hockey to new and diverse communities. This involves exploring innovative ways of playing the game, creating varied environments to make hockey accessible and enjoyable for everyone.

The key message for the hockey community is clear: HNZ demands the hockey community to pause and reflect on other alternatives before investing in new, high-specification performance turfs.

The strategic recommendations are designed for the hockey community at large. They align with HNZ's focus on 'opening and growing the game' and creating a 'connected hockey network,' while

also addressing the significant challenges faced by the hockey community, including the burdens associated with facilities and the environmental, social, and financial pressures.

The recommendations have been organised into four distinct categories:

- Adapting the Delivery Model
- Reimagine the Network of Facilities
- New Developments
- HNZ Specific Recommendations

This structure ensures that each recommendation has practical advice tailored to its unique circumstances, whilst being underpinned by:

- Sustainability
- Data-driven decisions
- Enhancing partnerships
- Optimising existing resources
- Flexible delivery options, making hockey accessible to more communities

1.6 Conclusion

The Spaces and Places Strategy identifies a significant imbalance in the provision of premium quality water-based turfs, which are designed for use by the elite, 1% of the hockey community. This overemphasis on catering to elite athletes has led to a neglect of the broader hockey community's needs, creating several challenges, including a culture of unrealistic expectations alongside issues of sustainability from both environmental and financial perspectives.

The current focus on high-end facilities has resulted in substantial maintenance costs and environmental impacts, which are unsustainable in the long term. The majority of the hockey community, which includes grassroots and recreational players, has not been adequately served by the existing infrastructure. This has potentially limited hockey's growth and accessibility for new and diverse participants.

The way forward, as outlined in the Strategy, provides a clear direction for addressing these challenges. By utilising the existing resources within the community and adopting a variety of surfaces and game formats, HNZ aims to 'open and grow' the game to a broader audience. This approach will not only make hockey more inclusive and accessible but also ensure that it is more sustainable.

Central to this Strategy is the adoption of environmental and financial sustainability practices, which aim to reduce the carbon footprint and operational costs while enhancing the longevity and efficiency of facilities.

2 Introduction

2.1 Purpose

Since the 2016 National Facility Strategy, Hockey New Zealand (HNZ) has transformed significantly. In 2022, HNZ launched the 'Taking Our Game Forward' National Strategic Direction, focusing on opening and growing the game and guiding the community towards this new vision. To successfully 'open & grow'[2] the game of hockey, Hockey New Zealand (HNZ) needs to examine the connected hockey network carefully. The approach to the 2024 National Hockey Spaces and Places Strategy (The Strategy) is a departure from previous strategies, there is a desire to have a more holistic view of hockey participation and to make the sport accessible to all, which means hockey in New Zealand needs to take a different approach.

2.2 Scope

The National Hockey Spaces & Places Strategy will provide its community with a future direction that will allow it to make aligned, evidenced and philosophically based decisions.

The new Strategy seeks to support the hockey community in the procurement of new facilities where appropriate, but more importantly, this Strategy aims to demonstrate the wide range of opportunities that are fit for purpose for the sport of hockey.

Several key outcomes are addressed by this Strategy:

- A comprehensive understanding of the hockey communities, including an audit of current facilities utilised by hockey.
- Current status of facilities utilised by hockey.
- Identification of potential facilities to expand hockey's reach and accessibility.
- Exploration and implementation of facility ownership models that support long-term sustainability.
- Strengthened interdependencies that enhance collaboration and create synergy across the hockey community.
- Increased participation through active engagement and collective contributions from diverse groups.
- Enhanced inclusion by fostering equitable access and a sense of belonging within the hockey community.
- Achieved sustainability by ensuring long-term viability, promoting environmental stewardship, and conserving resources.
- Addressed challenges through effective problem-solving and overcoming obstacles to growth.
- Opportunities for growth, innovation, and new possibilities for hockey development capitalised upon.

2.3 Methodology

The development of this report included the following key phases:

1. Project Set Up - An initial meeting with the Project Control Group (PCG) and Project Steering Group (PSG) comprising representatives from Hockey New Zealand, Sport NZ, Territorial Authorities, Hockey Associations and Regional Sports Trusts.
2. Identification of Interdependencies - A review of secondary documentation.
3. Audit and analysis of the current landscape – an audit of the existing network of facilities. Application of the agreed hierarchy to the existing network. Participation and demographic insights. Environmental and sustainability considerations. Emerging trends. Benefits.
4. Consultation and Research - Case studies. Benchmarking and learnings. Stakeholder engagement with the stakeholders identified by the PCG/PSG.

[2] HNZ Strategy Presentation – Taking Our Game Forward 2022

5. Development - PSG workshop to present initial findings. Agreement on modelling criteria. Identification of projected demand for facilities. Gap analysis. Modelling of the future network. Drafting of the strategy.
6. Gathering Feedback, Review, and Applying Changes – PSG feedback. Strategy for consultation. External peer review.
7. Implementation, Change Management and Communications Plan.
8. Launch.

2.3 Definitions and Terminology

The following terminology and definitions will be used throughout this report. Please refer to Appendix 1 for more details.

Term	Definition
Player Definitions	
Elite/ High Performance Hockey	International Tier 1, televised tournaments
Performance	National competitions
Participation	Regional, local, community and school hockey, plus other sports
Foundation	Large ball sports and foundation-level hockey
Player	Someone actively engaged in playing hockey or activity in a formal or informal capacity. Example - Someone regularly playing in a team is a player.
Member/Membership	Someone formally registered or affiliated with a club, organisation, or group, regardless of their level of participation in activities. Example - An individual who pays an annual fee to a club but doesn't actively play could still be a member.
Participant	A broader term encompassing anyone involved in an activity, program, or event, regardless of the frequency or level of commitment. Example - A child attending a one-off 'Have-a-Go Day' would be a participant.
Organisation Definitions	
Community Funders	Often governmental or non-profit, that provide financial support for initiatives aimed at benefiting the community. These funders typically allocate grants, donations, or other resources to projects that promote social, cultural, educational, recreational, or economic development. Examples include local councils, lottery grants, charitable foundations, and other entities that invest in programs enhancing community well-being and fostering local engagement.
Hockey Associations	32 regional hockey associations are responsible for the oversight of competitions and representative fixtures in each association area, as well as club support. Also referred to as a Regional Sport Organisation (RSO). The Hockey Association's boundaries do not align with Council boundaries.
Hockey New Zealand	HNZ – Governing body for hocket in New Zealand. It oversees the development, administration, and promotion of hockey across the country, including managing national teams like the Black Sticks (Men & Women), national tournaments, and grassroots programs. HNZ works with regional hockey associations to develop the sport at local levels and aligns with the FIH (International Hockey Federation) for international competitions and governance.
International Hockey Federation	FIH – Governing body for hockey internationally. It oversees international competitions such as the Hockey World Cup, the Pro League, and the Olympic hockey tournament. FIH also sets the rules of the game, promotes development programs, and regulates the sport worldwide.
Participation	In this report, participation refers to membership and playing statistics as documented by HNZ in the 2023 annual report.

Term	Definition
Regional Sports Trusts	RSTs are non-profit organisations that support sports, play and physical activity organisations and their communities to get and stay active.
Sport New Zealand / Ihi Aotearoa	Sport NZ, the Crown Entity responsible for Sport, Recreation and Play in Aotearoa / New Zealand.
Territorial Authorities / Councils	The descriptor for local government is also known as district or city councils. Responsible for a wide range of local services including, libraries, parks, recreation services and facilities, water and roads.
Other Definitions	
Facilities	A 'facility' refers to the suite of infrastructure and buildings that enable hockey activities to take place. This includes various components such as playing surfaces, spectator areas, support facilities such as changing rooms, social spaces such as pavilions, training and practice areas, and parking.
Amenities	Amenities refer specifically to changing rooms and social spaces such as pavilions and toilets.
Playing Surface	Playing surface refers to the primary areas where the game is played, such as specific hockey-based turf, artificial turf, grass, tennis courts, car park.
Turf	Turf refers to various turf types identified in the table below in line with FIH definitions
Venues	Venue refers to a designated location where hockey activities take place.
Surface Size Definitions	
Full Time Equivalent (FTE)	Full-sized turf available to the community at least 43 hours per week.
Full	A turf accommodation with a full-size playing area of 55.00 meters by 91.40 meters. Total Area 5017 square meters (not including runoff)
Half ½	Half the size of the full-size playing area of 55.00 meters by 45.7 meters. Total Area 2509 square meters. Often used for underage games, social competitions and foundation programmes. Training for most age groups and abilities can occur on a ½ turf.
Quarter ¼	Quarter the size of the full-size playing area of 45.7 meters by 22.85 meters. Total Area 1254 square meters. Often used for junior games and training. Often located on school grounds.
Hockey5s Courts	Various dimensions for community, competition and tournament[3].
Turf Type Definitions	
Hockey-specific turf definitions[4]	
Dry	This type of turf is in developmental stages[5] A turf that does not have irrigation and/or infill.
Non-filled / water/wet based	Elite-level playing surface. Short dense pile carpet with no infill. Normally requires irrigating. Wet turfs require irrigation primarily to apply a uniform layer of water across the surface.
Sand-dressed	Short dense pile carpet with sand dressing. Does not require watering. Dressed turf has a partial sand infill, enough to keep grass fibres upright, but resembles an unfilled turf.
Sand-filled	Carpet filled with sand. Grass fibres are kept upright by sand infill, ensuring a high degree of stability and wear, sand is noticeable on the turf.

[3] https://www.fih.hockey/static-assets/pdf/fih-facilities-guidance-hockey5s-courts.pdf
[4] Refer to Appendix 2 for FIH-downloaded PDFs.

[5] Refer to – The Criteria for Innovation Category https://www.fih.hockey/static-assets/pdf/fih-htfs-addendum-01-requirements-for-dry-non-irrigated-turfs.pdf

Term	Definition
Grass	A natural grass field with a well-maintained, level, and even playing surface. Grass is short, even, and firm.
Multi-use turf definitions	
Gen 2 / 2G	• Composition: Features short-pile synthetic grass, typically less than 24 mm in height, with a sand-based infill. • Primary Use: Ideal for sports like hockey due to its firm and even surface. • Characteristics: Provides a hard surface suitable for ball roll in hockey.
Gen 3 / 3G	• Composition: Consists of longer synthetic grass fibres, ranging from 40 mm to 65 mm, with a combination of sand and rubber granules as infill. • Primary Use: Designed mainly for football and rugby, offering a more natural feel and enhanced safety. • Characteristics: The rubber infill provides cushioning, reducing injury risk and mimicking natural grass playing conditions.
Gen 4 / 4G	• Composition: Similar to 3G but designed to eliminate the need for rubber infill. • Primary Use: Intended to offer a maintenance-free alternative for sports like football. • Characteristics: Currently, no accredited governing body officially recognises 4G pitches. The term is often used for marketing purposes, and the technology is still under development.
Long-pile multi-sports turf	• Composition: Features synthetic turf with a pile length greater than 30 mm. • Primary Use: Suitable for various sports, including football and rugby, and can accommodate multiple activities on a single surface. • Characteristics: The longer pile provides versatility, making it ideal for facilities hosting different sports.
Textile sports surface	• Composition: Constructed using a needle-punch technique, resulting in a dense, short-pile surface. • Primary Use: Ideal for sports like hockey, netball, and tennis. • Characteristics: Offers a durable and even surface, suitable for both indoor and outdoor applications.
Venue Type Definitions	
Core Hockey Turf	An artificial surface built and used for hockey as its main purpose, it only has hockey field lines, is regulation hockey size and is used primarily for training and playing hockey
Multipurpose Turf	An artificial surface built and used as a multisport turf. It can be of varying size and has multiple line markings and goal set ups.
School Turf	Refers to the location of a playing surface. A school turf could be a core hockey turf or a multipurpose turf
Community Turf	Refers to the location of a playing surface. A Community turf is often on council land and operated by the hockey association or a trust.

Definitions and assumptions for associations dashboards can be found in section 11.5.

3 Background

Since the implementation of the 2016 National Facility Strategy, the landscape has changed considerably both internally and externally at Hockey New Zealand (HNZ). HNZ has undergone a transformation and is on a journey that will see further change in future years.

In 2022 HNZ launched a new National Strategic Direction, *'Taking Our Game Forward'* with an emphasis on amplifying and 'opening and growing' the game. How the game of hockey is delivered will enable its community to realise its new direction.

HNZ defines its connected hockey network as where and how it sustainably organises participation in hockey in order to meet the needs of a wide variety of New Zealanders. The connected hockey network encompasses the following:

- The places and spaces where participation can occur
- The formats/versions played and the opportunities on offer
- The people needed to organise and deliver hockey opportunities

The first phase of the Open & Grow the Game strategic priority is the refresh and renewal of the current National Spaces and Places Strategy, focusing on alternatives to the current centralised model and traditional facility thinking.

3.1 Hockey Context

3.1.1 International Context

Hockey, a sport with deep-rooted traditions and a dynamic international presence, has been captivating audiences and players alike. Hockey's global influence is undeniable, underscoring its status as a unifying and exhilarating sport on the international stage.

3.1.2 Hockey New Zealand Context

The previous National Facilities Strategy, developed in 2016, primarily focused on growth and the provision of new turf. Over the past eight years, hockey membership across New Zealand has grown by approximately 4,000 members, reaching a total of 56,257 in 2023. During this period, significant internal and external changes have also reshaped the hockey landscape. In response to these changes, in 2022 HNZ released a new strategic direction known as 'Taking Our Game Forward.'.

The image below illustrates the three key strategic pillars of this strategy: The focus and emphasis of this Spaces and Places Strategy lie in strategic pillar two, 'Open & Grow Our Game.'

Figure 3.1: HNZ Key Strategic Pillars

The three strategic pillars are brought to life through the efforts and vision of a well-established and collaborative Connected Hockey Network. This network not only serves as the foundation for

delivering key initiatives, but it is also driven by the passion, dedication, and expertise of people, who remain at the very heart of hockey in New Zealand. The collective commitment of the people involved ensures that hockey in New Zealand's goals are achieved with impact, fostering a sense of community and shared purpose throughout the sport.

Figure 3.2: HNZ Connected Hockey Network

4 Challenges

In the context of hockey in New Zealand, the pursuit of global success is paramount yet fraught with unique challenges. Despite the national teams' aspirations to compete and triumph on the world stage, they grapple with a relative lack of fandom and the ongoing struggle to stay relevant in a crowded sports landscape. Facilities, while essential for training and development, present a dual challenge; they are both a critical asset and a financial burden, demanding significant upkeep and investment.

As a sport with a global footprint, hockey must embrace its role in promoting good global citizenship, particularly as the impacts of climate change are being felt acutely in some of the world's major hockey nations. Environmental pressures are increasingly affecting playing conditions and venue maintenance, making sustainability a key priority. In addition to these challenges, the sport faces the ongoing need to attract and retain talent, while managing financial constraints. Hockey in New Zealand must navigate a complex web of challenges to sustain and grow its presence both domestically and internationally.

HNZ has illustrated the challenges faced by both the organisation and the hockey community in the image below.

Figure 4.1: HNZ Identified Challenges

Through the development of the 'Our Way' strategy, HNZ wanted to address these challenges along with certain perceptions about the sport.

Hockey is often seen as a sport for the white middle class, perceived as insular and unwelcoming to newcomers. It is also considered less accessible and more expensive than other team sports, partly due to the belief that it requires resource-intensive, centralised facilities. While HNZ and the hockey community are proud of the gender balance hockey achieves in participation, there's still work needed to improve diversity and inclusion in participation, coaching and administration, making hockey in New Zealand truly representative and welcoming to all.

Following stakeholder interviews and insightful survey data in the development of this Strategy, it has become evident that the game of Hockey confronts a series of pressing issues and challenges. The summary below encapsulates the pivotal concerns and obstacles that have been identified through these investigative processes.

The Challenges

4.1 Elite Surface Expectations for Community Hockey

Within the hockey community, there exists an expectation for high-grade turf surfaces, typically reserved for elite and high-performance players according to FIH turf categorisations. Analysis conducted for this report reveals that New Zealand predominantly utilises water-based turf. However, upon comparing this with the demographics of players, it becomes evident that there is an overprovision of top-tier turf, surpassing the needs of a considerable portion of the New Zealand hockey playing community.

4.2 Lack of Essential Amenities

Examination and input from hockey associations and stakeholders has underscored a notable deficit in essential amenities such as changing rooms, grandstands, and social club rooms, posing a significant challenge. These amenities are critical for enhancing the overall hockey experience and promoting inclusivity where everyone can fully participate and enjoy the sport.

There is a growing concern that the emphasis on installing high-performance turf may be compromising the overall quality of the facility experience. The substantial cost associated with high-performance turf installation could potentially divert resources away from providing necessary amenities. The absence of these key facilities detracts from the overall appeal of the venue. Administrators face the perpetual challenge of balancing the need to deliver quality facilities while striving to optimise costs associated with construction and maintenance.

4.3 Lack of Social Facilities

Analysis and feedback from hockey associations and stakeholders has highlighted a significant shortage of social club rooms, presenting a notable hurdle. During COVID and the restrictions on social interaction, the hockey community discovered that playing the game without the post-game and post-training social interactions left participants feeling disconnected and less motivated to continue playing. Without the chance to engage socially afterwards, many players felt a diminished desire to participate in the sport.

Installing high-performance turfs, when the majority of the demand is community participation might compromise the overall facility experience. The considerable expense linked with installing top-tier turf could potentially redirect resources from providing essential amenities and social facilities. The lack of these vital facilities diminishes the overall attractiveness of the venue and impacts the efforts made to build the social infrastructure of the game.

4.4 Peak Time Surface Utilisation

The efficient utilisation of hockey surfaces during peak times presents a pressing challenge for hockey associations. As demand surges during these peak periods, managing the allocation of available playing surfaces becomes increasingly complex. Compounding this challenge is the feedback from the hockey community, indicating a strong preference for training and playing exclusively on premium water-based turfs. This preference for elite surfaces potentially leads to limited availability, exacerbating the scheduling dilemma and contributing to the centralisation of delivery.

This centralisation can impact accessibility, as foundation and social programming should ideally be delivered closer to home to increase local access, reduce costs, and provide a more tailored experience suited to the participant type. Additionally, the varying levels of demand and skill levels across different age groups further complicate the task of creating equitable scheduling arrangements. Without effective solutions in place to address these issues, there is a looming threat to the development of players and the overall growth of the sport within the community.

4.5 Challenging External Funding Environment

Hockey is reliant on third-party funders to develop and renew turfs. Association data states that 86% of projects rely on community funders for support. The current economic climate is making it challenging for councils to support 'non-core' projects, with significant increases in rates being proposed across most areas of New Zealand. Community funders are not immune to the economic climate with reduced investment returns and other factors contributing to lower levels of funds to invest in community projects. Many community funders are now refining funding criteria to reduce inequalities, environmental outcomes, financial sustainability and opportunities for more multi-use facilities, this may also impact hockey's ability to compete for funds in some areas.

4.6 Environmental Sustainability

The interviews conducted with hockey associations and key stakeholders have underscored a significant deficiency: the absence of comprehensive environmental sustainability plans. Additionally, it was observed that only a small minority of hockey associations had implemented sustainable practices, with the most prevalent desire being the installation of LED lighting. This not only raises concerns regarding environmental sustainability but also underscores a lack of awareness. Despite the predominant provision of water-based artificial turfs, few associations had sustainable initiatives tailored to such surfaces in place.

4.7 Financial Sustainability

Achieving financial sustainability poses a formidable obstacle, particularly given the substantial operational expenses tied to the recommended upkeep of high-quality water-based turf hockey facilities. Numerous associations and turf trusts have voiced concerns regarding the financial sustainability of hockey. The prominence of premium turf surfaces exacerbates this challenge, as they are not utilised as extensively as multi-use turfs, which arguably offer a lower cost per use. Moreover, the inability to distribute costs among multiple owners further compounds the financial strain associated with maintaining premium surfaces. Balancing the imperative of providing top-tier facilities with the fiscal realities of sustainability remains a pressing concern for hockey associations and turf trusts alike and ultimately impacts on the participant.

5 Participation Trends

5.1 Summary and Key Message

This section presents detailed research and analysis on the demographics and trends of hockey players in New Zealand, emphasising several critical points:

Primary School Age Dominance: The majority of hockey players in New Zealand are within the primary school age bracket, accounting for 43% of the total players (24,089 individuals). This indicates a strong base of young participants in the sport.

Rising Membership in Associations: Between 2016 and 2023, 53% of hockey associations in New Zealand reported an increase in membership. This trend reflects a growing interest and participation in hockey at the grassroots level.

Participant Satisfaction: According to the Voice of the Participant survey, satisfaction levels have seen little change from previous surveys. The Net Promoter Score (NPS) decreased slightly from +46 to +43, suggesting a need for improvements to maintain and boost player satisfaction.

Steady Growth in Secondary School Sports Census: Hockey continues to hold its position as the 6th most popular sport in the School Sports Census, demonstrating steady participation over the years. This stability underscores the sport's consistent appeal and participation among school-aged children.

Key Message

Hockey in New Zealand sees a strong base of young players, with the majority in the primary school age bracket. Despite this, the sport faces challenges in maintaining participant satisfaction, as indicated by a slight decline in the NPS score. The rising membership in hockey associations and steady growth in the School Sports Census reflect a positive trend in participation.

5.2 Voice Of Participant Survey Data

This voice of participant survey, conducted by Sport NZ, looks at the experience of hockey participants in 2023 and how this compares with results from 2021, 2018.

Satisfaction: Two-thirds (66%) of respondents were very or extremely satisfied with their club experience. This is consistent with all previous years and in line with the All Sports 2022/23 average (66% vs. 65%).

Net Promoter Score (NPS)[6]: Six in ten hockey respondents were highly likely to recommend their club. NPS has decreased slightly from 2021 (+43 vs. +46) although remains above the 2018 result. The hockey NPS is similar to the All Sports 2022/23 average (+44).

Value for Money: Two-thirds of respondents felt they got value for money from their club. Perceived value for money remains consistent with previous years, although is slightly above the 2018 result (67% vs. 65% in 2018). However, the 2023 result is significantly lower than the All Sports 2022/23 average (67% vs. 75%).

Likelihood to Rejoin: Four in five members (80%) intended to rejoin their club next season. This result has declined slightly from 2021 (83%) and 2018 (83%) but is in line with 2017 (81%). A slightly smaller proportion of hockey respondents are likely to rejoin next season compared with the All Sports 2022/23 average (81% vs 84%).

Other findings were as follows:

- Nine in ten hockey respondents (89%) spend up to 30 minutes travelling to training, and two-thirds (67%) spend up to 30 minutes travelling to hockey competitions.
- Nine in ten respondents (92%) feel the length of games is about right, while seven in ten (68%), feel the length of the season is about right.
- Nine in ten respondents (89%) of current participants, agree the formats of the game available are appropriate.

Refer to Appendix 3 – for the full VOP report.

5.3 Membership Trends

In 2023, there were 56,257 hockey members throughout New Zealand, compared to 51,947 in 2016. This is an overall 8% increase in membership (4,310 members). 53% of hockey associations (17 out of 32) have observed a rise in membership between 2016 and 2023. Conversely, 15 hockey associations have noted a decline. [7]

Table 5.1: Change in Membership from 2016 to 2023

Association	% Increase	Association	% Decrease
Auckland	7.8%	Buller	47.5%

[6] Net Promoter Score (NPS) is a metric used to measure customer loyalty and satisfaction by asking customers how likely they are to recommend a product, service, or organisation.

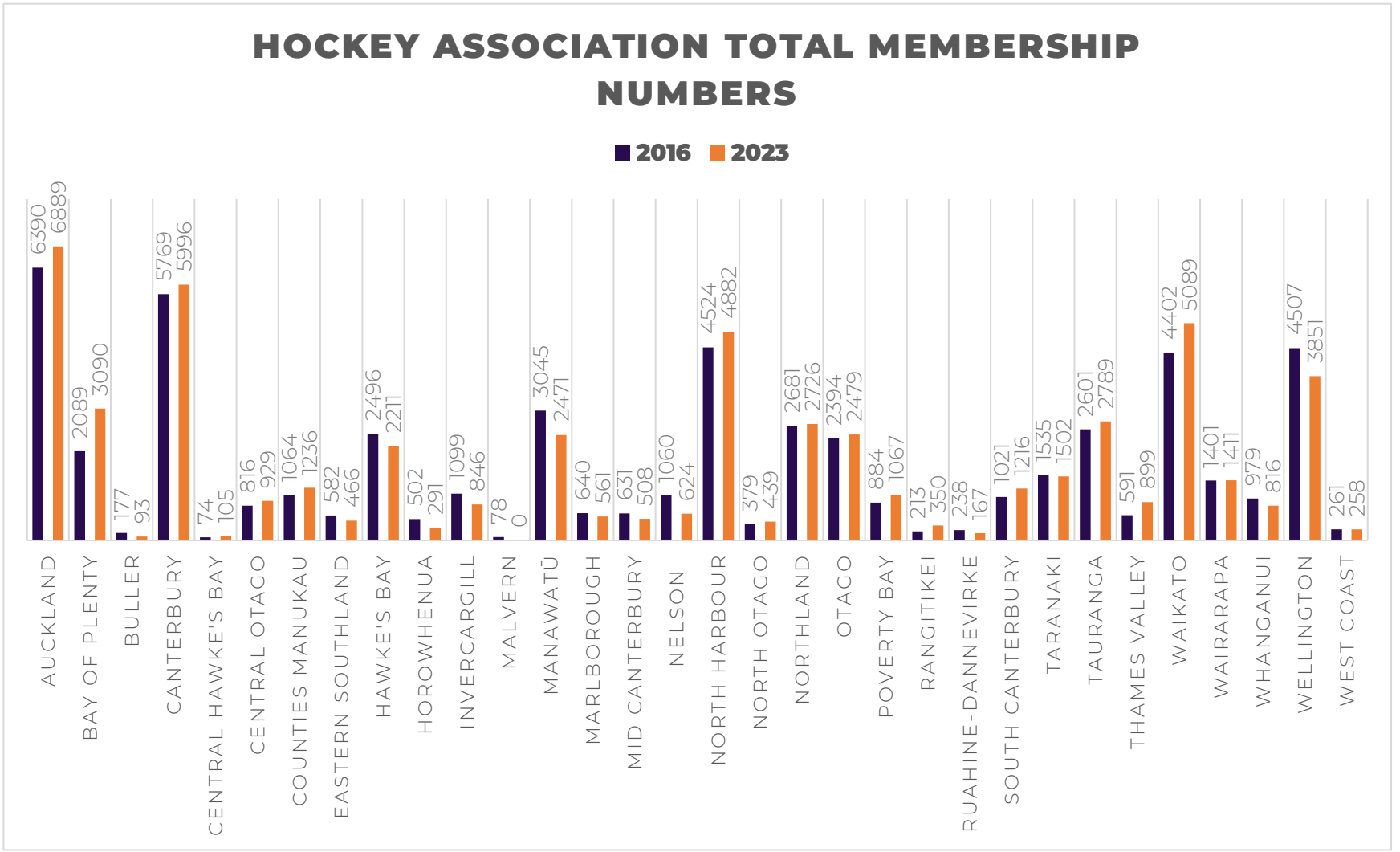
[7] HNZ census membership data

Association	% Increase	Association	% Decrease
Bay of Plenty	47.9%	Eastern Southland	19.9%
Canterbury	3.9%	Hawkes Bay	11.4%
Central Hawke's Bay	41.9%	Horowhenua	42.0%
Central Otago	13.9%	Marlborough	12.3%
Counties Manukau	16.2%	Mid-Canterbury	19.5%
South Canterbury	19.1%	Manawatū	18.9%
North Otago	15.8%	Malvern	100%
Northland	1.7%	Nelson	41.1%
North Harbour	7.9%	Invercargill	23.0%
Poverty Bay	20.7%	Ruahine Dannevirke	29.8%
Otago	3.5%	Taranaki	2.2%
Rangitīkei	64.3%	Wellington	14.6%
Thames Valley	52.1%	West Coast	1.2%
Tauranga	7.2%	Whanganui	16.3%
Waikato	15.6%		
Wairarapa	0.7%		

Hockey associations attribute membership declines to various factors, including the cost of the sport, competition from other sports, other commitments, and people relocating out of the area.

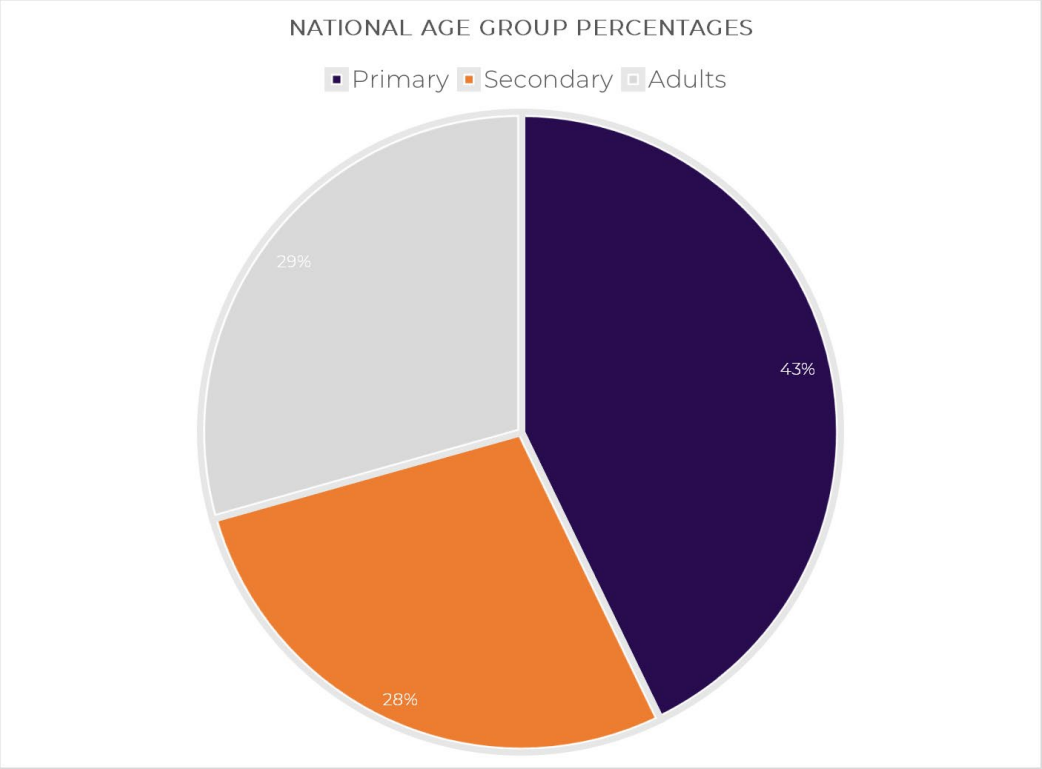
The significant percentage variations in some areas, such as Bay of Plenty, Central Hawke's Bay, Rangitīkei, Themes Valley, Buller, Horowhenua, Malvern, and Nelson, are primarily due to the small membership numbers in these regions. When working with such low figures, even slight changes in membership can result in large percentage fluctuations. For example, in the case of Malvern, the 100% decrease is a reflection of the association not providing a membership figure. A few members leaving can cause what appears to be a dramatic shift in percentage terms, even though the actual numbers involved are minimal. This variance isn't necessarily indicative of major changes in data collection, delivery, facilities, or cost, but rather a reflection of the small sample size in these areas.

Figure 5.1: Hockey Association Membership Numbers 2016 and 2023



The majority of current players are primary school age, constituting 43% (24,089 players) of members/participants in 2023, while the secondary school age group accounts for 28% (15,646 players), and adults comprise the remaining 29% (16,522 players). In 2023 there was a total of 56, 257 hockey players nationwide.

Figure 5.2: Playing Age Breakdown



Source: HNZ Annual Report

With 2023 marking the first full year of delivery since 2019, hockey saw record participation in national tournaments, such as the 96 teams in the Vantage National Masters and the 330 teams in secondary schools' competitions and a 10% rise in summer participation, indicating a robust return to the game following COVID-19 interruptions.

The increase in summer participation is particularly encouraging, highlighting a valuable opportunity to run foundation and social programs or competitions that target different participant groups. Without impacting the representative calendar, the off-season provides an ideal time to introduce new participants to the sport and create a more inclusive, accessible entry point before the main season begins.

Based on the 2023 secondary school sports census, hockey maintains its position as the 6th most popular sport, with participation split approximately 45% boys and 55% girls, showcasing steady growth over the years.

5.4 Traditional Mindset

There remains a traditional mindset within some segments of the hockey community, particularly regarding the necessity for elite performance surfaces at every level of the sport. This mindset is evident in the emphasis on autonomy over facilities and access, with a significant focus on maintaining dedicated, high-performance turf for all aspects of hockey, from grassroots to high-performance training and competitions. For instance, when asked about the appropriate playing surfaces for different playing categories, 25% of hockey associations indicated a preference for water-based surfaces across all levels of play, regardless of whether it was for training or competition.

Additionally, a portion of the hockey community continues to prioritise dedicated hockey spaces, reflecting resistance to collaborating or partnering with other groups or organisations. This desire for independence over communal resources reinforces a mindset focused on exclusivity, which can limit the sport's growth and adaptability, preventing it from embracing broader collaboration and shared use of resources.

"We would love to have a dedicated hockey turf"

"We need an indoor training facility"

"Another turf just for hockey training"

Quotes taken from the Hockey Association Facilities Survey 2023

6 Spaces and Places Context

6.1 Summary and Key Message

The following section presents detailed research and analysis on hockey facilities and surfaces in New Zealand, highlighting several critical issues:

Over-Specified Turf for Community Users: The analysis reveals that the majority of hockey turfs in New Zealand are designed for elite and high-performance play. With less than 1% of the nation's total participants competing at such levels, the specification of these turfs far exceeds the needs of the broader community participants.

Inadequate Amenities: The amenities (i.e. toilets, changing rooms, social spaces, parking, storage and spectator facilities) of hockey facilities across New Zealand are found to be lacking in quality or do not exist. This inadequacy affects the overall experience and usability of these facilities for the community.

High Provision Costs: Maintaining the current network of hockey facilities and surfaces is extremely costly. The expenses over the whole network range from $30 million to $42 million[8] over the next six years, creating a significant financial burden for the ongoing provision of these over-specified turfs.

Lack of Sustainability Awareness: The research highlights a concerning lack of sustainability awareness in the sport. The sport of hockey already poses environmental challenges, and there is limited evidence of efforts towards implementing sustainable practices within its facilities and operations.

Key Message

Hockey in New Zealand faces significant challenges with the over-specification of its turfs for community use, inadequate facility amenities, high provision costs, and a notable lack of

[8] Whole of life estimated costs multiplied by the number of turf renewals

sustainability awareness. With only a small fraction of the population engaged in elite hockey, the focus on high-performance turfs is not only disproportionate to participation needs but also financially and environmentally unsustainable. Addressing these issues requires a strategic re-evaluation to better align the facilities with community needs – open and grow the game.

6.2 FIH Playing Surfaces Categories

The International Hockey Federation (FIH) Guide to Outdoor Hockey Surfaces describes the different types of surfaces that can be used and their suitability for the various stages of the hockey development pathway.

The FIH Hockey Turf and Field Standards are internationally recognised standards that ensure the appropriate quality of surface/turf performance for the intended level of play - whether it is foundation participation, international competition, or anything in between.

Figure 6.1: FIH Player Categories and Playing Surface

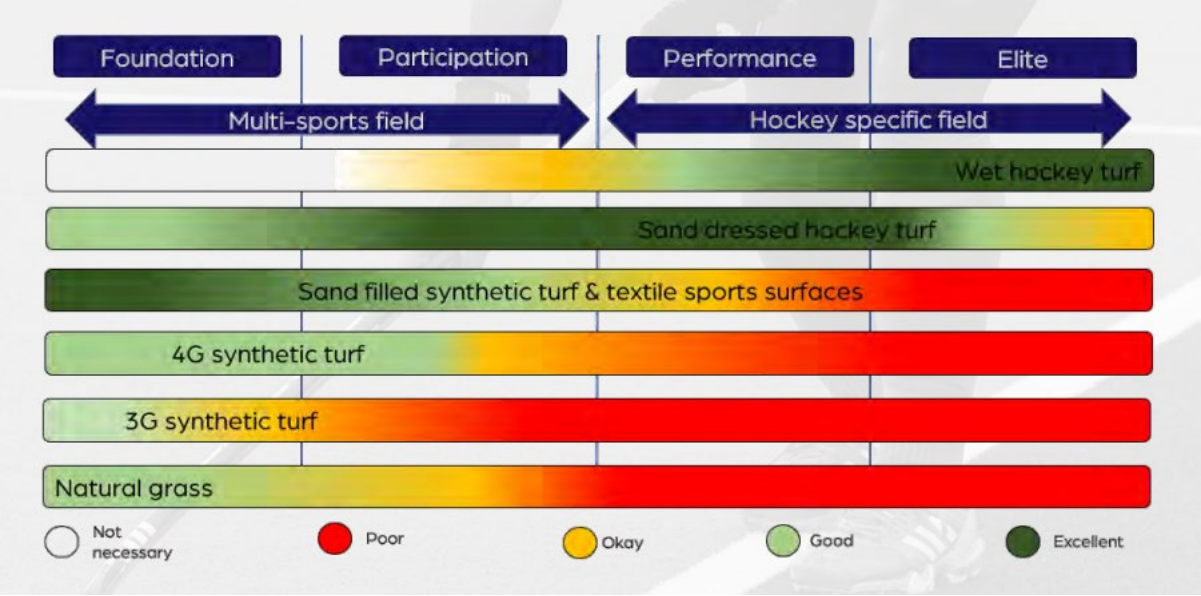


Figure 6.1 presents a breakdown of player categories in relation to playing surfaces, using a traffic light colour system to indicate suitability for each category. For instance, water-based turf is ideal for elite and performance players but unnecessary for foundation players. Sand-dressed hockey turfs appear to accommodate all player levels, with ratings ranging from excellent to acceptable. Conversely, natural grass is suitable only for foundation and participation players and is deemed inadequate for performance and elite players.

Further detail on the FIH turf categories can be found definitions and terminology section of the report.

The following research and analysis are based on the FIH hockey turf and field standards, as they are the internationally recognised and approved guidelines set by the global governing body for hockey.

6.3 The New Zealand Landscape

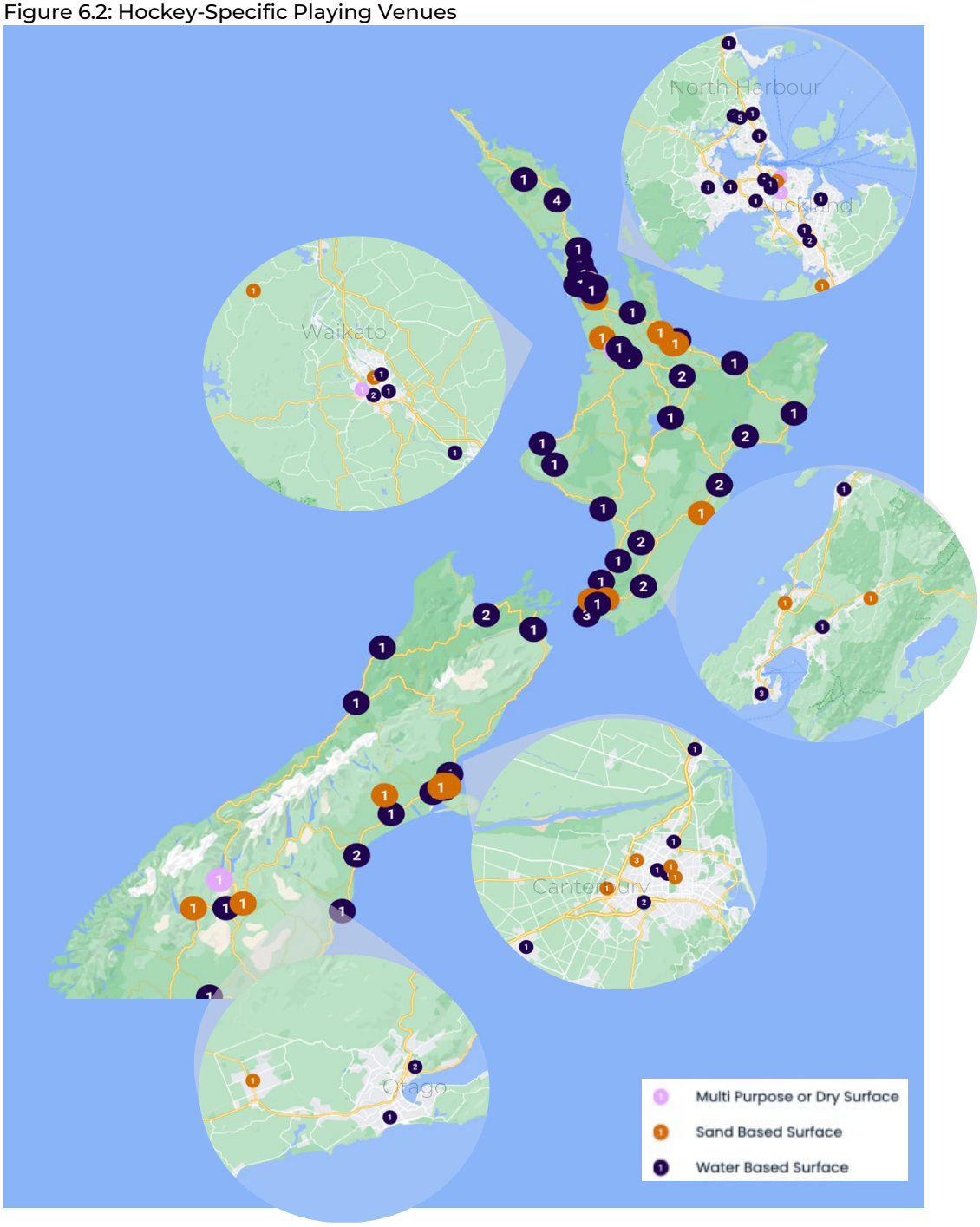
Hockey in New Zealand operates under a structured governance and delivery model, with HNZ as the national governing body, supported by 32 regional hockey associations and local clubs across the North and South Island.

Hockey in New Zealand operates through a tiered structure where HNZ provides national leadership, regional associations manage competitions and development, and clubs and schools drive grassroots participation.

Hockey venues in New Zealand were mapped based on data gathered from the Hockey Association Facilities Survey, interviews, and national conference.

Figure 6.2 highlights all dedicated surfaces currently used for playing hockey in New Zealand, as identified by hockey associations. These sites cover community venues, school venues, and multipurpose surfaces. Numerous other multipurpose turfs across the country may exist that are not yet utilised for hockey. The lilac pins refer to multi-purpose and or dry-based surfaces, the orange pins refer to sand-based surfaces and the dark blue pins refer to water-based surfaces. The number within the pin shows how many surfaces are at that location.

Figure 6.2: Hockey-Specific Playing Venues



The map above represents all the surfaces that are currently used for playing hockey in NZ. It includes community venues, school venues and any multipurpose surfaces. (Many more multipurpose turfs around the country are not currently being used for hockey).)

Table 6.1 provides a breakdown of player types based on participant type, revealing insights into the distribution of players across various categories in New Zealand. Notably, it underscores that the nation possesses a relatively small proportion of elite and high-performance players, comprising less than one percent of the total player base.

The majority of players, as indicated by the table, fall within the participation and foundation categories. This suggests a strong emphasis on grassroots involvement and development programs aimed at nurturing talent from a young age.

Table 6.1 Player Category Definitions and Breakdown in New Zealand.

Player Category	Definitions	Primary Age Players	Secondary Age Players	Adult Players
Elite hockey	International Tier 1, televised tournaments	0%	0%	<1%
High performance	International competitions	0%	0%	<1%
Performance	National Competitions	0%	20%	20%
Participation	Regional, local, community and school hockey, plus other sports	50%	60%	75%
Foundation	Large ball sports and foundation-level hockey	50%	20%	5%

Source: HNZ

When examining the dispersion of players among primary, secondary, and adult age groups in comparison to the breakdown of FIH player categories, the abundance of high-quality water-based turfs becomes more evident.

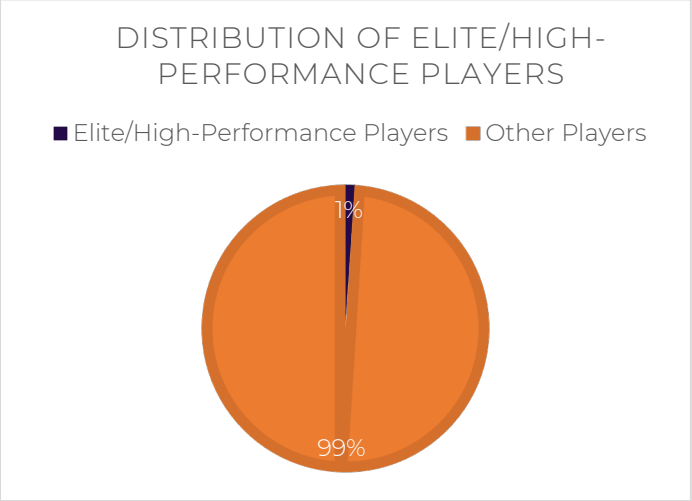
Presently, 73% of playing surfaces are water-based. Utilising the FIH playing surfaces categories and data from the 2023 hockey census, the recommended percentage for water-based turfs stands at 31%.

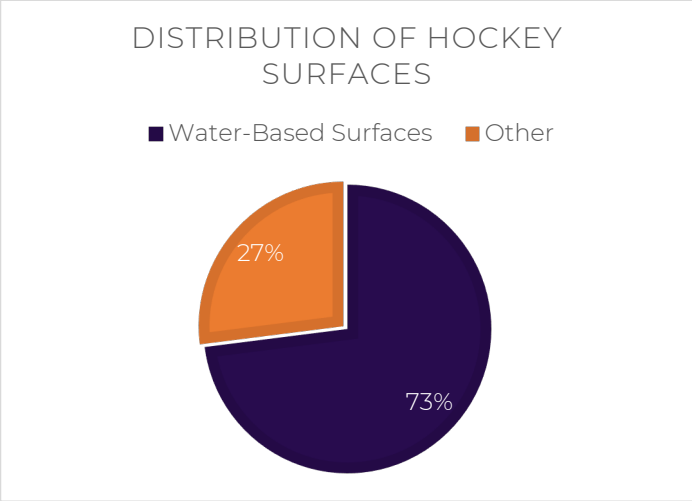
The distribution of players across the different categories in New Zealand presents a stark contrast with the distribution of surface types throughout the country. Despite having less than one percent of elite and high-performance players, a significant majority of surfaces, specifically, 73%, are tailored for this category of player.

Following are charts displaying the key information from the player category analysis:

- Figure 6.3 shows the distribution of elite/high-performance players in New Zealand, with less than **1%** participating at this level.
- Figure 6.4 illustrates that **73%** of the hockey surfaces in New Zealand are water-based, designed for performance and elite hockey.

Figures 6.3 and 6.4: Distribution of High-Performance Players and Hockey Surfaces



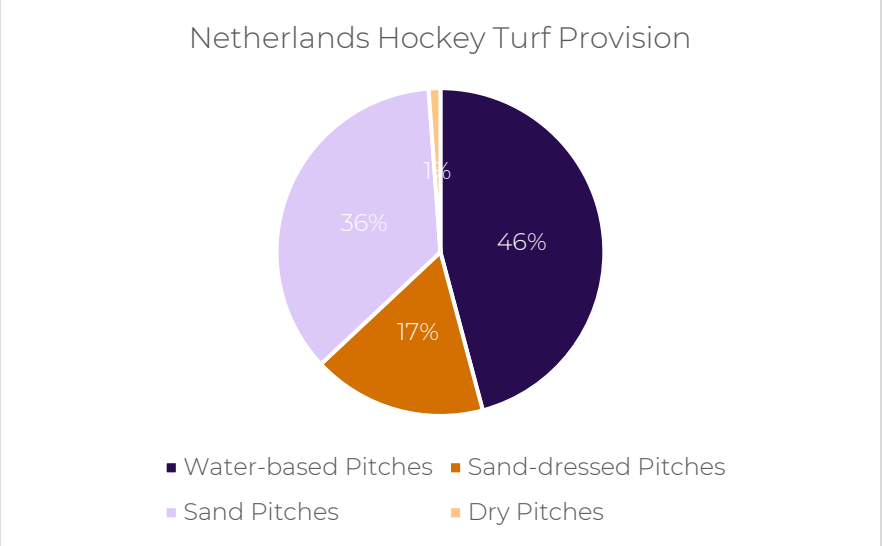


The pie charts highlight the imbalance in turf provision, where 73% of the turfs are water-based and tailored for elite or high-performance players. However, only 1% of the player population falls into this category. As a result, 99% of players are likely playing on a surface that exceeds their age or ability requirements.

> *"Kids are playing on the equivalent of Eden Park for hockey."*
>
> Andy McLean, Otago Hockey

When comparing New Zealand's turf provision for hockey with that of the Netherlands, several insights emerge. The Netherlands, with its large participation and membership base (240,000 members), has established itself as a global leader in the sport, consistently performing well on the world stage. The country boasts a strong tradition in hockey, both at the amateur and professional levels, supported by extensive infrastructure.

Figure 6.5: Netherlands Hockey Turf Provision



Netherlands Hockey reported the following:

- 240,000 members across 326 clubs, with 65% being female.
- A total of 950 turfs nationwide.
- The primary users of artificial surfaces are hockey clubs.
- The secondary use is by schools, during Autumn, Spring and Summer
- Schools (both primary and secondary) frequently use these turfs for Physical Education (PE) lessons during warmer months (spring, summer, and autumn).
- Schools tend toward sand-based pitches (sand and sand-dressed) due to their versatility for different sports.

The dominance of water-based turfs is evident through the facility audit. This type of turf is primarily designed to meet the demands of elite-level play rather than addressing the majority of playing needs at the grassroots level, according to the FIH guidelines.

Despite less than 1% of the population participating in elite or high-performance hockey, 73% of the hockey surfaces in New Zealand are water-based, designed for performance and elite play.

The main takeaway from the analysis is that hockey facilities in New Zealand are over-specified at a community level.

7 Venue and Facilities Context

7.1 Summary and Key Messages

The following section presents the findings from the Hockey Association Facilities Survey 2023 and follow-up interviews. The survey was conducted with 32 regional hockey associations, revealing insights into venue age, turf conditions, upgrade requirements, and satisfaction levels.

Key Findings:

- New Zealand has 89 hockey venues, with approx..120 turfs, 78% being under 20 years old.
- While many facilities are relatively modern, ongoing maintenance and turf replacements remain a significant challenge.
- 60 turfs across New Zealand require replacement, upgrades, or disposal within the next six years.
- Estimated cost: $30–$42 million, with the majority of funding (86%) expected to come from community funders.
- 41% of associations reported dissatisfaction with current venue amenities, citing insufficient changing rooms, social spaces, and parking.
- Despite these concerns, 78% of associations are satisfied with their venue locations, and 66% are satisfied with the overall condition of facilities.
- 38% of associations feel current facilities will not meet future hockey needs.

Key Message

While New Zealand's hockey infrastructure is relatively modern, the sport faces significant facility renewal challenges in the coming years. With 60 turfs needing replacement within six years and increasing dissatisfaction with amenities, there is a clear need for strategic investment in facility upgrades and sustainability planning.

7.2 Venue Age

A venue is defined as a place where hockey is played and includes other facilities, such as off-turf amenities, pavilion, change facilities and other supporting infrastructure.

There are 89 venues distributed across both North and South Islands. The age distribution of hockey venues across New Zealand is relatively young, with 78% of venues being less than 20 years old. It is important to note that some venues have more than one turf or additional amenities, each of which may have its own distinct lifecycle and maintenance schedule.

26%	Playing venues less than 6 years old.
26%	Playing venues 6-10 years old.
26%	Playing venues 11-20 years.

7.3 Turf Upgrades and Resourcing

Hockey associations have expressed the need to replace, upgrade, dispose and or develop **60 turfs** within the next **six years.** These surface developments are estimated to cost the hockey community between **$30 –and $42 million**.

28 turfs	next 3 years
32 turfs	4 to 6 years
53 turfs	7 to 15 years

The average lifespan of an artificial turf typically sits around 12 years, though most companies suggest it can range from 10 to 15 years, depending on factors such as frequency of use and the quality of ongoing maintenance.

A significant challenge for the hockey community is the substantial and potentially undeliverable investment required to maintain the existing network. The figures above do not include new developments, for example, Colin Maiden Park in Auckland.

Hockey associations, through the Hockey Association Facilities Survey, have identified various funding sources for turf replacements, with a heavy reliance on community funders, (86%), to support these projects.

The full breakdown of surfaces to be replaced, upgraded, disposed of and/or new developments with proposed timeframes can be seen in Table 7.1.

Table 7.1: Hockey Association Estimated Renewal, Disposal and New Development Timeframes.

Association	Next 3 years		Next 4-6 years		7-15 years	
	Renewal	New[9]	Renewal	New	Renewal	New
Auckland	1	1	3		9	
Bay of Plenty	0		3		1	
Buller	1		0		0	
Canterbury	3		6		7	
Central Hawkes Bay	0		0		1	
Central Otago	0		2		2	
Counties Manukau	1		1		1	
Eastern Southland	1		0		0	
Hawkes Bay	1		1		2	
Horowhenua	0		0		1	
Invercargill	0		0		3	
Malvern	N/A[10]		N/A		N/A	
Manawatū	0		2		1	
Marlborough	0		0		2	
Mid-Canterbury	1		1		0	
Nelson	1		1		0	

[9] Several hockey associations have indicated plans for new turf development in the early stages. As these projects have not yet begun construction, they are not included in Table 7.1.

[10] N/A indicates data was not available, hockey associations either did not complete the Hockey Association Facilities Survey or did not provide data to HNZ.

Association	Next 3 years		Next 4-6 years		7-15 years	
	Renewal	New[9]	Renewal	New	Renewal	New
North Harbour	1		2		8	
Northland	2		0		3	
North Otago	0		2		0	
Otago	2		0		1	
Poverty Bay	1		0		0	
Rangitīkei	N/A		N/A		N/A	
Ruahine Dannevirke	N/A		N/A		N/A	
South Canterbury	2		0		0	
Taranaki	1		0		1	
Tauranga	2		2		2	
Thames Valley	0		0		1	
Waikato	4		0		4	
Wairarapa	1		1		0	
Wellington	2		3		2	
West Coast	0		1		0	
Whanganui	0		1		1	
TOTALS	28	1	32		53	

7.4 Venue Amenities

Social spaces such as pavilions, changing rooms and other amenities for players officials, spectators and volunteers are integral to creating welcoming and inclusive environments for the hockey community. The facilities are essential for hockey clubs to operate effectively and engage meaningfully with their users and the broader community.

Based on the facilities survey conducted by the hockey association in 2023, 41% of respondents reported feeling dissatisfied or highly dissatisfied with the current amenities provided. A significant portion of the feedback highlighted concerns with or lack of car parking, changing rooms, and social spaces. Respondents frequently cited a shortage of these amenities, subpar quality, and inadequate maintenance of existing facilities as major concerns. Additionally, many comments emphasised that the current amenities do not meet the evolving needs and expectations of the community.

"There is no building to get changed and they have given us containers, with doors that are yet to be installed, they bring in Portaloo's, no building for clubroom or social connection."

"We have an issue with access and car parking and would like more support facilities such as seating, shelter etc."

"Trust run by volunteers struggles with maintenance of venues, one venue has no changing rooms, pavilion and grandstands etc"

"The changing rooms / downstairs of the pavilion is aging and is not suitable for the changing landscape of our society."

Quotes taken from the Hockey Association Facilities Survey 2023 – Hockey Association Feedback.

Well-designed community spaces and changing rooms play a vital role in the success of a club, its sporting precinct, and the broader local community. These versatile spaces can serve multiple user groups while celebrating the club's history and achievements. Noting the current lack of information about non-users, this presents a valuable opportunity to prioritise accessibility and inclusivity in facility planning. By developing functional changing rooms, social spaces, and other essential amenities with these considerations in mind, hockey clubs can better meet the needs of all genders, abilities, and ages, ultimately enhancing the experience for everyone.

7.5 Venue Satisfaction

The hockey associations' satisfaction[11] with venues they currently utilise varies significantly across different aspects, including venue location, condition, ability to meet current and future needs, provision of amenities, and management of facilities.

[11] Refer to Appendix 4 for the Hockey Association Facilities Survey Results

The following insights were extracted from the Hockey Association Facilities Survey Results:

- 78% expressed satisfaction or high satisfaction with the location of hockey venues.
- 66% indicated satisfaction or high satisfaction with the overall condition of venues.
- 56% expressed satisfaction or high satisfaction with the capacity to meet current needs.
- However, 38% expressed dissatisfaction or high dissatisfaction with the ability to meet future needs.
- 41% expressed dissatisfaction or high dissatisfaction with the provision of amenities.
- On the other hand, 56% expressed satisfaction or high satisfaction with the management and maintenance of hockey venues.

"Ensuring our facilities are suitable to welcome and host all areas of our community (on and off the turf) including having the ability to be innovative with different and new hockey products."

"While facilities meet the needs, they are in need of upgrade and maintenance. The building is 30 years old now and requires some upgrading. However, it is functional and well looked after."

"It is a constant juggle to get all junior games, festival, senior games, clubs training, representative teams training all on one playing facility"

The subsequent quotations originated from the Hockey Association Facilities Survey conducted in collaboration with 32 New Zealand hockey associations.

8 Sustainability

8.1 Summary and Key Messages

The following section presents detailed research and analysis of the sustainability challenges faced by hockey in New Zealand, focusing on several key points:

Lack of Sustainability Plans: Only one hockey association in New Zealand has a sustainability plan in place. This highlights a significant gap in understanding and addressing sustainability issues across the sport.

Environmental Sustainability Challenges: Hockey in New Zealand faces multiple environmental challenges:

- Water-Based Turfs: These turfs require substantial water usage, contributing to water resource concerns and increasing costs to use water.

- Microplastics: The use of artificial turfs leads to the release of microplastics, which pose environmental hazards.
- Carbon Emissions: The facility provision contributes to carbon emissions, impacting climate change.
- Inundation: Facilities are at risk of flooding and other climate-related impacts.
- Social Licence: Given the impact turfs can have on climate change, through increased surface temperatures, water runoff issues, and the use of non-biodegradable materials, consideration needs to be given to the social licence to operate such turfs.

Financial Sustainability: Maintaining the current hockey infrastructure is financially challenging. High operational and disposal costs strain the resources of hockey associations and turf trusts which have a high dependence on external funding to maintain hockey facilities.

Key Message

Hockey in New Zealand faces significant sustainability challenges that require urgent attention. With only one hockey association having a sustainability plan, the sport is ill-prepared to tackle the environmental issues posed by water-based turfs, microplastics, carbon emissions, and inundation. Additionally, the financial sustainability of maintaining and operating hockey facilities is a major concern, with high operational and disposal costs. Developing comprehensive sustainability plans and adopting environmentally friendly practices are essential steps toward ensuring the long-term viability and environmental responsibility of hockey in New Zealand.

Sport New Zealand's Environmental Sustainability Guidelines for Spaces and Places (Appendix 8) provide clear and practical advice to help sports organisations navigate ways to improve their environmental footprint.

8.2 Sustainability Landscape

The current landscape of hockey has been shaped by data from the Hockey Association Facilities Survey, stakeholder interviews, and discussions at the national hockey conference[12]. The following key points were identified:

38%	Hockey venues are not fully utilised.
1	One hockey association has a formal sustainability plan.
86%	Hockey associations have no sustainability awareness initiatives.
70%	Associations have plans to upgrade, renew, develop and or dispose of facilities in the foreseeable future.
26	Hockey associations indicated community grants contribute to turf renewal costs.

Ensuring the sustainability of hockey in New Zealand is a multifaceted challenge, encompassing both financial viability and environmental responsibility. In an increasingly competitive sports landscape, hockey faces mounting financial pressures as it vies for funding amidst a myriad of other sporting pursuits. With a heavy reliance on community funding, the financial landscape becomes even more precarious, necessitating strategic planning and diversification of revenue streams to maintain stability.

Moreover, the environmental sustainability of hockey infrastructure is a pressing concern. With 73% of turfs in New Zealand being water-based and a notable dependence on water for operation, hockey grapples with its environmental footprint. The prevalence of plastic turfs exacerbates this issue, highlighting the need for alternative, eco-friendly practices.

Moving forward, sustainability must be a central focus for the hockey community, especially considering that only 1 out of 32 hockey associations currently have sustainability plans in place. A considerable number of associations have acknowledged the challenges surrounding accessibility to the sport, primarily due to the cost of participation compared to similar team sports and the environmental implications of maintaining turf-based facilities.

8.3 Environmental Sustainability

With increasing awareness of the need to take care of the environment, the short and long-term impact on the environment of sport and recreation facilities is becoming more and more under the spotlight.

Water use, energy use, light-spill, chemical use, microplastic containment during maintenance and use, and the carbon emissions related to the installation and disposal of materials at the end of their useful life all impact the environment and should be considered in the facility planning and design phases.

[12] Refer to Appendix 17 for the list of stakeholders engaged during the strategy.

"Watering a hockey field does, however, come at a cost, both financially and environmentally, and it is increasingly being recognised that this is no longer a sustainable policy for hockey. Therefore, the FIH has challenged the synthetic turf industry to develop hockey turfs that retain the desired characteristics, but without using water."

FIH

8.3.1 The development of dry (non-irrigated) hockey turfs

"The FIH started working with the synthetic turf industry in 201 6 to develop surfaces that used less water, and this has resulted in a reduction of around 70% from the typical watering needs of a decade ago. Whilst this reduction is significant, the surfaces still require some water, so the FIH has challenged the synthetic turf industry to develop hockey turfs that provide acceptable playing conditions for top-level hockey without watering.

Moving away from insisting that this category of turf is watered means that the performance requirements for this category of surface need to be revised. Based on research undertaken by the UK's Loughborough University and specialist sports surface testing laboratory Labosport, the FIH, in May 2023, introduced an Innovation Category into our Hockey Turf and Field Standards.

Since the launch of the Innovation Category, an increasing number of manufacturers are developing hockey turfs to satisfy the criteria and submitting their products for independent evaluation in the laboratory. Those that are found to satisfy the criteria are awarded the designation of being an FIH Approved Innovation Category Hockey Turf and are listed on our website at FIH Approved Dry (No Irrigated) Hockey Turfs.

As Dry Turf fields are built around the world, we will seek player feedback on how they perform. Once the evidence shows the Dry Turf surfaces can provide acceptable performance for top-level hockey in all conditions in which hockey is played, we will remove our current requirement that Global category hockey turfs must be watered prior to play. The first formal review of how Dry Turf surfaces are perceived and our performance criteria is planned for September 2024 (currently no update has been provided). If required, further reviews will be undertaken every six months thereafter."[13]

8.3.2 Carbon Emissions

The carbon emissions associated with artificial hockey turfs can vary depending on various factors such as the materials used in their construction, the manufacturing process, transportation, installation, maintenance, and end-of-life disposal.

Factors to consider:

[13] https://www.fih.hockey/static-assets/pdf/dry-turf-project-update-march-2024.pdf

- **Manufacturing:** The production of materials such as synthetic fibres (e.g., polyethene, polypropylene) and the backing materials (e.g., rubber, latex) contribute to carbon emissions. The energy sources used in manufacturing also play a significant role.
- **Transportation:** Carbon emissions are generated during the transportation of raw materials to the manufacturing site and the transportation of the finished product to its destination.
- **Installation:** Depending on the method of installation, carbon emissions may be generated from equipment usage, transportation of installation materials, and energy consumption during the installation process.
- **Maintenance:** Regular maintenance of artificial turfs may involve the use of equipment such as groomers, leaf blowers, and other machinery, which contribute to carbon emissions. Additionally, the use of chemicals for cleaning and maintenance purposes can also generate emissions.
- **End-of-life disposal:** When artificial turfs reach the end of their lifecycle, they may be disposed of in landfills or recycled. Both processes have associated carbon emissions, particularly if recycling involves energy-intensive processes.

The calculation formula for off-setting these emissions is based on conventional plastic-based turf, it does not factor in 82% bio-carbon as used in the new generation of 'green turfs'. It is supplied for comparison purposes and should be seen as an estimate. Refer to Appendix 5 for the Carbon Emissions Calculation Table.[i]

Practical considerations and checklists can be found in the Environmental Sustainability Guidelines for Spaces and Places, refer to section 8.3.7 for more information or Appendix 7.

> "The cost of offsetting carbon emissions is approximately $8k per year or $80k over a 10-year period"
>
> Nick Meeten - Applied Energy, Dec 2023

8.3.3 Water Use

Water usage is increasingly becoming a concern due to rising costs and its status as a scarce resource, making the maintenance of water-based hockey turfs a significant challenge. Water usage costs in New Zealand can vary depending on several factors such as location, the supplier, usage volume, and whether the usage is for residential, commercial, or industrial purposes. Generally, water charges in New Zealand are based on consumption measured in cubic meters (m^3) or litres (L), with rates typically consisting of a fixed charge (a base fee) and a variable charge (based on usage volume).

For residential users, water charges may range from around **NZD $1.30 to $3.50 per** cubic meter, although prices can be higher in regions facing water scarcity or where water infrastructure maintenance costs are significant. The new turf products showcased at the 2024 Paris Olympics required 6,000 litres of water per game, compared to the current turf systems in use in New Zealand, which can require up to 15,000 litres per spraying session.

Commercial and industrial water usage rates may vary considerably depending on factors such as the scale of operation, the industry sector, and any special requirements for water quality or treatment.

Each local authority will have specific water usage charges. Additionally, water-saving measures and conservation efforts may impact overall water usage costs for individuals and businesses.

An example of current water charges (all per 1000 litres) across several local authorities can be found below.

$1.99	Auckland
$1.35	Christchurch
$1.64	Gisborne
$3.40	Tauranga
$2.27	Waikato

"FIH ultimately wishes to see all levels of hockey played on surfaces that do not need watering. Whilst the industry innovates and develops this technology, those considering a wet surface are encouraged to select a surface that has been FIH-approved, using an irrigation rate of no more than 1 l/m2. Likewise, water harvesting and water recycling should be utilised, wherever possible." [14]

8.3.4 Microplastics

A major focus for the FIH is addressing the issue of microplastics. It is actively advocating for a reduction in microplastic use, particularly in Europe. The European Union is developing more stringent standards in this area, and there is a specific initiative to ban the sale of rubber crumb infill, which is targeted for implementation by 2031. This move aims to significantly decrease the environmental impact of synthetic turf in hockey by eliminating one of the primary sources of microplastic pollution. The FIH's efforts are part of a broader push towards sustainability and environmental responsibility within the sport.

Concerns about microplastics in hockey from an environmental sustainability perspective include:

- **Pollution of Natural Waterways:** Microplastics from hockey turf and equipment can wash into stormwater systems and eventually end up in rivers, lakes, and oceans, contributing to water pollution and harming aquatic life.
- **Soil Contamination**: Microplastics can accumulate in the soil around hockey fields, potentially affecting soil health and the organisms that live in it, including plants and microorganisms crucial for soil fertility.
- **Impact on Wildlife:** Microplastics can be ingested by wildlife, leading to physical harm, reproductive issues, and even death. This is particularly concerning for animals that live near or frequent sports facilities.
- **Human Health Risks**: There is growing concern about the potential health risks of microplastics, as they can enter the food chain. Hockey players and spectators might also be exposed to microplastics through inhalation or skin contact.
- **Long-term Environmental Impact**: Microplastics are persistent pollutants, meaning they do not degrade easily and can remain in the environment for hundreds of years. This long-term presence poses ongoing risks to ecosystems and biodiversity.
- **Synthetic Turf Degradation**: As synthetic turf and shock pad ages and wears down, it releases microplastics into the environment. The disposal of old synthetic turf also contributes to microplastic pollution.
- **Challenges in Waste Management**: Proper disposal and recycling and re-use of synthetic materials used in hockey equipment and turf can be challenging, leading to increased environmental burden if not managed correctly.
- **Regulatory and Compliance Issues**: As awareness and regulation around microplastics increase, hockey facilities may face challenges in meeting new environmental standards,

[14] https://www.fih.hockey/static-assets/pdf/fih-facilities-guidance-outdoor-hockey-facilities.pdf

potentially incurring additional costs for compliance and adaptation. There may also be challenges finding funding and leases due to changing policies and requirements from Councils, the Ministry of Education and funders.

8.3.5 Inundation – Flooding and Sea Level Rise

The impacts of inundation on hockey can be multifaceted and significant, ranging from immediate disruptions to long-term consequences for players, facilities, and the broader hockey community.

Inundation, whether caused by natural disasters such as floods or rising sea levels due to climate change, poses various challenges to the sport's infrastructure, accessibility, and sustainability.

Floodwaters can damage playing surfaces, equipment, and facilities, leading to costly repairs and temporary closures, it can also cause microplastic migration and reduce the life of the surface. Moreover, inundation can displace players, coaches, and officials, disrupting training schedules, competitions, and community engagement initiatives. Beyond the immediate aftermath, repeated inundation events can erode the resilience of hockey ecosystems, affecting participation rates, sponsorship opportunities, and the overall viability of the sport in vulnerable regions.

Addressing the impacts of inundation on hockey requires proactive measures, including appropriate site selection, resilient infrastructure design, adaptation strategies, and collaborative efforts with stakeholders to mitigate risks and ensure the long-term viability and inclusivity of the sport in the face of environmental challenges.

Refer to Appendix 6 for the breakdown of inundation activity by region.

8.3.6 Hub and Spoke Model

In national facility planning, a hub-and-spoke model is frequently preferred. This model entails positioning a central regional hub, encircled by satellite facilities, to enhance provision efficiency, reduce duplication and provision costs, minimise travel time and participant costs, and increase proximity to public transportation.

Challenges can arise due to the region's shape, travel distances, geography and road network configuration. Travel time further complicates implementation, potentially discouraging participation, especially in remote areas. Utilising existing facilities like schools and tennis clubs can bolster the spoke component of the model, minimising travel time and environmental footprints.

Careful consideration of both population distribution and travel implications is crucial when determining the optimal location for regional hub facilities to ensure inclusivity and sustainability. Several examples of the hub and spoke model can be seen around New Zealand, examples include Wellington’s hub based in Newtown, North Harbour’s hub in Rosedale and Dunedin’s at Logan Park.

8.3.7 Environmental Sustainability Guidelines for Spaces and Places

Sport NZ has identified the need for clear, practical guidelines to help sport and recreation organisations navigate the range of issues relating to environmental sustainability that affect spaces and places for play, active recreation and sport in Aotearoa New Zealand.

As a result, Sport NZ has developed in conjunction with specialist consultants the Environmental Sustainability Guidelines for Spaces and Places. Although not specifically focused on hockey turfs, there are benefits, impacts, and mitigation strategies that can be applied to the hockey community.

The guidelines are intended to help organisations identify and adopt sustainability measures that will:

1. Help to improve present operations
2. Support decision-making for future investment

The complete environmental sustainability guidelines are available in Appendix 7 – Environmental Sustainability Guidelines for Spaces and Places. The environmental and sustainability guidelines, published partway through 2024, have likely not yet been utilised by hockey associations.

8.4 Financial Sustainability

8.4.1 Cost of Living

The rising cost of living in New Zealand is significantly impacting the hockey community. As everyday expenses such as housing, utilities, and food increase, families and individuals find it more challenging to allocate funds for sports and recreational activities. This financial strain affects participation rates, with many players unable to afford membership fees, equipment costs, and travel expenses associated with the sport. Additionally, hockey clubs and associations face higher operational costs, typically associated with the provision of sport-specific facilities (i.e. maintenance operations), which can lead to increased fees for participants. These economic pressures may hinder the growth and accessibility of hockey in New Zealand, potentially limiting opportunities for young athletes and reducing overall community engagement in the sport.

8.4.2 Capital Cost

The cost of an artificial field hockey turf field with standard dimensions can vary, depending on the region in which the turf field is to be installed, the size of the pitch, the desired turf system, the product quality, and the infill (if any). Additional costs may include, design and consent fees, concrete and kerb, fencing, shock pads, rubber base, transformers, floodlights/LED lighting systems, car parking, changing rooms, social facilities and more.

The overall cost of construction will be dependent on what skills and materials that are available locally. The greatest risk to a project and the biggest cause of escalating costs is the result of not understanding and fully accounting for the costs associated with ground conditions. The level of service and specifications chosen can significantly impact the overall costs." [15]

8.4.3 Operational Cost

The whole-of-life cost of turfs and associated facilities should include a thorough assessment of key elements such as maintenance practices and costs that optimise the facility's lifespan, operating expenses, renewal and replacement due to wear and tear, as well as potential income from usage fees. Additionally, usage frequency—such as the number of games and training sessions per week, month, or year—should be considered. Specialist surfaces, like water-based artificial turfs, require specific, regular care and maintenance to ensure their longevity and performance.

"Historically, it has been suggested that maintenance costs required for artificial fields are lower than natural grass fields, however, this is not always the case and is dependent on the field type and level of service requirements. It is generally accepted that most artificial sports fields require daily and routine maintenance and quarterly specialist service." [16]

As water becomes a more precious resource, water charges are increasingly being introduced by councils in an effort to reduce use and recover costs.

8.4.4 Disposal Costs

The disposal costs of artificial turf can vary depending on several factors such as location, size of the turf, local regulations, and the method of disposal. Generally, artificial turf disposal involves costs related to labour for removal, transportation, and disposal fees at appropriate waste management facilities.

It is recommended for up-to-date information about disposal costs for artificial turf in New Zealand, to connect with local waste management companies and relevant authorities such as city councils or environmental agencies. Such operators can provide current information on disposal fees, recycling options, and any specific regulations governing the disposal of artificial turf in their area.

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15 Sport NZ Sports Field Development Guide 2020

[16] Sport NZ Sports Field Development Guide 2020

8.4.5 Whole-of-Life Calculations

If there is a clear and identified need to develop a new turf it is important to understand the whole of life costs, not just the cost of construction. Whole-of-life costs include development of the turf, operational costs (such as insurance, rates, energy, water, staff, and ground lease), maintenance of the turf and amenities (such as grooming, spraying, repairs) and when it reaches the end of its useful life, disposal costs and consideration of any renewal costs.

Budgeting for annual maintenance alongside operating costs is critical and often overlooked in the planning stages of a new turf. Agreement for who is responsible for the various costs and the assumptions around how they will be funded (I.e. user fees, sponsorship, operating grant, community funders) during the life of a turf (capital, operations, renewals, disposals) needs to be agreed before commitments are made to develop any new turf.

Table 8.1 shows current turf cost estimates and the range of inputs that can be considered when planning for a hockey turf.

Table 8.1 Estimated Capital, Operating and Renewal Costs for One Turf

Cost Area	Estimated Cost Range[17]
Development of Turf (including minimal site preparation, shock pad, carpet, fencing, and floodlights)	$2.2m - $2.75m
Operating and Maintenance Costs (such as energy costs, water, lights, insurance, grooming, wee/mould spraying.)	$25-$40/annum
Turf Renewal Costs (turf replacement (including replacement carpet) in 10-12 years – approx.)	$500k-$700k
Turf Disposal Costs	$100k-$120k

*Exclusions:

- Site investigations, including geotechnical assessment, consents, planning and design fees.
- Fencing and lighting (will vary depending on site and level of lighting required).
- No allowance is made in these totals for offsetting carbon emissions related to artificial turf. Recent New Zealand-based estimates place this at averaging approximately $8,000 / year for the life of the turf.

The table above demonstrates that turf costs may range from $2.8m - $3.57m for the development, disposal and renewal of a turf, along with annual operating and maintenance costs.

The cost difference between a water-based turf and a sand-dressed turf is approximately $0.20m - $0.25m, which is mainly made up of more expensive installation and maintenance costs due to the requirement of a watering system.

An easy-to-use tool is available at Sport New Zeland[18] to provide an understanding of any turf project's whole of life cost.

[17] Cost estimates are in New Zealand dollars, excluding GST. They are estimates only and should be used as such. Figures are taken from known projects nationally in 2022-2023. Any future development should undertake site research to provide up to date, site specific estimates. Prices exclude off-turf development costs for items such as storage, change and toilet blocks, social spaces, car parking etc.

[18] Whole of life costs model for sports fields

9 Ownership Models

9.1 Summary and Key Messages

The following section presents detailed research and analysis of the ownership models of hockey venues, facilities and turfs in New Zealand, highlighting several critical points:

Mixed Ownership Models: Hockey facilities in New Zealand are owned through a mix of different models, including turf trusts, Councils, schools, and hockey associations. With numerous turf owners across the country, there is a diverse landscape of facility management.

Indirect Ownership by RSOs: Most Regional Sports Organisations (RSOs) do not directly own their hockey facilities. Instead, they rely on land provided by third parties such as councils and schools, often at low or no cost.

Common Use of Turf Trust: The common use of turf trusts, a prevalent ownership model for hockey facilities, allows these not-for-profit organisations to leverage third-party funding to subsidise both capital and operational costs. This partial cost recovery model significantly reduces expenses for users, making hockey more affordable for the community.

Community-Focused Ownership by Councils and Schools: Councils and schools are crucial resources for the hockey community. Their make-up of turf types is more balanced with a range of different surfaces aligned to FIH player categories than those of hockey associations and turf trusts. This alignment indicates a stronger focus on meeting community needs and growing the sport.

Sustainability Commitment by Councils and Schools: Councils and schools are more likely to meet sustainability needs, both environmental and financial. Their approach demonstrates a commitment to the long-term viability and responsible management of hockey facilities.

9.2 Key Message

Hockey in New Zealand operates under diverse and mixed ownership models, including turf trusts, councils, schools, and hockey associations. Most hockey associations do not own their facilities directly, relying on land provided by third parties, often at minimal cost. Turf trusts, as not-for-profit entities, play a crucial role in subsidising costs through third-party funding, which helps reduce expenses for users.

Councils and schools are particularly significant in this landscape, providing facilities that are more community-focused and aligned with FIH standards. Their commitment to sustainability, both environmental and financial, positions them as key contributors to the growth and long-term success of hockey in New Zealand. There is no single best practice model, as each ownership model has its own strengths and weaknesses. However, the key elements to ensure the success of any ownership model are:

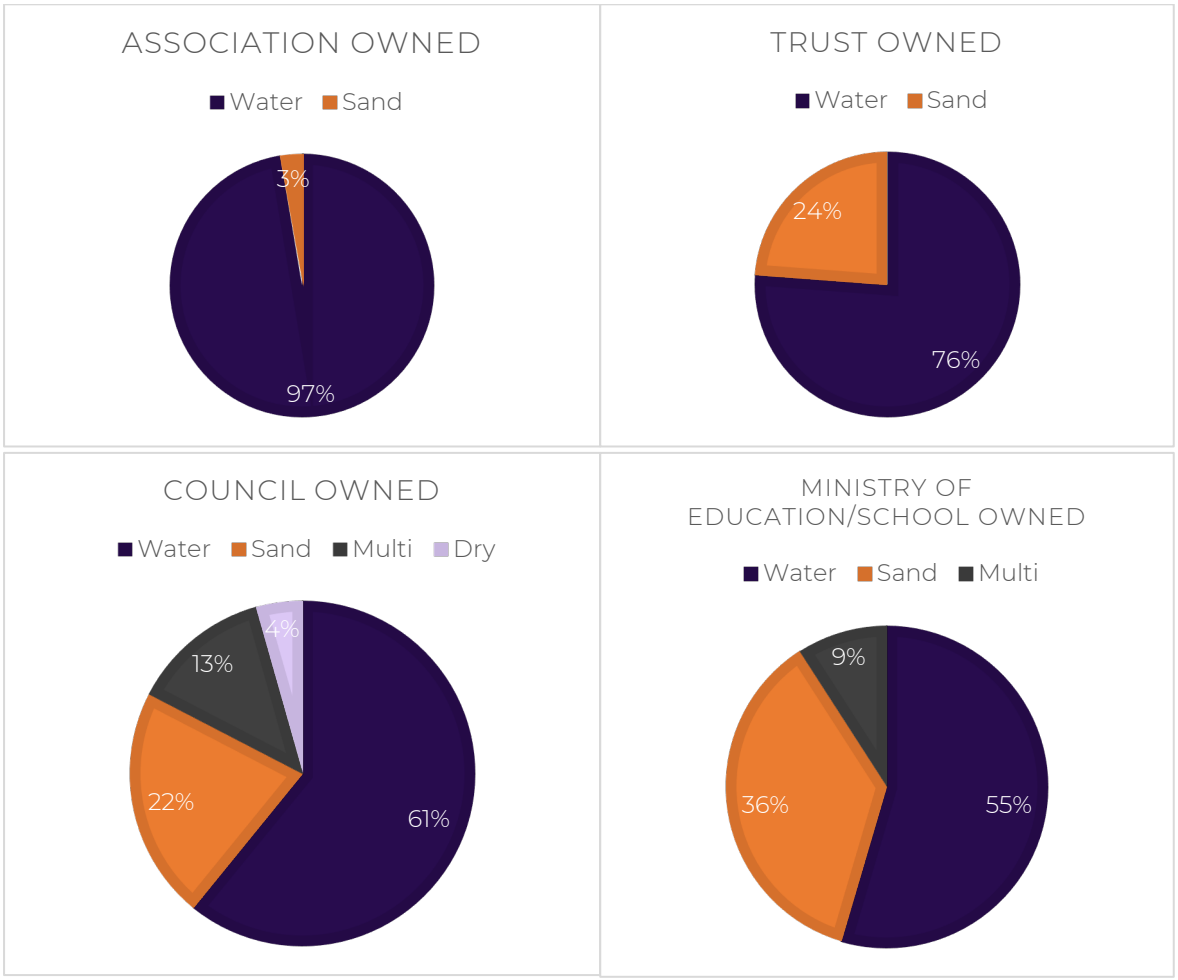
- **Strong Relationships and Aligned Vision**: Building strong relationships and ensuring that vision and values are aligned, along with strategic direction are key to success.
- **Financial Sustainability:** Ensuring financial sustainability for the hockey community is essential, ensuring the full life cycle has been costed of turfs and venues.
- **Accessibility and Affordability:** Preventing barriers to entry by keeping hockey as affordable as possible is vital for widespread participation.

The following pie charts illustrate the differences in the types of turfs provided based on the various possible ownership models.

1) For hockey association-owned venues the breakdown is water-based turfs 97%, sand-based turfs 3%

2) For trust-owned venues the breakdown is water-based turfs 76%, sand-based turfs 24%
3) For Council-owned venues the breakdown is water-based turfs 61%, sand-based turfs 22%, multi-use turfs 13%, 4% dry-based turfs (irrigation removed from water-based turf)
4) The final chart provides a visual representation of how different turf types are allocated among school-owned facilities, the breakdown is as follows: 55% are water, 36% are sand, 9% are multi-use surfaces.

Figure 9.1: Ownership Versus Turf Type Breakdown



9.3 Is There a Best Practice Model?

Appendix 8 presents a high-level summary of the advantages and disadvantages of each ownership model.

By evaluating these advantages and disadvantages, hockey associations and clubs can make informed decisions about whether facility ownership is the best option for fostering the growth and development of the sport in their community. Every ownership model can be effective, depending on the specific context and landscape of the hockey community. To increase the likelihood of a successful model, the following elements are crucial:

- **Strong Relationships and Aligned Vision**: Building strong relationships and ensuring that vision and values are aligned, along with strategic direction are key to success.

- **Financial Sustainability:** Ensuring financial sustainability for the hockey community is essential. A key element is to factor in the full life cost of maintaining a turf.
- **Accessibility and Affordability:** Preventing barriers to entry by keeping hockey as affordable as possible is vital for widespread participation.

> *"it's about sustainability for the game, what can hockey be played on versus what hockey owns".*
>
> - Ken Maplesden
>
> General Manager - Hockey Network

10 Strengths and Opportunities

In contrast to some of hockey's challenges, hockey stands out for its commitment to gender equity, offering a platform where both men and women can compete and excel equally. As an innovative sport, hockey continually adapts its game and rule formats to enhance accessibility and excitement. Innovations such as smaller game formats and the removal of the offside rule have modernised the sport, making it more engaging for players and spectators alike. These strengths underscore hockey's progressive approach and its ability to adapt and respond to the nation's communities.

Through stakeholder engagement and analysis of Hockey Association Facilities Survey data, a number of opportunities have been identified aimed at mitigating the challenges currently confronting the hockey community. From initiatives promoting different hockey delivery models and surfaces to sustainable practices and partnerships, these opportunities present a roadmap for overcoming obstacles and steering the hockey community towards a brighter future that fosters innovation, inclusivity, and sustained growth within the sport.

10.1 Exploring Different Hockey Delivery Models

Diversifying hockey delivery models, including relaxing and creating a more informal hockey experience will engage a broader range of participants and a wider range of settings. This could involve introducing variations in the format of the game, creating leagues or tournaments tailored to different skill levels, or implementing innovative coaching and training methods. Adapting the delivery model to accommodate various age groups, skill levels, and playing preferences can contribute to increased participation and engagement.

10.2 Utilising Different Surfaces and Locations for Hockey

Exploring different playing surfaces and locations presents opportunities to expand the reach and appeal of hockey, while also increasing access by reducing travel costs and barriers for participants. While water-based turfs are standard in New Zealand, alternative surfaces such as multi-use surfaces, beaches, netball/tennis hard courts, or even parking areas can add a dynamic element to the sport. These diverse surfaces offer unique challenges and opportunities, attracting a broader range of players and spectators. By bringing hockey closer to home, more participants can be engaged and volunteerism potentially boosted. Associations must consider how to facilitate this shift, whether

through flexible affiliation fees, revised rules, stronger community engagement, or rethinking what hockey needs to look like and where it can be played.

10.3 Technology Integration

For example, digital platforms can be used to create virtual training resources, allowing players to improve their skills off-site and reducing the need for constant use of high-performance turfs. Virtual coaching sessions could be offered, providing access to expert guidance from anywhere, while reducing the pressure on physical facilities. Additionally, the integration of data analytics into training and gameplay can enhance performance insights without requiring top-tier infrastructure.

By embracing these technological solutions, hockey can make the sport more accessible, reduce costs, and broaden participation beyond elite, turf-specific environments. It also opens the door to more diverse playing surfaces and locations, supporting the development of a more inclusive and adaptable hockey community that challenges the notion that top-level turfs are necessary for skill development and competition. Technology can help hockey associations rethink what the sport can look like, enabling more flexible, community-driven, and cost-effective delivery models that appeal to a wider audience.

10.4 Off Peak Utilisation

The hockey community holds a significant opportunity to utilise off-peak times to its advantage. Off-peak times offer the chance to accommodate a broader range of players, including students, and families who may have limited availability during peak hours. By optimising scheduling to include off-peak slots, hockey clubs and organisations can foster inclusivity, attract new members, and promote the sport's growth. Moreover, utilising off-peak times efficiently can help alleviate pressure on facilities during peak hours, leading to better maintenance and longer-lasting infrastructure.

Off-peak utilisation in hockey refers to strategies for making the most of hockey facilities during times when they are not typically in high demand. There are three main types of off-peak utilisation:

1. Partnership utilisation: The most effective type of off-peak utilisation is when turf is a) developed in partnership with schools so they can use it for PE, interschool fixtures, and training during the school day, and b) relationships with off-season codes are developed (i.e. futsal, touch and pickleball)
2. School Hours (9 am - 4 pm): This type of utilisation targets the time during regular school hours when most facilities are usually underutilised. A good example is the under-5's hockey program in Tauranga. By offering programs for younger children during these hours, facilities can be effectively utilised while catering to a specific age group that might not otherwise have access to hockey during peak times. This also allows schools and parents to incorporate physical activity into the daily routine of young children.
3. Weeknight Games (Monday - Thursday): The third type of off-peak utilisation involves scheduling more hockey games during weekday evenings, particularly from Monday to Thursday. Marlborough Hockey is a prime example, having moved most if not all, games to these weeknights. This strategy frees up weekends, allowing athletes to participate in other sports or activities. It also helps distribute the demand on facilities more evenly throughout the week, reducing congestion and making better use of available resources during times that might otherwise cause lower usage.

10.5 Community Engagement Initiatives

Capitalising on these opportunities also presents a chance to deepen community engagement. By partnering with local organisations, hockey can host joint community events, outreach programs, and collaborate with schools. Introducing varied delivery models and playing surfaces will foster inclusive participation, encouraging a more diverse demographic to embrace the sport. This

approach should include co-designing programs with groups who may face barriers to access—such as people with disabilities, different cultural communities, and older adults.

10.6 Sustainable Practices

The development of partnerships and alternative delivery models provides an excellent platform to incorporate sustainable practices within the hockey community. Initiatives such as eco-friendly events, waste reduction programs, and energy-efficient facility management align with broader environmental and social responsibility goals, promoting a positive image for the sport and attracting environmentally conscious stakeholders.

Examples of eco-friendly practices are:

- Energy efficient practices can include collecting rainwater and reusing it, using LED lighting.
- Implement maintenance practices that reduce microplastic migration, such as installing filtration systems around artificial turfs and regularly sweeping the turf to prevent particle loss.
- Adjust watering schedules to use less water during cooler times of the day or install sensors to water only when necessary, minimising water usage on fields and reducing overall environmental impact.
- Install solar panels to power venues, reducing reliance on non-renewable energy sources.
- Introduce a 'zero-waste' policy at events, with stations for compost, recycling, and waste to encourage responsible disposal.
- Implement green procurement policies for operational supplies, opting for sustainable, biodegradable, or recycled products wherever possible.
- Create partnerships with local environmental groups for tree-planting or habitat restoration initiatives tied to sporting events.
- Regularly audit energy and water usage to identify areas for further sustainability improvements.
- Encourage public transportation, carpooling or cycling.
- Discount ticket prices for those who choose greener transportation options.
- Sustainable catering: partner with local vendors who use organic and locally sourced seasonal ingredients and use recyclable plates and cutlery.

Refer to Section 8 for more examples.

10.7 Developing Partnerships

Establishing strategic partnerships within and beyond the sports community presents a significant opportunity for hockey associations. Collaborating with local businesses, educational institutions, and community organisations can bring about mutual benefits. Potential partnerships might include sponsorships, joint events, or shared resources, enhancing the overall sustainability and visibility of the sport.

11 Supply and Demand

11.1 National Summary

In developing the national summary and individual association dashboards, various key indicators were examined to provide the hockey community with a comprehensive view of its landscape.

The national map and association dashboards are designed to reflect the challenges, opportunities, and principles outlined in this strategy. The map and dashboards encompass several critical areas, including:

- **Membership Participation and Categories:** Tracking current and forecasted participation rates across different membership categories to monitor growth and engagement within the community.
- **Turf Capacity:** Assessing supply, availability, and demand for turfs to ensure adequate resources for training and competitions.
- **Venue Information:** Detailing locations, ownership, age, renewal schedules, development plans, and sustainability initiatives for hockey venues to support strategic planning and resource allocation

The National Summary Map 2023 (Figure 12.1) presents a summary of national information using a traffic light system that has been employed to categorise the 32 hockey associations, with colours indicating different levels of demand and required action:

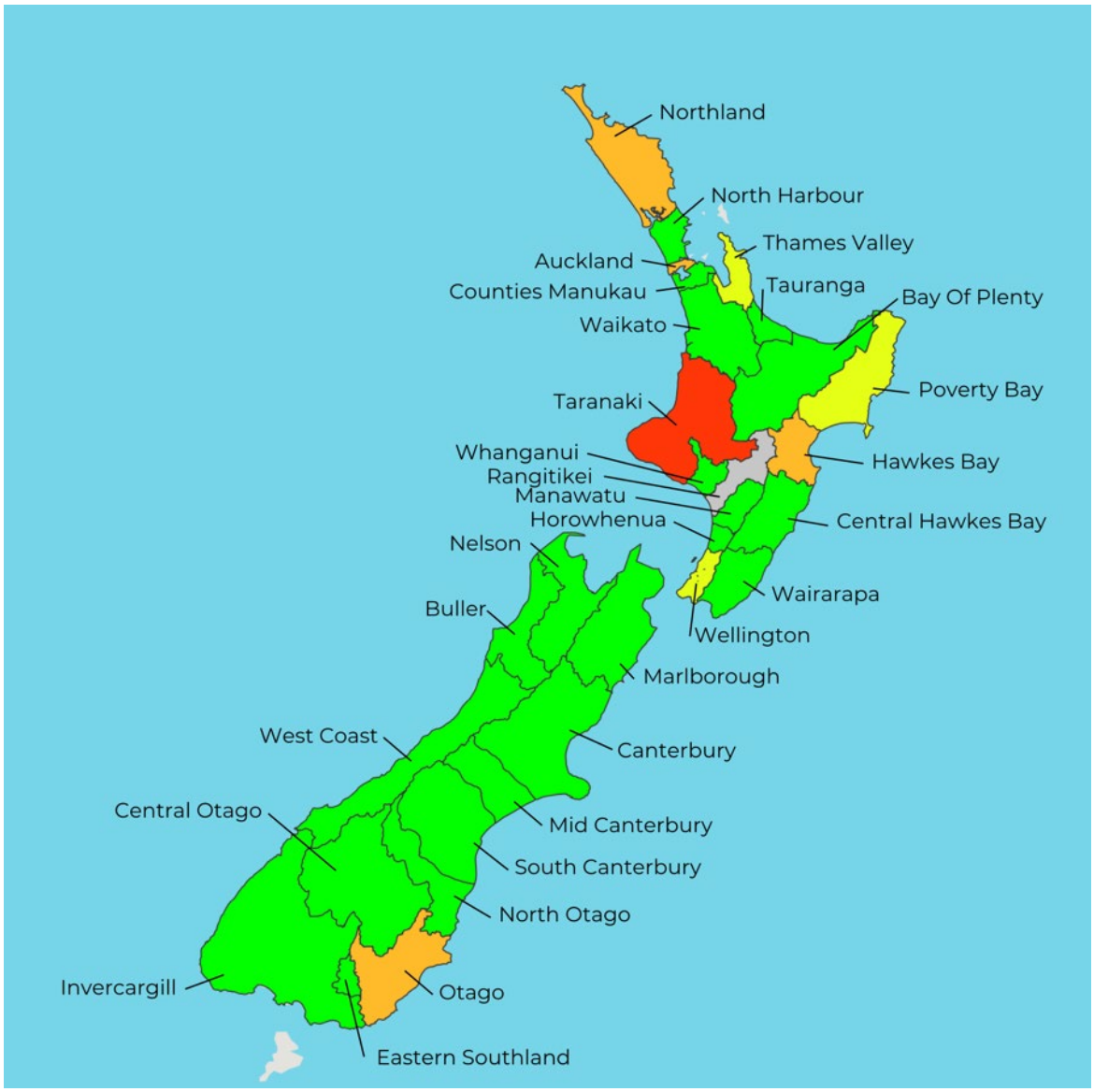
Demand threshold met or exceeded, likely requiring immediate action.
Demand parameters approaching the threshold, planned action should be considered.
Pressure is increasing, suggesting the need to begin investigating future options.
No obvious areas of concern
No data

The following indicators were utilised to evaluate each hockey association and assign the traffic light colour rating system above:

- Full turf players per FTE
- Total players per FTE
- A new calculation incorporating the stated assumptions regarding the number of teams, game durations, and assumed practice usage per FTE.

Additionally, the definition of FTE has evolved since 2016, with adjustments including the removal of assumptions about community versus school turfs and a reduction in available hours from 54 to 43.

Figure 12.1: National Summary Map 2023



The majority of associations, over 75% in New Zealand, are categorised as green, indicating no immediate concerns, demand and capacity are currently within the optimal range.

- Taranaki is classified as red, indicating demand has met a threshold that requires investigation.
- Auckland is classified as orange, with increasing pressure necessitating investigation into future options. This does not include future developments, such as Colin Maiden and the University.
- Northland, Otago and Hawkes Bay are identified as orange, nearing the threshold where planned action should be considered.
- Thames Valley, Poverty Bay, and Wellington are classified as yellow, having surpassed the threshold and likely requiring action[19].

[19] No data was available for Malvern, Rangitīkei and Ruahine-Dannevirke

The association dashboards provide additional information that helps understand the traffic light category rating including the specific challenges faced by the eight associations categorised under yellow, orange, and red.

The following National Summary Map looks at the 10-year forecast for the associations, taking into account the changes in population and the existing capture rate for hockey associations but assumes no other actions are undertaken by Associations.

Figure 12.2: National Summary Map 2033

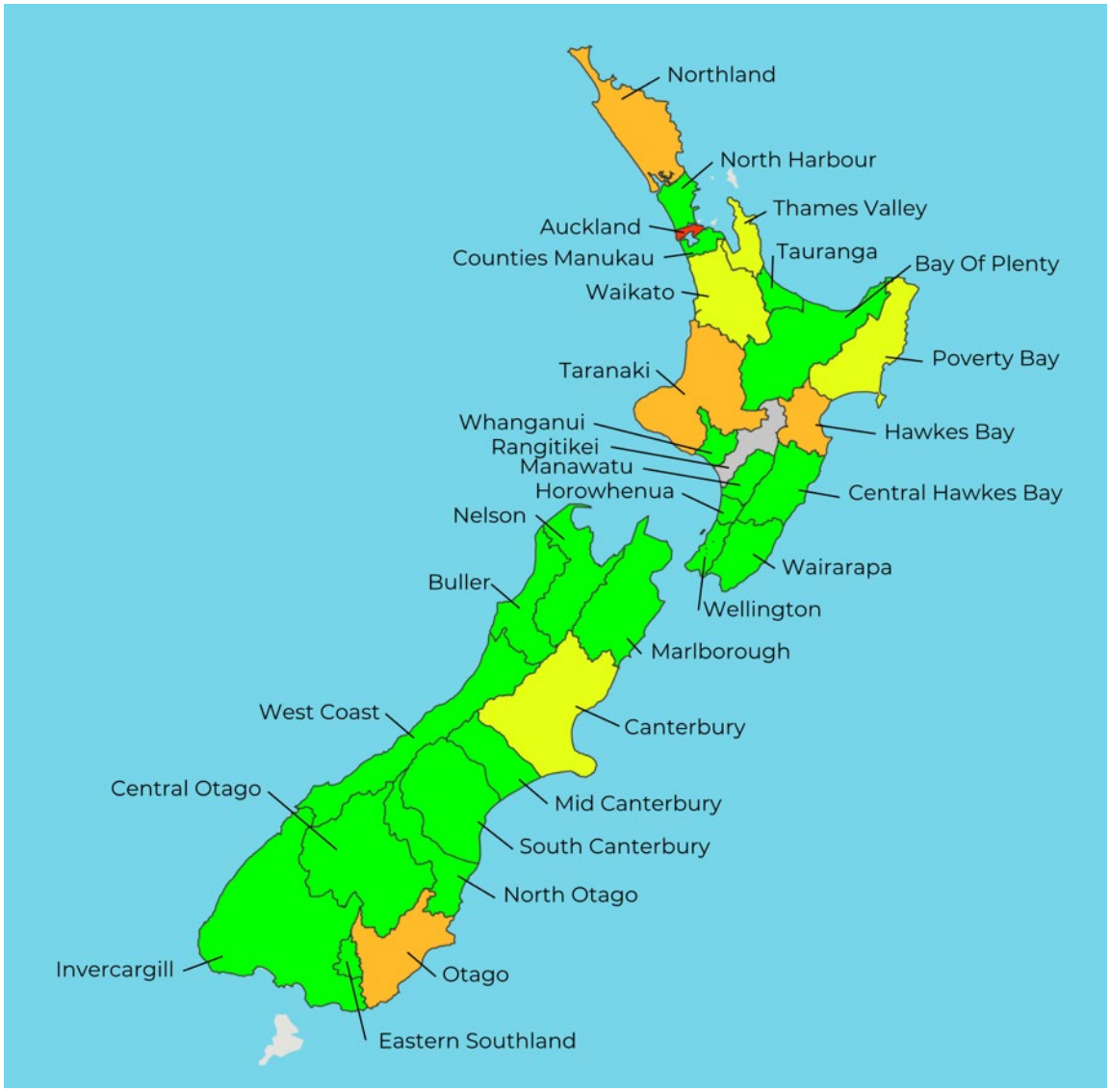


Table 12.1 below visually compares the two maps over a 10-year period, highlighting changes in threshold demand. This demand is calculated using the association's capture rate combined with projected population changes (increase or decrease) based on census data. It's important to consider that New Zealand has an ageing population, which will impact the number of participants within the typical playing age bracket (of 5-49 years). For example, a region's population may grow, but hockey membership could decline if most of the growth is outside the 5–49 age range.

Table 12.1. National Summary over a 10-year Period.

Association	2023	2033

Taranaki		
Auckland		
Northland		
Otago		
Hawkes Bay		
Poverty Bay		
Thames Valley		
Canterbury		
Waikato		
Wellington		

The remaining associations maintain their status in the traffic light system and stay green in 2033.

11.2 Association Dashboards

During the formulation of this Spaces and Places Strategy, an asset register was compiled utilising various sources, encompassing data from hockey associations, PlayHQ, the Sport NZ Facilities Planning Tool, online maps, and resources provided by Councils. Additionally, a range of metrics were applied to evaluate the current landscape and utilisation of hockey venues and surfaces.

The association dashboards provide a summary of some key information that directly relates to the principles of the strategy, including financial and environmental sustainability, membership information, playing age brackets, population data for now and the future and turf availability.

In developing the association dashboards, various key indicators were examined to provide the hockey community with a comprehensive view of their landscape. By covering these areas, the dashboards aim to provide valuable insights and facilitate informed decision-making for the hockey community.

A sample of the association dashboard is provided below.[20] Refer to Appendix 12 for the dashboards of each hockey association.

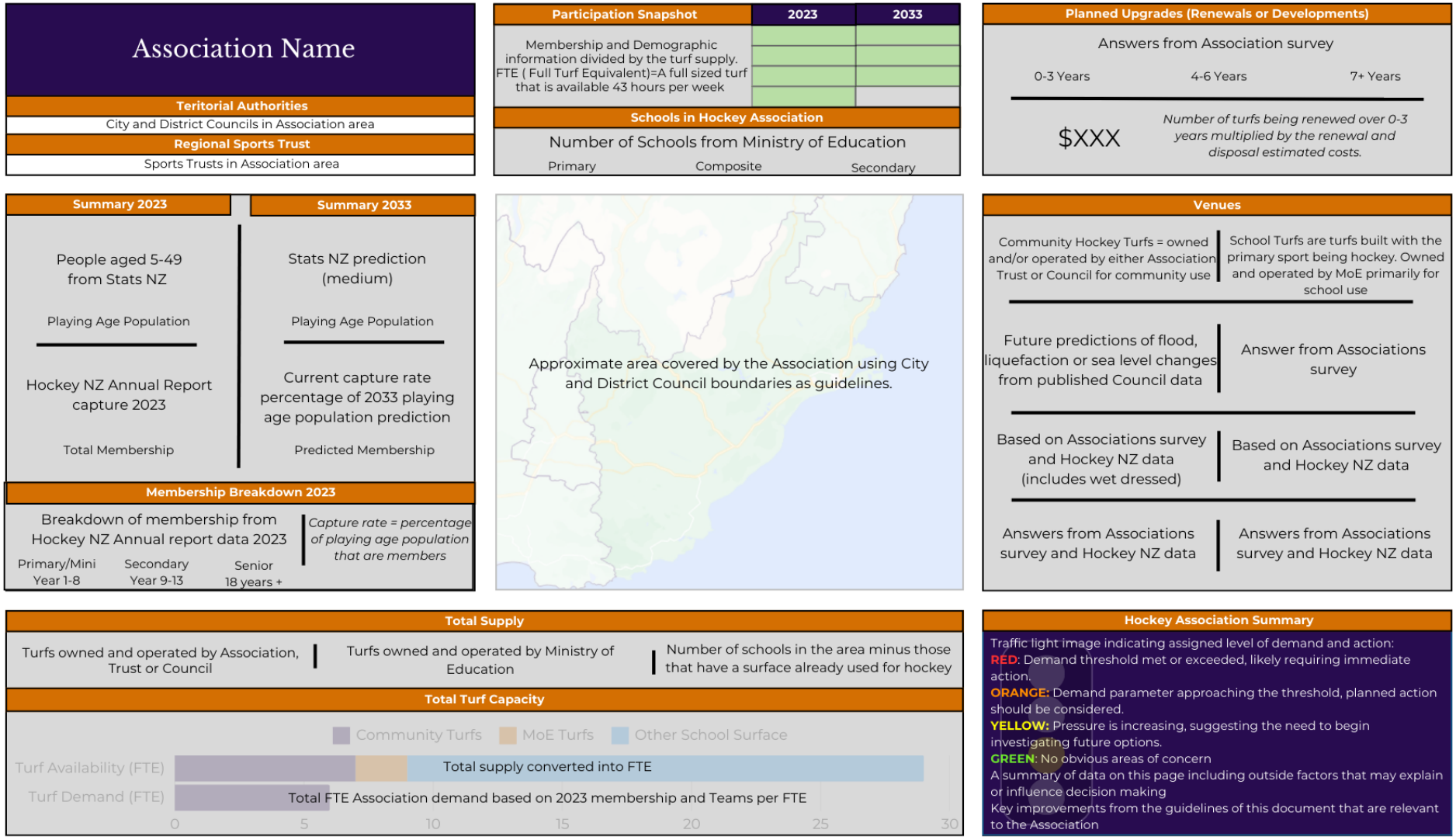
A comprehensive breakdown of the development process for each set of information, including the underlying assumptions, is provided on the following three pages. This section offers detailed insights into the methodology for the information that has been collected and the specific assumptions that were considered during their formulation.

To effectively address the specific needs of each region, it is recommended that more in-depth, localised facility planning be conducted in conjunction with the association dashboard. While the provision of regional summary data in this national strategy is valuable, it does not eliminate the need for detailed analysis at the association level to accurately identify and cater to the unique requirements of each area before commencing any projects.

[20] There was no data available for Malvern, Rangitīkei and Ruahine-Dannevirke so Dashboards were not prepared for those Associations.

11.2.1 Association Dashboard Example

11.2.2 Association Dashboard Definitions



11.2.3 Association Dashboard Assumptions

Assumptions

Population and Membership Assumptions

Playing Age Population: This is a measure of the potential player pool and identifies the total population aged between 5 and 49 years old. This age group represents the significant majority of players with analysis of available player data indicating that an average of 76% of players are aged between 5 and 18 years old; 21.2% between 19 and 49 years old and 2.5% over 50 years old.

Ratio of Total Registered Players per FTE: This is a measure of turf utilisation and indicates the overall level of use. These were established in the 2010 facility strategy and have been further refined by considering the breakdown of the local membership between senior (including college age) and junior (those requiring a full-size turf and those that can play on a half turf or smaller respectively).

Ratio of Full Field Players per FTE (full field): This is a measure of turf utilisation that considers the demand from those that require a full-sized field for competition play and includes all Senior and college-age teams. This recognises that the younger age groups play on a half turf or smaller and potentially do not have to play on a full-sized field.

Turf Operating Capacity Assumptions

Detailed analysis from the demand models used to identify the hours of use each team requires on a turf identifies that the point at which a turf can be considered to be operating at a sustainable capacity is between 650 to 850 players per FTE. The point at which an Association sits within this range is determined by the ratio of senior/ college (play on a full-sized turf) to junior (play on a part-sized turf) in its membership.
Based on the detailed analysis at the national level:
- 75% senior/ college to 25% junior. Capacity is 650 players per FTE
- 50% senior/ college to 50% junior. Capacity is 750 players per FTE
- 25% senior/ college to 75% junior. Capacity is 850 players per FTE

In considering the demand indicators: Where the Players per FTE is greater than the 650 – 850 range then additional turf time is required to meet the demand.

HNZ Spaces and Places Steering Group Approved Assumptions

1. All known turfs are identified and audited according to the size of the turf (Full, 0.5, 0.25 turf).
2. Full-time turf capacity is estimated based on the availability for community use. For example, a full community turf is 1 FTE, a 1/2 turf, available for 43 hours a week for community use is 0.5 FTE, and a full turf, available for 21.5 hours a week is 0.5 FTE.
3. 1 FTE is defined as being available for 43 hours a week (4-9 pm Mon – Friday and 8 am till 5 pm Sat and Sun). It is recognised that turfs are often utilised for up to 60 hours a week however this is through necessity. The 43 hours a week is considered the available hours, excluding hours considered anti-social by players (and other codes). The use of turfs outside of these core hours is considered to negative impact on the hockey experience.
4. Demand has been calculated based on:

- Estimated teams identified at each age group within the Association
- Senior and College teams – 14 members
- Intermediate and junior teams – 10 members
- Average game time x turf area per game at each age grade.
- An allowance of 13 hours has been made for representative teams etc per week.

Supply Demand Analysis

· Total Supply = Community Turfs, MoE Turfs and number of schools
· Turf Availability FTE = Already identified turfs plus other school surfaces which include tennis courts, turfed netball courts, grass fields or asphalt, it is assumed every school has 0.1 FTE of space available.
· Turf Demand FTE = number of teams per FTE

Competition Time Assumptions

Playing Age	Turf Size Used	Mins Per Team
Senior	1	45
Secondary	1	30
Intermediate	0.5	25
Junior (year5/6)	0.5	10
Mini/Small Sticks	0.25	10

Training Time Assumptions

Playing Age	Turf Size Used	Mins Per Team
Senior	0.5	60
Secondary	0.5	60
Intermediate	School	0
Junior (year5/6)	School	0
Mini/Small Sticks	School	0

Example Supply and Demand Analysis

Example	Total Players	Number of Teams	Competition Hours Needed	FTE Equivalent	Training Hours Needed	FTE Equivalent
Senior and Secondary (full turf)	3760	235	176	4.1	117	2.7
Intermediate and Junior (half turf)	1539	171	71	0.8	0	0
Mini/Small Sticks (quater turf)	697	77	26	0.2	0	0

	FTE Required if Only Games were on Turf	Total FTE Required (Competition & Training)	Total FTE Supply
Example	5.1	7.9 (includes 0.1 for Reps)	11

12 Guiding Principles for this Strategy

12.1 Principles

Recognising the vital role that spaces and places play in nurturing the growth and advancement of hockey throughout New Zealand, HNZ is committed to establishing a set of guiding principles.

These principles are crafted to establish a comprehensive framework that prioritises opening and growing the game, fostering inclusivity, sustainability, and community involvement in terms of facility provision.

These principles will:

- Drive decisions based on achieving the best possible overall outcome
- Ensure investment decisions will provide the best 'bang for buck'.
- Best match supply with demand.
- Help decision-makers understand and manage risk.
- Ensure decisions are made with the best available information so all parties understand costs and benefits.
- Build trust with stakeholders through showing credibility, legitimacy and responsibility in planning and prioritisation of needs.

Through adherence to these principles, HNZ seeks to create environments that inspire innovation and enhance accessibility for both current and future generations.

The following principles have been derived from conversations with HNZ, and the Project Steering Group and key strategic documents utilised throughout this review.

'Open & Grow the Game'
Promote accessibility, inclusivity, diversity, and equitable access to hockey.

Meeting an Identified Need
An evidence-based approach to identifying needs ensuring adaptable and appropriate solutions.

Connected Networks
Partner and collaborate to ensure spaces and places are well used, maximising return (social and financial) on investment.

Sustainability
Develop and operate sustainable provisions and practices encompassing environmental and economic dimensions.

Social Value of Hockey
Promote and develop positive impacts on individuals, communities, and society, beyond the realm of physical health, contributing to New Zealander's well-being.

Engagement with Mana Whenua
Ensure the mana of Te Tiriti o Waitangi is recognised and upheld.

The principles outlined have been elaborated upon in Appendix 9, offering a more comprehensive explanation of each principle and its underlying purpose, supported with case studies to see it in practice. This detailed breakdown aims to enhance understanding by clarifying the intent and application of each principle.

Adherence to these principles enables decision-makers to navigate intricate challenges, anticipate future requirements, and utilise and cultivate facilities that not only meet present demands but also lay the groundwork for a thriving hockey landscape in the years ahead.

13 Strategic Approach – Way Forward

Hockey New Zealand's primary goal is to expand the reach and inclusivity of the game, rather than increasing the number of premium hockey turfs.

The focus is on broadening participation and introducing hockey to new and diverse communities. This involves exploring innovative ways of playing the game, creating varied environments to make hockey accessible and enjoyable for everyone.

The key message for the hockey community is clear: HNZ demands the hockey community to pause and reflect on other alternatives before investing in new, high-specification performance turfs.

14 Conclusions

The Spaces and Places Strategy identifies a significant imbalance in the provision of premium quality water-based turfs, which are designed for use by the elite, 1% of the hockey community. This overemphasis on catering to elite athletes has led to a neglect of the broader hockey community's needs, creating several challenges, including a culture of expectations alongside issues of sustainability from both environmental and financial perspectives.

The current focus on high-end facilities has resulted in substantial maintenance costs and environmental impacts, which are unsustainable in the long term. The majority of the hockey community, which includes grassroots and recreational players, is not being adequately served by the existing infrastructure. This has potentially limited hockey's growth and accessibility for new and diverse participants.

The way forward, as outlined in this Strategy, provides a clear direction for addressing these challenges. By utilising the existing resources within the community and adopting a variety of surfaces and game formats, HNZ aims to 'open and grow the game' to a broader audience. This approach will not only make hockey more inclusive and accessible but also ensure that it is more sustainable.

Central to this Strategy is the adoption of environmental and financial sustainability practices, which aim to reduce the carbon footprint and operational costs while enhancing the longevity and efficiency of facilities.

Applying the principles of the Strategy will guide the development and renewal of facilities and programs. This will involve strengthening partnerships, promoting flexible and adaptive use of spaces, and continuously improving based on community feedback and data insights. Through these efforts, the hockey community can better align its resources with the needs of the majority of the hockey community, fostering growth, inclusivity, and sustainability in the sport.

15 Recommendations

The following strategic recommendations are designed for the hockey community at large. They align with HNZ's focus on 'opening and growing the game' and creating a 'connected hockey network,' while also addressing the significant challenges faced by the hockey community, including the burdens associated with facilities and the environmental, social, and financial pressures.

The recommendations have been organised into four distinct categories:

- Adapting the Delivery Model,
- Reimagine the Network of Facilities
- New Developments
- HNZ-Specific Recommendations

This structure ensures that each recommendation has practical advice tailored to its unique circumstances, whilst being underpinned by:

- Sustainability
- Data-driven decisions
- Enhancing partnerships
- Optimising existing resources
- Flexible delivery options, making hockey accessible to more communities

15.1 Adapting the Delivery Model

This recommendation focuses on diversifying the types of formats and surfaces available for training and play while enhancing the utilisation of existing facilities across the broader network.

- **Data-Driven Decisions**: Use insights from associations, regional data, and other relevant research to identify areas for improvement and prioritise evidence-based actions.
- **Flexible Programming and Alternative Formats**: Develop flexible programming that can adapt to different environments, such as urban spaces, schools, and recreational areas. Introduce alternative game formats and schedules to cater to different skill levels, time constraints, and interests.
- **Embrace New Ideas**: Encourage a culture of innovation within the hockey community, where new ideas and creative solutions are welcomed and explored
- **Increase Accessibility:** Work on making hockey more accessible to diverse communities by removing barriers to participation, such as cost, location, and availability.
- **Utilise Current Assets:** Make the most of the facilities, equipment, and resources already available within the network to maximise efficiency and effectiveness, this includes using different surface types, different delivery models and alternative scheduling, moving away from performance-based turfs to accessible spaces like school multi-use spaces, tennis and netball courts.
- **Do Not Embark on New Turf Development:** Ensure all the points above have been explored, that the need has been identified, and there is initial support from the regional sports trust, local councils, HNZ and hockey association before embarking on a new development.

15.2 Reimagine the Existing Network of Facilities.

This recommendation refers to the utilisation of existing non-hockey facilities and new locations from an optimisation and sustainability standpoint.

- **Facility Optimisation**: Optimise the potential of existing facilities and the broader network by enhancing scheduling, maintenance, multi-use capabilities, and fostering partnerships. Facility optimisation also encompasses opportunities to improve amenity provision and accessibility, ensuring spaces better meet community needs.
- **Strengthen Current Partnerships and Develop New Relationships**: Engage with existing partners, such as local councils, schools, and sports organisations to deepen relationships and ensure mutual benefits.
- **Environmental Sustainability:** The development and adoption of an Environmental Strategy including energy-efficient technologies, waste reduction measures, and sustainable facility management practices.
- **Financial Sustainability**: Ensure that full life cycle costs of turfs and venues are costed and planned for. Implement effective cost management structures and practices to optimise expenditure and ensure long-term financial health.
- **Resource Sharing:** Encourage the sharing of resources and best practices among different regions and clubs to develop sustainable practices, enhance overall performance and reduce costs.

15.3 New Developments

This recommendation refers to the need for a new facility to be built and the considerations that should take place.

- **Evaluate Need for New Turf Developments Carefully**: Before initiating new turf projects, conduct a thorough needs and feasibility assessment. New developments need to be responsive to participant type and growth areas. Secure regional and local support, aligning new developments with community needs and strategic goals. Consider all alternatives before embarking on a new development.
- **Seek support**: Ensure relevant support is gained for new development and that organisations such as HNZ, local councils, regional sports trusts, and other community organisations/funders have provided feedback and support.
- **Strengthen Current Partnerships and Develop New Relationships**: Form new connections with councils, schools, and related organisations to support new developments that align with community needs and sustainable growth
- **Environmental Sustainability:** Create an Environmental Strategy for new developments, including energy-efficient technologies, waste reduction measures, and sustainable facility management practices.
- **Financial Sustainability**: Ensure that full life cycle costs of turfs and venues are costed and planned for. Implement effective cost management structures and practices to optimise expenditure and ensure long-term financial health.
- **Increase Accessibility of New Facilities**: Design new facilities with an emphasis on accessibility by reducing barriers and improving reach, allowing diverse communities easier entry into hockey. Emphasis is placed on multi-use turf options, versus water-based turf. Reallocate non-essential activity (juniors, or trainings) off existing water-based turf to free up capacity.

15.4 HNZ Specific Recommendations

This area focuses on where HNZ can lead and support the hockey community to achieve the recommendations above.

- **Good Global Citizen**: Actively contribute to the sustainability of our planet by following and supporting global trends that aim to reduce hockey's environmental footprint, i.e. dry turf innovations.
- **Responsive Governance:** Ensure that the governance of HNZ is responsive and able to make swift decisions to address emerging challenges.
- **Education and Awareness**: Educate the hockey community on the importance of environmental sustainability and encourage eco-friendly behaviours.
- **Embrace New Ideas**: Encourage a culture of innovation within the hockey community, where new ideas and creative solutions are welcomed and explored. HNZ leadership to explore potential changes in rules, affiliation structures, policies, and hosting criteria that could facilitate these initiatives more effectively. Additionally, prioritise alignment on the types of projects HNZ chooses to support.

Appendix 13 reinforces the recommendations by aligning them with the core principles of the strategy and offering key considerations and guiding questions for each recommendation.

In summary, the hockey community must adapt to preserve the environment while nurturing the game that is deeply rooted in the communities. By acting as kaitiaki (guardians) of the land, hockey can adopt innovative approaches to make the game sustainable and accessible to more communities.

To effectively cater to the distinct needs of each region, it is advised to undertake comprehensive, localised facility planning utilising the association dashboard as a starting point for guidance. While the regional summary data provided in this national strategy offers valuable insights, it cannot replace the necessity for detailed, association-level analysis to precisely identify and address the unique priorities of each area prior to initiating any projects.

16 Key Shifts in Behaviour for Delivering Hockey in New Zealand

To successfully implement the strategic approaches outlined in Hockey New Zealand's Spaces and Places Strategy, several key shifts in behaviour are required. These shifts will ensure that the strategy principles are effectively applied to network and project planning and delivery, building spaces and places capable of meeting community needs, delivering alternative formats, fostering partnerships and collaboration, and continuously improving facility data and projects.

16.1 Applying the Strategy Principles for Network and Project Planning and Delivery

Strategic Alignment: Ensure all network and project planning aligns with the overarching strategic principles.

- Opening and growing the game
- Meeting the identified need
- Connected networks
- Sustainability
- Social value of hockey
- Mana whenua representation

16.2 Building Spaces and Places Capability

Enhancing spaces and places capability across the hockey network to help the community explore alternative options for constructing new hockey venues. Encouraging the hockey community to adopt innovative approaches in delivering hockey, including flexible programming, alternative formats, diverse surfaces and venues, and leveraging technology.

16.3 Partnership and Collaboration

Cultivating mindsets that value partnership and collaboration. Recognise the strengths and contributions of various stakeholders, including local councils, schools, businesses, and community groups.

Actively seek opportunities for joint initiatives and shared projects that can amplify impact and reach. This includes co-hosting events, sharing facilities, and combining resources for larger projects.

16.4 Continuous Improvement on Facility Data and Projects

Utilise data to drive decision-making processes. Regularly collect and analyse data on facility usage, community needs, and project outcomes to inform future planning and development.

Establish robust feedback loops that allow for continuous learning and improvement. This involves regularly gathering feedback from facility users, stakeholders, and community members and using this information to refine and enhance projects and programs. Recognise that continuous improvement is an ongoing process that requires flexibility and responsiveness.

By making these key shifts in behaviours, hockey in New Zealand can effectively deliver on its Spaces and Places Strategy, ensuring that facilities and programs are well-aligned with community needs, innovative in their approach and continuously improving to support the growth and development of hockey in Aotearoa.

16.5 Shifting the Mindset

This area focuses on effectively guiding and implementing the necessary transitions within the hockey network to help shift the mindset from a traditional hockey performance-based format on turf to accessible experiences in multiple formats and surfaces.

To guide and implement the following actions can be taken:

Education and Awareness – Workshops, success stories and communication campaigns.

Capacity Building – Training and resources to support multiple and alternative hockey formats.

Incentivise Change – Recognition Programmes, acknowledging and rewarding associations and clubs for diversifying delivery, while celebrating and promoting best practices to inspire others and foster a culture of innovation and inclusivity.

> *"It's time to look at developing the social infrastructure of hockey, not the asset infrastructure"*
>
> - Ken Maplesden
>
> General Manager - Hockey Network

17 Appendices

Project Management

Appendix 1 – Additional Definitions and Terminology

Appendix 2 - FIH Facilities Guidance PDF's Downloads

-https://www.fih.hockey/static-assets/pdf/fih-facilities-guidance-outdoor-hockey-facilities.pdf

Background Research

Appendix 3 - VOP Survey

Appendix 4 - Hockey Satisfaction Survey Results Table

Appendix 5 - Carbon Emissions Table

Appendix 6 - Flood and Seismic Activity

Appendix 7 - Environmental Sustainability Guidelines Sport NZ

Appendix 8 - Ownership Models, Advantages and Disadvantages

Spaces and Places Strategy

Appendix 09 - Principles in detail with case studies

Appendix 10 - Additional Case Studies

Appendix 11 – New Zealand Spaces and Places Framework

Appendix 12 - Hockey Association Dashboards

Supporting Appendix

Appendix 13 - Spaces and Places Key Considerations

Appendix 14 – Amenities Principles

Appendix 15 – Amenities Resources

Appendix 16 - Secondary Data Review

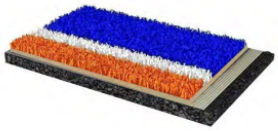
Appendix 17 – Stakeholder Engagement List

Appendix 18 – Hockey Association Facilities Survey Questions

Appendix 19 – Core Turf Inventory

17.1 Appendix 1 – Additional Definitions and Terminology

Table 17.1: FIH Turf Types in Detail

Table 1 – synthetic turf surfaces		Categories of FIH Approval
	**Non-filled (wet) hockey turf** • Designed for elite level hockey • Short dense pile carpet. No infill • Normally requires irrigating	• GLOBAL – when tested under irrigated and wet conditions • NATIONAL – when tested under dry and wet conditions
	**Sand dressed hockey turf** • Designed for hockey • Short dense pile carpet with sand dressing • Does not require watering	• NATIONAL • COMMUNITY – when laid on a more resilient shockpad • GEN 2 – when laid on a firmer shockpad
	**Sand filled hockey turf** • Original multi-sports synthetic turf surface, used extensively for hockey in 1990s – 2000s • Carpet filled with sand, which can the make surface firm and abrasive	• COMMUNITY

		Categories of FIH Approval
	**Textile sports surface** Manufactured using a needle-punch technique, normally semi-filled with sand. The surface provides a durable, relatively fast, and consistent playing surface	• COMMUNITY • GEN 2 – when laid on firmer a shockpad
	**GEN 2** Hockey friendly surfacse laid over a stiffened shockpad that allows hockey and other sports, such as tennis, netball, futsal, etc to be played on the same facility	• GEN 2 MULTI-SPORTS
	**Long-pile multi-sports turf** • Long pile carpet designed to play like natural grass • Hockey ball sits into carpet creating a slow and often bobbly ball roll • May be semi filled (often with rubber granules), or non-filled	• 3G MULTI-SPORTS

17.2 Appendix 2 – FIH PDF's Downloads

Table 17.2.FIH Field Standards Guidelines and Guidance

Title	PDF
Hockey Turfs and Field Standards FIH V2.1	fih-quality-standards -hockey-turf-products
Hockey Turf and Field Standards Part 2 FIH V2.2	fih-htfs-part-2-hocke y-fields.pdf

Facilities Guidance – Building Hockey Fields FIH V0.1	facilities-guidance-building-hockey-fields.p
Facilities Guidance – Hockey Field Irrigation Performance and operational requirements FIH V1.1	fih-facilities-guidance-field-irrigation.pdf
Dry Project Update FIH March 2024	dry-turf-project-update-march-2024.pdf
FIH Resources Link	https://www.fih.hockey/about-fih/fih-quality-programme/resources-hub/facilities-guidance-resources/11-a-side-hockey-facilities
Dry Turf Project Update	https://www.fih.hockey/dryturf

17.3 Appendix 3 – Voice of the Participant Report

Detail	PDF
Sport NZ Voice of the Participant Report for HNZ	Sport NZ VoP Report 2023 - Hockey New Z

17.4 Appendix 4 - Hockey Satisfaction Survey Results Table 17.3: Hockey Association Facility Survey Satisfaction Results

Association	Suitability of the LOCATION of the venue/s	Overall CONDITION of the venue/s	CAPACITY to meet CURRENT needs of your activity	CAPACITY to meet FUTURE needs of your activity	The provision of associated AMENITIES	MANAGEMENT/MAINTENENCE of the venue/s
Auckland	Very Satisfied	Very Satisfied	Satisfied	Satisfied	Neutral	Satisfied
Bay of Plenty	No data available					
Buller	Very Satisfied	Very Satisfied	Very Satisfied	Satisfied	Satisfied	Satisfied
Canterbury	Very Satisfied	Satisfied	Very Satisfied	Satisfied	Satisfied	Satisfied
Central Hawkes Bay	Very Satisfied	Satisfied	Neutral	Neutral	Dissatisfied	Dissatisfied
Central Otago	Dissatisfied	Dissatisfied	Very Dissatisfied	Very Dissatisfied	Neutral	Neutral
Counties Manukau	No data available					
Eastern Southland	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied
Hawkes Bay	Satisfied	Satisfied	Satisfied	Dissatisfied	Neutral	Satisfied
Horowhenua	Satisfied	Satisfied	Satisfied	Satisfied	Satisfied	Satisfied
Invercargill	Very Satisfied	Satisfied	Satisfied	Satisfied	Dissatisfied	Dissatisfied
Malvern	No data available					
Manawatu	Satisfied	Satisfied	Neutral	Neutral	Dissatisfied	Neutral
Marlborough	Satisfied	Very Dissatisfied	Very Dissatisfied	Very Dissatisfied	Dissatisfied	Very Dissatisfied
Mid Canterbury	Neutral	Dissatisfied	Neutral	Dissatisfied	Neutral	Dissatisfied
Nelson	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied
Northland	Very Satisfied	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Satisfied
North Harbor	Very Satisfied	Satisfied	Very Satisfied	Neutral	Satisfied	Satisfied
North Otago	Very Satisfied	Very Satisfied	Very Satisfied	Very Satisfied	Satisfied	Satisfied
Otago	Satisfied	Satisfied	Satisfied	Neutral	Dissatisfied	Satisfied
Poverty Bay	Very Satisfied	Very Satisfied	Very Satisfied	Neutral	Very Satisfied	Satisfied
Rangitikei	Very Dissatisfied	Satisfied	Very Dissatisfied	Very Dissatisfied	Very Dissatisfied	Satisfied
Ruahine Dannevirke	Very Satisfied	Satisfied	Very Dissatisfied	Very Dissatisfied	Dissatisfied	Neutral
South Canterbury	Very Satisfied	Neutral	Satisfied	Satisfied	Dissatisfied	Satisfied
Taranaki	Satisfied	Dissatisfied	Very Dissatisfied	Very Dissatisfied	Very Dissatisfied	Very Dissatisfied
Tauranga	Very Satisfied	Very Satisfied	Very Satisfied	Dissatisfied	Dissatisfied	Satisfied
Thames Valley	Satisfied	Neutral	Satisfied	Dissatisfied	Dissatisfied	Satisfied
Waikato	Very Satisfied	Neutral	Satisfied	Dissatisfied	Neutral	Satisfied
Wairarapa	No data available					
Wellington	Satisfied	Satisfied	Dissatisfied	Dissatisfied	Satisfied	Dissatisfied
West Coast	Very Satisfied	Satisfied	Dissatisfied	Dissatisfied	Dissatisfied	Satisfied
Whanganui	Very satisfied	Very satisfied	Very satisfied	Neutral	Very satisfied	Neutral

17.5 Appendix 5 - Carbon Emissions

Table 17.4: Carbon Emissions

Input Description	Natural Grass Turf – No Drainage	Natural Turf with Drainage	Artificial Unfilled Turf
Area	97.4m x 59m = 5,746m2	97.4m x 59m = 5,746m2	97.4m x 59m = 5,746m2
Lifespan	10 years	10 years	10 years
Renovation frequency	5 years	5 years	5 years
# Fertiliser Applications	2/year	2/year	N/a
# Grass protection applications	1/year	1/year	N/a
Lawnmower used	Conventional petrol engine	Conventional petrol engine	N/a
# User hours/year	480	800	1600
Kg CO2-eq /turf/year	27,100	43,100	113,000
Kg CO2-eq /user hour	56	54	70

Source – Nick Meeten Applied Energy

17.6 Appendix 6 - Flood and Seismic Activity

Table 17.5: Hockey Associations - Flood and Seismic Activity

Association	Council sea level data	Council flood risk data	Council seismic data
Auckland	Lloyd Elsmore – not affected Auckland Grammar – not affected Avondale College – not affected Henderson High School – not affected Kolmar – not affected Diocesan for Girls – not affected St Cuthbert's – not affected Mount Roskill Grammar – not affected	Lloyd Elsmore- Flood prone Auckland Grammar – not affected Avondale College – partially flood-prone Henderson High School- not affected Kolmar – not affected Diocesan for Girls – not affected St Cuthbert's – not affected Mount Roskill Grammar – Floodplain	Not available
Bay of Plenty	Not available	Not available	Not available
Buller	Not available	Significant risk – 0.3-1metre water in 50-year event (close to lagoon)	Not available
Canterbury	Nga Puna Wai - Not affected Nunweek- Not affected	Not available	Nga Puna Wai -Medium vulnerability to liquefaction 17% chance moderate-severe damage Nunweek- no risk
Central Hawkes Bay	Not available	Not available	Not available
Central Otago	Not affected	Wanaka – not affected Queenstown – not affected	Not available
Counties Manukau	Not affected	Flood plain	Not available
Eastern Southland	Not available	Not available	Not available
Hawkes Bay	Not affected	Flood risk area	High liquefaction vulnerability

Association	Council sea level data	Council flood risk data	Council seismic data
Horowhenua	Not available	Not available	Not available
Invercargill	Not affected	Riverine inundation Level 1 (low risk)	Very high liquefaction risk
Malvern	Not available	Not available	Not available
Manawatū	Not available	Not available	Not available
Marlborough	Not located in Direct Inundation or Indirect Inundation zone (up to year 2130)	Not affected	Liquefaction damage possible
Mid-Canterbury	2010 data – no flood or sea level rise risk	Not available	Not available
Nelson	Not affected	Not available	Not available
Northland	Not affected	Not affected	Not affected
North Harbor	Not affected	Not affected	Not available
North Otago	Not available	Not available	Not available
Otago	Not available	Harbour Tce= Flood hazard and storm surge zone B Kings= Flood hazard and storm surge zone A	Harbour Tce= -soft soil, liquefaction risk moderate-high Kings=-soft soil, liquefaction risk moderate-high
Poverty Bay	Not available	Not available	Not available
Rangitīkei	Not available	Not available	Not available
Ruahine Dannevirke	N/A	N/A	N/A
South Canterbury	Not affected	Not available	Not available
Taranaki	Not available	Not available	Not available

Association	Council sea level data	Council flood risk data	Council seismic data
Tauranga	Not affected	Flood prone >300mm Major overland flow path	Possible liquefaction risk
Thames Valley	Not available	Not available	Not available
Waikato	Not affected	100-year flood prone	Liquefaction possible – medium – high vulnerability
Wairarapa	Not affected	Not affected	Low risk liquefaction
Wellington	Not Affected	Fraser Park – Flood Zone	Not Available
West Coast	Not affected	Medium risk	Liquefaction risk
Whanganui	Not affected	Flood prone >300mm Major overland flow path	Low-moderate liquefaction risk

17.7 Appendix 7 - Environmental Sustainability Guidelines for Spaces and Places Sport NZ

Title	PDF
Environmental Sustainability Guidelines for Spaces and Places 2024 Sport NZ	 environment-sustainability-guidelines-3_8

17.8 Appendix 8 - Ownership Models, Advantages and Disadvantages

Figure 17.1 – Overview of Ownership and Operating Models

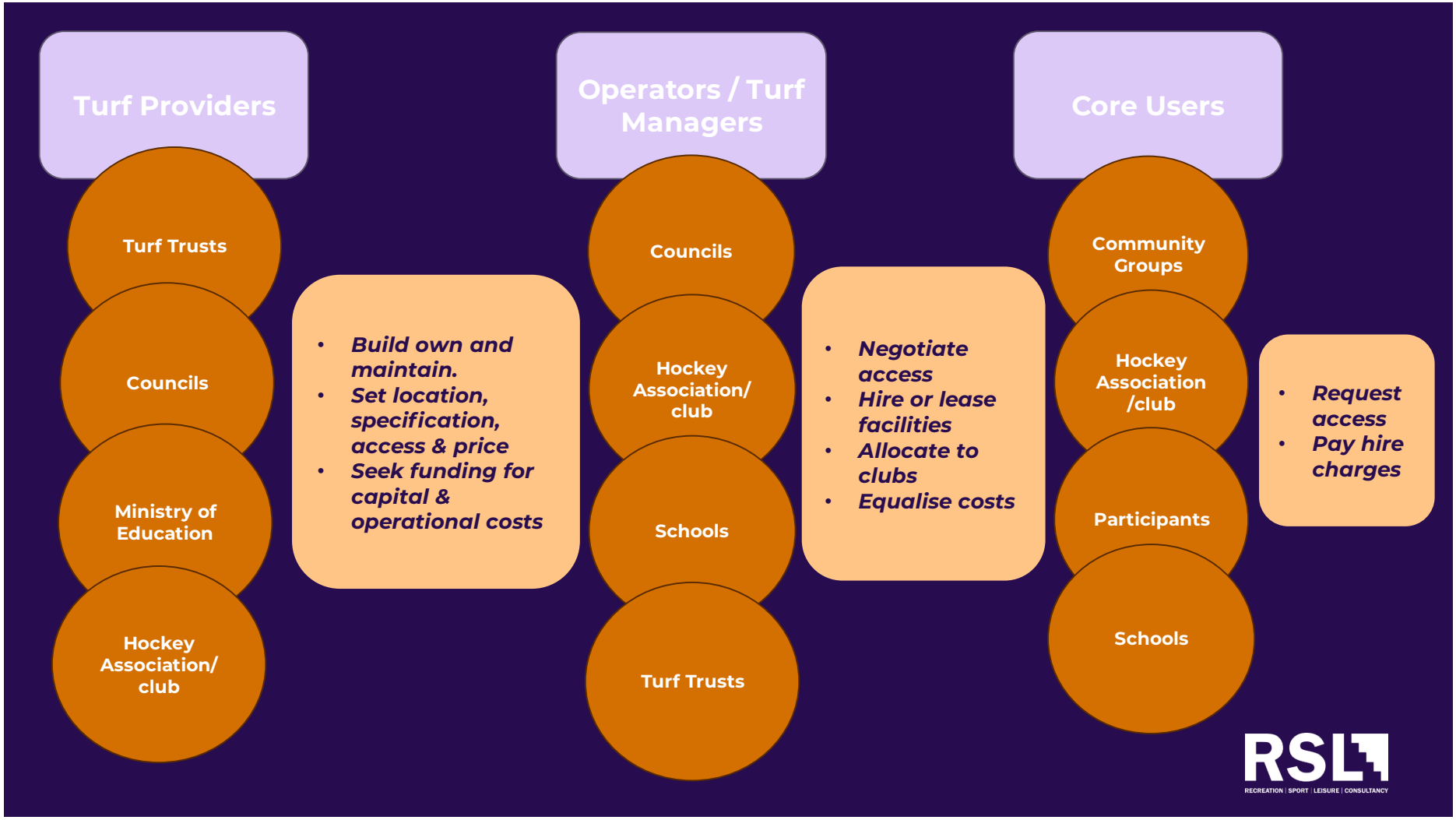


Table 17.6 – Overview of Ownership Advantages and Disadvantages

Ownership Model	Advantages	Disadvantages
Turf Trusts	Specialised Management and Expertise: Turf trusts typically have specialised knowledge and expertise in managing sports facilities, ensuring that the venue is maintained to a high standard. Financial Stability and Funding: Turf trusts often have access to funding sources, grants, and sponsorship opportunities that might not be available to individual clubs, providing better financial stability and resources for facility improvements and maintenance. Centralised Resource Allocation: A turf trust can allocate resources more efficiently across multiple venues, ensuring optimal use of funds and facilities. Professional Operations: With a professional management structure, the trust can offer consistent and high-quality services, including maintenance schedules. Community Benefits: Trusts are often community-focused, aiming to maximise the facility's use for a wide range of groups and activities, which can enhance community engagement and participation in hockey. Long-term Planning and Sustainability: Trusts can implement long-term plans for facility development and sustainability, ensuring the venue remains viable and up to date with modern standards and requirements.	Reduced Club Control: Hockey clubs may have less control over the scheduling, use, and management of the facility, leading to potential conflicts or dissatisfaction if the trust's priorities differ from those of the club. Complex Decision-Making: Decision-making processes can become more complex and slower due to the need for consensus among trust board members and stakeholders, potentially leading to delays in necessary actions or improvements. Potential for Higher Costs: Trusts might implement fee structures to cover operational costs, which could be higher than what individual clubs would set, potentially making the facility less accessible to some members of the community. Bureaucratic Challenges: Larger, hub trust-run facilities may encounter bureaucratic hurdles, including regulatory compliance and administrative overheads, which can complicate operations and increase costs. Focus on Financial Viability: Trusts might prioritize financial sustainability over other considerations, such as community needs or the specific requirements of hockey clubs, leading to decisions that may not always align with the interests of all users. Potential Disconnect from Users: If not managed properly, there can be a disconnect between the trust and the actual users

Ownership Model	Advantages	Disadvantages
		(clubs and players), leading to dissatisfaction with how the facility is run or maintained.
Councils	Public Funding and Support: Councils can access public funding, grants, and tax revenues to support the construction, maintenance, and improvement of hockey facilities, ensuring financial stability. Community-Centred Management: Council ownership often prioritizes community needs and inclusivity, making the facility accessible to a broader range of users, including schools, local clubs, and recreational players. Integrated Planning: Councils can incorporate the hockey facility into wider urban planning and development initiatives, ensuring it fits well with other community resources and infrastructure. Professional Maintenance: With dedicated municipal resources, councils can ensure regular and professional maintenance of the facility, maintaining high standards of safety and usability. Consistency and Reliability: Councils provide a stable and reliable management structure, reducing the risk of sudden changes in facility availability or quality. Strategic Development: Councils can undertake long-term strategic planning for the facility, aligning it with broader community development goals and sustainability initiatives.	Reduced Flexibility: Councils often operate within strict regulatory and bureaucratic frameworks, which can limit flexibility in decision-making and responsiveness to the specific needs of hockey clubs. Potential for Political Influence: Decisions about the facility may be influenced by political considerations, which might not always align with the best interests of the hockey community. Limited Specific Expertise: Council staff may lack the specialized knowledge and expertise required to manage a hockey facility optimally, potentially leading to suboptimal usage or maintenance. Competing Priorities: Councils have to balance multiple community interests and priorities, which may result in less focus and fewer resources dedicated to the hockey facility compared to other community needs. Complex Administrative Processes: The administrative processes within councils can be complex and slow, leading to delays in decision-making, funding allocation, and implementation of necessary improvements or repairs.

Ownership Model	Advantages	Disadvantages
Schools	Dedicated Use for Students: The primary focus of the facility can be on serving the students and providing consistent access for school teams and physical education classes. Community Engagement: Schools often serve as community hubs, potentially increasing local engagement and fostering a strong connection between the school and the community. Integrated Educational Programs: The facility can be seamlessly integrated into the school's curriculum, promoting sports education and physical fitness as key components of student development. Shared Resources: Schools can share resources, such as maintenance staff and security, with other school facilities, potentially reducing overall operating costs. Youth Development Focus: Ownership by a school ensures a focus on youth development, providing students with ample opportunities to participate in and develop skills in hockey from an early age. Potential for External Funding: Schools may have access to specific grants and funding opportunities aimed at educational institutions, which can be used for facility improvement and maintenance.	Limited Access for External Users: The primary use of the facility is for school activities, which may limit availability for local clubs, community groups, and other external users. Restricted Hours of Operation: The facility's availability is often limited to school hours and may not be accessible during evenings, weekends, or school holidays, reducing usage opportunities for the broader community. Maintenance and Funding Challenges: Schools may face budget constraints and limited funding for regular maintenance and upgrades, potentially affecting the facility's quality and usability. Lack of Specialized Management: School staff may lack the specialized expertise required to manage a hockey facility optimally, potentially leading to less effective operations and maintenance. Competing Educational Priorities: Schools have to balance the needs of their educational programs with the management of the facility, which may lead to competing priorities and reduced focus on the hockey facility. Potential for Wear and Tear: Heavy use by school students can lead to increased wear and tear on the facility, necessitating more frequent maintenance and repairs to keep it in good condition.
Hockey Association/Club	Tailored Management: The facility can be managed specifically to meet the needs of hockey players and the sport, ensuring that the scheduling, maintenance, and	Financial Burden: The financial responsibility for constructing, maintaining, and upgrading the facility can be significant, potentially straining the resources of the association or club.

Ownership Model	Advantages	Disadvantages
	development align closely with the requirements of the hockey community. Flexible Usage: Ownership allows for flexible scheduling and usage of the facility, enabling the association or club to prioritize hockey activities, training sessions, and matches. Community Focus: As dedicated entities, hockey associations and clubs can focus on promoting and developing the sport within the local community, fostering a strong sense of ownership and engagement among members. Direct Revenue Generation: Clubs and associations can directly benefit from revenue generated through facility rentals, events, and tournaments, reinvesting profits back into the facility and the sport. Customised Development: The facility can be developed and upgraded according to the specific needs and preferences of the hockey community, ensuring that it remains relevant and useful. Enhanced Membership Experience: Ownership can lead to an enhanced experience for members, with facilities tailored to their needs and preferences, potentially boosting membership numbers and retention.	Management Challenges: Effective facility management requires expertise and resources that the association or club may lack, leading to potential operational inefficiencies. Limited Diversification: Relying heavily on the facility for revenue can be risky, especially if the association or club faces membership fluctuations or changes in the local sports landscape. Maintenance Costs: Regular maintenance and unexpected repairs can be costly, and securing consistent funding to cover these expenses can be challenging. Potential for Internal Conflict: Decision-making within the association or club regarding facility management and usage can lead to internal conflicts, especially if there are differing opinions among members. Risk of Underutilisation: If the facility is not effectively marketed or if there is insufficient demand, the facility may be underutilized, leading to financial losses and wasted resources. Funding: The funding environment is becoming more challenging under the current economic climate making it hard to support projects that are not meeting certain criteria, such as environmental sustainability. With associations having such a heavy reliance on third-party funders to develop, renew and maintain turfs it will make it hard for associations to own and operate turfs in the future.

17.9 Appendix 9 - Principles in Detail with Case Studies

Principle	Detailed Intent
Open & Grow the Game	In the context of hockey, 'open & grow the game' refers to the ease with which players, coaches, and fans can engage with and participate in the sport. This concept encompasses various aspects of the game that contribute to its inclusivity and availability to a broad range of individuals. Key elements of accessibility in hockey include: • Physical Accessibility • Equipment Accessibility • Financial Accessibility • Inclusive Programming • Gender and Age Accessibility • Cultural Accessibility • Digital Accessibility Addressing these aspects of accessibility allows hockey organisations to create an environment that welcomes and accommodates individuals from various backgrounds, abilities, and demographics, thereby promoting a more inclusive and diverse hockey community, which links to the HNZ strategic pillar of 'open our game'.
Case Studies	• Aspire to be deadly – Cairns Hockey.  Case study - Cairns hockey.pdf
Connected Networks	In the context of hockey spaces and places, connected networks entails partnering and collaborating between various entities to plan, develop, manage, and maintain sports spaces and places. • Community Collaboration - partnerships with schools, youth sports organisations, and community groups to provide access to the facility. • Environmental Partnerships: Collaborations with environmental organisations and sustainable development initiatives aim to make sports facilities, including hockey facilities, more environmentally friendly. This may involve implementing energy-efficient technologies, waste reduction programs, and eco-friendly construction practices. By partnering with environmental experts and organisations, hockey facilities can reduce their ecological footprint and contribute to broader sustainability goals. By fostering strong partnerships and collaborations in the realm of sports facilities, stakeholders can optimise the use of resources, enhance the overall experience for fans and participants, and contribute to the long-term sustainability of sports venues. Collaborative efforts enable hockey facilities to not only meet the needs of the community but also uphold environmental stewardship, ensuring that they remain vibrant and valuable assets for years to come.
Case Studies	• Waikato Hockey Association and Schools

Principle	Detailed Intent
	Waikato Hockey Case Study.pdf
Meeting an identified need	In the context of hockey using an evidence-based approach to address identified needs ensures that hockey facilities are tailored to their intended purposes to address the identified challenges key elements of meeting an identified need. • Identifying and understand the true challenge/problem, the need versus the want. • Player/participation needs – age, gender, performance level. • Equipment needs. • Facility needs. • Accessibility needs. • Financial needs. • Environmental sustainability needs. By prioritising an understanding of needs and priorities over wants, all available options ad solutions are thoroughly considered to meet the identified needs.
Case Studies	• Hook in4 Health Papua New Guinea Case Study - hook-in-4-health-pap • Hook in4 Health Vanuatu Mamas in Hockey Case study - hook-in-4-health-van
Sustainability	In the context of hockey, 'sustainability' refers to the responsible management and development of the sport in a way that ensures its long-term viability while minimising negative impacts on the environment, society, and the game itself. Key elements of sustainability to consider: • Environmental sustainability – minimising the ecological footprint i.e. energy and water consumption, waste generation, transportation and more. • Social Responsibility – promoting ethical practises, including fair treatment of participants, fostering inclusive, diverse, and equitable practises. Building strong connections with local communities through outreach programs, community events, and partnerships with local organizations promotes the positive social and economic impacts of the sport. Financial sustainability – efforts to make the sport financially accessible, i.e. cost to participate and diversification of revenue.
Case Studies	• Auckland Hockey Association – Removal Irrigation

Principle	Detailed Intent
	Auckland Hockey Case Study.pdf • North Harbour Hockey Association – Te Hōnonga a Iwi North Harbour Environmental Sustai • Hockey5s Lausanne – Non-Water Turf Casy Study - hockey5s-lausanne-n • Bio Plastic Turf Tokyo Case study - bio-plastic turf tokyo. • Racing to Zero – Canada Case Study - sustainability-racing-t • German Hockey Association Hockey Forest Case study - hockey forest.pdf
Social Value of Hockey	The social value of hockey refers to the positive impact and contributions that sporting activities make to individuals, communities, and society as a whole beyond the realm of physical health and fitness. Social value is difficult to measure, however, Sport NZ has identified that for every $1 invested in sport and recreation, there is a $2.12 return to New Zealand in social outcomes. Key elements of the social value of sport to consider: • Community Cohesion: Providing opportunities for social interaction, bringing individuals, family/whānau together. • Inclusivity and Diversity: Providing a platform for individuals of all backgrounds, genders, ethnicities, and socio-economic statuses to participate in hockey. • Personal Development: Promotes personal development by encouraging life skills such as teamwork, leadership, goal-setting discipline, resilience, and self-confidence.

Principle	Detailed Intent
	• Health and Well-being: Participation in sports promotes physical health and mental well-being by encouraging regular exercise, reducing the risk of chronic diseases, and improving mood and mental resilience. It enhances overall quality of life and contributes to a healthier and happier society. • Education and Learning: Serves as a powerful educational tool, teaching valuable lessons in, fair play, and ethical behaviour. It provides opportunities for experiential learning and skill development, complementing formal education and promoting lifelong learning.
Case Studies	• Africa Plays Hockey – Sierra Leone  Case study - africa-plays-hockey-si • Supporting the Ukrainian hockey family through humanitarian efforts  Case study - supporting-the-ukrair
Engagement with Mana Whenua to uphold Te Tiriti o Waitangi	Engagement with mana whenua to the mana of Te Tiriti o Waitangi is recognised and upheld when planning facilities through the principles of partnership, protection, and participation. This recognition could be developed in many ways, working with tangata whenua to determine what is appropriate in various situations. This may include: • Understanding the cultural narrative of existing and proposed hockey venues • Incorporating te reo in venue signage • Encouraging increased participation • Ensuing facilities are friendly for whānau
Case Studies	• Canterbury Hockey Association – Nga Puna Wai  Case study - Matapopore-Cultural- • Sport NZ Te Tiriti o Waitangi informed approach to spaces, places provision for physical activity.  te-tiriti-o-waitangi-informed-approach-put https://sportnz.org.nz/resources/a-te-tiriti-o-waitangi-informed-approach-to-spaces-places-provision-for-physical-activity/

17.10 Appendix 10 Additional Case Studies

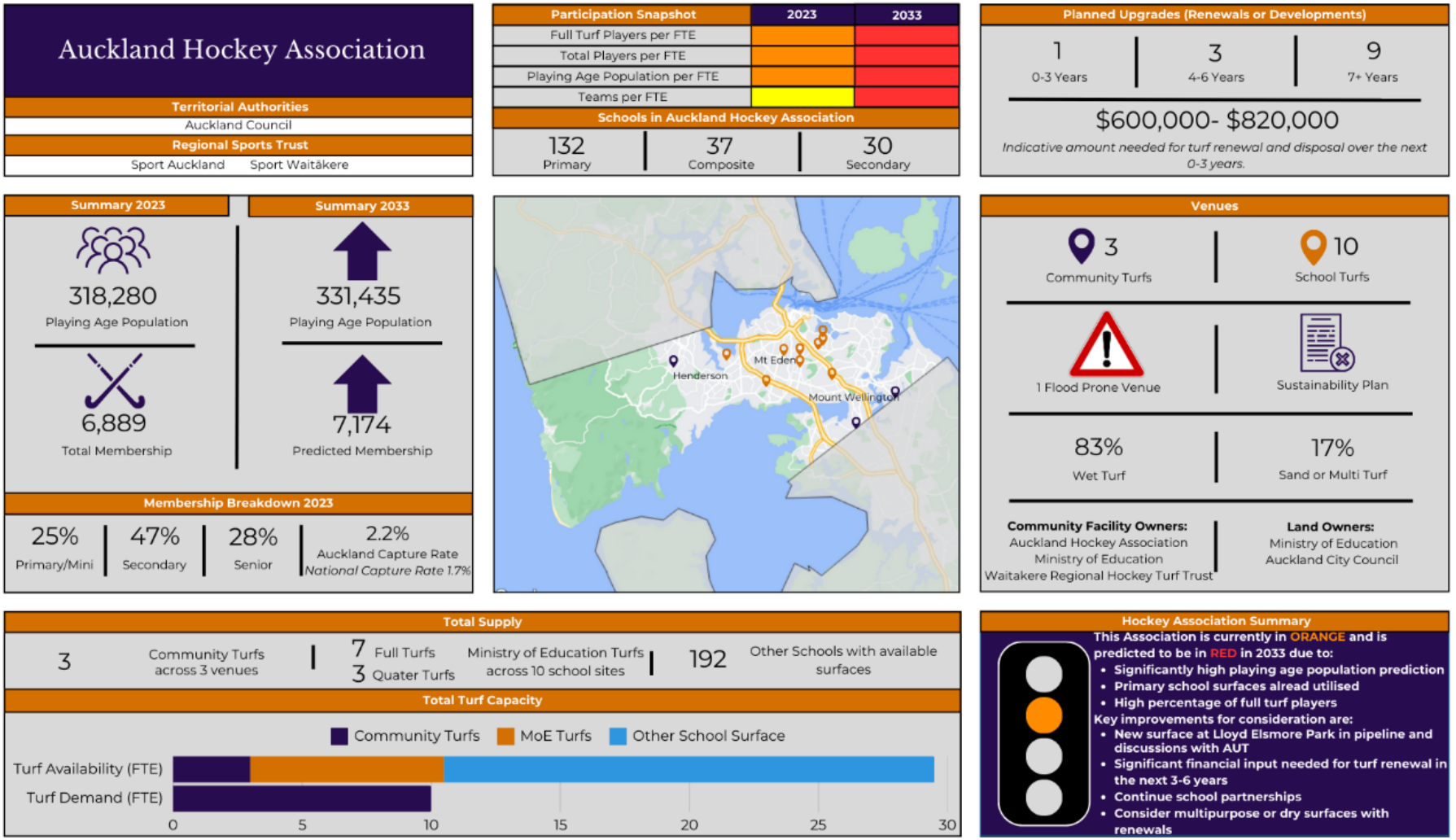
https://www.abc.net.au/news/2024-05-03/green-space-at-wentworth-point/103773204

https://cdn.revolutionise.com.au/cups/hockeyaus/files/0kzwnlknlps8hzhj.pdf

17.11 Appendix 11 – New Zealand Spaces and Places Framework

Title	PDF
New Zealand Spaces and Places Framework for Play, Active Recreation and Sport 2024 Sport NZ	 new-zealand-spaces-and-places-framewor

17.12 Appendix 12 - Hockey Associations Dashboards



Bay of Plenty Hockey Association

Territorial Authorities

Taupō District Council | Bay of Plenty Regional Council
Rotorua Lakes Council | Ōpōtiki District Council | Whakatāne District Council

Regional Sports Trust

Sport Bay of Plenty

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Bay of Plenty Hockey Association

76	24	12
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	1	2
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

77,750
Playing Age Population

3,090
Total Membership

Summary 2033

74,580
Playing Age Population

2,964
Predicted Membership

Membership Breakdown 2023

74%	23%	3%	4.0%
Primary/Mini	Secondary	Senior	BoP Capture Rate

National Capture Rate 1.7%

Venues

4	0
Community Turfs	School Turfs
Rotorua Venue- flood risk	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

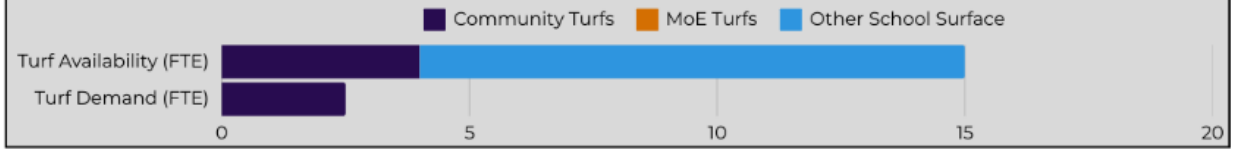
Community Facility Owners:
Taupō Hockey Association
Central Bay Hockey Charitable Trust
Rotorua Hockey Association

Land Owners:
Taupō District Council
Whakatāne District Council
Rotorua District Council

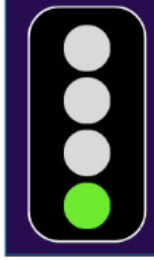
Total Supply

4	0	112
Community Turfs across 3 venues	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Significantly high capture rate makes continued membership growth unlikely**
- **Predicted decrease in playing age population**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Significant financial input needed for turf renewal in the next 1-6 years**
- **Consider multipurpose surface renewals**
- **Consider school relationships**

Buller Hockey Association

Territorial Authority
Buller District Council

Regional Sports Trust
Sport Tasman

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Buller Hockey Association

6	2	1
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	0	0
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

3,200
Playing Age Population

93
Total Membership

Summary 2033

3,000
Playing Age Population

87
Predicted Membership

Membership Breakdown 2023

59%	27%	14%	2.9%
Primary/Mini	Secondary	Senior	Buller Capture Rate *National Capture Rate 1.7%*

Venues

1	0
Community Turfs	School Turfs
Significant Flood Risk	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

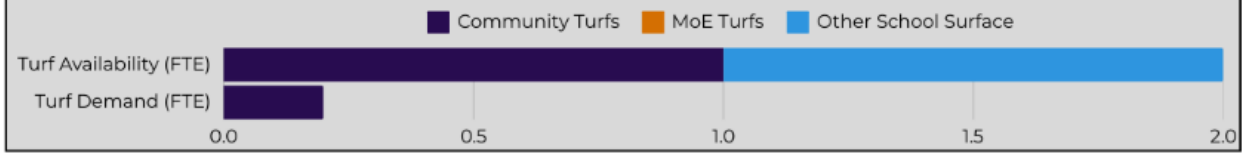
Community Facility Owners: Buller District Council

Land Owners: Buller District Council

Total Supply

1	0	9
Community Turfs across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in **GREEN** and is predicted to be in **GREEN** in 2033 due to:

- Current oversupply of FTE
- Predicted decrease in playing age population

Key improvements for consideration are:

- Establish a sustainability plan
- Significant financial input needed for turf renewal in the next 3 years
- Current turf location is significant flood risk

Canterbury Hockey Association

Territorial Authorities

Christchurch City Council
Hurunui District Council
Selwyn District Council
Waimakariri District Council

Regional Sports Trust

Sport Canterbury

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Canterbury Hockey Association

126	57	27
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

4	6	7
0-3 Years	4-6 Years	7+ Years

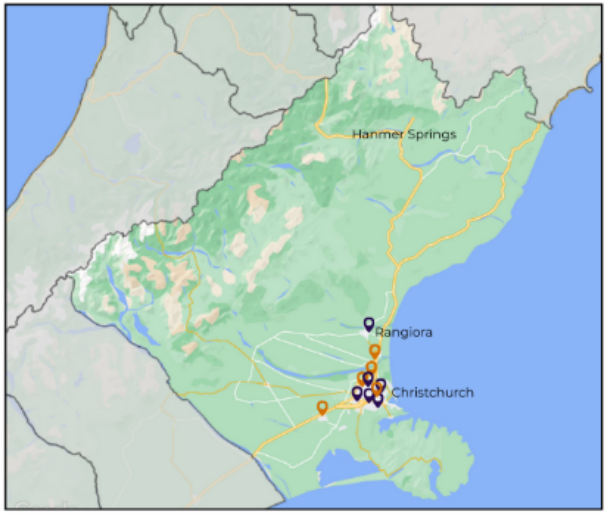
$2.4 - $3.28 million

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023	Summary 2033
257,090 Playing Age Population	257,770 Playing Age Population
5,996 Total Membership	6,012 Predicted Membership

Membership Breakdown 2023

37%	20%	43%	2.3%
Primary/Mini	Secondary	Senior	Canterbury Capture Rate *National Capture Rate 1.7%*



Venues

12	6
Community Turfs	School Turfs
Medium Vulnerability to Liquefaction	No Sustainability Plan
45% Wet Turf	55% Sand or Multi Turf

Community Facility Owners:
Christchurch City Council
NWCCS Trust
Ministry of Education

Land Owners:
Christchurch City Council
Ministry of Education

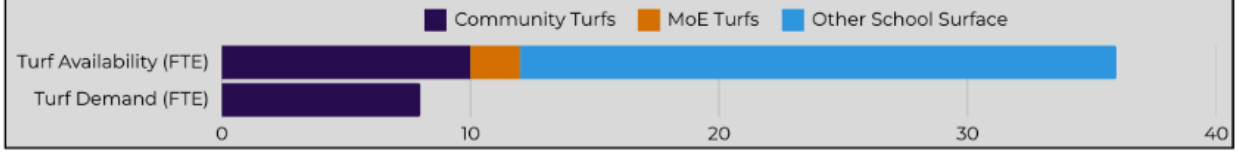
Total Supply

12 Community Turfs across 9 venues

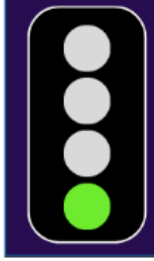
1 Full Turf
3 Half Turfs
2 Quarter Turfs
Ministry of Education Turfs across 6 school sites

204 Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in YELLOW in 2033 due to:

- **Demand is not yet approaching supply**
- **Above National capture rate and stable population prediction makes continued membership growth unpredictable**

Key improvements for consideration are:

- **Investigate primary school relationships to increase supply**
- **Establish a sustainability plan**
- **Significant financial input needed for turf renewal in the next 1-6 years**

Central Hawke's Bay Hockey Association

Territorial Authorities

Taurarua District Council | Central Hawke's Bay District Council

Regional Sports Trust

Sport Manawatū | Sport Hawke's Bay

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Central Hawke's Bay Hockey Association

32 Primary	2 Composite	4 Secondary

Planned Upgrades (Renewals or Developments)

0 0-3 Years	0 4-6 Years	1 7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

13,680 Playing Age Population

105 Total Membership

Summary 2033

13,040 Playing Age Population

100 Predicted Membership

Membership Breakdown 2023

31% Primary/Mini	12% Secondary	57% Senior	0.8% CHB Capture Rate *National Capture Rate 1.7%*

Venues

1 Community Turfs	0 School Turfs
Not available	No Sustainability Plan
0% Wet Turf	100% Sand or Multi Turf

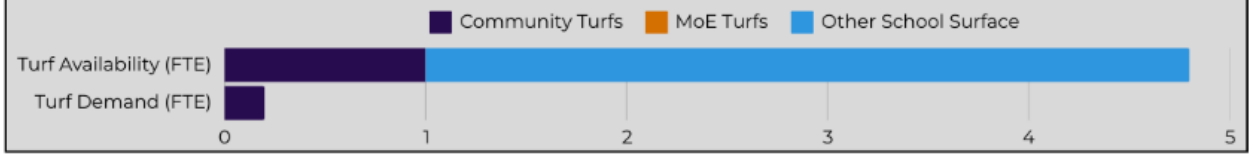
Community Facility Owners: Central Hawke's Bay Community Trust

Land Owners: Central Hawke's Bay District Council

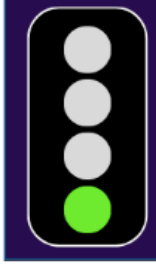
Total Supply

1 Community Turf across 1 venue	0 Ministry of Education Turfs across 0 school sites	38 Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Current oversupply of FTE**
- **Predicted decrease in playing age population**

Key improvements for consideration for this Association are:

- **Establish a sustainability plan**
- **Explore low capture rate- particularly in secondary age group**

Central Otago Hockey Association

Territorial Authorities

Queenstown Lakes District Council | Central Otago District Council

Regional Sports Trust

Sport Otago

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Central Otago Hockey Association

24	3	4
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	2	2
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

36,070
Playing Age Population

929
Total Membership

Summary 2033

35,900
Playing Age Population

925
Predicted Membership

Membership Breakdown 2023

60%	26%	14%	2.6%
Primary/Mini	Secondary	Senior	Central Otago Capture Rate *National Capture Rate 1.7%*

Venues

2.75	.5
Community Turfs	School Turfs
Venues Not Affected	No Sustainability Plan
30% Wet Turf	70% Sand or Multi Turf

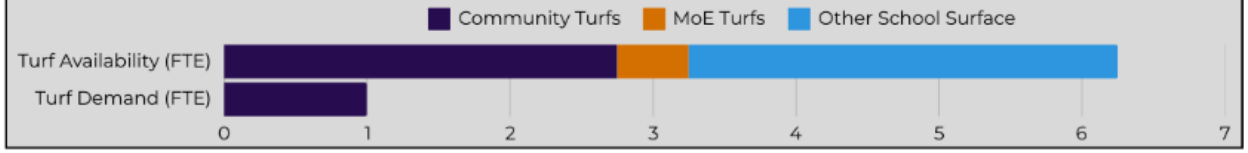
Community Facility Owners:
Central Otago Sport Turf Trust
Ministry of Education

Land Owners:
Queenstown Lakes District Council
Central Otago District Council
Ministry of Education

Total Supply

2.75	0.5	30
Community Turfs across 3 venues	Ministry of Education Turf across 1 school site	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Low percentage of full turf players**
- **Stable playing age population prediction**

Key improvements for consideration for this Association are:

- **Establish a sustainability plan**
- **Acknowledge geography challanges and winter weather conditions limiting turf use**

Counties Manukau Hockey Association

Territorial Authority
Auckland Council

Regional Sports Trust
Aktive

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Counties Manukau Hockey Association

55	15	15
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	1	1
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

327,445
Playing Age Population

1,236
Total Membership

Summary 2033

335,575
Playing Age Population

1,267
Predicted Membership

Membership Breakdown 2023

43%	20%	37%	0.3%
Primary/Mini	Secondary	Senior	CM Capture Rate *National Capture Rate 1.7%*

Venues

2	1
Community Turfs	School Turfs
Flood Risk Area	No Sustainability Plan
66% Wet Turf	33% Sand Turf

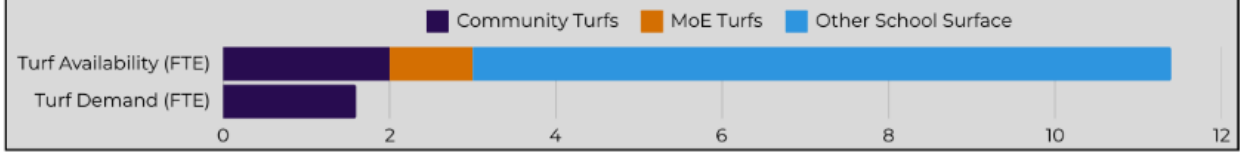
Community Facility Owners:
Counties Manukau Hockey Association
Ministry of Education

Land Owners:
Auckland Council
Ministry of Education

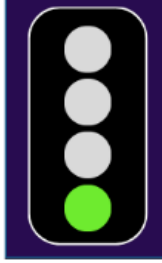
Total Supply

2	1	84
Community Turfs across 1 venue	Ministry of Education Turfs across 1 school site	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:
- **Significantly low capture rate**
- **Close proximity to Auckland and North Harbour Associations**

Key improvements for consideration for this Association are:
- **Establish a sustainability plan**
- **Explore significantly low capture rate**

Eastern Southland Association

Territorial Authority
Gore District Council

Regional Sports Trust
Active Southland

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Eastern Southland Hockey Association

9	0	2
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	0	0
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

5,240
Playing Age Population

466
Total Membership

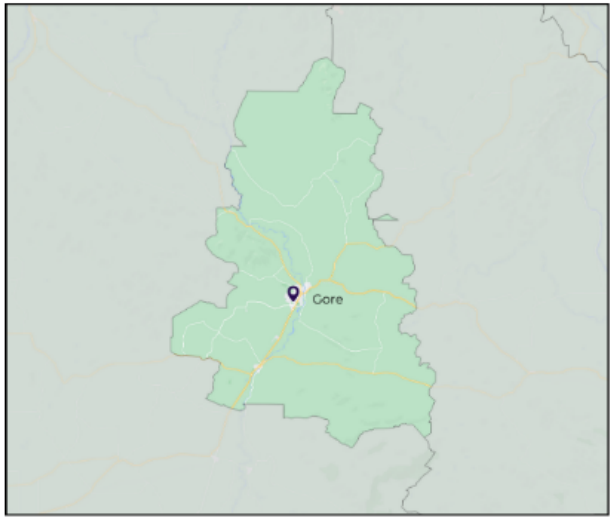
Summary 2033

4,879
Playing Age Population

433
Predicted Membership

Membership Breakdown 2023

50%	23%	27%	8.9%
Primary/Mini	Secondary	Senior	ES Capture Rate *National Capture Rate 1.7%*



Venues

1	0
Community Turf	School Turfs
Not Available	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

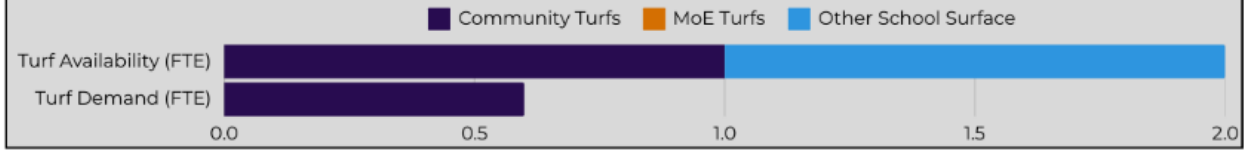
Community Facility Owners: Eastern Southland Hockey Association

Land Owners: Gore District Council

Total Supply

1	0	11
Community Turf across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in **GREEN** and is predicted to be in **GREEN** in 2033 due to:

- Significantly high capture rate makes continued growth unlikely
- Predicted decrease in playing age population

Key improvements for consideration are:

- Establish a sustainability plan
- Significant financial input needed for turf renewal in the next 3 years
- Consider school relationships

Hawke's Bay Association

Territorial Authorities

Napier City Council Hastings District Council

Regional Sports Trust

Sport Hawke's Bay

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Hawke's Bay Hockey Association

59	12	18
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	1	2
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

90,650
Playing Age Population

2,211
Total Membership

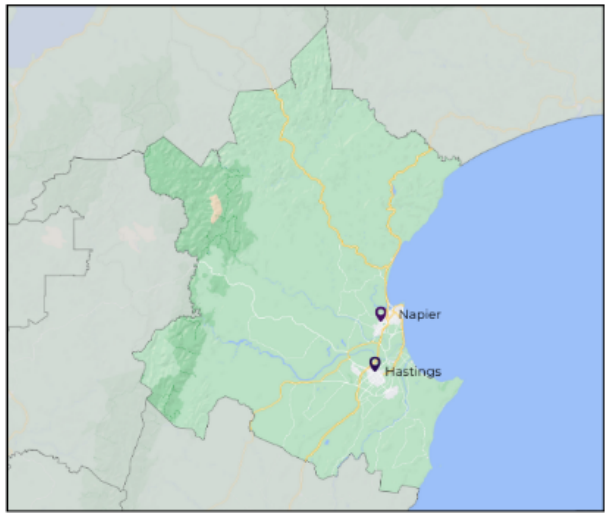
Summary 2033

92,030
Playing Age Population

2,245
Predicted Membership

Membership Breakdown 2023

33%	40%	27%	2.4%
Primary/Mini	Secondary	Senior	Hawke's Bay Capture Rate *National Capture Rate 1.7%*



Venues

3.5	0
Community Turfs	School Turfs
High Flood Risk High Liquefaction Vulnerability	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

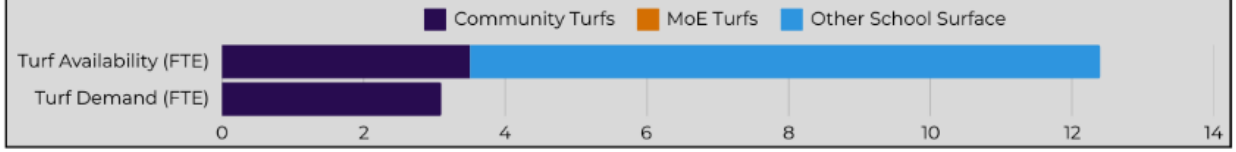
Community Facility Owners:
Hawkes Bay Hockey Association

Land owners:
Napier City Council
Hastings District Council

Total Supply

3.5	0	89
Community Turfs across 2 venues	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in ORANGE and is predicted to be in ORANGE in 2033 due to:

- **Approaching threshold to investigate use of extra venues**
- **Predicted increase in playing age population**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Both venues are at high risk of flood and liquefaction**
- **Consider school relationships**
- **Consider multipurpose turf renewals**

Horowhenua Association

Territorial Authority
Horowhenua District Council

Regional Sports Trust
Sport Manawatū

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Horowhenua Hockey Association

17	1	3
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	0	1
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

13,690
Playing Age Population

291
Total Membership

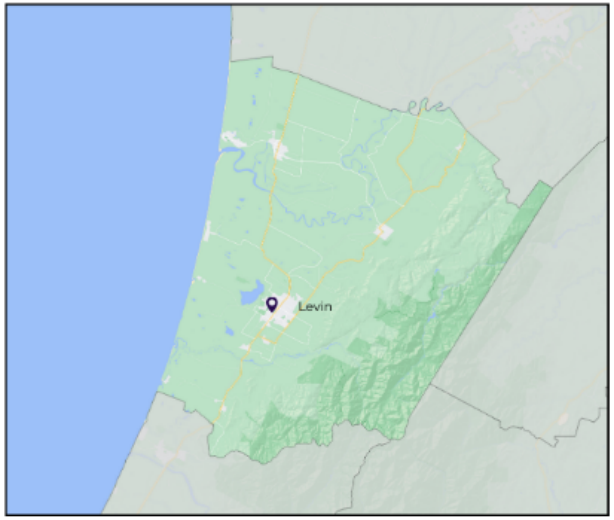
Summary 2033

13,300
Playing Age Population

283
Predicted Membership

Membership Breakdown 2023

53%	16%	31%	2.1%
Primary/Mini	Secondary	Senior	Horowhenua Capture Rate *National Capture Rate 1.7%*



Venues

1	0
Community Turf	School Turfs
Not Available	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

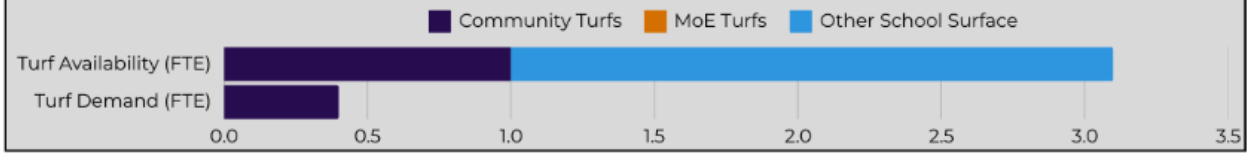
Community Facility Owners: Horowhenua Sports Turf Trust

Land Owners: Horowhenua District Council

Total Supply

1	0	21
Community Turf across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:
- **Current oversupply of FTE**
- **Predicted decrease in playing age population**

Key improvements for consideration are:
- **Establish a sustainability plan**
- **Consider school relationships**

Invercargill Association

Territorial Authorities

Invercargill City Council | Southland District Council

Regional Sports Trust

Active Southland

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Invercargill Hockey Association

56	2	10
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	0	2
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

51,090
Playing Age Population

846
Total Membership

Summary 2033

50,630
Playing Age Population

838
Predicted Membership

Membership Breakdown 2023

51%	37%	12%	1.7%
Primary/Mini	Secondary	Senior	Capture Rate

National Capture Rate 1.7%

Venues

2	0
Community Turfs	School Turfs
Very High Liquefaction Risk	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

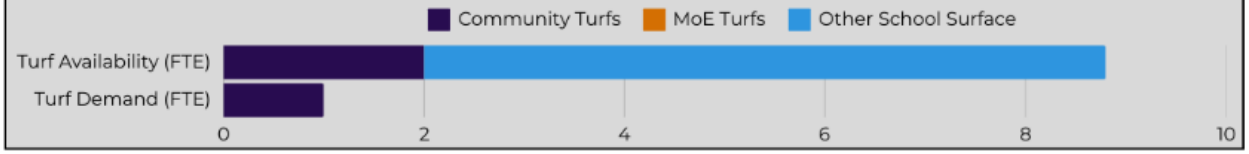
Community Facility Owners: Invercargill Hockey Association

Land Owners: Invercargill City Council

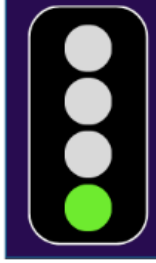
Total Supply

2	0	68
Community Turfs across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- Current oversupply of FTE
- Stable playing age population prediction
- Low percentage of full tuf players

Key improvements for consideration are:

- Establish a sustainability plan
- Consider school relationships
- Current location is very high risk for liquifaction

Manawatū Hockey Association

Territorial Authorities

Palmerston North City Council | Manawatū District Council

Regional Sports Trust

Sport Manawatū

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Manawatū Hockey Association

52	7	10
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	2	1
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

59,750
Playing Age Population

2,471
Total Membership

Summary 2033

58,910
Playing Age Population

2,476
Predicted Membership

Membership Breakdown 2023

42%	25%	33%	4.8%
Primary/Mini	Secondary	Senior	Manawatū Capture Rate *National Capture Rate 1.7%*

Venues

2	2
Community Turfs	School Turfs
Not Available	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

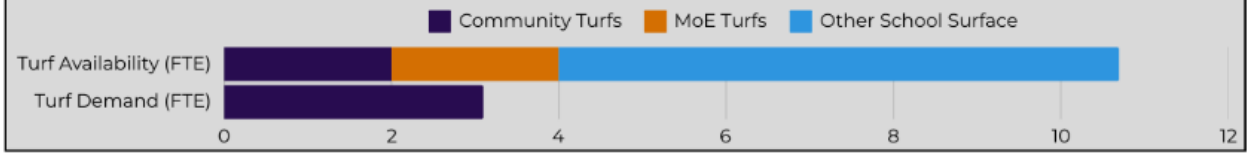
Community Facility Owners:
Palmerston North City Council
Ministry of Education

Land Owners:
Palmerston North City Council
Ministry of Education

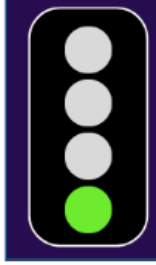
Total Supply

2	2	67
Community Turfs across 1 venue	Ministry of Education Turfs across 2 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Significantly high capture rate makes continued growth unlikely**
- **Stable playing age population prediction**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider primary school relationships due to high primary participation**
- **Consider multipurpose surface renewals**

Marlborough Hockey Association

Territorial Authority
Marlborough District Council

Regional Sports Trust
Sport Tasman

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Marlborough Hockey Association

23 Primary	3 Composite	3 Secondary

Planned Upgrades (Renewals or Developments)

0 0-3 Years	1 4-6 Years	1 7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

20,500
Playing Age Population

561
Total Membership

Summary 2033

19,330
Playing Age Population

529
Predicted Membership

Membership Breakdown 2023

66% Primary/Mini	17% Secondary	16% Senior	2.7% Capture Rate *National Capture Rate 1.7%*

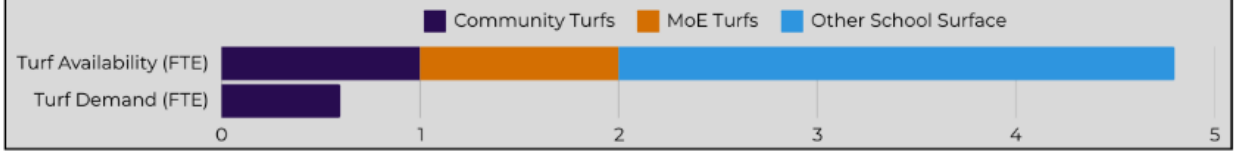
Venues

1 Community Turfs	1 School Turfs
Liquefaction Risk	No Sustainability Plan
100% Wet Turf	0% Multi or Sand Turf
Community Facility Owners: Marlborough District Council	**Land Owners:** Ministry of Education

Total Supply

1 Community Turf across 1 venue	1 Ministry of Education Turf across 1 school site	28 Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Old venue that was due to be decommissioned is now still in use**
- **Stable playing age population prediction**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider primary school relationships due to high primary participation**

Mid-Canterbury Association

Territorial Authority
Ashburton District Council

Regional Sports Trust
Sport Canterbury

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Mid-Canterbury Hockey Association

19	2	2
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	0	1
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

16,210
Playing Age Population

508
Total Membership

Summary 2033

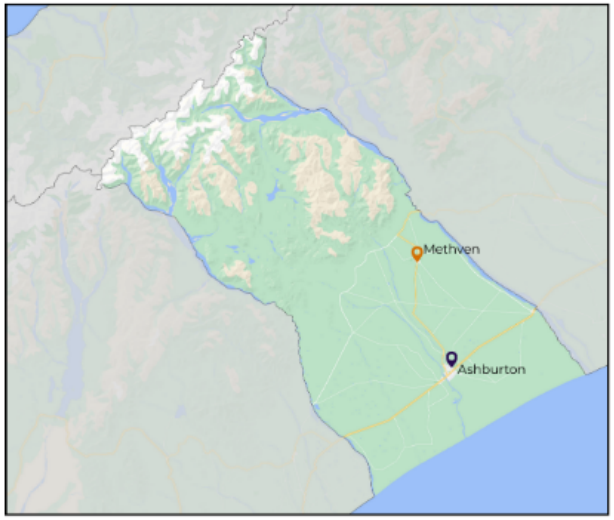
16,330
Playing Age Population

512
Predicted Membership

Membership Breakdown 2023

59%	0%	41%	3.1%
Primary/Mini	Secondary	Senior	MC Capture Rate

National Capture Rate 1.7%



Venues

1	1
Community Turfs	School Turfs
Venues Not Affected	No Sustainability Plan
50% Wet Turf	50% Sand or Multi Turf

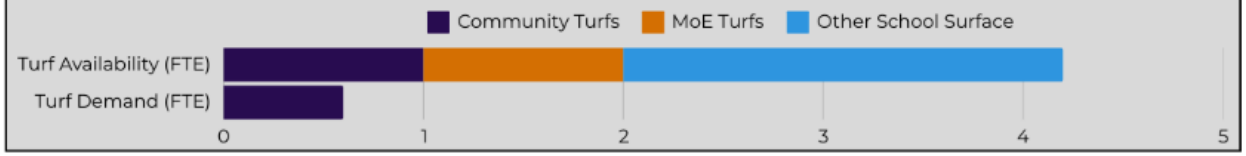
Community Facility Owners:
Mid-Canterbury Association
Ministry of Education

Land Owners:
Ashburton District Council
Ministry of Education

Total Supply

1	1	22
Community Turf across 1 venue	Ministry of Education Turf across 1 school site	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:
- **Current supply exceding demand**
- **Stable playing age population prediction**

Key improvements for consideration are:
- **Establish a sustainability plan**
- **Consider multipurpose surface - turf relocation currently under investigation**

Nelson Hockey Association

Territorial Authorities

Nelson City Council | Tasman District Council

Regional Sports Trust

Sport Tasman

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Nelson Hockey Association

39	9	7
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	1	0
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

42,700
Playing Age Population

624
Total Membership

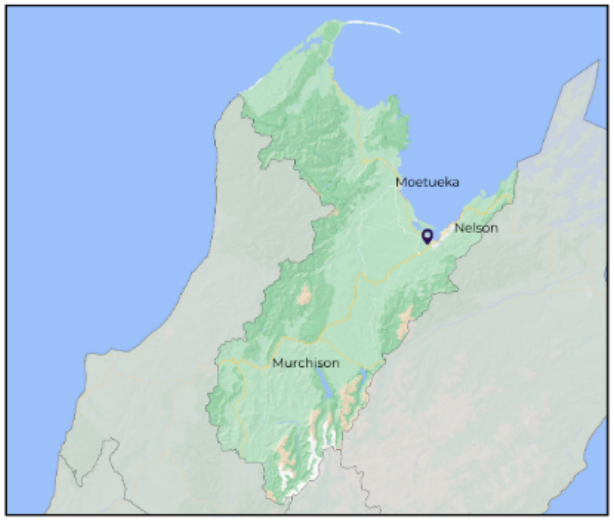
Summary 2033

40,800
Playing Age Population

596
Predicted Membership

Membership Breakdown 2023

14%	25%	61%	1.5%
Primary/Mini	Secondary	Senior	Nelson Capture Rate *National Capture Rate 1.7%*



Venues

2	0
Community Turfs	School Turfs
Venues Not Affected	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

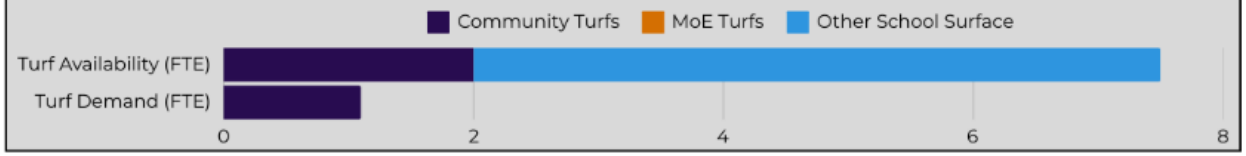
Community Facility Owners: Nelson City Council

Land Owners: Nelson City Council

Total Supply

2	0	55
Community Turfs across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Current supply exceding demand**
- **Predicted decrease in playing age population**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Explore low primary age participation**
- **Investigate school partnerships and multipurpose surface renewal**

North Harbour Hockey Association

Territorial Authority
Auckland Council

Regional Sports Trust
Harbour Sport

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
New Metric (Teams per FTE)		

Schools in North Harbour Hockey Association

69 Primary	24 Composite	19 Secondary

Planned Upgrades (Renewals or Developments)

1 0-3 Years	2 4-6 Years	8 7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

171,120
Playing Age Population

4,882
Total Membership

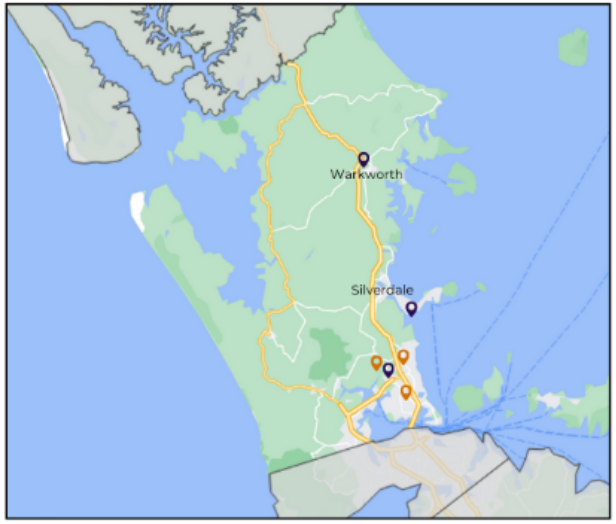
Summary 2033

187,265
Playing Age Population

5,343
Predicted Membership

Membership Breakdown 2023

39% Primary/Mini	28% Secondary	33% Senior	2.9% North Harbour Capture Rate *National Capture Rate 1.7%*



Venues

8 Community Turfs	3 School Turfs
Venues Not Affected	Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

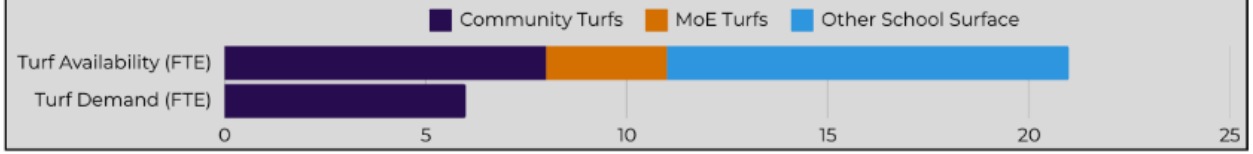
Community Facility Owners:
North Harbour Hockey Association
Auckland Council
Ministry of Education
Hockey Hibiscus Trust

Land Owners:
Auckland Council
Ministry of Education

Total Supply

8 Community Turfs across 3 venues	3 Ministry of Education Turfs across 3 school sites	109 Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:
- **Current oversupply of FTE**
- **Predicted increase in playing age population still does not approach supply**

Key improvements for consideration are:
- **Consider multipurpose surfaces with renewals**
- **Significant financial input needed for turf renewal**
- **Consider primary school venue utilisation to combat large geographic area**

North Otago Hockey Association

Territorial Authority
Waitaki District Council

Regional Sports Trust
Sport Otago

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in North Otago Hockey Association

17	1	4
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	1	0
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

9,130
Playing Age Population

439
Total Membership

Summary 2033

8,760
Playing Age Population

421
Predicted Membership

Membership Breakdown 2023

67%	14%	19%	4.8%
Primary/Mini	Secondary	Senior	North Otago Capture Rate *National Capture Rate 1.7%*

Venues

1	.5
Community Turfs	School Turfs
Not available	No Sustainability Plan
75% Wet Turf	25% Sand or Multi Turf

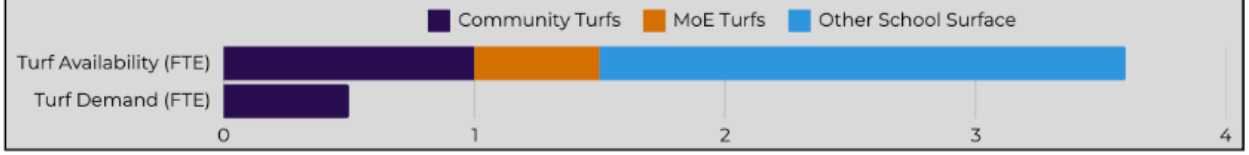
Community Facility Owners:
Oamaru North Otago Rec Turf Trust
Ministry of Education

Land Owners:
Waitaki District Council
Ministry of Education

Total Supply

1	0.5	21
Community Turf across 1 venue	Ministry of Education Turfs across 1 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- Current supply matches demand
- Stable playing age population prediction
- Low percentage of full turf players

Key improvements for consideration are:

- Establish a sustainability plan
- Develop relationships with school due to high primary membership rate

Northland Association

Territorial Authorities

Far North District Council Whangārei District Council
Kaipara District Council

Regional Sports Trust

Sport Northland

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Northland Hockey Association

103	31	16
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

2	0	3
0-3 Years	4-6 Years	7+ Years

$1.2 - $1.64 million

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

80,750
Playing Age Population

2,726
Total Membership

Summary 2033

80,830
Playing Age Population

2,729
Predicted Membership

Membership Breakdown 2023

36%	20%	44%	3.4%
Primary/Mini	Secondary	Senior	Capture Rate

National Capture Rate 1.7%

Venues

4.5	0
Community Turfs	School Turfs
Venues Not Affected	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

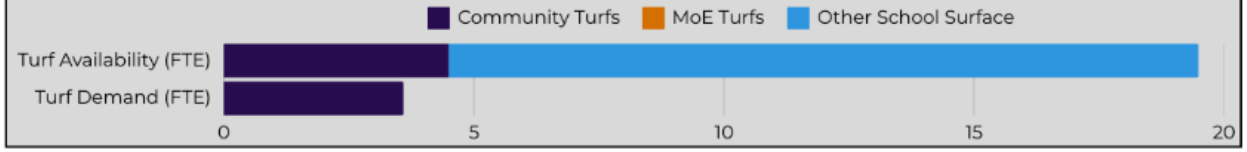
Community Facility Owners:
Northland Hockey Association

Land Owners:
Whangārei District Council
Kaipara District Council

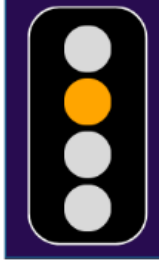
Total Supply

4.5	0	150
Community Turfs across 2 venues	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in ORANGE and is predicted to be in ORANGE in 2033 due to:

- **Association already utilises some other school surfaces**
- **Stable playing age population prediction**
- **High percentage of full turf players**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Large financial investment needed in next 3 years**
- **Consider school partnerships and multipurpose surfaces on FTE renewal**

Poverty Bay Hockey Association

Territorial Authority
Gisborne District Council

Regional Sports Trust
Sport Gisborne Tairāwhiti

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Poverty Bay Hockey Association

46	13	6
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	0	0
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

23,580
Playing Age Population

1,067
Total Membership

Summary 2033

22,730
Playing Age Population

1,029
Predicted Membership

Membership Breakdown 2023

74%	8%	18%	4.5%
Primary/Mini	Secondary	Senior	Poverty Bay Capture Rate *National Capture Rate 1.7%*

Venues

1	0
Community Turfs	School Turfs
Not Available	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

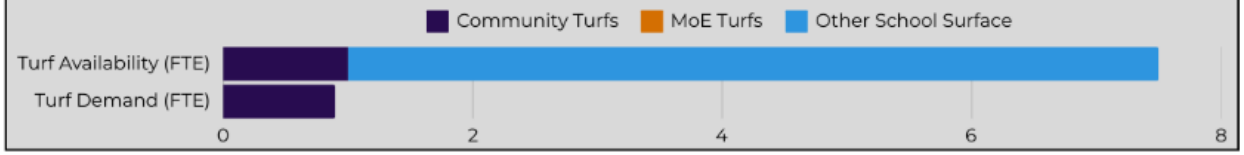
Community Facility Owners: Harry Barker Sports Facilities Trust

Land Owners: Gisborne District Council

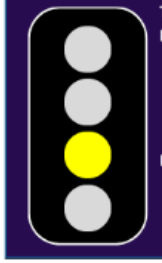
Total Supply

1	Community Turf across 1 venue	0	Ministry of Education Turfs across 0 school sites	65	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in YELLOW and is predicted to be in YELLOW in 2033 due to:

- **Singnificantly high capture rate makes continued growth unlikely**
- **Stable playing age population prediction**
- **High percentage of primary players**

Key improvements for consideration are:

- **Investigate utilising primary school venues**
- **Establish a sustainability plan**
- **Consider school partnerships and multipurpose surfaces on FTE renewal**

Otago Hockey Association

Territorial Authorities

Dunedin City Council | Clutha District Council

Regional Sports Trust

Sport Otago

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Otago Hockey Association

76	7	12
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

2	0	1
0-3 Years	4-6 Years	7+ Years

$1.2 - $1.64 million

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

90,230
Playing Age Population

2,479
Total Membership

Summary 2033

89,890
Playing Age Population

2,414
Predicted Membership

Membership Breakdown 2023

37%	28%	35%	2.7%
Primary/Mini	Secondary	Senior	Otago Capture Rate *National Capture Rate 1.7%*

Venues

3	.5
Full Community Turfs	School Turfs
2 Flood Prone Venues	No Sustainability Plan
75% Wet Turf	25% Sand Turf

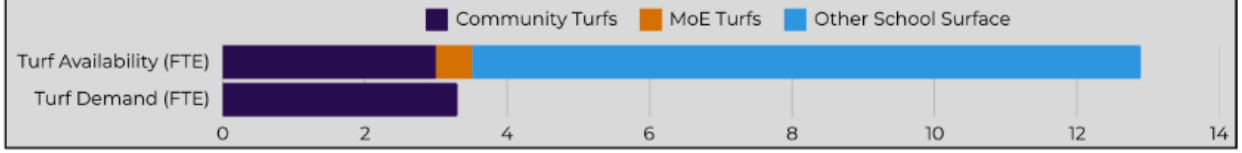
Community Facility Owners: Otago Hockey Association

Land Owners: Dunedin City Council, Ministry of Education

Total Supply

3	0.5	94
Community Turfs across 2 venues	Ministry of Education Turf across 1 school site	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in ORANGE and is predicted to be in ORANGE in 2033 due to:

- **High percentage of full turf players - University population influence**
- **Predicted decrease in playing age population**

Key improvements for consideration are:

- **Consider multipurpose surfaces with renewals**
- **Both Community venues are in high flood prone areas**
- **Consider primary school venue utilisation to combat temporary capacity issues**

South Canterbury Hockey Association

Territorial Authorities

Timaru District Council Waimate District Council
Mackenzie District Council

Regional Sports Trust

Sport Canterbury

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in South Canterbury Hockey Association

34	2	9
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

2	0	0
0-3 Years	4-6 Years	7+ Years

$1.2 - $1.64 million

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

24,590
Playing Age Population

1,216
Total Membership

Summary 2033

23,000
Playing Age Population

1,137
Predicted Membership

Membership Breakdown 2023

61%	26%	13%	4.9%
Primary/Mini	Secondary	Senior	Capture Rate

National Capture Rate 1.7%

Venues

2	0
Community Turfs	School Turfs
Venues Not Affected	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

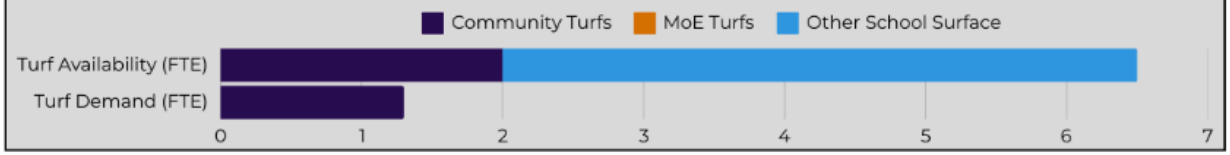
Community Facility Owners: South Canterbury Hockey Turf Trust

Land Owners: Timaru District Council

Total Supply

2	0	45
Community Turfs across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Current supply matches demand**
- **Predicted decrease in playing age population**
- **Low percentage of full turf players**
- **Significantly high capture rate makes continued growth unlikely**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider primary school relationships due to high primary participation**
- **Consider multipurpose surface renewals**

Taranaki Hockey Association

Territorial Authorities

New Plymouth District Council | South Taranaki District Council
Stratford District Council | Taranaki Regional Council | Ruapehu District Council

Regional Sports Trust

Sport Taranaki

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Taranaki Hockey Association

113	11	16
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	0	1
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

64,020
Playing Age Population

1,502
Total Membership

Summary 2033

61,090
Playing Age Population

1,433
Predicted Membership

Membership Breakdown 2023

52%	28%	20%	2.3%
Primary/Mini	Secondary	Senior	Taranaki Capture Rate *National Capture Rate 1.7%*

Venues

2	0
Community Turfs	School Turfs
Not Available	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

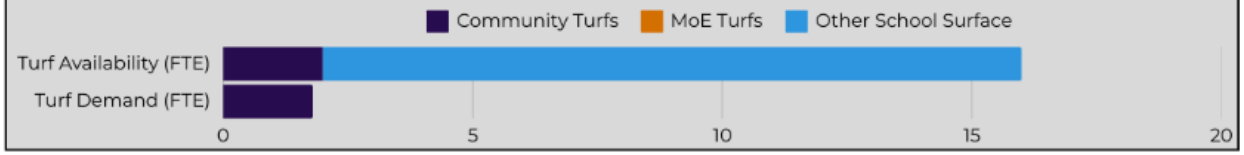
Community Facility Owners:
Taranaki Synthetic Turf Trust

Land Owners:
Stratford District Council
New Plymouth District Council

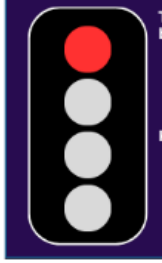
Total Supply

2	0	140
Community Turfs across 2 venues	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in RED and is predicted to be in ORANGE in 2033 due to:

- Demand is approaching supply but with a predicted decrease in playing age population
- High percentage of primary players
- High level discussions happening re options with Council and Association

Key improvements for consideration are:

- Investigate primary school relationships to temporarily increase supply
- Establish a sustainability plan
- Large financial investment needed in next 3 years
- Consider multipurpose surfaces on FTE renewal

Tauranga Hockey Association

Territorial Authorities

Tauranga City Council | Western Bay of Plenty District Council

Regional Sports Trust

Sport Bay of Plenty

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Tauranga Hockey Association

58	9	10
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

2	2	2
0-3 Years	4-6 Years	7+ Years

$1.2 - $1.64 million

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

89,010
Playing Age Population

2,789
Total Membership

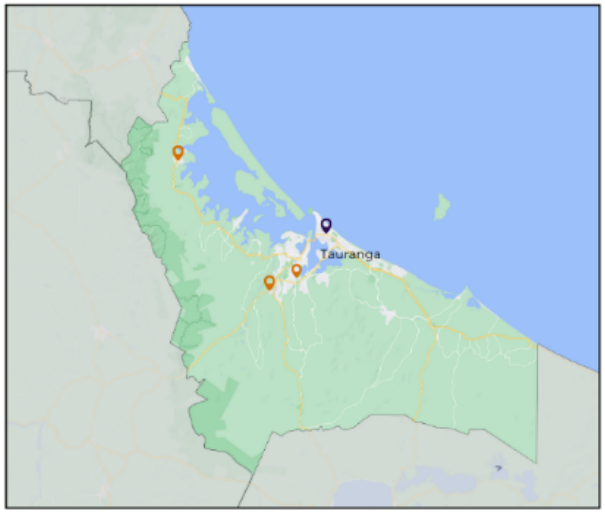
Summary 2033

91,270
Playing Age Population

2,860
Predicted Membership

Membership Breakdown 2023

57%	28%	15%	3.1%
Primary/Mini	Secondary	Senior	Tauranga Capture Rate *National Capture Rate 1.7%*



Venues

3	2.5
Community Turfs	School Turfs

Flood Prone Venue Major overland flow path Possible liquifaction risk	No Sustainability Plan

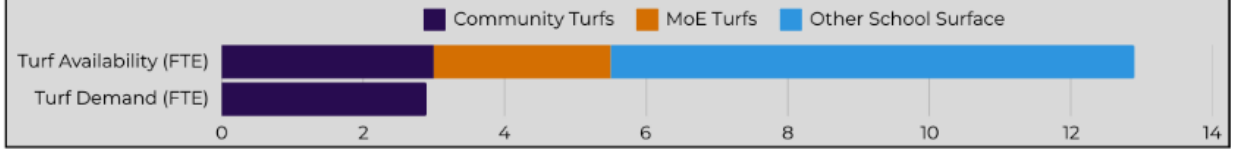
50%	50%
Wet Turf	Sand or Multi Turf

Community Facility Owners: Tauranga Hockey Association Ministry of Education	**Land Owners:** Tauranga City Council Ministry of Education

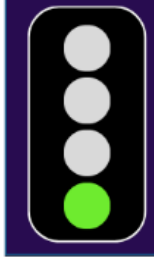
Total Supply

3	2.5	74
Community Turfs across 1 venue	Ministry of Education Turfs across 3 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Current supply matches demand**
- **Predicted increase in playing age population**
- **Low percentage of full turf players**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider primary school relationships due to high primary participation**
- **Community venue at high risk of flood and possible liquifaction**
- **Large financial investment needed in next 1-6**

Thames Valley Hockey Association

Territorial Authorities

Hauraki District Council | Thames-Coromandel District Council

Regional Sports Trust

Sport Waikato

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Thames Valley Hockey Association

36	4	4
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	0	1
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

17,380
Playing Age Population

899
Total Membership

Summary 2033

16,140
Playing Age Population

835
Predicted Membership

Membership Breakdown 2023

55%	23%	22%	5.2%
Primary/Mini	Secondary	Senior	Capture Rate

National Capture Rate 1.7%

Venues

1	0
Community Turfs	School Turfs
Not Available	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

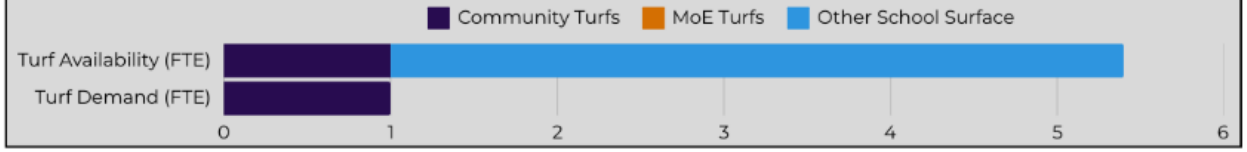
Community Facility owners: Thames Valley Hockey Turf Society

Land owners: Hauraki District Council

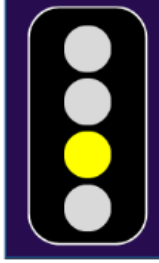
Total Supply

1	0	44
Community Turf across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in YELLOW and is predicted to be in YELLOW in 2033 due to:

- **Demand is approaching supply but with a predicted decrease in playing age population**
- **High percentage of primary players**
- **Significantly high capture rate makes continued membership growth unlikely**

Key improvements for consideration are:

- **Investigate primary school relationships to temporarily increase supply**
- **Establish a sustainability plan**
- **Consider multipurpose surfaces on FTE renewal**

Waikato Hockey Association

Territorial Authorities

Hamilton City Council Waipā District Council Ōtorohanga District Council
South Waikato District Council. Matamata - Piako District Council

Regional Sports Trust

Sport Waikato

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Waikato Hockey Association

84	72	28
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

4	0	4
0-3 Years	4-6 Years	7+ Years

$2.4 - $3.28 million

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

193,030
Playing Age Population

5,089
Total Membership

Summary 2033

199,640
Playing Age Population

5,263
Predicted Membership

Membership Breakdown 2023

40%	33%	27%	2.6%
Primary/Mini	Secondary	Senior	Waikato Capture Rate

National Capture Rate 1.7%

Venues

2	6
Community Turfs	School Turfs
1 Flood Prone Venue Liquefaction Possible	No Sustainability Plan
75% Wet Turf	25% Sand or Multi Turf

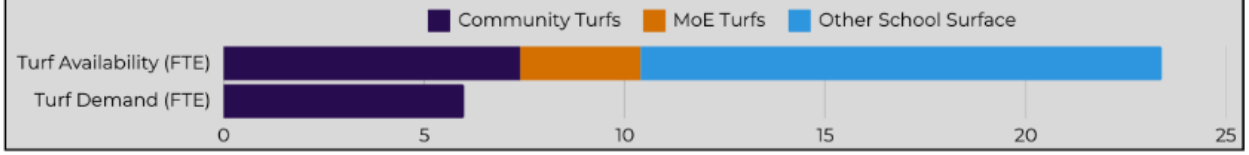
Community Facility owners:
Waikato Hockey Charitable Trust
Ministry of Education

Land owners:
Hamilton City Council
Ministry of Education

Total Supply

7	3	203
Community Turfs across 5 venues	Ministry of Education Turfs across 3 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in YELLOW in 2033 due to:

- **Utilises secondary school turfs well but not primary school surfaces**
- **Predicted increase in playing age population**

Key improvements for consideration are:

- **Consider multipurpose surfaces with renewals**
- **Significant financial input needed for turf renewal**
- **Consider primary school venue utilisation to combat large geographic area**
- **Shift trainings to make way for games on FTEs**

Wairarapa Hockey Association

Territorial Authorities

Masterton District Council | Carterton District Council | South Wairarapa District Council

Regional Sports Trusts

Nuku Ora | Sport Manawatū

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Wairarapa Hockey Association

24	3	7
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	1	0
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

18,690
Playing Age Population

1,411
Total Membership

Summary 2033

18,130
Playing Age Population

1,369
Predicted Membership

Membership Breakdown 2023

46%	23%	31%	7.5%
Primary/Mini	Secondary	Senior	Capture Rate

National Capture Rate 1.7%

Venues

2	.5
Community Turfs	School Turfs
Low liquifaction risk	No Sustainability Plan
80% Wet Turf	20% Sand or Multi Turf

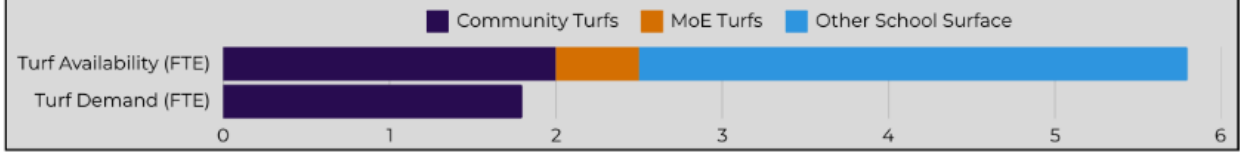
Community Facility Owners:
Masterton Community Trust
Ministry of Education

Land Owners:
Masterton District Council
Ministry of Education

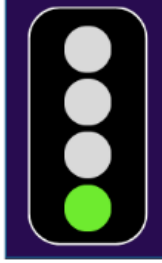
Total Supply

2 Community Turfs across 1 venue | 0.5 Ministry of Education Turfs across 1 school site | 33 Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Current supply matches demand**
- **Stable playing age population prediction**
- **Significantly high capture rate makes continued growth unlikely**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider multipurpose surface renewals**

Wellington Hockey Association

Territorial Authorities

Wellington City Council | Upper Hutt City Council | Lower Hutt City Council
Porirua City Council | Kāpiti Coast District Council

Regional Sports Trust

Nuku Ora

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Wellington Hockey Association

151	25	30
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

1	3	2
0-3 Years	4-6 Years	7+ Years

$600,000- $820,000

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

242,140
Playing Age Population

3,851
Total Membership

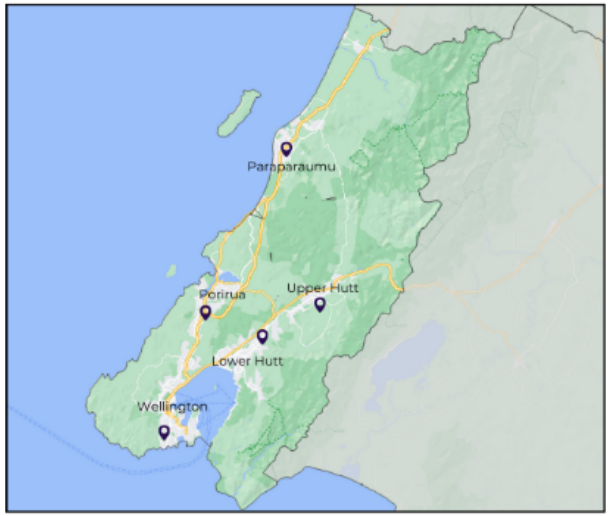
Summary 2033

239,080
Playing Age Population

3,802
Predicted Membership

Membership Breakdown 2023

20%	30%	50%	1.6%
Primary/Mini	Secondary	Senior	Wellington Capture Rate *National Capture Rate 1.7%*



Venues

7	0
Full Community Turfs	School Turfs
Fraser Park - Flood Zone	No Sustainability Plan
71% Wet Turf	29% Sand or Multi Turf

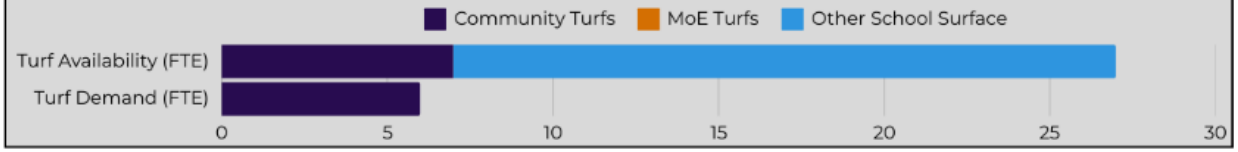
Community Facility Owners:
Wellington Regional Hockey Stadium Trust
Kāpiti Community Recreational Turf Trust
Maidstone Park Charitable Trust

Land Owners:
Wellington City Council
Kāpiti Coast District Council

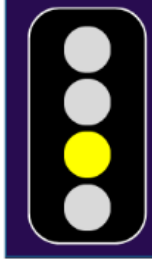
Total Supply

7	0	206
Community Turfs across 5 venues	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary



This Association is currently in YELLOW and is predicted to be in GREEN in 2033 due to:

- **Current supply meets demand**
- **Predicted decrease in playing age population**
- **Significantly high percentage full turf players**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider school partnerships and multipurpose surfaces with renewals**
- **High risk flood prone community venue**
- **Explore low primary membership**

West Coast Hockey Association

Territorial Authorities

Grey District Council | Westland District Council

Regional Sports Trust

Sport Canterbury

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in West Coast Hockey Association

21	2	3
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	1	0
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

9,040
Playing Age Population

256
Total Membership

Summary 2033

8,070
Playing Age Population

230
Predicted Membership

Membership Breakdown 2023

36%	18%	46%	2.9%
Primary/Mini	Secondary	Senior	West Coast Capture Rate *National Capture Rate 1.7%*

Venues

1	0
Community Turfs	School Turfs
Liquefaction Risk Medium Flood Risk	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

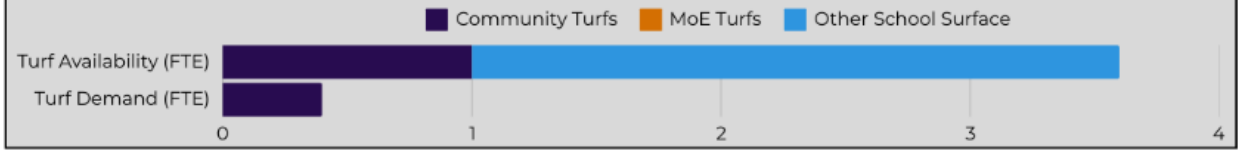
Community Facility Owners: Westurf Recreation Trust

Land Owners: Grey District Council

Total Supply

1	0	26
Community Turf across 1 venue	Ministry of Education Turfs across 0 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:

- **Current oversupply of FTE**
- **Predicted decrease in playing age population**

Key improvements for consideration are:

- **Establish a sustainability plan**
- **Consider multipurpose surface and school partnership with renewals**

Whanganui Hockey Association

Territorial Authority
Whanganui District Council

Regional Sports Trust
Sport Whanganui

Participation Snapshot	2023	2033
Full Turf Players per FTE		
Total Players per FTE		
Playing Age Population per FTE		
Teams per FTE		

Schools in Whanganui Hockey Association

27	6	6
Primary	Composite	Secondary

Planned Upgrades (Renewals or Developments)

0	1	1
0-3 Years	4-6 Years	7+ Years

$0

Indicative amount needed for turf renewal and disposal over the next 0-3 years.

Summary 2023

19,630
Playing Age Population

816
Total Membership

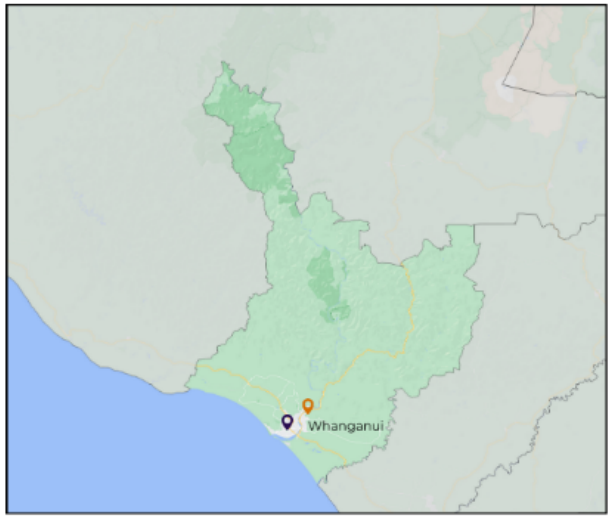
Summary 2033

19,090
Playing Age Population

794
Predicted Membership

Membership Breakdown 2023

58%	29%	13%	4.2%
Primary/Mini	Secondary	Senior	Capture Rate *National Capture Rate 1.7%*



Venues

1	1
Community Turfs	School Turfs
Flood prone venue Major overland flow path	No Sustainability Plan
100% Wet Turf	0% Sand or Multi Turf

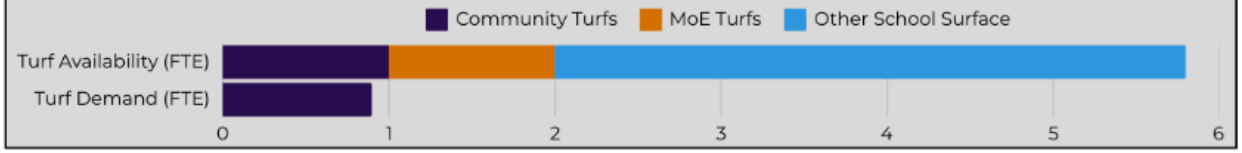
Community Facility Owners:
Whanganui District Council
Ministry of Education

Land Owners:
Whanganui District Council
Ministry of Education

Total Supply

1	1	38
Community Turf across 1 venue	Ministry of Education Turf across 1 school sites	Other Schools with available surfaces

Total Turf Capacity



Hockey Association Summary

This Association is currently in GREEN and is predicted to be in GREEN in 2033 due to:
- **Current oversupply of FTE**
- **Predicted decrease in playing age population**

Key improvements for consideration are:
- **Establish a sustainability plan**
- **Consider multipurpose surfaces with renewals**
- **Flood prone community venue**

17.13 Appendix 13 - Spaces and Place Key Considerations

Strategy Recommendation	Principle(s)	Key Considerations
Adapting the Delivery Model	Meeting an identified need Partnership and Collaboration Social value of sport Te Tiriti o Waitangi Informed approach	An evidence-based approach to identifying needs ensures fit-for-purpose solutions. What are our needs and priorities versus our wants? Are there non-capital solutions, such as changing the way you deliver your activities, or making use of existing assets? Consider what's needed to support intergenerational whānau participation. How do we maximise the use of the facility? How are we collaborating with others to 'open and grow' the game of hockey? How are we making the game of hockey and or the facility affordable for the end user? How do we continue to honour Te Tiriti o Waitangi?
Existing Network of Facilities	Accessibility Sustainability Social value of sport Te Tiriti o Waitangi Informed approach	Can we better use the wider network and connections? Repurpose or improve what we already have, if necessary, to meet community needs. Seek greater access to existing school and kura facilities and spaces and identify potential school/community partnership opportunities for new or expanded facilities. Review whole-of-life costs to ensure environmentally sustainable operations (i.e. materials, energy sources, digitisation, renewals). Prioritise the inclusion of amenities and operational approaches that support equitable access. Facilitate multi-use or shared facilities to meet the needs of the expected primary users, yet flexible enough to cater to a variety of uses now and in the future. Facilities can easily adapt to accommodate changing circumstances and emerging trends over time. What environmental sustainability initiatives are we deploying? Consider removing or reducing irrigation on turfs. Support mana whenua reconnecting to historic sites, protecting and enhancing these. Incorporate spaces to practice manaakitanga and facilitate gathering and social interaction.

Strategy Recommendation	Principle(s)	Key Considerations
		Alternative funding models and potential partnerships such as offsetting operational costs through funders who support equity of access.
New Developments	Accessibility Partnership and Collaboration Sustainability Social value of sport Te Tiriti o Waitangi Informed approach	Can we improve or redevelop an existing facility, rather than build a new one? Explore partnership opportunities before building standalone and/or single-use facilities and spaces. Evaluate upfront how affordable the facilities or spaces will be for the intended user and what changes you can make to ensure greater affordability. The location of new facilities and spaces should consider climate resilience and be integrated into active and public transport routes and co-located with other facilities if possible Complement universal design with accessible design to ensure accessibility and use by everybody regardless of their ability. Incorporate spaces to practice manaakitanga and facilitate gathering and social interaction. Review options to attain a low carbon footprint when redeveloping or building a new facility or space. Consider need, size, materials, waste, water, sharing of facilities / optimising use, and energy use to minimise embodied carbon.
HNZ Specific Recommendations	Sustainability Te Tiriti o Waitangi Informed approach	What environmental sustainability leadership and support is being offered to the hockey community? What structures, policies, and processes are enabling innovative thinking. Enhance connections with the surrounding natural environment and protect and enhance the natural ecology/biodiversity, strengthening the relationship between tangata and whenua.

17.14 Appendix 14 – Amenity Principles

In response to a large percentage of dissatisfaction with the provision of amenities, the following principles have been documented to support the hockey community to ensure these facilities are functional, welcoming, and inclusive for everyone.

Principle	Intent	Considerations
Universal design	Adapting and designing spaces that are functional for the full range of diversity within the hockey community, that address	Equitable use Flexible use Simple and intuitive

Principle	Intent	Considerations
	the physical, cultural, sensory and cognitive needs of the broadest possible range of people.	Size and spaces are appropriate – i.e. wheelchair access Design for longevity
Amenity Needs Analysis	Identifying necessary amenities, like accessible changing rooms or multipurpose spaces, while recognizing that some facilities, may not be required for all venues. By conducting a thorough needs analysis, clubs can design and improve their spaces to be functional, inclusive, and supportive of the club's success and community engagement.	Grandstand or covered seating Shade Dugouts Gender-neutral changing rooms Medical rooms Officials' rooms Storage Pavilion Kitchen Supporting infrastructure Car parking Spectator Seating
Master plan - location and placement of amenities	Planning the venue to provide maximum benefit, functionality and flexibility for the hockey community	Consider the location and placement of car parks, pavilion, grandstand, changing rooms, first aid rooms, officials rooms, storage rooms, and technology requirements for scoreboards.
Environmental, Sustainable Design	To consider environmentally friendly practices	Energy efficiency Water use Stormwater Indoor environment quality Materials used to construct amenities

17.15 Appendix 15 – Amenities Resources

Title	PDF
Guidance Note – Pavilions and Change Facilities Cricket Australia	Guidance-Note-07_Pavilions-and-Change-
Preferred Community Facility Guidelines 2024 Australian Football Venues AFL	Preferred Community Facilities

17.16 Appendix 16 - Secondary Data Review

Numerous generic and sport-specific documents have been developed by various agencies to aid in the planning and development of sports and recreation facilities.

Council LTPs

Councils were the focus of this data review given their reach and influence over regional and district Councils.

To summarise, there was a medium level of alignment between Council LTPs and the under-development New Zealand Hockey Facilities Strategy. However, there were some consistent themes

across Councils that Hockey should consider when developing the Spaces and Places Strategy and setting their direction. These were:

1)Pressure on water facilities and infrastructure:

a) Many Councils are facing an increasing challenge with water facilities and infrastructure ageing and there being risks of not meeting service levels.
b) Replacing infrastructure is a major focus for Councils.
c) Three waters and the impact of this are not fully confirmed or realised but need to be considered when planning for the future.
    i) What does this mean? Hockey needs to consider what would happen if Councils could not (or lessen) deliver on their service agreements for reasons such as needing to prioritise drinking water or stormwater. What would this mean for Hockey's facilities and areas where they use Council-owned spaces? How could they cope without the current levels of water being utilised for pitches etc? This could become a reality as populations increase and infrastructure quality depreciates.

2)Climate Change

a. Climate change is a huge challenge and risk for all Councils, and they are tackling this in different ways (i.e. at different levels of maturity).
b. There are many unknown factors when it comes to climate change, especially around who pays for what, and what the impact will be. However, there are already known issues and Councils are planning their response.
c. Responses include prioritising planning, undertaking precautionary measures, rethinking delivery models and more.
d. There are major concerns regarding the impact on Council finances if major weather events/climate events occur, and 'nice to haves' will be the first thing that gets cut.
e. For Hockey:
    i. Need to consider climate change in the strategy and how hockey can future-proof assets but also look at different ways of operating that will not be as heavily impacted by climate change and will enable less reliance on Councils (as they face more pressure with climate challenges).

4)Diversity, Equity and Inclusion

f. New Zealand is becoming increasingly diverse, and Councils are recognising this and rising to the challenge, particularly through focusing on partnerships.
g. For Hockey, how can our diverse population's needs be met, and how can delivery and facilities meet these needs? What needs to be considered?

5)Māori Partnership

h. This is a critical element to all of Councils' LTPs and working in true partnership is becoming more apparent and genuine.

Hockey needs to consider how to uphold Te Tiriti O Waitangi through its strategy and what it means to be a true Treaty partner through their work.

17.17 Appendix 17 - Stakeholder Engagement List

Stakeholder
Project Working Group (Empower)
Project Steering Group (Collaborate)
NZ Heritage
NZ Māori Hockey
NZ Pasifika Hockey
NZ Indians Hockey

Stakeholder
Associations
Clubs
NZ Secondary School Sports Council
Tertiary/University
Turf Trusts
Councils
Regional Sports Trusts
Māori and Iwi groups
Sport NZ
Facility owners and operators
Local Trusts and funding agencies
Regional sport, active recreation and play organisations
YMCA and similar organisations
Community Based Organisations

17.18 Appendix 18 – Hockey Association Facility Survey Questions

SurveyMonkey_409332785-6.pdf

17.19 Appendix 19 – Core Turf Inventory List

Core Hockey Turfs.xlsx