

Southern District Health Board Site Masterplan



28 April 2022

Mana Whenua engagement and input facilitated by Aukaha.

This document has been prepared by Jasmax-HDR health architecture partnership.

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Masterplan Brief and Context

"As a population group, Māori have on average the poorest health status of any ethnic group in New Zealand. We also received uncontested statistical evidence demonstrating that, despite reform and readjustments, Māori health inequities have persisted in the nearly two decades since the Act was introduced. All parties to stage one of this inquiry, including the Crown, consider the poor state of Māori health outcomes unacceptable"

— Waitangi Tribunal (2019)

Taken from the Wai 5275 treaty claim report, the above quote demonstrates the need for Mana Whenua and Māori leadership in the health system. The treaty claim highlighted that the provisions in the Act did not afford Māori partnership or any treaty consistent control of planning, decision making, design and delivery. They found that the framework fails to commit to achieving equity.

They also found several breaches in relation to district health board governance and concluded that the governance arrangements for district health boards do not, when taken together, reflect the Treaty partnership. Māori members of district health boards are always in the minority and do not necessarily reflect Mana Whenua interests, nor the Māori population or the district they serve. We acknowledge that the seven Papatipu Rūnaka are our treaty partner. It is our intention to ensure that they are engaged meaningfully in all aspects of this process. We acknowledge that choice for Māori is non-existent in the current health system, and by working in genuine partnership we aim to ensure that whānau have choice through well-funded Māori health providers and culturally responsive mainstream health provision within this plan.

This Masterplan outlines a vision for the future. Mana Whenua, facilitated by Aukaha (1997) Ltd, have had input into this, but this is simply a stepping stone for future conversations.

As Dr Michael Stevens writes in the New Dunedin Hospital Cultural Narrative,

"...our desire for an ongoing role is based primarily on our Mana Whenua status. Unlike Olssen's book – and parallel approaches that attempt to make us invisible – we will not accept being written out of the script. Again, if that was ever acceptable, it no longer is."

Whakamaua is the Ministry of Health action plan, it outlines four high-level outcomes. These are:

- lwi, hapū, whānau and Māori communities exercising their authority to improve their health and wellbeing.
- Ensuring the health and disability system is fair and sustainable and delivers more equitable outcomes for Māori.
- Addressing racism and discrimination in all its forms.
- Protecting mātauranga Māori throughout the health and disability system.

The health reforms also place Māori in the driving seat, giving them oversight, partnership, commissioning and monitoring roles in the new health system. These key changes in the health system, coupled with Mana Whenua's continued aspirations for mauri ora, set a clear expectation for involvement in any and all future projects stemming from this Masterplan.

Process

Jasmax-HDR health architecture partnership was engaged late September 2021 by the Southern District Health Board (SDHB) to lead the engagement and design process for the Site Masterplan project. The aim of the process was to deliver a clear, realistic and implementable plan, promoting a vision for SDHB's Wakari and Dunedin campuses including facilities for mental health and other services not included in the New Dunedin Hospital (NDH).

A number of pre-existing reports were made available and utilised in forming this Masterplan. In addition, a study of relevant international and national precedents was undertaken. This included researching overseas academic health precincts (following on from earlier studies), and also mental health facilities both in New Zealand and overseas.

The project was undertaken under the following workstreams:

- Executive Working Group
- Education and Research
- Clinical and Mental Health
- Placemaking

Services were delivered to a compressed timeframe, under the following engagement and design phases:

- 1. Define Vision
- 2. Explore Options
- 3. Refine Preferred Option
- 4. Deliver and Communicate

Engagement with Mana Whenua has been facilitated by Rūnaka owned entity Aukaha. Owned by:

- Te Rūnanga o Waihao
- Te Rūnanga o Moeraki
- Kāti Huirapa Rūnaka ki Puketeraki
- Te Rūnanga o Ōtākou
- Hokonui Rūnanga

The Mana Whenua engagement panel was made up of members from the Kāti Huirapa ki Puketeraki and Ōtākou rūnaka.

The Treaty of Waitangi is integral to how we proceed with this journey towards our vision. Future projects stemming from the Masterplan will engage Mana Whenua in a co-design process so that Mana Whenua values can be integrated and interpreted to produce relevant narratives and key concepts. This partnership approach between Health New Zealand and Mana Whenua is the beginning of a conversation without end, and extends to the ongoing operation, flourishing use and enjoyment of the precinct.

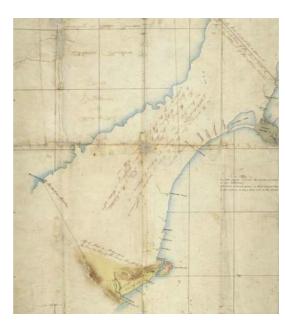


Figure 1. Kemp's Deed 1848, Source: ngaitahu.iwi.nz

Engagement included interactive workshops and input from the following key stakeholder groups. Mana Whenua were invited to attend all engagement workshops.

- Ministry of Health
- Dunedin City Council
- Otago Regional Council
- University of Otago
- Otago Polytechnic
- Waka Kotahi/NZTA
- Business South
- Aurora
- Local Advisory Group
- NDH Design Team

Key Stakeholder Reference Group

A Local Advisory Group (LAG) was established in 2018 to engage with local issues that are associated with the New Dunedin Hospital, but are not about the hospital build itself. The group was utilised as a forum to inform and gain feedback from key stakeholders during the Site Masterplan process. The following entities are represented within this group:

- SDHB
- Ministry of Health
- Ngāi Tahu/Kāi Tahu
- Dunedin City Council Officials and Elected Representatives are on LAG. Also includes Workforce Central representation.
- Otago Regional Council
- University of Otago

- Otago Polytechnic
- Waka Kotahi/NZTA

Key Facilities Brief Components

- Interprofessional Learning Centre
- Translational Research Centre
- Mental health facilities
- Southern Blood and Cancer Services
- Third party health services
- Multistorey carpark
- Administration facilities

In addition to the above, the brief included for:

- Health expansion and innovation facilities
- Health support services, such as childcare and recreation

Although not strictly part of the Masterplan brief, the Masterplan process included consideration of complementary accommodation infrastructure.

Mental Health Brief

The majority of existing mental health services in the Dunedin area are located at the Wakari Campus. Further work is required to precede a facilities brief to Masterplan the Wakari campus, and therefore, this report only covers Masterplan facilities design for the city health precinct.

This Site Masterplanning process realised the opportunity to envision and plan the future infrastructure investment needed in Dunedin for transformational change in care for the community, mental healthcare, and improved equity in access as it relates to the wider Southern region. It also presents a shared vision for the connection between Dunedin's two most significant sectors -Health and Education. The project's priority outcome is to provide healthcare and support for the ongoing wellbeing of all those across the Southern district. The Masterplan also impacts the training and education of New Zealand's future healthcare professionals, both vocational and non-vocational. It sets out a long term plan showing how the urban fabric of the city Health Precinct can support and represent its communities, emphasising place-making and a strong sense of local identity within Dunedin. Building on the cultural impact and narrative work undertaken between SDHB and Aukaha, an important aspect to this work programme will be to continue to connect the outcome of this process to wider cultural and sustainability goals for SDHB/Health New Zealand, our patients and their whānau.

Options Evaluation

The criteria and process for evaluation of Masterplan options were endorsed at the outset of this project. Evaluation comprised of six categories:

- Guiding Principles
- Functionality
- Placemaking, Connectivity and Amenity
- Value Creation
- Resilience and Sustainability
- Achievability, Constructibility and Asset Management

Longlist options explored a variety of collocations for facilities within the precinct. Following shortlisting, two options were further detailed and evaluated, with pros, cons, and dependencies identified and discussed for both options. The two shortlist options led to a hybrid model, which was then developed into the Preferred Option.

Timeline

The Masterplan brief asked the design team to consider and plan for the staged relocation or transition of all health facilities connected to (but not within) NDH. The timeframe for consideration extended to consider the end-of-life scenario for the currently planned NDH.

The city health precinct design has been represented in three time snapshots:

2030 – Short Term 2040 – Medium Term

2080 - Long Term

The Masterplan was considered against various anticipated contextual changes, including:

- Health and Disability System Review and Reforms
- Government policy changes
- Climate change
- Changes to local infrastructure
- Demographic and contextual changes to the Southern region
- The strategic direction for Southern region healthcare (General healthcare, and specifically, mental health), as defined in recent strategy documents

The project process has sequentially built a short, medium and long-term staged Masterplan, starting with a foundation of a shared vision across a diverse group of stakeholders. The strength of the built outcome will lie in the collective alignment around this vision, and ongoing partnership, commitment, and communication between key stakeholder parties.

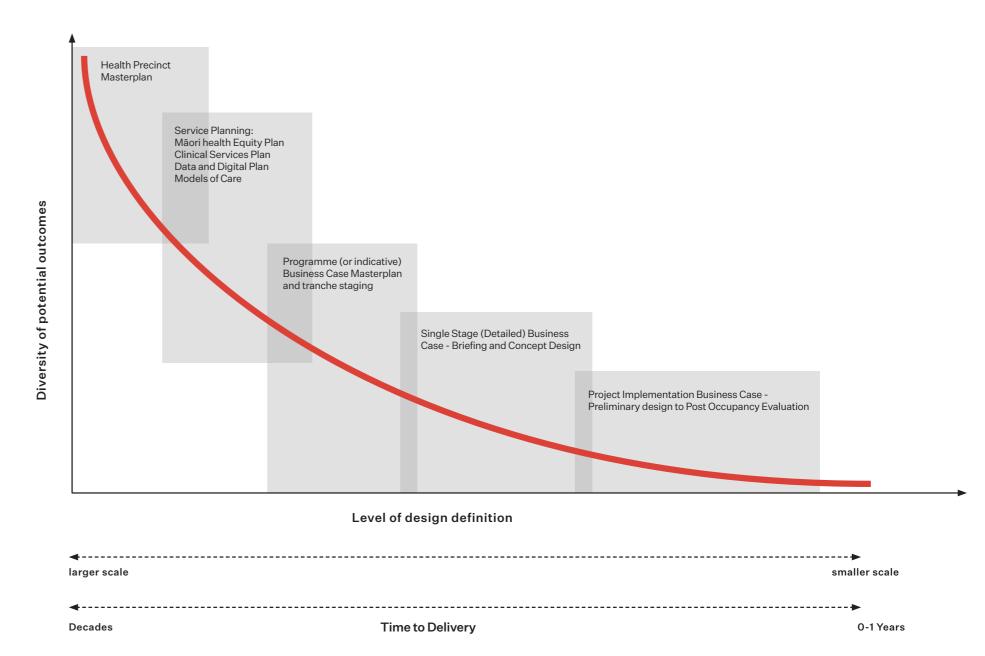


Figure 2. Design to Construction Process



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Figure 3. Dunedin City from Signal Hill. Photo: Vale_T

Vision, Values and Design Principles

Strategic Transition for the Southern Region

The Strategic Briefing for the Southern Health System, sponsored by SDHB and completed in December 2021 is considered the overarching guide and strategic context for this Masterplan. It sets out a strategic direction for the imminent transition and health reforms, and how they will impact the Southern region.

Engagement Process

A series of interactive stakeholder workshops have been held to co-create the vision, values and design principles for the health precinct Masterplan.

Vision Statement

Te Whakaari

Dunedin's Health precinct – A connected and thriving destination, enabling a revolution in equitable healthcare, as a stepping stone to flourishing wellbeing for all.

Explanation of the precinct vision name:

Te Whakaari

The Promise

The original name of the area of the city at the foot of Frederick Street, where the health precinct lays is Te Iri o Wharawhara Te Raki. This is known as a place of tapu, which is highly significant, as Tapu was drawn out as one of the most relevant of the four core values to be reflected in this project. The Mana Whenua Panel has therefore identified this as a significant and relevant narrative in relation to any developments within this precinct. Wharawhara Te Raki, was a chief and tohunga of very high rank, and this was said to be the place where he died, and his body was elevated onto a platform so that his tribe could see him before he was buried. Te Iri o Wharawhara Te Raki means 'the place where Wharawhara te Raki was lifted up', which some attribute the meaning of Whakaari – to be on display. Whakaari, is also the correct spelling of Wakari, the name of the area in which Wakari Hospital resides. It is also meaningful that Whakaari can also mean 'promise' so, although connected to Te Wharawhara o Te Raki, it also reminds us of the promises of hospitals and schools for Māori in Kemp's Deed. These promises have been of great significance to the build of the new hospital, with its project name of Whakatuputupu. The multi-faceted connections has meant that the name "Te Whakaari" – The Promise, is an appropriate name for this precinct Masterplan, and especially the vision of enabling equitable healthcare.



Figure 4. Sketch of Ōtepoti and Otago Harbour. Source: Aukaha. Unknown author

Values

There are four Te Ao Māori core values:

Mana - Whakapapa - Mauri - Tapu

Aukaha have worked with a Mana Whenua panel to understand and describe the relevance of each value to this particular place and programme of work. A number of other relevant values and principles were identified, and these have been worked into the Design Principles for the project.

Design Principles

The eight Design Principles identified are the culmination of all interactive stakeholder workshops, and represent the collective direction evidenced.

Design Strategies and Indicators of Success

The strategies and indicators selected are a collection of the most prevalent ideas brought forth in interactive workshops, and when used collectively, they can seed strategies to be employed on future tranched development projects, ensuring such projects develop in alignment with the Masterplan Vision.

Health Precinct Strategic Plan

Southern Region Vision (SDHB Strategic Transition)

Enable Māori leadership to improve Māori health outcomes. Build a connected system that is equitable, cohesive, people centred and accessible.

Implementation excellence – stay focused on health outcomes in times of leadership and organisational change

Focus areas to achieve this vision:

Thriving localities – establishing localities and the connected population health and community care systems within and between them Effective service integration – particularly around the leadership to establish pro-equity systems of care that apply across all parts of our community and specialist services Networking specialist services - which is about creating an environment where specialist services are better networked across the district and with the community. Activated enablers - which identifies the role of enablers in an integrated and connected health ecosystem Empowered workforce – which emphasises how a representative, capable and responsive workforce is at the core of the capacity and connectivity of our system.

Te Whakaari

The Promise

Dunedin's Health Precinct – A connected and thriving destination, enabling a revolution in equitable healthcare, as a stepping stone to flourishing wellbeing for all. Our health, education and research precinct will be an internationally renowned destination for equitable healthcare delivery and innovative research. It aims to deliver on the promises for Māori in Kemp's Deed.

It is where people and place thrive, celebrating the identity, culture and heritage of Ōtepoti and the Southern region.

Values

Precinct Vision

Mana

Ensuring the status of Mana Whenua is recognised, respected and represented within the design process and precinct

Whakapapa

Opportunities to share the whakapapa of place and people and nurture a collective sense of place, cultural and community identity

Ensuring Mauri is considered throughout the precinct, as it relates to the enhancement of wai, whenua, biodiversity and air.

Tapu

Mana Whenua will lead the consideration of appropriate procedures/protocols to safeguard sacred/tapu aspects.

Te Iri o Wharawhara Te Raki Tapu / Oraka

Design Principles

Auahataka

influencing a prospering economy

Whakamanuhiritaka

Recognising the whakapapa and

Whanaukataka

Whakamāhorahora

Feel at home, be comfortable and

Tīkaka

upheld with the of spaces and

Tūmataiti

public and private

Activators and Strategies

Considers efficiency and fiscal responsibility

Considers future

water, knowledge

resources

generations through

regenerating our land,

Future-ready; considers changing technology

beyond

competency and a diverse workforce

Enabling cultural

Provides for whānau spaces to enjoy family time together, childcare, child friendly, grandparent friendly

enjoyable connections and moments in each day/lifestyle, inside and outside

Greenspaces;

Mātauraka integrated into public spaces

health needs

Attention to Māori Way-finding – physical and cultural

Being part of a wider network serving the Southern region and

A hub for indigenous Māori excellence and innovation in wellness

Spaces in buildings

for cultural wellness -

People visiting for lunch

with those who work

Encouraging secondary school students into healthcare education

SDHB seen as a good

urban citizen in Dunedi

Ngā Moana e Rua, the flow of water is brought back to life in the city

Create attractive,

accessible and inclusive outside spaces and walking journeys, rest stops, exercise options

Encourage functional adjacencies which support porosity and connections between buildings

Events – health and

Equitable health and

education

Create indoor/outdoor porosity at ground floor level - encourage activities to support visitations and views into buildings

Growth of value added businesses

for all those from

varying places and cultures

Purposeful partnerships

Feeling welcome

eg wai touch points and spaces for whānau to come together

there

Reduced sickness, more smiles

Energy, water, waste and carbon flows are significantly reduced even as the precinct

Greater preservation of mātauraka

education together

Increased use of active

Indicators

Increased knowledge sharing and improved cultural competency

> Rich mix of space opportunities for interaction of ideas

Papatūānuku is alive and present biodiversity/ trees/ plants and birds are here

Improved diversity in workplace

impact

Reduced environmental

Improved staff retention

Clear way-finding, porous and welcoming building entry points

Community & Environment Wellbeing

A whole-system health approach encompasses the wellbeing of the environment – this being vital to the wellbeing of our communities. This Masterplan targets the additional positive outcomes that flow on from addressing and caring for people and place as a connected system.

History of Place

The city health precinct eastern edge was originally a fertile, food and resource-gathering coastal lagoon known as Ngā Moana e Rua or 'Two waters'. The area was then reclaimed and integrated into Dunedin's growing urban landscape, first as waterfront and then as 'downtown', while reclamation into the harbour continued. West of this, the area was known as 'Te Iri o Wharawhara', and this area includes the present Dunedin hospital site.

This Masterplan also considers the Wakari campus, approximately 10 minutes' drive northwest of the city centre. The Wakari site sits above Fraser's Gully, and forms part of the Kaikorai stream catchment nearby. The campus would once have been covered with the tall, native forest which surrounded Dunedin in pre-European times, a famously abundant habitat for native birdlife such as the Kererū, Korimako and Pīwakawaka.

The Masterplan aims to provide a vision and implementable plan reaching out to 2080 and beyond. Over that time, attitudes to, and the state of our environment and climate are likely to continue a trend of rapid change. The Masterplan must address current and future needs and trends with regard to our communities and environment, for its continued relevancy and for successful intergenerational delivery.

Pae Ora

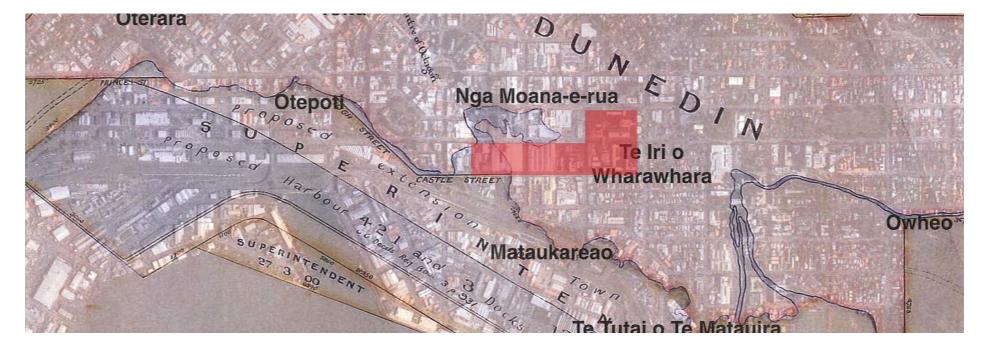
Pae ora is the Government's vision for Māori health. It provides a platform for Māori to live with good health and wellbeing in an environment that supports a good quality of life. Pae ora encourages everyone in the health and disability sector to work collaboratively, to think beyond narrow definitions of health, and to provide high-quality and effective services.

Pae ora is a holistic concept and includes three interconnected elements:

- Mauri ora healthy individuals
- Whānau ora healthy families
- Wai ora healthy environments

All three elements of pae or aare interconnected and mutually reinforcing, and further strengthen the strategic direction for Māori health for the future.

www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga/pae-ora-healthy-futures





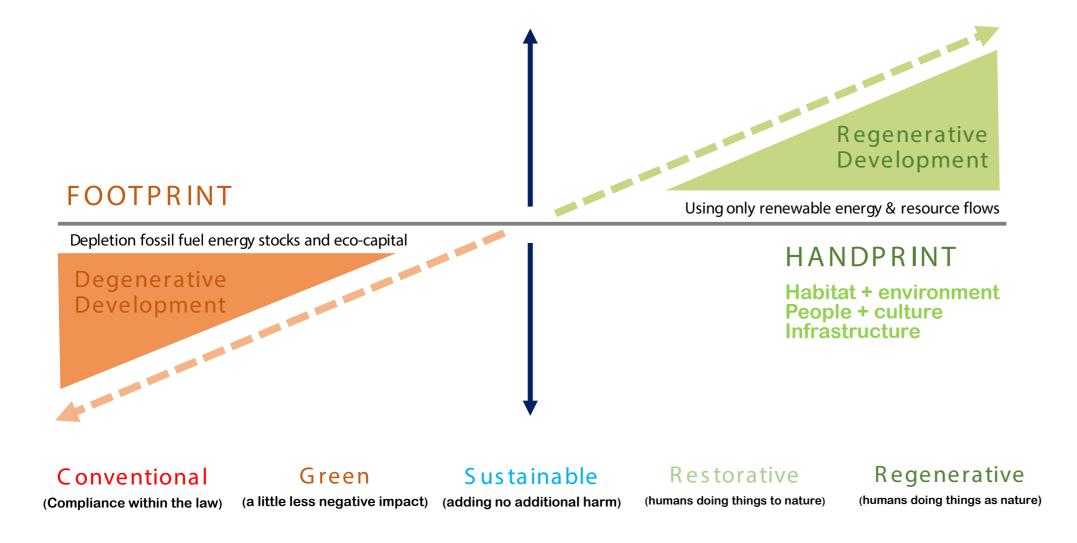
Regenerative Development

Sustainable or "Green" design approaches typically focus on reducing the footprint or negative impacts of developments. These might include carbon emissions, toxicity, pollution, congestion, energy, water and resource waste, whilst broader negative health impacts on people or on ecology (from land use or containment) are often not considered. This "Footprint" approach is important, as we need to rapidly reduce these impacts. In fact, New Zealand's planning and building regulations will be updated to address carbon emissions within this year. In addition, and becoming more common, is a 'Net Zero' approach for carbon or energy, using on-site renewable energy generation or carbon offset mechanisms such as carbon trading or tree planting.

However, despite the efficiencies described above, carbon emissions are still increasing, and leading international practice is moving towards truly holistic 'living systems thinking' or Regenerative Development (RD). Here, the Precinct and it's development over time, becomes an agent in service of delivering health and wellbeing, specifically in this place and region. The RD process shifts from a problem solving focus to working with the potential of partners, stakeholders and place. This open-ended systemic approach enables us to evolve new cultures of partnership and trust, self-care and wellbeing generation to ensure the vitality of the both the ecosystem and community (including business) in symbiosis.

RD has some parallels with Te Ao Māori (Māori world view) which acknowledges the interrelatedness and interconnectedness of all living and non-living things.

At the precinct scale there will be synergistic opportunities between partners, and land uses. To explore and achieve these requires strong partnerships, trust and alignment of purpose. An example of such a synergy, is the planned Interprofessional Learning Centre.



Based on Reed, 2006 & Roland, 2018

Figure 5. Trajectory of Regenerative Cultures

Acknowledging Partnerships and Stakeholders

There are many key entities who form, affect, and influence the place, the existing assets, and also achieve statutory outcomes from the Precinct development. The precinct offers so much potential for health, positive impacts and value-add to all entities involved, that a broader, inclusive approach will yield optimal results. This work aligns with sustainability ambitions of other key organisations and stakeholders, such as the University of Otago, Dunedin City Council, Treasury's Living Standards Framework and also and the future community, business and international network.

A sense of 'purposefully working together' through understanding other's drivers, needs and contributions and roles in delivery, is the most critical factor for the Precinct's success. The Precinct aim is to realise the greatest value to a system that can be co-created, and then in managing the ongoing development as a regenerative development – ie bringing the place and community to life.

Kāi Tahu and the new Māori Health Authority for Aotearoa

- The Kāi Tahu Cultural Impact Assessment (created for NDH) clearly sets out areas to address that will enable full iwi, hapū and whānau 'ora' and health, now and over time.
- Enabling Kāi Tahu's ability to lead an approach to identifying and addressing specific health gaps in Dunedin and across the wider Southern region
- Critical and specific health research from a Te Ao Māori world view
- Opportunities for innovative cultural health business start-ups and growth
- Medical, health and wellbeing academic and practitioner training including Rongoā
- Cultural competency and an environment to support Māori health workers, their ongoing wellbeing and retention
- Cultural and whole systems health research areas

Pātiki Framework

- The Pātiki framework (Developed for NDH by Aukaha, Ahi Kā and Mana Whenua) has a potential role to support the Precinct Masterplan.
- Whole system health growing mauri ora (vitality and life force), underpinning the health of people, place and region.
- Reimagining the core ecological function a thriving coastal edge and its ability to sustain human interactions.

Sustainable Design Recommendations

Within the Precinct there will new building developments, refurbished existing buildings, landscape and planting, parks, infrastructure such as ecological, transport, energy, water, sewerage, and waste. Critical to achieve the Health Precinct aims, will be innovation hubs, community facilities and ecologies that serve the academic, medical, local populations and of course new long and short term residents, as housing is also planned.

All this development will both stimulate health activity in the Precinct and wider region, with the potential to achieve this with a significantly reduced footprint from the developments, infrastructure, and operations. Lower carbon emissions, less pollution, no toxic chemicals used, less water and energy used, less waste produced and an increase in circular economy.

It is recommended that specific targets are set for all Precinct buildings and infrastructure, and that these targets meet, as a minimum, the Ministry of Health HIU and University of Otago sustainability targets. An initial summary for the evaluation and setting of targets is as follows:

- Initiate Environmentally Sustainable Design (ESD)
 discussions through an established partnership with Mana
 Whenua, documenting how project outcomes will align with a
 Te Ao Māori world view
- Prioritise and evaluate reuse of existing buildings, infrastructure and resources
- Assess climate impacts and plan for resilience
- Increase biodiversity cover targeting 20% of total area
- For projects over \$20M achieve Living Building Challenge (LBC) rating for best practice. At minimum, document and evaluate all design decisions against the LBC framework, and achieve Green Star 5 to 6 (design and as-built)
- Green Star 5 (design and as-built) minimum for projects over \$20M
- International Living Future Institute (ILFI) Core for projects up to \$20M
- Preliminary carbon emission Life Cycle Analysis, energy and water modelling to quantify designed reductions.
- Evaluate and assess delivery against Precinct metrics and complete a Post Occupancy Evaluation of key facilities users every 3 years, starting from 2028.

Impacts and Metrics of Success

Indicators and metrics of success for the Health Precinct Masterplan can be established and evaluated against at regular intervals using Post Occupancy Evaluation (POE). These can demonstrate that the place, iwi, institutions and communities have improved wellbeing as a result of the precinct Masterplan implementation. Some examples might include:

- Initiate ESD discussions through an established partnership with Mana Whenua, documenting how project outcomes will align with a Te Ao
- A diverse range of employment opportunities is represented within the Precinct (income, type, ethnicity of employees relative to local population statistics)
- Cultural competency is more prevalent within the Precinct
- Business representation within the Precinct includes start-up businesses
- People care for this place and support the work that happens here
- Visitors, staff and locals of a diverse range of backgrounds, ethnicity, socio-economic background, are similarly happy and motivated
- Users appreciate the space (inside and outside, built and natural), activity, and it supports them to be creative and productive
- Visible increase in native bird activity and native tree cover
- Absence of litter and other rubbish
- People are drawn to and regularly use this precinct

Post occupancy surveys are a valuable way to record and evaluate success.

Site Analysis – Central & Wakari Sites

City Context

Whilst the Masterplan makes suggestions for solutions on land owned by SDHB or the Crown, it has considered the wider context and how the precinct stitches into the city. Consideration has been given to recent urban design and Masterplanning projects carried out by the Dunedin City Council, University and SDHB. This process has allowed for thinking and solutions generated from the plans to be incorporated into the precinct Masterplan.

The precinct plan in the vicinity of NDH show a number of challenges to a high quality pedestrian environment:

- Level changes between street footpaths and building entries due to flood mitigation measures
- Regularity of vehicle crossings dissecting north-south pedestrian pathways on Cumberland and Castle streets, and a significant quantity of planned at-grade parking resulting in vehicle-oriented external spaces.
- State Highways to the west and east of the precinct, presenting challenges to east-west pedestrian pathways

Dunedin city is blessed with an abundance of character and heritage. This is prevalent to the north, east and south of the health precinct. Conversely, the study area itself has very little in the way of heritage value buildings or trees.

Wakari Context

The Wakari campus comprises a generous, park-like setting. Its building stock is general in poor to average condition and acknowledged to be no longer fit for purpose for contemporary mental health services

Existing Building Condition

Previous reporting commissioned by SDHB (generally dating from 2017) has been used to undertake a desktop study of existing building condition. It is recommended that further investigations and opportunities to repurpose existing buildings be sought, as the precinct Masterplan develops into individual build projects.

Urban Design Considerations

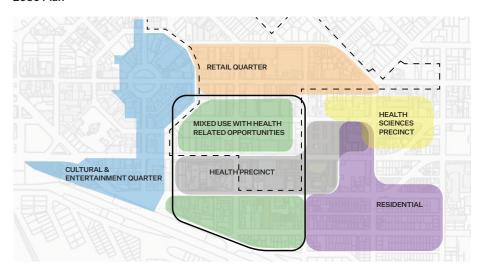
The precinct has a significant opportunity to contribute to the revitalisation of the central city. This Masterplan supports DCC's Central City Plan and the precincts and quarters it has identified. The health precinct provides a valuable 'mid-city link' between the tertiary precinct to the north (of which the Health Sciences precinct is a key part) and the Cultural and Entertainment Quarter to the south.

In addition, the Masterplan recognises that hospitals and health precincts – due to their scale and the functional requirement of the built form, can result in reduced movement in urban centres. To this end the Masterplan proposes a strategy of 'east west porosity' whereby a series of links through the health precinct are maintained and encouraged to support land use connections either side of the precinct. In turn, this will aid better

connections from George Street down to the railway line, and in time, through to the waterfront at Steamer Basin.

A successful precinct will require a structure to inspire both private and public investment. Whilst this Masterplan focuses on land within DHB and Crown ownership, it also considers the ideal structure for success and integration into the wider central city context. To achieve this the District Plan will need to evolve over time to accommodate and support changes to land use patterns. In the long term, the Industrial Zone to the east of NDH would potentially benefit from a change to allow mixed use for 360 degree activity around NDH with good pedestrian connections between the precinct and the waterfront. Synergies with the Health Sciences precinct will be realised through allowing complementary private enterprise to extend around a broad area reaching through to include the academic focussed northern edge of this zone.

2030 Plan



2080 Plan

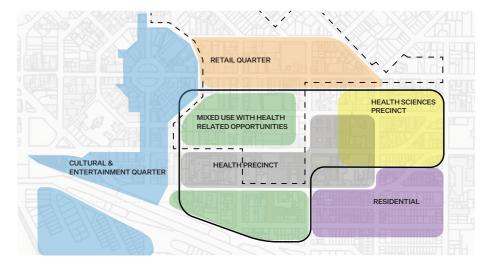


Figure 6. Urban Design Anchors



Figure 7. Dunedin City and Wakari Campuses

Key Design Moves

Responding to both contextual matters and the vision and values established for the Health Precinct, four key design moves are proposed.

These are detailed in the following pages of this report.

Connectivity

Key facilities within the Health precinct will strengthen the connection between the city centre and the University of Otago and Otago Polytechnic. The New Dunedin Hospital is a key connector to the Octagon and heart of the city. The health precinct will complement the retail quarter and form a strong double conduit of movement and connectivity for people on the north-south axis through the central city.

The ILC and TRC buildings will be used by students/vocational trainees, and both hospital and academic staff (individuals may share their time across both academic teaching/research and public and/or private health roles). As such these buildings are located to form a connection between NDH and the university Health Sciences precinct, in turn connecting back to the heart of the University campus and along to the Otago Polytechnic main campus.

Relevant Health Precinct Principles and Strategies

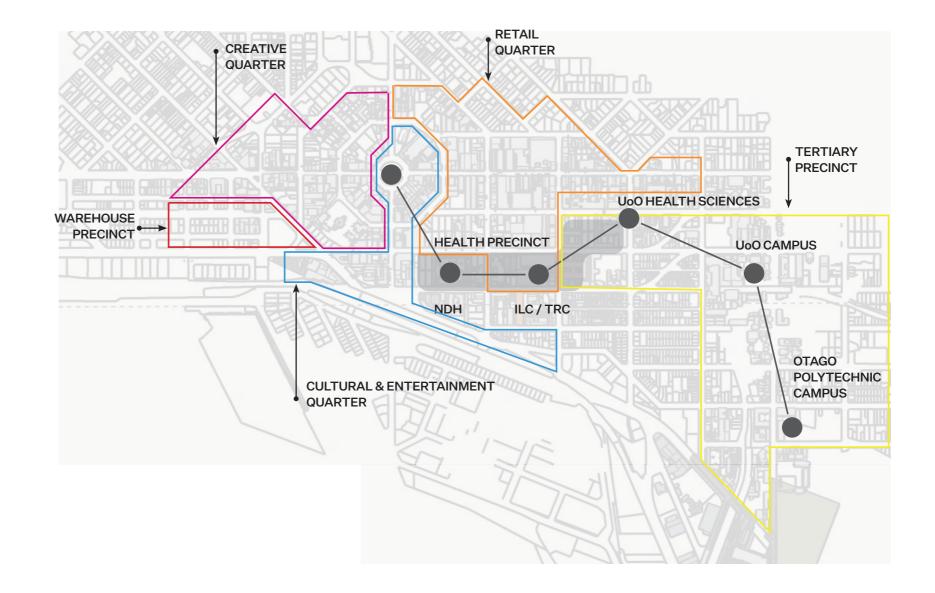
Being part of a wider network serving the Southern region and beyond

SDHB seen as a good urban citizen in Dunedin

Encourage functional adjacencies which support porosity and connections between buildings

Purposeful partnerships

Way-finding – physical and cultural



Porosity

Porosity is a counterpoint to the rigour of the formal city grid. A series of mid-block pedestrian links or laneways meander eastwest allowing a finer and looser grain to the city, and slower modes of transport to occur free of vehicular traffic. They create interest in the city, encourage walkability and healthier living. In conjunction with pocket-parks, urban planting and biodiverse habitats, these links will present improved economic value to previously land-locked and low-value urban space, with opportunities for tertiary retail sector, café hole-in-the wall, and small service establishments to thrive.

Visibility and porosity between facilities and therefore organisations is also key to enabling the synergies possible between public health, academia and research, and private enterprise. Welcoming, well lit and glazed entrance ways, principles of inclusion and universal design, and incorporating internal ground floor spaces into cross-block laneway routes are all strategies for stronger economic and community networks.

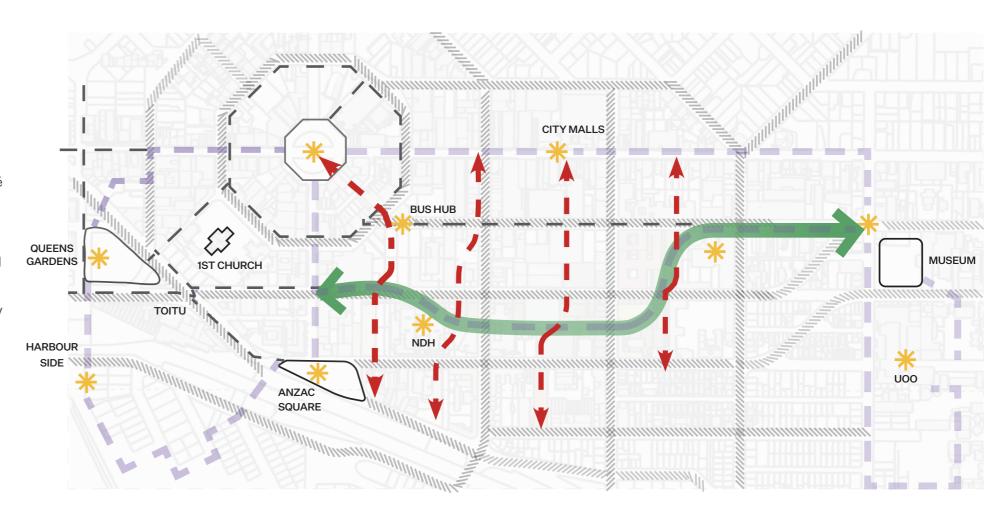
Relevant Health Precinct Principles and Strategies

Being part of a wider network serving the Southern region and beyond

Encourage functional adjacencies which support porosity and connections between buildings

Way-finding – physical and cultural

Increased use of active transport





Sharing Heritage, Whakapapa and Mauri

All public spaces present an opportunity to celebrate and tell the unique story of Ōtepoti and its people. They are also key places to make everyone feel welcome, included, and respected. They are the thresholds before one enters a building; a journey that may not always contain good news.

This threshold is a place that allows one to reflect and prepare for the next step - be it before, or after visiting a building. The facilities provided within the health precinct will offer care for the wider Southern Region, and the treatment of public spaces will represent the manaaki of the people of Dunedin.

Relevant Health Precinct Principles and Strategies

Mana

Ensuring the status of Mana Whenua is recognised, respected and represented within the design process and precinct

Arahonohono

Recognising the whakapapa and history of people, place, trails/journeys

Enabling cultural competency and a diverse workforce

Mātauraka integrated into public spaces

Feeling welcome



- HERITAGE BUILDINGS
- HERITAGE TREES
- LARGE TREES

Greenway Loop

The concept of the greenway was generated from the Waters of Leith which meanders through the University campus. It also builds on the concept for NDH where public spaces are both inside and out, along Cumberland Street. The greenway is a device that will complete Dunedin's primary green spaces in a loop between the University and the Octagon, and works in tandem with planned upgrades to Dunedin's retail quarter. The health precinct affords the opportunity for planned and linked amenity spaces between buildings, allowing for pleasant pedestrian connections and outdoor amenity for staff, whānau, patients and the general public.

The greenway complements other initiatives planned by the University and Dunedin City Council, and provides ample opportunity to regenerate urban natural habitat and attenuate stormwater.

Relevant Health Precinct Principles and Strategies

Whakapapa

Opportunities to share the whakapapa of place and people and nurture a collective sense of place, cultural and community identity

Whakamāhorahora

Feel at home, be comfortable and at ease. Attractive, connected fun spaces for more enjoyable moments

Provides for whānau – spaces to enjoy family time together, childcare, child friendly, grandparent friendly

Greenspaces; accessible and inclusive outside spaces and walking journeys, rest stops, exercise options

Create indoor/outdoor porosity at ground floor level – encourage activities to support visitations and views into buildings



Preferred Option

Overview

The city health precinct Masterplan preferred option is arranged with education and research at the heart of the precinct. This is a deliberate move to strengthen the bonds between University of Otago, Otago Polytechnic and the hospital. Spaces between buildings are set aside for a 'green spine'. This is a device aimed at encouraging pedestrian and social activity at the heart of the precinct, acting as a connector between existing city anchors (central city and academic precincts), creating a pleasant environment for moving between buildings, whilst also improving the health of the local environment and its communities.

Short, medium and long term staged plans are shown in Figure 13-15.

Long Term 2080 Options for Tertiary Care Hospital Capacity

Five key considerations/future trends were used to shape decision-making around the location for 2080 tertiary care facilities:

- Access to care Southern region
- Demographic change the regional population density shift to Central Otago
- Dunedin geographical constraints and potential population growth to 2150
- Climate change sea level rise to 2150 and flood related risk
- Climate change increased emphasis on efficient carbon expenditure (lengthening building lifespan expectations in New Zealand, alignment with international expectations).

The Jasmax-HDR recommendation is that new acute/subacute facilities are provided in the Central Otago region prior to NDH end-of-life, and the immediate drop in demand at NDH is used to begin a staged re-lifting process. This will capitalise on the carbon and cost expenditure of the infrastructure, ground works and structure of the NDH facilities. It is further recommended that sufficient crown-owned land is retained in the city, to give the flexibility for alternative locations should this option not be deemed most suitable come 2080.

Next steps - City Health Precinct

This Masterplan sits at an early stage in the planning process required to realise precinct-wide built infrastructure. To achieve success for the precinct and for individual buildings and facilities, further steps will include developing service planning, business cases, and drawing up memorandums of understanding and legal agreements with key partners.

Summary of immediate considerations and opportunities to be addressed:

- 1. Alignment with Southern region rūnaka and other SDHB workstreams
- 2. Land Ownership re alignment to best serve the vision and purpose defined by the Masterplan
- 3. City-wide Infrastructure and Energy Plan
- 4. Mobility Network and Connections
- 5. City Planning and Development
- 6. Urban Housing
- 7. Ward Building Adaptive Reuse

Alignment with Southern Region Rūnaka and other SDHB Workstreams

It is recommended that all projects stemming from this Masterplan receive further consultation with the seven rūnaka of the Southern region, and their input is sought in developing the plan for health services and facilities. This will extend upon consultation to date, which has focussed on representation from the Otago region rūnaka through Aukaha, and their scope to provide place-based cultural values and narrative integration.

Further, it is recommended that other SDHB/Health NZ workstreams are aligned, including the Southern Services Planning workstream.

Land Ownership

For all major components of the health precinct, it is considered prudent for Crown-owned land to be held available for both the preferred location, and also an alternative location. Alternative locations have been identified for:

- Tertiary care facilities from 2080 onward
- Southern Blood and Cancer Services
- Mental Health facilities

City-Wide Infrastructure and Energy Plan

With the level of change currently planned across the city of Dunedin, it is timely that a city-wide, long term infrastructure plan is carried out. This should include an assessment of condition, location, and timing of renewal for major energy infrastructure, with an aim to optimise the efficiency of the network and its spatial requirements, reduce the need for energy use and accelerate the use of de-carbonising energy sources wherever required. Such a study should include the city's existing electricity grid and the current High Temperature Hot Water (HTHW) provided by Pioneer Energy alongside alternative and new energy sources, such a Medium Temperature Hot Water (MTHW) district-wide system and other options. Both the Pioneer Energy facility and the North City Substation will require renewal of facilities by or around 2040, and their review can be included in such a study.

Aurora Substation

It is recommended that the Crown agree with Aurora Energy a new, more suitable location for the North City substation, which will meet Aurora's need for a larger land parcel whilst also enabling the connection between health and education facilities that is essential to catalyse the positive outcomes of this precinct. It is recommended that infrastructure decisions involve the same level of Mana Whenua involvement and environmentally sustainable design consideration and as all other precinct projects.

The Mobility Network and Connections

It is recommended that SDHB/Health New Zealand continue discussions with Waka Kotahi/NZTA regarding the vehicular network surrounding the health precinct.

Key issues:

- St Andrew Street upgrades between Castle and Cumberland Streets:

The raised external levels around the new hospital are caused by the need for resilience against flooding. The difference in level between this and St Andrew and Cumberland Streets results in challenges to accessibility, with the need for extensive ramping which will disadvantage some user groups. Raising the road network at the intersection of Cumberland and St Andrew Street (east side) so that it is closer to the proposed external ground levels around NDH will greatly improve accessibility and mobility, and provide a more welcoming, less imposing entry to both Inpatients and Outpatients.

Mid-block Pedestrian Crossings:

Castle Street crossing:

Linking the multi-storey carpark with NDH and the Wilsons Block. It is possible for pedestrian links to be provided above grade, however an at-grade crossing will provide a better urban outcome by activating the immediate surrounds with foot traffic.

- Cumberland Street crossing:

This crossing complements the Castle Street crossing to form an east-west route leading from the multi-storey carpark, through the ground floor of the proposed Health Expansion and Innovation building and Translational Research Centre, then to the west of Cumberland street it continues through existing internal malls to Great King and George Street. This connection meets the strategic direction set for the Health precinct by encouraging ground floor porosity into key precinct facilities, and also provides an alternative route to road footpaths, which will offer greater all-weather protection.

Hanover Street crossing

This crossing completes the proposed Greenway Loop, connecting the Fraser Building at its entrance, to the Wilson Bock. This in turn enables a pedestrian-priority, nature-priority connection from the heart of the University's Health Sciences Division through to the New Dunedin Hospital, forming a welcoming connector-spine at the heart of the health precinct.

Modelling work to understand any traffic implications that might arise from these recommendations will need to be undertaken as part of any future business cases.

City Planning and Development

The health precinct currently sits across three district plan zones, and identifies the characteristics of a number of urban anchors or neighbourhoods forming surrounding business and urban areas. The health precinct plan instigates an opportunity for future spatial planning and urban development to complement and accelerate the realisation of the vision for the health precinct and city. It is recommended that discussions continue with DCC's City Development team such that any future District Plan variations reflect the changes proposed by NDH and encourage the development of a high amenity-value, well-appointed Health precinct.

Urban Housing

The Health precinct affords the opportunity to improve the wider socio-economic determinants of health through providing quality, affordable urban housing. With Dunedin's geographic constraints to growth, urban housing is likely to continue to be a topic of interest. It is undecided whether the existing hospital site will be in Crown-ownership or other, beyond 2028-2030. However it is recommended that the site is not sold for private development in the long term, and is safeguarded for Health or Education purposes. This may leave an opportunity for Crown-owned/facilitated mixed tenure accommodation between 2030 and 2080, also matching the needs of the nearby academic and health facilities. It is recommended that SDHB/Health New Zealand continue to investigate options for future use of the current hospital site and support quality urban housing development in Dunedin.

Ward Building Adaptive Re-use

The existing hospital Ward Building will be progressively vacated from 2026, and is likely to be near fully vacated from DHB health use by the time NDH is completed in 2028. The condition of the Ward building indicates that it is worth investigating options for the adaptive reuse of this building.

Next steps - Wakari

It is recommended that a high level strategy is developed for mental health in the Southern region, with the aim of providing a refreshed and cohesive direction for mental health services, and providing strategic direction on where services should be located or colocated across the network. This should address the benefit of colocation of mental health services with other health services (public and third party provider), and should also address access to services and issues of equity. This would therefore consider the benefit of servicing the community in the community, versus the benefits of colocation of health services for patients with complex health needs. It is recommended that local Māori leadership form a core part of any delivery team creating such a strategy. A region-wide strategic direction can look to realign mental health services with improved safety, access, and a contemporary and future perspective on how mental health care is delivered, with a view to the continuum of care and issues around distance and low population density that characterise the Southern region. SDHB is currently carrying out a services planning assessment for Southland, and this should be referenced and aligned.

A strategic direction such as this will inform the mental health services – and other community services - that are most appropriate to be located at Wakari. A corresponding Masterplan can be completed to reflect the outcomes of these programmes, incorporating the relevant mental health component and other services. Once this is complete, decisions on the best utilisation of Wakari land can be made on sound basis. Projects that are scoped, sized and located within the Masterplan can then be prioritised and single stage business cases progressed to funding and implementation.

He mana tangata, he mana kaupapa, ka puta ki te whei ao, ki te ao mārama.

Short-term Masterplan (2030)

This stage includes a multi storey parking facility, an Interprofessional Learning Centre and a Translational Research Centre. It also proposes re-purposing existing buildings for non-clinical function such as administration and childcare.

By 2030 the precinct offers a promising catalyst for national and international health-related businesses and research institutes to colocate themselves within or adjacent to the precinct. An increase in occupation density will also lead to developers seeing the opportunity to provide retail, housing and other mixed-use activity in the area.

Buildings

NDH New Dunedin Hospital

ILC Interprofessional Learning Centre

TRC Translation Research Centre

SBCS Southern Blood and Cancer Services

MH Mental Health

Car parking building

Cancer and Health Support Centre (Dairy building)

Substation (proposed relocation)

FE Fraser Building Existing Fraser Building New

Health Expansion/Innovation

Figure 10. Key to North and South Views

Usage

Olinical – Southern Blood and Cancer Service

Clincial - Other

Clinical - Mental Health (excludes Forensic and ID IPU 4040m)

Education & Research

SDHB Administration

 Health Support Services Health Expansion and Innovation

Mixed Use/Education/Commercial



Figure 11. 2030 Plan View

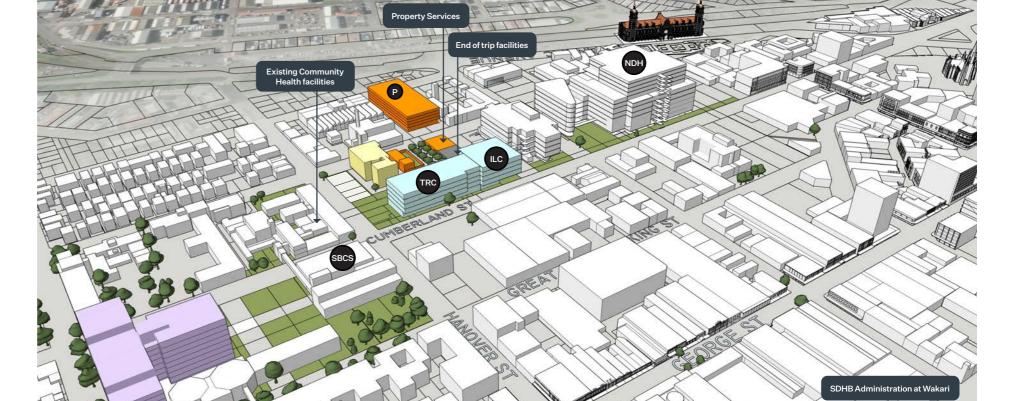


Figure 8. 2030 North View



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Figure 9. 2030 South View

Southern District Health Board Site Masterplan Masterplan Brief & Context

Medium-term Masterplan (2040)

This stage permits the potential move of Southern Blood and Cancer Services and mental health services, and also sees DHB administrative functions relocating from both existing city facilities and Wakari. By this stage the precinct will have reached a scale sufficient to be a vibrant contributor to the life of the city, encouraging health and academic health related businesses and institutions to continue locating themselves within and around the precinct. The plan anticipates that Southern Blood and Cancer Services could grow into a comprehensive centre, with the existing Dairy Building repurposed as a Cancer Support Centre and/or Health Rehabilitation Centre.

The plan shows the retention of the existing hospital Ward building, on the basis of conditions information currently available. The consultation process has not identified specific health or education related demand for using the space. Whilst this would be ideal (given the location) in the long term, in the interim the building offers the flexibility for a variety of uses including accommodation at upper levels, and potential decant space for ongoing DHB and education developments.

Buildings

NDH New Dunedin Hospital

ILC Interprofessional Learning Centre

TRC Translation Research Centre SBCS Southern Blood and Cancer Services

MH Mental Health

INIT INITIAL TEALCH

P Car parking building

Cancer and Health Support Centre (Dairy building)

S Substation (proposed relocation)

FE Fraser Building Existing

FN Fraser Building New

HI Health Expansion/Innovation

Usage

Olinical - Southern Blood and Cancer Service

Clincial - Other

 Clinical – Mental Health (excludes Forensic and ID IPU 4040m)

Education & Research

SDHB Administration

Health Support Services

Health Expansion and Innovation

Accomodation

Mixed Use/Education/Commercial

Figure 15. Key to North and South Views



Figure 14. 2040 Plan View



Figure 12. 2040 North View



Figure 13. 2040 South View

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Long-term Masterplan (2080)

This stage shows the opportunity for heath facility expansion adjacent to ILC and TRC. Prior to this, the interim childcare and property services facilities will be relocated, with the nearby Fraser Building site being one option to consider. The plan allows for several activities within a proposed Health Expansion and Innovation facility, which were not part of the original brief, but identified during the consultation process as activities that would assist in attracting staff, retaining talent and strengthening the vision for globally relevant health innovation. The site offers flexibility for the DHB/HealthNZ and other partners to see such a vision to fruition. In the event the site is developed in stages, it is recommended that development occurs in vertical slices to a height of 3-5 stories. This ensures site utilisation, vibrancy and urban value is maximised for long term gain.

Usage

Clincial – Other

and ID IPU 4040m)

Education & Research

SDHB Administration

Health Support Services

Health Expansion and Innovation

Mixed Use/Education/Commercial

Olinical - Southern Blood and Cancer Service

Clinical - Mental Health (excludes Forensic

Buildings

NDH New Dunedin Hospital

ILC Interprofessional Learning Centre

TRC Translation Research Centre

SBCS Southern Blood and Cancer Services

MH Mental Health

P Car parking building

D Cancer and Health Support Centre (Dairy building)

S Substation (proposed relocation)

FE Fraser Building Existing
FN Fraser Building New

HI Health Expansion/Innovation

 $\textbf{Figure 19.} \quad \text{Key to North and South Views}$



Figure 18. 2080 Plan View

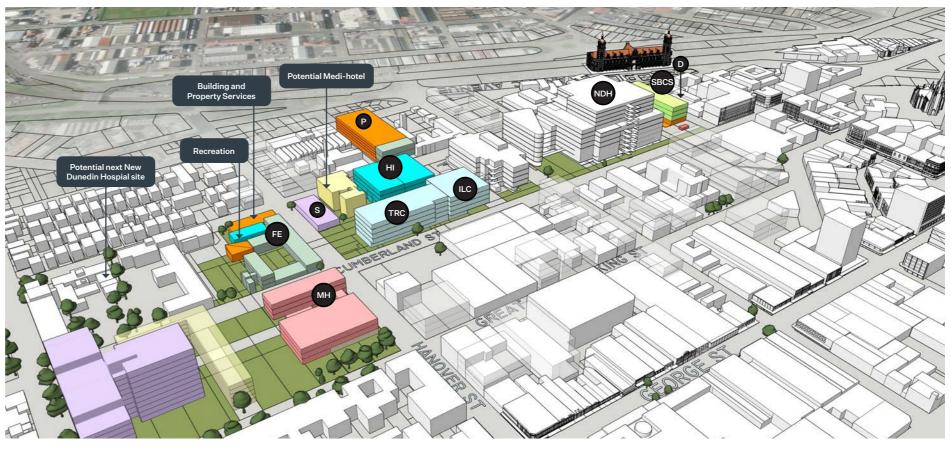


Figure 16. 2080 North View



Figure 17. 2080 South View

Indicative Green Spine Concept





Southern District Health Board Site Masterplan 28 April 2022

Mana Whenua engagement and input facilitated by Aukaha.

This document has been prepared by Jasmax-HDR health architecture partnership.