National Asset Management Strategy - Infrastructure

Te Kāwanatanga o Aotearoa
New Zealand Government

Health New Zealand
Te Whatu Ora

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Foreword

This National Asset Management Strategy – Infrastructure is about improving the practices and tools that Health New Zealand | Te Whatu Ora (Health NZ) need to better manage all public health infrastructure across the estate. In practical terms, it is about providing the Infrastructure & Investment Group a forward plan and the ability to manage our health facilities so they operate effectively, and efficiently so clinical services can be provided to New Zealanders, 24/7.

It should be read alongside the Health Infrastructure Plan to understand the full extent of the investment opportunities Health NZ faces and the challenges with respect to its ageing infrastructure assets. The Health Infrastructure Plan contains the proposed longer-term investments.

This document summarises the known issues regarding the asset base and how it needs to be realigned to support the goals of Pae Ora (Healthy Futures) Act 2022. However, the main focus of this strategy document is on the asset management practices and systems that Health NZ has underway and needs to develop and mature to get full, national level visibility of the condition of the health infrastructure assets it is responsible for.

A national view will support better regional planning, investment decisions, and risk management associated with the ageing estate. It also assists with developing proactive maintenance programmes to avoid the costly reactive approach currently in place that impacts on clinical service delivery. We know we cannot build our way out of our infrastructure situation. We need to better manage the existing health estate and identify and prioritise investments.

This National Asset Management Strategy identifies seven outcomes that will guide how we better manage our health estate and lift our asset management capability over the next few years.

We have also identified five asset goals that will help shape our investments to better meet health and disability infrastructure needs over the long-term.

In line with best asset management practices, we are adopting three pillars to uplift the maturity of our asset management practices. This will ensure we have appropriate and robust asset management practices and systems in place to manage the health infrastructure estate.

The National Asset Management Strategy will help Health NZ better manage the estate and achieve better infrastructure outcomes across the country and direct investments

towards critical priorities, which are carefully sequenced from a nationwide perspective on health need and equity in access.

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Executive summary

Safe and fit for purpose facilities, sites and equipment are important parts of our health system. Health New Zealand | Te Whatu Ora (Health NZ) is responsible for more than 1,200 buildings on 86 campuses, ranging from specialist hospitals to smaller healthcare facilities. This is the most complex vertical infrastructure portfolio in the country.

Health services need specialised facilities in their design and their fit-out which includes clinical and digital equipment. These facilities are among the most challenging to plan, design and build. Getting our health infrastructure right is crucial to enable our workforce to deliver care safely and effectively, and for people to receive high-quality care.

Health NZ has inherited a fragmented system from the former District Health Boards (DHBs) with several challenges that make it difficult for our clinical workforce to provide effective and efficient models of care.

Decades of under investment has led to a significant number of health facilities approaching the end of their life. We are facing seismic and resilience issues, health and safety risks, and compliance risks.

Many of our hospitals are not fit-for-purpose and are struggling to provide the healthcare required.

We now have the opportunity to take a national approach to health infrastructure challenges and future-proof our facilities.

To address this challenge, the NAMS will provide a consistent approach to managing the health infrastructure assets across the country. The NAMS balances four concurrent challenges:

1. Asset management needs to balance the management of risk of asset failure due to the degraded state of the health infrastructure portfolio.
2. The need to improve planning and management of the portfolio to support sustained delivery and financial sustainability.
3. The importance of realigning health infrastructure to support the goals of Pae Ora (Healthy Futures) Act 2022 (Pae Ora).
4. Meeting Government expectations for investment and asset management as contained in ‘Cabinet Office Circular: CO (23) 9.

The above Treasury Cabinet Circular CO (23) 9 states asset intensive entities, which Health NZ is, are required to ‘demonstrate a level of asset management practice and performance for our assets that is appropriate to the scale of our assets and the criticality of those assets to the delivery of key public services’.

This NAMS considers how we will achieve a future that enables us to:

- better manage the health estate

- better manage asset and associated health and safety risks
- improve our asset management practices
- meet Government expectations for investment and asset management.

Achieving the desired uplift, or improvement, in asset management practices will be a multi-year journey. We need a progressive lift in capability and maturity across multiple areas over the next few years to get the foundations right and inform the longer-term plan.

We want to create flexible and adaptable healthcare infrastructure that supports new models of care and a good patient experience, addresses health inequities, and provides critical services in the most efficient and effective way possible.

The NAMS compliments the Health Infrastructure Plan. Together they will ensure enhanced management of the estate to enable clinical service delivery to be maximised.

Background:

Public health infrastructure is the largest and most complex vertical infrastructure portfolio in New Zealand, with more than 1,200 buildings on 86 campuses. The current replacement value is ~$38 billion.

Delivering health infrastructure is complex. It requires significant levels of consultation with clinicians and community representatives and is often built on constricted sites or spaces, with 24/7 operational requirements to consider.

Additionally, historical under investment has resulted in poor asset condition and performance, including significant seismic and resilience issues.

The National Asset Management Strategy – Infrastructure (NAMS) and the Health Infrastructure Plan (HIP), which prioritises planned investments, together present an opportunity for Health NZ to implement actions that will further improve the Health and Disability sector in New Zealand and ensure health infrastructure assets align with the goals of Pae Ora.

Implementing the HIP and NAMS in an integrated way means that they can strengthen asset management capabilities and ensure resources are targeted at achieving desired health outcomes and maximise the potential benefits of both of these initiatives.

The scope of the NAMS

The NAMS will support the financial sustainability of the health system. It supports the development of an initial 10-year strategy. As we mature in our asset management practices, future NAMS will cover a 30-year horizon given most of our assets will be reaching major lifecycle decision points over this period. This will be supported by a 30-year investment programme.

This initial NAMS outlines the proposed change over the next 10 years for how

we will manage the health infrastructure portfolio, the new approaches to support this change in the portfolio, and the proposed lift in health infrastructure asset management capability to enable its implementation. The next iteration of the NAMS, three years from now, will include the other asset classes belonging to Data and Digital, Clinical Equipment, and Vehicle Fleet. It is important to note that the NAMS is written at a time when we are still determining what we know and do not know about the Health NZ asset portfolio. It is also written at a time when Health NZ is going through a reset.

The NAMS sets out how, as a long-term asset owner, we will manage the varying lifecycle requirements of our existing health infrastructure to enable the delivery of health services. It includes how we will re-orientate our asset base to support the Pae Ora goals and achievement of improved health outcomes. As an enabler of clinical health service delivery, health infrastructure is one component of the interventions being employed across the health system to address the current and future health needs of New Zealanders. Health infrastructure therefore needs to adapt to support the wider system shift being implemented by Health NZ.

The health system faces multiple challenges in meeting current and future health needs:

- The changing demography of New Zealand is seeing increasing demand for health services with a growing, ageing population and a more ethnically diverse population.
- Persistent inequalities in healthcare for Māori and Pasifika populations with lower life expectancy and high levels of morbidity.

The NAMS provides a framework from which future decisions can be made.

- Poor geographic distribution of services to meet the needs of a dispersed rural population and highly concentrated population in metro areas.

The growing demand on the health system and the current and projected gap between healthcare provision and demand requires an all of system response. Health NZ is undertaking actions to reduce the need for health intervention through prevention, public health initiatives, and primary and community care within localities. Virtual and digital healthcare is being developed to remove barriers to specialist healthcare as well as to enhance the efficiency of healthcare provision. Improvements in transport systems for patients are also being assessed to support access and facilitate people to get care with whānau support.

A shift in clinical service delivery

A fundamental part of the system change will be a shift to more effective provision of healthcare at hospital and specialist sites across New Zealand. The Nationwide Clinical Service & Campus Plan (NCSCP) sets out the planned realignment of clinical service delivery as part of a deliberate shift of where clinical services are provided to move towards equity of access and improved outcomes for all New Zealanders.

The shift will see healthcare and health needs redistributed across the health network, with greater needs met in primary, ambulatory i.e. outpatient care, and rural healthcare settings, and that hospital services optimise efficiency. This transformation is critical for managing operating costs over the medium to long-term by shifting care to lower cost settings where clinically appropriate.

The shift in clinical services may require the following changes to health infrastructure:

1. A shift in the geographic distribution of health infrastructure to address inequity in service provision.
2. The shift of ambulatory and some specialist care support, including cancer and renal dialysis, away from main hospital sites so that more healthcare is provided in lower cost facilities.
3. The establishment of urban ambulatory hubs and rural centres to support delivery of care closer to communities.
4. Provision of facilities that enable the concentration of complex care on fewer sites.
5. Ensuring that metropolitan hospital sites have the capacity to meet growing demand.

Strategic outcomes of the NAMS

The realignment of health infrastructure to support the shift in clinical services could be extensive and may be a long-term effort depending on the capital and non-capital solutions implemented. Alongside ongoing operational requirements, it will necessitate greater efficiency and effectiveness in health infrastructure management. New approaches for health services, infrastructure delivery and asset management are required to ensure that effort is focused, and the value from investment in health assets is maximised.

To meet the changes in clinical service delivery, we have identified the following outcomes that will guide how we will better manage our health estate and lift our asset management capability

#	Outcomes	Description
1	Better understanding of the estate supports better planning and investment decisions	Understanding our current state will enable better planning. This is essential to: • ensure that health needs are addressed and that facilities are best aligned to requirements • maximise the utilisation of current facilities and plan for their replacement or renewal • accurately predict future expenditure and investment requirements.
2	Enhanced digital tools to support decision making	We need systematic processes and data to guide the planning, acquisition, operation, maintenance, renewal, decommissioning and disposal of assets along with the ability to monitor and report on their performance. Better quality of information in a centrally located system will provide a single source of truth and support more efficient decision making.
3	Asset risk and resilience are actively managed	It is essential that facilities can maintain critical health services, day to day and following a disaster. Investments must focus on addressing a range of seismic risks and the robustness of supporting horizontal infrastructure across the health estate.[1] Future prioritisation of investments must mitigate and address significant risks and ensure the resilience of our health estate.
4	Improved management of our health estate	The replacement timeframes for the current health infrastructure estate means that it will be the focus for providing most healthcare services over the next 10 years. Managing our health infrastructure assets is essential to support the shift in clinical service provision across the health system and ongoing financial sustainability.
5	Investment is prioritised to meet growing clinical service needs	New infrastructure takes time to design and build. We need to prioritise to ensure that investments are directed towards critical priorities and then carefully sequenced from a national perspective on health need and equity in access.
6	Standardised design and delivery of new facilities	Adopting standardised design and delivery throughout the infrastructure portfolio will reduce the cost of delivery and enhance operational effectiveness. Developing greater levels of guidance and specifications from a service design and facility design perspective will reduce the level of variation across health facilities and reduce costs and variances in performance.
7	A range of funding, investment ownership models are explored	Moving away from providing care in specialist and generalist hospitals to the community and rural areas requires the testing of different models of care for these health facilities. This includes: • collaboration with possible partners such as iwi and community providers of healthcare • considering leasing arrangements and joint ownership models.

[1] Horizontal infrastructure is a term used to describe common building and infrastructure campus assets including roads, reticulated services (e.g. electrical), buried services, tunnels and common support systems.

The NAMS complements the Health Infrastructure Plan

The NAMS is being implemented alongside the Health Infrastructure Plan (HIP) which sets out the priority areas for investment in new health infrastructure to support the goals of Pae Ora – or the healthy future of New Zealanders.

The Infrastructure & Investment Group (IIG), Planning, Funding and Outcomes and the four Regions are working in close partnership to ensure investments are directed towards critical priorities and carefully sequenced from a nationwide perspective on health need, equity in access and outcomes.

The prioritisation process and the method for determining investment areas are developed by clinical service delivery priorities alongside the identification of asset failure risk and the infrastructure investment options that would meet clinical service goals.

The overall work will result in a total investment plan for Crown health infrastructure. Across Health NZ we will see:

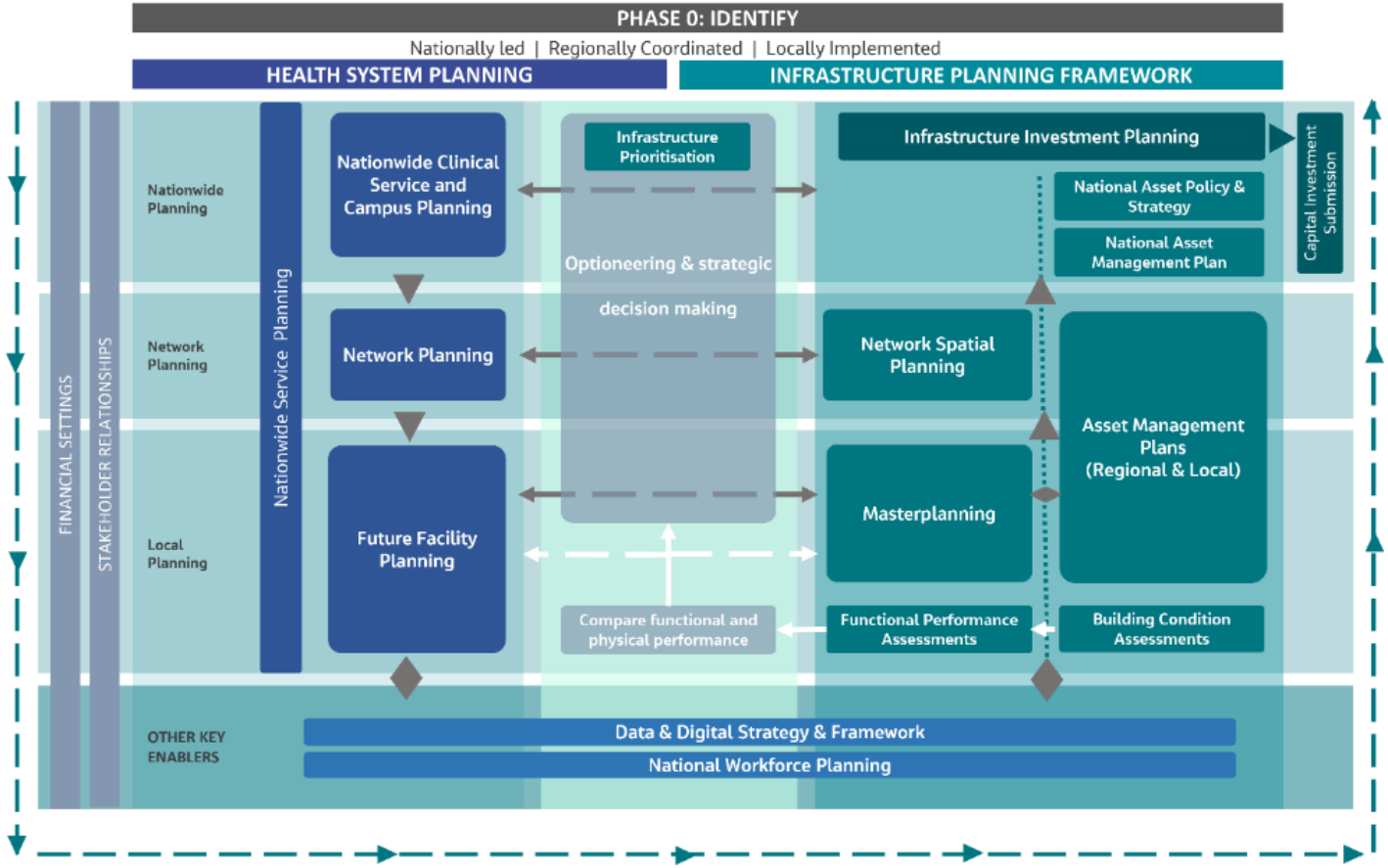
- improved financial processes and ongoing development of financial delegations nationally
- joint capital and renewal decision making groups
- integrated asset management and capital investment planning.

The NAMS will support the ongoing strengthening of process for determination of the infrastructure investment priorities by:

- clearly stating asset levels of service expected from our assets to meet clinical service requirements
- assessing the health estate against these standards
- utilising the asset management maturity improvement programme to achieve the asset levels of service.

As asset management maturity improves across all asset classes, the system will support enhanced prioritisation to be able to support future HIPs.

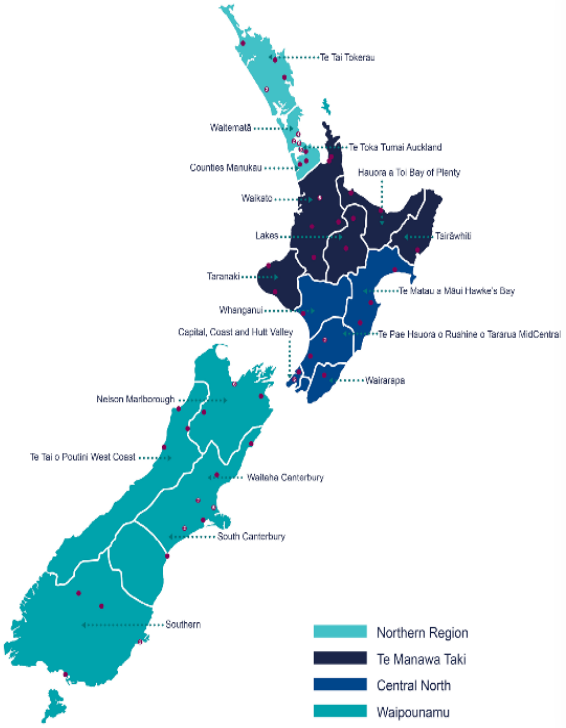
Figure 1 Context shows the connection and collaboration required across Health NZ in a dynamic planning environment. It incorporates woven vertical and horizontal process streams at each step. The processes described are not purely linear, nor is each step sequential. They are reiterative interactions that inform and rely on each other.



The diagram should be read in a 'U shape' from top left, down the page, across the bottom and up to the right.

Figure 1 Infrastructure Planning Context

The current state of our health estate



Current State Asset Portfolio

No. of Campuses: 86

No. of Buildings: 1273

Average age of Buildings: 45.16 YEARS

Net Book Value:

Land: $1.7 BILLION

Buildings: $9 BILLION

Replacement value: $38 BILLION

Source: Te Whatu Ora draft Annual Report

Health NZ owns one of the Crown's largest estates, comprising public health assets of land, buildings and health infrastructure, clinical equipment, health technology and motor vehicles. We manage more than 1,200 buildings with a replacement value of around $38 billion.

Locally submitted capital intentions have more than doubled since 2020 from $15 billion to $34 billion ($49.6 billion escalated cost) ahead of Budget 2024. The total current portfolio of significant infrastructure projects has capital funding of $8.2 billion for 115 projects across the country.

The total capital planned to be spent on infrastructure in 2024/25 is $1.465 billion ($367 million funded through Health NZ depreciation cash[2], $1.033 million from the Crown, $65 million from other sources). Most of this funding relates to pre-commitments, with no new Crown funding included. This includes $243 million of Health NZ's depreciation cash

[2] Depreciation funding is funding set aside to renew assets. This is funded by Health NZ.

for infrastructure), with a further $60 million of depreciation cash is going towards contributions to Crown funded projects.

Health NZ has prioritised the funding available for new projects to those which represent the greatest clinical needs as prioritised by the regions.

Key findings of the current state assessment report

The Ministry of Health's (Manatū Hauora) **2020 National Asset Management Programme (NAMP) Report 1: The Current-State Assessment** (Report 1) provided the following key findings of our health infrastructure assets, which remain current:

- Health sector weakness in asset management.
- The prioritisation of expenditure on operational rather than capital requirements, which has led to a significant backlog of deferred maintenance.
- The inability of the former DHBs to adapt quickly enough to changing demands.
- The average age of buildings ranged from 28 years to 58 years.
- Buildings are mostly in average to good condition, many in average condition had components that rated poorly.
- Site-wide infrastructure is in relatively poorer condition than the main campus buildings.
- Many campuses have significant issues with reticulated infrastructure, including electrical systems and pipes at or near end-of-life and not designed to support continually increasing operational loads.
- Many mental health facility buildings are in better condition than main clinical blocks due to their location in low-rise and simpler building types. However, the interiors of mental health facilities were in poorer condition.

The condition assessments surveys used to inform Report 1 were high-level visual assessments using a sampling approach.

We still need to undertake comprehensive condition assessments to get a full and detailed understanding of the condition and performance of the entire heath estate. Work for this has started and is described later in this document: "Standardised condition assessment and deterioration modelling."

Our latest information indicates the average age of our buildings is 45 years. Typically, the lifecycle of a building is 50 years. This means many of our buildings are at, or approaching, the end of their useful life and reaching obsolescence.

We also have significant seismic issues that need addressing, and we need more information on how well our facilities are utilised and if they are meeting clinical service expectations.

We do not yet have all the information we need to quantify the cost to remedy this situation. Future iterations of the NAMS will look to address this.

Our current work programme has found more issues

There are still significant gaps in our understanding of the condition of our health estate. We have initiated a number of workstreams to help address the gaps, which have uncovered further issues with the current state of our assets. These workstreams and issues are outlined below.

Seismic work programme

A Seismic Work Programme has been set up to ensure that our health facilities are safe for occupation and delivery of critical health services is supported following a seismic event.

The Seismic Work Programme assesses the seismic vulnerability of all our buildings to ensure they are fit for purpose and any remediation can be prioritised.

The Seismic Work Programme has built on the work of Report 1 resulting in the first health seismic report **Understanding and Improving the Seismic Resilience of Hospital Buildings**

The findings of that report were:

Seismic findings
More than a third of all hospital buildings are yet to have an assessment reported.
Of the buildings that have been assessed, 48 (6%) are earthquake prone. Nineteen (19) of these are categorised as Importance Level 4 critical buildings, 10 of which are 'patient facing' buildings.
A number of key hospital buildings have low seismic ratings for life safety in rare earthquakes, including relatively modern buildings constructed from 2000 onwards.
There is little to no information on the performance of non-structural elements, such as ceilings and specialist medical equipment, which can render facilities unusable in a major earthquake.

Obtaining seismic reports for hospitals has been time consuming and difficult and several reports were completed prior to 2017 when the building regulations related to earthquakes substantially changed following the Christchurch earthquakes.

Further assessments are required to give us a full understanding of the seismic resilience of the estate and to inform prioritisation of investment.

Risk and assurance campus-wide infrastructure project

We have undertaken assessments of site wide (horizontal) infrastructure across 34 campuses (those providing medical and surgical services).

This workstream has built on the work of Report 1 through a much deeper and comprehensive assessment methodology utilising skilled engineering resources. The findings of the assessments were:

Risk and Assurance findings
Infrastructure risk is present across the motu.
The highest number of Very High, High and Medium risks are in Gisborne, Hawke's Bay, Palmerston North and Kenepuru hospitals.
The infrastructure asset sub-elements having the largest number of Very High, High and Medium risks are potable water, medical gases, electrical and mechanical.
The cost of mitigating the 82 Very High priority risks is estimated between $140.4 million to $372.5 million.

Mitigating the 399 High priority and 118 Medium priority risks will require substantial further planning and investment.

Further assessments are required on the other 52 campuses to form a complete picture of the horizontal infrastructure asset risks.

Climate change risk assessment

We completed an assessment of our 34 largest public hospitals to understand the impact on our infrastructure assets due to climate change risks such as flooding and increased temperatures. The main findings of the report were:

Climate risk findings
Increased temperatures are creating uncomfortable environments for staff and patients which can overload HVAC systems and consequently interfere with hospital care and the operation of some machinery.
Extreme rainfall causing water ingress to buildings due to age, flat roofs and under capacity drainage.
Flooding causing access issues to, or throughout, sites and causing water ingress into low lying areas that contain critical infrastructure.
Coastal hazards causing access issues to some sites and in some cases, salination to drinking water supplies.
Drought conditions and the lack of available storage compromising the amount of water available to hospital sites.

These findings will form the basis of an agreed set of priorities from which to develop risk (adaptation) responses, couched within the overall risk and assurance programme.

This information has feed into the Health National Adaptation Plan and will be incorporated into the regional/local Climate Health Action Plans.

Water and energy usage benchmarking tool

During 2022 and 2023 Health NZ collaborated with the Energy Efficiency & Conservation Authority (EECA) on a project to collect energy and water consumption data at a selection of 48 of our largest hospital campuses to develop a New Zealand-specific rating system for energy and water consumption.

We know there are pockets of good practice across the former DHBs, which we will look to leverage and incorporate as we implement our plan to uplift the

The tool we established for the rating system is National Australian Built Environment Rating System for NZ (NABERSNZ). This allows us to create a baseline to benchmark for New Zealand conditions and provides a robust means of tracking, monitoring, and lifting the carbon, energy, and water performance of existing assets.

In parallel with this climate initiative, we have started an Energy Transition Programme (ETP). The ETP was established to lead and support the delivery of several energy-related emission reduction initiatives. These initiatives will meet the Te Pae Tata strategic objective of a 25 percent reduction across both Category One and Category Two emission by 2025

(equating to a 23,000 tCO2/25% reduction in stationary energy).

Key findings
The ratings reveal a broad range of energy and water efficiency across the 48 sites.
Only 30 sites were able to provide data on water consumption owing to a lack of water meters or water consumption data not being recorded.
Water ratings across the 30 campuses for which data was available ranged from the lowest score of 0 (3 campuses) up to the highest score of 6 (1 campus) with an average of 2.77.
Energy ratings across the hospital campuses ranged from the lowest NABERSNZ score of 0 (6 campuses) up to the highest score of 6 (3 campuses) with an average of 2.75.

We have rolled-out NABERSNZ and have a plan in place for ongoing data capture.

Current state of our asset management practices

Health NZ has inherited a fragmented system with a set of differing practices of how assets are managed across the estate. This has resulted in a lack of strategic direction and planning and inconsistencies that will take time to align as one. This has contributed to our infrastructure assets being in a degraded state.

This was noted in **the Health and Disability System Review interim report (2019, p 263)**,*"The current state of DHB assets is not good and there is little in the way of long-term planning which can give any confidence that the problem is under control".*

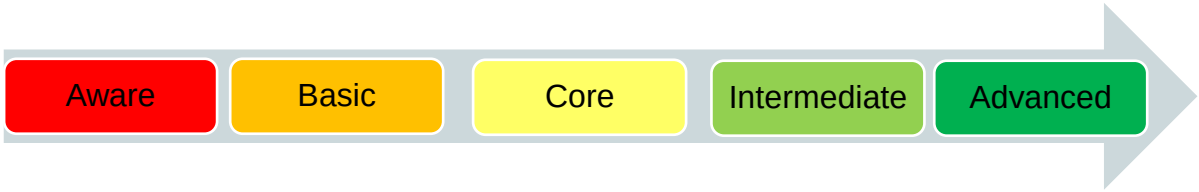
Resources have tended to be directed to managing short-term operational pressures, rather than to plan for and invest in longer-term sustainable solutions, including infrastructure.

Report 1 stated we need to build the capability to support system transformation, especially as models of care evolve, including the advances in clinical equipment and technology that enable shorter hospital stays and more community-based care.

Eight of the previous DHBs were considered investment-intensive agencies and as such were assessed by Treasury in terms of how well they performed in relation to asset management practices. Of the eight, four did not meet the standard required by Treasury[3].

The International Infrastructure Management Manual (IIMM) provides a widely used maturity framework that organisations can use to assess their asset management practices and determine the appropriate level of advancement (or maturity) they want to achieve. The levels range from Aware to Advanced.

[3] These assessments were conducted by Treasury in 2019.



A summary of these levels is shown in the table below. The full explanation of the levels is provided at “Appendix A: IIMM Maturity

Aware	The organisation knows that it needs to do something but has yet to act.
Basic	The organisation has some parts of good practice in place but still has obvious gaps that need to be filled.
Core	The organisation has adequate processes in systems and process in place to comply with a minimum set of requirements but, it is still developing and is not yet realising the benefits that it should from good asset management.
Intermediate	The organisation has good practices in place and is demonstrating solid capability as an asset manager. There are still opportunities to improve but it could be that this is adequate for the types of assets being managed and investment in anything better is not warranted.
Advanced	The organisation is an exemplar asset manager that others are envious of. It is a leader in developing the best asset management practices that others then want to adopt.

The above asset management maturity framework is likely to be used for any external audit. We will use this framework to improve our asset management practices and for internal assessment of the state of asset management practice for Health NZ.

We consider Health NZ asset management practice maturity to be at an overall **Aware** to **Basic** level. Noting there are some instances of **Core** across the country. To reach this conclusion, we used the IIMM maturity index above and the ISO 55000[4] Standards for a Management System. We also considered the state of our current processes and practices across the estate.

[4] An international standard for asset management.

Our current situation means we cannot effectively manage the estate to meet the objectives of the health reforms and shift in clinical service delivery. We cannot effectively plan for asset renewals, replacements or optimise maintenance strategies.

Without good asset information or data, we will make suboptimal decisions, rather than being more efficient or effective with our capital planning, and asset management and performance decisions.

Our current situation …we cannot effectively plan for asset renewals, replacements or optimise maintenance strategies.

Findings from the Infrastructure Commission's Asset Management State of Play report

The Infrastructure Commission has released a report on the state of asset management. This report is a high-level snapshot of New Zealand's approach to asset management.

This report identified Health with the lowest overall asset management maturity when compared to Energy, Education, Telcos, Water and Transport.

The report states "As expected, asset management maturity is generally higher in the more critical infrastructure sectors - these being the energy, transport, and water sectors. The health sector is the exception, which has highly critical infrastructure but poor asset management and poor physical infrastructure that affects wellbeing and health outcomes."

The State of Play report supports our internal assessment of our AM Maturity. The NAMS seeks to address this situation.

The report also noted that we had recently stood up an organisation to manage the Health Estate – being the IIG.

The current situation presents some significant risks

The current state of our health estate and asset management practices presents several significant risks as shown in the tables below.

Risks to how we manage our assets
Our ability to provide safe, fit for purpose facilities which enable health services to be delivered is impacted.
Our ability to manage our health and safety obligations.
Our deferred maintenance costs could significantly blow out if we continue to only carry out reactive maintenance on our assets. This will lead to continued degradation of our assets.
The seismic management of risks will be impacted, presenting health and safety risks.
Our reliance on consultants will continue.

We will continue to see inefficiencies in capital planning and delivery. This will lead to greater cost pressures across the heath estate including the Health Capital Envelope.
We will not achieve costs and service efficiencies from smarter and bundled procurement (bulk buying).
We may be unable to provide health services if we do not address asset and resilience risks.
The full extent of risk within the estate will remain unknown, increasing the potential for funds to be diverted from clinical uplifts, and for failure of existing services to occur.

Risks to our asset management practices
We will not invest in the right place at the right time or meet Government expectations around providing a prioritised pipeline of capital investments.
We will not achieve time and cost savings from implementing design standardisation/repeatable design.
We will not improve our reporting processes or undertake project data analysis.
Poor time and cost estimates will continue to apply pressures to the HCE and to the delivery pipeline.
We cannot plan infrastructure investments properly or confidently and we continue with the fragmented approach to the management of the estate which the health reforms set out to change.

Future state: health infrastructure and asset management

This strategy has a 10-year horizon. However, the key focus of this NAMS is the current work underway and Horizon 2 - getting the foundations right. This will then inform the later years (Horizon 3) and reach our goal of a core level of maturity by year six.

Horizon 1 (current to 30 June 2025)

Horizon 1 continues our current work in our asset management maturity uplift programme by completing our foundational policies, frameworks and procedures to provide guidance and consistency to our asset management practices.

Further information on the current workstream underway is contained in the next section of the Strategy.

Horizon 2 (2025/26 to 2027/28)

Horizon 2 is about starting to implement and deliver on the foundational activities to better manage our assets and lift our asset management maturity[5]. This includes:

- baselining the estate to understand the condition of our assets
- working closely with the regional infrastructure team to support them in implementing and delivering on the workstreams
- a focus on quick wins
- implementing foundational Asset Management Information System (AMIS) capabilities including a national asset register.

This Horizon builds on the work we have recently started, with a strong focus on identifying and effectively managing our critical assets, risk and maintenance practices. including addressing and starting to remedy the current state of our assets and asset management practices. It will also ensure we obtain a good understanding of our health and safety risks, so we can mitigate these.

Horizon 3 (2028/29 to 2030/31) and beyond

For Horizon 3 and beyond we expect to have the foundations in place and all regions to be applying the Asset Management Policy and Strategy. This includes managing our assets to meet the required levels of services, and asset

[5] In line with industry best practice as ISO 55000 and the International Infrastructure Management Manual (IIMM).

management plans informing capital intentions.

This will be when we achieve an overall core level of AM maturity, which will then allow us to further lift our asset management maturity and realise any cost and work efficiencies available.

Towards the end of Horizon 3 we should have our Asset Management practices embedded. We can then start to benchmark externally and seek continuous improvement.

Review of the NAMS

We expect to review our NAMS on a three-year cycle – at the end of Horizon 2, once the Asset Management practices are embedded and we start to integrate across the different asset classes.

The future state will address how we:

- better manage the health estate
- will improve our asset management practices
- better manage asset and associated health and safety risks
- meet Government expectations for investment and asset management.

How we will better manage the health estate

Setting asset goals (asset levels of service) will enable us to be better stewards of our health estate by shaping investment in the portfolio in a business-like manner to better meet health and disability infrastructure needs over the long-term. Levels of service are the means of defining the outcomes and outputs that customers can expect from asset-based activities, measured through achievement of defined performance measures and targets.

The following table sets out these goals along with potential performance measures[6]:

Asset Goals	Potential performance measure
1. Our assets enable the ongoing delivery of health services	• Clinical service provision is not interrupted by failure of assets • Patients and staff are satisfied with the facilities • Assets meet or exceed baseline condition standards • New facilities meet Facility Design Guidelines
2. Our assets are resilient	• We reduce the likelihood of asset failure • Earthquake Prone Buildings have an occupancy risk evaluation and investment plan • Assets are replaced before they reach end of life.
3. Our assets meet service demands	• Assets deemed appropriate for services being provided • Asset utilisation measure to be determined

[6] These asset goals are also our asset level of service statements. As part of our future state development of asset levels of service we will develop and agree performance measures.

Asset Goals	Potential performance measure
4. Our assets are delivered to meet community and rural health needs	• Delivery of community and rural health facilities • Reduced travel distance to receive health care for communities
5. Our portfolio is financially and environmentally sustainable	• Reduction in construction programme development costs • New facilities are designed to meet environmentally sustainable design standards

How we will improve our asset management practices

Asset management practices vary across the organisation with some regions having more resources dedicated to asset management than others. It is essential for us to strengthen services across all sites to enhance management of our health estate.

Health NZ is committed to establishing and maintaining an asset management system that delivers on Government expectations and supports our asset management goals. The asset management system is the co-ordinated set of activities that are undertaken to deliver the organisation's asset management goals.

Plans and processes relating to the asset management system must be clearly aligned from the strategic plan through to the detailed work programmes and procedures.

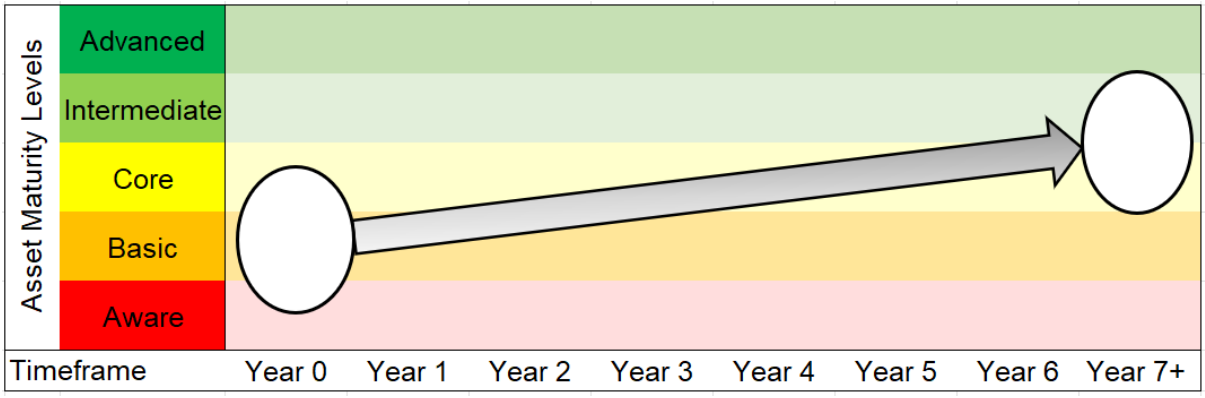
The scope of the asset management system can cover all asset classes. However, this NAMS focuses only on infrastructure assets including land and buildings across the public health estate. As Health NZ matures its systems and processes, other asset classes such as data and digital, clinical equipment and vehicle fleets will be included.

There are three core documents needed for good asset management practice, as outlined below:

Asset Management Policy is the "Why"	• The Asset Management policy outlines the principles that govern an organisation's approach to asset management and the way it will apply asset management practices to achieve the organisational objectives.
Asset Management Strategy is the "How"	• The Asset Management Strategy outlines how the organisation will make asset investment decisions based on clinical service needs and our investment planning framework. A key element is it will contain the Asset Levels of Service and measures for condition, utilisation and fitness for purpose and asset management improvement programme.
Asset Management Plans are the "What"	• Asset Management Plans outline the specific asset level actions/investments necessary to achieve the organisation's asset management objectives, typically arranged by date. Investment includes maintenance (opex), renewal (depreciation) and redevelopment (capex). This provides the financial information (capex/maintenance) that feeds into our Infrastructure Investment Plan.

Our longer-term future state goal is to be Intermediate to Advanced. The graph below shows where we are now and where we want to get to. The target for the next six years is to achieve an overall core level of asset management maturity. The workstreams outlined in Appendix C: Workstreams to lift AM Maturity will achieve this. These workstreams are our foundation activities to then allow us to further mature. As we approach the end of the next three-year period, we will be in a far better position to plan our strategy beyond Horizon 2.

Figure 2: Health NZ Asset Management Maturity journey



In line with best asset management practice,[7] we are adopting the following three pillars to achieve our asset management maturity uplift goals:

[7] International Infrastructure Management Manual (IIMM) and the ISO55000 suite

Understanding requirements
Ensuring we know what we need from our assets to meet clinical demands and corporate objectives. By knowing the state of our assets and what we need from them we can make better choices about investment in new and existing assets in the most cost-effective manner. This also enables us to meet desired level of service and performance measures for our assets.

Lifecycle management
This is about how we manage our assets across all phases of their lifecycle and optimise activities to better manage the estate, such as increasing planned maintenance to extend the life on assets and therefore spend less on renewals.

Asset Management Enablers
Asset Management Enablers support effective infrastructure planning and decision processes. These enablers include people (internal & external), data, Asset Management Information Systems (AMIS), and processes. They also detail the approach for ensuring Asset management practices are subject to continuous improvement.

More details provided in the tables at Appendix B: Asset Maturity Goals.

Government expectations for investment and asset management

Government expectations for both Investment and Asset Management are set out in the **Cabinet office circular CO (23) 9**. These include:

- ensure existing and future assets are resilient to the effects of significant risks
- report on investment intentions over 10 years (as a minimum) that require Cabinet consideration
- manage assets to ensure they deliver intended levels and methods of service
- demonstrate a level of asset management practice and performance for our assets that is appropriate to the scale of our assets and the criticality of those assets to the delivery of key public services
- develop and maintain asset management plans to inform strategic, tactical, and operational choices
- identify service critical assets and maintain details of the identity, condition, and risk exposure of these assets in the agency's asset register
- capture relevant indicators of past and projected asset performance (for example, asset utilisation, condition, and fitness for purpose) for service critical assets.

We have taken these expectations into account when considering what we need to do to better manage our estate and improve our asset management practices, with respect to infrastructure assets. Other asset classes also need to meet these expectations.

How we are going to get there

We know that to achieve our health infrastructure goals in making our health estate fit for the future, we need to re-orientate our infrastructure to move towards equity of access and improved outcomes for the people of New Zealand. This will require a roadmap with clear and specific actions that are achievable and measurable.

We also know that many of these actions and our workstreams are codependent, and therefore some workstreams such as developing asset management plans cannot be fully achieved until other activities / workstreams are delivered such as the condition assessment and baselining of our health estate.

Improvement initiatives underway

We have developed a work programme to lift our asset management maturity, based on the asset management maturity pathway guidelines.

We have some foundational work programmes already underway. These workstreams will contribute to asset management goals and the strategic outcomes of the health reforms in respect to health infrastructure as an enabler of health services, specifically by:

- supporting a nationally consistent approach to understand our facilities and assets which enables decision making that mitigates risk
- ensuring the provision of safe, fit-for-purpose facilities, sites and equipment
- making investment decisions based on need by using asset condition and risk assessments
- demonstrate a level of asset management practice and performance for our assets that is appropriate to the scale of our assets and the criticality of those assets to the delivery of key public services, as required by CO(23)9.

These workstreams are detailed below.

A new structure for the Infrastructure and Investment Group

The Infrastructure and Investment Group have consulted on and have implemented phase 1 of the new operating structure.

The new structure and operating model will provide the basis for nationally integrated asset management practices across Health NZ. The Head of Infrastructure Asset Management will be responsible for leadership of the national asset management function, with direct

reporting lines to the Chief Infrastructure & Investment Officer.

The Head of Infrastructure Asset Management will collaborate with the other Infrastructure and Investment functions (Planning & Investment, Commercial & Procurement, Delivery, and Land & Property Management) to be a core enabler in infrastructure strategy, planning, operation, and delivery for Health NZ.

These functions will establish the evidence-base and levels of service to support regional decisions being made within nationally consistent planning and guidance across asset management practices, which will support an uplift in asset management practices, maturity and competency.

The next phase in implementing the new structure are to:

- develop regional structure and functions
- put in place a people and capability framework to support our health estate management (this is out-of-scope for NAMS).

Standardised condition assessment and deterioration modelling

Understanding asset condition and performance supports risk management, lifecycle decision-making and financial/performance reporting.

We have developed and piloted a standardised approach to assessing asset condition and deterioration modelling. When this is rolled out it will enable us to prioritise maintenance and renewal investment.

We are now in the process of determining the best approach to carry out a national programme of condition assessments.

Baselining the estate allows us to complete financial modelling such as renewal planning, and optimised decision making such, where to prioritise investment, and where to sweat assets, or take action to extend the life of assets. It will also support our maintenance strategies per hospital.

Draft Asset Management Policy

The draft Asset Management Policy defines the principles and responsibilities that Health NZ will apply when managing infrastructure assets. This policy will:

- underpin and give effect to Te Pae Tata, achieving Pae Ora – Healthy Futures
- provide the overarching framework for our National Asset Management Strategy and Asset Management Plans
- set the strategic objectives for the management of our assets and outline our commitment to continually improving the way

we manage our infrastructure assets.

We have started internal engagement on a draft Asset Management Policy. Where existing asset management policies have already been adopted at a district level, they will continue to provide a framework for local practices.

We aim to have this finalised and approved by the end of Horizon 1.

Asset Management Information System

An Asset Management Information System (AMIS) is beginning to be implemented to replace fragmented, legacy solutions.

Analysis of the current state identified:

- there is currently no single nationwide source of asset information or an asset register
- tools and standards for managing asset data are fragmented between former DHBs, and between the different types of assets
- the fragmentation of information means that Health NZ does not have a consistent understanding of its asset related risks and its priorities for investment
- there is a disconnect between the financial fixed asset register and asset management tools.

The AMIS will support:

- standardisation of the asset hierarchy location/space and class used to describe/define each infrastructure asset
- an inventory of infrastructure assets, condition, usage, and maintenance history.
- visibility of the asset performance attributes like levels of service, condition, utilisation, resilience, risk, and criticality across the health estate
- the ability to automate our risk management and registers (including the national asset risk register).

Investment in an AMIS, based on national data standards, is important to ensure that decisions are evidence based, contributing to equitable health outcomes. Over time this will enable Health NZ to have visibility into its asset portfolio and optimise asset usage.

Asset risk register

This is a central source of truth for capturing and tracking our asset risks, from across the health estate. Risk has been captured from the former DHBs (where risk registers were in place), Property Loss Control reports and the workstream detailed in “Risk and assurance campus-wide infrastructure project.”

Integrating the asset risk register with the AMIS to enhance and manage the register in accordance with the risk management framework is part of the future AMIS roadmap.

Seismic Work programme

Under this programme of work we have:

- implemented a seismic policy
- implemented Priority Response Agreements for engineers to respond immediately to major hospitals following earthquakes – to confirm if safe to continue to occupy or if we need to decant
- developed hospital-specific design guidance which sets out performance objectives to inform the work of all design team disciplines
- commenced a programme of further seismic assessments required on the estate.
- developed and implemented an approach for determining the life safety risks of our earthquake prone buildings.

Maintenance Assessments

34 key campuses were assessed to identify how Health NZ:

- prioritises maintenance activities of its infrastructure assets, with a key focus on statutory compliance.
- ensures risks are managed effectively
- confirms whether we are investing in operating expenditure efficient and effectively.

The findings concluded that whilst we are largely compliant with statutory requirements and no wasteful spending was identified, there is a critical need to increase maintenance funding to ensure the safety, reliability, and effectiveness of our infrastructure, ultimately improving patient care and outcomes.

Maintenance Prioritisation Methodology

This methodology was established to provide a standardised set of principles of how HNZ will prioritise maintenance expenditure. This methodology helps our teams prioritise the criticality of clinical service provision and urgency of each work order. This consistent process will help ensure our local teams are balancing risk, time and cost effectively.

Roadmap for the future

A high-level work programme, at Appendix C: Workstreams , details how we plan to improve our asset management practices and aligns the workstreams to our strategic outcomes, asset goals and goals to improve our asset management practices. The workstreams either directly deliver or support each pillar to lift our asset management maturity.

The workstreams needed to start the improvement of our asset management practices over the next six years are detailed below. Noting that some foundational workstreams are already under way in Horizon 1 and others will be implemented in Horizons 2. The 10 workstreams are:

1. Finalise the Asset Management Policy.
2. Develop an asset levels of service framework – and national level asset levels of service.
3. Implement a condition assessment programme to baseline the estate.
4. Develop a risk management and criticality frameworks.
5. Implementation of further risk and resilience assessments (seismic/climate/horizontal infrastructure).
6. Develop a maintenance strategy.
7. Development of asset management plans across all campuses.
8. Complete and embed the new IIG structure.
9. Implement an Asset Management Information System (AMIS).
10. Develop an Audit and Improvement Programme.

Going faster would require further investment

The workstreams will be delivered primary utilising internal resources within the IIG.

However, some external specialists will be used for things like our condition and seismic assessments. We have requested funding in Budget 25 for such costs.

To accelerate the implementation of the work programme and lift our asset management maturity faster and address the degraded state of our health infrastructure assets would require a significant lift in budget and resources.

Wider considerations

The workstreams below are not part of the NAMS. However, they are important context for the environment we work in.

Alternative financing

We need to establish a nationally consistent and coordinated approach towards the use of alternative

financing arrangements. Alternative financing includes a range of potential mechanisms to fund and procure the provision of infrastructure. Different models and approaches have been used across the former DHBs.

An initial investigation has identified financing mechanisms suited for different asset classes and the Infrastructure Investment Plan also identified initial opportunities in some areas. Where we do enter into different finance arrangements, maintenance would likely be funded and/or delivered differently.

A national approach would provide:

- a single approach to the market for large scale financing
- assurance around the procurement and commercial terms
- the ability to enhance the upgrade of facilities without upfront capital cost
- identification of potential non-financial benefits by drawing on commercial expertise
- the means to involve iwi, private providers and financial entities to test other means for involvement in health sector.

Delivery partnerships

With the planned investment in health facilities closer to the community, there will be a range of opportunities to partner with other providers in the provision of health services. This could include various forms of joint ownership ventures where facilities are not solely owned by Health NZ but instead has the ownership and the provision of services shared and developed in partnership with local community service providers, iwi, and private sector health providers.

An initiative would be required to support:

- developing a consistent framework and approach across Health NZ
- establishing the mechanisms and capability to support the initiation and oversight of joint ventures
- exploring opportunities for joint ventures to support enhanced service provision and reduced cost through the sharing of facilities
- enhancing provision of primary and ambulatory care in jointly run facilities in the community.

Standardisation of Design

The design of health facilities historically has been bespoke in nature leading to increased project cost and time as well as inconsistent design outcomes.

National standardised design guidance and processes (e.g. repeatable standard room components) will support increased project efficiencies, cost reduction and consistency of clinical, equity and sustainability outcomes.

We have also mandated the use of Australasian Health Facility Guidelines (AusHFG) as the base for all facility design, supported by the development of the New Zealand-specific design guidance notes (DGN) to ensure we get the benefit of multi millions of dollars of trans-Tasman health facility investment while ensuring NZ specific requirements are provided.

To date we have developed and implemented NZ specific Fire Design Guidelines. We are in the process of finalising Seismic Design and Building services guidelines.

Broader Outcomes

Sustainability, decarbonisation and circular economy transition can influence how healthcare assets are used and the value that these assets provide for the communities (a broader value beyond the asset itself).

In the context of Health and management of our assets, there are multiple overlapping systems which will require consideration:

- Broader social and economic outcomes and integrating cultural perspectives through the design, delivery and operation of assets.
- Implementation of sustainability reporting and decarbonisation (net-zero greenhouse gas emissions) mandates, towards mitigating against climate change impacts.
- Implementing measures to increase resilience and adaptation to climate change impacts, supply-chain disruption, and workforce skills shortages.
- The global shift to a more Circular Economy, based on designing out waste and pollution, cycling materials and assets, and regenerating natural systems.

Health NZ has developed an Infrastructure Broader Outcomes Strategy which supports the delivery of cultural, social, economic and environmental outcomes as mandated through the Government Rules of Procurement. These are outlined in the Infrastructure Broader Outcomes Supplier Guide and incorporate guidance material developed by the Construction Sector Accord.


Cultural Wellbeing
Toiora Ahurea
Improved diversity and inclusion of all ethnicities and genders
Social Wellbeing
Toiora Tāngata
Improved conditions for workers
Quality employment outcomes for Priority Groups*
Empowered and connected
Local stakeholders
Economic Wellbeing
Toiora Ōhanga
Improved size and skill level of domestic construction sector workforce
Increased access for Aotearoa businesses (Supplier diversity/ Market accessibility)
More workers have the financial means to live well
Environmental Wellbeing
Toiora Taiao
Net zero emissions economy
Reduced waste from the construction sector
Improved environmental guardianship
Improved water protection

Appendix A: IIMM Maturity Index

The tables below show the requirements for the 2020 International Infrastructure Management Manual Asset Management Maturity Index. To align with best practice, these are separated out into the three pillars identified to achieve our asset management maturity uplift goals. These are 'Understanding Requirements,' 'Lifecycle Management' and 'Asset Management Enablers'.

UNDERSTANDING REQUIREMENTS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
Strategic Direction	The organisation demonstrates an awareness of its external and internal strategic environment (evident in responses to interview questions).	A high-level, informal strategic analysis has been carried out to determine major trends (strategic issues) influencing the delivery of Asset Management (AM), and the results documented. Strategic organisational planning may be in place but not integrated with asset management.	Governance and leadership expectations of the AM System are expressed through an approved and AM Policy and AM Objectives. The AM Policy and Objectives cover all aspects of the asset lifecycle. The AM Policy and Objectives are being actively applied. The AM Objectives are aligned to organisational objectives.	As for Core, plus: The AM Policy and Objectives have been developed with demonstrable consideration of the implications of: Analysis of the strategic context (internal, external, customer environment) analysed. Analysis of the asset portfolio to determine fitness-for-purpose (current and future).	As for Intermediate, plus: Achievements against AM Objectives and delivery of the AM Policy are regularly monitored and reported. Regular environmental scans are in place to identify strategic changes implicating the AM System and required changes are managed through SAMP and Asset Management Plan (AMP) review processes.
Asset Levels of Service and Performance Management	The organisation recognises the benefits of defining levels of service, but they are not yet documented or quantified (evident in responses to interview questions).	Customer groups defined and requirements informally understood. Some key performance measures have been defined for the activity.	Customer groups needs or expectations are analysed and documented. Level of service statements cover a range of service attributes are:	As for core, plus: Service level options (with associated risks and costs) have been presented to executive and governance teams to support level of	As for intermediate, plus: A customer and stakeholder communications plan is in place outlining processes for engaging with customers and stakeholders, with evidence

UNDERSTANDING REQUIREMENTS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
			- aligned with the organisational service planning and performance management processes - periodically measured and reviewed - Level of service and cost relationship understood - aligned and integrated with performance measures - Level of service and cost relationship understood and described in the AMP.	service decisions. Levels of service are integral to decision making and business planning, with evidence that AM strategies and decision frameworks are aligned to the levels of service framework. Asset (technical) performance measures are aligned to service (customer) performance measures.	the plan is implemented. Key customers and stakeholders are presented with, and consulted on, significant service levels and options, with key outcomes documented in the AMP.
Demand Planning	Future demand requirements generally understood but are not well documented (evident in responses to interview questions).	Demand forecast trends based on knowledgeable staff. Demand drivers are understood and described. Demand management strategies are being developed. Some basic demand information is being collected and monitored.	Demand forecasts are based on relevant primary demand factors (e.g. population growth) and extrapolation of historic demand trends. Demand forecasts are presented in the AMP with supporting assumptions. Risk associated with demand change are broadly understood and documented in the AMP. Strategies to manage demand	Demand forecasts are based on analysis of historic demand trends and all material demand factors. A range of demand scenarios is developed (e.g. high/medium/low) and presented in the AMP with supporting assumptions. Strategies to manage demand (demand management strategies, asset-responses) are documented in the AMP	As for Intermediate, plus: Risk assessment carried out for different demand scenarios with mitigation actions identified and evaluated in determining the appropriate demand forecast scenario for AM planning. Sensitivity testing is carried out to determine confidence levels in demand forecasting scenarios.

UNDERSTANDING REQUIREMENTS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
			(demand management strategies, asset-responses) are documented in the AMP. Demand management is considered in investment evaluations.	with supporting evidence that costs and benefits have been evaluated in determining the best strategy. Demand management is considered in all strategy and capital project decisions.	Demand risks are included in organisational risk registers.
Performance Monitoring	The need for condition and performance information is understood but is not quantified or documented (evident in responses to interview questions).	Condition and performance information is based on knowledgeable staff and is described in the AM Plan. Some asset condition and performance data is collected but is not well-linked to defined levels of service and performance measures.	Adequate data and information is collected to report current performance against levels of service. A condition and performance monitoring process is documented and followed for critical assets. Condition and performance information is suitable to be used to plan and prioritise short term maintenance and renewals. Performance results are reviewed to identify areas failing to achieve targets.	A condition and performance monitoring strategy and programme is developed for all assets, with consideration of factors such as asset criticality, inherent risk, lifecycle and demand. Condition and performance information is routinely captured and updated in line with the programme. Future condition and performance information is modelled to assess whether levels of service can be met in the long term. Performance results are regularly evaluated to determine appropriate responses.	The condition and performance assessment strategy is implemented and audited with a 5+year data history.

UNDERSTANDING REQUIREMENTS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
Strategic Asset Management Plan	The organisation is aware of the concept of, and benefits of, a SAMP and AM System (evident in responses to interview questions).	The AM System is broadly understood in terms of the assets and functions covered. A process for establishing the AM System has commenced (though these aspects may not be documented in a 'SAMP').	The scope of the AM System is defined. The links between organisational and AM objectives are defined. The process for establishing and maintaining the AM System is developed (e.g. the AM Improvement Plan). Strategic issues have been identified and options developed. The above aspects are documented in the SAMP or equivalent document. SAMP input from relevant teams and stakeholders (internal and external) occurs.	As for Core, plus: The relationships and processes between the AM System and other parts of the organisation are defined in the SAMP or equivalent document. Strategic issues and options have been analysed and prioritised and a long-term strategy has been developed. There is evidence that the SAMP is widely communicated and is actively used to support decision making . A regular SAMP review and approvals process is in place.	A SAMP is in place, with content as per ISO 55002. Formal review, audit and approvals processes are documented with evidence of implementation.

LIFECYCLE MANAGEMENT					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
Lifecycle Decision Techniques	There is not a specific maturity index for this function as it introduces techniques and processes but the application of these are largely assessed in the functions where these processes are used, notably 'Section 3.3 Managing Operational Programmes' and '3.4 Managing Capital Programmes'.				
Managing Risk and Resilience	Risk management is identified as a future improvement (evident in responses to interview questions).	High level organisational risks are identified and reported to management. Critical services and assets are understood and considered by staff involved in maintenance / renewal decisions (evident in responses to interview questions).	An organisational risk management policy, framework and process is in place. An asset criticality framework has been developed and critical assets are recorded in the AMIS. Activity risks are identified in the risk register and regularly updated and monitored. Management strategies for highest risks and most critical assets are developed and documented (in the AMP, risk management plan or similar). The approach to managing asset network resilience is described in the AMP or other supporting document.	As for core, plus: A resilience strategy has been developed (may be part of the SAMP or AMP) and is being implemented. Systematic risk analysis and resilience considerations are incorporated into major decisions. The risk register is regularly updated, actions monitored and reported to management. Risk is managed, prioritised and escalated consistently across the organisation.	Asset risks are assessed for multiple failure modes. An ongoing programme of asset network and organisational resilience assessments are completed with improvements identified and actively progressed. Risk and resilience levels are quantified for the organisation and risk mitigation options to close identified gaps are evaluated. Risk and resilience are integrated into all aspects of decision making.

LIFECYCLE MANAGEMENT

Activity	Aware	Basic	Core	Intermediate	Advanced
Operational Planning	Operational processes based on historical practices but there is awareness of opportunities to improve and optimise operational activities.	Operating plans are available for critical operational areas. Operational scheduling is largely based on historic practices with adjustments to planned and unplanned maintenance frequencies based on experienced staff and contractor knowledge. Operations organisational structure in place and roles assigned.	Operating plans are available for all operational areas. Incident and emergency management plans are in place. Operational support requirements have been reviewed against good practice and are in place, including consideration of critical spares requirements. Trends in planned and unplanned maintenance and renewal activities are analysed and trade-offs considered in determining optimal maintenance and renewal frequencies.	As for core, plus: Operational objectives and intervention levels defined (aligned to AM Objectives) and results analysed to drive improvements. A formal and regularly reviewed operational planning process is in place. Incident and emergency management plans are regularly tested. Optimal planned and unplanned maintenance and renewals programmes are established with analysis of operating cost, asset condition/ performance, risk and asset criticality.	Decision frameworks (e.g. multi-criteria analysis, benefit-cost analysis) are used to prioritise and optimise expenditure across planned and unplanned maintenance and renewals programmes. Continual review and improvement can be demonstrated for all operational processes. Reviews are undertaken after significant events and recommendations are implemented.
Capital Investment Planning	Capital investment projects are identified during annual budget process. There is awareness of the need for longer-term capital budgeting (evidenced in interviews).	There is a schedule of proposed capital projects and renewal programmes based on historical costs and staff judgement of future requirements. Renewals strategies are	Projects have been collated from a wide range of sources (e.g. through reviews of asset performance, growth, risk management and renewal analysis) and are collated into a project register.	As for core, plus: A capital delivery / options evaluation framework is in place and used consistently across the organisation. Formal options analysis and	As for intermediate, plus: Formal options analysis and business case development has been completed for significant major projects beyond 3 years.

LIFECYCLE MANAGEMENT					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
		verbalised in interviews but are not well documented. CAPEX projects and programmes justified in AMP (high level) and supporting CAPEX database (detail).	Projects are tracked (in a project register or similar) through capital planning stages. Short term capital projects are fully scoped (including options analysis) and cost-estimated. Renewals programme is based on age and limited condition data. The CAPEX programme is prioritised, based on agreed decision criteria, to rank the relative importance of capital projects and programmes.	business case development has been completed for major projects in the next three years. Long term major capital projects are conceptually identified and broad cost estimates are available. A formal prioritisation framework is routinely applied to all capital projects and programmes (utilising a multi-criteria or benefit-cost approach).	Long-term capital investment programmes are derived from advanced decision techniques such as predictive renewal and network modelling which evaluate level of service and cost scenarios.
Asset Financial Forecasts and Valuations	Financial planning of asset related expenditure is largely an annual budget process, but there is intention to develop longer term forecasts (evident in interviews).	Asset related financial forecasts prepared for period appropriate to asset life expectancies. Financial budgets for separate operational and capital planning expenditure are prepared.	Depreciated replacement cost valuations aligned to asset information used in renewal forecasts. Asset expenditure categories are suitable to enable AM costing / forecasting analysis. Asset-related financial forecasts are aligned to operational and capital planning and forecasting processes.	As for core, plus: Long term asset funding options are regularly reviewed and evaluated with consideration of distribution of benefits (user pays), practicality, financial prudence and intergenerational equity. Major expenditure proposals incorporate whole of life costing.	As for intermediate, plus: Advanced financial modelling includes sensitivity testing of assumptions, demonstrable whole of life costing and cost analysis for level of service options. A decision framework enables budgets, projects and programmes to be optimised across all activity areas.

LIFECYCLE MANAGEMENT					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
			Consequential OPEX for all new assets is included in OPEX forecasts. Asset and corporate long-term financial planning processes are aligned. Funding strategies are developed and documented.		Formal risk-based sensitivity analysis of financial forecast scenarios is carried out. Asset and financial data and reporting are fully integrated or regularly reconciled.
Developing AM Plans	Stated intention to develop AMPs (evident in responses to interview questions).	A portfolio AMP contains basic information on assets, service levels, planned works and financial forecasts and future improvements.The AMP may not cover all asset types or services, may only have a short-term focus, may be developed in isolation from organisational planning, or may not be otherwise sufficiently mature for the organisation.	Portfolio AMPs contain core content including asset information, levels of service, demand and lifecycle strategies linking to financial forecasts with key assumptions stated. AMPs are aligned with corporate long-term strategic and financial plans and objectives and are signed off by managers. AMP input from relevant teams and stakeholders. Internal and external reviews occur. AMPs are updated in accordance with the AM Policy / SAMP.	As for core, plus: The Portfolio AMP is supported by Asset Class AMPs, where appropriate. AMPs include confidence levels, detailed significant assumptions and associated risks. AMPs are fully integrated with corporate long-term financial planning process and iterations are formally managed. AMPs are periodically updated, discussed and approved by governance and leaders.	As for intermediate, plus: AMPs are managed as a 'live' document and updated when significant changes signalled. Formal review, audit and approvals processes are documented with evidence of implementation.

ASSET MANAGEMENT ENABLERS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
Asset Management People	The organisation recognises the benefits of an asset management function within the organisation, but has yet to implement a structure to support it (evident in responses to interview questions).	AM functions are carried out by small groups, but AM is not embedded or coordinated across the organisation.	Regular ongoing AM coordination processes established (e.g. a cross-divisional committee) which support an integrated and consistent approach across the organisation. Position descriptions incorporate the main AM roles and training is made available suitable to those roles. Visible ownership and support of AM by governance and leadership and awareness of AM purpose across most of the organisation (evident through interviews).	As for core, plus: Leadership is involved in AM coordination (e.g. membership on a regular AM Steering Group or separate AM Governance coordination group). An internal AM communications and training plan is in place and being implemented. Roles reflect AM System competency requirements (defined in SAMP or equivalent document) and are defined in all relevant position descriptions. Demonstrable alignment between AM objectives, team and individual responsibilities.	As for intermediate, plus: Formal documented assessment of AM capability and capacity requirements to achieve AM objectives, regularly reviewed and recommendations incorporated into AM Improvement Plan. Governance and Leadership demonstrably fulfils all the requirements of ISO 55001: establishing policy/objectives, resourcing, communicating, monitoring, supporting cross-functional collaboration and promoting continual improvement of AM.

ASSET MANAGEMENT ENABLERS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
Asset Data and Information	Asset information is not available. Awareness of need for asset information (evident in responses to interview questions).	Basic physical asset information recorded (e.g. location, size, type), but may be based on broad assumptions or not complete.	Sufficient information to complete depreciated replacement cost valuation (physical attributes, replacement cost and asset age/life) and to manage operational requirements for assets. Asset hierarchy, identification and attribute standards documented and implemented. Metadata held as appropriate. A formal information needs analysis has been undertaken and an information strategy and data improvement plan developed. Knowledge of asset criticality and risk supports the regularity of data collection and updating.	As for core, plus: A reliable register of physical, financial and risk attributes recorded. The information strategy and data improvement programme are being actively monitored and reported. The use of asset information in asset management planning and decision making is reviewed for effectiveness. Documented, systematic and audited data collection process in place based on a formal information needs analysis.	As for intermediate, plus: All asset data is accurate, consistent and reliable and is used to inform both short term and long-term decision making. Information on work history type and cost recorded at an appropriate asset or component level to enable analysis. Systematic and fully optimised data collection programme with supporting metadata.
Asset Information Systems	Intention to develop an electronic asset register / AMIS (evident in responses to interview questions). A financial fixed asset register	Asset register capable of recording all core asset attributes – capacity, type, size, material, etc. Asset information reports can	Industry-recognised AMIS or asset register system enables hierarchical asset capture and reporting to component level. AMIS enables live tracking of	Financial, asset and customer service systems are integrated or able to be fully reconciled (to provide a 'single source of truth' for all data).	All advanced AM functions are available, including asset risk assessment, predictive maintenance and renewal modelling for different level of service scenarios.

ASSET MANAGEMENT ENABLERS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
	may be in place but only captures accounting data.	be manually generated for AM Plan input. Simple asset database in use (such as spreadsheet or Access database).	customer requests linked to maintenance tasks. AMIS provides basic AM reporting capability - condition / performance, renewal forecasts, valuations. The AMIS meets most user requirements (functionality, reporting, usability).	An information systems strategy for asset related systems is implemented and regularly reviewed. AMIS has spatial mapping capability or interface. AMIS captures remote, 'live' data from operators. More automated analysis and reporting on a wider range of information. AMIS provides renewal modelling capabilities using factors such as age, condition, criticality and performance.	Availability of 3D models to enable visual integration with data (e.g.: BIM/Digital Twin).
Asset Management Processes	Awareness of need to formalise systems and processes (evident in responses to interview questions).	Simple AM process documentation in place for service-critical AM activities, covers operation, maintenance and renewal activities.	Critical AM processes are identified, documented, monitored and subject to review. There is evidence that these critical AM processes are followed in practice. AM process interfaces with other teams and organisations, are defined and managed.	As for core, plus: All AM processes have been identified and prioritised. AM process documentation implemented in accordance with the AM System to appropriate level of detail, depending on process criticality (including business process mapping or similar).	As for intermediate, plus: AM processes are regularly reviewed and audited and improvements implemented. ISO certification of processes to multiple standards for large asset intensive organisations. AM System has been assessed and meets the requirements of ISO 55001.

ASSET MANAGEMENT ENABLERS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
				All internal management systems and cross-departmental processes are aligned and managed.	Strong integration of all management systems and cross-departmental processes within the organisation.
Service Delivery Models	Procurement and service delivery practices are informal. Organisation is aware of different service delivery options (evident in responses to interview questions).	Service delivery and procurement practices clearly documented (internal and external), generally following historic approaches.	Procurement strategy/policy in place. Internal service level agreements (SLA) with the primary internal service providers, and contracts for the primary external service providers, are in place. Contract and SLA performance specifications are aligned to levels of service. Procurement and contract performance management processes are in place and regularly reviewed.	As for core, plus: Risks, benefits and costs of various outsourcing and lease/buy options considered in determining the service delivery approach. Suitably qualified roles manage procurement and contract management processes. Procurement and contract management processes are regularly audited and improvements identified.	All potential service delivery mechanisms reviewed and formal analysis carried out to identify best delivery mechanism.

ASSET MANAGEMENT ENABLERS					
Activity	**Aware**	**Basic**	**Core**	**Intermediate**	**Advanced**
Asset Management and Improvement	Recognition of the need for AM improvement process, evident in responses to review questions.	Improvement actions identified and allocated to appropriate staff and progress monitored.	Current and future AM maturity assessed (gap analysis) and used to identify improvement actions. Appropriate maturity has been defined for each AM function. Identified improvement actions collated from the maturity assessment and other relevant studies and have been prioritised with input from relevant staff and management. Improvement plans identify timeframes, deliverables, resources and responsibilities and are monitored by the AM team. Improvement plans are monitored.	As for core, plus: Formal periodic monitoring of the AM improvement plan is in place with reporting to appropriate levels of the organisation, at frequencies specified in the SAMP or AMP. Major improvement actions are managed within the organisation's project management framework. Evidence of effective change management practices support AM Improvement Plan implementation. A formal audit and review framework is established.	A regular cycle of audit and maturity assessment is undertaken with actions fed back into improvement planning. KPIs for monitoring the effectiveness of AM improvement plan outcomes are reported.

Appendix B: Asset Maturity Goals

Best practice uses three pillars for assessing asset management maturity. These are ‘Understanding Requirements’, ’Lifecycle Management’ and ‘Asset Management Enablers’. Each pillar is made up of several components or activities. The tables below show each component, describes the purpose and show which workstream we have underway that is working toward the activity. More details on the workstreams are provided at Appendix C: Workstreams .

UNDERSTANDING REQUIREMENTS		
Activity	**Purpose**	**Workstream (See Appendix C)**
Strategic Direction	Asset management planning and delivery needs to ensure our organisational objectives are supported by an Asset Management Policy and associated asset management objectives. It informs our asset management practices and programmes.	Workstream 1
Asset Levels of Service and Performance Management	Asset Levels of service describe how we expect our asset to perform to enable health services. They are the outputs our patients, staff and communities receive from the organisation. The agreed levels of service should be SMART (specific, measurable, achievable, realistic and time bound). Performance measures support the assets levels of service and are the performance levels expected from our assets.	Workstream 2
Demand Planning	Our National Services Plan will help us to plan ahead to meet demand for new and existing assets and ensure new assets are in the right place at the right time.	Workstream delivered by the Planning Funding and Outcomes team
Performance Monitoring	Condition assessments of our buildings and infrastructure (baselining the estate) inform us of the condition of our assets. This allows us to collect asset performance information such as asset usage, supports risk management and financial planning. Condition assessments also support business cases.	Workstream 3

UNDERSTANDING REQUIREMENTS		
Activity	**Purpose**	**Workstream (See Appendix C)**
Strategic Asset Management Plan	The strategic asset management plan gives effect to the Asset Management Policy and establishes Asset Management objectives and set out how the organisation will achieve these objectives.	The NAMS is achieving this purpose

LIFECYCLE MANAGEMENT		
Activity	**Purpose**	**Workstream (See Appendix C)**
Lifecycle Decision Techniques	Decision techniques reveal strategic choices, and balance the trade-off between levels of service, cost and risk. Effective decision making is a formal process to identify and prioritise all potential asset and non-asset solutions with consideration of financial viability, social and environmental responsibility, and equity outcomes.	This will be a result of improving how we work
Managing Risk and Resilience	Risk management helps identify risks and identify actions to treat and manage those risks. This process reduces the organisation's exposure to asset related risk, especially around critical assets, and drives renewal and rehabilitation programmes and decision making.	Workstreams 4 and 5
Operational Planning	Operational procedures are wide ranging and sometimes complex. The facilities manager needs to have robust and documented procedures in place for cost and budget management, health and safety management, security, operational risk, reactive and preventative maintenance. A major challenge for the asset maintenance strategy is striking the appropriate balance between planned maintenance (inspections and scheduled maintenance etc.) and unplanned maintenance (arising from unexpected failures).	Workstream 6

LIFECYCLE MANAGEMENT		
Activity	**Purpose**	**Workstream (See Appendix C)**
Capital Investment Planning	Capital investment includes the upgrade, creation or purchase of new assets, typically to address growth or changes in levels of service requirements, or for the periodic renewal of existing assets, to maintain service levels. Health NZ needs to plan for the long-term asset requirements relative to future levels of service and service delivery. Deciding on whether to create a new asset provides the most opportunity to impact on the potential cost and level of service.	This will draw from the HIP, NSP and Workstream 7
Asset Financial Forecasts and Valuations	Poor financial management can lead to higher long run lifecycle costs, inequitable fees and charges, and financial "shocks". Good collaboration between financial and asset managers is important, especially in relation to long term financial forecasts and asset revaluations. Robust financial budgets are a key output of any asset management planning process. The above includes long-term financial forecasts from capital and operational planning. It also includes valuation and depreciation calculations.	Will be the result of doing everything right
Developing AM Plans	An asset management plan documents the intended capital and operational programmes for new and existing infrastructure. It is based on the organisations understanding of demand, service planning and network of assets.	Workstream 7

ASSET MANAGEMENT ENABLERS		
Activity	**Purpose**	**Workstream (See Appendix C)**
Asset Management People	Effective asset management requires a committed and co-ordinated effort across all parts of Health NZ. The organisational structure and asset management roles need to be clearly defined and specifically allocated to people and teams. The next iteration will include other assets needed to consider broader governance frameworks.	Workstream 8
Asset Data and Information	The provision of reliable and comprehensive asset information. A central asset register of all asset classes will record what we own and operate, where those assets are located, and their asset history.	Workstream9

ASSET MANAGEMENT ENABLERS		
Activity	**Purpose**	**Workstream (See Appendix C)**
Asset Information Systems	Asset management information systems are an essential tool to effectively deal with the extent of analysis required to support the size and complexity of assets and their operation, and the maturity of asset management practices.	Workstream 9
Asset Management Processes	Management systems are the procedures and interactions within an organisation that are needed to achieve its objectives. A robust management system enables the organisation to operate consistently and reliably and provide evidence that what was planned was delivered. The processes should be appropriate, consistently applied and understood.	Workstream 9
Service Delivery Models	The effectiveness of asset management is proven in the efficient and effective delivery of maintenance services at an operational level. Health NZ needs to consider the relative costs, benefits and risks of alternative maintenance delivery mechanisms.	Workstream 6
Asset Management and Improvement	Well performing agencies give careful consideration of the value that can be obtained from improving asset management information, processes, systems, and capability. The focus is on ensuring asset management practices are "appropriate" to the business objectives and government requirements.	Workstream 10

Appendix C: Workstreams to lift AM Maturity

In the tables below we detail our workstreams underway, how we plan to improve our asset management practices and aligns to the activities discussed at Appendix B: Asset Maturity Goals. The workstreams either directly deliver or support each Asset Management pillar to lift our asset management maturity.

UNDERSTANDING REQUIREMENTS					
Workstream	**Activity**	**Activity or Action**	**Horizon 1** **Current to 30 June 25**	**Horizon 2** **2025/26 to 2027/28**	**Horizon 3 (Beyond 2028)**
1. Finalise the Asset Management Policy	Strategic direction.	Finalise, adopt and implement the Asset Management Policy.	Gain Health NZ approval.	Implement and support the adoption of the Asset Management Policy. Monitor and update the policy as required	Review the Asset Management Policy every 3 years.
2. Develop an Asset Levels of Service framework	Asset Levels of Service and Performance Monitoring.	Develop an appropriate Levels of Service Framework to meet the strategic asset management goals.	Engage with Planning Funding and Outcomes team to understand their clinical service requirements. Development of Asset Levels of Service Framework/plan	Health NZ approval of framework. Development of national asset levels of service based on framework plan Identify meaningful performance measures to reach/improve our Asset Maturity goals.	Ongoing measurement, review of the asset Levels of Service and performance measures.

UNDERSTANDING REQUIREMENTS					
Workstream	**Activity**	**Activity or Action**	**Horizon 1** **Current to 30 June 25**	**Horizon 2** **2025/26 to 2027/28**	**Horizon 3 (Beyond 2028)**
3. Implement a condition assessment programme to baseline the estate	Performance monitoring.	Undertake condition assessments on our vertical and horizontal infrastructure. Train staff on process and procedures so they can assess regional, rural and community hospitals Label all building and infrastructure assets. Undertake a thorough asset stocktake across the health estate. Start renewal modelling.	Develop condition assessment procedures (completed). Confirm approach to completing the programme of assessments, including resourcing approach (mix of external consultants and internal resources).	Condition assessments underway. Renewal modelling.	Continue programme of condition assessments over next few years. Beyond year six, expand scope of condition assessments to include design, utilisation and fitness for purpose etc. Optimise asset renewal modelling based on condition assessment data collected. The underlying data collection programme is adapted to reflect the assets' lifecycle stage. Investment planning uses this data to inform prioritised decisions.

LIFECYCLE MANAGEMENT					
Workstream	**Activity**	**Activity**	**Horizon 1 Current to June 2025**	**Horizon 2 2025/26 to 2027/28**	**Horizon 3 (and Beyond 2028)**
4. Develop risk management and criticality frameworks	Managing risk and Resilience.	Develop national frameworks for risk management and to identify critical assets. Critical services and assets are agreed and feed into maintenance, mitigation and renewal decisions.	Develop and implement a Risk Management Framework. Develop an initial Criticality Framework.	Finalise, approve and adopt criticality framework and risk management framework. Risks are identified and managed in accordance with the risk framework. Automate central asset risk register (part of AMIS), with risk escalation. The criticality matrix is used for maintenance and renewal planning.	Risk and resilience programmes are in place. Ongoing monitoring and development of these frameworks to ensure they remain fit for purpose.
5. Implementation of further risk and resilience assessment	Managing Risk and Resilience.	Full Health NZ wide risk and resilience assessment done based on campus-wide infrastructure project and Climate change risk assessment project. Further seismic assessments undertaken.	Scope and develop resource plan to deliver further assessments.	Implement further risk and resilience assessments. The IIG work with Hospital & Specialist Services and Emergency Management Team to determine mitigation and management approaches at a local and regional level.	Manage risks and resilience in accordance with risk management framework and criticality matrix.

LIFECYCLE MANAGEMENT					
Workstream	**Activity**	**Activity**	**Horizon 1** **Current to June 2025**	**Horizon 2** **2025/26 to 2027/28**	**Horizon 3 (and Beyond 2028)**
6. Develop a Maintenance Strategy	Operational Planning + Service delivery models.	Undertake a review of current service delivery models at each campus (maintenance). Identify the programme of work required to implement a national maintenance strategy.	Draft stocktake of campuses, including current maintenance expenditure, and maintenance models (in source /outsource / hybrid). Assess extent of deferred maintenance. Draft national maintenance strategy	Analyse and understand trends/benchmarking. Determine best service delivery models for each region and/or campus. Run procurement processes to achieve optimised service delivery and cost savings. Align with Procurement and Commercial workstreams. Implement options to address / remediate levels of deferred maintenance.	Ongoing review and enhancement of our service delivery mechanisms[8].

[8] Service delivery mechanisms involve being clear on roles and responsibilities for asset and facilities management service delivery at hospitals, agreeing insource vs outsource vs hybrid approach to maintenance, and a procurement strategy.

LIFECYCLE MANAGEMENT					
Workstream	**Activity**	**Activity**	**Horizon 1** **Current to June 2025**	**Horizon 2** **2025/26 to 2027/28**	**Horizon 3 (and Beyond 2028)**
7. Development of asset management plans across all campuses (regional/ national)	Developing asset management plans.	This workstream is dependant of a number of the workstreams above being completed in Horizon 1 and 2. Confirm the Asset Management Planning Framework. Develop Asset Management Plans for each campus, region and nationally. Nationwide Clinical Service and Campus Plan will be a key input here along with site master planning.	Complete stock-take of asset management plans completed to data and their status	Basic level asset management plans (AMPs) can be commenced by districts. During Horizon 2, AMPs developed at a: • Campus level	AMPS developed at a Regional level and National level AMPs used to inform capital planning over 30-year horizon. AMPs provide seamless interface with HIP work – they support optimised decision making.

ASSET MANAGEMENT ENABLERS					
Workstream	**Activity**	**Activity or Action**	**Horizon 1 2023/24**	**Horizon 2 2024/25 to 2026/27**	**Horizon 3 (and Beyond 2028)**
8. Complete and embed the new IIG structure	Asset Management People.	Complete appointments and leadership structure. Develop regional structure and functions. Put in place people and capability frameworks.	Complete appointments and leadership structures.	Develop regional structure and functions. Put in place people and capability frameworks. Put in place Asset Management governance structure(s).	Further work on this AM Enabler in line with our maturity pathway.
9. Implement an Asset Management Information System (AMIS) which includes an asset register and asset data standards	Asset Information Systems.	Design and implement the AMIS solution. Adopt and implement data standards.	Finalise AMIS requirements, system solution, road map and business case. Prepare for a national building plant and Infrastructure (AMIS). Adopt and start implementation of national data standards.	Implement first tranche of AMIS roadmap, based on revised accelerated plan. Progressive introduction of enhanced functionality as funding permits.	Progressive introduction of enhanced functionality as funding permits.
10. Develop an Audit & Improvement Programme	Asset Management Improvement.	Develop an initial audit and Improvement programme that meets industry best practice.	N/A	Initial asset management review programme developed – and updated as we embed foundation activities.	Audit and improvement programme fully adopted. Benchmark our level of maturity and any learnings.