THE FARADAY CENTRE

The case for revitalisation

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DRAFT FOR CONSIDERATION ➤ V1.0 ➤ 9 APRIL 2021 ➤ **PREPARED FOR NAPIER DISTRICT COUNCIL**

NAPIER CITY COUNCIL
Te Kaunihera o Ahuriri

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Executive Summary

The Faraday Centre

The Faraday Centre is Napier's specialised technology museum.

The Faraday Centre opened in 1993 as Napier's specialised technology museum. The Centre is located on Faraday Street in the old power house, which in the early days supplied the city of Napier with power, and later contributed to the national grid.

At the core of the building is the fullagar engine, manufactured in England by the English electric company in 1923 and shipped to Napier. It was commissioned in 1924 to provide electricity for Napier and ran continuously until the earthquake in 1931. The fullagar engine was the sole source of electricity for Napier immediately following the earthquake and it continued to run as part of the national grid until it was decommissioned in 1970.

Following the closure of the powerhouse, the Hawke's Bay Museum of Technology Society made a submission to the Napier City Council to retain the former power generation shed. The Council accepted the submission and the Faraday Centre was opened in 1993.

The Faraday Centre's mission statement is: "to provide a resource that demonstrates the relationship between past and present technology.

The Centre provides exhibits of technology artifacts that showcase the use of energy in its different forms, particularly those that are part of the history of the development and use of electricity.

From the outset, visiting the Centre was designed to be a fun and interactive experience, rather than a place where visitors just look at static exhibits. Visitors can pull levers, strike bells, pedal and treadle, or put a penny in a slot and listen to tunes from the past.

It appeals to a wide range of people from different age groups and acts as an intergenerational bridge where children can see the world their grandparents lived in and how technology has changed.

By its very nature the Centre plays an educational role because people can see how machinery actually works and the engineering behind the machines. This educational role is unstructured and experiential.

People who visit the Centre have overwhelmingly positive things to say, and often remark on the hands-on nature of the exhibits.

THE FUTURE FOR TECHNOLOGY MUSEUMS

Museums are increasingly moving towards hosting interactive exhibitions, where visitors can actively engage with a hands-on learning experience. Technology museums are particularly well suited to this model because of the mechanical nature of many technology artifacts.

Berlin has two outstanding institutions devoted to the history of technology in Germany's captial: the Deutsches Technikmuseum and the Science Centre Spectrum. The exhibitions in the Museum are mainly static, but the Science Centre has over 150 fun, hands-on exhibits, which allow visitors to explore scientific phenomena, have fun learning the explanations for them, and discover their applications to technology.

There are exhibits in force and energy, heat and temperature, mechanics and motion, and many more. The wide variety of hands-on learning experiences on offer makes the Science Centre hugely popular for people of all ages.

The Science Centre Spectrum is an excellent example of how a technology museum that provides a fun, hands-on learning experience can be extremely popular.

Executive Summary

Ownership of the land and building needs to change

The site and the building are currently owned by the NZ Defence Force.

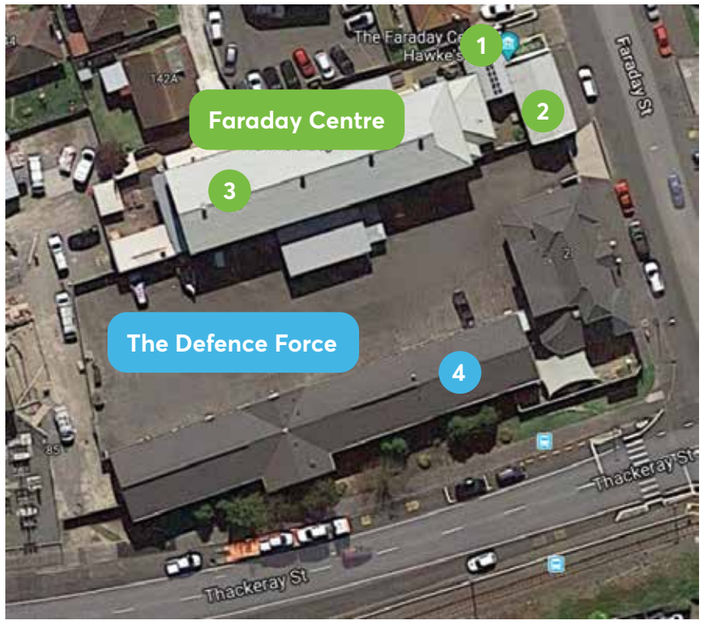
New Zealand Defence Force (NZDF) owns the Faraday Centre building and the land it sits on. NZDF purchased the property from Unison Networks in 2003. The property comprises 2 and 2B Faraday Street. 2 Faraday street is occupied by NZDF and 2B was leased to the Hawkes Bay Museums Trust for a non-renewable peppercorn rent. The two sites are shown in the picture at right.

The lease agreement was for 20 years and it expired on June 30 2013. However, the sale and purchase agreement contained a section stating that NZDF would "give favourable consideration to the continued occupancy of the Museums site by the Trust on terms and conditions substantially similar to the terms and conditions of the lease."

The Centre is made up of three connected buildings on 2B Faraday Street:

- The entry building (building 1 of approximately 58m^2)
- The education room (building 2 of approximately 72m^2)
- The museum (building 3 of approximately 405m^2).

Building 4 is used exclusively by NZDF, as is the car parking. The layout of the buildings is shown at right.



The primary challenges with the Faraday Centre – discussed on the following page – cannot be addressed without resolving the ownership and lease issues. NZDF ownership of the land and building has occurred for historic reasons, and it seems unlikely the Defence Force wishes to be a long-term owner of a technology museum.

Accordingly, negotiations are underway with NZDF about the potential long-term lease or purchase of the land and buildings for the Faraday Centre. The options are discussed in more detail on page 12.

As negotiations are still ongoing, site valuations and other information pertaining to negotiations are commercially sensitive and not able to be disclosed at this stage. Accordingly, this business case discusses the options and approaches – and resulting budgets – for the strengthening and redevelopment of the Faraday Centre once the ownership approach has been agreed with NZDF.

Separate papers will be made available to Council in due course, as part of the negotiation process.

Executive Summary

The challenges

The Faraday Centre has a range of challenges that need to be addressed.

Those who are familiar with the Faraday Centre are aware there are a range of challenges. We conducted workshops with participants from the Napier City Council, the Faraday Centre and the Hawke's Bay Museums Trust to draw out the Centre's key challenges. The group identified the following challenges:

1. The building the Faraday Centre is housed in has significant seismic and health and safety issues that pose a risk to the safety of both staff and visitors and deter some people from visiting
2. The Faraday Centre is tired and run-down, and lacks the appropriate functionality necessary to become an attractive and compelling destination in Napier for visitors and locals
3. The Faraday Centre's operating model is not sustainable and fit-for-purpose.

Despite its challenges, the group agreed the Faraday Centre is an important part of Napier City and it would be a big loss for the city if it were to close.

The group derived three investment objectives in response to the challenges. These are shown in the diagram at right.

The Faraday Centre building and the land it sits on is owned by the New Zealand Defence Force (NZDF). Resolving the land ownership issues with NZDF is a key consideration for the Faraday Centre moving forward and is considered as part of the implementation of the preferred option.

Strategic challenges

The review of the Faraday Centre in its current state identified three core challenges:

1. The building the Faraday Centre is housed in has significant seismic and health and safety issues that pose a risk to the safety of both staff and visitors and deter some people from visiting.
2. The Faraday Centre is tired and run-down, and lacks the appropriate functionality necessary to become an attractive and compelling destination in Napier for locals and visitors.
3. The Faraday Centre's operating model is not sustainable or fit-for-purpose.

Investment objectives

The investment objectives for the Faraday Centre were derived from the challenges:

1. **To ensure the Faraday Centre meets the required seismic and health and safety standards to ensure the safety of its staff and visitors.**
2. **To develop the Faraday Centre into an attractive and compelling destination in Napier for locals and visitors alike.**
3. **To ensure the governance and operation of the Faraday Centre is effective, sustainable and fit-for-purpose.**

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The options

The preferred option for the Faraday Centre has multiple dimensions.

Following the workshop that identified the Faraday Centre's challenges, a subsequent workshop was held with the participants from the various agencies to identify the full range of options to address the challenges.

The participants identified that the solution to the Centre's challenges is multifaceted and involves multiple dimensions. These dimensions are listed in the diagram at top right.

The workshop participants came up with a range of options for the location, building, services and operating model dimensions, ranging from the sublime to the ridiculous. These options were then evaluated against the investment objectives and the affordability and achieveability critical success factors to arrive at the preferred option for each dimension. The preferred approach for the Faraday Centre is the combination of the preferred options for each dimension. These options are described in the diagram at bottom right.

After landing on the preferred approach the, participants identified a range of funding sources the Faraday Centre could use to fund the capital and operating costs of the preferred approach. These sources include:

- Napier City Council
- Grants / lotteries
- Edowments / bequests
- Commercial sponsorship
- Central government
- Users.

It is likely that a mixture of all of the sources will be needed to progress the preferred approach for the Centre.

Location + **Building** + **Services** + **Operating Model**

The **Location** dimension assesses the full range of alternatives for the location of the Faraday Centre in order to meet the investment objectives.

The **Building** dimension assesses the full range of options for addressing the issues with the Faraday Centre building in order to meet the investment objectives.

The **Services** dimension assesses the full range of potential services the Faraday Centre could deliver in order to meet the investment objectives.

The **Operating Model** dimension assesses the full range of alternatives for how the Faraday Centre could be operated in order to meet the investment objectives.

Location + **Building** + **Services** + **Operating Model**

The preferred option for the location of the Faraday Centre is to stay at the same location within the current land footprint initially.

Expanding the Faraday Centre's land footprint will be explored in the third phase of implementation and may be progressed subject to willingness of NZDF.

Implementing a precinct is out of scope for this investment. However, there is nothing to prevent willing parties working together to establish a precinct.

The preferred option for the Faraday Centre building is to strengthen it to meet >67% NBS and redesign it so it is fit-for-purpose.

Expanding the building is subject to acquiring additional land from NZDF and will be explored during the third phase of implementation.

The preferred services option is for the Faraday Centre to provide a range of services including: interactive exhibitions, educational programmes, events and functions, and other programmes.

The preferred operating model is for the Faraday Centre to be owned by the Council and operated by an independent Trust.

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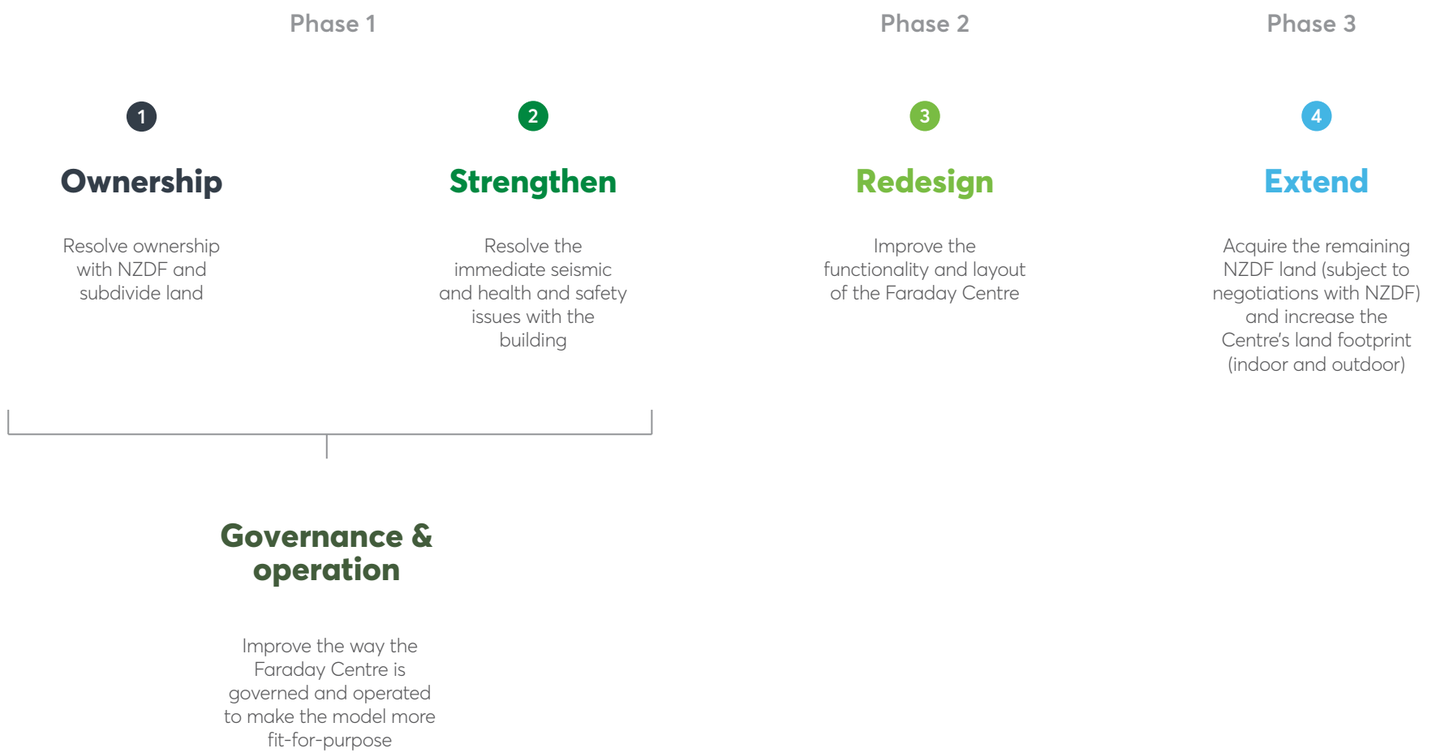
Implementing the changes

Implementation is a three phase process.

The preferred approach will be implemented over three phases as follows:

- The first phase resolves the immediate issues with the Faraday Centre, including resolving land ownership issues with NZDF, resolving the immediate building issues and improving the Centre's governance and operating models
- In the second phase, the Faraday Centre is redesigned to improve the functionality and layout
- In the third phase, the remaining NZDF land is acquired (subject to negotiations) and the Centre is expanded onto the additional land.

As mentioned previously, the implementation of a precinct is out of scope for this investment, but may be explored subsequently if the parties are willing to work together.



2.0

Strategic Assessment

Strategic Assessment

The Faraday Centre

The Faraday Centre is a specialised technology museum.

The Faraday Centre is Napier's specialised technology museum. The Centre's mission statement is:

> **To provide a resource that demonstrates the relationship between past and present technology.**

This role focuses on providing exhibits of technology artifacts that showcase the use of energy in its different forms, particularly those that are part of the history of the development and use of electricity.

From the outset, visiting the Centre was designed to be a fun and interactive experience, rather than a place where visitors just look at static exhibits. Visitors can pull levers, strike bells, pedal and treadle, or put a penny in a slot and listen to tunes from the past.

It appeals to a wide range of people from different age groups and acts as an intergenerational bridge where children can see the world their grandparents lived in and how technology has changed.

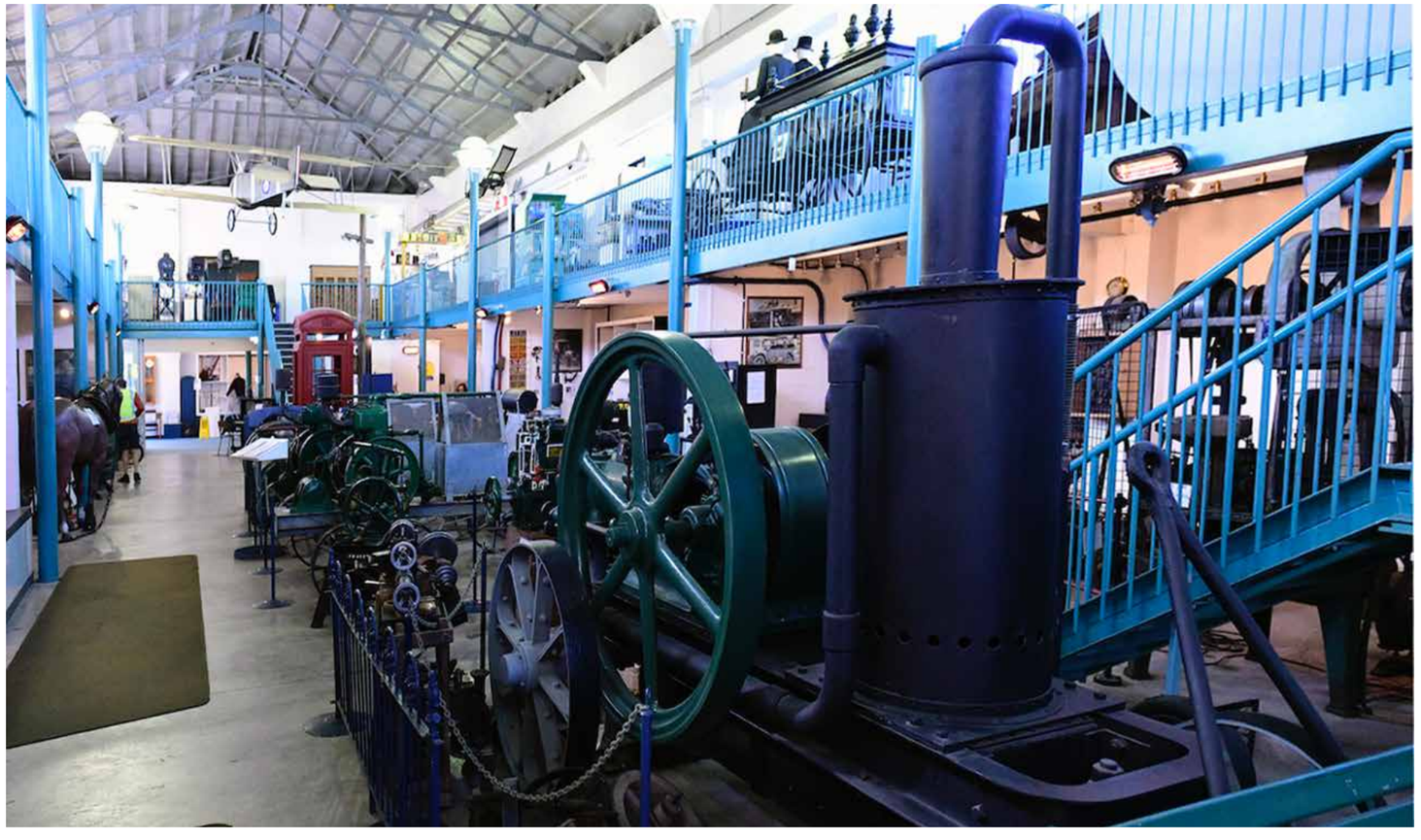
One TripAdvisor reviewer said " I thought that this little museum would be just for the kids but my husband, myself and my mother enjoyed it just as much."

By its very nature the Centre plays an educational role because people can see how machinery actually works and the engineering behind the machines. This educational role is unstructured and experiential.

The museum does not have a documented collections policy; instead, its collection philosophy has evolved over time as a combination of:

- The volunteers' interest in vintage machinery that can be restored to working order (principally, but not exclusively engines and energy sources of different types)
- Items donated to the Centre by the public
- The need to generate some income through admission fees and educational activities.

People who visit the Centre have overwhelmingly positive things to say, and often remark on the hands-on nature of the exhibits.



Strategic Assessment

History of the building

The Faraday Centre has a rich history.

The Faraday Centre (the Centre) began in 1979 as the Hawke's Bay Museum of Technology (the Museum), which was initially based at McLeod's Vineyard. The museum subsequently moved to its current location on Faraday Street and it was renamed as the Faraday Centre in 1993 when it merged with the Hawke's Bay Cultural Trust.

Faraday Street is named after the great 19th century scientist Michael Faraday who made significant discoveries in science, particularly in electricity generation. The Centre is housed in the old power house, which in the early days supplied the city of Napier with power, and later contributed to the national grid.

At the core of the building is the Fullagar engine, manufactured in England by the English electric company in 1923 and shipped to Napier. It was commissioned in 1924 to provide electricity for Napier and ran continuously until the earthquake in 1931.

After the earthquake the building was severely damaged, but the engines were not. Therefore, temporary repairs were quickly made so the engine could be restarted to supply desperately needed electricity to the devastated area. It was the sole source of electricity immediately after the earthquake. One of its major roles was to provide power to displaced families in temporary accommodation at Nelson Park.

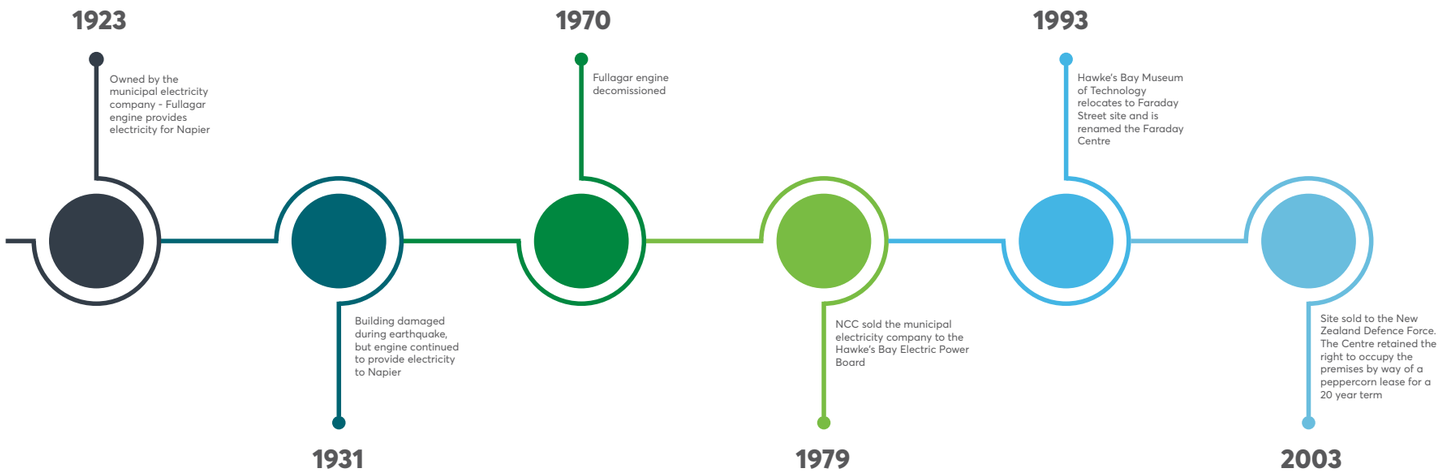
After the recovery, the engine continued to run as part of the national grid, with its main role being to supplement power during peak times. It was finally decommissioned in 1970, when the alternator it was driving stopped working.

The powerhouse was closed and the engine was offered to the Hawke's Bay Museum of Technology. The Museum didn't have anywhere to store it, so the Council made a decision to sell the municipal electricity department. During the negotiations, the Hawke's Bay Museum of Technology Society made a submission to the Council for the retention of the former power generation shed in Faraday Street, with the objectives of:

- Preserving the Fullagar engine and generator, and the generation shed itself as part of Napier's history; and
- Re-locating the Hawke's Bay Museum of Technology Society's collection, which according to the submission to the Council included "the best and most comprehensive collection of stationary engines in New Zealand", to the Faraday Street site as part of a strategy to establish a technology museum and science centre.

The Council accepted the submission and in 1993 the Faraday Centre was opened as a permanent home for the great engine and other mechanical and historic artifacts.

Today this engine is thought to be the only running Fullagar diesel engine still in existence in the world. It is this engine and the history of the building that makes its location significant. As part of the sale and purchase agreements, the Centre has retained the right to occupy the old premises provided it continues to operate as a museum.



Strategic Assessment

The land and the building

There are land ownership issues to work through.

New Zealand Defence Force (NZDF) owns the Faraday Centre building and the land it sits on. NZDF purchased the property from Unison Networks in 2003. The property comprises 2 and 2B Faraday Street. 2 Faraday street is occupied by NZDF and 2B was leased to the Hawke's Bay Museums Trust for a non-renewable peppercorn rent. The two sites are shown in the picture at right.

The lease agreement was for 20 years and it expired on June 30 2013. However, the sale and purchase agreement contained a section stating that NZDF would "give favourable consideration to the continued occupancy of the Museums site by the Trust on terms and conditions substantially similar to the terms and conditions of the lease."

The Centre is made up of three connected buildings on 2B Faraday Street:

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- The education room (building 2 of approximately 72m^2)
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Building 4 is used exclusively by NZDF, as is the car parking. The layout of the buildings is shown at right.

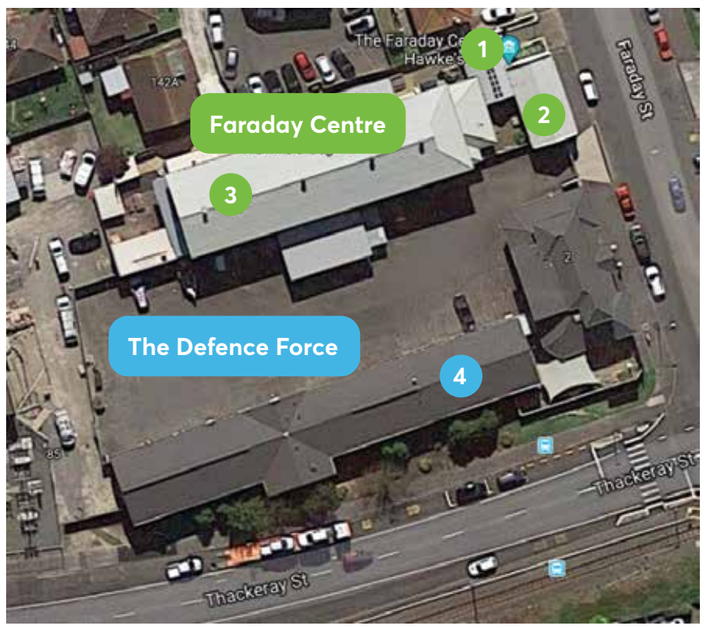
In 2014 NZDF commissioned a series of Qualitative Detailed Seismic reports from engineering consultants GHD Limited on how well the buildings on the site complied with the New Building Standard (NBS). The reports were later peer reviewed by the Council in 2015.

A building is classed as 'earthquake-prone' if it fails to meet 34% of the current NBS. The reports found that both buildings failed to meet 34% NBS – buildings 1 and 2 meet 29% of NBS and the museum building meets 18% NBS. All three buildings have been issued a Section 124 earthquake-prone building notice, which requires the building to be strengthened.

Earthquake-prone buildings are those likely to collapse causing injury or death, or damage to any other property, during or following a moderate earthquake. In the case of the Faraday Centre, the potential life safety hazards include walls falling outwards or inwards in a significant earthquake event.

A rough order of costs to strengthen the buildings to >67% NBS was included as part of the 2014 reports. These cost estimates are now out of date, and a more up-to-date estimate is required.

If the Faraday Centre decides to progress works to strengthen the building, it needs to form an agreement with NZDF in regard to the buildings and land.



The Council engaged The Property Group to carry out a high-level desktop options assessment regarding the Council's possible acquisition or lease of the Faraday Centre. The following four options were considered:

1. Acquire the entire property (2 and 2B Faraday Street)
2. Acquire the Faraday Centre only (2B Faraday Street)
3. Lease the Faraday Centre and carry out strengthening works
4. Lease the Faraday Centre subject to NZDF carrying out the strengthening works.

From a financial perspective, leasing the Faraday Centre is likely to be the preferred option, particularly if a long-term lease at a less-than-market rental can be negotiated. However, if NZDF were to enter into a long-term lease, it could be reasonably argued that the Faraday Centre is surplus to requirements and should be disposed of. This would create a risk that a third party may acquire the property. The Council could continue to lease the property from a third party, but this is uncertain. In addition, a long-term lease (greater than 35 years) would trigger a subdivision requirement under the Resource Management Act 1991.

Option 1 depends on NZDF declaring the whole property as surplus, which is uncertain as NZDF have not completed the review of its portfolio. Unless the Council has a public work requirement for the whole property it is unlikely to be able to use the provisions of the Public Works Act 1982 to acquire the property.

Based on the assumption that the Council does not have a use for the whole site, The Property Group recommended Option 2, and that the acquisition be completed under the Public Works Act 1982 for museum purposes. Option 1 may still be viable depending on the preferred option for the Faraday Centre and the outcome of the review of NZDF property portfolio.

Strategic Assessment

Land negotiation approach

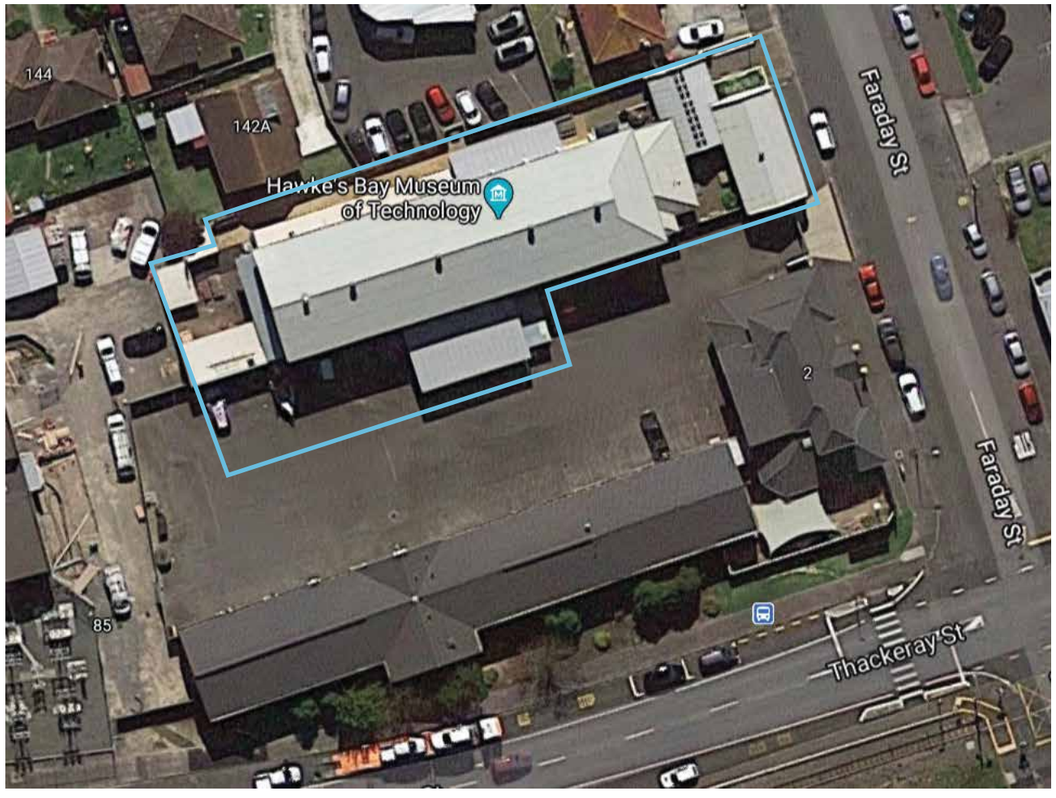
Negotiations are ongoing.

The Property Group are about to recommence negotiations with the NZDF on the land the Faraday Centre sits on. The Property Group is working closely with the Council.

As negotiations are still ongoing, site valuations and other information pertaining to negotiations are commercially sensitive and not able to be disclosed at this stage.

The desired outcome of negotiations is that the land is subdivided and the land the Faraday Centre sits on becomes a separate title to the land used by the NZDF. The land proposed for subdivision is shown in the picture at right. The current lease is for the main building and doesn't include the smaller building to the right of the main building. However, it is desirable to acquire the additional land to future proof the Faraday Centre and provide some extra space for parking or storage. The Council accepts it is likely that it will bear the costs associated with subdividing.

Once the land is subdivided, the Council intends to purchase the piece of land the Faraday Centre sits on off the NZDF at an agreed price. The Faraday Centre building will then become an asset on the Council's balance sheet, in the same way as other assets such as MTG.



Strategic Assessment

How the Faraday Centre is governed

The current governance arrangements are relatively complex.

Overall governance for the Faraday Centre occurs through the Hawke's Bay Museums Trust Ruawharo Tā-ū-rangi. The Trust holds the lease for the Centre from NZDF and owns the collection, so in the governance sense is responsible for the direction of the Museum and its collection.

Day to day operation of the Faraday Centre has been delegated to the Napier City Council through a management agreement with the Trust. In operational terms, Council maintains the building, employs the staff, pays the operating costs and collects revenues from visitors. This approach is consistent with other Council facilities such as MTG.

As is the case with other facilities such as the Aquarium, there is a pool of volunteers that undertake much of the work at the Faraday Centre. Their efforts make an enormous contribution to the visitor experience thanks to the knowledge, energy and enthusiasm they bring to the Centre and willingly share with visitors.

Volunteers are unpaid but undertake essential work such as machinery maintenance, collection management, facilities development and most of the public-facing interactions. Volunteers are coordinated through the Facilities Manager and are covered under the Council's health and safety policies.

GOVERN

Hawke's Bay Museums Trust
Ruawharo Tā-ū-rangi

Hawke's Bay Museum Trust

- Holds the lease for the Faraday Centre
- Owns the Faraday Centre's collection and is responsible for its care, maintenance and development

MANAGE

NAPIER CITY COUNCIL
Te Kaunihera o Ahuriri

Napier City Council

- Responsible for managing the Faraday Centre (delegated through a management agreement with HBMT)
- Maintains the building
- Employs management and reception staff on behalf of the Faraday Centre
- Funds the operation of the Faraday Centre

Facilities Manager

Volunteers

Paid staff

Strategic Assessment

How the Faraday Centre is operated

Volunteers have always been at the heart of the Faraday Centre.

Up until 2019 the Council was not involved in the daily operation of the Faraday Centre, aside from providing a part-time receptionist. For the majority of its life the Faraday Centre has been run by an enthusiastic team of volunteers with a passion for history and technology.

There is widespread recognition of the outstanding work done by the volunteers over many years in restoring the machinery and items housed and exhibited at the Faraday Centre and in making a genuine hands-on experience available for visitors.

There were however challenges with volunteers running the Faraday Centre. Volunteers have only a limited number of hours they can commit, and the workload was stretching the aging volunteers beyond their capacity. Limited volunteer hours also meant the Centre had very limited opening hours, which impacted visitor numbers.

In early 2019 the Council stepped in and reviewed the Centre's operating model. It employed a part-time facility manager (32 hours per week), responsible for the day-to-day running of the museum, managing the volunteers, ensuring the collection is maintained and building the profile of the Faraday Centre.

The Centre also employs a receptionist for 12 hours per week and three casuals who work approximately six hours per week.

The Centre still relies heavily on volunteers and would not be able to operate without them. There are 11 volunteers working at the Centre during the week. Most work one three hour shift per week, with the exception of three volunteers who work an all day shift once a week. There are eight volunteers who work on a Saturday.

The majority of the volunteers are over 60 years old and the Faraday Centre has trouble attracting new volunteers.

There are two volunteer teams:

- Technical - builders, engineers, mechanics, painters or tinkerers
- Visitor hosts - security, guides and teachers - their main role is to chat with visitors, teach them about the collection, make sure nobody is harming themselves or the exhibits or helping themselves to the collection.

The paid staff are responsible for management and reception. However, everyone at the Faraday Centre works as a team, and paid staff carry out many tasks including hosting visitors, cleaning, installing exhibitions and holding group talks.

With the introduction of the Faraday Centre Facility Manager, a number of changes have been made at the Centre, including:

- Creating a social media presence for the Faraday Centre, including on Facebook, Tripadvisor and Eventfinda
- Extending the Faraday Centre's opening hours from 9am to 3pm.

The Faraday Centre is operating far more efficiently than it was prior to the Council's intervention, and the changes made have had a big impact. However, the Centre still faces operating challenges due to limited funding and a heavy reliance on volunteers.

Strategic Assessment

Building functionality

There are a number of functional issues with the building.

The Faraday Centre has had little spent on it in terms of maintenance and upgrades over the years, and as a result there are a number of functional issues with the building:

- The decor and facilities in the buildings that make up the Centre are basic and tired. While work has gone into painting the interior and some limited upgrades to the foyer area, more significant changes have been constrained by budget. The effect is the Centre appears dated and unattractive in parts, despite the efforts of both staff and volunteers.
- The building's exterior is tired and lacks identity, which impacts the Centre's ability to draw in people passing by. It is not always clear the Centre is a museum and it lacks road presence – with some visitors noting they had driven past the building for years without realising it was there.
- There are space issues in the building, particularly in regard to storage of machinery. This limits the Centre's ability to provide educational programmes and update and service exhibits. Limited flexibility of spaces also mean that there is underutilised space for a significant portion of the year. For instance, the room at the front of the building has variously been used for education, storage and offices, yet it occupies the prime position on the site despite being a poor fit for most of these uses.

The diagram at right outlines the key building issues.

In addition, the age and condition of the building means that cooling in summer and heating in winter are more challenging than they should be. There is no HVAC system, so keeping the building at a comfortable temperature is achieved with electric heaters and some heat pumps, which have higher operating costs than is ideal.

Functionality

There is a gap between the top of the wall and the roof, allowing dirt and birds to enter the building.

The lack of insulation and the air gaps result in the building being hot in summer and cold in winter.

There is no forced ventilation, so some machines cannot be demonstrated because it is not possible to manage the exhaust fumes.

There is poor disabled access to areas of the building, such as the upper levels and the bathrooms.

The old education room (currently used as a storage area) was not fit-for-purpose for school visits due to heating and cooling problems.

The decor and facilities throughout the building are dated, maintenance has been patchy over the decades and improvements are needed.

The front desk is cramped and an extra desk has needed to be installed for extra space

The building exterior is tired and has limited street presence or appeal

Technology in the education room is basic.

Most of the space in the Museum is filled with exhibitions

The education room is basic and the decor is tired and shabby

There is limited storage space in the buildings

Space/flexibility

The way the building is laid out means there is insufficient space in some parts of the building for displays.

Storage is also an issue, resulting in the education area being used for storage at the front of the building.

There is overall a lack of storage for exhibits and their supporting items, such as tools.

The nature of the bays constrains the flexibility to create larger display areas.

There is no modern display infrastructure, such as AV capability , in any part of the building.

Overall there is insufficient space to either display or store the full collection.

Building exterior

The entrance to the building is off Faraday Street. There is a lack of street appeal and identity, and it is not obvious to people passing by that the building is the Museum of technology.

There is no space for a mobility park and no on-site car parking. This is a major issue, especially in the school holidays.

Strategic Assessment

Visitor numbers

The Faraday Centre suffers from low visitor numbers.

In 2019 the Faraday Centre had around 8,800 visitors in total, which works out at less than 1,000 visitors per month.

It is commonly reported that a large part of the reason for the Centre's low visitor numbers is that people simply don't know it's there. The Faraday Centre has a poor street presence, and many people in the area don't know what it is. As a result, it rarely attracts people passing by and locals often aren't telling visitors about it.

The Centre used to play a significant role as an educational resource in the Hawke's Bay community. However, due to seismic and other building functionality issues, schools will no longer visit the Faraday Centre, so it has been forced to cease educational role.

The Centre's formal educational role came under the Ministry of Education curriculum support project, Learning Experiences Outside the Classroom (LEOTC). It is a limited and contestable funding pool that supports community-based organisations to provide students with learning experiences that complement and enhance student learning, in alignment with the national curriculum.

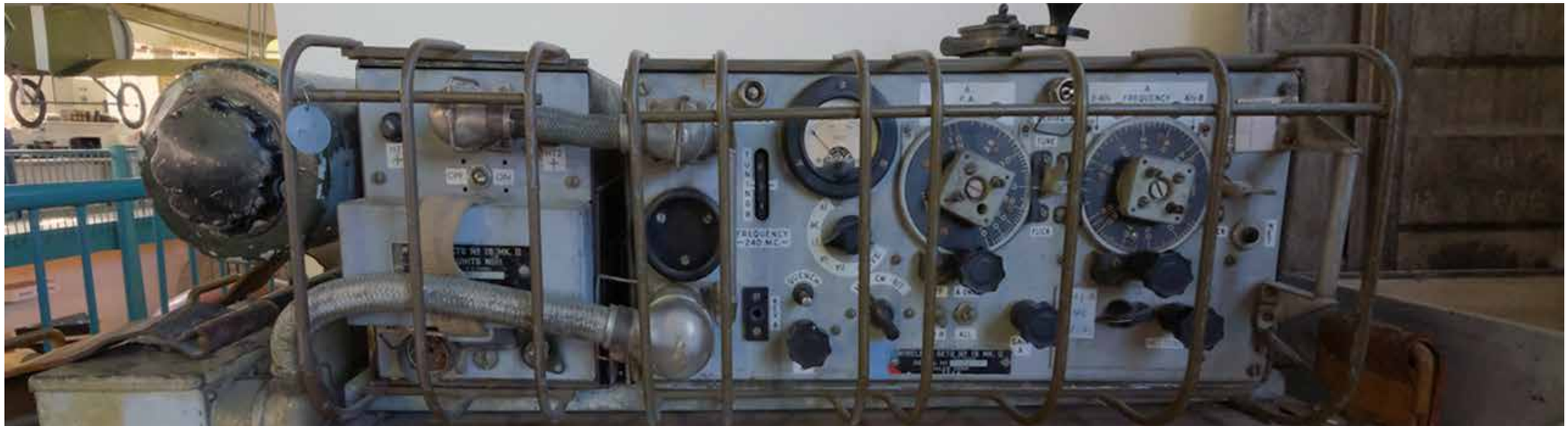
Providers and schools work in partnership to ensure that programmes meet the learning needs of students and support classroom teaching and learning.

LEOTC ran at the Faraday Centre for over 10 years. In Napier, the MTG, the National Aquarium of New Zealand also provide LEOTC.

The cessation the Centre's formal educational role meant the Centre lost a portion of funding. This has resulted in the Centre's collection and learning centre becoming stagnant as there is no money to create new exhibitions.

Another impact of the Centre no longer having a formal educational role is that families don't find out about it as a result of their children visiting it during school. This adds to the issue of locals being unaware of the Faraday Centre.

The Faraday Centre is stuck in a cycle where it has low visitor numbers, and as a result, low revenues. Due to the Centre's limited funding, it cannot afford to advertise to attract more visitors or to create new exhibits to attract new visitors and keep current visitors interested and returning.



Strategic Assessment

The new model for technology museums

The Science Centre Spectrum is a successful, interactive science museum in Berlin .

Berlin has two outstanding institutions devoted to the history of technology in Germany's captial: the Deutsches Technikmuseum and the Science Centre Spectrum. Both are operated by the Stiftung Deutsches Technikmuseum Berlin, a non-profit foundation. In total, the Museum and Science Centre receive more than 600,000 visitors per year.

The Deutsches Technikmuseum has a wide range of exhibitions that take visitors on an eventful journey of discovery through the cultural history of technology. The Museum has varied special exhibitions and 19 permanent exhibitions including chemicals and pharmacy, rail transport and telecommunications.

The exhibitions in the Museum are mainly static, but the Science Centre has over 150 fun, hands-on exhibits, which allow visitors to explore scientific phenomena, have fun learning the explanations for them, and discover their applications to technology. There are exhibits in force and energy, heat and temperature, mechanics and motion, and many more. The wide variety of hands-on learning experiences on offer makes the Science Centre hugely popular for people of all ages.

The Science Centre also puts on public demonstrations and workshops. For example, the first Saturday of every month is devoted to a special topic, with different kinds of activities devoted to a variety of themes. The demonstration highlights individual exhibits and presents them from a fresh point of view, expands on specific aspects of the exhibition, and takes a deep dive into broad-ranging questions. Putting on events such as this one provides variety and keeps visitors interested, even when the exhibits do not change.

The Science Centre also offers a school lab, where students can visit the Science Centre to perform experiments and learn about science and technology outside the classroom.

The Science Centre Spectrum is an excellent example of how a technology museum that provides a fun, hands-on learning experience can be extremely popular.

Photo: C. Kirchner

Strategic Assessment

The need for change.

The Faraday Centre has a range of issues that need to be addressed.

The Faraday Centre has enormous potential to become a leading technology museum. It has a wide range of fascinating artifacts and already follows a hands-on approach in its exhibitions, which is commonplace in successful technology museums overseas.

However, the Centre is being held back from reaching its full potential. The review of the Faraday Centre, in terms of how it operates and its physical infrastructure, identified three core challenges that need to be addressed, specifically:

- The building the Centre is housed in has significant seismic and health and safety issues that pose a risk to the safety of both staff and visitors. The seismic issues prevent schools from visiting and deter some visitors from coming to the Centre.
- The Faraday Centre is tired and run-down, and lacks the appropriate functionality necessary to become an attractive and compelling destination in Napier for locals and visitors
- The Faraday Centre's operating model is not sustainable or fit-for-purpose.

This business case responds to these issues by identifying the investment objectives – shown in the table at right – and assessing the options for how the goals of the Centre and the Napier City Council might best be achieved. The result is a preferred option for the revitalisation of the Faraday Centre, which is explored in the following sections of this document.

Strategic challenges

The review of the Faraday Centre in its current state identified three core challenges:

1. The building the Faraday Centre is housed in has significant seismic and health and safety issues that pose a risk to the safety of both staff and visitors and deter some people from visiting.
2. The Faraday Centre is tired and run-down, and lacks the appropriate functionality necessary to become an attractive and compelling destination in Napier for locals and visitors.
3. The Faraday Centre's operating model is not sustainable or fit-for-purpose.

Investment objectives

The investment objectives for the Faraday Centre were derived from the challenges:

1. **To ensure the Faraday Centre meets the required seismic and health and safety standards to ensure the safety of its staff and visitors.**
2. **To develop the Faraday Centre into an attractive and compelling destination in Napier for locals and visitors alike.**
3. **To ensure the governance and operation of the Faraday Centre is effective, sustainable and fit-for-purpose.**

Strategic Assessment

Investment scope

There are clear scope boundaries for the proposed investment.

In scope

The following items are in scope for this investment:

- The resolution of land ownership with NZDF and the subsequent land acquisition process for the current Faraday Centre
- Seismic strengthening and building remediation of the Faraday Centre buildings
- Bringing the Faraday Centre up to the required health and safety standards
- Improving the functionality of the Faraday Centre through building upgrades and changes
- Recommendations on parking improvements for the Faraday Centre
- Recommendations on an approach to establish a precinct that includes the Faraday Centre to increase visitor numbers
- Review of the Faraday Centre's operating model and implementation of recommended operating model
- Review of the Faraday Centre's governance structure and implementation of recommended governance structure.

Out of scope

The following items are out of scope for this investment:

- Any changes to roads or parking, including land acquisition
- Implementation of a precinct, including merging with any other organisations
- Management or extension of the Faraday Centre's collection.

Strategic Assessment

Constraints and dependencies

There are a number of constraints and dependencies that need to be observed.

Constraints

There are a number of constraints that apply to this investment, as follows:

- The Faraday Centre's options are constrained by the NZDF's preferred approach to land ownership as the NZDF owns the Faraday Centre buildings and the land it sits on
- The preferred option must fit within the Napier City Council's zoning requirements and District Plan
- The relevant legislation and regulatory constraints need to be observed, including the Resource Management Act 1991
- The Fullagar engine has high national heritage value, and the preferred option must take this into consideration.

Dependencies

This investment does not have any dependencies.

Strategic Assessment

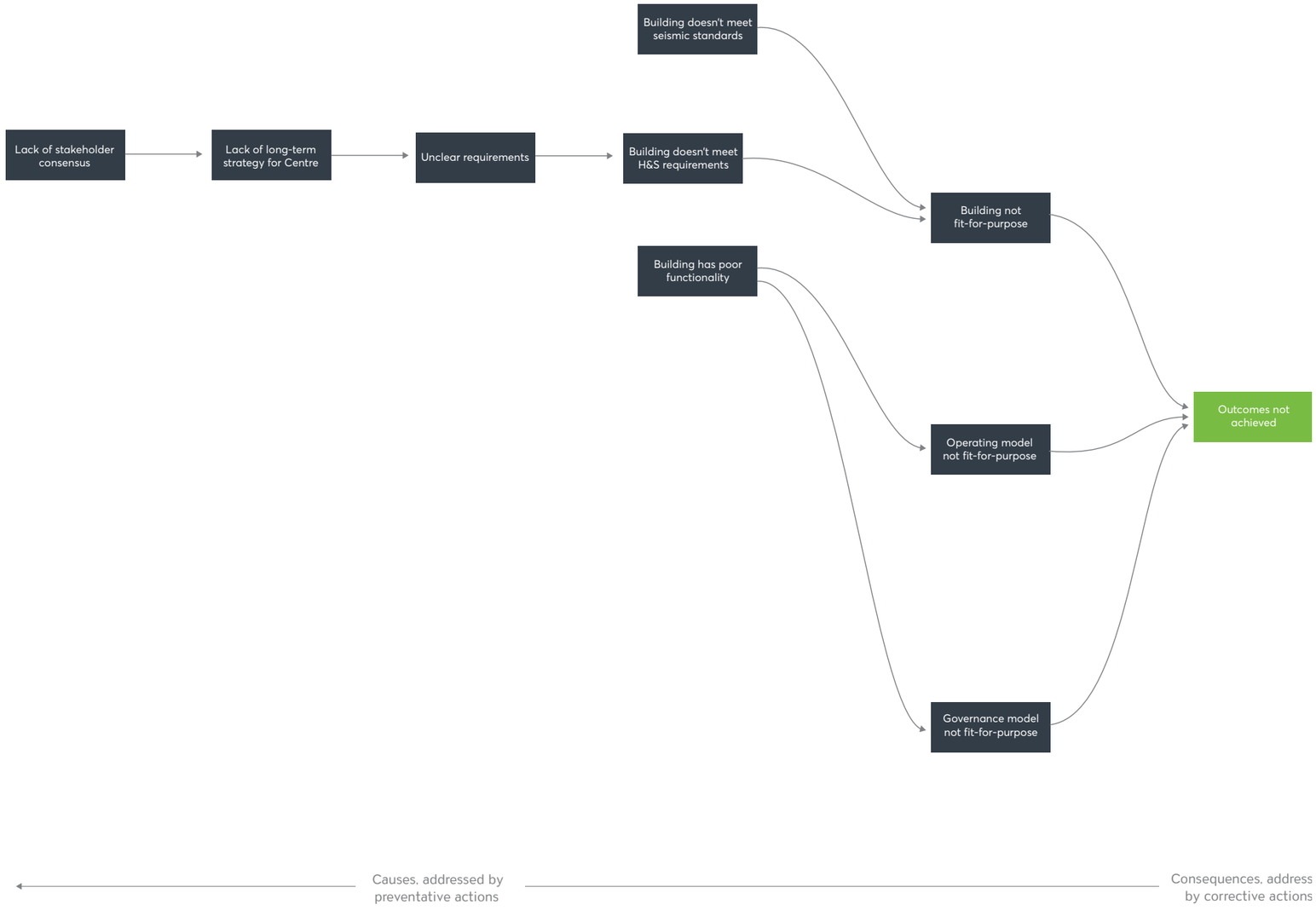
Risks and challenges

The investment risks are well defined and are being carefully manged.

There are a number of risks to the Faraday Centre not achieving the desired outcomes for the community, as shown in the diagram at right. The key challenges are as follows:

- The building is not fit for purpose, primarily because it cannot meet the required seismic standards and functional requirements
- The operating model for the Faraday Centre may not be fit for purpose, which means it cannot perform the desired functions of education, information and entertainment
- The governance model may not be fit for purpose, which can introduce uncertainty, complexity and cost for operating the Centre, as well as leaving gaps in key areas such as acquisition and collection policies.

As the diagram notes, the operating model and governance challenges are currently risks and will not in themselves cause the Centre to close; however, the seismic standards are an issue rather than merely a risk, and failing to address them in a timely way will require the Faraday Centre to close at some point, due to the risk to staff, volunteers and visitors.



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Economic Case

Economic Case

Scope and strategic fit

Napier's museums play an important role in communicating the region's history.

Museums in Hawke's Bay play an important role in communicating the region's history. Hawke's Bay's sense of itself as a distinctive region has always been strong, but out of the devastation of the earthquake came a heightened desire to create a fitting home for the region's artifacts and stories.

The Museum Theatre Gallery (MTG) Hawke's Bay is the main museum in Hawke's Bay. It has been around for 150 years and is located in the heart of Napier. It uses its collection to tell the stories of New Zealand and it has a permanent exhibition dedicated to the 1931 earthquake.

The Faraday Centre also plays an important role in communicating the region's history as Napier's specialised technology museum. It showcases the Fullagar engine, which was vital in supplying power to devastated areas in the aftermath of the earthquake.

On 3 February 1931 Napier experienced what was described as "New Zealand's most destructive single disaster", which was to change everything for the city of Napier, from its topography to its architecture and lifestyle.

At around 10:47am Napier was struck by a magnitude 7.4 earthquake. Energies roughly equal to the detonation of 100 million tonnes of TNT was channeled down a moving slab of landscape - 'the rupture zone' - that ran directly below Napier and southwest across the Heretaunga plains. The initial earthquake was followed by a series of aftershocks.

Meanwhile, fires started in two chemist shops on Hastings Street. From these shops the fire spread into adjoining buildings, and by mid afternoon, the town was completely ablaze. The conditions were favourable for the spread of fire in that it was a hot, fine day following a dry spell of weather. The wind had also shifted from a westerly (off-shore) to an easterly which sent the flames roaring up Hastings Street towards the Hill. With the water supply already disrupted by the earthquake, the Fire Brigade was rendered virtually powerless, despite earnest attempts to bring water from the sea. Consequently, Napier's business district, from Tennyson Street to Dickens Street, was abandoned to the flames which, after destroying any remaining wooden structures, left the town looking like a bomb site.

A special reporter sent by the New Zealand Herald on the day of the earthquake reached Napier at night to find "a city of the dead, except for the glow of a land fire, and the lights of ships". It wasn't until the afternoon of the following day that the fires finally died down and the destruction could be assessed. The official toll for the Hawke's Bay earthquake was 256 dead (including 162 in Napier), 2 unaccounted for, and 400 hospitalised.

On 17 February, a moratorium was placed on the rebuilding of any business premises until further notice, in order to allow time for the rational planning of a new CBD for Napier. Although some businesses had already re-established themselves, there was a real concern that hasty reconstruction would result in shoddy buildings and that the urgent clearing of debris might be hindered.

A Government loan of £10,000 provided for the building of 32 temporary business premises in Clive Square and 22 professional offices in Memorial Square. Erected by the Fletcher Construction Company, and popularly referred to as Tin Town, the extensive corrugated iron complex opened on 16 March 1931.

The first new structure to be built in the CBD was the Market Reserve Building, completed in 1931. Designed by Natusch and Son and approved in December 1930, it would have been built regardless of the disaster. Occupying the entire block between Hastings and Market Streets on the southern side of Tennyson Street, the new building was seen as "a statement of faith in Napier's future". One of its most notable features was its overhanging veranda, the first of its kind in the town. After the earthquake all buildings in Napier were required to have such verandas in order to keep the street kerbs clear of obstructions.

By March 1932, 19 new shops were ready for occupation and the rebuild continued at pace. Much of central Napier was rebuilt in art deco style, which now attracts both national and international tourists.

Economic Case

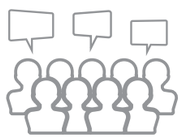
The process we have used

The development of the preferred option follows a structured process in the Better Business Case methodology.

The diagram below shows the process used to identify and assess the options for the Faraday Centre. This is a structured process in the Better Business Case methodology, which works through all possible options for achieving the outcome in order to identify a short-list and then a preferred option.

The following pages explain the options that were assessed in workshops and explored in the analysis process.

1 Identification



- Conduct workshops to **identify** the full range of options for addressing the investment challenges, ranging from the sublime to the ridiculous

2 Analysis and long list

- **Collate** the information gathered from workshop sessions with stakeholders
- Analyse the long-list of options against the **investment objectives** being sought by stakeholders
- Analyse the long-list of options against the **Critical Success Factors** in the Better Business Case methodology
- Identify the **short-list** of possibilities that will be carried forward into the short-list

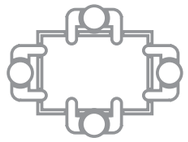
3 Short list

- Conduct more in-depth analysis of the short-listed options in order to **refine** the possible investment approaches
- Identify the **financial and non-financial benefits** that will be realised from the key short-listed options

4 Preferred option

- Review the short list with stakeholders and assess their **viability** to achieve the investment objectives
- Identify the **preferred option** from the short-list

5 Decision making



- Develop the detailed description of the preferred option and use this as the basis for the **cost/benefit analysis**
- Present the information in a form that allows stakeholders to make an **informed decision** about investing in the initiative

Economic Case

Assessment against objectives

Each of the options is assessed against the investment objectives.

Strategic challenges

The review of the Faraday Centre in its current state identified three core challenges:

1. The building the Faraday Centre is housed in has significant seismic and health and safety issues that pose a risk to the safety of both staff and visitors and deter some people from visiting.
2. The Faraday Centre is tired and run-down, and lacks the appropriate functionality necessary to become an attractive and compelling destination in Napier for locals and visitors.
3. The Faraday Centre's operating model is not sustainable or fit-for-purpose.

Investment objectives

The investment objectives for the Faraday Centre were derived from the challenges:

1. **To ensure the Faraday Centre meets the required seismic and health and safety standards to ensure the safety of its staff and visitors.**
2. **To develop the Faraday Centre into an attractive and compelling destination in Napier for locals and visitors alike.**
3. **To ensure the governance and operation of the Faraday Centre is effective, sustainable and fit-for-purpose.**

Critical Success Factors

The critical success factors are contained in the Treasury business case methodology

1. **Strategic fit** | Conforms to the goals and aspirations of Napier
2. **Value for money** | Optimises value for money | Enables greater effectiveness
3. **Supplier capability** | Service provider(s) can meet the technical and cultural needs | Service provider(s) have the capacity to deliver the required outcomes
4. **Affordability** | Affordability must match ambition | Matches sector funding constraints
5. **Achievability** | Internal and external skills exist and are available for successful delivery

Under the Treasury methodology, the various options for addressing the strategic challenges are assessed against both the investment objectives and the critical success factors (CSFs). Options that are unable to fully deliver the objectives or the CSFs are rejected, and a process of positive dismissal is used to derive the short-list of viable options.

In effect, the investment objectives and CSFs are used as a yardstick to measure the ability of each option to address the challenges identified in the Red Meat Sector Strategy.

Economic Case

Options development

There are four components to the way forward for the Faraday Centre.

The diagram at right shows how a multi-criteria analysis approach is used to identify the preferred option for the Faraday Centre.

Four dimensions have been assessed, each of which is crucial to the effective functioning of the Centre. These are:

- The location of the Centre
- The functioning of the building itself
- The services the Faraday Centre should provide to visitors
- The operating model that describes how the services are delivered.

There are a range of options in each of these dimensions, ranging from doing nothing to transformative and aspirational approaches. The preferred options in each dimension are then added together to arrive at the best approach for the Faraday Centre – and this process is explained in more depth on the following pages.

Economic Case

Options development - Location

Each of the options is assessed against the investment objectives.

The first consideration for the way forward for the Faraday Centre is where it is located. There are four options for the location of the Faraday Centre:

- Stay in the same location on the same amount of land
- Stay in the same location, but expand the current land footprint
- Stay in the same location, with the opportunity for additional facilities to be grouped around the Faraday Centre
- Move to a new location.

Each of the four options was assessed against the investment objectives. This analysis is shown in the diagram at right.

Given the historical significance of the current site, the preferred option is to stay at the same location. Moving location was eliminated as an option because it takes away from the history of the Centre and it will also be far more expensive because land will need to be purchased and the Fullagar Engine would need to be moved. It is more than likely that it would not be possible to relocate the Fullagar engine at all.

The options of expanding and creating a precinct remain feasible, and could be progressed depending on affordability and availability of surrounding land. Creating a precinct is out of scope for this project, but the redevelopment of the Faraday Centre will help to facilitate a precinct if other parties are willing to collaborate.

We recommend that expanding the Faraday Centre is explored as part of a phased approach.

	Seismic objective	**Destination** objective	**Fit-for-purpose** objective	**Affordability**	**Achievability**	**Rating**
1 **Same location** In this option, the Faraday Centre stays in the same location with the same land footprint						Feasible
2 **Same location + expand** In this option, the Faraday Centre stays in the same location and also expands its land footprint.						Feasible
3 **Precinct** In this option, the Faraday Centre stays in the same location, with the opportunity to group additional facilities around the location						Feasible
4 **Move location** In this option, the Faraday Centre moves to a new location altogether						Discarded

Economic Case

Options development - Building

Each of the options is assessed against the investment objectives.

The next consideration for the way forward for the Faraday Centre is what happens with the building. The current building has significant seismic and health and safety issues and is not fit-for-purpose. There are five options for the building:

- Strengthen the current building so it meets the minimum NBS requirements (>67%)
- Strengthen the current building to meet the minimum NBS requirements and redesign and renovate it
- Strengthen the current building to meet the minimum NBS requirements and redesign it and expand it onto a larger site
- Demolish the current building and rebuild it
- Strengthen the current building to meet the minimum NBS requirements, redesign it and construct a second building on another site.

Only strengthening the building was discarded as an option as this does not solve the other building functionality issues. Strengthen and redesign came out as the preferred option as it brings the building up to the right seismic standard and also solves the building functionality issues, which will allow the Centre to achieve the objective of becoming an attractive and compelling destination for locals and visitors.

The option to expand remains feasible and will be explored as part of a phased process.

Demolish and rebuild also remains feasible, but this depends on the relative cost of strengthening and redesigning the current building versus demolishing it and rebuilding. This will be further explored in the implementation phase.

Constructing a second building was ruled out on the grounds of achieveability and affordability as it is unclear whether it will achieve greater benefits for a higher cost.

	Seismic objective	**Destination** objective	**Fit-for-purpose** objective	**Affordability**	**Achievability**	**Rating**
1 **Strengthen** In this option, the current building is strengthened to meet minimum NBS requirements (>67%)	☐	☐	☐	☐	☐	Discarded
2 **Strengthen + redesign** In this option, the current building is strengthened to meet minimum NBS requirements (>67%) and is redesigned and renovated	☐	☐	☐	☐	☐	Preferred
3 **Strengthen + expand** In this option, the current building is strengthened to meet minimum NBS requirements (>67%) and is redesigned and expanded onto a larger site	☐	☐	☐	☐	☐	Feasible
4 **Demolish & rebuild** In this option, the current building is demolished and rebuilt to meet seismic requirements and be fit-for-purpose	☐	☐	☐	☐	☐	Feasible
5 **Second building** In this option, the current building is strengthened to meet minimum NBS requirements (>67%) and a second building is also constructed on a nearby site	☐	☐	☐	☐	☐	Discarded

Economic Case

Options development - Services

Each of the options is assessed against the investment objectives.

There are six options for services that the Faraday Centre can deliver, and these options aren't mutually exclusive. The Faraday Centre currently displays static and interactive exhibitions and it used to provide educational services.

The diagram at right evaluates each of the six potential service offerings and comes out with four preferred options:

- Interactive exhibitions
- Educational services
- Events and functions; and
- Programmes.

The combination of these services make up the preferred option for the services the Faraday Centre will deliver.

Providing static exhibitions only was ruled out as an option as it does not meet the objective of the Faraday Centre becoming an attractive and compelling destination for visitors and locals. Providing virtual services online was ruled out on the grounds of affordability and achieveability. Virtual services would add value, but would be unlikely to attract visitors to the Faraday Centre's physical location, which is a key investment objective. As such, spending extra money on virtual services would be unlikely to more effectively achieve the outcomes being sought.

	Seismic objective	**Destination** objective	**Fit-for-purpose** objective	**Affordability**	**Achievability**	**Rating**
1 **Static exhibitions** In this option, the Faraday Centre has only static exhibitions	☐	☐	☐	☐	☐	Discarded
2 **Interactive exhibitions** In this option, the Faraday Centre has both static and interactive exhibitions (status quo)	☐	☐	☐	☐	☐	Preferred
3 **Education** In this option, the Faraday Centre provides educational services	☐	☐	☐	☐	☐	Preferred
4 **Events / functions** In this option, the Faraday Centre can be hired for events and functions	☐	☐	☐	☐	☐	Preferred
5 **Programmes** In this option, the Faraday Centre provides programmes based on proactively identified needs	☐	☐	☐	☐	☐	Preferred
6 **Virtual** In this option, the Faraday Centre provides virtual services online	☐	☐	☐	☐	☐	Discarded

Economic Case

Options development - Operating model

Each of the options is assessed against the investment objectives.

Determining the correct operating model for the Faraday Centre is crucial to its success. Even with a fit-for-purpose building and attractive services, the Centre will not succeed if the operating model is not sustainable.

There are six options for who could own and operate the Faraday Centre:

- Napier City Council
- An independent trust
- Volunteers
- A commercial operator
- Central government
- The regional council.

Achieving success for the Faraday Centre requires a clear focus on compelling exhibitions and displays, engaging volunteers and exciting visitors. It also requires a consistent approach to promoting and managing the Centre.

By its nature, an interactive technology museum requires a degree of flexibility and agility to ensure it meets the changing expectations of visitors and the possibilities of its collection. The experience of other technology museums is that an independent organisation is best at developing the skills and maintaining the passion needed to ensure success. In turn, the operating organisation works best when it has clear objectives and a singular focus, rather than attempting to share resources or skills between multiple disparate facilities.

While the Napier City Council can continue to be the primary steward of the Faraday Centre, experience shows that an independent Trust – supported by the Council via an operating grant – is likely to produce better outcomes for the Centre and its visitors.

	Seismic objective	**Destination** objective	**Fit-for-purpose** objective	**Affordability**	**Achievability**	**Rating**
1 **Napier City Council** In this option, Napier City Council owns and operates the Faraday Centre	☐	☐	☐	☐	☐	Feasible
2 **Trust** In this option, an independent trust owns and operates the Faraday Centre	☐	☐	☐	☐	☐	Preferred
3 **Volunteers** In this option, the Faraday Centre is owned and operated by volunteers	☐	☐	☒	☐	☐	Discarded
4 **Commercial operator** In this option, the Faraday Centre is owned and operated by a commercial operator	☐	☐	☒	☐	☐	Discarded
5 **Central government** In this option, central government owns and operates the Faraday Centre	☐	☐	☒	☐	☒	Discarded
6 **Regional Council** In this option, the regional council owns and operates the Faraday Centre	☐	☐	☒	☐	☒	Discarded

Economic Case

Preferred approach

The preferred approach is made up the preferred options from all four dimensions.

As noted on previous pages, four dimensions have been assessed, each of which is crucial to the effective functioning of the Centre. These are:

- The location of the Centre
- The functioning of the building itself
- The services the Faraday Centre should provide to visitors
- The operating model that describes how the services are delivered.

The preferred option for the Faraday Centre is therefore the combination of the preferred option in each dimension, shown in the table at right. The result will be:

1. The Faraday Centre continues to operate in Faraday Street at its current location, with the possibility of expanding its footprint to the adjacent NZDF land, subject to negotiations.
2. The existing building is strengthened to >67% NBS in accordance with NCC standards, and its functionality improved to ensure it operates better for staff, volunteers and visitors
3. The Faraday Centre continues to offer interactive exhibitions, and actively pursues engaging programmes and events aimed at increasing visitor numbers and engagement
4. The Centre is owned by the Napier City Council (after completing the purchase from NZDF) and is operated by an independent Trust.

More information about the preferred option is provided in the following sections.

Location	Building	Services	Operating Model
The preferred option for the location of the Faraday Centre is to stay at the same location within the current land footprint initially. Expanding the Faraday Centre's land footprint will be explored in the third phase of implementation and may be progressed subject to willingness of NZDF. Implementing a precinct is out of scope for this investment. However, there is nothing to prevent willing parties working together to establish a precinct.	The preferred option for the Faraday Centre building is to strengthen it to meet >67% NBS and redesign it so it is fit-for-purpose. Expanding the building is subject to acquiring additional land from NZDF and will be explored during the third phase of implementation.	The preferred services option is for the Faraday Centre to provide a range of services including: interactive exhibitions, educational programmes, events and functions, and other programmes.	The preferred operating model is for the Faraday Centre to be owned by the Council and operated by an independent Trust.

Economic Case

Funding

The Faraday Centre will draw on multiple funding sources to progress the preferred approach.

In order to progress the revitalisation of the Faraday Centre, significant capital expenditure will be required. However, there are a range of funding options for the Centre, shown in the table at right.

Each of the funding approaches has its strengths and weaknesses, and – like most projects of its type – it is likely a full range of sources will be needed as the revitalisation progresses.

Once the upgrade project is complete, the ongoing operation of the Centre needs to be funded in a sustainable way. Again, there are a range of available sources, all of which are likely to be sought for the various activities and programmes of the Faraday Centre.

Based on experience in other facilities, the primary operational funding approach is likely to be:

- A Napier City Council operating grant underpins the functioning of the Centre, by covering the staff costs and basic occupancy costs
- Commercial sponsorship, grants and lotteries funding is used to stage exhibitions and run programmes of varying kinds
- Endowments, bequests and some event revenue is used to acquire items for the collection or make targeted changes to the Centre for specific purposes.

Conducting the funding operations will be the responsibility of the independent Trust. Its roles are explored in more detail on following pages.

Capital costs

1 Napier City Council
In this option, Napier City Council uses ratepayer funds to fund the capital costs of the preferred option

2 Grants / lotteries
In this option, the Faraday Centre applies for grants and lotteries to fund the capital costs of the preferred option

3 Endowments / bequests
In this option, the Faraday Centre uses various forms of community fundraising, including activities, endowments and bequests to fund the capital costs of the preferred option

4 Commercial sponsorship
In this option, a commercial entity contributes funds to the capital costs of the preferred option for the Centre

5 Central government
In this option, the Faraday Centre applies for central government funding through appropriate funds

All of these funding sources are feasible and the Faraday Centre will need to use a combination of them to fund its capital and operating costs.

Operating costs

1 Napier City Council
In this option, Napier City Council uses ratepayer funds to fund the operational costs of the Faraday Centre

2 Grants / lotteries
In this option, the Faraday Centre applies for grants and lotteries to fund its operating costs

3 Endowments / bequests
In this option, the Faraday Centre uses various forms of community fundraising, including activities, endowments and bequests to fund its operating costs

4 Commercial sponsorship
In this option, a commercial entity contributes funds to the operating costs of the Faraday Centre

5 Users
In this option, the Faraday Centre uses revenue from users of the Centre to fund its operating costs

Economic Case

Implementation constraints and approach

The preferred approach will be implemented over three phases.

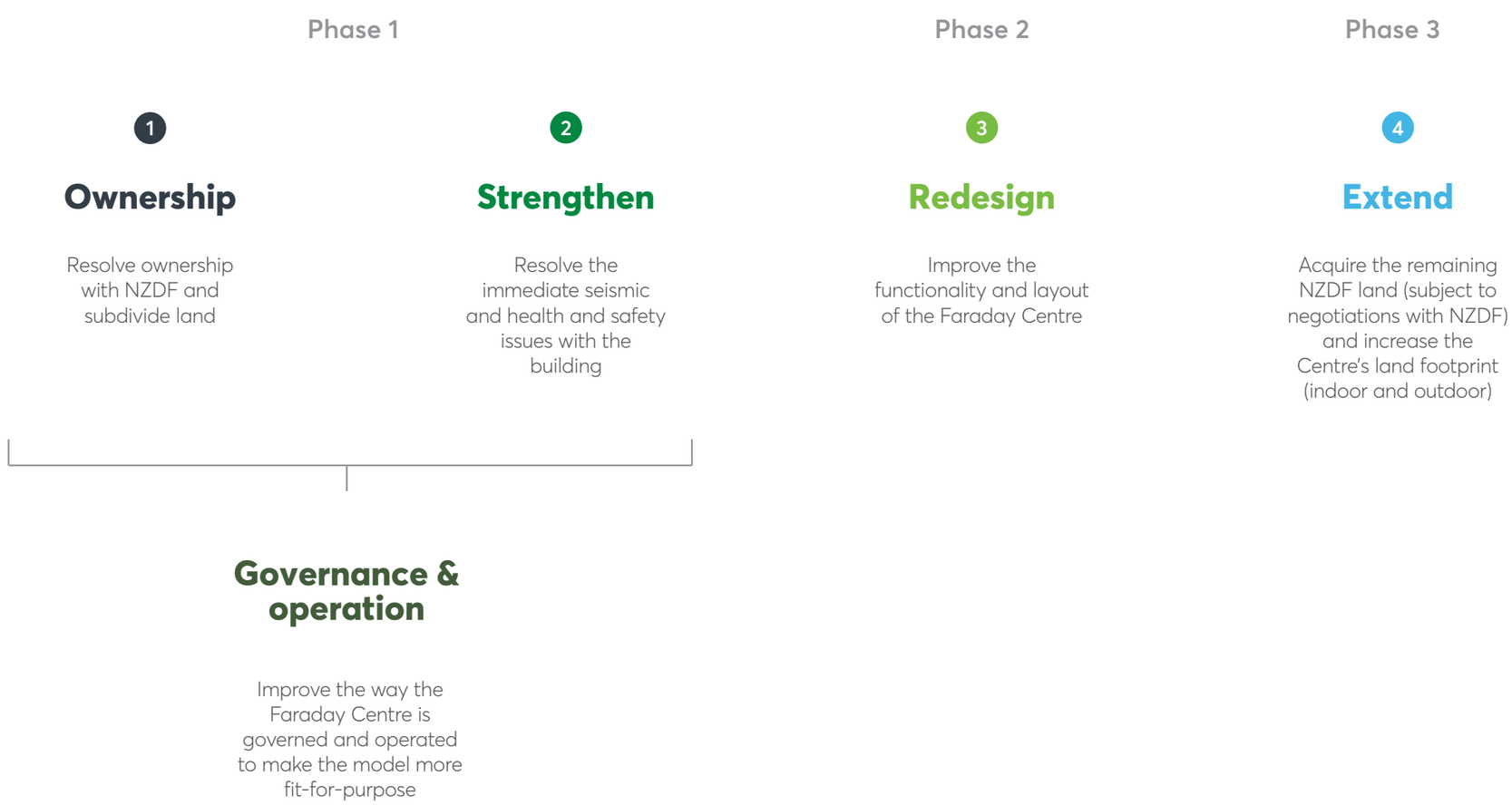
After analysis with the Faraday Centre management team and Napier City Council staff, a staged approach to implementation has been identified as the most viable way of upgrading the Centre.

The preferred approach will be implemented over three phases as follows:

- The first phase resolves the immediate issues with the Faraday Centre, including resolving land ownership issues with NZDF, resolving the immediate building issues and improving the Centre's governance and operating models
- In the second phase, the Faraday Centre is redesigned to improve the functionality and layout
- In the third phase, the remaining NZDF land is acquired (subject to negotiations) and the Centre is expanded onto the additional land.

As mentioned previously, the implementation of a precinct is out of scope for this investment, but may be explored subsequently if the parties are willing to work together.

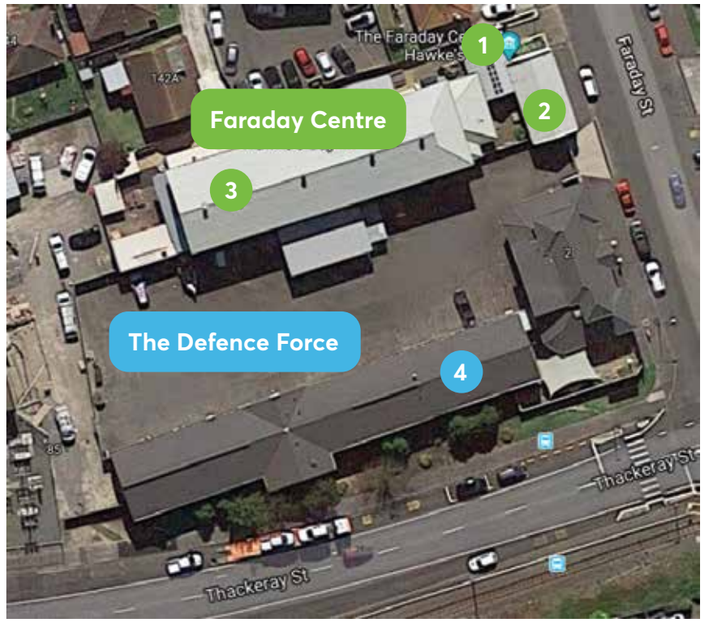
The following pages provide more information about each phase.



Economic Case

Scope of works - phase one

The initial phase strengthens and remediates the building.



The picture at left shows the current Faraday Centre site and buildings and the building used by NZDF. The first phase addresses the immediate issues with the Faraday Centre, including resolving land ownership issues with NZDF, resolving the immediate building issues and improving the Centre's governance and operating models. The scope of works is therefore:

1. Land and building acquisition from NZDF, subject to negotiation and agreeing a commercial approach suitable to both parties. As per the Property Group report, the way forward may include:
   - Acquire the entire property (2 and 2B Faraday Street)
   - Acquire the Faraday Centre only (2B Faraday Street)
   - Lease the Faraday Centre and carry out strengthening works
   - Lease the Faraday Centre subject to NZDF carrying out the strengthening works.
2. Assuming ownership or control of the site passes to the Napier City Council, the next step is the strengthening of the structure to meet a 67% NBS rating, as per Council's policy. The time and cost estimates for this work are shown in the table at right.
3. Establish the independent Trust, along with the governance, management and financial structures, so that operation of the Faraday Centre can be transitioned to the new structure.

The first phase of work addresses the immediate seismic strengthening and building remediation issues. The configuration and layout of the Faraday Centre will remain the same at the conclusion of the work. The cost ranges and likely timelines are shown at right.

Phase 1: Seismic and building remediation

9-12 months

duration

$0.9 million - $1.2 million

capital investment

Economic Case

Scope of works - phase two

The second phase improves the building entrance and provides more space.

The second phase of work builds on the seismic strengthening by redesigning the layout and functionality of the building to optimise the site.

Despite the size of the site and the main building, the space is not utilised as efficiently as it could be – and some key functions (such as storage facilities and dedicated education spaces) are severely lacking. So the second phase will redesign the spaces to improve the operation of the Faraday Centre. The scope includes:

- Ensuring the space within the buildings and the site are allocated efficiently to showcase, store and manage the collection
- Improving the functionality of the spaces to make it easier to operate the Centre, from an exhibition, collection management and administration perspective
- Improve the visitor experience through changes to the entrance areas, road appeal and visibility of the Faraday Centre
- Upgrade plant and equipment as required to ensure the building can be heated, cooled, lit and secured in a sustainable and cost-effective way
- Other cosmetic changes as needed to bring the Centre up to the standard of a regionally-significant cultural and historical asset.

These changes could occur as part of the seismic upgrade project, or can be implemented at a later date. The timing will depend on the availability of funding for the scale of changes required, which will in turn depend on how significant the planned improvements are. The sidebar at right discusses how the requirements for this phase will be developed.

The costings are based on a per-square-metre rate of $5,000+GST multiplied by the current sizes of the three buildings (535m^2 total), plus a 20% contingency. Actual costings will depend on the designs selected, plus actual construction costs at the time of the project.

Phase 2: Building reorganisation

12-24 months

duration

$2.6 million - $3.2 million

capital investment

Developing the requirements

There are a range of stakeholders that will need to be involved in the development of the requirements for a redesign of the Faraday Centre. These include:

- The volunteers, who have in-depth experience of the exhibits and how best to show and demonstrate them
- The staff, who have the knowledge of what is necessary for the Centre to function effectively
- The Napier City Council and the economic development specialists in wider Hawke's Bay, who will understand how the Centre fits into the wider economic and tourism landscape
- The museums sector, who will be able to bring national and international best practice experience to inform the design for a technology museum
- The education and tourism sectors, who will be able to offer their perspectives and insights about how the museum should function
- The heritage specialists who will be able to contribute the context for the Faraday Centre and its collection.

It is proposed that all these groups – and other important stakeholders, such as Iwi – are engaged in developing the scope and requirements for the improvements to the Faraday Centre, through a structured and interactive process overseen by the Napier City Council.

Economic Case

Scope of works - phase three

The third phase expands the Faraday Centre onto NZDF land.

The third phase aims to expand the Faraday Centre onto the adjacent NZDF land, re-purposing the existing buildings to expand the exhibition, storage, administration and public areas of the Centre.

However, this phase is contingent on NZDF's decisions about the future of their facilities. It is acknowledged that any decisions could be some years away, and NZDF may decide to retain the land and buildings for their own purposes – in which case phase three cannot proceed. However, it will be worth indicating to NZDF that the Napier City Council is an interested party if and when disposal of the land is contemplated.

As noted in The Property Group report, there is some complexity around the process for changes to land ownership, and there may be a requirement to offer the land to other parties such as Iwi, under the Crown's Treaty obligations.

In these circumstances, it is difficult to provide much certainty around the timing or costs of a future expansion of the Faraday Centre. From an exhibition and operational perspective, having more land would enable the Centre to offer a more expansive and compelling attraction for visitors and a better experience for educational groups, so it is desirable to pursue discussions with NZDF to see if there is a mutually beneficial path forward for the site.

Economic Case

Scope of works - governance and operating model

An independent trust will be responsible for the Faraday Centre.

What experience elsewhere tell us

There is a growing body of work based on community-led development models that show there are many benefits to community-led approaches.

Community-led facilities contribute to the ability of communities to thrive and be resilient. Community-led action is usually agile, responsive, adaptable and flexible in developing solutions to solve common problems. Evidence suggests that community problem solving is complex, but by building a project's approach to tap into local strengths and assets, tap into existing resources, and develop stronger local connections by assisting and incentivising a variety of local actions, complexity is reduced, and the skills of the community are fully utilised" (Community Matters).

Using a community-led approach doesn't preclude involvement of partners with specialist expertise in areas such as asset management or administrative services, but it does put the control of the operation of the assets and services into community hands.

Empowering the community-led collective and providing them with access to suitable infrastructure to carry out their role is only the beginning. For a facility to be successful, the community must control the journey of telling its stories and attracting visitors, by tapping into community networks and other resources. This approach enables the facilities to be more responsive to changing needs, which allows greater participation in the work of the facility.

There are five key principles integral to the success of community-led service provision:

1. There is a shared local vision and a drive for change to meet community needs
2. There are existing expertise and capabilities in the region
3. There are groups in the community already working together towards a common goal, or a willingness to work together
4. The community is willing and able to build diverse and collaborative leadership
5. It is possible to build in adaptive planning and action informed by outcomes.

The possibilities for the Faraday Centre

The Centre has always had strong ties to the Hawke's Bay community' without the tireless work of volunteers over decades, the Centre would not exist. So it is important to continue this linkage, whilst bringing the professional disciplines needed to run a sophisticated regional facility.

Based on experience elsewhere in Aotearoa, an independent Trust is viewed as the most viable way to combine the enthusiasm of the community with managerial expertise. The Trust should be established by the Napier City Council to operate the Faraday Centre according to the following principles:

- Membership of the Trust is by appointment from NCC, based on professional expertise and a standard recruitment process
- The asset of the land and buildings is owned by NCC, with the Trust having a long-term operating lease for the facility, with complete discretion about how it operates the Faraday Centre
- The Trust is tasked with (and measured on) its ability to grow the number of visitors and their satisfaction with the quality of the experience
- While the basic operation of the Centre is funded by an operating grant from NCC, the Trust is tasked with raising the additional funding needed to increase participation and improve the facilities.

The proposed financial arrangements are discussed in the following sections of this document.

Economic Case

Four wellbeings analysis

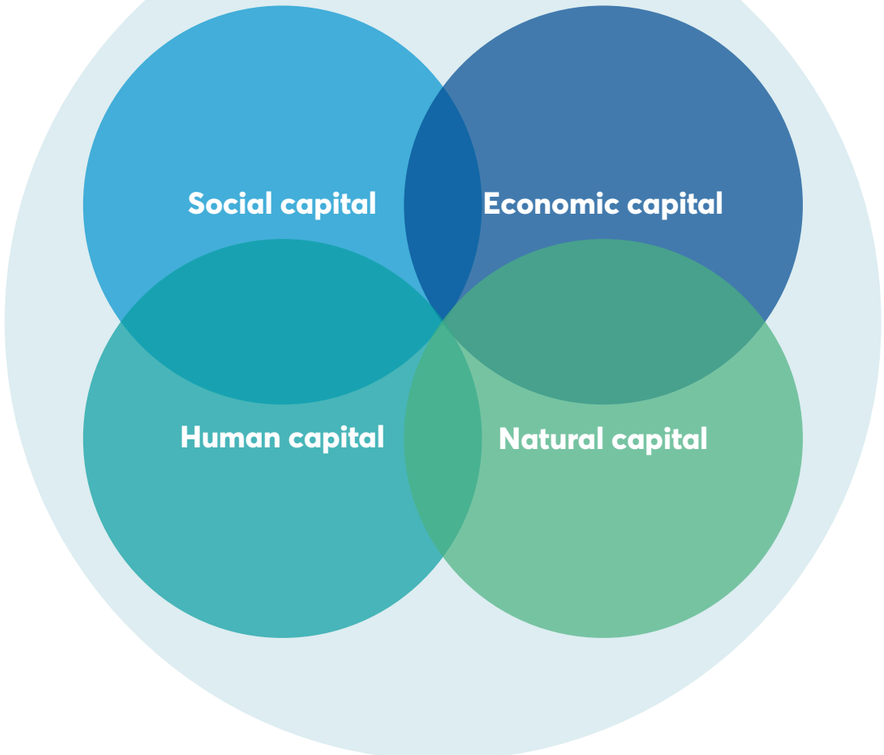
There are a range of benefits that come from facilities such as the Faraday Centre.

At the heart of the economic analysis of the proposed investment sits the Living Standards Framework. This is the toolkit used by the Government to assess the full range of costs and benefits of making investments, informed by their social, economic, human and environmental impacts. An overview of the methodology is shown in the diagram at right.

Cultural facilities such as the Faraday Centre do not exist solely for their economic return; practically all museums in Aotearoa require an operating subsidy to function, as they are unable to cover their full costs from user fees. However, the benefit of this financial support comes primarily from the improvements to social and human wellbeing that come from understanding our history and our stories.

There is now a solid body of economic research that allows the wellbeing impacts of cultural assets to be understood and modelled, as demonstrated by the Auckland Museum study on the following page. A similar methodology in simplified form has been used to assess the wellbeing benefits from the Faraday Centre, so the full costs and benefits of the investment can be understood.

Treasury's vision is "higher living standards for New Zealanders". By "living standards" we mean much more than just income. We mean people have greater opportunities, capabilities and incentives to live a life that they value, and that they face fewer obstacles to achieving their goals.



- The cultural, philosophical and ethical norms of society
- The social and political institutions that organise society eg, laws, expectations
- The way people interact, eg, whether they trust each other

- Individual assets eg, homes, cars, factories and machinery
- Community assets eg, roads and hospitals
- Financial assets that could buy these things

- The stock of skills and qualifications that people have
- The level of health
- The systems used to organise people to create value

- Extracted resources eg, oil and gas
- Renewal resources, eg, like water and fish
- Environmental services eg, climate, breathable air and soil

Economic Case

The Auckland Museum Study

Museums have the potential to create significant social, environmental and economic value for stakeholders.

There is evidence that museums can create significant social, environmental and economic value for a wide range of stakeholders.

In 2014, Auckland Council conducted a Social Return on Investment (SROI) Analysis to measure the value created by Auckland Museum's "Moana - My Ocean" exhibition. SROI is a unique valuation methodology used for understanding the value created by a programme or organisaiton. It uses established economic valuation techniques to express the social, environmental and economic impacts of a programme or organisation in monetary terms.

A key strength of the SROI methodology is that a range of impacts are expressed in a common currency. This allows benefits to be compared to the money invested into an activity, and the calculation of a benefit-cost ratio. This ratio articulates how much social, environmental and economic value is created for every dollar invested.

The 2014 SROI analysis provides strong evidence that Auckland Museum's Moana - My Ocean exhibition created, or is likely to create in the future, significant social, environmental and economic value, for a wide range of stakeholders.

The value created by Moana - My Ocean exceeded the investment into the development of the exhibition, such that for every $1 invested, $4.66 of social, environmental and economic value was created.

The analysis showed that a range of stakeholders were impacted, or were likely to be impacted in the future by the Moana - My Ocean exhibition, including visitors, the environment, contractors and community partners, and Museum staff.

Visitors experienced enjoyment, development / reinforcement of a personal sense of connection with the marine environment, increased sense of pride in Auckland and increased engagement with learning.

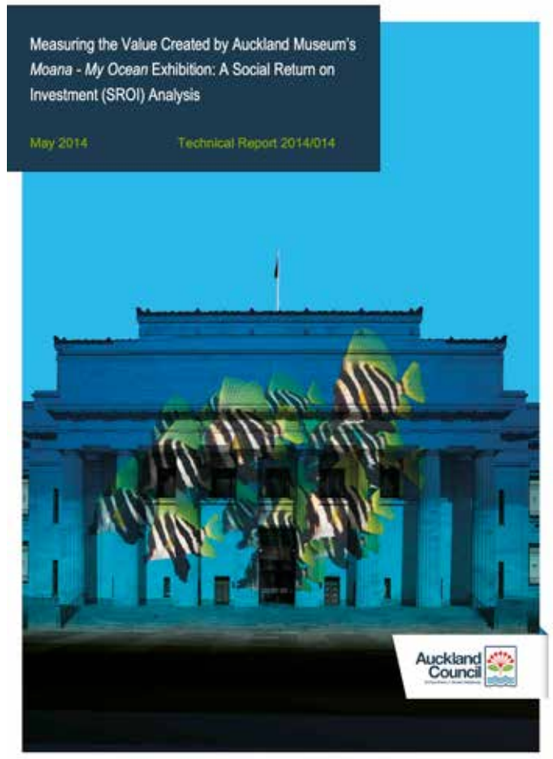
Museum staff and contractors and community partners experienced increased job satisfaction, increased business / career opportunities and a strengthened sense of Māori cultural identity.

The environment was also impacted by increased public awareness of environmental issues faced by the marine environment, leading to behavior change that is likely to support improved environmental outcomes.

The Faraday Centre is unlikely to generate material environmental benefits as its exhibitions are not environmentally focused. However, it is reasonable to expect that it will generate similar benefits for visitors, museum staff and contractors and community partners.

The majority of value created by the Moana – My Ocean exhibition was created for visitors. Although each visitor was only impacted moderately, the sheer number of visitors (140,200) resulted in a significant collective impact. In contrast to visitors, the number of contractors and community partners, and Museum staff affected by the exhibition was small, but the size of the impact for each stakeholder was large.

The analysis of the benefits of the investment in the Faraday Centre is based on the SROI analysis used to measure the value created by the Moana - My Ocean exhibition.



Economic Case

Applying the benefits to the Faraday Centre

The benefits experienced by visitors will be similar to the findings of the Auckland Museum study.

There were a range of stakeholders that experienced benefits from the Moana - My Ocean exhibition including visitors, the environment, contractors and museum staff. We have assumed that visitors and museum staff will benefit from visiting the Faraday Centre in a similar way to how they benefited from visiting the Moana - My Ocean exhibition.

The outcomes (benefits) each stakeholder experienced are set out in the table at right along with how the outcome was measured, how the outcome was valued, the duration and the dollar value of the outcome. It is likely that some outcomes from visiting the Faraday Centre, such as enjoyment, would be valued in similar ways; and some outcomes such as sense of connection and sense of pride would be different as the subject matter and region are different to those in the Moana - My Ocean exhibition.

If Council wishes to quantify the social, environmental and economic value generated from investing in the Faraday Centre, it could commission a piece of research similar to the one done on the Moana - My Ocean exhibition. This would involved surveying visitors post- and prior to investing in the Faraday Centre. However, there are significant costs associated with such a study.

In the absence of the necessary data from visitors, we can estimate the types of benefits from the investment, but cannot quantify their value. So while the table at right provides some indication of the dollar values of the benefits for Moana - My Ocean at Auckland Museum, caution should be taken in applying these values directly to the Faraday Centre.

Stakeholder	The outcome (what changes)				
	Description	Indicator of change	Proxy used	Duration	Value $
	How would we describe the changes?	How was the outcome measured?	How was the outcome valued?	How many years will it last?	What is the value of the change?
Adult visitors	Enjoyment	"How much enjoyment did you get out of coming to Moana - My Ocean?"	The Value Game: A comparison with other activities	1	34.20
	Development / reinforcement of a personal sense of connection to the marine environment	"How much do you think visiting Moana - My Ocean has increased your motivation to act in a more environmentally sustainable way?"	Average annual increase in money that visitors are willing to donate to a marine conservation group	3	34.80
	Increased sense of pride in Auckland	"How much has visiting Moana - My Ocean made you feel more proud of Auckland?"	Cost of an Auckland dolphin and whale safari in the Hauraki Gulf	2	53.30
Child visitors	Enjoyment	Adults were asked: "How much enjoyment do you think [your chid] got out of coming to Moana - My Ocean?"	Comparison with enjoyment value reported by adults	1	31.50
	Increased engagement with learning	Adults were asked: "How much do you think visiting Moana - My Ocean will have increased [your child's] engagement with learning?"	Cost of an academic tutoring session	2	14.40
	Increased sense of pride in Auckland	Adults were asked: "How much do you think visiting Moana - My Ocean has made [your child] feel more proud of Auckland?"	Cost of an Auckland dolphin and whale safari in the Hauraki Gulf	2	35.00
Museum staff	Increased job satisfaction	"How much has being involved in Moana - My Ocean increased your level of job satisfaction?"	Willingness-to-accept (WTA) question	2	32,500.00

Risks to benefits

There are some external risks to the benefits of the investment in the Faraday Centre being achieved. While construction risks can be mitigated as part of the implementation project, some of the risks are beyond the control of Council or the independent Trust responsible for operating the Faraday Centre. This is because the drivers are largely exogenous – that is, they are external factors:

- The changing geopolitical environment resulting from the COVID-19 pandemic, the resulting alterations to international tourism flows, and the consequences for the Hawke's Bay economy
- The resulting changes to Aotearoa's domestic tourism sector, caused by our inability to travel overseas in the short term and the resulting growth of domestic travel
- The changing expectations of museum visitors, requiring different ways of interacting with museums and their collections, including the desire for more online resources and virtual experiences.

While the risks are not under the direct control of Council, some of the impacts can be mitigated by Faraday Centre management working with officers to adjust opening hours, promotional efforts and exhibition approaches in an agile and responsive way.

Economic Case

The importance of taking action

The Faraday Centre will be forced to close unless the issues can be addressed.

As the Auckland Museum study demonstrates, there are a wide range of benefits that come from cultural and educational facilities such as the Faraday Centre; they are a valued and important part of our lives in Aotearoa, and a vital way of connecting the past to the present.

However, the Faraday Centre is in danger of closure if the seismic issues are not addressed. The current state of the building means that visitation by school groups has all but ceased, and it is likely that some form of enforced closure to the public will be required if the structure is not made safe. In turn, this means the social, human and cultural benefits of the Faraday Centre will be lost to the region and the nation.

Should closure occur, the region will also be deprived of the opportunity to make the Faraday Centre a greater part of the cultural and historical story of Hawke's Bay. The power plant and the Fullagar Engine played a central part in the immediate aftermath and recovery from the earthquake – but this story is not widely known.

The reason for this is obvious: the facility is not widely promoted and does a poor job of attracting visitors based solely on its road presence. Staff and volunteers are routinely told by visitors – both locals and from around the world – how wonderful the experience was, but they were simply not aware of it. Yet its story and the nature of the technology museum experience means the Faraday Centre could play a much wider role in attracting visitors to the region and inspiring them to stay longer.

It is apparent from the analysis that the Faraday Centre cannot stand still. Doing nothing will result in eventual closure due to seismic issues, whilst investing in the future will allow the museum to develop and thrive. In effect, there is no "steady state" option available, and the clock is ticking when it comes to strengthening the structure. Action in either direction – towards closure, or towards revitalisation – must be taken soon.

4.0

Financial Case

Financial Case

Investment requirements

Proposed investment will occur in two phases.

The table at right shows the capital investment requirements for the Faraday Centre:

- **Phase 1** is required for seismic strengthening and building remediation, and excludes the capital cost of acquiring the land and building from NZDF (the purchase amount is currently confidential due to ongoing negotiations). This investment is required in order to bring the Faraday Centre up to standard, and without this investment the building will be forced to close due to seismic issues.
- **Phase 2** improves and updates the Faraday Centre to enhance the visitor experience and the management of exhibits. It is not required for seismic or compliance reasons, but will likely result in a higher profile for the Museum and improved visitor numbers.

The two phases are not time-dependent; that is, the timing of Phase 2 can occur as part of the Phase 1 strengthening project, or it could be deferred a number of years until the condition of the exhibition spaces deteriorates further. This is a decision for Council in the context of other funding priorities.

Phase 1: Seismic and building remediation	Phase 2: Building reorganisation
9-12 months duration	**12-24 months** duration
$0.9 million - $1.2 million capital investment	**$2.6 million - $3.2 million** capital investment

Developing the requirements

A range of funding sources are available to fund the capital costs of seismic strengthening and upgrades to the Faraday Centre. These sources include:

- Napier City Council
- Grants / lotteries
- Endowments / bequests
- Commercial sponsorship
- Central government
- Users and private donors.

The table at right shows the likely availability of fundings sources by project phase. It should be noted that external funding is unlikely to be available for the purchase of the building and land from NZDF, so this cost may well need to be borne directly by Council.

It is proposed that a Revenue Generation Strategy is developed for the second phase of the project, and that Council capital funding is made contingent on the external funding goals being achieved. This approach is consistent with comparable projects in other regions in Aotearoa, particularly for museums and galleries. In order to give certainty to external funders, Council will need to make an in-principle commitment of capital for the project - perhaps in the range 30%-50% of the overall project budget.

Financial Case

Operating budget

The budget covers the operation of the Faraday Centre after completion of the seismic strengthening work.

	2020-21 ANNUAL Plan	2021-51 LTP Budget 2021/22	2021-51 LTP Budget 2022/23	2021-51 LTP Budget 2023/24	2021-51 LTP Budget 2024/25	2021-51 LTP Budget 2025/26	2021-51 LTP Budget 2026/27	2021-51 LTP Budget 2027/28	2021-51 LTP Budget 2028/29	2021-51 LTP Budget 2029/30	2021-51 LTP Budget 2030/31
Revenue (includng shop sales)	-103,859	-172,000	-176,988	-181,408	-185,949	-190,593	-195,358	-200,432	-205,850	-211,405	-216,909
Other gains/losses	3	0	0	0	0	0	0	0	0	0	0
Employee Benefit Expense	93,487	157,202	161,761	165,801	169,951	174,196	178,550	183,187	188,139	193,217	198,247
Depreciation and amoritisation	6,872	144,367	304,951	325,634	330,585	363,234	368,826	374,486	410,937	417,287	423,179
Other Operating Expenses (incl Cost of Goods sold)	36,184	179,179	157,778	183,624	275,163	198,087	284,542	187,614	212,948	554,043	366,017
Internal Expenditure	16,454	31,243	32,375	35,443	36,705	38,336	40,350	41,953	42,374	43,520	45,298
Minor Capital	15,000	10,000	10,300	10,568	10,843	11,136	11,426	11,746	12,075	12,425	12,760
Net Funding Requirement	**64,141**	**349,991**	**490,176**	**539,661**	**637,298**	**594,425**	**688,336**	**598,555**	**660,624**	**1,009,087**	**828,592**

As the table shows, the Faraday Centre requires ongoing ratepayer support, as the revenues from visitors, shop sales and functions are unable to fully fund the facility. This is consistent with the overwhelming majority of cultural and community facilities in Aotearoa.

Following the proposed strengthening work, the major source of operating cost for the Faraday Centre is depreciation and amortisation of the resulting asset. This cost reflects a prudent approach to long-term asset management on behalf of Council.

Financial Case

Visitor and revenue projections

The operating budget is based on the completion of the Phase 1 seismic strengthening work.

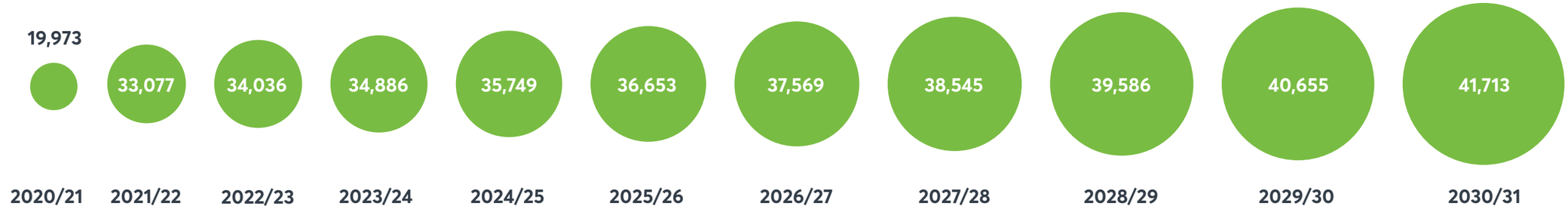
The current admission charges for the Faraday Centre are shown in the table below:

Admission	Fee (incl GST)
Adults	$9.00
Children (under 15 years)	$4.50
Senior Citizens (65 +) and Community Services Card holders single admission	$7.50
Family Pass (2 Adults, 2 Children)	$25.00
Annual Pass	$125.00
Concession Card (10 trip Adults)	$75.00
Concession Card (10 trip Children)	$40.00
Group rate Adults	$7.50
Group rate Children	$4.00
Meeting Room	
Hourly rate	$40.00
Morning or Afternoon	$100.00

These rates are not expected to change materially in the coming years, other than in response to normal CPI inflation. However, some revision may be warranted once the Phase 2 redevelopment of the Faraday Centre occurs.

The graph below shows the current projections for visitor growth over the next decade. Growth is expected to come from better promotion of the Faraday Centre plus the return of school groups once the seismic issues with the building have been rectified.

The projections show visitors growing from around 20,000 per annum in 2020/21 to more than 40,000 a decade later.



5.0

Commercial Case

Commercial Case

Procurement strategy

A robust procurement strategy is necessary to achieve the desired outcomes.

It is considered best-practice for councils to follow the Government Procurement Rules. The Rules help to support good market engagement, which leads to better outcomes for agencies, suppliers and New Zealanders. As this is a construction project, it is also recommended that the Council applies the practices set out in the construction procurement guidelines.

A robust, documented procurement strategy, based on facts and analysis, is an important part of planning the successful delivery of a capital project.

The procurement strategy defines the procurement process for the project. It will be developed during the planning phase of the implementation project, and may be prepared internally by the Council or externally, such as by the project manager or architect.

One of the key objectives of a procurement strategy is to assess a range of delivery options and identify a recommended delivery model. Assessing a range of options maximises value and optimises project outcomes.

The procurement plan follows on from the procurement strategy document, providing the methodology, approach, process, and project management structure for sourcing and managing suppliers.

The process of developing a procurement strategy can be divided into three steps:

- Gather and analyse project information
- Determine preferred delivery model
- Plan approach to market.

The process is set out in more detail at right.

1 Analyse project information

Gather and **analyse** relevant project information to establish a good understanding of the project characteristics in the following areas:

- Project requirements
- Project constraints
- Project risks
- Client capability
- Market position

2 Determine delivery model

Determine appropriate evaluation criteria based on project information

Evaluate each potential delivery model

Identify and **test** preferred options to **determine** the final option

3 Plan approach to market

Determine the most appropriate tender process and type

Identify the most appropriate pricing mechanism

Determine the most appropriate contract type

ROLES AND RESPONSIBILITIES

There are a number of roles required for the procurement of the proposed investment. The project manager will typically prepare the procurement strategy, tender documentation and scope, and manage technical inputs to the procurement documentation, with the assistance and guidance of the Council's procurement team.

A critical role is the Council's Senior Responsible Officer, who has suitable delegation and authority to approve the procurement steps. Other key roles include technical and consultant support:

- Project management and reporting
- Urban planning advice
- Technical advice (architect/cost consultant/other technical disciplines)
- Financial advice
- Legal advice.

Commercial Case

Project requirements

In order to successfully deliver the project, a number of services will need to be procured by the Council.

REQUIREMENTS	Service	Required scope
	Project Manager	Responsible for delivery of the project scope, cost, time and quality, including procurement of the team to achieve the outcomes. Reports to the Project Sponsor. Involved from initiation through to handover to operations. Can be an internal resource or externally procured. Can sometimes include design management to support the design coordination role
	Project Engineer	Responsible for the administration and management of the construction contract
	Quantity Surveyor	Responsible for developing and agreeing the capital cost estimation methodology. Also updating the project control budget and providing assessments for variations and progress claim certificates. Scope to include whole-of-life costs for plant selection
	Architect	Typically lead consultant, and responsible for the provision of detailed design drawings and technical specifications and monitoring the construction in accordance with New Zealand Institute of Architects observation levels 1-5 to achieve the intent of the design. Responsible for building consent process, lodgement, responses and obtaining approvals
	Structural Engineer	Provides detailed design drawings, technical report and technical specifications Provides construction monitoring during the construction phase, assists with design-related issues in accordance with IPENZ construction monitoring levels 1-5, and as per scope of services Provides certification of design in accordance with relevant standards and to achieve the Code Compliance Certificate (CCC)
	Fire Engineer	Provides detailed design drawings, technical report and technical specifications Provides construction monitoring during the construction phase, assists with design-related issues in accordance with IPENZ construction monitoring levels 1-5, and as per scope of services Provides certification of design in accordance with relevant standards and to achieve CCC
	Mechanical/HVAC/hydraulic/electrical engineer	Provides detailed design drawings, technical report and technical specifications Provides construction monitoring during the construction phase, assists with design-related issues in accordance with IPENZ construction monitoring levels 1-5, and as per scope of services Provides certification of design in accordance with relevant standards and to achieve CCC.
	Civil Engineer	Provides detailed design drawings, technical report and technical specifications Provides construction monitoring during the construction phase, assists with design-related issues in accordance with IPENZ construction monitoring levels 1-5, and as per scope of services Provides certification of design in accordance with relevant standards and to achieve CCC
	Geotechnical Engineer	Provides detailed design drawings, technical report and technical specifications Provides construction monitoring during the construction phase, and is responsible for dealing with the site ground conditions, foundations and groundwork required Provides certification of design in accordance with relevant standards
	Planning Officer	Provides consenting strategy, schedule of consents required, specific planning advice, assessments of environmental effects and scoping of technical assessments, and includes lodgement and processing support for the resource consents
	Legal Advisor	Provides legal advice as required for planning, consenting and compliance purposes
	Construction Contractor	Constructs the facility to the supplied designs, managing all subcontractors as required

Commercial Case

Delivery models

There are a range of delivery models.

There are eight potential delivery models that could be used to deliver the project:

- Traditional
- Design and build
- Package based
- Direct managed
- Alliance
- Early contractor involvement
- Panel of suppliers
- Public private partnership.

A summary of each model and a description of when each model is appropriate is included in the table at right.

Council will determine the most appropriate delivery model based on the project.

Approach	Summary	When it is appropriate
Traditional	Requires that the design is fully developed before the construction contract is awarded. The client engages consultants to prepare a design against a brief and budget, and to prepare the tender documents. Contractors are then invited to submit bids to do the construction work, based on the tender documents.	Regarded as the best delivery model to use for routine, uncomplicated works of small to medium size and duration
Design and build	The main contractor takes on the responsibility for both the design and construction. The client develops the functional and technical performance requirements for a facility and this information is used in the tender process to invite contractors to submit proposals for design and construction. With the exception of relatively simple, straightforward projects, design and build projects typically require a comprehensive set of requirements documents to ensure that the completed facility meets the client's expectations.	This model is best used when: • Functionality is more important than achieving the highest possible design quality • There is a need for a high degree of cost certainty at the time of contract award • The result sought by the client is clear in terms of stakeholder requirements, and the required functional and technical performance standards can be clearly defined at the time of tender • The client does not want to take on design risk and/or the client requires a single point of responsibility for design and construction • There is a need to improve integration of the design and construction process, to improve constructibility out-comes.
Package based	Allows an earlier on-site start and enables the tender process and construction to overlap with the design. They've developed to provide faster project delivery times while still allowing the client to retain control over the design, and therefore quality. Management methods break down a project into small packages that can be tendered as and when the design for each package is complete.	This model is best used when: • The client wants to retain overall control of the project, including design aspects, to ensure flexibility to amend the design • The project is of a specialised nature • The risk of potential cost overruns is acceptable, where completion is critical to the client's operational needs • There are complexities that warrant expert advice from an experienced construction manager or management contractor who can provide constructibility advice on the design, and can coordinate and administer delivery of the construction works • The works can be readily broken down into separate packages • A fast-track approach to design and construction is required to achieve the earliest possible completion.
Direct man-aged	The client directly manages all aspects of the delivery of the project works.	This model is best used when: • The client operates in an asset-intensive environment and can invest in developing the in-house skills required • There's a need for the client to control all aspects of the project • There's a desire for the client to remain informed and develop the skills of in-house personnel • The project is for minor works contracts and/or emergency works • There are uncertain or complex interfaces, and flexibility on scheduling and delivery is required.
Alliance	A relationship-style arrangement, that brings together the client and one or more parties to work together to deliver the project, sharing project risks and rewards.	Collaborative procurement methods are usually used for highly-complex or large infrastructure projects that would be difficult to effectively scope, price and deliver under a more traditional delivery model.
Early contractor invovlement (ECI)	ECI is an approach to contracting that can complement either a traditional or novated design and build delivery model. ECI can be used to gain early advice and involvement from a contrac-tor into the buildability and optimisation of designs. ECI usually takes the form of a two stage approach to tendering.	This model is suited to large, complex or high-risk projects because it affords an integrated team time to gain an early understanding of requirements, enabling robust risk management, innovation and public value.
Panel of suppliers	A panel of suppliers is a list of suppliers who have been pre-approved by an agency and who have agreed to the terms and conditions for supply. In establishing a panel of suppliers, the agency will verify which suppliers are capable of delivering the works and will agree in advance with each supplier the terms and conditions of supply of the goods, services or works, including the pricing or the pricing mechanism that will apply. Once the panel has been established, the client can select an appropriate supplier from the panel each time a project needs to be deliv-ered through a secondary procurement process.	This model is best used where clients: • Are delivering a significant programme of work requiring construction or maintenance services, requiring multi-ple procurements of a similar nature • Have a good degree of certainty on the pipeline in terms of planned volumes of work and their timing • Want to develop long-term strategic relationships with suppliers to encourage industry investment in skills and training • Want to adopt a continuous improvement approach to realise the wider programme benefits a panel can bring.
Public private partnership (PPP)	PPP is a term that can refer to many different kinds of relationships between the government and the private sector. Generally, the term is used to refer to long-term contracts for the delivery of a service, where the provision of the service requires the construction of a facility or asset, or the enhancement of an existing facility. The private sector partner finances and builds the facility, operates it to provide the service and usually transfers control of it to the public sector at the end of the contract. A key objective of the PPP approach is the drive to optimise whole-of-life outcomes by encouraging innovation from the private sector.	PPPs are suited to a range of different projects. However, PPPs are better suited to high value projects in order to attract private finance.

Commercial Case

Client and market capability

The market has capacity to deliver the project.

The National Construction Pipeline Report 2019 reports that non-residential building value nationally is forecast to grow to a peak of $9b in 2021. This is largely driven by activity in Auckland. Non-residential building activity in Auckland grew by 23% in 2018 and is forecast to remain at this high level and peak at $3.5b in 2021. However, these forecasts were made prior to the Covid-19 pandemic.

The shift to Alert Level 4 saw New Zealand's construction sector slowing to a standstill in March and April, with building projects put on hold for 33 days. Building activity picked up rapidly once the alert level was reduced. However, a Royal Institution of Chartered Surveyors (RICS) Global Construction Monitor survey from quarter two, 2020 revealed that 25% of projects were halted in the second quarter, and on-site productivity is predicted to fall 12%.

A Westpac Economic Insight report from May 2020 states that a second downturn in construction activity over 2021 with sharp falls in both privately funded residential and non-residential projects is expected. Those falls will more than offset the planned increases in public spending in areas like infrastructure.

Westpac expects that the drop off in building activity is likely to be gradual, and its full extent won't be evident until late in 2021. This is because of the large pipeline of work that was already planned prior to the outbreak of Covid-19 and a backlog of work that built up during the lockdown period. However, the number of new construction projects coming to market or going through the consenting process will fall over the coming months. There is also likely to be a higher-than-usual number of planned projects that are canceled. Given the usual lags between planning and building, this points to another slowdown in building activity over the year ahead.

Beyond 2021, building activity is expected to pick up again, supported by the combination of very low interest rates and large increases in Government spending, including large increases in infrastructure spending. The recovery in privately funded residential and commercial building is still likely to be protracted.

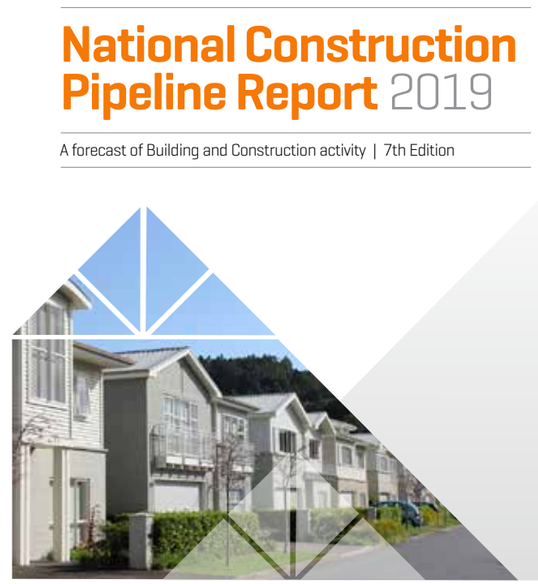
Westpac expects that over 2021 and 2022, quarterly spending on commercial building activity will fall roughly 15% below pre-Covid-19 levels. In comparison to the fall in residential investment, the downturn in commercial construction is expected to be more protracted. That's because developers will be reluctant to initiate new projects until they are confident that the economy has entered a sustained upturn. This reluctance will be reinforced by the large cost of many commercial construction projects.

While privately funded building activity will drop sharply over the coming year, Government related spending on infrastructure is set to increase over 2021 and 2022.

RICS reports that while the global shock to demand has prevented tender prices from rising, the cost of materials has also risen, driving construction costs higher. As a result, respondents almost universally noted deteriorating margins in quarter two, and they expect it to persist for the next twelve months.

With activity falling, and margins under rising pressure, respondents also reported a sharp reduction in headcounts, and expect this trend to persist for the next 12 months.

There is likely to be market capacity to deliver the project, especially since commercial building activity is expected to fall. However, increased construction costs and reduced headcounts may push prices up.



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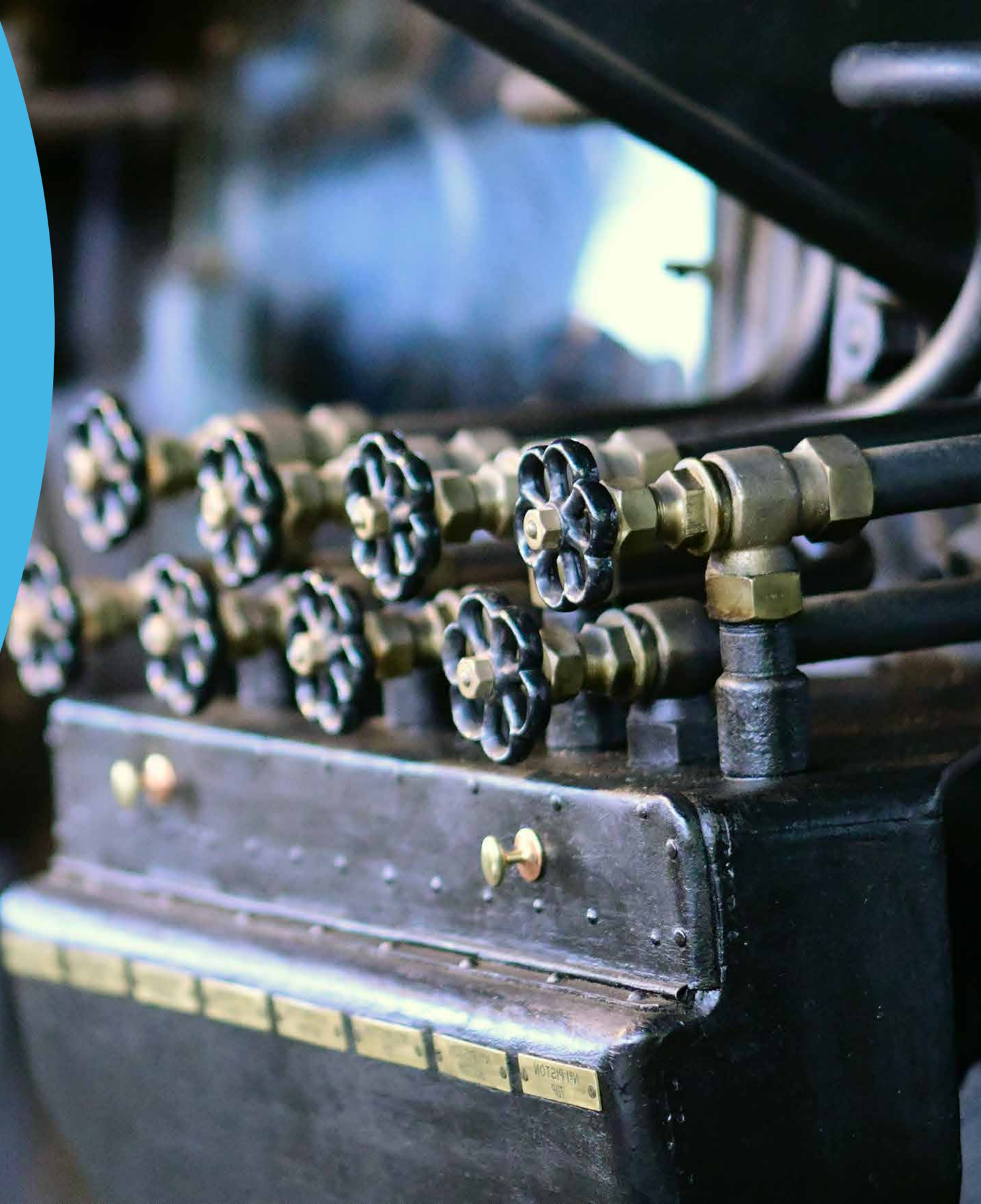
Management Case



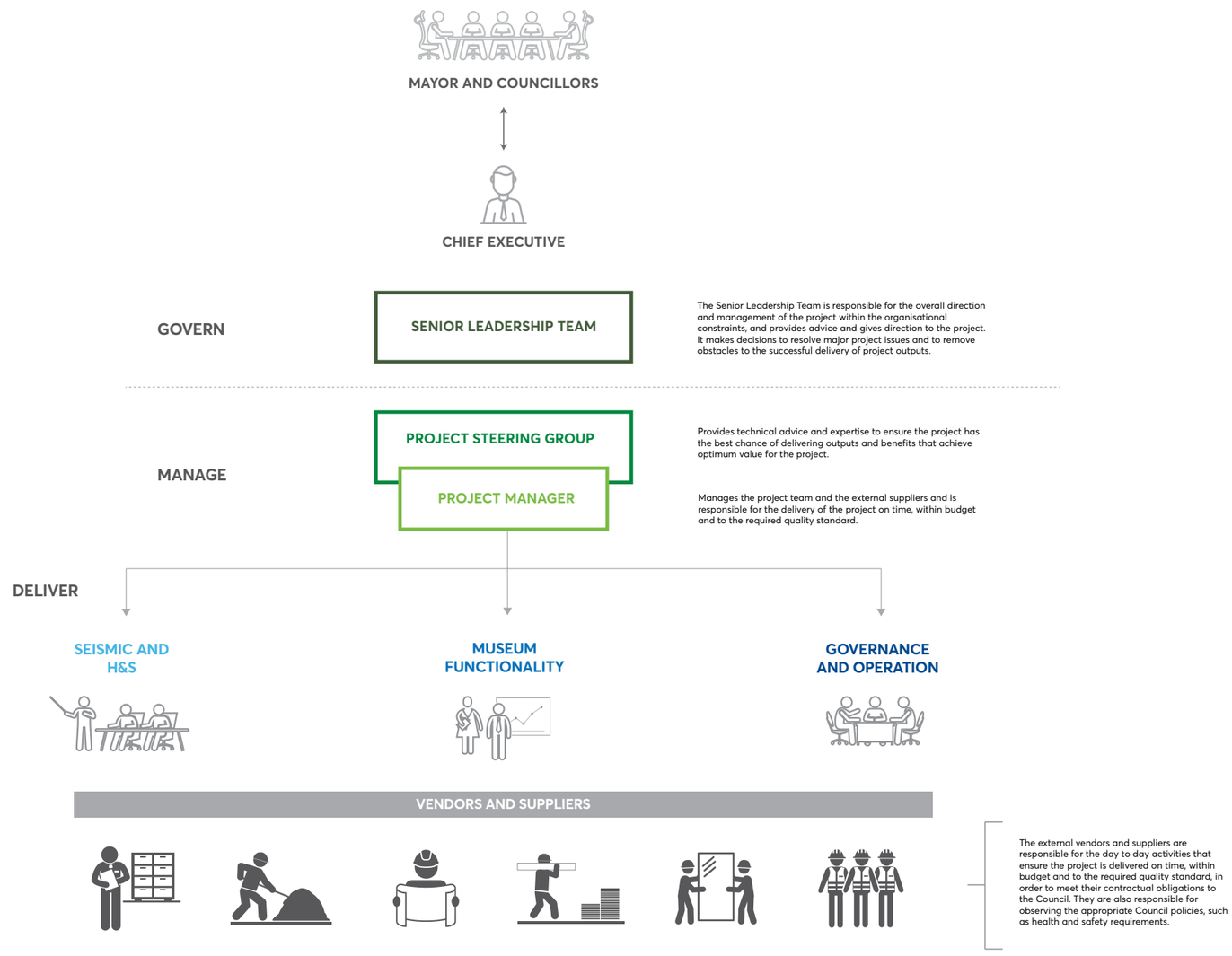
Management Case

Project delivery

The project has been designed with the robust governance needed to deliver a high-quality outcome.

The diagram at right shows an indicative governance approach for the program of work. Oversight and governance is conducted by elected members, working through the Chief Executive and an appointed Steering Group. This approach is in line with accepted project management methodologies and the Local Government Act.s

As the diagram shows, accountability will need to be provided by elected members, and responsibility provided by a number of management and delivery tiers. The identified workstreams will also need to fall under the control of the project manager, even though the resourcing of the activities may be provided by a range of organisations.



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Recommendations and next steps

Recommendations and next steps

There is a bright future for the Faraday Centre.

The Faraday Centre is a valuable yet underutilised attraction for the Hawke's Bay region. Due to a range of building issues, the Centre is unable to reach its full potential without a significant capital investment.

Visitor feedback on the experience the Centre has to offer in its current state is overwhelmingly positive. However, many people simply don't know it exists, so the Centre misses out on many potential visitors. Additionally, the educational potential for the Centre is being stymied due to the seismic issues that prevent schools from visiting.

The Centre has a committed bunch of volunteers who are hugely passionate about the Centre and its attractions. The drive to make the Centre a fantastic attraction in Napier City is strong from staff and volunteers alike; but it does require some capital funding assistance to grow and flourish.

This document makes the case for investment in the Faraday Centre, using a phased approach. The recommendations are therefore as follows:

1. **Note** that negotiations are underway with NZDF to acquire the land and buildings for the Faraday Centre and that a separate paper will be presented to Council regarding this
2. **Approve** the phase 1 work to strengthen the building to meet Council's required NBS rating of >67%, with a capital investment of $0.9 - $1.2 million, subject to the successful acquisition of the property
3. **Note** the future possibility of upgrading the building further in phase 2, with a capital investment requirement of $2.6 - $3.2 million, subject to the availability of sufficient external funding
4. **Approve** making application to external funders for support for phases 1 and 2 of the upgrade of the Faraday Centre.

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