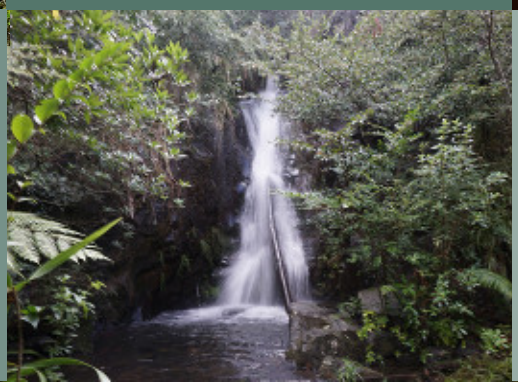
VISITOR SOLUTIONS
& PARTNER CONSULTANTS

October 2019

Te Aroha Tourism Precinct Development Feasibility



Prepared for Matamata-Piako District Council and Partners

matamata piako district council

INFORMATION

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Authors	Craig Jones, Gordon Cessford, Rob McDonald, Lawrence McIlrath, Ana Crawford, Phil Howard and Morné Hugo.
Sign off	Craig Jones
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CONSULTANT TEAM

Deloitte

VISITOR SOLUTIONS

Boffa Miskell

mpm projects

TOMAHAWK

MENETH CONSULTING

NativebyNature

design tribe ARCHITECTS

Spa Evolution INSPIRED SPA CONCEPTS

FRESH INFO

Powell Fenwick

Aotearoa EXPERIENCE LTD

locales

SALMOND REED ARCHITECTS

m.e consulting

architects pacific environments

pdp PATTLE DELAMORE PARTNERS LTD

EXECUTIVE SUMMARY

In order to stimulate business growth and economic development that improves social cohesion, economic and cultural outcomes for the Te Aroha community, a feasibility study has been commissioned to conceptualise and explore a range of visitor experiences associated with the development of the Te Aroha visitor precinct.

The client perceived the existing natural, historical and cultural assets of the Te Aroha Domain, and its surrounds, could be enhanced and developed into a spa resort. Well situated in the Auckland-Hamilton-Tauranga triangle, Te Aroha may leverage and capture some of the emerging tourism business. A consortium led by Visitor Solutions was appointed to undertake a feasibility study to assess these and other tourism opportunities within Te Aroha.

The feasibility study concluded:

1. A significant number of tourism opportunities exist in Te Aroha and that many of them have widespread support from sectors of the community, including Mana Whenua.
2. Based on available data the best catalyst opportunity is the development of a new spa facility which operates using the available geothermal resource.
3. The other significant opportunity is the redevelopment of the Te Aroha Domain with initiatives such as a destination playground, interpretation and new croquet lawn in addition to a range of potential private sector initiatives.
4. Improving the Te Aroha main street will also be an important initiative to lift both local pride and improve visitor perceptions of the town.
5. The initiatives will create an environment that fosters private business opportunities. There are several individuals and entities that have expressed a desire to develop a range of new businesses on the back of the catalyst opportunities, especially the proposed spa.
6. A series of spa options have been developed that take into consideration risk mitigation. These options are:
    - Option A: A new spa development utilising 63m^2 of geothermal pool surface water in total (Gross Floor Area, GFA of 1,161 m^2) = $13.4 million
    - Option B: A new spa development utilising 125m^2 of geothermal pool surface water in total (GFA of 1,378 m^2) = $15.7 million
    - Option C: A new spa development utilising 125m^2 of geothermal pool surface water in total via the use of heat pumps (GFA of 1,378 m^2) = $16.2 million
7. Based on the estimated volumes, pricing, costs and capital costs the redevelopment of the spa and pools in Te Aroha are considered financially viable.
8. As a largely fixed cost operation, the financial viability is sensitive to changes in volume and price.
9. Overall, the proposed development (Option B) is likely to deliver positive benefits, even if the anticipated growth does not materialise, or if the project costs are exceeded.
10. Assistance from the Provincial Growth Fund will be sought for 50% of the cost of development of the Spa ($7.2 million to $8.5m) and other significant Domain opportunities including interpretation ($4.5 million)

Based on the available data the study recommended that:

1. The project should advance to the next stages of evaluation in a business case process (this should include detailed examination of the financial and commercial case).
2. The project's governance group and Council should continue Mana Whenua and community engagement as part of the business case process.
3. The findings from the feasibility study should be shared with Councillors and MBIE in separate confidential meetings.

CONTENTS

1.0 INTRODUCTION

1.1 REPORT OBJECTIVES

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The client perceived the existing natural, historical and cultural assets of the Te Aroha Domain, and its surrounds, could be enhanced and developed into a spa resort. Well situated in the Auckland-Hamilton-Tauranga triangle, Te Aroha may leverage and capture some of the emerging tourism business. A consortium led by Visitor Solutions was appointed to undertake a feasibility study to assess these and other tourism opportunities within Te Aroha.

1.2 OBJECTIVES

As the project is funded as part of the Provincial Growth Fund (PGF), the shared goal of the Matamata Piako District Council (MPDC) and Crown is to accelerate regional development, increase regional productivity, and contribute to additional better-paying jobs. The project should help achieve the PGF's objectives of:

- Creating jobs, leading to sustainable economic growth;
- Increasing social inclusion and participation;
- Enabling Maori to realise their aspirations in all aspects of the economy;
- Encouraging environmental sustainability and helping New Zealand meet climate change commitments alongside use of land, water and other resources;
- Improving resilience, particularly of critical infrastructure, and by diversifying our economy.

1.3 METHODOLOGY

A holistic approach to collating and analysing data and information was undertaken using a range of processes and sources including the following:

SECONDARY DATA RESEARCH AND ANALYSIS

This research and analysis component of the study looked at the following key areas.

- Tourism data;
- Traffic movement data;
- Published and unpublished reports and plans.

PRIMARY DATA COLLECTION - COMMUNITY ENGAGEMENT

- Mana Whenua workshops / meetings;
- The Te Aroha Tourism Opportunities Survey (web based);
- Open online comments (on Council webpage and Facebook page);
- Community and stakeholder workshops;
- Community drop-in discussions.

SITE ANALYSIS

- Site walks and assessments;
- Asset condition assessments.

DEVELOPMENT CONCEPT ANALYSIS

- Existing and new ideas explored, considering historical and cultural themes;
- Identifying 'value adds' or 'points of difference' to other centres;
- Options assessment framework;
- Preferred investment option explored;

- Market assessment;
- Architectural and landscape framework plans;
- Engineering assessment.

FINANCIAL MODELLING AND ANALYSIS

- Indicative capital costs;
- Indicative operational costs;
- Financial profit and loss and cash flow modelling;
- High-level sensitivity analysis;
- Economic benefit analysis;
- Risk and mitigation assessment.

2.0 CONTEXT

2.1 LOCATION

Te Aroha is located very strategically and centrally within an area of the upper North Island sometimes termed 'The Golden Triangle' - named as such for its growing concentration of domestic population, visitor arrivals and transport/commerce connections (Figure 2.1).

Figure 2.1: The 'Golden Triangle' Area

This area incorporates New Zealand's predominant domestic population concentration[1], and is defined by Auckland, Hamilton and Tauranga. It effectively incorporates the combined populations of the Auckland, Waikato and Bay of Plenty Regions, representing around 2.5 million residents all within under a 2-hour drive of Te Aroha.

Te Aroha is located around 130km (1.5 hours drive) from New Zealand's main tourism entry point of Auckland Airport. Over the year ending June 2019[2], Auckland Airport received around 1.31 million people making holiday/vacation visits to New Zealand. In addition, Auckland received around 211,000 cruise ship passenger arrivals in the year ending June 2018, while Tauranga received around 152,000[3].

Combined, these domestic residents and international visitors represent the largest potential visitor catchment available within 2 hours drive. Additionally, Te Aroha's location has numerous strategic features:

- It is located on State Highway 26 which joins Hamilton to the Coromandel Peninsula (also via Morrinsville and Paeroa).
- On State Highway 26, Te Aroha is located only 20km (17 minutes drive) south of the State Highway 2 turnoff at Paeroa, with State Highway 2 linking Auckland to Tauranga/Bay of Plenty.
- On State Highway 26 Te Aroha is located only 55km (50 minutes drive) east of the State Highway 1 turnoff at Hamilton, with State Highway 1 linking Auckland to Hamilton/Waikato and the rest of the North Island (this is also the closest current connection to rail services).
- Te Aroha is also located only 14km (12 minutes drive) east of Tatanui where State Highway 26 crosses State Highway 27, which provides a second Auckland to Tauranga/Bay of Plenty link option (via Matamata).
- Te Aroha is also located:
  - at the western gateway to Kaimai-Mamaku Forest Park (via tracks at Mt Te Aroha, Wairongomai etc).
  - centrally along the Waihou River which has been variously navigable from the Firth of Thames to Te Aroha and beyond for various craft at various times (subject to channel conditions).
  - centrally along the Hauraki Rail Trail from Kaiua/Miranda south to Matamata

[1] Combined population of around 2.5 million in 2018 (Statistics NZ Population Estimates)

[2] Statistics New Zealand, International Travel and Migration: Visitor arrivals by country of residence, purpose and NZ port (Annual-Jun)

[3] Statistics New Zealand, Cruise Ship traveller and expenditure statistics: YE 2018. Note, many may have been counted as visitors at both Ports.

- 28km (20 minutes drive) south of the Karangahake Gorge and its attractions/gateways to Kaimai-Mamaku Forest Park.
- 50km south of both the Kopu/Thames and Waihi gateways to the Coromandel Peninsula.
- 37km (30 minutes drive) north of the growing tourism hub in Matamata (with its core Hobbiton attraction).

2.2 MANA WHENUA HISTORY

"Ngati Rahiri Tumutumu have occupied Te Aroha since ancient times and held the mana over mountain, hot springs and surrounding whenua. The mountain and hot springs are sacred to the tribe, a taonga.

Ngati Rahiri Tumutumu consider Mount Te Aroha to be wahi tapu associated with their ancestors, particularly Te Ruinga. A maunga tapu is a spiritual halfway station between this world and the next. In traditional stories, patupaiarehe inhabit its misty peaks embodying and intensifying the tapu nature of the mountain. The hot springs at the base of the mountain flow out of its heart, right underneath Te Ruinga's later pa site at Whakapipi.

Maori tradition ascribes the hot springs to the taniwha, Ureia, who left the O-kiroire hot springs to gouge out the channel of the Waihou River. He is said to have taken several gourds of hot water from O-koroire to leave at various points, including O-kauia springs and Te Aroha which lie along the Hauraki fault line.

Ngati Rahiri Tumutumu have always used the waters – the cold water for drinking and the hot water for bathing and healing. For centuries, battle wounded Maori often repaired themselves in Te Aroha by bathing in the springs. During the Waikato Wars, many wounded warriors were brought to the waters for healing and recuperation. Maori were also reported to have been brought from miles around by sleigh to receive the benefits of the healing waters. Ngati Tumutumu chief, Te Mokena Hou, hosted the Maori King, Te Whaio, on numerous occasions in the 1880s. Te Whaio bathed in the pools to relieve his rheumatism. Old warriors also used the waters to soak in to relive symptoms of rheumatism and old age. Diseases of the eye were treated by the colder springs.

Maori built clay walls to create bathing pools and dammed the water flow with rocks to regulate the temperature by controlling the flow of hot and cold water into the pools. Maori would also contain the water by using raupu.

Following three fiercely contested cases in the land court, the Crown acquired the Aroha block in 1878. Various reserves were granted back to the tribe in the block including the Omahu Reserve which was originally to include the hot springs. Just before the vesting, 20 acres around the hot springs were excluded from the reserve. Crown control of the hot springs was asserted through the Aroha block purchase and a number of pieces of subsequent legislation. Tribe members either hold the view that the hot springs were confiscated, or the hot springs were gifted by the chief Te Mokena Hou on the condition that Maori were to continue to have free unencumbered access to their waters (the latter being supported by documentary evidence). The perception of Te Mokena Hou of a joint partnership in the joint management of the hot springs was ignored by the Crown as it progressively sought to remove Maori from management and access to their taonga. The Waitangi Tribunal found that the Crown had failed to protect the traditional values and kaitiakitanga of Ngati Rahiri Tumutumu in Te Aroha mountain and hot springs and the management of these places.

Ngati Rahiri Tumutumu today still hold the mountain and hot springs sacred. The current structures and containment of the Mokena geyser have destroyed the wairua of the waters. Ngati Rahiri Tumutumu have been excluded from access and management of the waters, as promised by the Crown back in 1878 and yearn to have this remedied and the wairua of the waters restored".

Text kindly provided by Ngāti Rahiri Tumutumu (September 2019).

2.3 SPA HISTORY

This section summarises the history of Te Aroha with respect to its development as a spa destination[4].

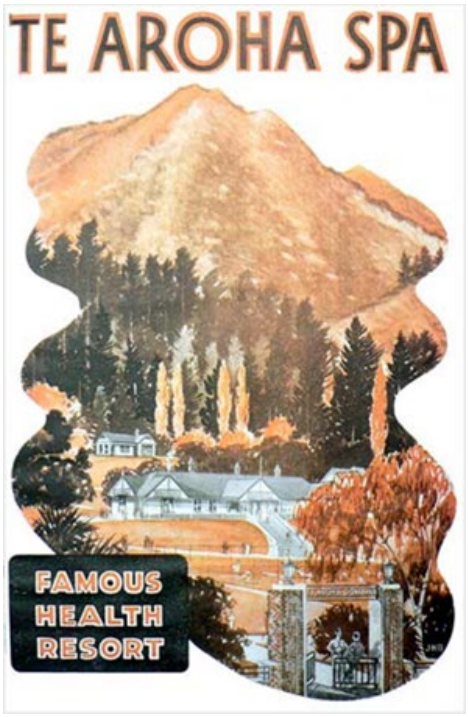
Mana Whenua have been aware of the Te Aroha hot springs and making use of the waters for hundreds of years before European arrival (See section 2.2).

European visitor use of the hot springs began to build after the opening of the Thames Goldfield in 1867, with many residents of the ensuing 'boomtown' of Thames travelling up the Waihou River for recreational activities, including regular excursions visiting the hot springs at Te Aroha. The possibility of a 'sanatorium' being developed at Te Aroha was raised as early as the 1870s.

A decade later, the discovery of gold at Te Aroha (1880) and nearby Wairongomai (1881) led to Te Aroha's own time as a 'boomtown'. While this was only a short-lived period it contributed to improved access to Te Aroha and improved infrastructure within it. In 1880 regular boat services commenced up the Waihou River between Thames and Te Aroha and a coach service established from Hamilton. Following Te Aroha land purchases in 1878, the springs area was designated the 'Te Aroha Hot Springs Reserve' in 1882 under the Public Domains Act. The construction of the first permanent Bath Houses began in 1883. In 1885 the initial landscape development began including manicured lawns, provision for lawn tennis and racket courts, and tree planting. Further springs were being opened and the paths were beginning to be constructed linking the new features.

By this time Te Aroha was becoming increasingly well known as a tourist spa destination. The railway from Hamilton to Te Aroha was completed in 1886, opening a direct link from Auckland and greatly increasing Te Aroha's accessibility and popularity for visitors. This was enhanced by the opening of the Thames to Te Aroha railway link in 1889, increasing local accessibility, and creating an option to boat from Auckland to Thames and then taking the railway. With these enhanced accessibilities the town of Te Aroha developed rapidly with visits to the hot pools progressively taking over from mining as the main driver. There was accommodation for up to 500 visitors and in the year ended March 1887, 28,553 baths were taken at Te Aroha, compared with only 4,878 in Rotorua over the same period. By the 1890s Te Aroha had become the most popular Spa in the country (although Rotorua soon took over following its connection to the rail network in 1894).

Figure 2.1: An early tourism promotional poster



Source: Te Ara – Encyclopaedia of New Zealand https://teara.govt.nz/en/ephemera/27336/spa-advertisement

4 A more general and comprehensive summary of the town's history and development from pre-European times to the present can be found on the Matamata-Piako District Council website https://www.mpdc.govt.nz/about-te-aroha/te-aroha-history

In Te Aroha Domain itself the Cadman Bath House and a new band rotunda were opened in 1898. By the turn of the century 22 springs had been discovered. And by 1910 many new facilities were established including new and well-used bowling greens, croquet lawns, tennis courts (grass and asphalt), baths and bath houses, massage rooms, a tea kiosk, and staff facilities.

Visits had initially been driven by the attraction of the reputed 'curative' properties of the hot spring waters, which were a very strong driver of tourism in the late 19th and early 20th century:

> "OWING to the rapid advancement of Te Aroha, which has now attained a place in the front rank among the health resorts of Australasia, and the frequent appeals made upon the Domain Board for reliable information re the mineral baths and their curative properties, it has been decided to issue this small treatise, so that persons throughout the various Australian colonies and even in places beyond may be made more fully acquainted with Te Aroha and its surroundings, the advantages it offers as a health resort, and the accommodation it provides for invalids and tourists. During the last few years Te Aroha Sanatorium has become famous, owing to the many permanent cures which have been effected by the use of its life-giving waters. Such diseases as, Chronic Rheumatism, Lumbago, Sciatica, Derangements of the Liver and Kidneys, and other kindred complaints, have been proved to quickly yield to the health reviving virtues of the Thermal Springs. This fact is borne out by the testimony of hundreds of invalids who have visited the baths, and after a brief sojourn have returned to their homes restored to perfect health. We commend the claims of Te Aroha to all who need the stimulating influences to be obtained by the use of its waters.
>
> CHARLES F. SPOONER, Editor, Te Aroha News. Te Aroha, New Zealand, October, 1895".
>
> AND:
>
> "TESTIMONIALS AS TO THE VALUE OF THE BATHS.
>
> (Selected from among hundreds of others.)
>
> J. P. Hickey, Whitford, writes:—"Derived great benefit from Nos. 2 and 3 Baths, before I left I jumped 4ft. 3in. long jump. Could not jump 6in when I came here."
>
> E. J. Care, Auckland, writes:—"Cured of rheumatism and indigestion in 4 weeks at Te Aroha. I was 3 weeks at Rotorua, but received no benefit."
>
> A. H. Nelson, M.L.C., Queensland. March, 1891.—"Enjoyed a week at these Baths. Found great benefit to liver and kidneys; especially for the drinking of the water in the Kiosk."
>
> A. M. Donald, Auckland.—"Very severe case of acute rheumatism could not walk without crutches, and legs much swollen. Complete cure in three weeks by use of No. 2 Bath."
>
> I. Hunter, Melbourne.—"Came to Te Aroha broken in health and spirits, and am leaving well and happy."
>
> P. F. Bruen, M.D., Westport.—"Arrived at Te Aroha in a very feeble state; general debility and muscular rheumatism of the worst type. I leave vary greatly improved in every respect."
>
> Rev. Jas. Cameron, Sydney.—"I have now been one month at Te Aroha. I have bathed morning and evening, and drunk three or four jugs of water daily. During the first week a long-standing cough and pain in the chest, both the result of an attack of pleurisy, entirely left me. Before coming here my stomach and liver were much deranged, digestion bad, and appetite very poor. I now eat largely, regularly, and with relish, and am now fully recovered from all my ailments."
>
> Malcolm M. Irving, Newcastle, N.S.W.—"These baths are as good as any of a similar chemical nature in Europe, and only require to bo known to become frequented by residents in Australia and travellers from Europe. The hotels are superior in every way to any in N.S.W., and charges very moderate."
>
> Source: Wright 1877.' Te Aroha New Zealand: A guide for tourists and invalids to the thermal springs and baths'

Over time visits became increasingly driven by recreational experience opportunities as well as expectations of therapeutic outcomes. The Domain became a popular picnic spot and school parties regularly came on special excursion trains. Apart from the hot springs and the recreation opportunities associated with the Domain itself, these visitors also enjoyed visits to the mines, walks on Mount Te Aroha and along the river, and river trips. Te Aroha became an especially popular destination for day-trippers on public holidays. It was reported that on New Year's Day 1912, 7,000 visitors arrived in Te Aroha for the day. Many of such visitors arrived on special excursion trains from Auckland, which took five hours each way.

From their heyday in the early 20th Century there ensued a gradual decline. This resulted in part initially from the rise of Rotorua as the pre-eminent spa destination, a loss of rail and river access options, and then increasingly from a general decline in the attraction of the 'health-spa' destination concept overall. People still continued to use the baths, but with emphasis on more casual recreational enjoyment than the more formal health-driven 'taking of the waters'. Most facilities had closed or were re-purposed by the mid-20th century, although basic maintenance of the Domain and retention of its facilities continued.

In signs of turning the corner in more recent years there appear to have been some reconsolidation of experiences in the Domain. 'Te Aroha Mineral Spas' was opened in 1980, providing modern spa pools using the thermal soda water. 'Swim Zone Te Aroha' was opened in 1990, providing a new outdoor swimming and soaking pool. In 1997 the historic

No.2 Bath House was restored as a heritage bathing pool, the No.7 Bath House refurbished, a new Foot Pool established, and historic lakelets re-established. Development of tracks for walking and mountain biking starting from the Domain has also added new activities and visitors. Overall the focus appears to have now shifted to as much a historic heritage theme as a hot springs theme. Compared to other thermal water attractions in New Zealand, the living historic heritage component now appears to represent a particularly unique feature of the Te Aroha Hot Springs attraction.

2.4 DEMOGRAPHICS

This section addresses the population numbers and trends among potential domestic visitor catchments at different levels, as well as also considering age and ethnicity demographics.

Introduction

The catchment populations for visitor attractions, facilities, services and businesses in Te Aroha are viewed here at three levels:

1. The immediate **'Te Aroha'** area - local user catchment area within around 5km of Te Aroha. It is represented by the 'Te Aroha' Statistics New Zealand Census Area Unit (534800).
2. The **'Matamata-Piako' District** - beyond this local town catchment is the larger population of the Matamata-Piako District Council area.
3. The '**Golden Triangle Regions**' (combining Waikato, Auckland and Bay of Plenty Regions) - provides the larger population catchment for potential domestic visitors.

Information on changes in population numbers and the compositions of age-groups and ethnicities are presented on the next page. The main summary points are summarised below:

Summary points:

- largely static local population numbers, but strongly growing wider growth across the Golden Triangle Regions, and significantly in Auckland.
- an older local age-profile.
- age-group projections feature reducing numbers of all age-groups apart from those aged 65+ (who were projected to increase). This pattern was weaker across the Golden Triangle Region's, and least apparent for Auckland.
- very high proportions of Europeans in local Te Aroha/Matamata-Piako populations, but higher proportions and larger numbers across the Golden Triangle Regions (particularly in Auckland).
- projections of strongly increasing Non-European ethnicities generally, although this only represents large new population numbers in the Golden Triangle Regions (and particularly Auckland).
- lower proportions of overseas born people more locally than for the 'Golden Triangle' Regions overall, and Auckland in particular.

Any new developments which are dependent on future growth for their sustainability will have to either capture an increasing market share among local and District populations, or more effectively capture new market opportunities in the Golden Triangle Regions (particularly Auckland) and/or overseas visitors.

Overall population numbers and trends

Table 2.1 presents the populations of the respective catchment areas at the most recent 2013 Census. It also includes data from previous censuses to illustrate recent population trends. This shows that while there has only been slight growth in local and District populations over the last 10-15 years, the wider Golden Triangle Regions have grown substantially (led strongly by Auckland).

Table 2.1: Current population and recent trends (2001-2013)

	2001	2006	2013	Change 2001-2013	% change
Te Aroha	3,684	3,771	3,906	222	6
Matamata-Piako	29,469	30,480	31,536	2,067	7
Golden Triangle' Regions	1,756,032	1,943,163	2,086,932	330,900	19
Auckland Region	*1,160,271*	*1,304,961*	*1,415,550*	*255,279*	*22*
Waikato Region	*356,346*	*380,823*	*403,638*	*47,292*	*13*
Bay of Plenty Region	*239,415*	*257,379*	*267,744*	*28,329*	*12*

Source: Statistics NZ Census 2013

Looking forward over the next 25 years, Table 2.2 projects relatively similar rates of growth, with significant growth continuing across the Golden Triangle Regions, again led strongly by Auckland. Local population growth is projected to remain stable given current trends.

Table 2.2: Projected population and future trends (2018-2043)

	2018	2043	Change 2018-2043	% change
Te Aroha	4,240	4,360	120	3
Matamata-Piako	35,000	37,000	2,000	6
Golden Triangle' Regions	2,470,600	3,241,400	770,800	31
Auckland Region	*1,699,900*	*2,326,200*	*626,300*	*37*
Waikato Region	*467,200*	*562,100*	*94,900*	*20*
Bay of Plenty Region	*303,500*	*353,100*	*49,600*	*16*

Source: Statistics NZ Census 2013

Added to overall population growth will be changes in population composition, most significantly around age-group and ethnic-group proportions. Some key population characteristics and trends in these features are summarised below.

Age Characteristics and Projections

Figure 2.1 and Table 2.3 show that compared with the wider 'Golden Triangle' Regions, Te Aroha's population age-group distribution was notably 'older'. Te Aroha had significantly higher proportions of older adults (60+years), and notably lower proportions of younger adults (20-39years). The effect was also apparent for the Matamata-Piako population, although to a lesser extent. This was reflected in the respective median ages of 47 for Te Aroha, 41 for Matamata-Piako and 38 for the 'Golden Triangle' Regions overall.

Figure 2.1: Age-group distribution

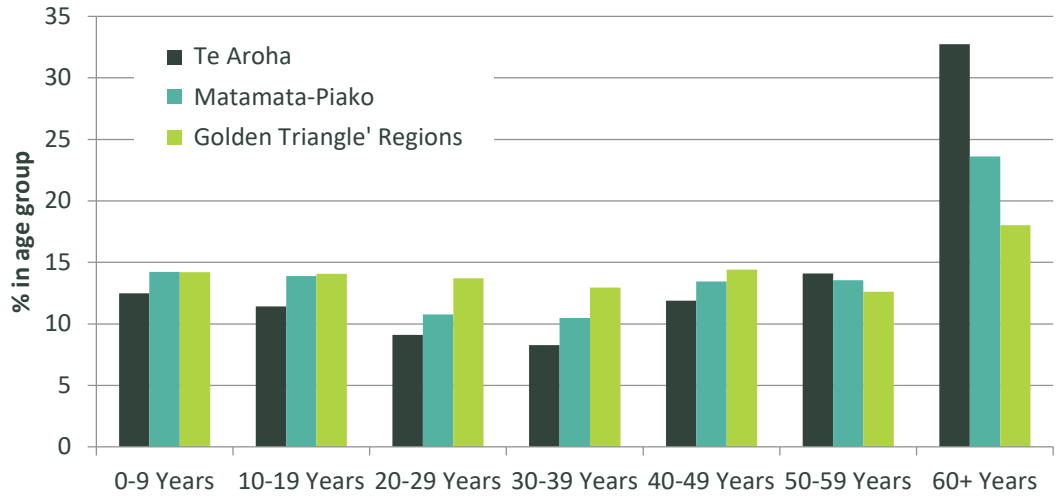


Table 2.3: Age group distribution

	0-9 Years	10-19 Years	20-29 Years	30-39 Years	40-49 Years	50-59 Years	60+ Years	Total	Median Age
Te Aroha	489	447	357	324	465	552	1,281	3,915	47
Matamata-Piako	4,485	4,383	3,399	3,306	4,239	4,275	7,446	31,533	41
'Golden Triangle' Regions	296,481	293,862	286,047	270,240	300,741	263,442	376,116	2,086,929	38

Source: Statistics NZ Census 2013

Looking forward over the next 25 years, Table 2.4 and Figures 2.2 and 2.3 show that a general pattern of an aging domestic population is projected for all catchments. Across all catchments, the oldest age groups (60+yrs) were projected to increase markedly, with actual numeric population decline in the younger age groups. The exception was in the Golden Triangle Regions where no age-group numbers decreased (reflecting a strong Auckland profile of growing younger age-groups). In Te Aroha the already older age profile was projected to age most strongly, with the proportion of those aged 65+ increasing from 26% of the population in 2018 to 35% by 2043. Corresponding figures for Matamata-Piako reflect a projected increase from 19% to 30%, and in the Golden Triangle Region's from 14% to 21% (although less so in Auckland).

Table 2.4: Age-group projections 2018-2043

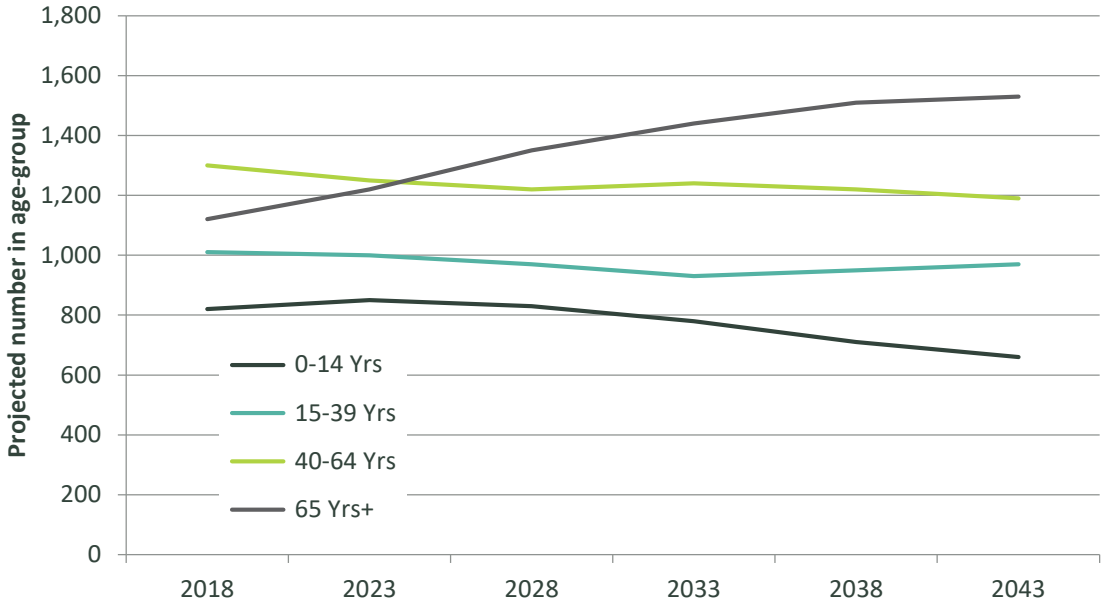
Te Aroha	2018	2043	Change 2018-2043	% change
0-14 Yrs	820	660	-160	-20
15-39 Yrs	1,010	970	-40	-4
40-64 Yrs	1,300	1,190	-110	-8
65 Yrs+	1,120	1,530	410	37
Total	**4,250**	**4,350**	**100**	**3**

Matamata-Piako	2018	2043	Change 2018-2043	% change
0-14 Yrs	7,300	6,300	-1,000	-14
15-39 Yrs	10,200	9,200	-1,000	-10
40-64 Yrs	10,700	10,500	-200	-2
65 Yrs+	6,700	11,000	4,300	64
Total	**34,900**	**37,000**	**2,100**	**6**

Golden Triangle Regions	2018	2043	Change 2018-2043	% change
0-14 Yrs	483,500	532,600	49,100	10
15-39 Yrs	908,600	1,008,300	99,700	11
40-64 Yrs	739,800	1,034,100	294,300	40
65 Yrs+	338,600	666,400	327,800	97
Total	**2,470,500**	**3,241,400**	**770,900**	**31**

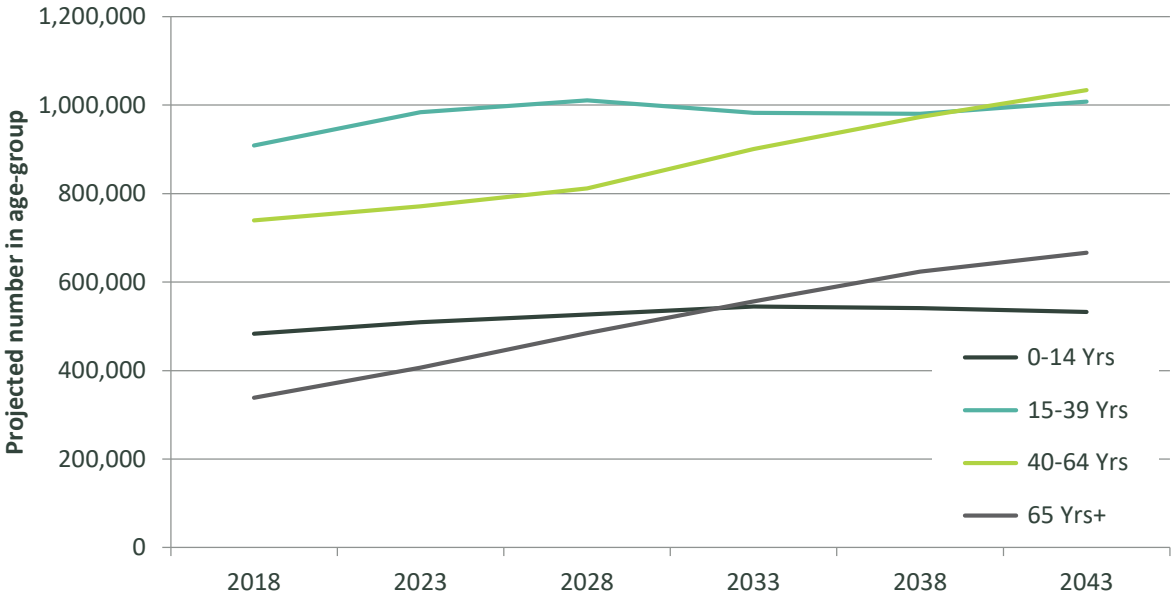
Source: Statistics NZ Population Projections (2018 base)

Figure 2.2: Projected age-groups (2018-2043) – Te Aroha



Source: Statistics NZ Population Projections (2018 base)

Figure 2.3: Projected age-groups (2018-2043) – Golden Triangle Regions



Source: Statistics NZ Population Projections (2018 base)

These figures show that in the future any provision of new developments, services or opportunities will experience an environment of only slight local population growth, but strong wider Regional population growth (particularly in Auckland). Accompanying this will be increasing proportions of older people represented in those populations.

Ethnic Characteristics and Projections

Figure 2.4 and Table 2.5 show that the first characteristic feature of the Te Aroha and Matamata-Piako populations is their higher proportions of Europeans (around 85%), compared with the 'Golden Triangle' Regions (65%). Second is their lower proportions of Asian and Pacific residents compared with the 'Golden Triangle' Regions (18% Asian and 11% Pacific).

Figure 2.4: Ethnic Composition of Catchment Populations (including %'s)

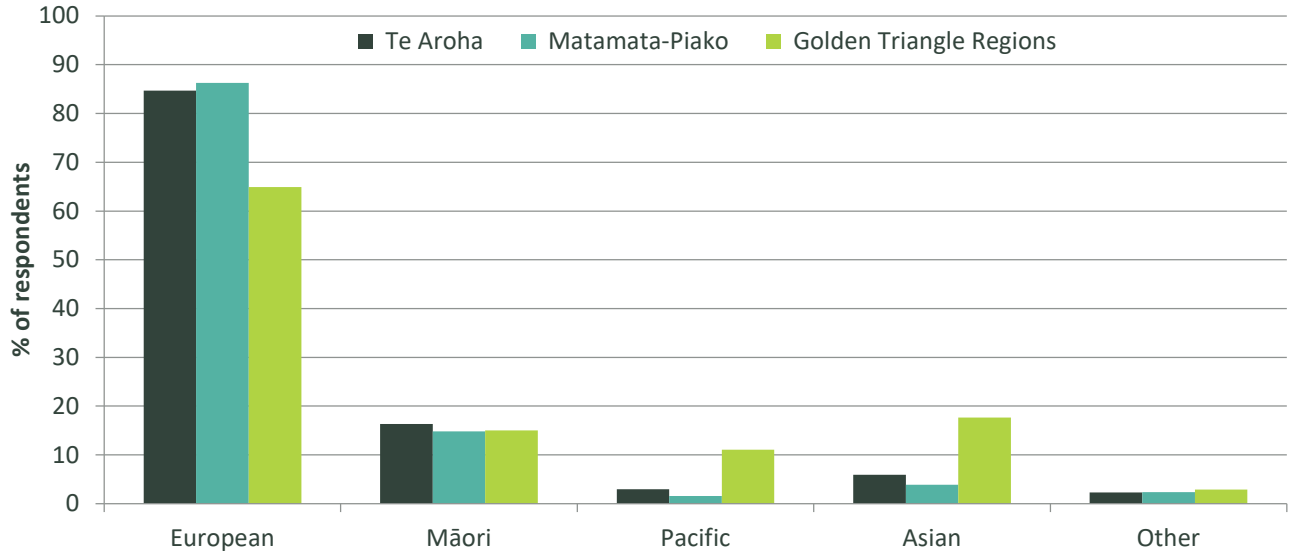


Table 2.5: Ethnic Composition of the Catchment Populations

	European	Māori	Pacific	Asian	Other	Total
Te Aroha	3,198	618	111	225	87	3,777
Matamata-Piako	26,145	4,491	477	1,185	714	30,312
Golden Triangle Regions	1,275,003	295,452	217,386	346,575	56,478	1,964,547

Source: Statistics NZ Census 2013

Looking forward in Tables 2.6 and 2.7, ethnic population composition is projected to diversify. The effect of this growth in Matamata-Piako will only be slight given the low base numbers currently identifying with the non-European ethnicities. The relative proportions of groups are projected to barely change. By contrast, the larger scale growth of ethnic diversity across the Golden Triangle Regions is much more significant, particularly in Auckland. Across these regions, while base numbers increase, the proportion identifying as Europeans decreases from 62% (2018) to 54% (2038). While the proportion identifying as Asian increases from 22% (2018) to 29% (2038).

Table 2.6: Projected ethnic group proportions (2018-2038) – Matamata-Piako

	2018	2023	2028	2033	2038	Change 2018-38	% change
European	29,600	30,000	30,300	30,400	30,300	700	2
Maori	5,790	6,390	7,030	7,730	8,510	2,720	47
Pacific	730	870	1,020	1,180	1,360	630	86
Asian	2,250	2,630	3,000	3,370	3,720	1,470	65
Total	**35,000**	**35,900**	**36,500**	**36,900**	**37,100**	**2,100**	**6**

Source: Statistics NZ Projections by ethnicity, 2013

Table 2.7: Projected ethnic group proportions (2018-2038) – Golden Triangle Regions

	2018	2023	2028	2033	2038	Change 2018-38	% change
European	1,525,600	1,585,700	1,629,500	1,666,200	1,693,500	167,900	11
Maori	380,100	413,400	446,700	482,000	519,700	139,600	37
Pacific	285,100	318,050	352,250	388,250	425,050	139,950	49
Asian	545,300	656,700	747,800	834,400	916,800	371,500	68
Total	**2,470,600**	**2,671,200**	**2,834,500**	**2,984,400**	**3,118,100**	**647,500**	**26**

Source: Statistics NZ Projections by ethnicity, 2013

The low diversity of ethnicities in the local Te Aroha and Matamata-Piako areas is reflected further by the proportion of residents born overseas. These proportions were only 17% and 13% respectively. Both were notably lower than the corresponding figure for the 'Golden Triangle' Regions (32%), with most of this reflecting the Auckland Region (39%).

3.0 COMMUNITY PERSPECTIVES

3.1 INTRODUCTION

Mana Whenua and wider community perspectives on tourism and recreation development opportunities at Te Aroha Domain and in Te Aroha generally were sought through five main approaches.

- Mana Whenua workshops / meetings,
- The Te Aroha Tourism Opportunities Survey (web based),
- Open online comments (on Council webpage and Facebook page),
- Community and stakeholder workshops,
- Community drop-in discussions.

The following section provides a high-level summary of findings from the engagement process. Some participants raised certain opportunities "in confidence". This confidentiality has been maintained. However, in the event other participants in the engagement process raised the same opportunities (in an open forum) the opportunities have been summarised and may appear in the report. Confidential information has not been shared between entities or individuals. Detailed confidential information about Mana Whenua and private sector initiatives or opportunities has not been included but was taken into consideration by the consultants.

3.2 MANA WHENUA PERSPECTIVES

Mana Whenua engagement was led by Ngāti Rahiri Tumutumu representatives. This engagement has proven informative to the consultant team in development of the feasibility study. Ngāti Rahiri Tumutumu have expressed a strong desire to keep the process of engagement progressing and expanding over the project's future work stages. The wider Mana Whenua Forum has also expressed this desire.

Ngāti Rahiri Tumutumu representatives and members who participated in workshops and meetings all saw the project as a much-needed way of revitalising Te Aroha for the benefit of the entire community. There was a strong desire to have a "place that is thriving". The project was also seen as a potential catalyst to bringing their community together. All those spoken with wanted to be active participants in the project and its outcomes.

People talked about the importance of building on what Te Aroha has and protecting what makes the whenua special, such as the maunga, geothermal springs and the Waihou river. There was also a strong desire to tell Ngāti Rahiri Tumutumu stories, which were perceived to be underrepresented currently. These stories should be offered to the community in time after careful consideration and discussion.

The opportunities identified during the engagement process were wide and varied. Some were considered to have potential commercial objectives while others were discussed to build value and strength in the community. Ideas included:

- Developing a new spa and leveraging off visitors with a series of Mana Whenua lead or partnered projects (such as walking tours, traditional "Hau oranga" - wellness experiences, cultural experiences and commercial support services),
- A desire to share stories and have a higher visibility. For example, stronger connection to Mōkena Hau and the story that he 'gifted' the Domain land to the Government,
- A desire to see tours integrated with the Marae (as was historically the case with tours that took visitors up the maunga after having first visited the Marae),
- Opportunities that used the Waihou river (such as waka tours or wider tour boat links from Thames),
- Optimised walking and cycling tracks and integration with the excellent Cycle trail (with the Domain as the hub),
- Spaces for families such as a themed destination playground - Māra Hūpara that is an attractor. This enables tamariki Māori to see themselves reflected in their stories and have pride in who they are
- Commercial leisure opportunities,
- Reinstating the Māori ngāwhā (spa),

3.3 COMMUNITY PERSPECTIVES

SURVEY SUMMARY

An open-access web-based survey was provided via Council channels and media to the whole Te Aroha Community. The link was also published on non-Council community noticeboards, newsletters and webpages. In total 168 full responses were received, and summary findings from the 3 open-ended questions are presented below.[5] (also see the summary tables in Appendix 1[6]).

- **Te Aroha Domain** - summary comment themes from the top 5 recreation and tourism opportunities:

    1. **Hot pools/Spa** opportunities (76%) - often linked to soaking related to use of tracks and/or the mountain for walking and biking.
    2. **Walking and biking track** opportunities (54%) - usually linked to the Mountain, with some also linking them to hot pool use.
    3. **Mountain attraction** opportunities (36%) - often linked to options for gondolas, luges, ziplines, walking/ biking tracks and networks.
    4. **Heritage building** opportunities (27%) - usually referring to upgrading them and/or repurposing them for more recreation and tourism focused uses, including some hot pool/spa uses and engaging in heritage recreation activities.
    5. **Other thermal attraction** opportunities (23%) - often featuring geyser enhancement and/or restoration of soda water experiences and product availability.

- **Wider Te Aroha Town** - summary comment themes from the top 5 recreation and tourism opportunities:

    1. **Walking and biking** track networking opportunities (42%) - often linked to the Mountain, with some also linking them to Rail Trail, Kaimai Range and river site uses.
    2. **Rail Trail networking** opportunities (33%) - often based on linking rail-trail and hot pools/spa experiences, with some suggesting packages.
    3. **Mountain attraction** opportunities (29%) - often linked to attraction options for gondolas, luges, zip-lines, walking/biking tracks and sometimes to hot pools/spa and river use options.
    4. **River use and networking** opportunities (24%) - including cruises, kayaking, and connecting different sites/activities (e.g. rail trail, town heritage experiences)
    5. **Spa precinct/resort** opportunities (23%) - hot pool/spa/soaking uses, sometimes linked to track opportunities and engaging with heritage precinct/activities.
    5. **Heritage precinct/site** opportunities (22%) - usually related to generally upgrading and featuring Icon/theme buildings and sites (e.g. the Domain)

- **Top 5 tourism development projects** - that would help boost Te Aroha

    1. **Hot pool/Spa** developments (53%) - usually referring to specific facility or service improvement/development, or greater thermal precinct development.
    2. **Mountain attraction** developments (51%) - often linked to options for gondolas, luges, ziplines, walking/ biking tracks and improved road accessibility.
    3. **Support structure / service** developments (44%) - a wide variety of general infrastructure / service improvements including accommodation capacity, info resources / services, transport options, parking, better maintenance etc.
    4. **Tracks / Networking** developments (35%) - track maintenance and new tracks, more connections to wider walking and biking networks (including Rail Trail, River, Kaimai Ranges), more biking options.
    6. **'Mainstreet' /Heritage precinct** developments (30%) - mostly related to tidying the mainstreet/central Te Aroha, with heritage restoration and precinct development as a sub-theme.

Overall the survey results indicated the interlinked nature of potential opportunities. Clustering opportunities were seen as essential. For example, the hot pool/spa development ideas were seen by many as being strategically aligned

5 Figures represent the cumulative response frequencies from the combined 5 responses allowed for (e.g. how many times each theme was cited in total).
6 Full survey comment responses are also available for more detailed investigation as required.

with other developments especially those associated with or around the Domain or Mount Te Aroha (built heritage, walking and biking tracks, wider rail trail and river use linkages, and mainstreet restoration).

FACEBOOK COMMENT SUMMARY

Notices about the project and related survey and workshop opportunities were submitted to several Facebook pages during August 2019. These included the Facebook pages of Matamata-Piako District Council and the Te Aroha Community Noticeboard. These notices were also shared further by individuals on their personal private Facebook pages. As well as generating awareness of the survey and workshops, many comments were also made on these notices about possible development ideas. Comments posted on the 'public' site were viewed and the main themes are summarised here as a complement to the main survey and workshop processes. From the 112 comments available for review, the top five 'meaningful' comment themes[7] (in descending order) were:

- Improving general town support infrastructure and its sustainability (e.g. shops, accommodation, information services, developing a vibrant/attractive 'Mainstreet' precinct),
- A general need for the development of Te Aroha,
- Developing more track options for walking and biking (including links to other networks e.g. Rail Trail, activities and hot pools/spa)
- Developing a renewed spa hub, including restored heritage baths and other geothermal features (Hanmer Springs was cited as a success example in several comments).
- Adopting heritage themes in building restoration, downtown development, attractive restorations or developments that pull people into Te Aroha.

Beyond the top five comment themes, the next two themes 6 and 7 were respectively for and against developments on Mt Te Aroha (e.g. gondola, ziplines, luges, road access) with comment numbers largely equal either way. Skyline Rotorua and Skyline Queenstown were cited as examples of gondola and adventure-based activity hub successes.

Collectively these various comment themes represent the scope and prevalence of the meaningful comments made.

COMMUNITY WORKSHOPS / DISCUSSIONS

The workshops undertaken at the Te Aroha Domain and community drop in discussions were well attended (circa 200 attendees). They largely identified the same opportunities and challenges identified in the survey process (summarised above). However, the workshops and discussions were invaluable on fleshing out opportunities in more detail. These more detailed data were used to inform the development of the feasibility study but have not been summarised again.

7 Many 'comments' were not meaningful in term of offering development ideas or opinions, so actual meaningful comment numbers were considerably fewer.

Community Workshop Image: Source Stuff.co.nz

Community Workshop Image: Source Stuff.co.nz

4.0 PROPOSED VISITOR EXPERIENCES

4.1 INTRODUCTION

Development initiatives / experiences for reinvigorating Te Aroha as a visitor destination have been raised, both in the past and through the engagement process undertaken for this report. The three main findings from our analysis are that:

1. There is no shortage of possible initiatives.
2. That most of these initiatives would benefit from other associated initiatives (that is they are unlikely to succeed fully in isolation).
3. Many initiatives are unlikely to be feasible at this time (or if they are it could take a long time to align the necessary partners to see development commence).

For these reasons it is necessary to sort all the proposed experiences and select one or two that are potential catalysts that would generate the necessary conditions for further growth. In doing this we need to be mindful of constraints and development considerations.

4.2 IDENTIFIED CONSTRAINTS / CONSIDERATIONS

The three main development constraints or considerations are:

1. The Te Aroha Domain's reserve status may constrain the level of external capital that can be attracted and how any commercial activity is structured.
2. The lack of upper mid-level plus accommodation (say four- and five-star) in Te Aroha will initially limit some visitors from staying overnight. There will likely be a lag as the accommodation market takes time to adjust and catch up should a higher-level catalyst attraction be established. This Is already occurring with the existing spa.
3. Existing tourist flows will take time to adjust. Most potential catalyst attractions will have niche markets and be dependant on the domestic market.

4.3 PROPOSED EXPERIENCES

Table 4.1 outlines in summary form the experiences that were proposed by the community for consideration. It also outlines the consultant teams' preliminary conclusions about how they should be treated within the current study.

Table 4.1: Proposed Experience Summary and Consultant Conclusion

Proposed Experiences	Summary Description - From Engagement Data	Preliminary Analysis	Consultant Conclusion
Gondola-based attraction	• The development of a Gondola to the top of Mount Te Aroha (often with reference to related descent options - see preliminary analysis). This proposal has been under consideration for many years and has historically undergone preliminary feasibility analysis. The gondola would need to travel over Council and DoC managed land and go through a thorough concession, resource consent and building consent process. Mana whenua would be extensively involved in these processes.	• Considered to have a low probability of advancing in the near to medium term without wide support from Mana whenua. • High capital costs increase the risk for developers / operators of generating a return on their investment. • Viability is likely to be dependent on other co-dependent and complementary 'mountain-based' activities being established (luge, mountain bike tracks, zip lines, parapenting, scenic walks, track network access etc). Some of these activities may be considered unacceptable on DoC land.	• Exclude from current analysis and allow proponents to further discussions with key parties (Mana whenua, DoC and Council).
Spa destination	• Expansion of the capacity provided by current spa facilities. Primarily Involving new high-end day-spa infrastructure and more general hot pool and thermal resource (e.g. geyser, soda water, soaking) experiences. Also endeavouring where possible to: 1. Incorporate and build on heritage themes infrastructure, 2. To recreate an overall 'spa-resort' type of destination based upon a park/ precinct concept for the Domain (refer to 'Build heritage brand' and 'Restore Mainstreet' below).	• Current day-spa capacity is insufficient to meet demand and limited options constrain the realisation of other hot pool/spa opportunities. • Viability of any day-spa development is likely given current excess demand, • Potential capture of new market is likely to be achieved by an expanded scale and variety of hot pools and spa offers, especially if any complementary passive and active activity offers in and around the Domain are created (e.g. sightseeing, walking and biking tracks, links to Rail Trail and River use options etc).	• Advance feasibility assessment as a core catalyst experience in this study.
Destination playground	• Workshops identified the opportunity of developing an enhanced special destination playground in the Domain. • Seen as an opportunity to tell "Te Aroha stories" through themed design. • Referred to as Pāpa Takaaro / Māra Hūpara / Te Aroha Destination Playground In workshops.	• This may provide a catalyst attraction for some families to visit the Domain (and its associated attractions). • Contributes to the creation of a 'family zone' on the south east side of the Domain. • Potentially good synergies with a café and the pool. • Would assist in adding critical mass to paid leisure experiences (potentially developed by others).	• Advance for inclusion in master plan framework. Consider benefits in Domain optimisation.
Track networks and hubs	• Consolidation of the Domain as the key gateway hub for current (and expanded) walking and biking trail and attraction networks around the lower levels of Mount Te Aroha and	• The domain by default already provides a localised hub for access to Mount Te Aroha and sites/networks beyond (e.g. into the Kaimai Ranges and nearby natural/ cultural/ historic heritage	• Build upon the 2008 MPDC Track Strategy to develop a more localised track network development

Proposed Experiences	Summary Description - From Engagement Data	Preliminary Analysis	Consultant Conclusion
	access to the summit and beyond. Connections to the rail trail, town mainstreet and the river would reinforce the network hub role for the Domain. Also enhanced by the potential attraction of the Domains thermal and heritage features.	sites). As such it is also a logical hub destination for enhanced walking/biking connections to experiences associated with heritage sites in the area, Te Aroha's mainstreet, the rail trail, the riverbank and any new waterway experiences.	strategy and workplan based on Te Aroha Domain as a hub (exploring options to access the slopes and summit of Mt Te Aroha, the Kaimai Ranges and other attraction areas in and around Te Aroha). • Advance for inclusion in master plan framework.
Build heritage / cultural brand	• Building on past initiatives (e.g. Project Te Aroha Townscape and Heritage Report 1992) update information and re-define key heritage infrastructure and themes as the unifying foundation for a 'strategic plan' for targeted facility development, re-purposing, restoration and overall town and attraction branding. Focus initially on the Domain and related spa option developments, along with a 'mainstreet' approach to Te Aroha's downtown and heritage themed components of other visitor experiences (see 'Restore the Mainstreet').	• The heritage context can be applied to a range of potential key visitor attractions / features (e.g. mountain, river, geothermal springs) represents a competitive advantage for Te Aroha. The town and especially the Domain has considerable retention of historic European heritage infrastructure and a strong latent brand as an 'Edwardian Spa' destination. Other thermal attraction areas lack this. • Opportunity to tell Mana Whenua stories / heritage which has been largely overlooked to date. The story starts well before Pakeha discovered the springs. Will require Ngati Rahiri Tumutumu taking a lead role.	• Advance for inclusion in master plan framework and interpretation work stream. • Should become core to the new spa brand and values.
Restore the Mainstreet	• Reinvigorate Te Aroha's mainstreet. • Many calls were made to this effect commonly associated with initiatives with general infrastructure improvements e.g. roading and parking. People also wanted action to address vacant shops / shop windows, restoration of heritage and better branding.	• Te Aroha's mainstreet requires reinvigoration to contribute to growing the overall attraction of the town as a destination, and to support the development of other specific attractions within it. Internationally and in New Zealand many towns have successfully applied 'Mainstreet programmes' to this effect. • The internationally proven MainStreet, Town Centre and Business Investment District Models are community revitalisation programmes that apply holistic partnership-based approaches to revitalise flagging shopping strips, pedestrian malls, and town centres.	• Include for consideration in the study. • Commit to application of a 'Mainstreet' model approach to Te Aroha, aligned with building a heritage brand and lifting the visual appeal.
Mana Whenua Stories	• Some community members and Mana Whenua questioned why Maori stories "were below the radar" now.	• Pre-European stories are currently lacking. This diminishes the richness of the stories visitors to Te Aroha receive. • It is up to Ngati Rahiri Tumutumu to share their stories in their own	• Include Mana Whenua stories as a key opportunity in this study.

Proposed Experiences	Summary Description - From Engagement Data	Preliminary Analysis	Consultant Conclusion
	• A need to expand and define the key cultural heritage themes and stories for Mana Whenua (when the holders of this information are ready to share).	time. It is important that this opportunity is offered to Ngati Rahiri Tumutumu.	
Better Accommodation	• A lack of higher quality accommodation was perceived as a limiting factor by some.	• An analysis of the accommodation market confirmed this perception.	• Develop a catalyst experience that can trigger additional commercial development / higher end BandB redevelopment.
Commercial leisure activities	• Workshop attendees and survey respondents perceived a need for additional commercial leisure activities. Some saw these as potentially part of a hub or cluster. Ideas included, zip lines, zip line coasters, ropes courses, luge, mini golf etc.	• Opportunities are best advanced by private developers supported by the benefits of catalyst initiatives.	• Advance for inclusion in master plan framework. Provide zone where activity could take place but enable private sector to advance (potentially in partnership with landowner).

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5.0 MARKET ANALYSIS

5.1 INTRODUCTION

This section brings together data and insights from several sources regarding the current and potential visitor market for Te Aroha as a spa destination. It addresses:

- potential market catchments and potential demand for Hot pools and Spa/Wellness destinations.
- the types of competing destinations nearby.
- current visitation features (and potential latent demand).
- wider traffic and visitor trends.

5.2 HOT POOLS AND SPA / WELLNESS MARKET

Results of work undertaken for the project by the consultants 'FreshInfo' focused specifically on the numbers of visitors recorded as coming to the three broad demand catchment areas:

- Overnight visitors recorded as coming to **Matamata-Piako District.**
- Overnight visitors recorded as coming to **sites/destinations/areas within 1 hours' drive time** from Te Aroha.
- Overnight visitors recorded as coming **to sites/destinations/areas within 2 hours' drive time** from Te Aroha (excluding visits made to Auckland).

These visitors were asked to indicate the types of sites and attractions they visited and what types of activities they preferred. Those visitors who had expressed interest in Hot pool activities and/or some Health Spa/Day Spa/Wellness activities (across the three catchment areas) were defined as ***'potential customers'*** for any such attractions at Te Aroha. Results for the 2018 year are summarised below (also see Appendix 2 'FreshInfo'):

POTENTIAL CUSTOMERS - HOT POOL DESTINATIONS

Domestic

- Around 32,000 (16%) of the annual domestic overnight visitors to the Matamata-Piako District were 'potential customers' of hot pools[8].
- This increased to 239,000 for visitors within a 1-hour drive time (13%), and 2.1 million when it is expanded to a two-hour drive time (30% - reflecting inclusion of the pre-eminent geothermal destination of Rotorua).
- The number of domestic potential customers for hot pools is expected to increase by 8-10% within all three catchments by 2025.
- Demographic features of these domestic potential customers included the following:
  - Auckland was the major source market.
  - Around half of the domestic potential customers were aged 15-34 years, with 35-54 years olds a prominent secondary age-group. Those aged 55+ were notable among Matamata-Piako District visitors.
  - The gender balance was relatively even.

International

- Around 21,000 (52%) of the annual international overnight visitors to the Matamata-Piako District were 'potential customers' of hot pools.
- This increased to 168,000 for visitors within a 1-hour drive time (41%), and 672,000 when it is expanded to a two-hour drive time (48% - again reflecting the impact of Rotorua).
- The number of international potential customers for hot pools is expected to increase by around 30% within all three catchments by 2025.
- Demographic features of these international potential customers included the following:
  - Australians were the largest potential market for hot pools followed by China, USA, UK and Germany
  - Around half potential visitors were aged 15-34 years, although they were a notable majority (almost 60%) for Matamata-Piako District visitors.
  - The gender balance slightly favoured females.

[8] Comprising those visitors within the catchment who indicated an interest in hot pool activities.

POTENTIAL CUSTOMERS - HEALTH SPA/DAY SPA

Domestic

- Around 21,000 (11%) of the annual domestic overnight visitors to the Matamata-Piako District were 'potential customers' of Health spas/Day spas[9].
- This increased to 165,000 for visitors within a 1-hour drive time (9%), and 1.5 million when it is expanded to a two-hour drive time (21% - reflecting inclusion of the pre-eminent geothermal destination of Rotorua).
- The number of domestic potential customers for Health spas/day spas is expected to increase by 8-10% within all three catchments by 2025.
- Demographic features of these domestic potential customers included the following:
  - Auckland was the major source market.
  - Around half of the domestic potential customers were aged 15-34 years, with 35-54 years olds a prominent secondary age-group.
  - The gender balance was more female over all three catchments, although this feature was stronger as the catchment widened (over 60% female for visitors in the 2-hour drive time catchment).

International

- Around 6,000 (16%) of the annual international overnight visitors to the Matamata-Piako District were 'potential customers' of Health spas/Day spas.
- This increased to 50,000 for visitors within a 1-hour drive time (12%), and 213,000 when it is expanded to a two-hour drive time (13%).
- The number of international potential customers for Health spas/Day spas is expected to increase by around 30-40% within all three catchments by 2025.
- Demographic features of these international potential customers included the following:
  - Australians were the largest potential market for hot pools followed by China, USA, UK and Germany
  - Around 40-45% potential International customers were aged 15-34 years, although they were more prominent (48%) among Matamata-Piako District visitors.
  - The gender balance was more female over all three catchments, although this feature was stronger as the catchment widened (over 60% female for visitors in the 2-hour drive time catchment).

IN SUMMARY

- Numerically there were many more domestic than international potential customers in 2018, with Auckland the main domestic market source.
- But there are higher expected growth rates among international potential customers, led by Australians.
- Rotorua visitors were also a prominent source of potential customers at the wider catchment scales.
- Young adults (15-34) were the predominant age-group among potential customers.
- Females were particularly prominent (around 60%) among the potential customers for Health spas/Day spas.
- Not much difference in the characteristics of hot pool and health spa/day spa potential customers.

5.3 COMPETITOR ANALYSIS

There are large numbers of 'hot pool' sites throughout the mid-to-upper North Island associated with the 'Golden Triangle' area (i.e. Auckland, Waikato, Bay of Plenty). Rather than addressing the many small natural hot-pool and largely hotel-based spa pool facilities, this analysis focusses on those facilities which operate more in a context of larger 'spa/resort' destinations. These are nearby destinations/sites that are somewhat comparable to what has been historically operated in Te Aroha in the past (and potentially could do so in the future).

Initially some brief descriptive context around the Te Aroha Domain is required for assessing its current comparability with other spa/resort destinations.

TE AROHA DOMAIN

The early development of Te Aroha was closely aligned with Te Aroha Domain and its thermal waters. While not associated with significant geothermal landform features, the up to 20 hot springs in and around Te Aroha Domain were well known and attracted much pre-European use. Following the agreement for designation of Te Aroha Hot Springs as a public reserve in the 1880s, Te Aroha Domain soon became one of New Zealand's most popular thermal/spa destinations for health and wellbeing. Much of the Domain's current layout and infrastructure reflects

[9] Comprising those visitors within the catchment who indicated an interest in hot pool activities.

this historic spa-resort past. The retention of this historic infrastructure now provides Te Aroha with one of its key distinguishing features. While Rotorua soon developed into the New Zealand's main thermal attraction, the reduced pressure in Te Aroha has allowed it to retain much of its historic spa-resort context. Most other early thermal/spa destinations have lost their heritage infrastructure through developments. More recently developed sites generally lack any similarly enriching historic and/or cultural context.

As a result, Te Aroha Domain is currently the most intact Edwardian spa in New Zealand. While the town has lost many of its original historic buildings, it still retains more than any other former spa destination (especially in Te Aroha Domain). A lot of work has gone into the Domain in the last few years, including much focus on restoring original features (e.g. the lakelets and the foot pool) have helped to revive the Edwardian character that is such a large part of the town's history. Historic buildings have been retained and repurposed as required. Current features of Te Aroha Domain include:

- The Mokena Geyser[10],
- Te Aroha Mineral Spas (commercial hot pools/spa complex),
- Swimzone Te Aroha Aquatic Centre,
- The historic Cadman Bath House (now Te Aroha and Districts Museum),
- The historic Domain House (available to hire for various functions),
- The old Domain Office (which houses the Te Aroha i-SITE),
- The historic Cottage Cafe, which is housed in the old Gardener's Cottage,
- The historic band rotunda,
- The historic bowling greens and croquet club,
- An art gallery,
- Playground facilities.

In addition, the Domain is also the hub starting point for many of Te Aroha's popular walking and biking tracks around the Domain area, onto Mt Te Aroha (and beyond) and to the Waihou River. As well as giving access for recreational activities they also currently (or potentially) connect to nearby sites of other cultural and heritage interest

'COMPETITOR' REVIEW

This table summarises some high-level descriptive content about a few different larger scale spa/thermal offers in the Golden Triangle area (Auckland, Waikato, Bay of Plenty). This area covers sites within 2 hours drive of Te Aroha' including the focal thermal areas of Rotorua and Taupo.

Name	Address	Summary Features/Services
Te Aroha Mineral Springs	Te Aroha Domain, Te Aroha 3320 Proximity - 0km	• Included here as the current spa service provider at Te Aroha Domain, to enable comparisons with off-site providers. • Hot thermal water from the geyser bore is cooled and piped to the multiple wooden tub-spas in a series of private rooms • A range of massages and beauty treatments are also available, ranging from around $40-150 • Cost $19 Adult for ½hr to $36 for an hour ($11/20 for children and $16/26 for seniors) • Open all year from 10.00am-9.00pm (Mon-Thu)/10.00am-10.00pm (Fri-Sun)
Wairakei Terraces and	State Highway 1, Wairakei, Taupo 3377 Proximity	• Large natural style thermal/hot pool spa destination. • Geothermal bore water emerging through originally artificial, but now naturally growing silica terraces, over a waterfall before descending through a series of manmade hot pools of steadily reducing temperature.

[10] While not a natural feature as it was created through a bore to support thermal developments, it is now considered to be the only hot soda water geyser in the world.

Name	Address	Summary Features/Services
Thermal Health Spa	- 148km - 1 hr 50 min drive	• A large hotel complex is adjacent. • Linked to walkway tours through adjacent natural terrace and geyser areas (also walkways and plantings around pools) • Has included added Maori cultural experience options • Various styles of massage available. • Adults-only site (14years+). • Cost $25 per person (14 years+) for the hot pools, extra for booked massages or the cultural experiences (if active) • Open all year from 8am-9pm (Thursdays closed)
Waikite Valley Thermal Pools	648 Waikite Valley Rd, Waikite Valley, Rotorua 3077 Proximity - 136km - 1 hr 50 min drive	• Natural style thermal/hot pool destination. • Hot pools straight out of the Te Manaroa natural boiling spring. • Six pools in a range of temperatures, including a large leisure pool, sit and soak pools and private pools. Also, a walkway to the source spring and large cafe • Includes a campsite with 26 powered/unpowered sites, laundry and kitchen facilities, thermally-heated drying room, and free access to the pools. • $16.50 adult, $9 child, $3 U5s • Open all year from 10am-9pm
Okoroire Hot Springs	18 Somerville Rd, RD2, Tirau, 3485 Proximity - 56km - 40 min drive	• Small thermal pool destination. • Three secluded hot springs in rural setting near Tirau • Historic spa site with main hotel established in 1889 • Hotel includes restaurant and spaces for events, functions, conferences, meetings etc., and is located adjacent to a golf course • Cost $10 per person per hour • Open all year from 7.30am-7pm
Miranda Hot Springs	Front Miranda Rd, RD 6, Thames, Miranda 3576 Proximity - 61km - 50 min drive	• Large basic thermal pool destination. • Three pool complex in open rural location including large main warm swimming pool, smaller cooler children's pool and hotter adult-only sauna pool. • Current pool established in the late 1950s. • Other facilities include play spaces, games room and separate dairy-style shop onsite. • Located adjacent to the large Miranda Holiday Park which includes its own thermal pool, extensive activity/play options, and usual campground kitchen, laundry and shop facilities. • Cost $14 adult (14 years+), $7 children (3-13 years), $9 non-swimmers, Free for children U3. $15 per 30mins for private spa, per person • Open all year from 9am-9pm.
Polynesian Spa	1000 Hinemoa St, Rotorua 3010 Proximity	• Large high-end spa destination. • Geothermal hot mineral waters in central Rotorua are sourced from two natural springs (with different water properties) and feed into 28 hot mineral pools.

Name	Address	Summary Features/Services
	- 104km - 1 hr 20 min drive	• Current spa complex established in 1972 on the site of earlier spa buildings near Government Gardens and include a café and 'Spa-Essentials' shop. • Costs range for different pool and spa experiences from starting at $10 for family pools to $179 for day-spa retreat experiences. Extras can include Deluxe spa, massage, mud therapies or facials (individually or in package combinations). • Open all year from 9am-9pm.
The Lost Spring	121A Cook Dr, Whitianga 3510 Proximity - 130km - 1 hr 50 min drive	• High-end spa destination. • Geothermal bore water running through a series of manmade hot pools in a planted natural setting in Central Whitianga. • Located adjacent to several small waterfront resort and apartment complexes. • Established in the 1990s • Many customised services, treatments and therapies available including massage, facials, foot pampering, poolside food and drink services, multiple soaking options in a variety of package options. • Adults-only site (14years+, 14-18 with 1:1 adult). • Costs range for different pool and spa experiences from starting at $45 for 1½hr pool soak ($80/day) to a $420 all day 'Pure Decadence' experience. • Open all Year from 9:30am - 6:00/8.00pm Sun–Thu/Fri-Sat
Taupo DeBretts Spa Resort	76 Napier-Taupo Road, SH 5, Taupo 3330 Proximity - 158km - 2 hr drive	• Large Aquatic/Spa resort complex featuring 2 large thermal water pools in natural planted settings. 12 internal private thermal pools and multiple other thermally heated aquatic centre facilities including a kids' warm-water park/playground, spa-pools and hydroslides. • There is also a day spa with various body treatments, massages, facials, pedicures, thermal mud etc. in a range of packages. • The wider complex also includes a café and a full Holiday Park with a variety of accommodation options from motel units to tent sites. The Hilton Lake Taupo is located adjacent. • Costs for pool use: $23 Adult, $16 Students (13-17 years), $11 Seniors (65+), $12 Children (4-12 years), $3 Children <3 years (and spectators). Hydro-slides $8. Costs for a variety of other treatments range from around $20-$200 subject to package. • Open all Year from 8:30am – 9.30pm.
Mount Hot Pools	9 Adams Ave, Mount Maunganui, Tauranga 3116 Proximity - 90km - 1 hr 20 min drive	• Hot thermal water is used to heat saltwater for the five pools, comprising a cooler active pool and children's pool, a warmer passive pool, and 2 hotter spa pools. • Private pools and massage options are also available along with some programmed activities (more like an aquatic centre) • Costs start for basic public pool use $14.70 Adult, $9.40 Seniors (65+) and children 5-15 years, $5.90 Children (2-4 years), free Children <3. All prices are higher for private pools. A variety of massage options range from $50-120 • Open all year from 6:00am – 10.00pm (8.00-10.00 Sun/hols).
Parakai Springs	150 Parkhurst Road, Parakai, Helensville, Auckland, 0830	• Large Aquatic/Spa resort complex featuring 2 large thermal water pools (one indoor and one outdoor), indoor private pools and spa pools and two hydroslides. While thermal mineral water is used this water is treated.

Name	Address	Summary Features/Services
	Proximity - 184km - 2 hr 20 min drive	• There is a private venue option available including various indoor and outdoor function spaces for up to 20. It includes staffing and catering services. • A café and campground also provide some onsite food and accommodation options. • A private spa/beauty service is also available onsite for various treatments and massages. • Costs for pools: $26 Adult, $19 Students, $16 Seniors, $13 Children (5-15 years), $6 Toddlers (3-4 years), $3 babies. Hydro-slides included. • Open all year from Sun-Thu 10am-9pm and Sat -Fri 10am-10pm

5.4 EXISTING SPA VISITATION

Recent spa use levels and trends, along with estimation of potential latent demand is outlined below.

VISITATION

Visitation data over the past ten years (2009-10 - 2018-19) for the existing spa was analysed (Table 5.1 / Figure 5.1). These data were analysed in terms of beauty treatments (including massage) and private spa pool visits. Data indicates that private spa pool visitation is the predominant service utilised. However, both spa pool and beauty treatments have increased over time and are in demand.

In 2018/19 circa 29,000 mineral spa pool visits were recorded (30-minute duration per booking) representing an increase of 97% from 2009-10. Beauty treatments increased 145% over the same period from 606 to 2,800 (Table 5.1).

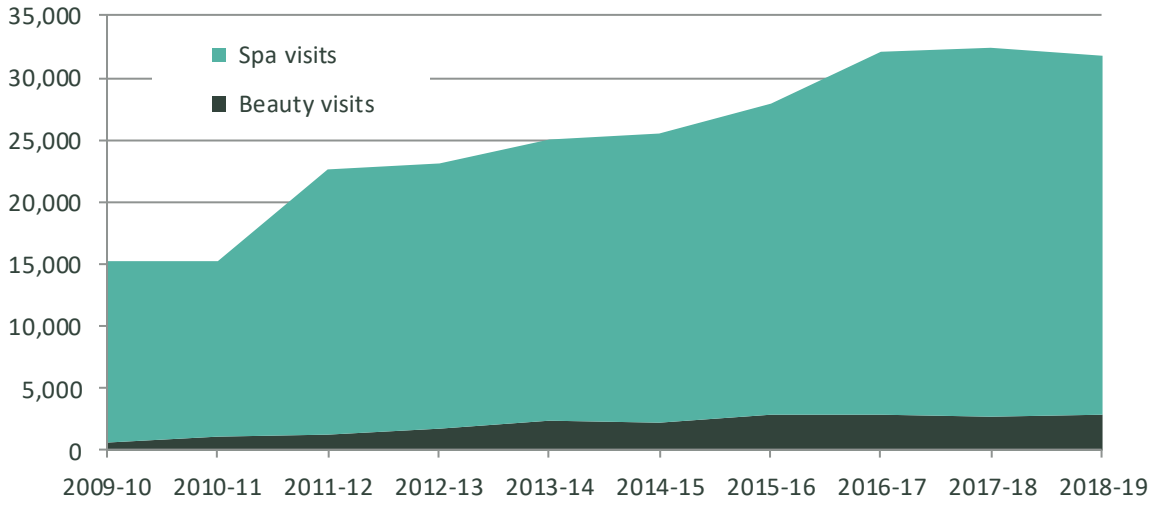
Table 5.1: Te Aroha Mineral Spa visits (2009-2019)

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	change 2009-19	% change
Beauty/Massage Visits	606	1,144	1,246	1,661	2,357	2,148	2,856	2,877	2,758	2,800	**1,656**[11]	**145**
Spa Visits	14,684	14,146	21,443	21,353	22,626	23,338	25,071	29,163	29,574	28,906	**14,222**	**97**
Total Visits	15,290	15,300	22,689	23,014	24,983	25,486	27,927	32,040	32,332	31,706	**16,416**	**107**

Source: Bookings data, Te Aroha Mineral Spas.

[11] Note the 'change' total for beauty treatments was calculated using a 2010-11 base as the 2009-10 data appears exceptionally low and may be incomplete. This did not significantly alter other numeric total or percentages calculated in Table 1.

Figure 5.1: Te Aroha Mineral Spa visits (2009-2019)



Source: Bookings data, Te Aroha Mineral Spas.

The Te Aroha Mineral Spa has significant capacity constraints due to facility size (1 beauty treatment room and 4 small private spa pools only) which significantly limits visitation.

LATENT DEMAND

It was apparent that there is considerable latent demand for the Te Aroha Mineral Spas. During August 2019 staff were requested to manually collect data on the number of facility bookings that were turned away due to space constraints. Once the data was cleaned and extrapolated to account for four missing days in the month, it was determined that approximately 431 spa pool bookings and 150 beauty/massage bookings were turned away during August. This is despite the facility having a comparatively minimal marketing profile and not being in a peak visitation month.

Based on conservatively extrapolating the August 2019 figures back for the whole year ending August 2019 and allowing for a conservative average of two users per spa booking (the minimum required), the following minimum potential revenue loss estimates were made.

Spa Pool Bookings:

- 5,172 bookings were turned away, representing around 10,344 individual users, who at an estimated average spend of $22 (for 30 minute) represented a potential revenue loss of around $227,500.

Beauty/Massage Bookings:

- 2,088 individual bookings were turned away at an estimated average spend of $50. This represented a potential revenue loss of circa $104,400.
- If an average New Zealand spa treatment rate of $161 was applied this loss would increase to circa $336,000.

The figures are high-level indicative estimates but are likely to represent around the minimum scale of lost potential visitors and revenue.

CONCLUSION

Overall the analysis indicates there has been a strong and growing market demand for the types of services offered by the Te Aroha Mineral Spas, but that growth is now constrained as current demand now exceeds capacity.

5.5 WIDER TRAFFIC AND VISITOR FLOW ANALYSIS

This section summarises travel and tourism trends in the Matamata-Piako District. It is largely based upon the tourism measures undertaken by the Ministry of Business, Innovation and Employment (MBIE), and the vehicle counts undertaken by the New Zealand Transport Authority (NZTA). Of these, only the vehicle counts can be related

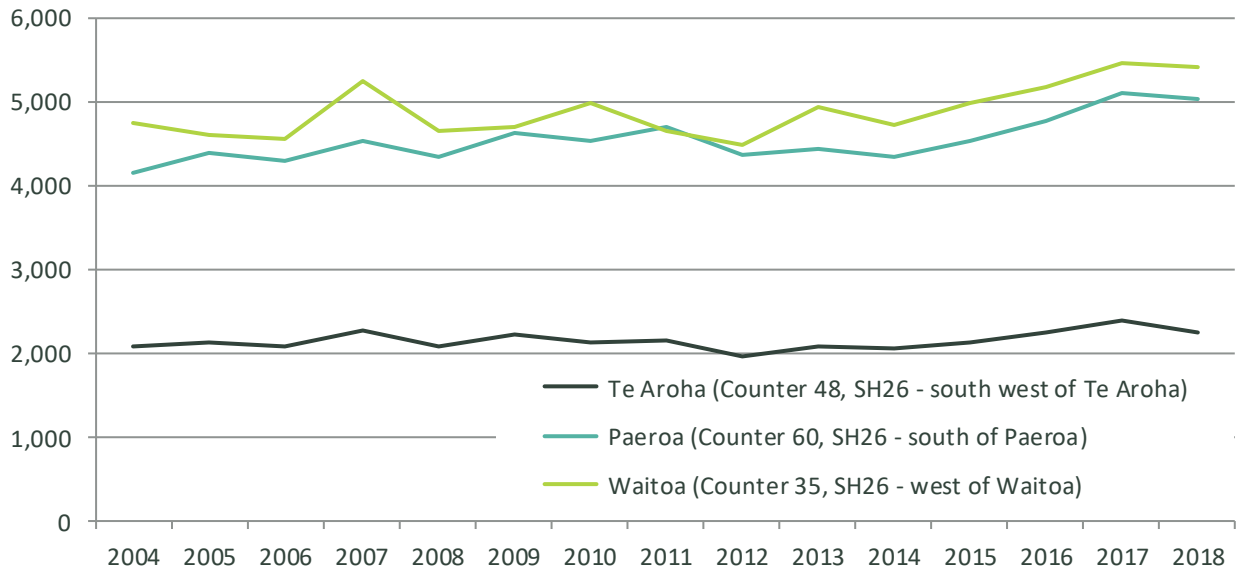
specifically to Te Aroha, with other information available only at the level of Matamata-Piako District or Waikato Region.

TRAFFIC VEHICLE COUNTS

Vehicle counts provide a long-term indicator of the scale and direction of visitor activity in Te Aroha. While the purpose of traffic movements cannot be determined, the overall trends in levels and seasonality do provide an indicator for travel activity – of which some would be related to visitors and tourism. Given the relative stability of the local Te Aroha and Matamata-Piako populations (see Section 2.3 Demographics), any growth in vehicles is likely to represent visitor traffic.

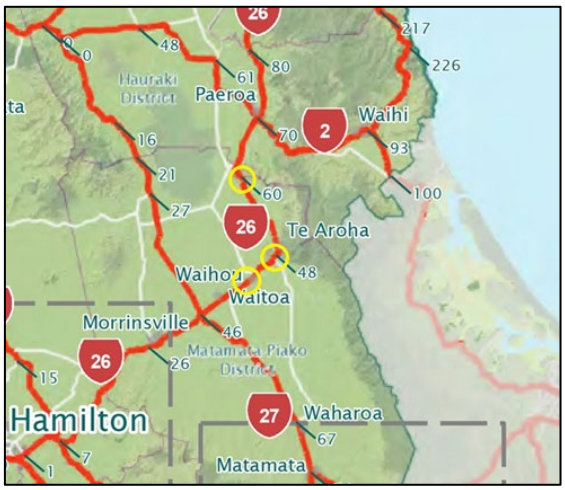
Traffic counts along State Highway 26 on the approaches to Te Aroha (Figure 5.2) show that there has been relative stability in vehicle traffic volumes over most of the last 15 years, with perhaps a slight general increase since around 2014. Counter 48, located on SH26 just to the southwest of Te Aroha, has lower counts than the other counters located further to the North (counter 60) and West (Counters 35) on SH26. The similarly higher overall traffic volumes recorded at the SH26 counters near Paeroa (Counter 60, north of Te Aroha) and Waitoa (Counter 35, to the southwest of Te Aroha) suggests some through-traffic take a shortcut/bypass to avoid going through Te Aroha (possibly along Ngutumanga Road/Waihou).

Figure 5.2: Annual Average Daily Traffic Estimates 2004-2018



Source: New Zealand Transport Agency (NZTA), Traffic Volume Data (State Highway counts)

Figure 2: State Highway counter locations and network around Te Aroha



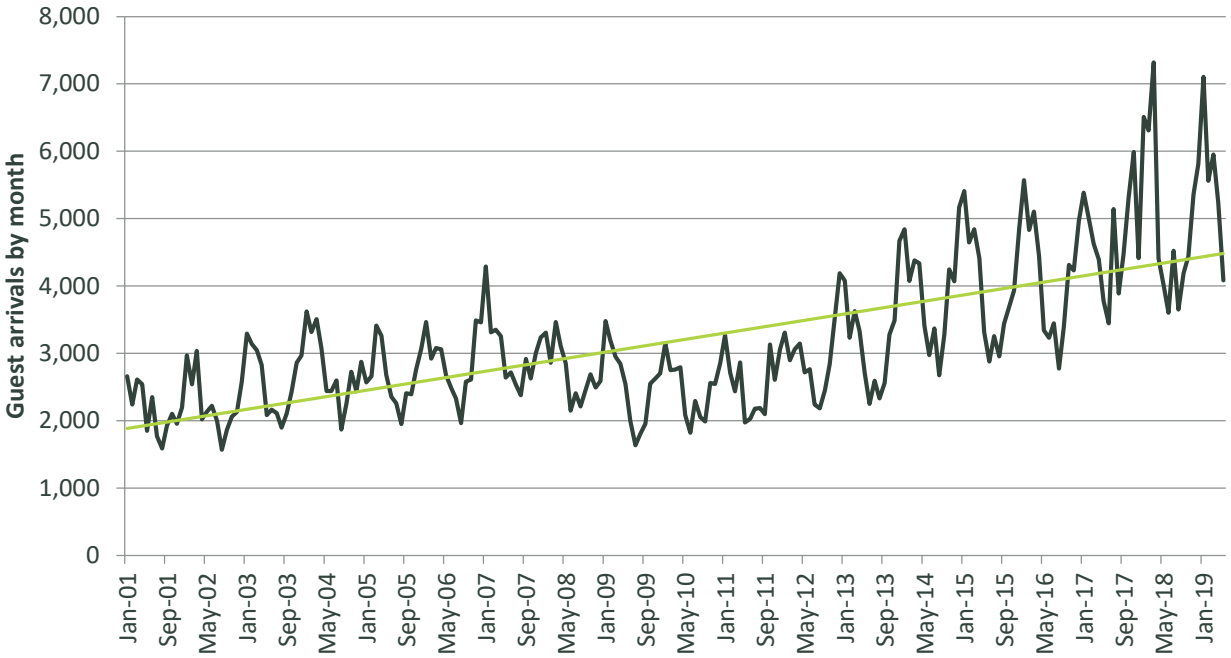
Source: New Zealand Transport Agency (NZTA), Traffic Volume Data Booklets

While these traffic counts do provide long term indicative trends in travel activity, they are only indirectly related to visitor numbers to any site. Other measures provide more visitor-specific indicators, although they are not specific to Te Aroha.

ACCOMMODATION SURVEY

The Accommodation Survey conducted by the Ministry of Business, Innovation and Development records the monthly total guest nights at commercial accommodation providers[12] in standard administrative areas. The most specific level of data is only available at the level of territorial authorities. The data presented in Figure 5.3 relates to the Matamata-Piako District overall, and only inferences may be drawn with respect to Te Aroha itself. While not town-specific, this is a useful indicator for the overall state of tourism in the Matamata-Piako District, as most people using commercial accommodation will be on leisure-related visits[13].

Figure 5.3: Guest night trends – Matamata-Piako District Council Area (Feb 2002-May 2014)



Source: Accommodation Survey, Ministry of Business, Innovation and Development ad Statistics New Zealand

This shows a number of clear visit features:

- A highly seasonal visitor pattern punctuated by a January summer holiday peak and a secondary peak in March (most probably related to Easter).
- An overall trend of significant increase in visitor nights over time.
- It can be reasonably assumed that some secondary part of this growth has been experienced in Te Aroha.

12 While the Accommodation Survey data excluded smaller hosted accommodation providers such as BandBs and Farmstays etc, the annual 'Visitor Experience Monitor' (VEM) survey run by Tourism New Zealand found only 11% of overseas visitors used BandBs in their New Zealand visits; 7% homestays and 3% farmstays. By contrast 42% used hotels; 29% motels; 20% backpacker hostels; 17% holiday parks/camping grounds; %5 luxury/boutique lodges (all included in the Accommodation Survey)

13 Note that some domestic visitation will be related to business or visiting family and friends, although given the relative population stability of the area, most visitation is likely to be for tourism purposes. It is acknowledged that attractions around Matamata town will likely have been the prominent drivers of this growth (e.g. Hobbiton).

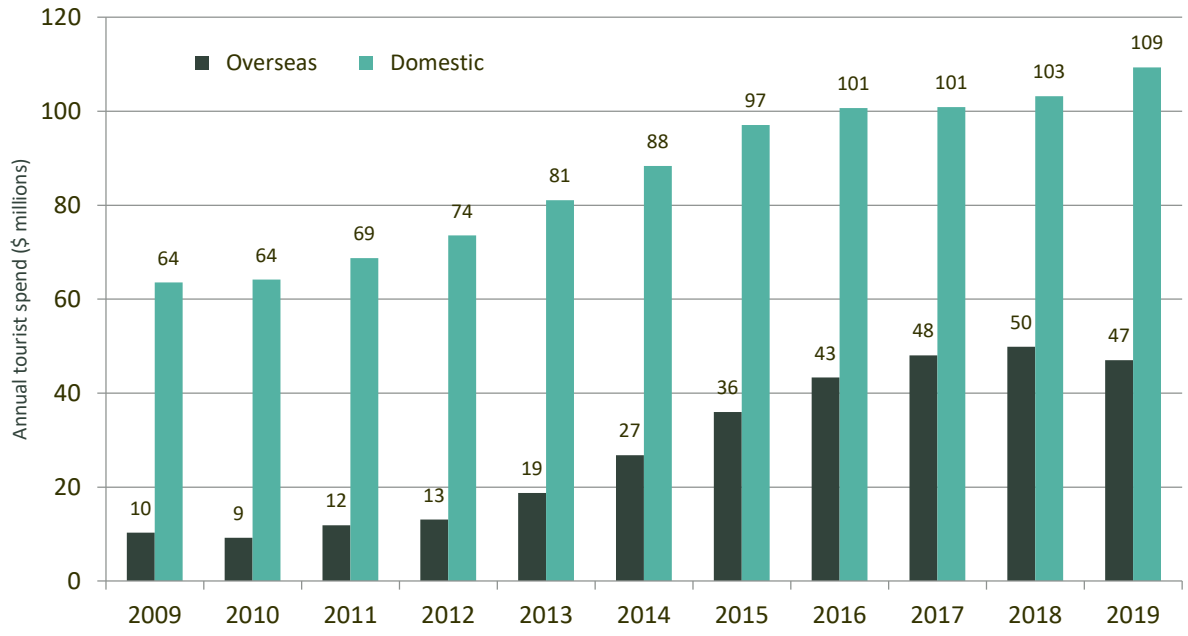
VISITOR SPEND ESTIMATES

Monthly Regional Tourism Estimates (MRTEs) from the Ministry of Business, Innovation and Employment give some indication of the type of visitor spending that has been occurring and its trends over time[14]. Firstly, Figure 5.4 summarises the overall trends in annual visitor spend by Domestic and International visitors in the Matamata-Piako District.

This shows that there has been sustained growth in both Overseas and Domestic visitor spend over the last 10 years. Overseas spend is considerably lower but it has been increasing more strongly. Table 5.2 shows Overseas spend has increased by over 350% compared with 72% for Domestic visitors. As a result, while Overseas spend comprised only 14% of Overall visitor spend in 2009, by YE Jun 2019 it had exceeded 30%.

Over the last 10 years, Overseas spend is primarily made-up of the Australian market (27%), followed by Europe (20%), Asia (19%), North America (16%) and the UK (11%). After Australia, featured individual countries were the USA, UK, Germany and China. A majority of Domestic visitor spend can be attributed to other 'Golden Triangle' residents of the Waikato (33%), Auckland (31%) and the Bay of Plenty (13%) - excluding local Matamata-Piako Residents.

Figure 5.4: Annual Visitor Spend in Matamata-Piako District (YE June 2009-19)



Source: Monthly Regional Tourism Estimates Data, MBIE.

Further analysis of the tourism spending data shows the breakdown of main product types concerned. Table 5.2 shows the estimated average annual visitor spending on different product categories in the Matamata-Piako District. This shows that the largest single spending category was in 'Retail Sales – Fuel and other Automotive', which averaged around $30 million each year (24% of all visitor spend - $1,265 m). Most of this spend is indirectly related to leisure and tourism businesses. Although spending associated with the 'Cultural, recreational and Gambling Services' category is inclusive of enterprises delivering leisure products related to arts, sports, heritage, culture, and natural areas etc.[15].

14 These are estimates derived from a baseline of visitor spending data from electronic cards. The Overseas or Domestic status of 'visitors' can be defined from card data indicating in what NZ Region or Overseas Country the card was issued. This enables local residents of Matamata-Piako to be excluded, with those remaining being 'visitors'.

15 These Product-Type spend categories correspond with the Level 4 industry categories from the ANZIC 2006 industry classification, with Cultural, Recreation and Gambling Services including the Level 2 sub-categories of Health and Fitness Centres and Gymnasia Operation; Amusement Parks and Centres Operation; Zoological and Botanic Gardens Operation; Nature Reserves and Conservation Parks Operation; Sports and Physical Recreation Venues, Grounds and Facilities Operation; Museum Operation; Performing Arts Operation;

Table 5.2: Average annual spend by product type in Matamata-Piako District (for 2009-19)

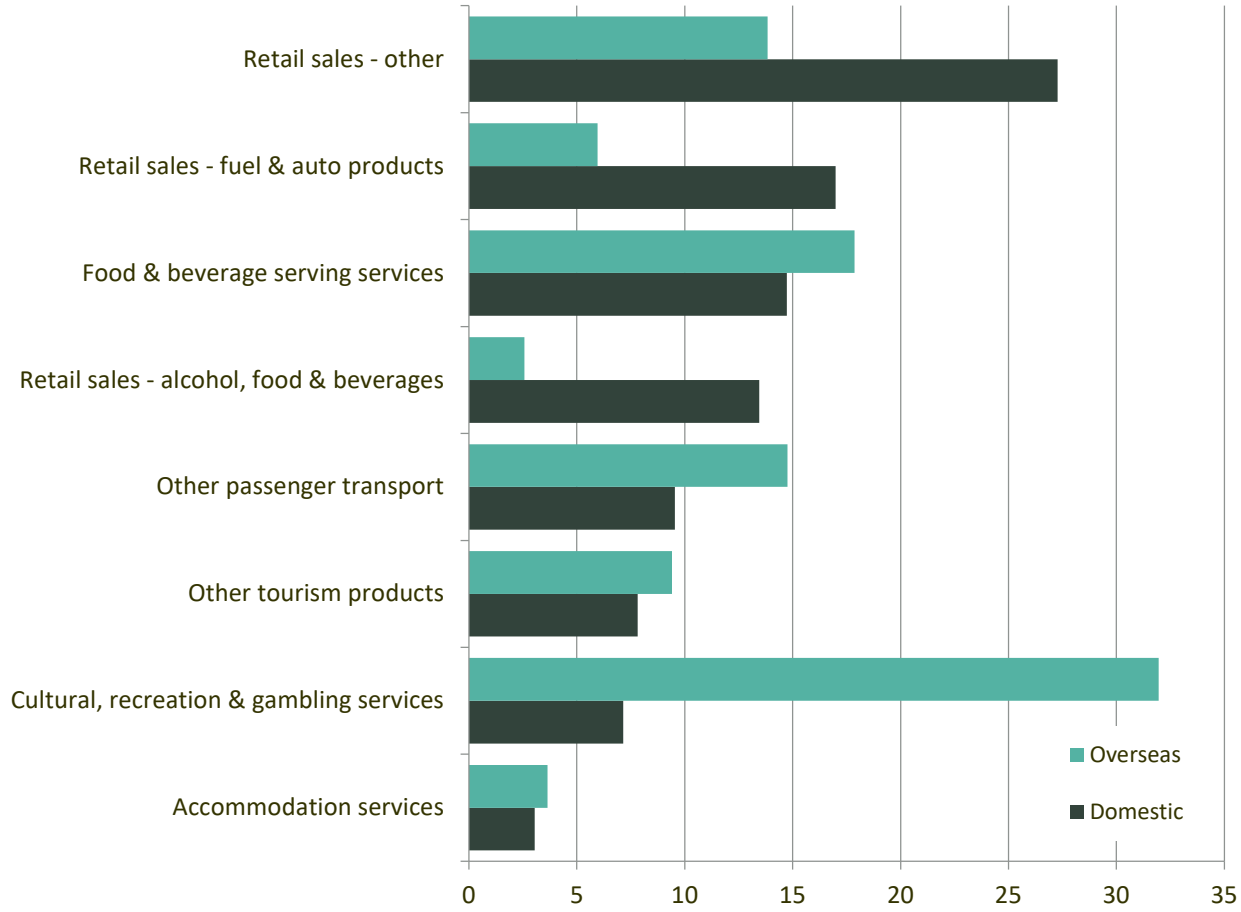
	Accom services	Cultural, recreation and gambling services	Food and beverage serving services	Other passenger transport	Other tourism products	Retail sales - alcohol, food and beverages	Retail sales - fuel and auto products	Retail sales - other
Av annual visitor spend ($m) 2009-19	4.2	15.3	17.4	14.3	10.6	15.1	30.0	19.8
% Av annual visitor spend 2009-19	3	12	14	11	8	12	24	16

Source: Monthly Regional Tourism Estimates Data, MBIE.

Figure 5.5 and Table 5.3 below show that this spending pattern differed between Domestic and overseas visitors. Domestic visitors spent most on the 'Retail Sales – Fuel and Automotive' category (27%), presumably reflecting their higher use of private vehicles and the greater likelihood of their spending being associated with domestic travel to or through the District for general purposes, rather than recreation/tourism (e.g. business, visiting friends and relatives etc). Also reflecting the more 'day-to-day' nature of many trips to or through the District by Domestic visitors was their relatively higher spending on various other forms of 'Retail sales' (e.g. alcohol, food, beverages, and 'other').

By contrast, for Overseas visitors 'Retail Sales – Fuel and Automotive' was much less significant, representing only around 14% of their spending. This was also apparent for the other general 'Retail Sales' spending categories. They tended to have much higher spending on 'Cultural, recreation and gambling services' and 'Other Passenger Transport'.

Figure 5.5: Average annual product spend % (2019) – Domestic/Overseas Visitors



Performing Arts Venue Operation; Libraries and Archives; Sport and Physical Recreation Clubs and Sports Professionals; Amusement and Other Recreation Activities; Lottery Operation; Casino Operation; Other Gambling Activities. Source: Monthly Regional Tourism Estimates User Guide (2018), Ministry of Business, Innovation and Employment.

Table 5.3: Average annual product spend % (2019) – Domestic/Overseas Visitors

	Accommodation services	Cultural, recreation and gambling services	Food and beverage serving services	Other passenger transport	Other tourism products	Retail sales - alcohol, food and beverages	Retail sales -fuel and auto products	Retail sales - other
Domestic ($109m)	3	7	15	10	8	13	27	17
Overseas ($47m)	4	32	18	15	9	3	14	6

Source: Monthly Regional Tourism Estimates Data, MBIE.

Summary

Overall these results highlight a number of general tourism/traveller[16] trends in the Matamata-Piako District and Te Aroha area:

- fairly steady traffic flows through Te Aroha year-round, with little seasonal variation and little sign of any growth over time.
- higher seasonality in commercial accommodation use and tourism spending, particularly in December-January.
- a strong predominance of Domestic tourists/travellers in both total numbers and in spending volume.
- forecasts of only slight increases (at best) in total tourism visitors to the Waikato Region, but trends of gradually increasing accommodation use and travel/tourism-related spending in the Matamata-Piako District.
- a strong focus on fuel and vehicle-related spending in the Matamata-Piako District, particularly among domestic tourists/travellers. Suggesting travel through the area is a primary driver of spending rather than the area being a destination.

These findings are based predominantly on high level data available at the Matamata-Piako District or Waikato Regional level. The only data available that was specific to Te Aroha were the NZ Transport Authority State Highway road counts and estimates. There is clearly a gap in having any more local indicators of travel and tourism related visits to Te Aroha (apart from visits to the Te Aroha Mineral Spas).

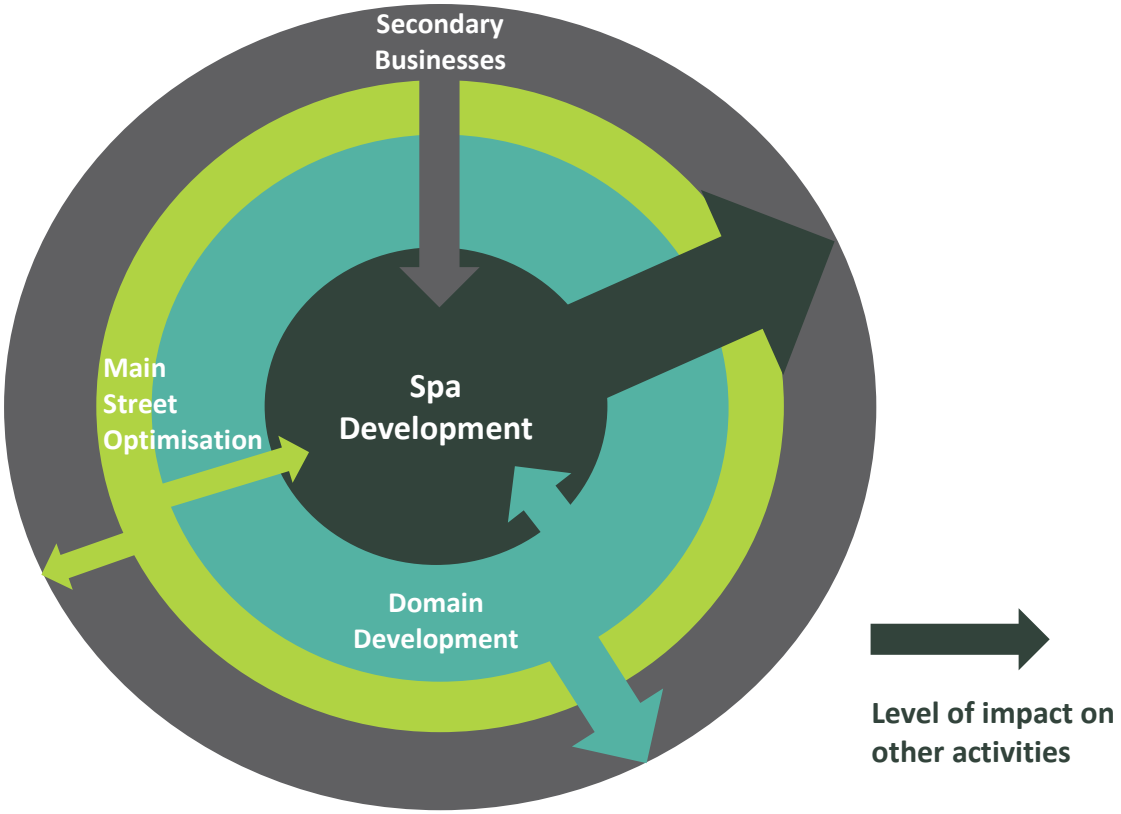
16 It is important to note that some traveller presence in the Matamata-Piako District and related spending may not be specifically 'tourism' related but be associated with more general travel through the area on State Highway 1.

6.0 PROPOSED APPROACH

6.1 INTRODUCTION

Based on available data a proposed approach has been established that sees the development of two core catalysts, a new spa and the optimisation of Te Aroha Domain (and its surrounds). The approach also calls for the optimisation of the town's main street environment, to lift its vibrancy and the fostering of a series of secondary businesses. These secondary businesses are dependent on the development of the new spa and to a lesser degree the Domain (Figure 6.1).

Figure 6.1 Proposed Approach - Impact Relationship



6.2 CORE CATALYST SPA DEVELOPMENT

The development of a new spa is the primary catalyst. Te Aroha has long been associated with spa tourism / visitation well before Pakeha 'discovered' the healing nature of the waters in the 1800s (see Section 7). In many respects we are seeking to learn from Te Aroha's past and focus on the health and wellness end of the market.

Analysis of the existing spa facility, developed in the 1990s, indicates that it is not viable to redevelop the existing spa and that it would be better to construct a new facility. This is due to factors such as site limitations, existing asset quality and cost effectiveness. A new site within the Domain would enable the existing spa to continue operation while the new spa is developed and most importantly afford a greater gross floor area (delivering greater visitor capacity).

The objective of the new spa is to increase overall capacity to better cater to market demands (while making maximum use of the quality geothermal spring water). The domestic and international spa market has advanced significantly in the last thirty years. The new spa concept will reflect these advances and attract a more discerning health and wellness clientele with higher levels of discretionary spending. These visitors will likely be day visitors in the short term, but as suitable accommodation becomes available greater numbers will spend an overnight stay in Te Aroha and partake in other local activities.

6.3 CORE CATALYST DOMAIN DEVELOPMENT

The second core catalyst development involves the optimisation of the Domain itself. This will see several old (non-historic) buildings removed, landscaping improved and new croquet lawns developed. The other key developments will be the establishment of a Pāpa takaaro, Māra Hūpara (Destination Playground) and precinct wide interpretation. These later components are designed to lift the unique stories and qualities of Te Aroha to the surface. The overall objective of the redevelopment is to make the Domain a stronger destination by improving the quality of what already exists while adding new elements. These changes will afford the local community and domestic and international visitors new opportunities and a higher quality experience. They will also facilitate private sector opportunities (see Section 6.5).

6.4 MAIN STREET OPTIMISATION

The Spa and Domain do not site in isolation and most visitors will pass through Te Aroha's main street. The Main street environment although improving does not project vibrancy, largely due to the number of empty shop frontages. Scope exists to explore ways of lifting the appeal of the main street to set a better first impression to visitors.

6.5 SECONDARY BUSINESSES

Community engagement initiatives have identified a series of secondary businesses that developers and entrepreneurs are interested in developing if the spa and domain core catalysts are advanced. These businesses have been summarised in Table 6.1 at a level that does not compromise commercial sensitivity.

Table 6.1: New Secondary Businesses Generated from Core Catalysts Development

Experience	Description	Capex	Visitation	Estimated New FTEs
Motel / Lodge Accommodation (4 star)	• Higher end 4-star accommodation more aligned to the proposed spa and conference facilities.	• Circa $3.5- $4.5 million per 10-15 room facility. • Interest from 3 potential developers.	• Assume ten rooms per facility at 70% occupancy = circa 2,550 room bookings p.a. (with an average of two people per room circa 5,100 visitors p.a. per facility or 15,300 visitors in total). Note: this assumes visitors stay only one night.	• 12 FTE
BandB Accommodation	• Higher end 4-star BandB accommodation more aligned to the proposed spa and conference facilities.	• Circa $100,000 - 200,000 refurbishment of existing residential cottages / accommodation. • Interest from numerous residents / landowners.	• Assume an average of two rooms per dwelling. • Assume 5 dwellings are converted giving 10 rooms in total. • Assume ten rooms at 70% occupancy = circa 2,550 room bookings p.a. (with an average of two people per room circa 5,100 visitor's p.a.).	• 4 FTE

Experience	Description	Capex	Visitation	Estimated New FTEs
Boutique Conference facilities	• Small boutique conference / meeting facilities for day conferences and two-day conferences. Dependant on spa and associated activities to make a compelling boutique conference proposition.	• Circa $800,000 as part of existing development.	• Assume 40 day conferences with 100 visitors and 40 two-day conferences with 40 visitors. 5,600 visitors.	• 2 FTE
Ropes / Wires Experience	• A ropes / wires experience from Europe designed for families and team building (note constrained by loading times so a greater throughput of visitors is possible). Lower price point than zip lines and zip coasters and therefore more attractive to the domestic market. Note: Zip Coasters could be developed in a second phase.	• Capex circa $500,000.	• Assume 6,000 in year one.	• 2 FTE
Mini Golf	• A potential partnership with a local developer establishing a destination quality mini golf course that would appeal to families.	• Circa $500,000	• Assume 8,000	• 2 FTE
Café	• New destination café located within the core development precinct (Domain House).	• Circa $400,000	• Assume 20,000	• 6 FTE

Figure 7.2 Benefits to Existing Assets

Experience	Description	Capex	Visitation	Estimated New FTEs
Swim Zone Te Aroha	• Community leisure pool (with spa and indoor hot pool).	• NA.	• The existing leisure pool receives circa 30,000 visits pa. • With the development this is estimated to increase by 15,000 visits (predominantly by people from outside Te Aroha).	• 1 FTE

7.0 PRELIMINARY CONCEPT

7.1 INTRODUCTION

Much of the Inspiration for the preliminary concept outlined in this section has come from listening to Mana Whenua (in particular Ngati Rahiri Tumutumu) and the local community. From these discussions, our experience and the background research outlined in earlier sections, a precinct design philosophy has been developed. This has given rise to a precinct master plan framework with a series of storytelling and interpretation opportunities and spa schedule (and spa spatial layout diagram).

7.2 PRECINCT DESIGN PHILOSOPHY

Te Aroha Hot Springs has significant historic and cultural value and was once the leading nineteenth century New Zealand health resort with world class geothermal pools located in impressive grounds with a stunning mountain backdrop and close connection to the Waihou River.

The Spa Precinct Master Plan Framework has been developed in a highly collaborative manner, to carefully integrate the various existing and new design components within the Te Aroha Domain and adjacent town centre, into a cohesive experience for visitors, user groups and residents.

The following key design elements are located within the precinct:

- Proposed new spa complex;
- Existing Heritage Buildings and structures including the Cadmen bathhouse, Māori ngāpha (spa), #2 bathhouse, band rotunda and the I-site building amongst others;
- Café and function venue
- The existing swimming pool complex;
- Croquet club building and croquet lawns;
- Grass events area;
- Pāpa Takaaro / Māra Hūpara Destination Playground;
- Proposed mini-golf course;
- Proposed high ropes, coaster or zip-line activity;
- ‘Soft’ or low-impact parking areas;
- Shared space parking and pedestrianised road zone across Whitaker Street;
- Hot water source and upgraded track connections to Mount Te Aroha;
- Service zones.

The landscape and vegetation framework within the domain area function as the ‘cloak’ or ‘vessel’ which surrounds and contains the various design elements and shapes them into a cohesive experience for visitors. The landscape design proposal seeks to replant and upgrade the vegetation and tree framework within the domain to support this function and create a high amenity visual and experiential outcome.

The visitor experience is further supported by the interpretative storytelling elements proposed throughout and surrounding the domain precinct.

Key gateway points located at either end of the Whitaker Street shared space zone, signposts the entry to the precinct and makes road users aware that they are now entering a unique, pedestrian focussed zone within Te Aroha.

The proposed pedestrianisation of Whitaker Street allows the domain to reach across and engage with the south western street edge and creates a strong visual and physical connection for pedestrians heading into the centre of town or towards activities associated with the river and new cycle trails.

The existing spa buildings (circa 1990s) are too small and the area available for expansion too constrained to accommodate the spaces required for a high-class spa facility in the current location. There is however an opportunity to locate such a facility on the old croquet greens behind the Cadman building.

We suggest any building in this location does not try to replicate the Cadman Bathhouse but instead nestles discretely down into the landscape contours and is screened by some of the existing trees and new sculpted landscape berms.

Building on the place-based relationship of the domain as a health and wellbeing centre, a biophilic design approach to any building would be highly appropriate. Biophilic design or the deliberate incorporation of elements from nature into the built environment is not a new practice. Amanda Sturgeon CEO of the International Living Future Initiative and founder of that organisation's Biophilic Design Initiative notes in her book on "Creating Biophilic Buildings" that in every part of the world for millennia people have infused architecture with plants and incorporated gardens, ponds and atria into buildings and "brought the outside in" so that the natural world and built environment co-exist.

7.3 HERITAGE ASSETS

Working from first principles, Heritage NZ's listing on the entire Domain recognises the area's relevance to the town's social and architectural history. However, this does not preclude changes (Appendix 3).

Ideally use/reuse each building/structure for its original intended purpose, or a purpose that does not require wholesale changes. Retain the extent of place curtilage or "free space" around each building.

To some extent, the default position for each building in the context of the Domain and Te Aroha's tourism rejuvenation initiative is to tell authentic stories in authentic settings. Deviating too far from the Domain setting as it is today would miss the point.

In the short-term, the Cadman Bathhouse may sensibly remain in use as a museum, until future development opportunities present themselves. Within the Domain Historic Area new buildings might include a new Mineral Spa bathhouse. We strongly recommend resisting the temptation to build another "replica villa". Instead we see this as a golden opportunity for Te Aroha to aspire to an award-winning modern building, sited well in the landscape and a drawcard on its own merits.

7.4 TE AROHA STORYTELLING AND INTERPRETATION OPPORTUNITIES

There are multiple sites and opportunities to tell Te Aroha's stories as part of the project (Appendix 4). We recommend focussing on the key theme of water and building a suite of storytelling/discovery experiences that create an attraction and act as a vehicle for the community to tell the Te Aroha Story.

On many levels water is at the core of Ngati Rahiri Tumutumu origins, history and healing, and is also the basis for the spa functions of the township and contemporary visitor experiences and products.

We propose a series of kinetic sculptural installations with local stories embedded in the structures. These unique and compelling installations become a must-see in Te Aroha.

Visitors can also delve deeper along a trail through the domain and beyond using digital mobile storytelling where hapu and community share their stories.

A theatrette, located on or near the domain, uses mist to create a large projection screen where an animated sequence tells the story of Te Aroha. This is potentially a paid-for / hosted experience.

Other options include a water-based mini golf attraction and an experiential website that begins the storytelling for pre-trip planners.

7.5 PRECINCT MASTER PLAN FRAMEWORK

The precinct master plan framework is not considered to be a detailed master plan, but rather a framework that reflects Mana Whenua and community aspirations while also accommodating the required catalyst developments identified through the research process (Plan 7.1). It Is acknowledged that the plan reflects feedback from engagement to date and that further public input and guidance will be required.

From an operational perspective the master plan framework allows for:

- The development of a new spa with greater visitor capacity.
- A Pāpa takaaro /Māra Hūpara (Destination Playground) which Is themed to reflect the rich stories of Te Aroha in a fun environment for youth and adults of all ages. This zone anchors the corner of the Domain and makes use of the embankment below Domain House (which itself becomes a café and small functions venue). The playground Is envisaged as a destination attraction.
- The reinstatement of the māori ngāwha (spa) as a key node point within the site which enables Mana Whenua to utilise an area of heritage significance.
- Introduce interpretation that tells all the stories of Te Aroha from initial Maori use and settlement to the arrival of Pakeha. This Is not only important from a Mana Whenua and local resident perspective but also commercially to support the spa brand with visitors.
- Domain House to become a café and small functions venue supported by a new 'soft' car parking area which Is adjacent. The café becomes more prominent and better placed to leverage off synergies with the destination playground and pool.
- The south eastern side of the Domain becomes a family fun focused zone (containing the existing leisure pool, proposed destination playground and café. The opportunity also exists for a mini golf and Low impact zipline, coaster or high ropes experience).
- Croquet to be retained on the site with four lawns being provided. This facilitates both club and regional play and tournaments. It also retains the sport's historical connection with the domain.
- An event area adjacent to the croquet lawns which assists other users to hold events (or components of an event) within the Domain. Outside the event times the area becomes a casual play and picnicking space (supported with BBQ and associated landscaping).
- A potential connection can be formed with the Te Aroha Centre.
- The retention of all heritage buildings.

COST ESTIMATES

The cost estimates for the precinct master plan framework and interpretation are:

- Precinct master plan framework components = $6.3 million (see Appendix 6).
- Interpretation components =$2.8 million (see Appendix 4).

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Notes:

1. Interpretive signage and sculpture elements would be developed at key points throughout the Domain.
2. The proposed domain and spa redevelopment would support opportunities for new accomodation offerings being established in close proximity to the Domain.

KEY

1. Pāpa takaaro Māra Hūpara (Destination Playground)
2. Croquet lawns (4)
3. Event area / Casual Play / BBQ Areas
4. I-site
5. Existing public parking
6. On-street parking
7. Existing playground
8. Rotunda
9. Cadmen Bathhouse
10. New Spa Complex
11. Service zone
12. Remove existing spa, revegetate area & upgrade track network
13. Retain existing pool
14. #2 Bathhouse
15. Additional 'soft' on-site parking
16. Low impact zipline, coaster or high ropes experience
17. Shared space road zone allowing Domain to engage with the opposite street edge
18. Key connection between domain & river. Access to kyaking, waka, water experiences and link to cycle trails
19. Gateway threshold Points. Opportunity for key wayfinding and sculptural elements
20. Reinstate māori ngāwha (spa) as a key node point within the site
21. Possible location for minigolf course
22. Cafe & Function Venue
23. Relocated service shed

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TE AROHA TOURISM PRECINCT

Site Zoning Plan (Aerial Overlay)

Date: 03 September 2019 | Revision: A

DRAFT FOR DISCUSSION

Plan prepared for Matamata Piako by Boffa Miskell Limited

Project Manager: mome.hugo@boffamiskell.co.nz | Drawn: ALI | Checked: MHu

01

7.6 SPA CONCEPT

The spa concept is fundamental to the proposed development approach given it is the central catalyst. In the first instance three potential development options have been shaped by the constraints (or potential constraints) of the available geothermal resource. Working within these parameters a schedule of spaces has been developed that reflects spa best practice and a potential niche opportunity in the domestic market. It is focused more on the health and wellness. This opportunity reflects the origins of human use of the Te Aroha springs as a place of healing, first by Maori and then, in much later times, by Europeans as a health spa.

Geothermal Risk Mitigation – Different Development Options

Desk top analysis of the geothermal resource and engineering opportunities have identified a three-option approach to the spa development (Appendix 5). This multi option approach enables geothermal consenting risks to be controlled. The options are.

1. Option A: A new spa development utilising 63m^2 of geothermal pool surface water in total. This is aligned to the current geothermal water consent.
2. Option B: A new spa development utilising 125m^2 of geothermal pool surface water in total. This would require doubling the current geothermal water consent. The ability of the resource to supply this level of supply to the pools would need to be confirmed prior to seeking resource consent
3. Option C: A new spa development utilising 125m^2 of geothermal pool surface water in total. This option allows for using the existing consented geothermal take (circa 63m^2 of pool surface area) and using heat pumps for additional heating (to reach 125m^2 surface water capacity).

Option A gives a smaller spa with reduced revenue opportunities and levels of visitor capacity. Option B has a significantly increased capacity and revenue potential but requires an increase of the consented geothermal take. Should this additional geothermal take be granted, and the larger spa developed the consent conditions may state the consented take be reduced should undue impacts be detected to the geothermal field. Although considered unlikely Option C would then become a development's fallback position. The spa would be operated with the aid of heat pumps based on the original consented geothermal take that is currently in place.

If In later analysis and consent discussions additional geothermal take above these levels were possible additional outdoor pools could be considered in a potential development.

Spa Schedule of Spaces

A schedule of spaces has been developed which reflects the likely geothermal operating parameters and identified market niche (a health and wellness focused spa). The schedule of spaces was developed in association with a specialist spa consultant. The objective was to maximise the spa's revenue potential while maintaining the lowest possible development costs (gross floor area). Two options, Options A and B have been outlined in Table 7.1. Option C is the same as for Option B but with higher plant costs so has not been outlined in the schedule.

Table 7.1: Preliminary Spa Schedule of Spaces

SPACE	Option A			Option B		
	No	Option A Area m^2	Option A Water Area	No	Option B Area m^2	Option B Water Area
RECEPTION/RETAIL/WAITING/BOH/KITCHENETTE	1	75		1	75	
MULTI-USE TREATMENT ROOM-WITH SHOWER	6	12.5 (each)		6	13 (each)	
COUPLES TREATMENT ROOM-DUAL SHOWER	1	25		2	26	
BOH SPA AREAS	1	130		1	150	
LAUNDRY	1	15		1	15	
DRYING ROOM	-	-		1	20	
RELAXATION AREAS	1	40		1	40	
FEMALE CHANGE/WC/SHOWERS	1	40		1	48	
MALE CHANGE/WC/SHOWERS	1	40		1	48	
FEMALE HAMAM	1	25		1	25	
MALE HAMAM	1	25		1	25	
FEMALE EXPERIENCE SHOWER	2	16		2	16	
MALE EXPERIENCE SHOWER	2	16		2	16	
FEMALE SAUNA	1	16		1	16	
MALE STEAM ROOM	1	16		1	16	
OUTDOOR POOL	1		20	2		24 (each)
STANDARD PRIVATE POOL	5	17 (each)	7 (each)	8	17 (each)	7 (each)
DELUXE PRIVATE POOL	1	22	8	2	20 (each)	10 (each)
OUTDOOR EXPERIENCE SHOWER		Covered above			Covered above	
WATER PLANT		20			40	
BUILDING PLANT		95			115	
GENERAL SERVICES		25			25	
GENERAL STORE		50			50	
RUBBISH		20			20	
CIRCULATION		260			280	
TOTAL AREA (m^2)		1,161 m^2	63 m^2		1,378 m^2	124 m^2

7.7 SPA SPATIAL DESCRIPTIONS

To provide an understanding of the specification being sought from the different spaces and how they are utilised each core space has been described and a series of visual representation of existing international spas has been outlined. These images are an aspirational guide only as a Te Aroha spa would seek its own unique New Zealand look and feel.

SPA RECEPTION/RETAIL AREA

A spa reception/retail area is the first point of entry for spa guests. It has several functions, but is ideally integrated as one space (with divisions in areas) including:

1. **A Spa Reception** (in this instance with 2 spa concierge stations). Each workstation/pod is complete with a computer, POS, phone and colour printer for invoicing. Booking, payment, welcoming/departure and spa retail purchase are all made from this space by the Spa Concierge staff. As such, the reception counter needs visual view of both the waiting/consultation areas as well as the retail display.
2. Retail Area – This includes countertop space at reception and a lot of cabinetry space is required in/adjacent to the spa reception counter.
3. Consultation Lounge – This is where the welcome/departure ritual/consultation is done with spa treatment guests. Adequate seating space must be accounted for (for singles, couples and groups) based on spa capacity.
   BOH space must also be adjacent to this area. This will include retail storage, spa staff WC, spa slipper pantry (with display shelving for guest slippers), tea prep pantry/kitchenette and spa admin/offices. Kitchenette to include fridge, hot/cold water supply, sink, dishwasher and cupboard storage.

LOCKER/WC/SHOWER/CHANGE AREAS

The Spa change/locker/WC and shower areas are the first space that spa and heat/water guests will transition to once they're checked in at the spa reception. These areas will be gender segregated and will generally include:

1. Double-stacked (500ml) lockers will factor in space for shoes, amenities, shirt hanging space, a folded robe, towel and amenities.
2. Comfortable and visually appealing seated benches are required in the middle of the locker areas for changing.
3. 1-2 small private changing cubicles (with a bench and hanging space to be incorporated if possible, for the more modest guests).

4. Seated vanity areas/stations with amenities/hairdryers/shaving plugs, wall-mounted shaving/vanity mirrors.
5. Additional open shelving for additional towels (for guests)
6. A swimsuit dryer and large towel drop stations.
7. Janitorial space in this area is also required to be added as well as spare amenity, towel and robe storage space.

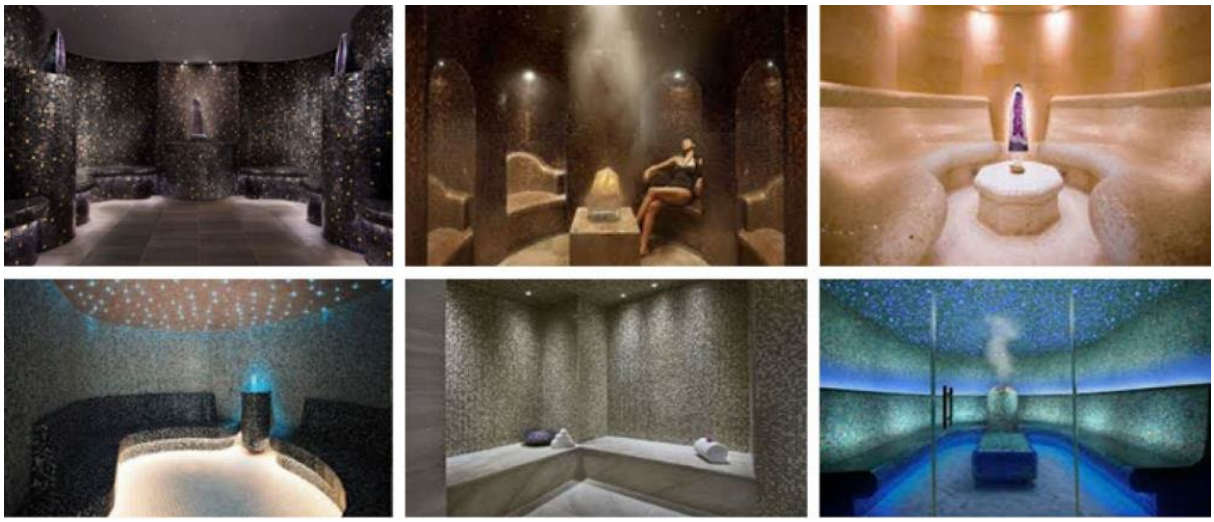
This area must be separate from the pool change areas and must be adjacent to spa reception (with a direct connection/transition to the spa heat and water areas).

STEAM ROOM / CRYSTAL STEAM ROOM

A steam room is an enclosed (generally tiled) space with large amounts of high-temperature steam, creating a high-humidity environment. This is assumed to be part of the male and female heat/water areas for spa treatment and heat/water guest use.

People sit in this room similarly to a sauna (which is conversely a hot, dry atmosphere), for relaxation, to prepare the mind/body for their upcoming spa treatments and to improve health and well-being.

Steam room temperatures are commonly maintained at 41°C or above, with a humidity of around 100%. A crystal steam room is similar, however includes a large (generally Amethyst or Quartz) crystal inside the steam room which assists in absorbing, releasing and regulating energy whilst harmonizing the chakras.



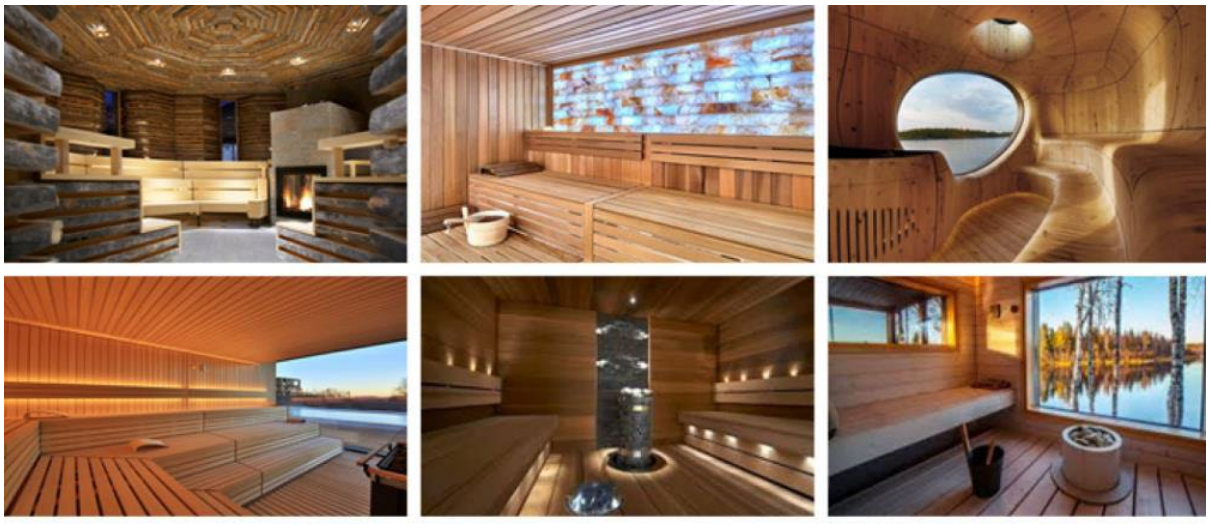
EXPERIENCE SHOWERS

An experience shower is a shower combining a unique variety of multi-temperature water sequences (e.g. tropical rain, mist, monsoon amd cold waterfall) sometimes with chromatherapy (colour therapy), acoustics and aroma to deliver a multi-sensorial encounter. Experience showers are used for rinsing the body before / after a treatment to help cool, increase blood flow, flush out toxins and close the pores (and as a great contrast to heat experiences). These are assumed both within the male and female heat/water areas (a more complex model) and outdoors near the outdoor pools (more simplistic) with hot and cold options.

SAUNA

A sauna is a small (generally wooden – spruce, aspen, oak or hemlock) room or building designed as a place to experience dry heat. The high heat makes bathers perspire and assist with warming the muscles prior to spa treatments or after bathing in cold pools. Air temperatures average around 75–100°C.

At Te Aroha, both a male and female sauna are assumed in the spa heat and water areas. Views of the surrounding area are ideal for additional relaxation.



HAMAM

Turkish bath is a variant of the Roman / steam bath (distinguished by a focus on water). Traditionally, it starts with relaxation in a warm room where the marble walls and benches are heated by a continuous flow of hot, dry air, allowing the bather to perspire. Bathers then move to a hot room before washing in water. Traditionally, after performing a full body scrub and receiving a foam massage, bathers finally move to the cooler room to relax. A more modern-day hamam experience can be performed in one heated marble room with marble seating benches and a marble scrub bench.

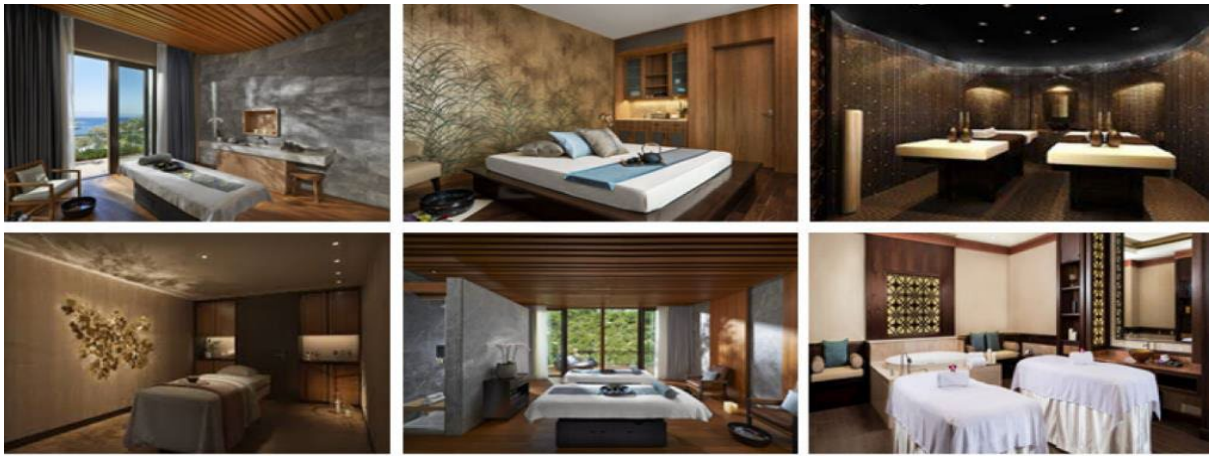
Both male and female hamam are assumed in the Te Aroha facility. These spaces will be used for paying hamam treatment guests and ideally can take up to 2-3 guests at any one time in each. Traditionally, female therapists work on female guests and male therapists on male guests. Whilst this space could be booked as a private space, generally strangers or friends could be within one hamam at once. Additional guests could also simply enjoy the space with their own spa hamam kit if desired (as long as capacity and atmosphere is not compromised).

SPA TREATMENT ROOMS

A spa treatment room is a comfortable space (which includes a treatment bed, storage for linen and spa treatment equipment, a sink and guest consultation chair with foot ritual area) where a guest has their spa treatments.

Due to the relatively low number of assumed treatment rooms at the Te Aroha Spa, we have assumed all multi-use treatment rooms within the facility. This allows maximal operational/treatment flexibility for each treatment room (i.e. each treatment room will be able to conduct facials, massage, body scrubs, body wraps and holistic treatments all in one space – if selected by the vendor). The multi-use treatment rooms also add maximal comfort for guests.

A mix of single and couples treatment option have been assumed within the spa. To maximise operational efficiency/yield, the couples treatment rooms are able to be converted into two single rooms (with a strongly sound-proofed divisible internal wall) and also have direct connectivity to the deluxe private pool(s).



RELAXATION AREA

Relaxation rooms can be gender mixed or segregated spaces. They are ideally a quiet, cosy area at the beginning/end of a spa treatment corridor for guests to relax pre or post treatment (particularly post before the guest changes).

Relaxation beds (with the torso elevated) are laid out singularly (with privacy being key to separate each bed). Each bed generally contains built in headsets, lighting and a space for magazines) for guest enjoyment. No-smell snacks/healthy refreshments are also served in this space (generally from a small self-serve buffet counter).

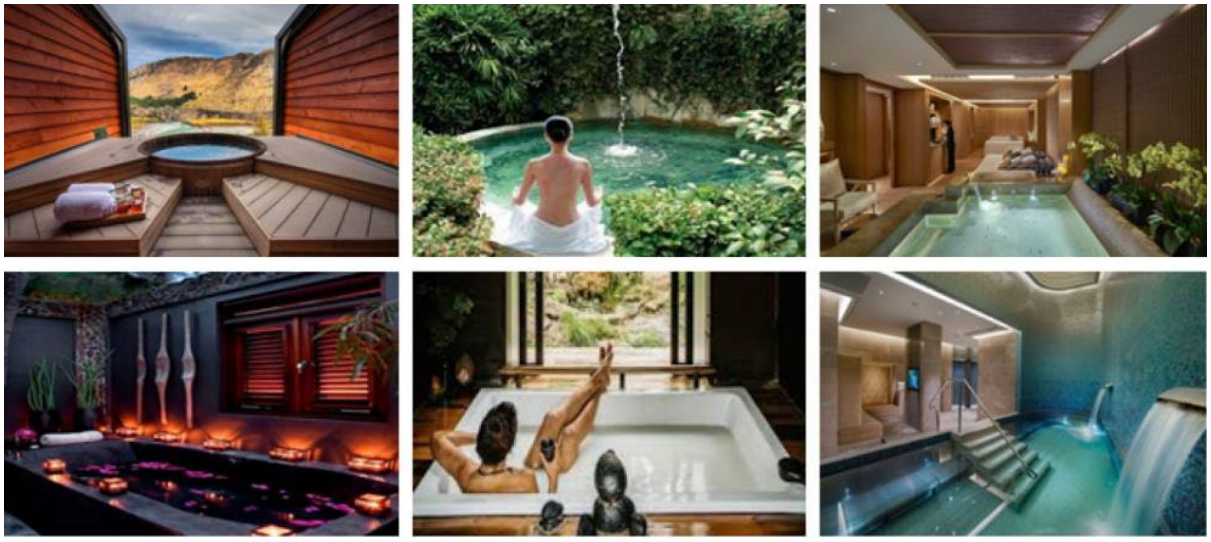
PRIVATE GEOTHERMAL POOLS

A private geothermal pool is a pool where the water is sourced from groundwater (geothermally heated by the earth's crust) and temperature controlled (typically operating at a temperature of 38°C (+/-) and not exceeding 40°C).

These unique waters are often naturally rich in algae and minerals and are said to have health benefits such as cleaning, exfoliating, and nourishing the skin, and are particularly good for certain skin conditions.

The private pools at Te Aroha will be spaces where guests can enjoy this experience privately with partners, loved ones or friends. Pools can be a vast range of designs (from more a jacuzzi style, to a cedar tub, to a bespoke luxurious tile and stainless-steel pool. Ideally theses are equipped with a range or air and water jet features for the neck and body with comfortable contours for guest seating (from 2-4 guests).

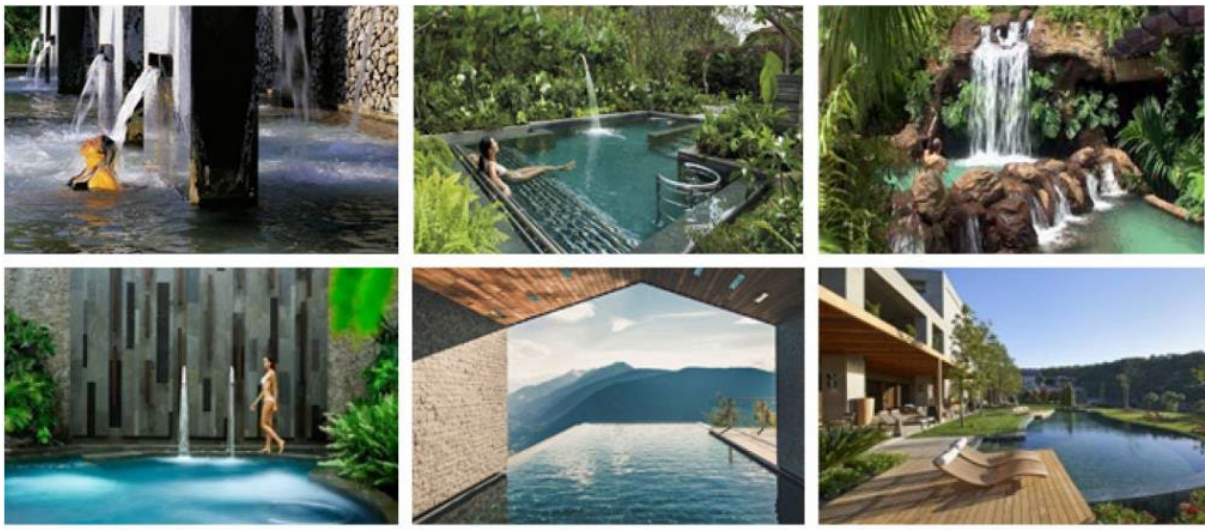
Note: If one of the private pools is at 1.2-1.3m (D), 4m diameter, with a temperature that can be reduced to 35°C, then the pool could also be used as a space for Watsu treatments. Watsu is a gentle form of body therapy (pictured bottom left) performed in a warm water pool. The treatment combines elements of massage, joint mobilisation, shiatsu, stretching and dance to relieve stress, pain and deeply relax. The guest is supported while being floated, cradled, and stretched. This could be an additional revenue stream during non-peak pool times.



OUTDOOR GEOTHERMAL POOLS

The outdoor geothermal pools are similar to the indoor private pools, but with a greater guest capacity and larger design. These pools are assumed to be general access pools (both for spa and heat/water guest use) where guests have slightly less privacy but can enjoy the pools amongst others - by themselves, with partners, loved ones or friends.

If there's more than one outdoor geothermal pool, ideally each pool will vary in temperature (between 35°C to 40°C). Pools can be a vast range of designs (from more a natural style utilising the surrounding rock/landscape, to a bespoke tile and/or stainless-steel pool). Ideally even the outdoor pools (whilst larger) are still equipped with a range or air and water jet features for the neck and body. A space for bathers to self-apply natural/local face and body masks may be available alongside the pools to enhance the 'general admission' experience.



SPA PRELIMINARY SPATIAL LAYOUT DIAGRAM

Based on the schedule of spaces a spatial layout diagram has been prepared for Option B (Plan 7.2). The spatial layouts depicted in the plan is indicative only and does not constitute a design. It has been prepared to test and optimise the schedule of spaces. Further site investigation and briefing is required before progressing layouts to a concept design level of detail.

COST ESTIMATES

The cost estimates for the three Options A, B and C have been developed. The full cost breakdown Is outlined in Appendix 6. Option B was also informed by the spatial layout diagram. At a high level each option Is costed as:

- Option A: A new spa development utilising 63m2 of geothermal pool surface water in total (GFA of 1,161) = $13.4 million
- Option B: A new spa development utilising 125m2 of geothermal pool surface water in total (GFA of 1,378) = $15.7 million
- Option C: A new spa development utilising 125m2 of geothermal pool surface water in total via the use of heat pumps (GFA of 1,378) = $16.2 million

The spatial layouts depicted in this plan are indicative only and do not constitute a design.

19053 Te Aroha Tourism Precinct
Thursday, 12 September 2019
P.O. Box 8807 Symonds St, Auckland, NZ,
Ph (09)308-0070 Email: info@penzl.co.nz

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Title: Interior Spatial Layout Plan
Sheet number: A102
Scale: 1:250@A3

matamata piako district council

architects pacific environments NZ Ltd

8.0 FINANCIAL FEASIBILITY

8.1 INTRODUCTION

BACKGROUND

The core catalyst opportunity identified through the analysis process is a destination spa facility that operates within the likely geothermal consenting constraints (see earlier report sections). The proposal is a redeveloped spa and private pool facility in the Te Aroha Domain to be funded by Matamata Piako District Council (Council), with assistance from the Governments Provincial Growth Fund (PGF). Significant external private sector capital is unlikely given the facility is on a Council Domain (Reserve land). However, without any promotion of the study three potential spa management entities have indicated they would be interested in looking at the development's management rights.

The Spa and Pools are expected to be the driver for other investment in the area including accommodation, hospitality and other activities – potentially funded by third parties.

This feasibility study is an initial analysis to determine whether the proposed Spa and Pool development is viable. Depending on the outcome of the initial feasibility and PGF support, the feasibility may be extended to a full in-depth business case.

PROPOSALS OPTIONS ANALYSED

Two proposal options have been analysed:

- Option A: A new spa development utilising 63m^2 of geothermal pool surface water in total (GFA of 1,161 m^2) = $13.4 million.
- Option B: A new spa development utilising 125m^2 of geothermal pool surface water in total (GFA of 1,378 m^2) = $15.7 million.

These options are outlined in more detail in section seven of this report.

SUMMARY CONCLUSION

Based on the volumes, pricing, costs and capital costs provided the redevelopment of the spa and pools in Te Aroha are considered financially viable.

Assuming Provincial Growth Fund (PGF) funding support and the balance funded by Council with debt, the Spa Development proposals are forecast to repay the debt over a reasonable period of time.

As a largely fixed cost operation, the financial viability is sensitive to changes in volume and price.

8.2 GENERAL ASSUMPTIONS

The following general assumptions have been made:

- Annual inflation (CPI) will be 2% per annum. This is applied to all revenues, payroll and other costs.
- It is assumed in the feasibility study that Council will own and operate the Spa and Pools. As this is the case tax has not been taken into account.
- There have been expressions of interest from third parties to lease and operate the facilities. These will be considered in the business case, as the lease will depend on the capital cost, how it is funded, and whether MPDC wish to operate it.

8.3 CAPITAL COSTS

The indicative capital costs of the proposals are summarised below in Table 8.1. The indicative capital costs are in today's dollars. Also included is an estimate assuming the facilities are built in two years, allowing for capital cost escalation at 4% per annum, based on Quantity Surveyor advice.

Table 8.1: Te Aroha Spa and Pool Facilities - Indicative Capital Costs

NZ000's	Option A	Option B	Life (years)
Land	Owned by PCDC		
Buildings	$8,936	$10,696	50
Plant	$736	$980	20
Pools	$642	$1,026	15
FFE	$254	$317	8
Services	$2,798	$2,659	50
Estimated cost in Todays $	**$13,367**	**$15,677**	
Escalation - say 2 years at 4% pa (MPM)	$1,090	$1,279	
Estimated cost in 2 years time	**$14,457**	**$16,956**	

Source: High level estimates from MPM Projects (QS). Life - Deloitte estimates

Provision has also been made in the feasibility study for the capital cost of replacement and renewal of assets over time.

8.4 VISITS

The following assumptions have been made in relation to visits:

- The level of patronage and price are key to the facility's viability.
- Visits have been forecast based on the existing facility, latent demand (as evidenced by bookings being turned away for capacity reasons) and other facilities known to Visitor Solutions and Spa Evolutions (a specialist spa treatment consultant working with Visitor Solutions).
- The level of visits is forecast to increase annually until the facilities reach their operational capacity. This will be supported by a large marketing campaign in the year of opening and ongoing marketing thereafter.

Table 8.2: Te Aroha Spa and Pool Facilities - Indicative Visit Numbers

	Current	Forecast										
	FY19	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	Capacity
Option A												
Spa Treatment Guests	2,800	5,000	5,300	5,618	5,955	6,312	6,628	6,959	7,307	7,600	7,904	**15,943**
Pool Guests	29,000	45,300	48,018	50,899	53,953	57,190	60,050	63,052	66,205	68,853	71,607	**74,460**
Option B												
Spa Treatment Guests	2,800	6,000	6,360	6,742	7,146	7,575	7,954	8,351	8,769	9,120	9,484	**18,220**
Pool Guests	29,000	70,080	74,285	78,742	83,466	88,474	92,898	97,543	102,420	106,517	110,778	**124,000**

Source: Visitor Solutions and Spa Evolution estimates

8.5 PRICING

The following assumptions have been made in relation to pricing:

- Pricing has been based on current pricing, pricing at similar facilities and the knowledge of Visitor Solutions and Spa Evolution.
- Proposed pricing is:
  - Average Spa Treatment lasting 75 minutes : $201 including GST.
  - Average Private Pool fee: $40 per person including GST.
- Pricing is assumed to increase at CPI each year.

8.6 OTHER REVENUE

- Based on advice from Spa Evolution an allowance has been made for sale of spa products to Spa Treatment guests, at a cost of sale of 50%.

8.7 STAFFING

The following assumptions have been made in relation to staffing:

- The Spa and Pools are forecast to employ 27 to 32 full time equivalent staff, increasing as guest volumes increase.
- Staffing is the main cost of operations. Spa Evolutions have developed a staffing schedule as set out in Table 8.3 below.

Table 8.3: Staffing Schedule

NZ000's	Option A	Option B	Salary/ Wage	Commissions
	Full Time Equivalents			
Spa Director	1	1	$90,000	
Manager	1	1	$55,120	
Spa Ops Supervisor	1	1	$48,880	
Spa Concierge	4	6	$45,800	1% of total revenue
Treatment Supervisor	1	1	$48,880	
Therapists	6	7	$45,760	5% of treatment revenues and 7% of retail sales
Hamam Therapist	2	2	$42,640	
Spa/ Private Pool Attendants	8	10	$43,995	
Overnight Cleaners	3	3	$43,995	
Total Staff FTE Number	**27**	**32**		
Payroll Year 1	$1,375,204	$1,617,847	ACC, Kiwisaver, sick pay	
Total including 8% on-costs	$1,485,220	$1,747,274		

Source: Spa Evolution

- As a sales incentive Therapists and Concierges are also paid a commission on turnover.
- Payroll is increased by CPI annually.
- Staff numbers for Spa Concierges, Therapists and Attendants are increased proportionally as the guest numbers increase.

8.8 OTHER COSTS

The following assumptions have been made in relation to other costs:

- Credit card commission costs at 2% have been allowed on all revenue.
- Cost of Sales for retail sales has been assumed to be 50% based on Spa Evolutions advice.
- Other costs have been built up by Spa Evolution and Visitor Solutions based on their knowledge from similar facilities and from benchmarks.
- All costs inflate annually at CPI.

Table 8.4: Spa Overhead Costs

Spa Overhead Costs	Option A	Option B
Cleaning materials	$4,950	$6,869
Spa Software	$15,500	$15,500
Contract Services	$55,692	$77,279
Decoration	$4,950	$6,869
Guest Supplies	$39,603	$54,954
Laundry and dry cleaning	$74,256	$103,039
Maintenance	$65,000	$65,000
Marketing	$50,000	$50,000
Operating Supplies	$12,376	$17,173
Staff Training	$14,851	$20,608
Travel	$19,950	$21,869
Uniforms	$3,465	$4,808
Uniforms Cleaning Costs	$12,376	$17,173
Utilities	$45,000	$55,000
Insurance	$60,000	$70,000
Staff Entertainment	$8,663	$12,021
Licences and Permits	$1,980	$2,748
Music	$9,901	$13,739
Postage	$1,238	$1,717
Office Supplies	$12,376	$17,173
Misc.	$5,152	$5,152
Telephone / Communications	$4,950	$6,869
Accounting etc	$28,587	$28,587
Waste	$3,000	$3,000
Annual Costs	**$553,816**	**$677,147**
Additional Costs in Year 1		
Marketing	$100,000	$100,000
Uniforms	$14,500	$19,500
Other Cost Year 1	**$668,316**	**$796,647**

Source: Spa Evolution and Visitor Solutions estimates

8.9 FUNDING

- The proposed funding for the Spa and Pools has not been confirmed.
- It has been assumed that the Spa Development will be funded with support from the Provincial Growth Fund (PGF) at 50% of the initial capital cost, with the balance funded by Council with debt on typical Council funding terms, namely repayable over 30 years at a 5% interest rate. We note that Councils' can currently borrow at significantly less than 5%, but this has been included as a conservative long term estimated interest rate.

8.10 OUTCOMES

OPTION A

- Option A (the smaller facility) is financially viable over time before funding. This is evidenced by the forecasts being operationally cash flow positive from year 1.
- Taking debt into account the operation is forecast to require additional support to pay back debt in pay interest in the initial year.

OPTION B

- Option B (the larger facility) is forecast to be financially viable over time, before and after funding costs, with forecast cash flows being positive from year 1.

The financial forecasts are summarised on the following pages.

OPTION A

Private and Confidential
Te Aroha Spa Development v3 - Optional A 19 Sep 2019 **DRAFT**

Statement of Financial Performance - Te Aroha

Note - Some years are hidden for presentation purposes only

NZ000's	FY21	1 FY22	2 FY23	3 FY24	4 FY25	5 FY26	6 FY27	7 FY28	8 FY29	9 FY30	10 FY31	11 FY32	16 FY37	20 FY41	21 FY42	30 FY51	31 FY52	40 FY61	50 FY71
Guests																			
Spa Treatments		5,000	5,300	5,618	5,955	6,312	6,628	6,959	7,307	7,600	7,904	8,141	9,346	10,116	10,318	12,332	12,578	15,032	15,943
Private Pools		45,300	48,018	50,899	53,953	57,190	60,050	63,052	66,205	68,853	71,607	73,755	74,460	74,460	74,460	74,460	74,460	74,460	74,460
Total Guests		50,300	53,318	56,517	59,908	63,503	66,678	70,012	73,512	76,453	79,511	81,896	83,806	84,576	84,778	86,792	87,038	89,492	90,403
Revenue per Guest																			
Spa Treatments		$185	$189	$193	$197	$201	$205	$209	$213	$217	$222	$226	$250	$270	$276	$329	$336	$402	$489
Private Pools		$37	$38	$39	$39	$40	$41	$42	$43	$44	$44	$45	$50	$54	$55	$66	$67	$80	$98
Average $/Guest (including Retail)		$54	$55	$56	$57	$58	$59	$61	$62	$63	$64	$65	$75	$83	$85	$108	$111	$141	$176
Revenue																			
Spa Treatments		927	1,003	1,084	1,172	1,267	1,357	1,454	1,557	1,652	1,752	1,841	2,333	2,733	2,844	4,062	4,226	6,036	7,803
Private Pools		1,683	1,819	1,967	2,127	2,299	2,463	2,637	2,825	2,996	3,179	3,339	3,722	4,029	4,110	4,911	5,010	5,987	7,298
Retail		93	100	108	117	127	136	145	156	165	175	184	233	273	284	406	423	604	780
Total Revenue		2,703	2,922	3,159	3,416	3,693	3,956	4,236	4,537	4,813	5,106	5,364	6,288	7,036	7,238	9,379	9,658	12,626	15,882
Cost of Goods Sold		(245)	(265)	(287)	(310)	(335)	(359)	(384)	(412)	(437)	(463)	(487)	(602)	(695)	(721)	(1,000)	(1,038)	(1,447)	(1,858)
Gross Margin		**2,457**	**2,657**	**2,873**	**3,106**	**3,358**	**3,597**	**3,852**	**4,126**	**4,376**	**4,642**	**4,877**	**5,687**	**6,341**	**6,517**	**8,379**	**8,620**	**11,179**	**14,024**
Gross Margin %		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	90%	90%	90%	89%	89%	89%	88%
Indirect expenses																			
Staff Costs	(303)	(1,485)	(1,594)	(1,653)	(1,797)	(1,889)	(2,015)	(2,142)	(2,276)	(2,351)	(2,493)	(2,637)	(3,018)	(3,420)	(3,528)	(4,588)	(4,680)	(6,048)	(7,647)
Insurance	-	(64)	(65)	(66)	(68)	(69)	(70)	(72)	(73)	(75)	(76)	(78)	(86)	(93)	(95)	(113)	(115)	(138)	(168)
Laundry and dry cleaning	-	(79)	(80)	(82)	(84)	(85)	(87)	(89)	(91)	(92)	(94)	(96)	(106)	(115)	(117)	(140)	(143)	(171)	(208)
Maintenance	-	(69)	(70)	(72)	(73)	(75)	(76)	(78)	(79)	(81)	(82)	(84)	(93)	(100)	(102)	(122)	(125)	(149)	(182)
Marketing	-	(159)	(54)	(55)	(56)	(57)	(59)	(60)	(61)	(62)	(63)	(65)	(71)	(77)	(79)	(94)	(96)	(115)	(140)
Utilities	-	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(64)	(70)	(71)	(85)	(87)	(103)	(126)
Other	-	(287)	(281)	(287)	(292)	(298)	(304)	(310)	(316)	(323)	(329)	(336)	(371)	(401)	(409)	(489)	(499)	(596)	(727)
	(303)	(2,191)	(2,194)	(2,264)	(2,420)	(2,525)	(2,663)	(2,804)	(2,951)	(3,040)	(3,195)	(3,354)	(3,809)	(4,276)	(4,402)	(5,632)	(5,745)	(7,320)	(9,198)
EBITDA	**(303)**	**267**	**463**	**608**	**686**	**833**	**933**	**1,048**	**1,175**	**1,336**	**1,447**	**1,524**	**1,878**	**2,064**	**2,116**	**2,747**	**2,876**	**3,858**	**4,826**
Depreciation	-	(478)	(478)	(478)	(478)	(478)	(478)	(478)	(482)	(482)	(446)	(465)	(482)	(465)	(534)	(569)	(598)	(651)	(319)
EBIT	**(303)**	**(211)**	**(15)**	**131**	**208**	**355**	**456**	**571**	**693**	**855**	**1,001**	**1,058**	**1,395**	**1,599**	**1,581**	**2,178**	**2,278**	**3,208**	**4,506**
Interest	-	(362)	(357)	(351)	(345)	(339)	(332)	(325)	(318)	(310)	(302)	(294)	(245)	(196)	(182)	(22)	-	-	-
NPBT	(303)	(573)	(371)	(220)	(137)	17	124	246	375	545	699	765	1,151	1,404	1,399	2,155	2,278	3,208	4,506
Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NPAT	(303)	(573)	(371)	(220)	(137)	17	124	246	375	545	699	765	1,151	1,404	1,399	2,155	2,278	3,208	4,506

Statement of Cash Flows - Te Aroha

NZ000's	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY37	FY41	FY42	FY51	FY52	FY61	FY71
Cash flow from Operations																			
Receipts from Customers	-	2,703	2,922	3,159	3,416	3,693	3,956	4,236	4,537	4,813	5,106	5,364	6,288	7,036	7,238	9,379	9,658	12,626	15,882
Payments to Suppliers	(303)	(2,436)	(2,459)	(2,551)	(2,730)	(2,861)	(3,022)	(3,188)	(3,363)	(3,477)	(3,659)	(3,840)	(4,411)	(4,971)	(5,122)	(6,632)	(6,782)	(8,768)	(11,056)
Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Cash flows	**(303)**	**267**	**463**	**608**	**686**	**833**	**933**	**1,048**	**1,175**	**1,336**	**1,447**	**1,524**	**1,878**	**2,064**	**2,116**	**2,747**	**2,876**	**3,858**	**4,826**
Investing Cash flows	(14,484)	-	-	-	-	-	-	-	(305)	-	(1,015)	(479)	(1,071)	(1,237)	(1,813)	(1,508)	(1,672)	(2,412)	-
Free Cash flows - Op & Investment	**(14,788)**	**267**	**463**	**608**	**686**	**833**	**933**	**1,048**	**870**	**1,336**	**432**	**1,045**	**806**	**828**	**302**	**1,239**	**1,203**	**1,446**	**4,826**
Interest	-	(362)	(357)	(351)	(345)	(339)	(332)	(325)	(318)	(310)	(302)	(294)	(245)	(196)	(182)	(22)	-	-	-
Debt (Debt Repayment)	7,242	(109)	(114)	(120)	(126)	(132)	(139)	(146)	(153)	(161)	(169)	(178)	(227)	(275)	(289)	(449)	-	-	-
Net Cash Flows	**(7,546)**	**(204)**	**(8)**	**137**	**215**	**362**	**462**	**577**	**399**	**865**	**(39)**	**574**	**335**	**357**	**(169)**	**768**	**1,203**	**1,446**	**4,826**

Net Present Value at 10%	(3,122)	
IRR	8.2%	
Payback Years	16	excluding funding and interest

DISCLAIMER - These projections have been compiled from information and instructions furnished to us and estimates made by Deloitte. As these projections are based on assumptions about circumstances and events that have not yet taken place they are subject to variations that may arise as future events actually occur. Accordingly, we cannot give assurance that the predicted results will actually be achieved.

Deloitte, Chartered Accountants, Christchurch 19 September 2019

OPTION B

8.5

Te Aroha Spa Development v3 - Option B 19 Sep 2019 **DRAFT**

Statement of Financial Performance - Te Aroha

Note - Some years are hidden for presentation purposes only

		1	2	3	4	5	6	7	8	9	10	11	16	20	21	30	31	40	41	50
NZ000's	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**FY32**	**FY37**	**FY41**	**FY42**	**FY51**	**FY52**	**FY61**	**FY62**	**FY71**
Guests																				
Spa Treatments		6,000	6,360	6,742	7,146	7,575	7,954	8,351	8,769	9,120	9,484	9,769	11,215	12,139	12,382	14,798	15,094	18,038	18,220	18,220
Private Pools		70,080	74,285	78,742	83,466	88,474	92,898	97,543	102,420	106,517	110,778	114,101	124,000	124,000	124,000	124,000	124,000	124,000	124,000	124,000
Total Guests		76,080	80,645	85,483	90,612	96,049	100,852	105,894	111,189	115,637	120,262	123,870	135,215	136,139	136,382	138,798	139,094	142,038	142,220	142,220
Revenue per Guest																				
Spa Treatments		$185	$189	$193	$197	$201	$205	$209	$213	$217	$222	$226	$250	$270	$276	$329	$336	$402	$410	$489
Private Pools		$37	$38	$39	$39	$40	$41	$42	$43	$44	$44	$45	$50	$54	$55	$66	$67	$80	$82	$98
Average $/Guest (including Retail)		$50	$51	$52	$53	$54	$56	$57	$58	$59	$60	$61	$69	$76	$78	$98	$100	$126	$129	$154
Revenue																				
Spa Treatments		1,113	1,203	1,301	1,407	1,521	1,629	1,744	1,868	1,982	2,102	2,209	2,800	3,280	3,413	4,874	5,071	7,243	7,462	8,918
Private Pools		2,603	2,814	3,043	3,290	3,557	3,810	4,080	4,370	4,635	4,917	5,166	6,199	6,710	6,844	8,179	8,342	9,970	10,169	12,153
Retail		111	120	130	141	152	163	174	187	198	210	221	280	328	341	487	507	724	746	892
Total Revenue		3,827	4,138	4,474	4,837	5,230	5,601	5,999	6,425	6,815	7,230	7,596	9,278	10,318	10,598	13,541	13,921	17,937	18,378	21,963
Cost of Goods Sold		(312)	(337)	(364)	(394)	(426)	(456)	(489)	(523)	(555)	(589)	(619)	(774)	(890)	(922)	(1,269)	(1,315)	(1,820)	(1,872)	(2,237)
Gross Margin		**3,515**	**3,801**	**4,109**	**4,443**	**4,804**	**5,145**	**5,510**	**5,901**	**6,260**	**6,641**	**6,977**	**8,504**	**9,428**	**9,676**	**12,272**	**12,605**	**16,117**	**16,506**	**19,726**
Gross Margin %		92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	91%	91%	91%	91%	90%	90%	90%
Indirect expenses																				
Staff Costs	(348)	(1,747)	(1,863)	(1,955)	(2,132)	(2,260)	(2,421)	(2,557)	(2,699)	(2,814)	(2,996)	(3,183)	(3,762)	(4,186)	(4,349)	(5,571)	(5,729)	(7,360)	(7,566)	(9,042)
Insurance	-	(74)	(76)	(77)	(79)	(80)	(82)	(84)	(85)	(87)	(89)	(91)	(100)	(108)	(110)	(132)	(135)	(161)	(164)	(196)
Laundry and dry cleaning	-	(109)	(112)	(114)	(116)	(118)	(121)	(123)	(126)	(128)	(131)	(133)	(147)	(159)	(162)	(194)	(198)	(237)	(241)	(289)
Maintenance	-	(69)	(70)	(72)	(73)	(75)	(76)	(78)	(79)	(81)	(82)	(84)	(93)	(100)	(102)	(122)	(125)	(149)	(152)	(182)
Marketing	-	(159)	(54)	(55)	(56)	(57)	(59)	(60)	(61)	(62)	(63)	(65)	(71)	(77)	(79)	(94)	(96)	(115)	(117)	(140)
Utilities	-	(58)	(60)	(61)	(62)	(63)	(64)	(66)	(67)	(68)	(70)	(71)	(79)	(85)	(87)	(104)	(106)	(126)	(129)	(154)
Other	-	(370)	(362)	(369)	(376)	(384)	(391)	(399)	(407)	(415)	(424)	(432)	(477)	(517)	(527)	(630)	(642)	(768)	(783)	(936)
	(348)	(2,588)	(2,596)	(2,702)	(2,894)	(3,038)	(3,214)	(3,366)	(3,524)	(3,656)	(3,855)	(4,059)	(4,729)	(5,233)	(5,417)	(6,847)	(7,031)	(8,915)	(9,153)	(10,938)
EBITDA	**(348)**	**928**	**1,205**	**1,407**	**1,549**	**1,766**	**1,930**	**2,144**	**2,377**	**2,604**	**2,786**	**2,918**	**3,775**	**4,195**	**4,259**	**5,424**	**5,575**	**7,202**	**7,353**	**8,787**
Depreciation	-	(459)	(459)	(459)	(459)	(459)	(459)	(459)	(462)	(462)	(462)	(482)	(511)	(458)	(533)	(542)	(588)	(612)	(664)	(434)
EBIT	**(348)**	**469**	**746**	**948**	**1,090**	**1,307**	**1,472**	**1,686**	**1,916**	**2,143**	**2,325**	**2,437**	**3,265**	**3,737**	**3,726**	**4,883**	**4,986**	**6,590**	**6,689**	**8,353**
Interest	-	(424)	(418)	(411)	(404)	(396)	(389)	(381)	(372)	(363)	(354)	(344)	(286)	(229)	(213)	(26)	-	-	-	-
NPBT	(348)	45	329	537	686	911	1,083	1,305	1,544	1,780	1,971	2,093	2,979	3,508	3,513	4,856	4,986	6,590	6,689	8,353
Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NPAT	(348)	45	329	537	686	911	1,083	1,305	1,544	1,780	1,971	2,093	2,979	3,508	3,513	4,856	4,986	6,590	6,689	8,353

Statement of Cash Flows - Te Aroha

NZ000's	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY37	FY41	FY42	FY51	FY52	FY61	FY62	FY71
Cash flow from Operations																				
Receipts from Customers	-	3,827	4,138	4,474	4,837	5,230	5,601	5,999	6,425	6,815	7,230	7,596	9,278	10,318	10,598	13,541	13,921	17,937	18,378	21,963
Payments to Suppliers	(348)	(2,899)	(2,933)	(3,067)	(3,288)	(3,464)	(3,671)	(3,855)	(4,048)	(4,211)	(4,444)	(4,677)	(5,503)	(6,123)	(6,339)	(8,116)	(8,346)	(10,735)	(11,025)	(13,176)
Interest	-	(424)	(418)	(411)	(404)	(396)	(389)	(381)	(372)	(363)	(354)	(344)	(286)	(229)	(213)	(26)	-	-	-	-
Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Cash flows	**(348)**	**504**	**787**	**996**	**1,145**	**1,370**	**1,542**	**1,764**	**2,005**	**2,241**	**2,433**	**2,575**	**3,489**	**3,966**	**4,046**	**5,398**	**5,575**	**7,202**	**7,353**	**8,787**
Investing Cash flows	(16,956)	-	-	-	-	-	-	-	(366)	-	-	(517)	(1,857)	-	(1,971)	-	(2,691)	(689)	(2,929)	-
Free Cash flows	**(17,305)**	**504**	**787**	**996**	**1,145**	**1,370**	**1,542**	**1,764**	**1,640**	**2,241**	**2,433**	**2,057**	**1,633**	**3,966**	**2,075**	**5,398**	**2,884**	**6,513**	**4,424**	**8,787**
Financing Cash Flows	8,478	(128)	(134)	(141)	(148)	(155)	(163)	(171)	(180)	(189)	(198)	(208)	(265)	(322)	(339)	(525)	-	-	-	-
Net Cash Flows	**(8,826)**	**376**	**653**	**855**	**997**	**1,214**	**1,379**	**1,593**	**1,460**	**2,053**	**2,235**	**1,849**	**1,367**	**3,643**	**1,736**	**4,873**	**2,884**	**6,513**	**4,424**	**8,787**

Net Present Value @ 10%	6,804	
IRR	13.0%	
Payback Years	11	excluding funding and interest

DISCLAIMER - These projections have been compiled from information and instructions furnished to us and estimates made by Deloitte. As these projections are based on assumptions about circumstances and events that have not yet taken place they are subject to variations that may arise as future events actually occur. Accordingly, we cannot give assurance that the predicted results will actually be achieved.

Deloitte, Chartered Accountants, Christchurch 19 September 2019

8.11 SENSITIVITIES

- Costs of operation are largely fixed. Therefore, the viability of the Spas and Pools are sensitive to volumes and prices.
- This is illustrated in the charts below, which summarise for the two Options for Changes in volume and changes in price.

CHANGES IN VOLUME

The analysis below shows the impact of changes in volume.

- Earnings Before Interest, Depreciation and Tax (EBITDA) (or Operating Profit):
- EBITDA increases or decreases proportionately with increases/ decreases in forecast guest numbers.
- The operation still remains financially viable before funding costs at a decline in guest numbers of 20%, though with additional funding required for a few extra years of deficits before becoming profitable.
- The numbers of years of deficit increases with lower guest numbers:
    - In Option A, a decline in guests of 40% (to Spa treatment 3,000 guests and Pool usage 27,000 guest) means the operation does not make surpluses until year 15. The operation at this level would require significant support for a long period and therefore is not considered viable.
    - In Option B, a similar 40% decline (to Spa treatments 3,600 guests, pools 42,000 guests) would require an estimated $2m operating support over 7 years before surpluses are forecast to be achieved.

Figure 8.1: Option A: Earnings Before Interest, Depreciation and Tax

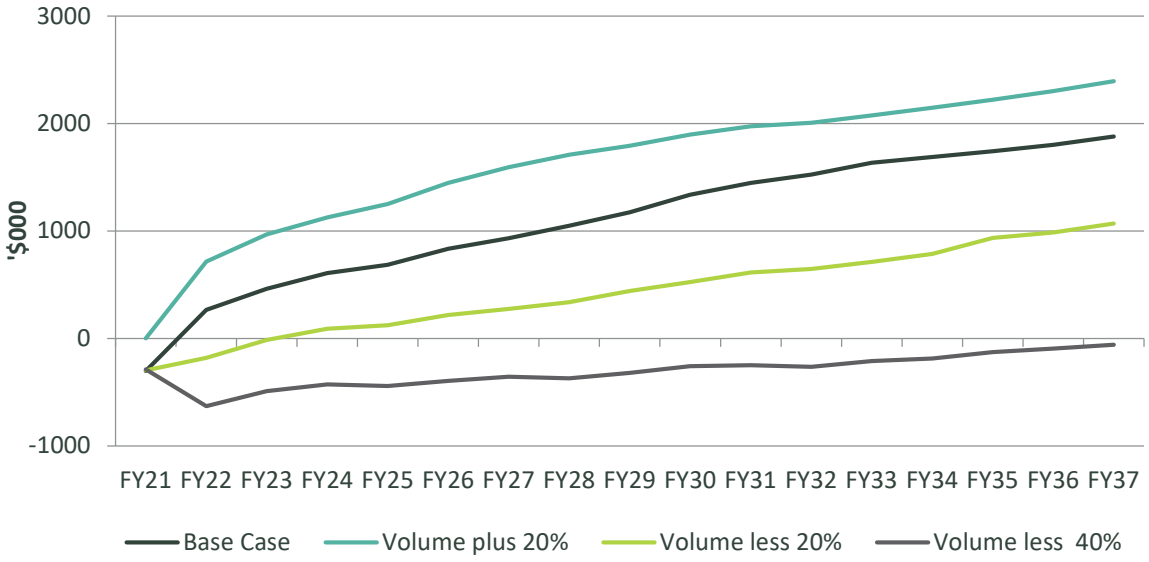
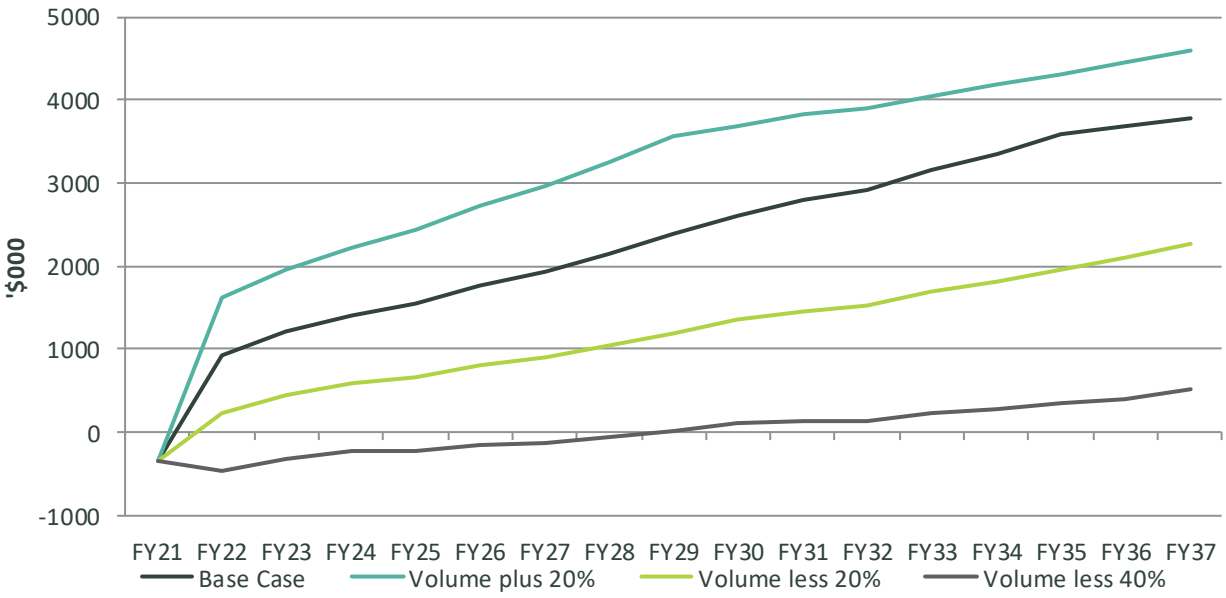


Figure 8.2: Option B: Earnings Before Interest, Depreciation and Tax



Another way of illustrating this is to look at the impact of changes in volume on the payback period. That is, how many years of earnings (EBITDA) does it take to repay the initial investment. This is illustrated in the table 8. 5 below.

Table 8.5: Initial Investment Payback

Change in Volume	Guests - Year 1		Payback	Guests - Year 1		Payback
	Spa	Pools	Years	Spa	Pools	Years
Base	**5,000**	**45,300**	**15**	**6,000**	**70,080**	**11**
Volume plus 20%	6,000	54,360	11	7,200	84,096	8
Volume less 20%	4,000	36,240	21	4,800	56,064	17
Volume less 40%	3,000	27,180	>50	3,600	42,048	39

Source: Deloitte analysis using forecasts

This shows that:

- increases in volume will make the payback period shorter and decreases make the payback period longer.
- The operations are still viable at volumes less 20%, but would require additional funding for some of the earlier years.
- The operations are not viable at a volume decrease of 40%, because the payback period in Option A is longer than the estimated life of the facility, and in Option B takes 39 years which would mean it would require additional funding for a reasonably long period.

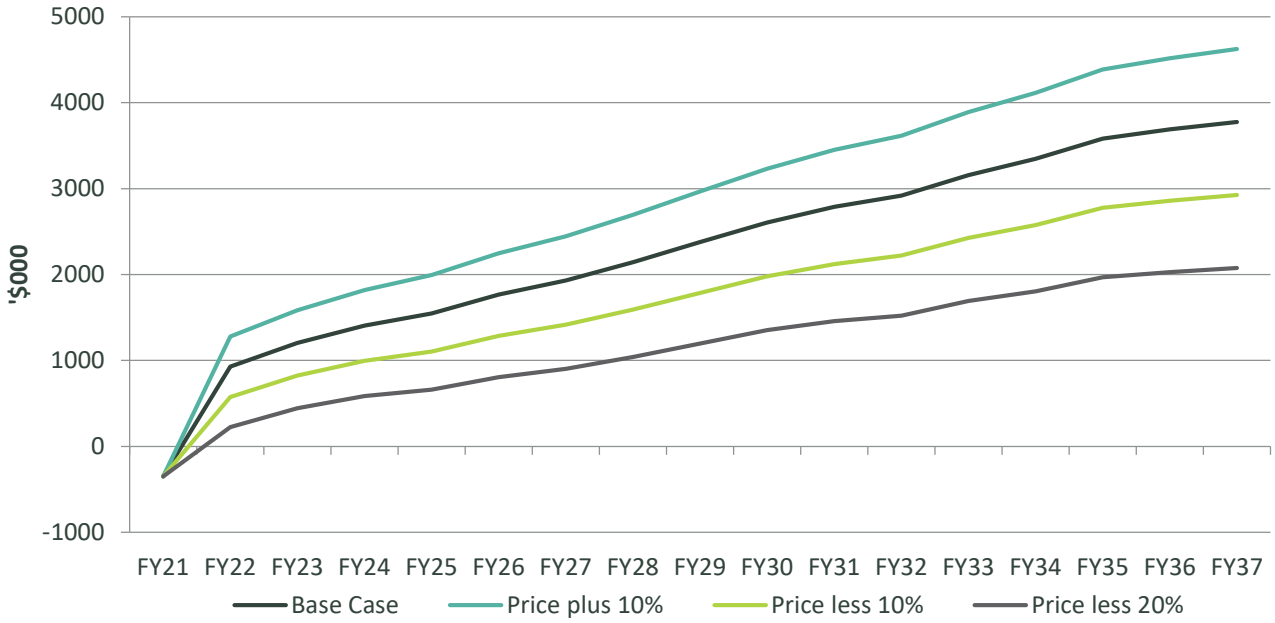
8.12 CHANGES IN PRICE

The analysis below shows the impact of changes in price of +10%, -10% and -20%.

EBITDA becomes positive in all Options in a reasonable period, though in Option A if prices were 20% lower than forecast, it takes 8 years before income covers operating costs. In this case the facility would need additional support over a longer period.

Figure 8.3: Option A: Earnings Before Interest, Depreciation and Tax

Figure 8.4: Option B: Earnings Before Interest, Depreciation and Tax



The impact of changes in prices on payback period is shown in the table 8.6 below.

Table 8.6: Impact of Price on Payback

Change in Price	Price - Year 1		Payback	Price - Year 1		Payback
	Spa	Pools	Years	Spa	Pools	Years
Base	**$201**	**$40**	**15**	**$201**	**$40**	**11**
Price plus 10%	$221	$44	13	$221	$44	9
Price less 10%	$181	$36	23	$181	$36	13
Price less 20%	$161	$32	36	$161	$32	17

Source: Deloitte analysis using forecasts. Price is including GST

This shows that:

- Increases in prices will make the payback period shorter and decreases make the payback period longer.
- The operations are still viable at prices less 10%, but would require additional funding for some of the earlier years.
- The operations are still viable in Option B at prices less 20%, but would require additional funding support in the early years.
- The payback period for Option A at prices less 20% is 36 years which would require significant additional funding support to be considered viable.

DISCLAIMER

As these estimates are based on assumptions about circumstances and events that have not yet taken place, they are subject to variations that may arise as future events actually occur. Accordingly, we cannot give assurance that the forecast results will actually be achieved.

Deloitte

19 September 2019

9.0 RISK AND MITIGATION

9.1 INTRODUCTION

Operational risks and mitigation options should be considered throughout a project even early during the feasibility process. As a project progresses the risk and mitigation analysis can be expanded. This section sets out high level issues that have been considered during the development of the feasibility study.

9.2 RISK AND MITIGATION SUMMARY

Table 9.1 outlines a preliminary level operational risk and mitigation summary.

Table 9.1: Operational Risk and Mitigation Summary

Risk	Potential Severity	Likelihood	Mitigation Options
Lack of forecast visitation during commencement.	Moderate - Severe	Considered unlikely given: • latent demand of current spa, • level of proposed marketing spend, • market analysis indicates solid domestic and international spa market, • proposed facility quality and point of difference.	• Marketing initiatives, • Maintain a broad target market (international and domestic), • initiatives to retain existing clients, • Utilise experienced spa operator, • Adjust staffing levels.
Long term forecast visitation does not materialise.	Moderate - Severe	Considered possible	• Ongoing marketing initiatives, • Maintain a broad target market (international and domestic), • Initiatives to retain existing clients, • Utilise experienced spa operator, • Maintain spa facility to a good quality. • Adjust staffing levels.
Geothermal resource is reduced.	Moderate - Severe	Considered possible (but unlikely).	• Develop resiliency with a spa design that allows for heat pumps. • Revert to an alternative water source (non-geothermal).
Operational costs are higher than estimated.	Low – moderate	Considered possible (but unlikely).	• Undertake detailed business case, • Peer review cost estimates against existing operational spa data, • Utilise experienced spa operator.

Risk	Potential Severity	Likelihood	Mitigation Options
The business model becomes flawed as final build costs are higher than anticipated.	Moderate - Severe	Considered possible (but unlikely).	• Undertake robust and holistic feasibility, business case analysis. • Appoint experienced project managers, quantity surveyors and architects. • Bring in construction companies earlier in the process. • Maintain robust cost management processes.

10.0 COSTS AND BENEFITS

10.1 INTRODUCTION

As part of assessing the Te Aroha spa proposal, the costs and benefits were considered; only the changes that are caused, facilitated, or unlocked, by the proposal are included in this assessment. The economic assessment looks at Option B as described elsewhere in the report. The capital costs, operational costs as well as benefits flowing to the district are incorporated. Importantly, a district focus is used, meaning that we do not consider within New Zealand transfers. Using a district focus in the assessment aligns with central government's aims to distribute the impacts of tourism around New Zealand and to support regional development.

The assessment reflects the relationship between the costs and benefits that will be felt locally. The assessment is based on the work completed by the wider project team. These analyses were adjusted to suite the economic assessment e.g. we removed inflation and adjusted the spending to account for matters like the opportunity cost and transfers of labour[17]. Deadweight losses[18] and the cost associated with using economic resources are factored into the analysis. The spa and hot pools facility will unlock and support other secondary business opportunities that are included in the assessment. The assessment covers 25 years and uses Discounted Cash Flow (DCF) analysis to express the future cash flows in current terms (i.e. Net Present Value analysis) using a 6% discount rate[19].

10.2 RESULTS AND SENSITIVITY ANALYSIS

The results are summarised below in Table 10.1 by reporting the key metrics of the analysis.

Table 10.1: Key Cost Benefit Metrics

Discount rate	*Costs*	*Benefits*	*Net*	*BCR*
4%	111	123	11.7	1.11
6%	92	97	5.0	1.05
8%	78	78	0.3	1.00

The analysis suggests that the proposed development will return a positive BCR i.e. it is greater than one (1) under all the discount rates. In terms of the net benefit (benefits less costs), the proposal will deliver benefits that are between -$0.3m and $11.7m. Taking the present value and spreading it out over 25 years returns an annual value ranging between $10,300 to $470,000 with a mid-point of $202,000. This value is the annual average and is lowered by the early years when capital spending (costs) outweigh the benefits. In future years, when the facility and secondary businesses operate at the assumed capacity, then the district will see a gain of $3.8m (per year and undiscounted).

Under the high discount rate (8%) the proposal's benefits are only marginally higher than the costs. The high discount rate reduces the relative importance of future benefits. This suggests that the project is not without risk and that a positive outcome is not guaranteed. There are several uncertainties around the spa and hot pools project. The sensitivity analysis shed light on the impacts of downward changes to key assumptions. The modelling suggests that the visitor numbers could be 13% lower than the estimates before the costs exceed the benefits. And, operating cost can increase by 8% before the project's costs exceed the benefits. The project is relatively insensitive to changing the capex. Capex can increase by 27% before the CBR falls below 1.

[17] Treasury New Zealand (2018) CBAx Tool User Guidance and CBAx Tool.
[18] Treasury New Zealand (2017) Guide to Social Cost Benefit Analysis.
[19] http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/currentdiscountrates

10.3 OTHER CONSIDERATIONS

The CBA focuses on the additional effects of the spa and hot pools as well as the secondary business opportunities. The project will unlock a range of benefits and other activities with benefits. For example, the district's profile and exposure will be enhanced. The value of these benefits, and any further resulting effects are not included in the assessment. Excluding such benefits from the analysis means that the true benefit position is understated.

There will be other areas that will see gains and losses. These are more difficult to (robustly) estimate and quantify. Examples include the environmental effects (e.g. emissions from more visitors), more traffic and other externalities (like social cultural costs and risks). These are excluded from the above analysis.

Appendix 7 provides a more detailed summary of the project's costs and benefits.

11.0 CONCLUSIONS AND RECOMMENDATIONS

11.1 CONCLUSIONS

The feasibility study has concluded that:

1. A significant number of tourism opportunities exist in Te Aroha and that many of them have widespread support from sectors of the community, including Mana Whenua.
2. Based on available data the best catalyst opportunity is the development of a new spa facility which operates using the available geothermal resource.
3. The other significant opportunity is the redevelopment of the Te Aroha Domain with initiatives such as a destination playground, interpretation and new croquet lawn in addition to a range of potential private sector initiatives.
4. Improving the Te Aroha main street will also be an important initiative to lift both local pride and improve visitor perceptions of the town.
5. The initiatives will create an environment that fosters private business opportunities. There are several individuals and entities that have expressed a desire to develop a range of new businesses on the back of the catalyst opportunities, especially the proposed spa.
6. A series of spa options have been developed that take into consideration risk mitigation. These options are:
    - Option A: A new spa development utilising 63m^2 of geothermal pool surface water in total (GFA of 1,161 m^2) = $13.4 million
    - Option B: A new spa development utilising 125m^2 of geothermal pool surface water in total (GFA of 1,378 m^2) = $15.7 million
    - Option C: A new spa development utilising 125m^2 of geothermal pool surface water in total via the use of heat pumps (GFA of 1,378 m^2) = $16.2 million
7. Based on the estimated volumes, pricing, costs and capital costs the redevelopment of the spa and pools in Te Aroha are considered financially viable.
8. As a largely fixed cost operation, the financial viability is sensitive to changes in volume and price.
9. Overall, the proposed development (Option B) is likely to deliver positive benefits, even if the anticipated growth does not materialise, or if the project costs are exceeded.
10. Assistance from the Provincial Growth Fund will be sought for 50% of the cost of development of the Spa ($7.2 million to $8.5 million) and the other significant Domain opportunities and interpretation ($4.5 million).

11.2 RECOMMENDATIONS

Based on the available data the study recommends that:

1. The project should advance to the next stages of evaluation in a business case process(this should include detailed examination of the financial and commercial case).
2. The project's governance group and Council should continue Mana Whenua and community engagement as part of the business case process.
3. The findings from the feasibility study should be shared with Councillors and MBIE in separate confidential meetings.

12.0 APPENDIX

APPENDIX 1 - SURVEY SUMMARY

This Appendix presents summary tables of response themes from the three main questions asked in the Te Aroha Tourism Opportunities Survey. Detailed comments are available In the survey database.

- **What are main tourism and recreation opportunities that exist at Te Aroha Domain (and its surrounding areas)?**

Theme	Count	%	Notes
Spa/ Thermal	122	76	Hot pools, spa, soaking etc (often linked to use of tracks)
Tracks	87	54	Walking and biking tracks (often linked to Mountain), rail trail
Mountain attractions	58	36	Gondola, walk/bike tracks, luges etc (often linked to tracks)
Heritage buildings	27	17	Upgrading and featuring them for various uses
Other thermal	23	14	Geyser feature/restoration, soda water/availability
Museum /Arts	22	14	Upgrading and featuring them, arts experiences
Heritage experiences	22	14	Doing various heritage activities - recreation/play
Sport facilities	20	12	Upgrading and featuring them (croquet, petanque other etc)
Pools	19	12	Just mentions, usually linked to Spa/Thermal
Events	9	6	Various ideas, often heritage or walk/bike track linked
Cultural	5	3	Featuring local cultural stories (usually linked to heritage)
Other	43	27 (n=161)	Miscellaneous ideas, often links beyond domain

- **More generally, what are some of the wider tourism and recreation opportunities that exist in and around Te Aroha overall?**

Bike/walk tracks/ networks	53	42	Walking and biking tracks, wider networks into surrounding areas
Rail Trail links	42	33	Rail trail use and associated activity packages
Mountain attractions /theme	36	29	Gondola, walk/bike tracks, luges etc, often linked to spa, river uses
River use links	30	24	River use for cruises, kayaking, connecting different sites/activities (e.g. rail trail)
Spa precinct /resort	29	23	Hot pools, spa, soaking etc, often linked to use of tracks
Heritage precincts / attractions	28	22	Upgrading and featuring icon/theme buildings and sites
Links to other Heritage/Natural sites	18	14	Use of other related sites, often linked by walking/biking tracks
Hub linking to other towns/ attractions	17	13	Connections to other sites (e.g. population centres, Hobbiton etc)
Sport facilities /activities	16	13	Use of various facilities (e.g. racing, croquet etc), related to events
Museum /Art sites/ activities	11	9	Art tours, sculptures, creative activities, theatre
Other	46	37 (n=132)	Wide variety of tourism 'types' cited (e.g. cultural, agricultural, nature etc), specific activities

What do you think would be the <u>TOP FIVE potential tourism development projects</u> that would help boost Te Aroha?

Respondents could cite up to five, with the table below representing the cumulative total times each theme was cited.)

Spa / Pool improvements	72	53	Specific facility and/or precinct development
Mountain Attractions	69	53	Variety of gondolas, zip-lines, improved road accessibility
Support structures / services	60	46	General infrastructure and services - few internal themes
Tracks / Networks (bike/walks)	47	36	Track and/or network improvements or creation
Heritage precinct/ Mainstreet attraction	41	31	Mostly tidying mainstreet, with some heritage themes cited
Domain upgrade	30	23	Specific facility and/or precinct development
River uses / water/ lake	26	20	Development of opportunities using waterways
Specific facilities	20	15	A variety of specific facility ideas
Rail Trail	18	14	Development and/or enhancement of connections
Specific Activities	15	11	A variety of specific activity ideas
Cultural attractions	11	8	A variety of cultural and/or art culture ideas
Other specific sites	7	5	A variety of specific / site-specific ideas
Other	40	31	Miscellaneous ideas/comments with few themes

(n=135)

APPENDIX 2 - SPA MARKET ANALYSIS

Introduction

This report provides estimates of potential demand for wellness services located in the Matamata-Piako District. The service categories relevant to this study are 'Health spa or day spa' and 'Hot pools'.

Definitions

Demand catchment: The geographic area in which the majority of the attraction's customers will stay overnight immediately prior to or after undertaking your activity. Three demand catchments have been considered in this analysis:

- Matamata-Piako district
- One-hour drive time from Te Aroha:
  - Hauraki District
  - Waikato District
  - Matamata-Piako District
  - Hamilton City
  - Waipa District
  - Otorohanga District
  - South Waikato District
- 2-hour drive time from Te Aroha:
  - Thames-Coromandel District
  - Hauraki District
  - Waikato District
  - Matamata-Piako District
  - Hamilton City
  - Waipa District
  - Otorohanga District
  - South Waikato District
  - Waitomo District
  - Taupo District
  - Western Bay of Plenty District
  - Tauranga City
  - Rotorua District
  - Whakatane District
  - Kawerau District
  - Opotiki District

Overnight visitor: A person aged 15 years or over who stays at least one night in the demand catchment.

Potential customers: Potential demand for an activity is measured as the number of adult visitors who stay overnight in the selected demand catchment and have a preference for that activity. Domestic and international preferences are calculated using different methodologies and hence are not comparable to each other i.e. adding domestic and international potential customers is not advisable.

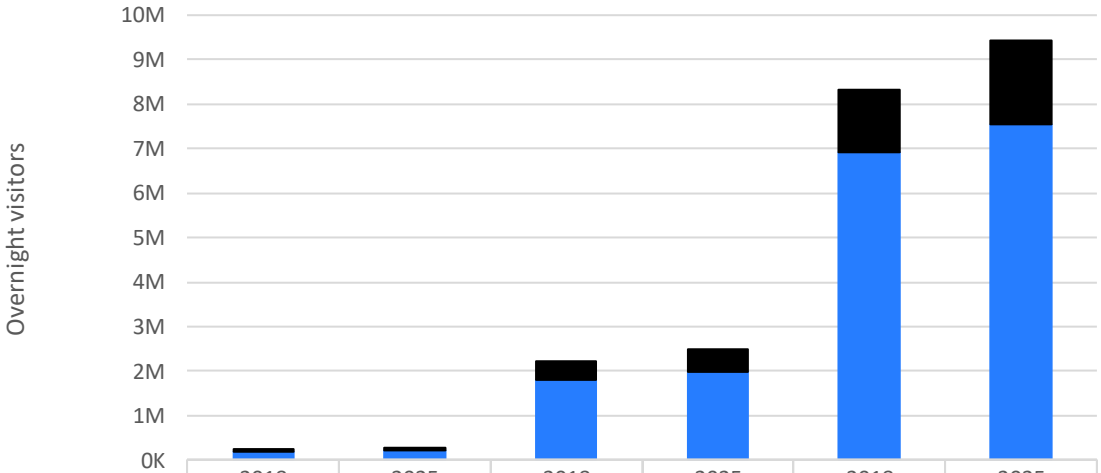
Overnight visitors

In 2018, there were around 238,000 overnight visitors to Matamata-Piako district. About 17% of these were international visitors while the remaining 83% were NZ residents. By 2025, overnight visitors are projected to rise by 13% to around 268,000, with 19% of these being international in origin.

Broadening the catchment to encompass districts within a one-hour drive time of Te Aroha increases the number of overnight visitors to 2.22 million in 2018. About 18% of these were international visitors while the remaining 82% were NZ residents. By 2025, overnight visitors are projected to rise by 13% to 2.5 million, with 21% of these being international in origin.

Broadening the catchment further to encompass districts within a two-hour drive time of Te Aroha increases the number of overnight visitors to 8.33 million in 2018. About 17% of these were international visitors while the remaining 83% were NZ residents. By 2025, overnight visitors are projected to rise by 13% to 9.42 million, with 20% of these being international in origin.

Figure 1 Overnight visitors to catchments around Matamata-Piako district



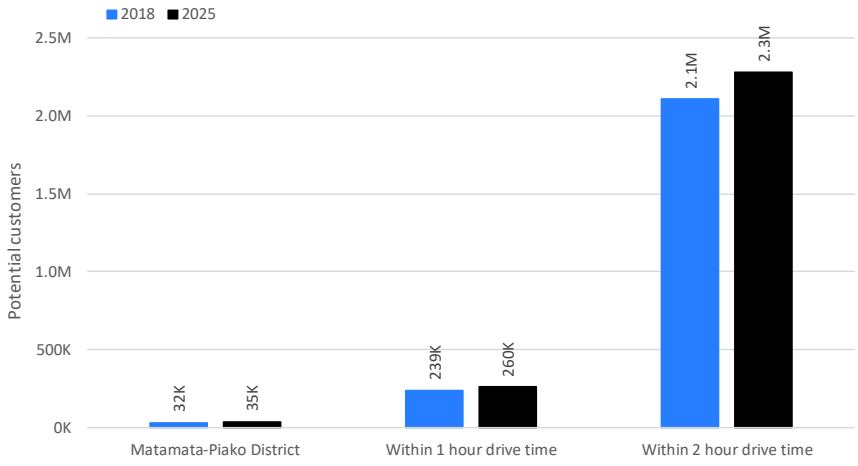
	2018	2025	2018	2025	2018	2025
	Matamata-Piako District		Within 1 hour drive time		Within 2 hour drive time	
International	40,100	51,500	405,600	529,100	1,400,100	1,863,800
Domestic	197,600	216,700	1,814,400	1,970,000	6,926,100	7,552,300

Potential customers for hot pools

Domestic customers

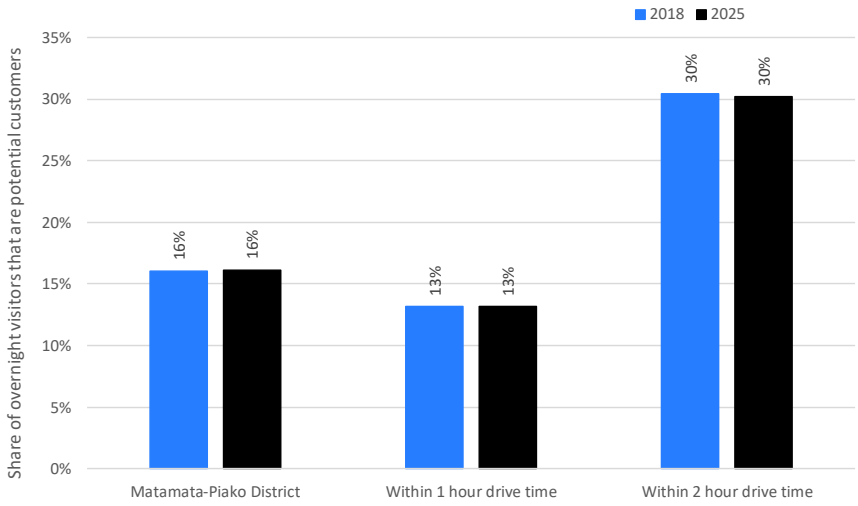
There were around 32,000 domestic overnight visitors to the Matamata-Piako district in 2018 who were potential customers of hot pools. This number rises to 239,000 when the demand catchment is expanded to a one-hour drive time, and 2.1 million when it is expanded to a two-hour drive time. The number of potential customers for hot pools is expected to increase by 8-10% within all three catchments by 2025.

Figure 2 Domestic overnight visitors that are potential customers of hot pools by catchment



The share of domestic overnight visitors that are potential customers of hot pools is 16% for those staying in Matamata-Piako district, 13% for those staying within a one-hour drive time of Te Aroha, and 30% for those staying within a two-hour drive time (due to the inclusion of Rotorua which has a strong geothermal offering). These shares are expected to remain consistent in 2025.

Figure 3 Share of domestic overnight visitors that are potential customers



Demographic analysis of domestic overnight visitors that are potential customers of hot pools reveals the following insights:

- Auckland is a major source market, although its dominance reduces somewhat as the catchment widens.
- Around half of the potential customers are aged 15-34 years. The share of potential customers aged 35-54 years almost doubles as the catchment widens, mainly at the expense of 55+ year olds.
- Male and female demand is relatively even within the one-hour and two-hour drive time catchments, but there is a small skew towards males among those staying overnight in Matamata-Piako district.

Figure 4 Share of potential domestic customers by region

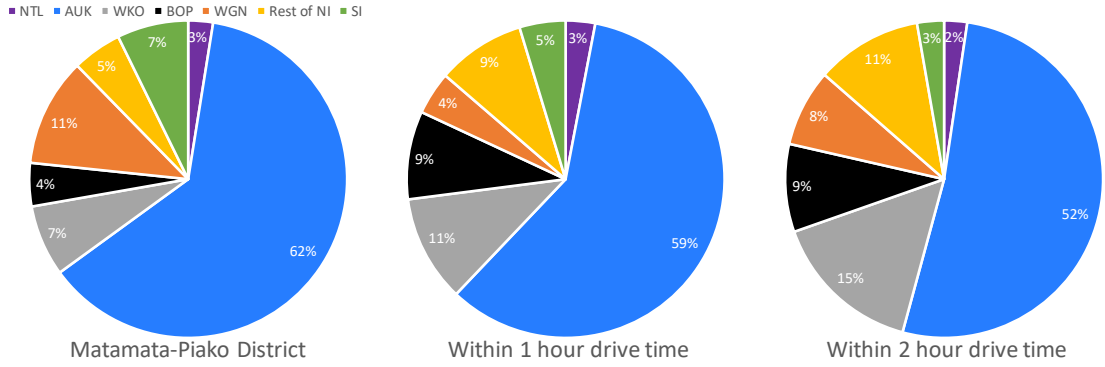


Figure 5 Share of domestic potential customers by age

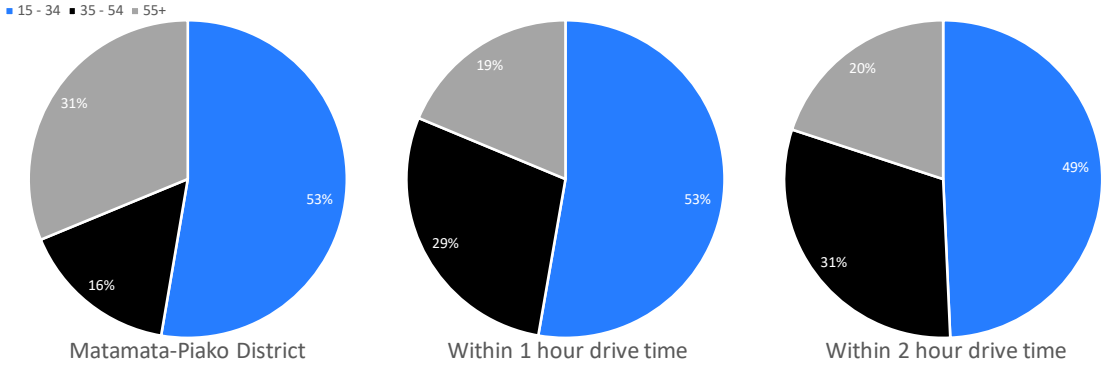
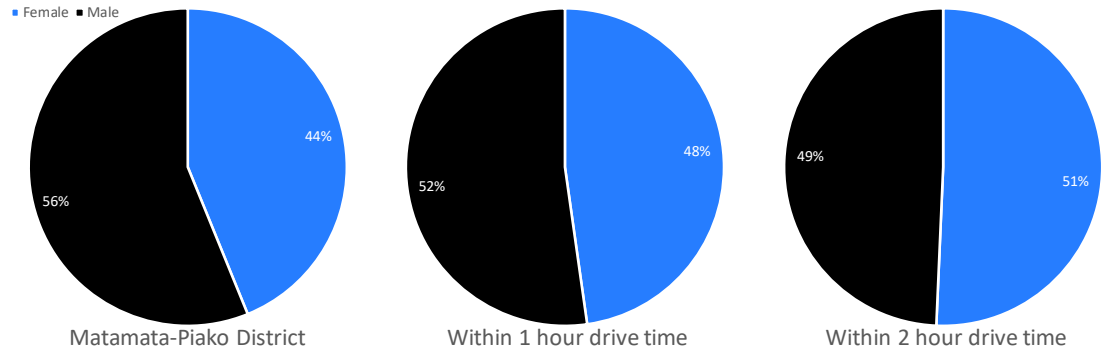


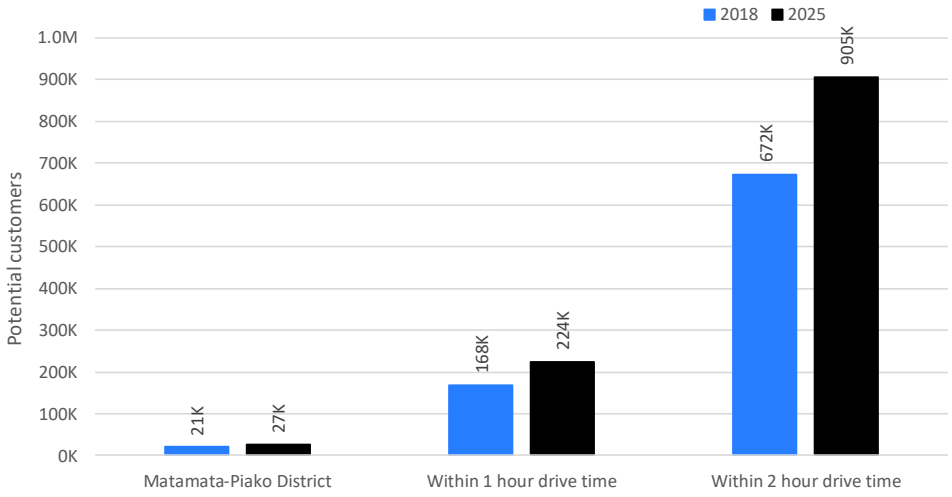
Figure 6 Share of domestic potential customers by gender



International customers

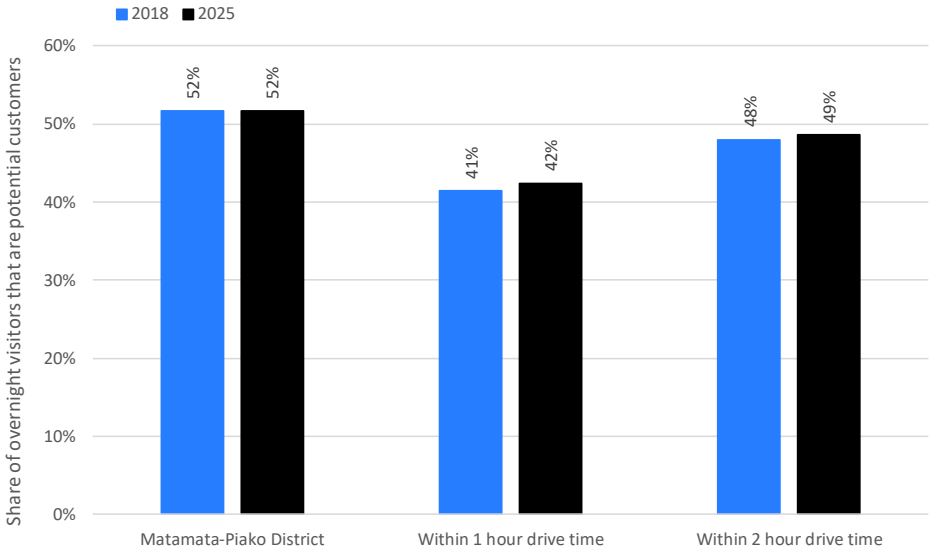
There were around 21,000 international overnight visitors to Matamata-Piako district who were potential customers of hot pools. This number rises to 168,000 when the demand catchment is expanded to a one-hour drive time, and 672,000 when it is expanded to a two-hour drive time. The number of potential customers for hot pools is expected to increase by around 29-35% within all three catchments by 2025.

Figure 7 International overnight visitors that are potential customers of hot pools by catchment



The share of international overnight visitors that are potential customers of hot pools is 52% for those staying in Matamata-Piako district, 41% for those staying within a one-hour drive time of Te Aroha, and 48% for those staying within a two-hour drive time. These shares are expected to remain relatively consistent in 2025.

Figure 8 Share of international overnight visitors that are potential customers



Demographic analysis of international overnight visitors that are potential customers of hot pools reveals the following insights:

- Australians are the largest potential market for hot pools followed by China, USA, UK and Germany.
- The age profile of potential customers is relatively balanced in the one-hour and two-hour drive time catchments but is skewed towards 15-34 year olds in the Matamata-Piako catchment.
- International customers are slightly more likely to be female than male.

Figure 9 Share of potential international customers by region

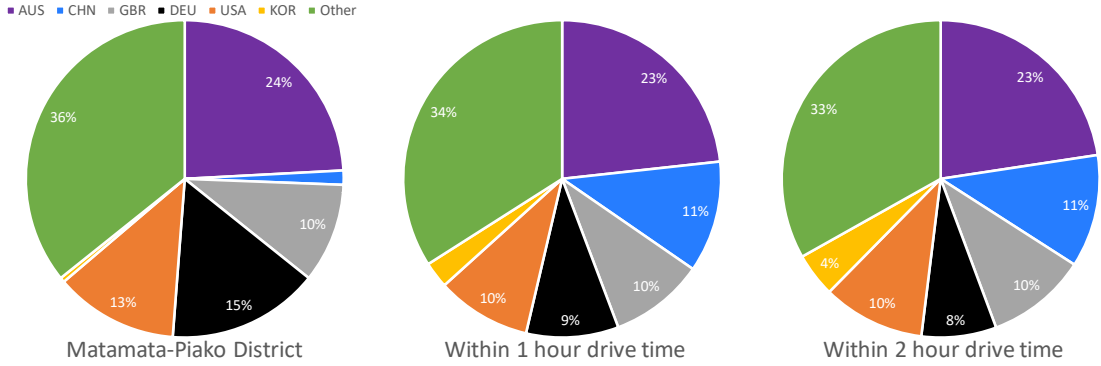


Figure 10 Share of potential international customers by age

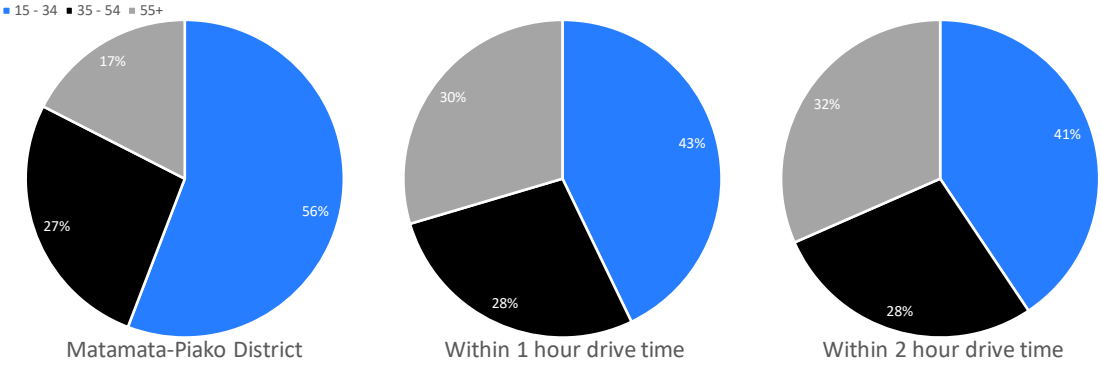
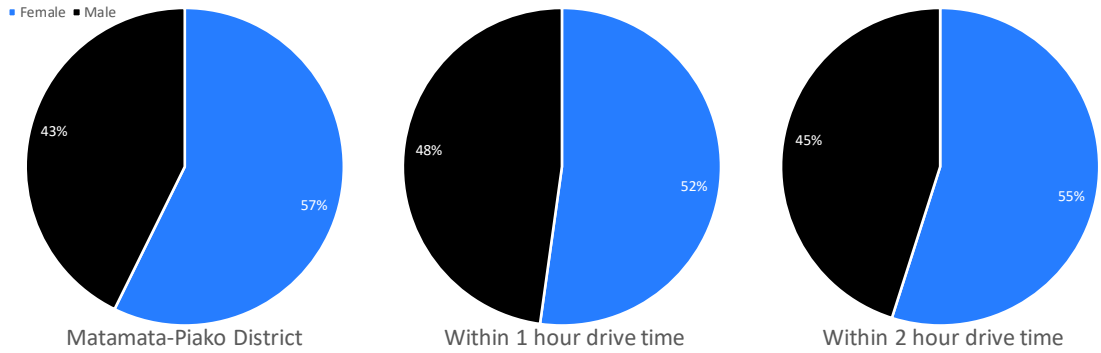


Figure 11 Share of potential international customers by gender

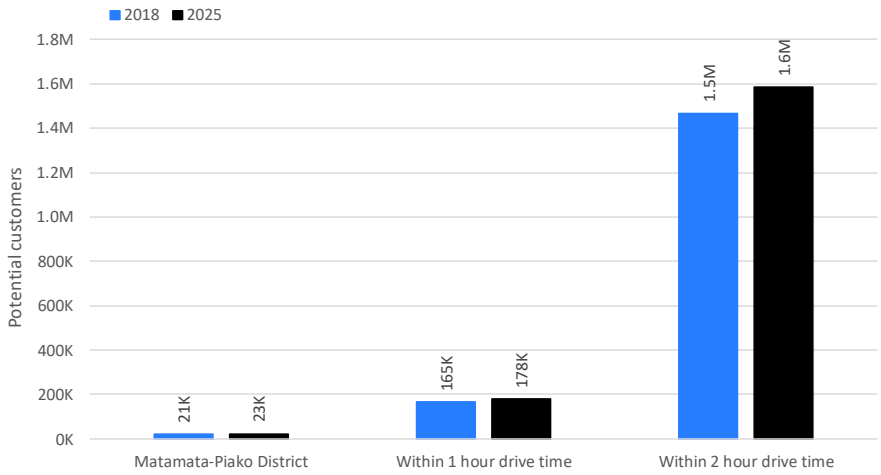


Potential customers for health spa or day spa

Domestic customers

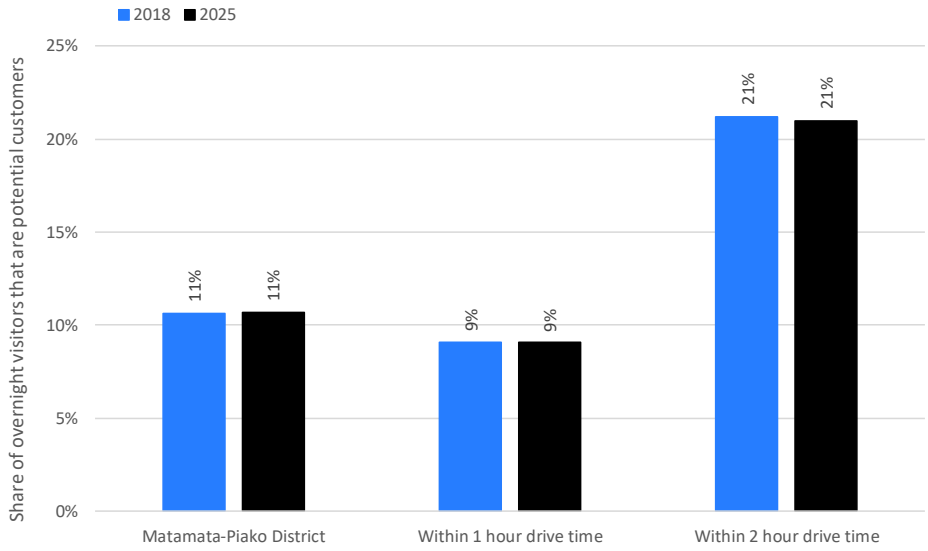
There were around 21,000 domestic overnight visitors to the Matamata-Piako District in 2018 who were potential customers of health spa or day spa. This number rises to 165,000 when the demand catchment is expanded to a one-hour drive time, and 1.5 million when it is expanded to a two-hour drive time. The number of potential customers for health spa or day spa is expected to increase by 8-10% within all three catchments by 2025.

Figure 12 Domestic overnight visitors that are potential customers of health spa or day spa



The share of domestic overnight visitors that are potential customers of health spa or day spa is 11% for those staying in Matamata-Piako district, 9% for those staying within a one-hour drive time of Te Aroha, and 21% for those staying within a two-hour drive time (due to the inclusion of Rotorua which has a strong geothermal offering). These shares are expected to remain consistent in 2025.

Figure 13 Share of domestic overnight visitors that are potential customers



Demographic analysis of domestic overnight visitors that are potential customers of health spa or day spa reveals the following insights:

- Auckland is a major source market, although its dominance reduces somewhat as the catchment widens.
- Around half of the potential customers are aged 15-34 years. The share of potential customers aged 35-54 years increases from 19% to 33% as the catchment widens, mainly at the expense of 55+ year olds.
- There is a skew towards females among potential customers for health spa and day spa, which increases as the catchment widens.

Figure 14 Share of potential domestic customers by region

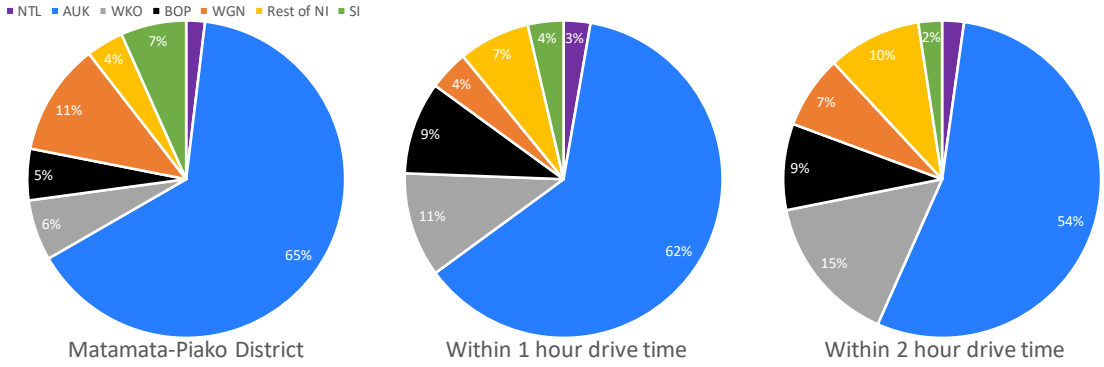


Figure 15 Share of domestic potential customers by age

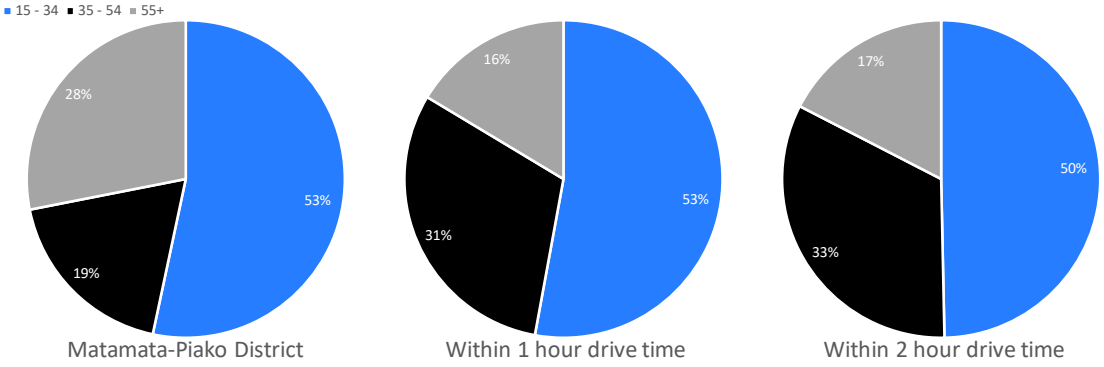
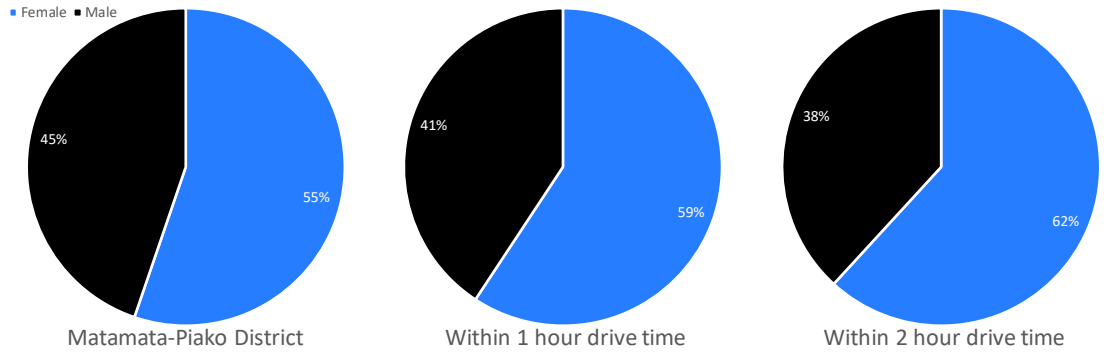


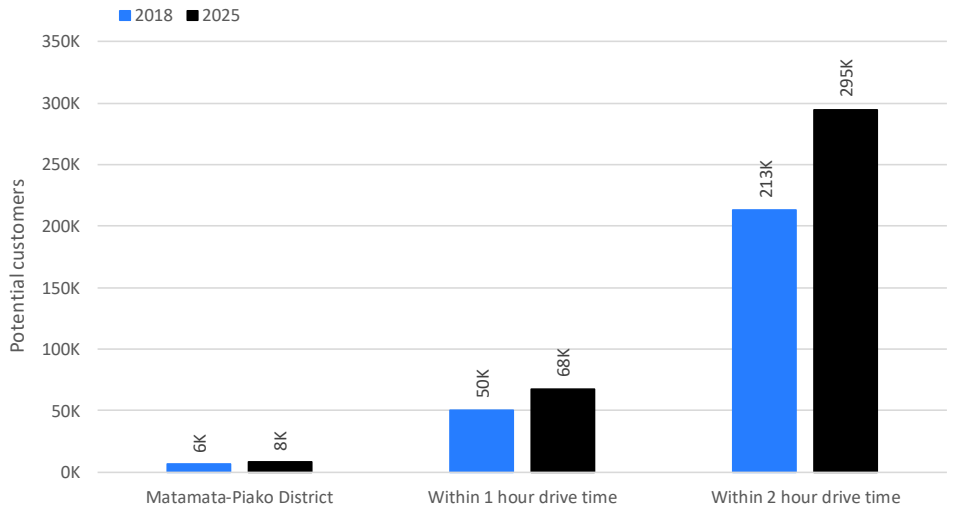
Figure 16 Share of domestic potential customers by gender



International customers

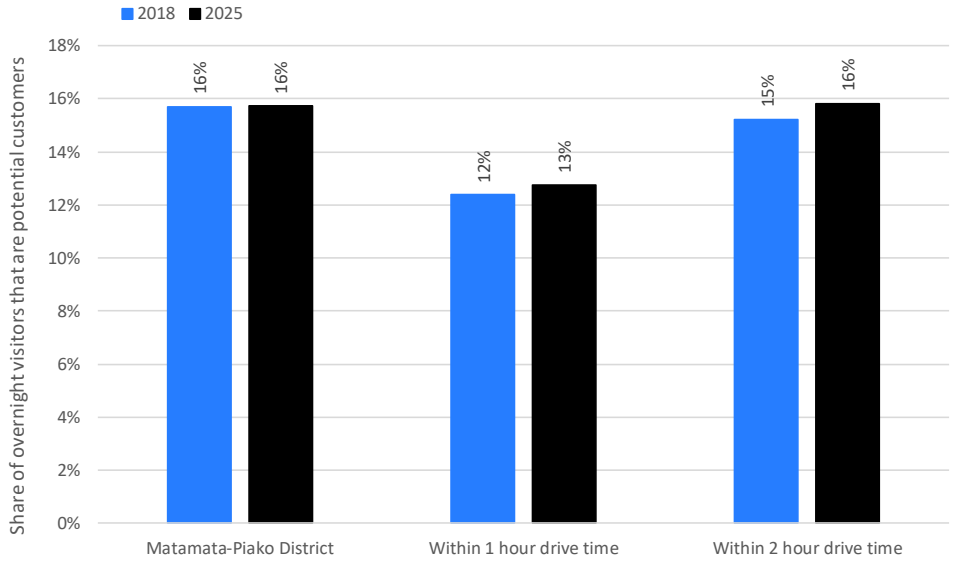
There were around 6,000 international overnight visitors to Matamata-Piako district who were potential customers of health spa or day spa. This number rises to 50,000 when the demand catchment is expanded to a one-hour drive time, and 213,000 when it is expanded to a two-hour drive time. The number of potential customers for health spa or day spa is expected to increase by 29-38% by 2025.

Figure 17 International overnight visitors that are potential customers of health spa or day spa



The share of international overnight visitors that are potential customers of health spa or day spa is 16% for those staying in Matamata-Piako district, 12% for those staying within a one-hour drive time of Te Aroha, and 15% for those staying within a two-hour drive time. These shares are expected to remain relatively consistent in 2025.

Figure 18 Share of domestic overnight visitors that are potential customers



Demographic analysis of international overnight visitors that are potential customers of health spa or day spa reveals the following insights:

- Australians are the largest potential market for health spa or day spa followed by China, USA, UK and Germany.
- The age profile of potential customers is skewed towards 15-34 year olds in the Matamata-Piako catchment and one-hour drive time catchment but is more balanced in the two-hour drive time catchment.
- There is a skew towards females among potential customers for health spa and day spa, which increases as the catchment widens.

Figure 19 Share of potential international customers by region

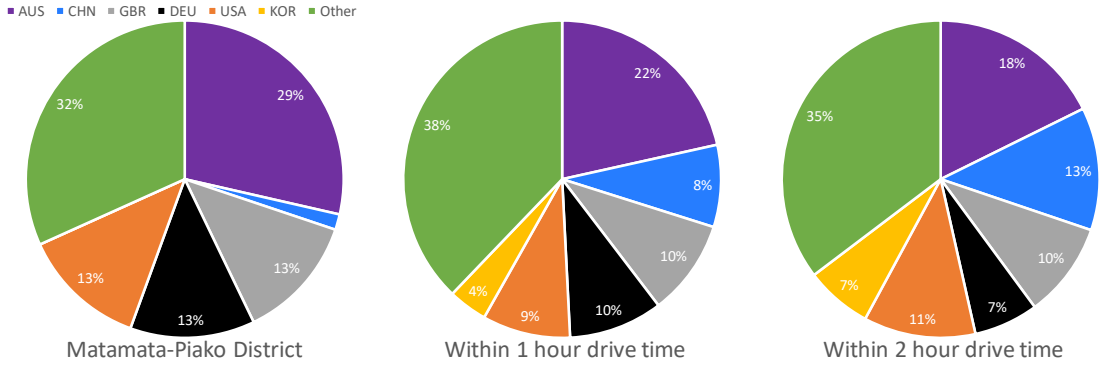


Figure 20 Share of potential international customers by age

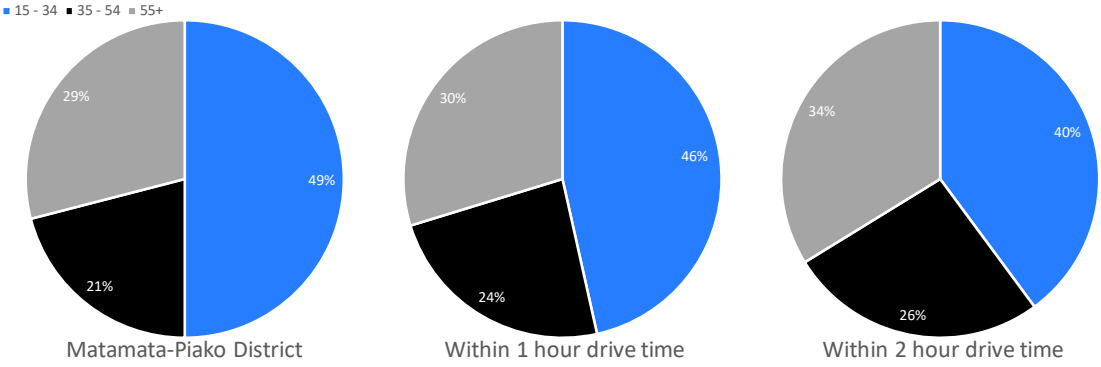
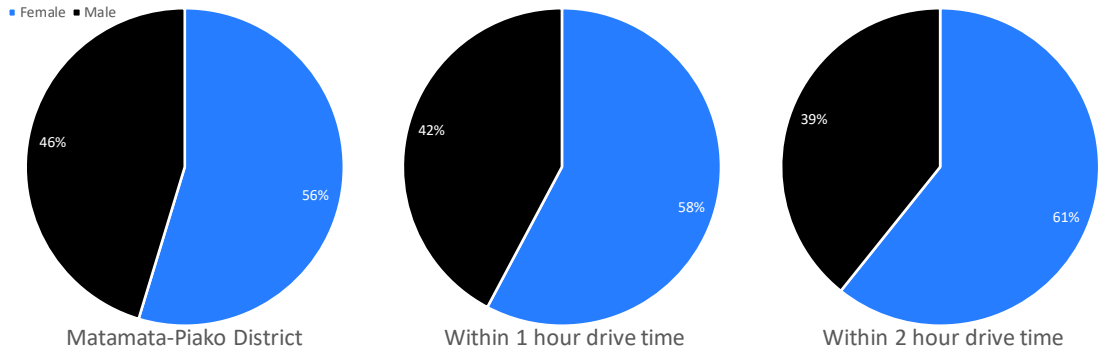


Figure 21 share of potential international customers by gender



APPENDIX 3 - BUILT HERITAGE

SALMOND REED ARCHITECTS LIMITED

58 CALLIOPE ROAD
DEVONPORT
AUCKLAND 0624
TEL 09 445 4045

salmondreed.co.nz

15 August 2019
2019-064

Craig Jones
Visitor Solutions
PO Box 9972
Newmarket
Auckland 1149
E: craig@visitorsolutions.net

Dear Craig,
Te Aroha Tourism – Built Heritage in the Domain Summary

At your request, I offer the following appraisal of heritage values of the built structures in the Domain precinct bounded by Whitaker, Boundary and Wilson Streets in Te Aroha:

Built Heritage
Heritage NZ listed the Te Aroha Domain as an Historic Area in 1994, and I reference sections of their appraisal as follows:

Historical Significance or Value
This historic area was registered under the Historic Places Act 1993. The following text is from the original Recommendation for Registration report considered by the NZHPT Board at the time of registration.

Historical: The Te Aroha Hot Springs Domain was for almost two decades the most popular of the three main spa resorts developed in New Zealand at the end of the nineteenth century.

CONCLUSION: Te Aroha Hot Springs has significant historical and cultural value as a once leading nineteenth Century New Zealand health resort. It has maintained a level of historic integrity unmatched by other spa resorts such as Hanmer Springs and Rotorua. The structures that remain and the landscape features of the Domain serve to maintain much of the original Edwardian character.

Architectural: Te Aroha is an interesting collection of vernacular bathing and recreational buildings that still reflects the character of the Edwardian era. Only a few of the original buildings remain but they are unique architectural examples of their type.

Aesthetic: The Te Aroha grounds represent the mature landscape that has been altered over time but one that still retains features from the gardens developed under H. Dalton and T.E. Pearson. The original landscaping that includes lake-lets, rockeries, exotic and native plant life is enhanced by the remaining Edwardian structures.

Archaeological: There are several significant archaeological sites within the Domain due to the removal of structures dating back to the spa's heyday.

Cultural/Social: Te Aroha reflects nineteenth Century attitudes to health problems and their cure. The Domain continues to play an important part in the town as an urban park area, a sports centre and as an attraction for local and international tourists.

Working from first principles, HNZ's listing on the entire Domain recognises the area's relevance to the town's social and architectural history. This doesn't preclude changes, and I propose the following draft inventory:

1. **Buildings for retention** - recognised as having heritage value with Heritage NZ and/or local Council:
    - Cadman bathhouse (1898) – use to be determined
    - Domain House (1908-23) – return as a teahouse/café/restaurant
    - No.7 or Maori bathhouse (1886) – restore, possibly make open to public for museum viewing/interpretation
    - *i-Site* building (1894-1905) – possible use unchanged
    - Former Women's Bowling Pavilion (1905) – possible gallery use unchanged

- Band rotunda (1898-1905) – retain as is
- No.2 bathhouse (1886) – Council to continue with restoration/adaptation works to concrete bath
- No.15 spring (1910) – retain as is
- Cottage café (Gardener's Cottage) (1907) – retain use, maintenance
- Historic gates (Whitaker St) – retain
- Grand Hotel – refurbish for use as hotel

Ideally use/reuse each building/structure for its original intended purpose or a purpose which doesn't require wholesale changes. Retain extent of place curtilage or "free space" around each building.

2. **Buildings/landscape for possible retention, modification, removal or demolition** -
   - Mineral Spa bathhouse (c 1990) – demolish, consider replacement building
   - Pools building – retain as is
   - Croquet club (c 1950) – retain for new use or remove/demolish
   - Former Bowling pavilion (c 1980) – retain for new use or remove/demolish
   - Former Skating pavilion (c 1957) – remove/demolish
   - Former Croquet Greens – retain, modify in-line with proposal
   - Former Bowling Greens – modify in-line with proposal
   - Lake-lets & playgrounds – retain or modify in-line with proposal
   - Utility Shed – remove/demolish
   - Toilet & carport – remove/demolish

I trust this appraisal is of assistance to interested parties in light of potential tourism development opportunities in the near future.

Yours sincerely

Salmond Reed Architects Ltd

Lloyd Macomber
ARCHITECT / DIRECTOR

APPENDIX 4 - INTERPRETATION

Te Aroha

Potential Interpretive Media Approach

Prepared for **Matamata-Piako District Council** on 16.09.2019

locales
place-based storytelling

Introduction

In the initial community stakeholder sessions and in the initial consultation with hapū representatives it is clear that Te Aroha has a wealth of authentic stories to share with visitors to support their visit.

While the number and range of stories is vast and deep, we suggest identifying a theme that differentiates Te Aroha as a visitor destination and that ties in with the other visitor experiences being developed.

We suggest focussing on the stories that relate to water. Many of the community suggestions have mentioned water in some way: the healing waters of the springs, the river, the spa, steam and the water in Lemon and Te Aroha.

By making an interpretive storytelling experience based around water this enables Te Aroha to cut through with clear marketing messages that relate to the general product offering.

This does not mean that stories that do not relate to water are not told, but rather that the connection to water is the ‘hook’ and the other rich and varied hapū and community histories are accessed from this entry idea.

Note: This document outlines potential delivery mechanisms for the visitor experience — it does not constitute a final concept.

In-depth engagement with mana wheuna and the local community will be required before storylines can be determined.

Water Themed Installations — Option A

Creating a series of water-themed installations throughout the reserve will create an interactive, kinetic storytelling trail that will engage visitors during the day and evening.

Concepts can be developed in consultation with the community – but each installation has a relationship to the role of water in the region, from the waters of the river, the mountain, the healing thermal water, steam and the rejuvenating Lemon and Te Aroha.

Each of the installations has an interactive component that incorporates water, steam or mist.

We have featured three initial concepts here that could be further developed, added to and co-designed with hapū and community groups.

- Healing waters
- Steam power
- Lemon and Te Aroha

These installations are lit at night to create another level of visitor experience.

OPTION A

Healing Waters – Orientation Map

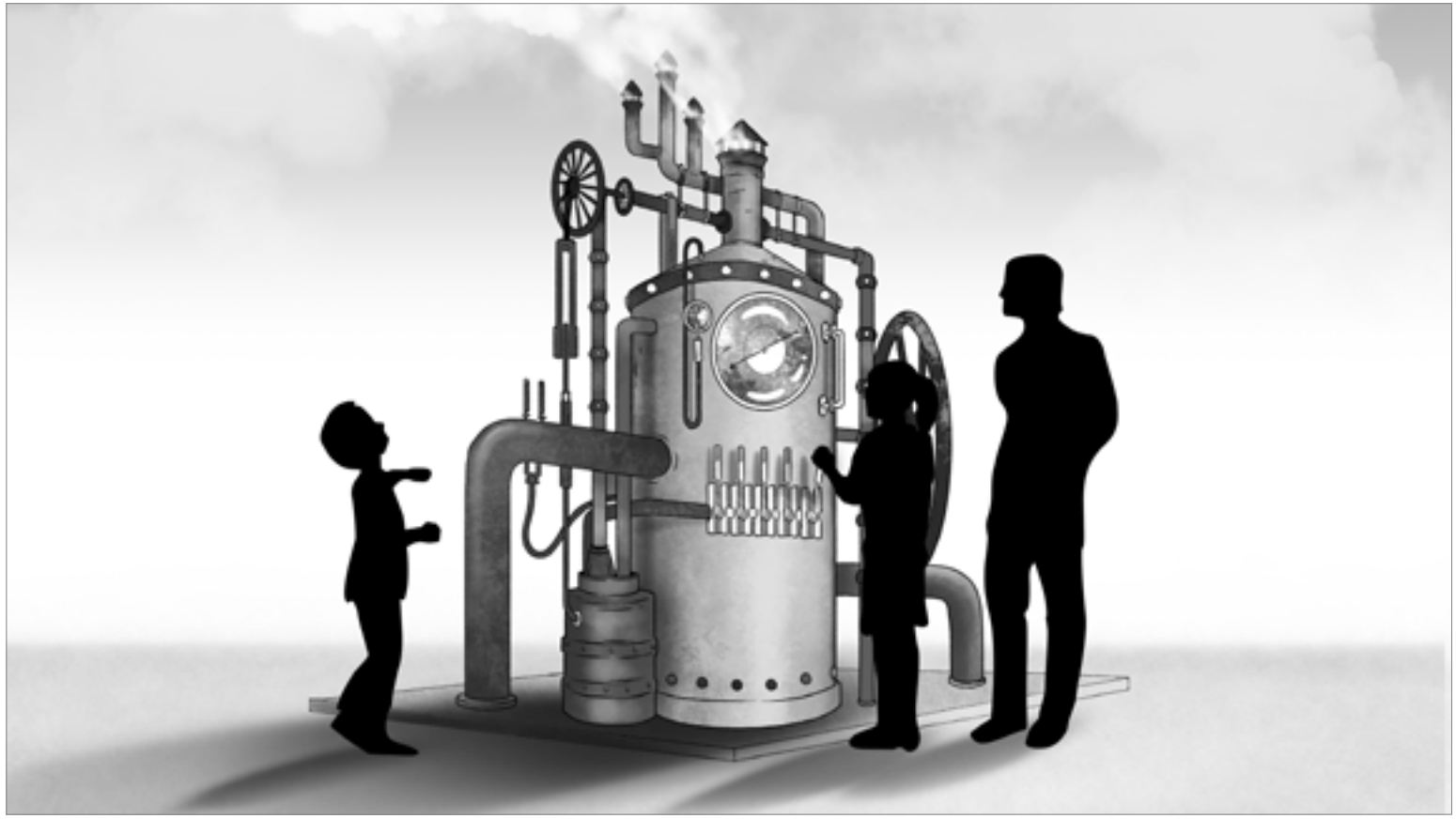
A 3D relief map of the region shows the topographical layers of the mountain, the river and also a street map. The waters of the river and potentially bathing pools/springs are water features that flow through the structure. These water flows can be lit at night.

The map also serves as an introduction to the area from a hapū perspective, and as a guide to the facilities and tourism/storytelling features and products.

OPTION A

Sculptures: Steam

A playful structure that evokes steam trains and other steam powered histories of the region with an interactive element that creates a mist effect.



OPTION A

Sculptures: Bottle

A direct play on the L&P Bottle – this L&TA bottle is mounted inside a flow of water which is then recycled back up into the pouring bottle.

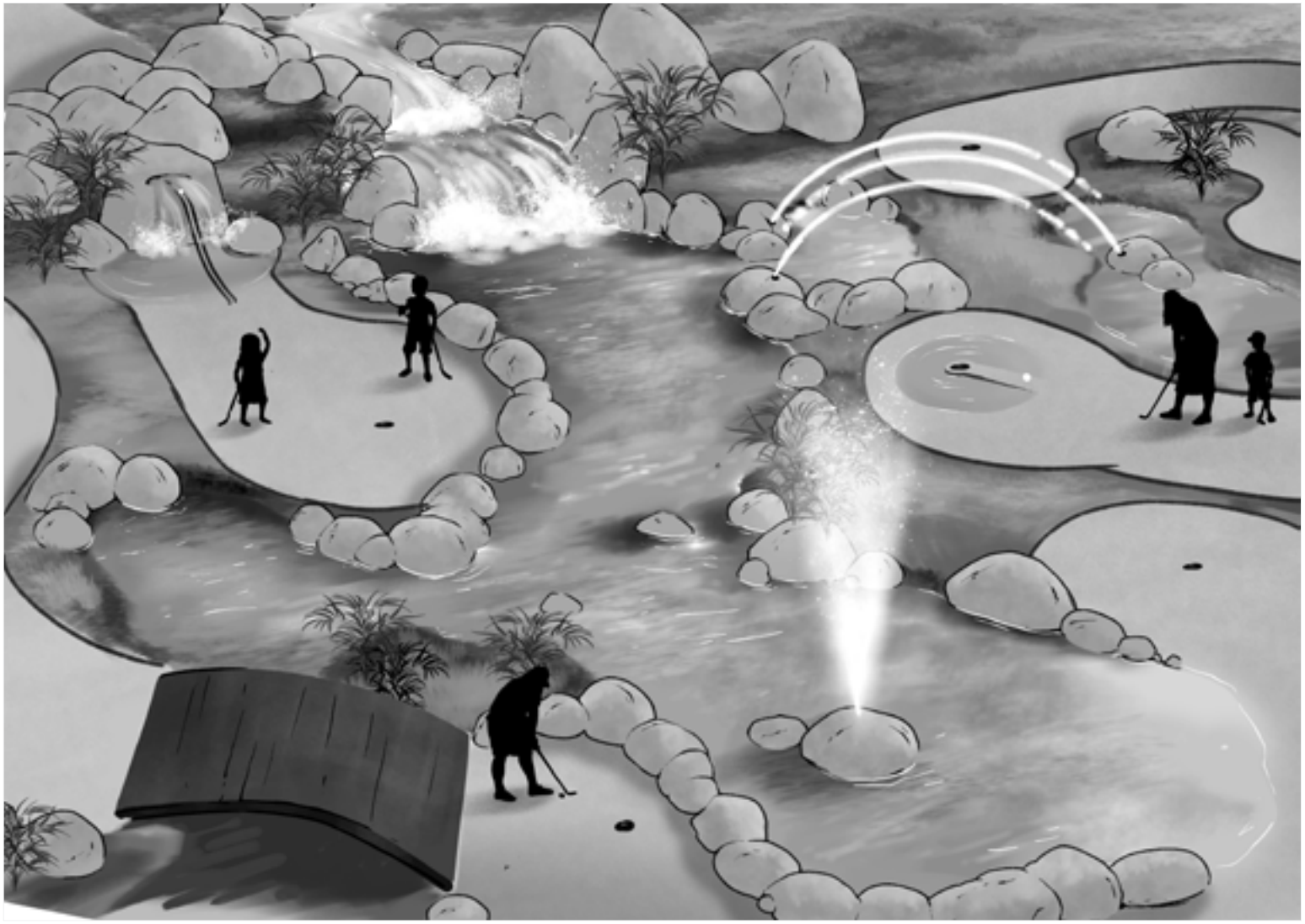
Note: this feature may not be in the domain and could be positioned elsewhere in Te Aroha.

Water Themed Installations — Option B

An alternative to the water-powered installations (which will require water, electricity and pumps) are more traditional interpretive stations with unique design elements that tell similar stories but in more static forms.

Themed Mini Golf

A water-themed mini-golf experience would offer a unique destination experience. Set within a water-based set water can be used to propel the golf-balls, or create obstacles with each hole telling a unique aspect of Te Aroha.



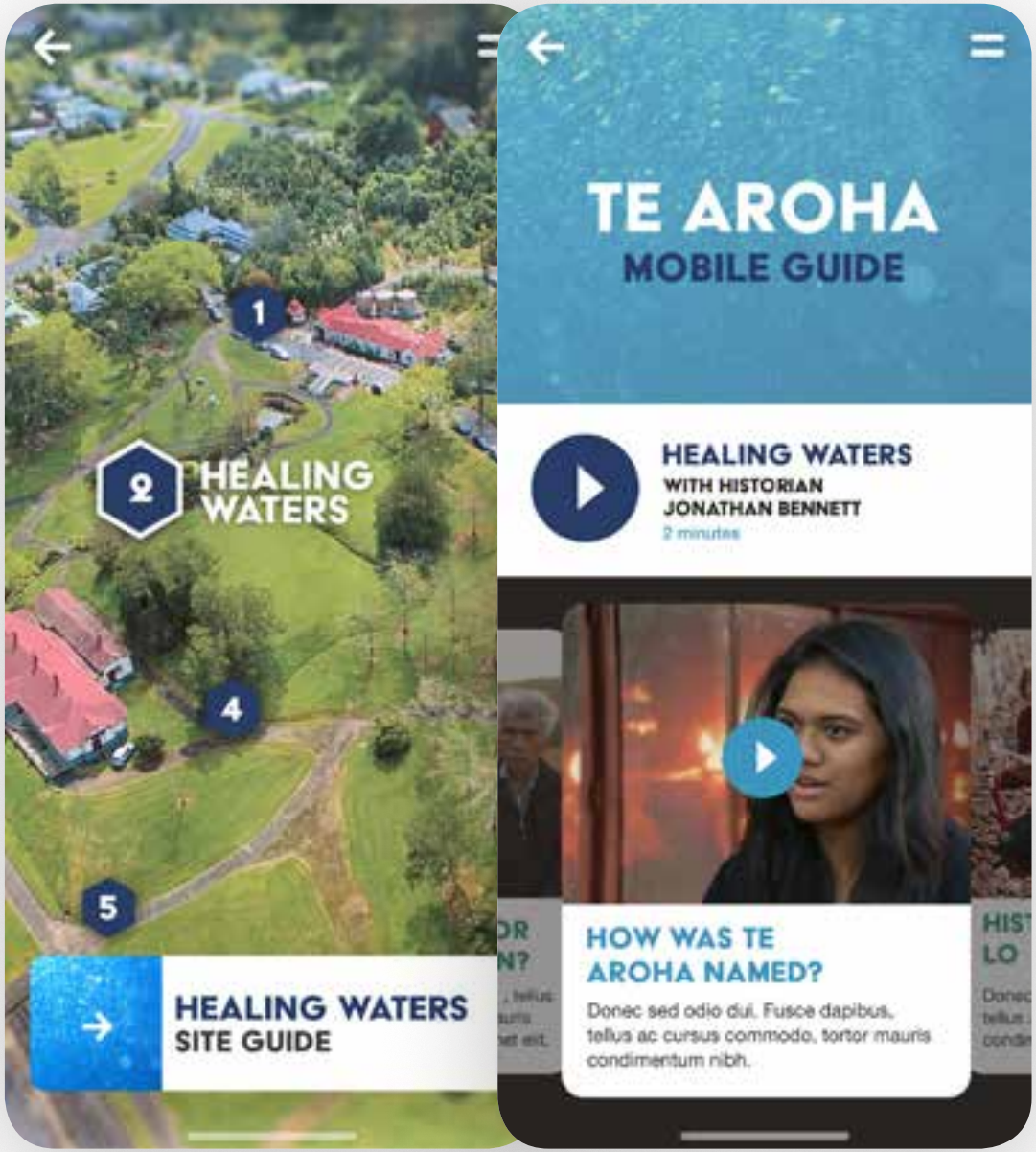
Story Signage

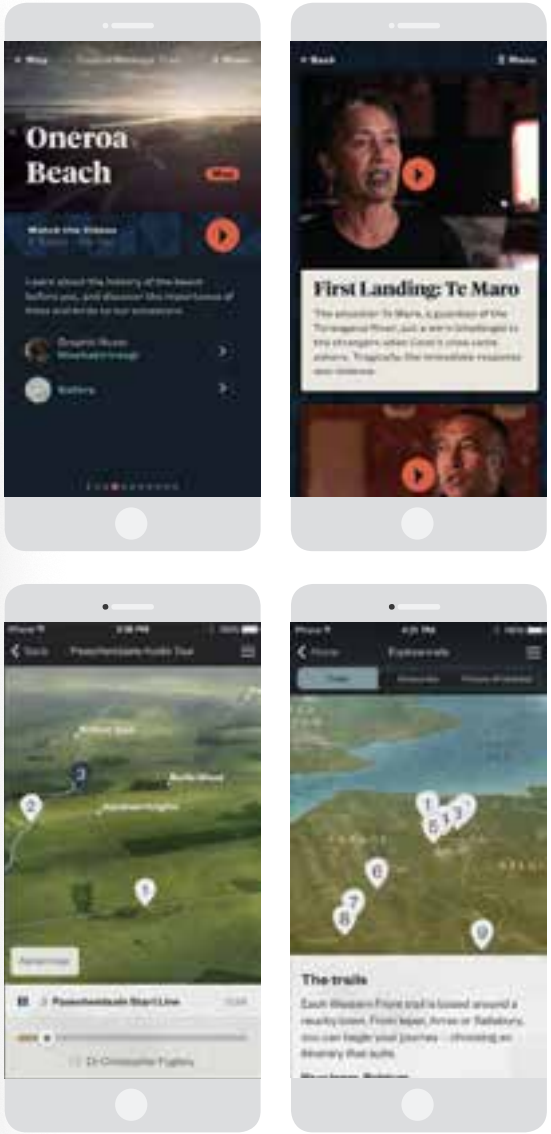
A story trail through the reserve, township and other places of interest. Each marker has a theme/ topic relating to its location along the trail and is supported by the Mobile Stories Walking Tour below.

Mobile Stories Walking Tour

Each of the installations is associated with a digital storytelling tour where members of the community share their stories through videos and audio accessed on a local app. The visitors can sit near the installations and play the stories that describe what a special place Te Aroha is from the perspectives of locals.

An example of this type of experience is Tupapa.nz – a free app accessed in Gisborne to support a walking tour around the harbour.





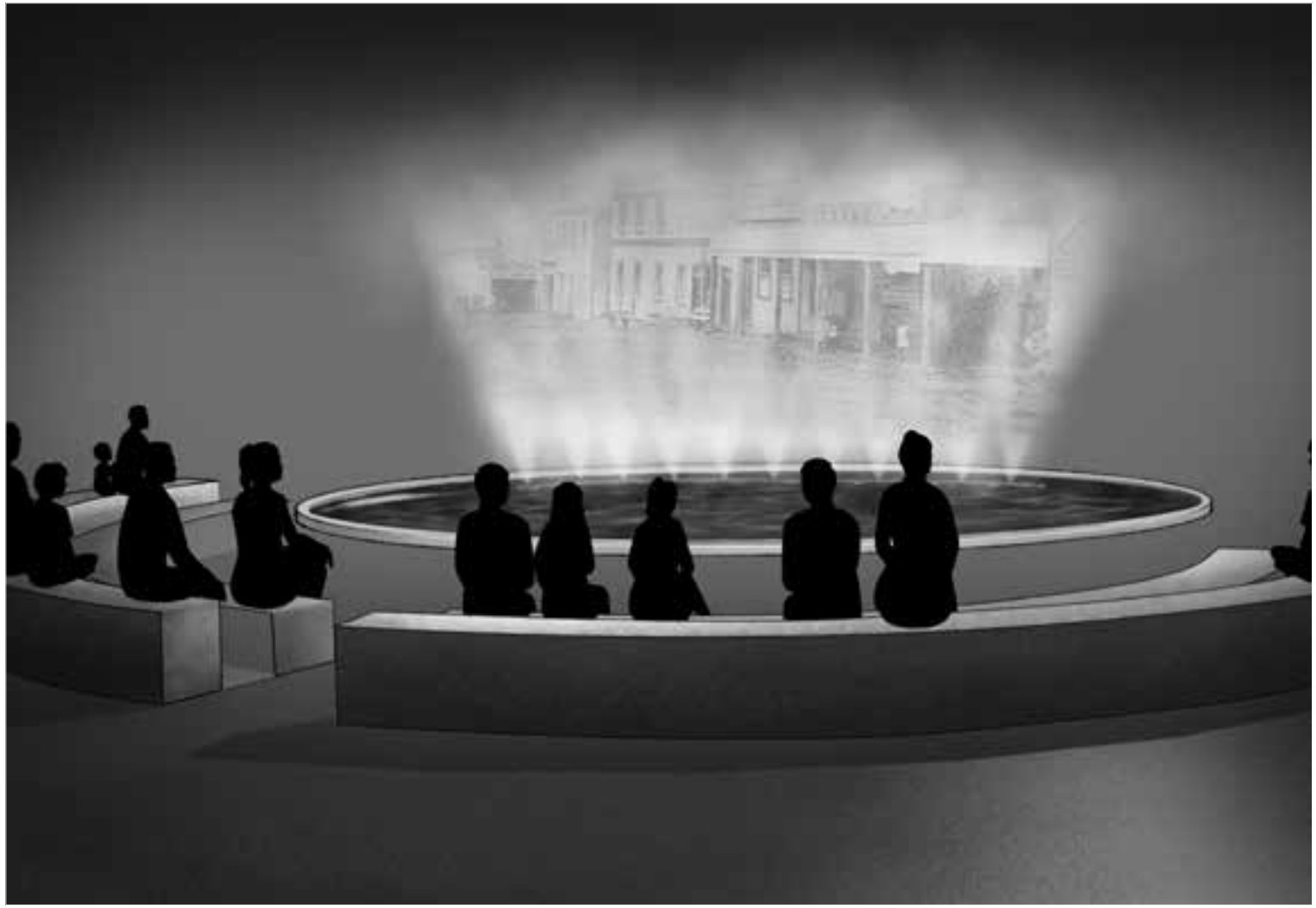
Projection Theatre - Water, Steam, Mist

The projection experience is an audio-visual animation or video show that tells the story of Te Aroha from the local hapu perspective.

It is potentially housed either in a new purpose built theatre space, a cultural centre or inside an existing building in Te Aroha.

A steam or mist device creates a series of projection screens – with water droplets either rising or falling depending on the technology. The projected animations or video move across the ‘screens’ and are accompanied by a soundtrack.

This experience is co-designed with local hapu and the creative opportunities for storytelling on water are limitless.



Projection Theatre cont...









Orientation Maps and Wayfinding

At key entrances to the town large Orientation Maps provide a 3D dimensional relief map / guide to the town and wider region. This approach means that the visitor is not reliant on the i-SITE or marketing materials when they arrive. The Orientation signage also has town brochure/guides available.

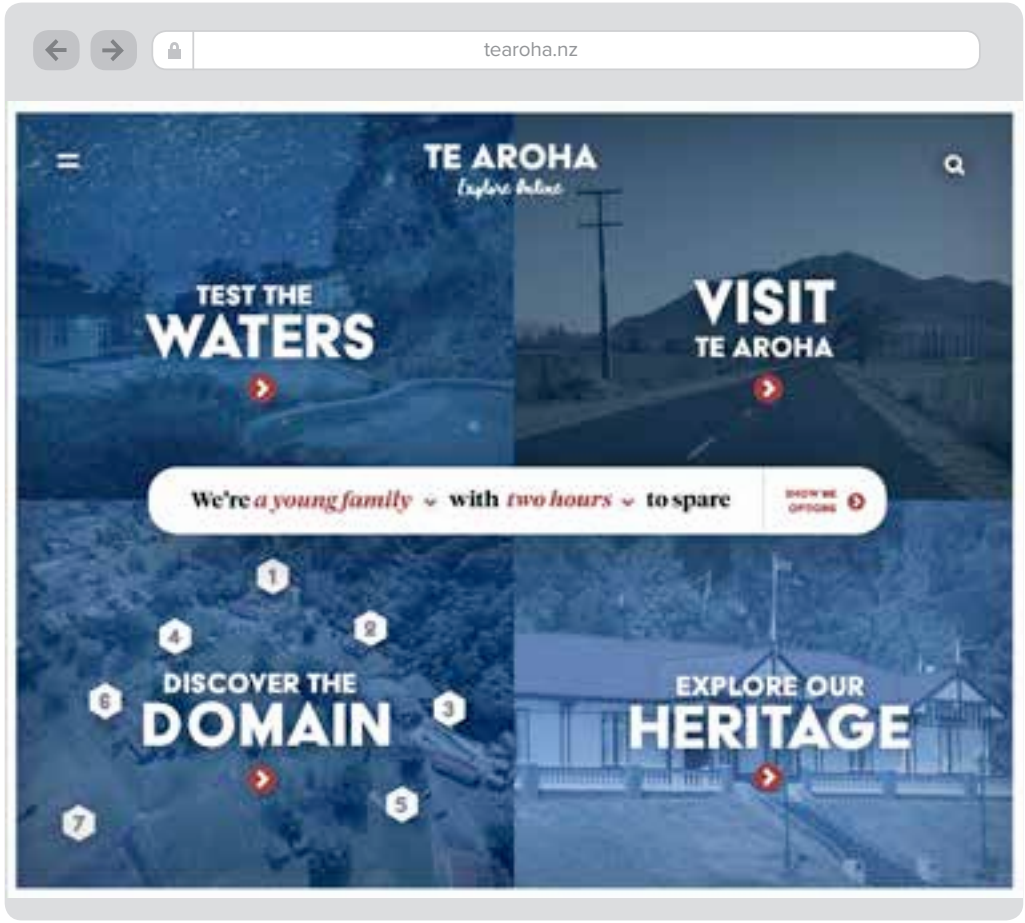
Wayfinding markers throughout the reserve guide visitors to key products and activities.

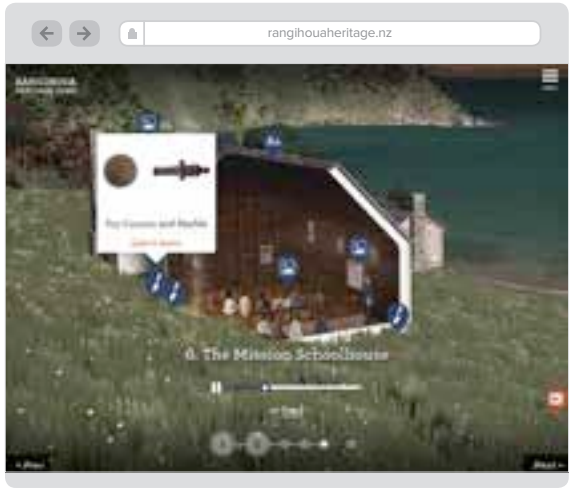
Website

The website is the call to action for the Te Aroha marketing campaign and describes the product and visitor experience.

There is an opportunity to make this a discovery experience that provides a taste of the experiences with video interviews and animations from the storytelling product as well as fly-throughs of the spa. The objective of the site is to encourage a visit.

This is also an opportunity to include retail and online booking links for the products provided.





Pricing

The pricing estimates are very high-level and need to be expanded further if the ideas are feasible. These estimates are based on similar work undertaken. The estimates for the Theatre Projection and the Water Installations are very rough and are a guideline only.

Solution Definition		Price Estimate
	Stakeholder Workshops/Consultation	
	Content Schedule/Content Brief	
	Schematic Drawings - Physical	
	Schematic Drawings - Digital	
	Look and Feel	
	Project Planning and Pricing	
	Travel	
	Subtotal	**$80,000**

Orientation		
Water Installations – OPTION A		
3x Installations	Detailed Spatial Design	$60,000
	Content Development/Graphics/Text	$30,000
	Materials/Fabrication/Engineering	$800,000
	Installation	$100,000
	Project/Creative management/Workshops	$60,000
	Travel	$20,000
	Subtotal	**$1,070,000**

Pricing cont...

Orientation cont...		Price Estimate
Water Installations – OPTION B		
3x Installations	Detailed Spatial Design	$3,000
	Content Development/Graphics/Text	$24,000
	Materials/Fabrication/Engineering	$300,000
	Installation	$20,000
	Project/Creative management/Workshops	$30,000
	Travel	$10,000
	Subtotal	**$327,000**
Orientation Maps		
4x Structures	Developed Design – Graphics	$12,000
	Content Development/Map	$24,000
	Detailed Design/Production Drawings	$3,000
	Materials/Fabrication/Printing	$25,000
	Installation	$10,000
	Subtotal	**$74,000**
Wayfinding		
20x Wayfinding	Content	$6,000
	Graphic Design/Production Ready	$12,000
	Fabrication/Printing	$30,000
	Subtotal	**$48,000**
Mini Golf	Price TBC	

Pricing cont...

Story Signage		Price Estimate
10x signs	Detailed Spatial Design	$6,000
	Content Development/Graphics/Illustrations	$40,000
	Content Management – Writing/Translations	$24,000
	Materials/Fabrication/Printing	$80,000
	Installation	$20,000
	Project/Creative Management/Workshops	$20,000
	Travel	$10,000
	Subtotal	**$200,000**

Digital Project		
Web	Developed Design	$24,000
	Content – 3D Recreations/Maps/Illustrations	$24,000
	Content – Text/Images/Translations	$30,000
	Technical Development	$40,000
	Test/Browsers	$15,000
	Project Management	$20,000
	Travel	$6,000
	Subtotal	**$159,000**

Pricing cont...

Digital Project cont...		Price Estimate
Mobile	Developed Design	$24,000
	Content Production – Video Interviews/Narrations	$100,000
	Content Management – Text/ImagesTranslations	$40,000
	Technical Development	$80,000
	Project Management/Creative Direction/Workshops	$30,000
	Testing	$10,000
	Travel	$10,000
	Subtotal	**$294,000**
Projection Theatre		
	Script/Storyboard/Consultation	$40,000
	Set Design	$25,000
	Animation/Audio-Visual Production	$200,000
	Water-based Screen Hardware	$400,000
	Installation/Fitout/Commissioning	$150,000
	Project Management/Creative Direction	$60,000
	Travel	$20,000
	Subtotal	**$895,000**
Total (Option A)		**$2,820,000**
Total (Option B)		**$2,077,000**

APPENDIX 5 - GEOTHERMAL NOTES

PATTLE DELAMORE PARTNERS LTD
South British House, Level 2
35 Grey Street, Tauranga 3110
PO Box 13274, Tauranga 3141, New Zealand

Tel +64 7 985 6440 Fax +64 9 523 6901
Web www.pdp.co.nz
Auckland Tauranga Wellington Christchurch

solutions for your environment

6 September 2019

Craig Jones
Director
Visitor Solutions
PO Box 9972
Newmarket
AUCKLAND 1149

Dear Craig

TE AROHA TOURISM PRECINCT GEOTHERMAL FEASIBILITY ASSESSMENT

1.0 Introduction

Pattle Delamore Partners (PDP) were engaged by Visitor Solutions to provide specialist advice relating to the geothermal resource for the Te Aroha Tourism Precinct Development feasibility study for Matamata-Piako District Council (MPDC). The proposed development comprises enhancement of the existing Te Aroha Domain to include a spa resort and associated visitor attractions. There are existing geothermal pools at the site but it is likely that the development will involve expansion of these pools requiring additional geothermal resource use. PDP have been asked to undertake a desk-based review of the geothermal (hot water) supply, which will form an integral part of the overall operation.

This letter summarises the review of relevant available information and provides comments on supply and demand aspects of the geothermal heat resource use along with regulatory considerations.

2.0 Background

The Te Aroha geothermal resource is a small, low temperature geothermal system within the Hauraki rift zone (WRC, 2013)[1]. The resource has been utilised for over a century, primarily for supply to hot pools and spas and as a general attraction for tourism. Analysis of the resource by WRC (2013) indicated that the geothermal waters rise rapidly though structures such as fractures or fissures with high vertical permeability. Temperatures of hot water at the surface ranges from 50 to 90 °C.

The areal extent of the resource is limited. A number of bores were historically drilled (since the 1930s) but most of these have subsequently failed or been decommissioned.

[1] Waikato Regional Council Technical Report 2013/07: The chemistry of waters of Te Aroha geothermal system.

3.0 Demand

The future demand on the geothermal heat resource depends on the number and size of hot pools to be included in the ultimate proposal design, which at the time of this review is still in development. The scale and resulting geothermal resource demand of the proposed development will be guided in part by the capacity of the resource for further extraction and associated costs. A number of options exist, including utilising the existing supply, installing heat exchanger technology to extract more heat from the existing resource, or seeking an increased extraction.

At the time of this review, the general development plans comprise two main options in terms of the heating demands:

1. Plans comprising a combined pool surface area of up to 63 m^2, based on the current supply; and
2. Plans comprising a combined pool surface area of up to 125 m^2, which would require approximately double the level of heat extraction from the resource.

4.0 Supply Considerations

4.1 Existing Infrastructure

A number of bores have historically been drilled within the Te Aroha Domain, but the current pool complex is supplied from two bores. The Mokena Geyser bore is the primary supply and was drilled in 1936 to a depth of 105 m (Figure 1). The bore is open hole from 67 m below ground level (BGL). Maximum temperatures from the bore are around 90 °C. The bore erupts periodically, and the hot water is collected in a surrounding shallow pool and diverted to tanks for subsequent supply to the hot pools.

Figure 1: Site layout and bore locations.

A second supply bore is located off Wilson Street and is used to supply Bath Houses 2 and 7. The bore was drilled in 1995 to a depth of 79 m. Around 25 m^3/day flows naturally from this bore in a similar fashion to the Mokena Geyser bore. Water is collected and stored prior to supply to the bath houses. Maximum temperatures from this bore are around 75 °C.

While there are a number of other historically drilled bores across the Te Aroha Domain, a number of these are known to have gone cold or been abandoned/lost. The potential for any of these bores to be utilised as additional supply sources is unknown and would require further on site investigation.

4.2 Current Consents

MPDC currently hold two resource consents from Waikato Regional Council (WRC) to take geothermal water at the Te Aroha hot pools site. Details of these consents are summarised in Table 1 below.

Table 1: MPDC resource consents for geothermal groundwater takes

Consent ID	Purpose	Expiry Date	Comments
AUTH118275.01.01	Take and use 50 m^3/day of geothermal heated water from the Te Aroha Domain Mokena Geyser for pool heating and bathing purposes	30/09/2021	Main source of hot water for pools.
AUTH127309.01.01	To take up to 30 m^3/day of geothermal fluid from an underground source for use in bathing pools.	21/09/2030	Passive take from Wilson Street Bore (64_512; 79 m deep) to supply Bath Houses 2 and 7.

Notes: Consent data sourced from Waikato Regional Council consents database

4.3 Current Resource Use

Compliance data for take and use of the geothermal water for the 12 months up to September 2019 were supplied by MPDC and are shown in Figure 2. It is understood that the data correspond to the take from the Mokena Geyser under AUTH118275. It is noted that the daily take volume frequently exceeded the consent limit of 50 m^3/day for just over half of the days during this period. The average daily take over the same period was 51.5 m^3/day. This indicates that the current consent limit is insufficient to satisfy the demands of the current system and additional allocation is required to achieve compliance.

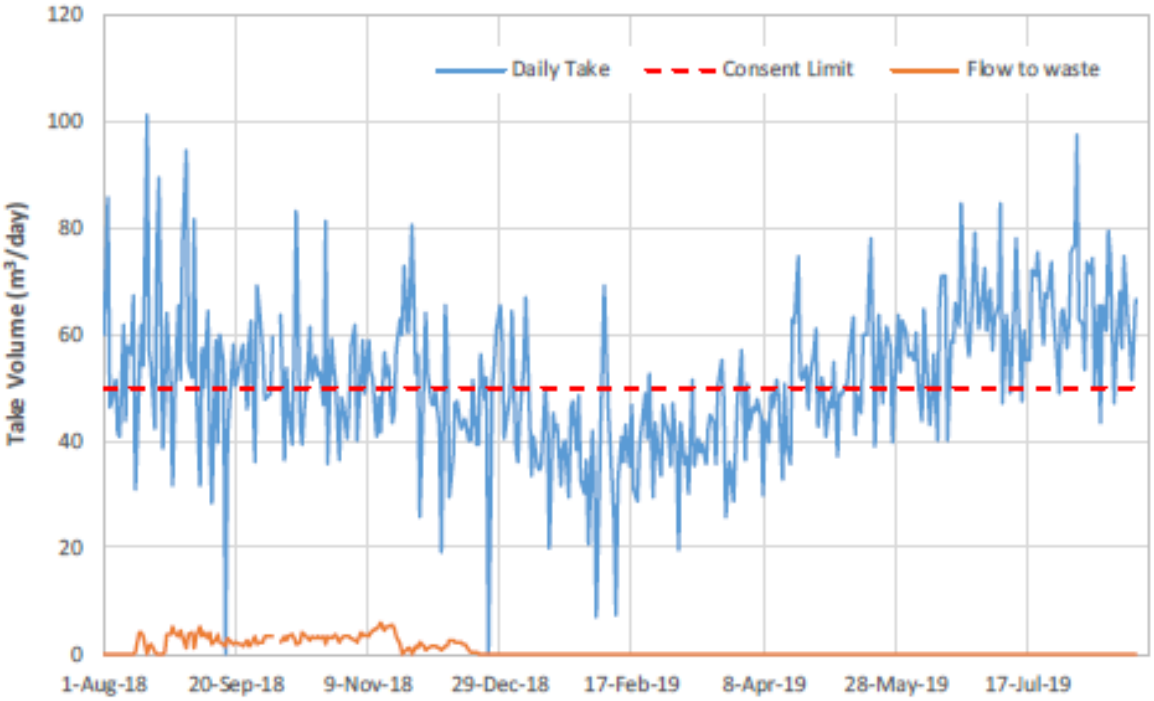


Figure 2: Mokena Geyser bore geothermal take 2018 – 2019.

The monitoring also records the daily volume of water flowing to waste. The data suggest that almost all of the flow from the geyser was captured and used over this period of time, hence it is understood that an increase to the consent limit would only enable the current levels of hot water use. The period of lower take volumes during summer 2018-2019 correspond to a period of nil flow to waste. If these data are accurate, and the take represented 100% of the flow from the geyser during this time, this indicates a natural decline in flows over this period. Average daily take volumes for January and February 2019 were around 40 m^3/day.

It is recommended that the data are checked against on-site observations to confirm that the above interpretation is accurate.

In summary, a resource consent variation is required now to allow the current levels of daily abstraction from the Mokena Geyser bore. Any future developments would also benefit from utilising the total discharge from the bore without consent restrictions on daily take volume.

5.0 Options and Recommendations

The following three broad options are presented for consideration and are discussed further below:

1) Utilise existing hot water supply from the Mokena Geyser bore and Wilson St bores
2) Extract additional hot water from existing geothermal bores
3) Install a new geothermal bore for hot water extraction. WRC (2013) indicated that subsurface temperatures of between 150 and 170 °C may be present at greater depths.

5.1 Option 1: Utilise existing supply

This option comprises a continuation of taking hot water from the existing two sources (Mokena Geyser and Wilson Street bores). Given the recent use data from the Mokena Geyser bore, which indicates daily takes of up to 100 m^3/day, a consent variation would be required to enable the current level of hot water use. Within this supply option, there are likely to be opportunities to reduce energy losses and increase resource use efficiency. It is understood that use of heat exchanger technology may be adopted in conjunction with the current supply, but the capital and operational costs of this approach may be limiting.

5.2 Option 2: Increase geothermal water extraction from existing bores

This option would require an investigation of the current unused bores on site and identification of a feasible hot water supply bore. In order to confirm the capacity of the bore, a flow test would be required, whether water naturally flowed from the bore, or if the use of a pump is required. An assessment of environmental effects would need to be prepared to support a new consent application for taking geothermal water from the identified source. The success of this option would depend on both the supply potential of the source and acceptance of the consent application by WRC.

5.3 Option 3: Drilling a new geothermal bore for increased overall extraction

Should there be no suitable existing bores capable of providing the required demand, a new bore could be drilled with the aim of providing an additional source and increasing utilisation of the geothermal resource. Based on the information available, the bore would likely need to be drilled to a depth of 100 m or more. The hot water source is thought to reside at around 150 m depth (WRC, 2013). This option would also require testing of the bore to confirm capacity and support subsequent assessments of effects. Installation of a new bore may provide an opportunity to take water at high temperatures with reduced system heat losses currently affecting the efficiency of the Mokena Geyser supply. However, the potential effects of a new take on the sustainability of the resource and the Mokena Geyser itself would need to be demonstrated through the consenting process. As with any new potential source, the successful acquisition of a consented supply could not be guaranteed and would be subject to results of intrusive investigation and testing.

5.4 Consenting Considerations

Any take above the current limits (50 m^3/day from the Mokena Geyser Bore and 30 m^3/day from the Wilson Street bore) would require either a consent variation or a new consent for additional extraction. Compared to seeking additional extraction from the resource above the current levels, a consent variation to allow greater daily take volumes from the Mokena Geyser Bore is considered to require a relatively low level of assessment. Given the passive nature of the take (i.e. water is collected after erupting), actual effects of the increased daily take volume on the geothermal resource would likely be considered nil.

It is recommended to undertake preliminary discussions with WRC during the next phase of the project to better understand the consenting requirements for various options under consideration. This will guide the level of investigation and assessment required to support a consent application for increased geothermal resource use and may guide the selection of options.

6.0 Conclusions

Options are currently being considered for the development of the Te Aroha Tourism Precinct, which will include a number of hot pools. PDP were engaged by Visitor Solutions to prepare a desk-based review of the geothermal resource currently used to supply the existing hot pools, and specifically, the potential of the resource to support various development options. Findings of the review indicated that:

- The recent take of geothermal water at the site has exceeded consent limits for daily take volume and a consent variation should be obtained to authorise the current level of resource use;
- Various pool development options are being considered based on the existing or increased levels of geothermal resource use;
- Options requiring heat resources above the current supply level would require either use of heat exchanger technology, or acquisition of additional consented geothermal supply;
- Options for obtaining additional consented geothermal supply have been outlined and may involve drilling and testing of a new bore;
- It is recommended that the various options are discussed with WRC to better understand the level of assessment required and associated consenting risks.

7.0 Limitations

This report has been prepared by Pattle Delamore Partners Limited (PDP) on the basis of information provided by Visitor Solutions and others (not directly contracted by PDP for the work), including Waikato Regional Council and Powell Fenwick Limited. PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the report. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

This report has been prepared by PDP on the specific instructions of Visitor Solutions for the limited purposes described in the report. PDP accepts no liability if the report is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

Yours faithfully

PATTLE DELAMORE PARTNERS LIMITED

Prepared by	Reviewed and Approved by
Blair Thornburrow	**Alan Pattle**
Water Resources Service Leader	Technical Director

DESIGN ADVICE MEMO

MECHANICAL

Memo No	**P02**
Job Name	**Te Aroha Domain Development**
Job No	**190685/P/1**
Date	**27 August 2019**
To	**Visitor Solutions**
Email	**craig@visitorsolutions.net**
Attention	**Craig Jones**
Signature	 **Nick Yannakis**

P **03 366 1777**

W **www.pfc.co.nz**

383 Colombo St, Sydenham, Christchurch

PO Box 7110, Sydenham 8240 Christchurch

1. Introduction

The following outlines the information and outcomes from the initial site investigation carried out on the 15th July 2019 and the thermal energy investigation that followed.

2. Thermal Energy Investigation

The total volume of thermal water collected per day is 50,000l (approx.) as per the existing resource consent, at around 85-90˚C, from the geyser. It is assumed that there will be temperature loss during the collection process, so a stored water temperature of 75˚C has been used for this investigation. This water temperature provides a high grade heating source for the site. The total collected volume (50,000l) equates to a flow of 0.58l/s for a 24 hour period, which is relatively low for a site of this size.

The following assumes a twelve hour site operation, where pool covers are used when outside of this.

If the spa pools are assumed to be at a temperature of 40˚C for use, the simplest option would be for the high grade heating water to run directly through a heat exchanger with no additional heating input, providing a maximum temperature drop of 30˚C. This temperature drop, and the above flow rate, provides a heating capacity of 73kW, the equivalent of heating a 63m² pool to 40˚C.

If an additional heating input were to be used, for example a water source heat pump, the heating water could initially be run through a heat exchanger as before, providing an initial 73kW, and then be further stripped of its heat down to around 15˚C (additional temperature drop of 30˚C). This increased temperature drop could provide a total of 146kW of heating capacity, the equivalent of heating a 125m² pool to 40˚C. This option, although providing twice the heating capacity, would incur larger capital and operational expense due to heat pump purchase and running costs.

Comparing the above options to the provided schedule of areas indicate that both are insufficient for the Te Aroha Site, with 178m² of spa pools assumed to be heated to 40˚C (BOH Spas and Private Spas), requiring around 210kW of heating, and 300m² of more traditional outdoor pools (assumed 34˚C for bather comfort) requiring around 240kW of heating.

If the indicated pool areas were to be constructed, an additional heating source would be required to provide sufficient capacity for the assumed temperatures. It is recommended that the geothermal potential of the site is investigated further, with the possibility of further thermal water from Spring No. 13. If further thermal water was found, a secondary heating analysis should be undertaken to investigate the further heating capacity of the heat source. This would also require an amendment to the current resource consent, as the maximum draw would be exceeded if this occurred. If no further thermal water source is available, a secondary heating system should be investigated.

APPENDIX 6 - COST ESTIMATES

mpm projects

Rough Order of Cost Estimate

For

Te Aroha Spa

5/09/2019 R1

mpm projects

Te Aroha Spa

Rough Order of Cost Estimate - September 2019
Clarifications & Exclusions

Clarifications

Estimates are based on the following :

- PENZL Schedule of Spaces dated 29/08/19
- Boffa Miskell Site zoning plan dated 3 Sept Rev A
- Estimates assume a traditional procurement process
- Provisional Allowances have been made where noted for items where scopes have been assumed.

Exclusions

The following are excluded from these estimates:

- Boffa Miskell Plan Key references as follows:
  - 4 I -Site
  - 5 Existing Public parking
  - 6 On street Parking
  - 7 Existing playground
  - 8 Rotunda
  - 9 Cadmen Bathhouse
  - 13 Existing pool
  - 14 #2 Bathhouse
  - 16 Low impact Zip line/ropes experience
  - 17 Shared space road zone
  - 18 Key Connection between domain & river
  - 21 Minigolf course
  - 22 Café & Function Venue
- Site specific allowances including geotech issues
- Development Contributions & Infrastructure Growth charges
- Land, Finance & Legal costs
- Escalation costs from 3rd Quarter 2019
- GST

Te Aroha Spa Precinct

mpm projects

Rough Order of Cost Estimate - September 2019

Map Ref	Item					
1	**Destination Playground**					
	Demolition & site clearance	1	Sum	40,000	40,000	
	Provisional Sum Allowance for Destination Playground	1	Sum	1,000,000	1,000,000	
	Provisional Sum Allowance for Landscaping	1	Sum	200,000	200,000	1,240,000
2	**Croquet Lawns**					
	Demolition & site clearance	1	Sum	70,000	70,000	
	Relocate existing clubrooms	1	Sum	20,000	20,000	
	x1 new croquet lawn	1	Sum	160,000	160,000	
	Provisional allowance to make good x3 existing lawns	1	Sum	75,000	75,000	325,000
3	**Event Area**					
	Demolition & site clearance	1	Sum	10,000	10,000	
	Grade & regrass lawn areas	1	Sum	80,000	80,000	
	Provisional Sum Allowance for Landscaping	1	Sum	100,000	100,000	
	Provisional allowance for BBQ sites x 4	4	Sum	20,000	80,000	270,000
10	**New Spa Complex (Refer separate Estimate)**					
11	**Service Zone**					
	Allowance for new service access road	1	Sum	200,000	200,000	
	Provisional Sum Allowance for Landscaping	1	Sum	50,000	50,000	250,000
12	**Remove existing Spa Building**					
	Demolition & site clearance	1	Sum	65,000	65,000	
	Allowance for making good tracks	1	Sum	20,000	20,000	
	Provisional Sum Allowance for Landscaping	1	Sum	75,000	75,000	160,000
15	**Carparking**					
	Allowance for Carparking (4Nr locations)	1	Sum	1,200,000	1,200,000	
	Provisional Sum Allowance for Landscaping	1	Sum	150,000	150,000	1,350,000
19	**Gateway Threshold Points**					
	Provisional Sum Allowance for Sculptures/gateway treatments	2	Sum	200,000	400,000	400,000
20	**Reinstate maori ngawha as key node point**					
	Provisional Sum Allowance for pathway realignments	1	Sum	150,000	150,000	
	Provisional Sum Allowance for Landscaping	1	Sum	50,000	50,000	200,000
23	**Relocation of Services Shed**					
	Provisional Sum Allowance for relocating services shed	1	Sum	170,000	170,000	170,000
	Provisional Sum Allowance for site wide landscaping	1	Sum	500,000	500,000	500,000
	Te Aroha Spa Precinct Sub Total					**4,865,000**
	Professional Fees	15%				730,000
	Consent fees					75,000
	Contingency	10%				567,000
						$6,237,000
						Say $6.3M
	Site Interpretation					
	Refer Separate Budget Allowance for Interpretation, wayfinding signage, maps, themed installations sculpture installations					
	Option "A"	1	Sum	2,820,000	2,820,000	**$2,820,000**

Te Aroha Spa

mpm projects

Rough Order of Cost Estimate - September 2019

Option A (based on 63m2 pool surface area, no heat pump)

BUILDING				
RECEPTION/RETAIL/WAITING/KITCHENETTE	75	m2	4,500	337,500
MULTI-USE TREATMENT ROOM-WITH SHOWER	12.5	m2	6,700	83,750
MULTI-USE TREATMENT ROOM-WITH SHOWER	12.5	m2	6,700	83,750
MULTI-USE TREATMENT ROOM-WITH SHOWER	12.5	m2	6,700	83,750
MULTI-USE TREATMENT ROOM-WITH SHOWER	12.5	m2	6,700	83,750
MULTI-USE TREATMENT ROOM-WITH SHOWER	12.5	m2	6,700	83,750
MULTI-USE TREATMENT ROOM-WITH SHOWER	12.5	m2	6,700	83,750
COUPLES TREATMENT ROOM	25	m2	6,700	167,500
COUPLES TREATMENT ROOM	-	m2	6,700	-
BOH SPA AREAS	130	m2	4,500	585,000
LAUNDRY	15	m2	4,500	67,500
DRYING ROOM	-	m2	4,500	-
RELAXATION AREAS	40	m2	5,700	228,000
FEMALE SPA CHANGE/WC/SHOWERS	40	m2	6,600	264,000
MALE SPA CHANGE/WC/SHOWERS	40	m2	6,600	264,000
FEMALE HAMAM	25	m2	9,000	225,000
MALE HAMAM	25	m2	9,000	225,000
FEMALE EXPERIENCE SHOWER	8	m2	7,600	60,800
FEMALE EXPERIENCE SHOWER	8	m2	7,600	60,800
MALE EXPERIENCE SHOWER	8	m2	7,600	60,800
MALE EXPERIENCE SHOWER	8	m2	7,600	60,800
FEMALE SAUNA	16	m2	8,000	128,000
MALE SAUNA	16	m2	8,000	128,000
FEMALE STEAM ROOM	16	m2	8,200	131,200
MALE STEAM ROOM	16	m2	8,200	131,200
OUTDOOR POOL	-	m2	7,500	-
STANDARD PRIVATE POOL 1	17	m2	7,500	127,500
STANDARD PRIVATE POOL 2	17	m2	7,500	127,500
STANDARD PRIVATE POOL 3	17	m2	7,500	127,500
STANDARD PRIVATE POOL 4	17	m2	7,500	127,500
STANDARD PRIVATE POOL 5	17	m2	7,500	127,500
DELUXE PRIVATE POOL	20	m2	7,500	150,000
O/D EXPERIENCE SHOWER 1	-	m2	7,600	-
O/D EXPERIENCE SHOWER 2	-	m2	7,600	-
WATER PLANT	20	m2	2,700	54,000
BUILDING PLANT	95	m2	2,700	256,500
GENERAL SERVICES	25	m2	2,700	67,500
GENERAL STORE	50	m2	2,700	135,000
RUBBISH	20	m2	2,700	54,000
CIRCULATION	260	m2	4,500	1,170,000
Gross floor area	1,161	m2		
POOLS				
OUTDOOR POOL	1	Sum	100,000	100,000
STANDARD PRIVATE POOL 1	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 2	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 3	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 4	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 5	1	Sum	50,000	50,000
DELUXE PRIVATE POOL	1	Sum	55,000	55,000
O/D EXPERIENCE SHOWER 1	1	Sum	50,000	50,000
O/D EXPERIENCE SHOWER 2	1	Sum	50,000	50,000
SPECIALIST PLANT				
FEMALE HAMAM	1	Sum	33,000	33,000
MALE HAMAM	1	Sum	33,000	33,000
FEMALE EXPERIENCE SHOWER	2	Sum	27,000	54,000
MALE EXPERIENCE SHOWER	2	Sum	27,000	54,000
FEMALE SAUNA	1	Sum	20,000	20,000
MALE SAUNA	1	Sum	20,000	20,000

	FEMALE STEAM ROOM		1	Sum	23,000	23,000	
	MALE STEAM ROOM		1	Sum	23,000	23,000	
	OUTDOOR POOL		1	Sum	40,000	40,000	
	STANDARD PRIVATE POOL 1		1	Sum	20,000	20,000	
	STANDARD PRIVATE POOL 2		1	Sum	20,000	20,000	
	STANDARD PRIVATE POOL 3		1	Sum	20,000	20,000	
	STANDARD PRIVATE POOL 4		1	Sum	20,000	20,000	
	STANDARD PRIVATE POOL 5		1	Sum	20,000	20,000	
	DELUXE PRIVATE POOL		1	Sum	25,000	25,000	
	O/D EXPERIENCE SHOWER 1		1	Sum	27,000	27,000	
	O/D EXPERIENCE SHOWER 2		1	Sum	27,000	27,000	
						$7,136,100	
	Prov Allowance for excavation/retaining to form building platform		1	Sum		600,000	
	Prov Allowance for access paths, ramps etc		1	Sum		400,000	
	Prov Allowance for hard paving around building		1	Sum		200,000	
	Prov Allowance for landscaping		1	Sum		200,000	
	Prov Allowance for outdoor structures		1	Sum		200,000	
	Prov Allowance for services infrastucture		1	Sum		1,400,000	
	Prov Allowance for mineral water supply/ storage		1	Sum		100,000	
	Prov Allowance for loose furniture fittings & equipment		1	Sum		200,000	
	Spa Facility Sub Total					**10,436,100**	
	Professional Fees		15%			1,619,600	
	Consent fees					95,000	
	Contingency		10%			1,216,000	
						$13,366,700	
						Say $13.4M	

Te Aroha Spa

mpm projects

Rough Order of Cost Estimate - September 2019

Option B (based on 124m2 pool surface area, no heat pump)

BUILDING				
RECEPTION/RETAIL/WAITING/KITCHENETTE	75	m2	4,500	337,500
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
COUPLES TREATMENT ROOM	26	m2	6,700	174,200
COUPLES TREATMENT ROOM	26	m2	6,700	174,200
BOH SPA AREAS	150	m2	4,500	675,000
LAUNDRY	15	m2	4,500	67,500
DRYING ROOM	20	m2	4,500	90,000
RELAXATION AREAS	40	m2	5,700	228,000
FEMALE SPA CHANGE/WC/SHOWERS	48	m2	6,600	316,800
MALE SPA CHANGE/WC/SHOWERS	48	m2	6,600	316,800
FEMALE HAMAM	25	m2	9,000	225,000
MALE HAMAM	25	m2	9,000	225,000
FEMALE EXPERIENCE SHOWER	8	m2	7,600	60,800
FEMALE EXPERIENCE SHOWER	8	m2	7,600	60,800
MALE EXPERIENCE SHOWER	8	m2	7,600	60,800
MALE EXPERIENCE SHOWER	8	m2	7,600	60,800
FEMALE SAUNA	16	m2	8,000	128,000
MALE SAUNA	16	m2	8,000	128,000
FEMALE STEAM ROOM	16	m2	8,200	131,200
MALE STEAM ROOM	16	m2	8,200	131,200
OUTDOOR POOL 1	-	m2	7,500	-
OUTDOOR POOL 2	-	m2	7,500	-
STANDARD PRIVATE POOL 1	17	m2	7,500	127,500
STANDARD PRIVATE POOL 2	17	m2	7,500	127,500
STANDARD PRIVATE POOL 3	17	m2	7,500	127,500
STANDARD PRIVATE POOL 4	17	m2	7,500	127,500
STANDARD PRIVATE POOL 5	17	m2	7,500	127,500
STANDARD PRIVATE POOL 6	17	m2	7,500	127,500
STANDARD PRIVATE POOL 7	17	m2	7,500	127,500
STANDARD PRIVATE POOL 8	17	m2	7,500	127,500
DELUXE PRIVATE POOL 1	20	m2	7,500	150,000
DELUXE PRIVATE POOL 2	20	m2	7,500	150,000
O/D EXPERIENCE SHOWER 1	-	m2	7,600	-
O/D EXPERIENCE SHOWER 2	-	m2	7,600	-
WATER PLANT	40	m2	2,700	108,000
BUILDING PLANT	115	m2	2,700	310,500
GENERAL SERVICES	25	m2	2,700	67,500
GENERAL STORE	50	m2	2,700	135,000
RUBBISH	20	m2	2,700	54,000
CIRCULATION	280	m2	4,500	1,260,000
Gross floor area	1,378	m2		
POOLS				
OUTDOOR POOL 1	1	Sum	120,000	120,000
OUTDOOR POOL 2	1	Sum	120,000	120,000
STANDARD PRIVATE POOL 1	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 2	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 3	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 4	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 5	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 6	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 7	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 8	1	Sum	50,000	50,000
DELUXE PRIVATE POOL 1	1	Sum	60,000	60,000
DELUXE PRIVATE POOL 2	1	Sum	60,000	60,000
O/D EXPERIENCE SHOWER 1	1	Sum	50,000	50,000

	O/D EXPERIENCE SHOWER 2		1	Sum	50,000	50,000
	SPECIALIST PLANT					
	FEMALE HAMAM		1	Sum	33,000	33,000
	MALE HAMAM		1	Sum	33,000	33,000
	FEMALE EXPERIENCE SHOWER		2	Sum	27,000	54,000
	MALE EXPERIENCE SHOWER		2	Sum	27,000	54,000
	FEMALE SAUNA		1	Sum	20,000	20,000
	MALE SAUNA		1	Sum	20,000	20,000
	FEMALE STEAM ROOM		1	Sum	23,000	23,000
	MALE STEAM ROOM		1	Sum	23,000	23,000
	OUTDOOR POOL 1		1	Sum	50,000	50,000
	OUTDOOR POOL 2		1	Sum	50,000	50,000
	STANDARD PRIVATE POOL 1		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 2		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 3		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 4		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 5		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 6		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 7		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 8		1	Sum	20,000	20,000
	DELUXE PRIVATE POOL 1		1	Sum	25,000	25,000
	DELUXE PRIVATE POOL 2		1	Sum	25,000	25,000
	O/D EXPERIENCE SHOWER 1		1	Sum	27,000	27,000
	O/D EXPERIENCE SHOWER 2		1	Sum	27,000	27,000
						$8,853,200
	Prov Allowance for excavation/retaining to form building platform		1	Sum		600,000
	Prov Allowance for access paths, ramps etc		1	Sum		400,000
	Prov Allowance for hard paving around building		1	Sum		200,000
	Prov Allowance for landscaping		1	Sum		200,000
	Prov Allowance for outdoor structures		1	Sum		200,000
	Prov Allowance for services infrastucture		1	Sum		1,400,000
	Prov Allowance for mineral water supply/ storage		1	Sum		100,000
	Prov Allowance for bore for additional hydrothermal supply		1	Sum		100,000
	Prov Allowance for loose furniture fittings & equipment		1	Sum		250,000
	Spa Facility Sub Total					**12,303,200**
	Professional Fees		15%			1,847,600
	Consent fees					100,000
	Contingency		10%			1,426,000
						$15,676,800
						Say $15.7M

Te Aroha Spa

mpm projects

Rough Order of Cost Estimate - September 2019

Option C (based on 124m2 pool surface area, with heat pump)

BUILDING				
RECEPTION/RETAIL/WAITING/KITCHENETTE	75	m2	4,500	337,500
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
MULTI-USE TREATMENT ROOM-WITH SHOWER	13	m2	6,700	87,100
COUPLES TREATMENT ROOM	26	m2	6,700	174,200
COUPLES TREATMENT ROOM	26	m2	6,700	174,200
BOH SPA AREAS	150	m2	4,500	675,000
LAUNDRY	15	m2	4,500	67,500
DRYING ROOM	20	m2	4,500	90,000
RELAXATION AREAS	40	m2	5,700	228,000
FEMALE SPA CHANGE/WC/SHOWERS	48	m2	6,600	316,800
MALE SPA CHANGE/WC/SHOWERS	48	m2	6,600	316,800
FEMALE HAMAM	25	m2	9,000	225,000
MALE HAMAM	25	m2	9,000	225,000
FEMALE EXPERIENCE SHOWER	8	m2	7,600	60,800
FEMALE EXPERIENCE SHOWER	8	m2	7,600	60,800
MALE EXPERIENCE SHOWER	8	m2	7,600	60,800
MALE EXPERIENCE SHOWER	8	m2	7,600	60,800
FEMALE SAUNA	16	m2	8,000	128,000
MALE SAUNA	16	m2	8,000	128,000
FEMALE STEAM ROOM	16	m2	8,200	131,200
MALE STEAM ROOM	16	m2	8,200	131,200
OUTDOOR POOL 1	-	m2	7,500	-
OUTDOOR POOL 2	-	m2	7,500	-
STANDARD PRIVATE POOL 1	17	m2	7,500	127,500
STANDARD PRIVATE POOL 2	17	m2	7,500	127,500
STANDARD PRIVATE POOL 3	17	m2	7,500	127,500
STANDARD PRIVATE POOL 4	17	m2	7,500	127,500
STANDARD PRIVATE POOL 5	17	m2	7,500	127,500
STANDARD PRIVATE POOL 6	17	m2	7,500	127,500
STANDARD PRIVATE POOL 7	17	m2	7,500	127,500
STANDARD PRIVATE POOL 8	17	m2	7,500	127,500
DELUXE PRIVATE POOL 1	20	m2	7,500	150,000
DELUXE PRIVATE POOL 2	20	m2	7,500	150,000
O/D EXPERIENCE SHOWER 1	-	m2	7,600	-
O/D EXPERIENCE SHOWER 2	-	m2	7,600	-
WATER PLANT	40	m2	2,700	108,000
BUILDING PLANT	115	m2	2,700	310,500
GENERAL SERVICES	25	m2	2,700	67,500
GENERAL STORE	50	m2	2,700	135,000
RUBBISH	20	m2	2,700	54,000
CIRCULATION	280	m2	4,500	1,260,000
Gross floor area	1,378	m2		
POOLS				
OUTDOOR POOL 1	1	Sum	120,000	120,000
OUTDOOR POOL 2	1	Sum	120,000	120,000
STANDARD PRIVATE POOL 1	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 2	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 3	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 4	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 5	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 6	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 7	1	Sum	50,000	50,000
STANDARD PRIVATE POOL 8	1	Sum	50,000	50,000
DELUXE PRIVATE POOL 1	1	Sum	60,000	60,000
DELUXE PRIVATE POOL 2	1	Sum	60,000	60,000
O/D EXPERIENCE SHOWER 1	1	Sum	50,000	50,000

	O/D EXPERIENCE SHOWER 2		1	Sum	50,000	50,000
	SPECIALIST PLANT					
	FEMALE HAMAM		1	Sum	33,000	33,000
	MALE HAMAM		1	Sum	33,000	33,000
	FEMALE EXPERIENCE SHOWER		2	Sum	27,000	54,000
	MALE EXPERIENCE SHOWER		2	Sum	27,000	54,000
	FEMALE SAUNA		1	Sum	20,000	20,000
	MALE SAUNA		1	Sum	20,000	20,000
	FEMALE STEAM ROOM		1	Sum	23,000	23,000
	MALE STEAM ROOM		1	Sum	23,000	23,000
	OUTDOOR POOL 1		1	Sum	50,000	50,000
	OUTDOOR POOL 2		1	Sum	50,000	50,000
	STANDARD PRIVATE POOL 1		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 2		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 3		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 4		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 5		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 6		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 7		1	Sum	20,000	20,000
	STANDARD PRIVATE POOL 8		1	Sum	20,000	20,000
	DELUXE PRIVATE POOL 1		1	Sum	25,000	25,000
	DELUXE PRIVATE POOL 2		1	Sum	25,000	25,000
	O/D EXPERIENCE SHOWER 1		1	Sum	27,000	27,000
	O/D EXPERIENCE SHOWER 2		1	Sum	27,000	27,000
						$8,853,200
	Prov Allowance for excavation/retaining to form building platform		1	Sum		600,000
	Prov Allowance for access paths, ramps etc		1	Sum		400,000
	Prov Allowance for hard paving around building		1	Sum		200,000
	Prov Allowance for landscaping		1	Sum		200,000
	Prov Allowance for outdoor structures		1	Sum		200,000
	Prov Allowance for services infrastucture		1	Sum		1,400,000
	Prov Allowance for heat pump		1	Sum		400,000
	Prov Allowance for mineral water supply/ storage		1	Sum		100,000
	Prov Allowance for bore for additional hydrothermal supply (if required)		1	Sum		100,000
	Prov Allowance for loose furniture fittings & equipment		1	Sum		250,000
	Spa Facility Sub Total					**12,703,200**
	Professional Fees		15%			1,907,600
	Consent fees					100,000
	Contingency		10%			1,472,000
						$16,182,800
						Say $16.2M

APPENDIX 7 - DETAILED COSTS AND BENEFITS

TE AROHA SPA AND HOT POOLS PROPOSED DEVELOPMENT

Option B – Costs and Benefits

Tourism is an important part of the New Zealand economy. Total annual tourism expenditure is estimate at $39bn of which 59% is spent by New Zealanders travelling around the country. The sector employs over 216,000 employees directly and another 149,000 indirectly[1]. According to MBIE, tourism creates inclusive growth by distributing economic opportunities and bringing social benefits across regions, cities, and communities. Tourism provides pathways for people to enter the workforce, gaining skills and income. MBIE also assert that recent visitor growth has increased the benefits of tourism, but the growth has also created pressures and costs – like overcrowding. As part of assessing Option B, the costs and benefits were considered.

When undertaking a cost-benefit analysis (or an economic impact assessment), it is important to focus on those changes that are caused, facilitated, or unlocked, by the proposal. If something would have taken place irrespective of the proposed development, then it is excluded. In assessing the Te Aroha proposal (Option B), we consider the capital costs, operational costs as well as benefits flowing to the district. Importantly, a district focus is used meaning that we do not consider the regional transfers. The visitor spending that is new to the district is viewed as a benefit. A portion of this spending is transferred from the rest of NZ, suggesting that the 'net position to NZ' is neutral. Using a district focus is consistent with aims to distribute the impacts of tourism around New Zealand.

The analysis focuses on the costs and benefits, not the economic impacts. An economics impact assessment[2] looks that how the new spending flows through the economy, generating GDP[3] and employment impacts. An economic impact assessment looks at all the flow-on/supply chain impacts. A cost-benefit analysis looks at the costs of resources used relative to the benefits a district or region receives. A CBA does not consider the supply chain impacts.

The assessment reflects the relationship between the costs and benefits that will be felt locally. The assumptions and key variables follow:

Key assumptions

Several assumptions underpin the economic analysis and they are summarised below.

- The development is estimated to cost $15.7m to put in place. In addition, a series of 'non-core' or secondary business opportunities will be unlocked. Responding to these opportunities will need additional capital investment. This additional investment is estimated at circa $5m. We have assumed that the capex for the spa and hot pools will be funded using public funds, like the Provincial Growth Fund (PGF). The capex for the secondary opportunities will be privately funded. When public financing is used, the money is sourced from taxpayers and a deadweight loss is incurred. According to the New Zealand Treasury, taxes encourage people to move away from things that are taxed and toward things that are

[1] Statistics New Zealand. Tourism Satellite Account. YE March 2018.

[2] M.E have economic impact models, including multi-regional Input-Output models (MRIO) as well as Computable General Equilibrium (CGE) models

[3] Importantly, GDP is not a benefit because it includes compensation of employees (a cost), taxes (a transfer), consumption of fixed capital (cost) and operating surplus (benefit).

not taxed or more lightly taxed. Their consumption choices are distorted away from what they would prefer in the absence of taxes. The change in the mix of consumption has an adverse welfare effect which is additional to the loss of welfare resulting directly from the loss of money that is taken away in the form of tax. This welfare loss is referred to as the deadweight cost of taxation (or sometimes as a deadweight loss, or 'excess burden'). Treasury indicates that 20% should be added to publicly funded costs – this reflects the deadweight loss. By adding the 20% to the original capex, a $3.1m load is added to the cost. Looking at the long term (10+ years), the financial modelling allows for future reinvestments and renewals. We assumed that the spa and hot pools operation would be financially viable and able to pay for these items. So, these future items are treated as a private cost (so no deadweight loss is added).

- Developing the facility is assumed to unlock and facilitate a marked increase in visitors coming to the district. It is assumed that hot pools and spa will attract 'new visitors' (and so spending) to the district. In other words, it will not simply cause a shift of visitors from existing facilities. We use the visitor projections as prepared by Deloitte for the study. We use the average spending at the facility, i.e. $175 and $35 per visitor/use/day for the spa and hot pools respectively, but the assessment excludes price changes associated with inflation. The total estimated visitors are put at 18,220 to the spa and 124,000 to the hot pool components, respectively. A small portion of the spending (circa 2%) is assumed to be residents using the facilities and this part is excluded from the analysis.
- With reference to the labour component, this is treated as both a cost and benefit. A portion of the labour opportunities supported by the development is 'new'. Developing the facilities and establishing operating entities (businesses) will increase the level of employment. Only a portion of the employment gains are benefits because the lift in employment has different components – net additional employment, opportunity costs and displacement effects. The opportunity cost accounts for the fact that a person going into a job does not necessarily see their welfare increase by their increase in income. While unemployed, a person can utilise their time and gain satisfaction from this. The displacement effects account for the fact that if an intervention moves an individual from unemployment into employment, the individual may take a job someone else would have otherwise filled. In other words, in the absence of the intervention, someone else would have taken the vacant job and the unemployment rate would be no higher or lower. The balance (after removing displacements effects, the opportunity costs and net of the business as usual growth) is the net additional employment. This is treated as a benefit and is valued using the salary and wage renumeration. The approach followed to estimate these two effects are based on the NZ Treasury's guidelines.[4] This assumes that a portion of labour value (wages and salary) are costs, and they do not present a (net) benefit to society.[5] These costs are included under the 'cost heading' and the benefits are recorded as described. When expressing the 'new jobs' that investing in the facility would deliver, only the net component is reflected, and it is translated into jobs, i.e. expressing the estimated $-value of the labour component in job-terms.
- When economic or business activity is undertaken, resources are used; these have costs that must be accounted for. The cost to deliver the goods and services, as well as the cost

[4] Treasury New Zealand (2017) Guide to Social Cost Benefit Analysis.
[5] Treasury New Zealand (2018) CBAx Tool User Guidance and CBAx Tool.

associated with operating the spa and hot pools are included in the analysis. The costs are informed by an analysis of official information published by Statistics New Zealand. Ratios in the Matamata-Piako District Multi-regional Input-Output model were used to refine and customise some of the parameters used in the analysis. Broadly, the costs to deliver the goods and services falls between 63% and 78% (of sales and excludes labour costs). In terms of the cost to operate and maintain the spa and hot pools, these were based on the Deloitte estimates. The annual operating cost for the spa and hot pools is put at $4.6m (uninflated and once operating at a maximum). This includes labour costs of $2.9m. With reference to the secondary opportunities, these will also use economic resources, and the value of this is estimated at $3.8m (once operating at the assumed level). Labour cost of $0.7m is included for the secondary activities.

- The assessment covers 25 years and uses Discounted Cash Flow (DCF) analysis to express the future cash flows in current terms (i.e. Net Present Value analysis). NZ Treasury recommends using a rate of 6% for discounting the future cashflows (costs/benefits) for infrastructure and special purpose (single-use) buildings[6]. The headline figures we report are estimated using a 6% discount rate. However, the the present value of cashflows at a lower (4%) and higher (8%) discount rates are shown to highlight the range.

Results and sensitivity analysis

The results are summarised below by reporting the key metrics of the analysis.

Discount rate	*Costs*	*Benefits*	*Net*	*BCR*
4%	111	123	11.7	1.11
6%	92	97	5.0	1.05
8%	78	78	0.3	1.00

The analysis suggests that the proposed development will return a positive BCR, i.e. it is greater than one (1) under all the discount rates. Under the high discount rate (8%) the proposal's benefits are marginally higher than the benefits. This is because the high discount rate reduces the relative importance of benefits that are expected in the future. Considering that the assessment period is 25 years, and that most of the costs are incurred early in the assessment period (due to the capex). This suggests that the project is not without risk and that a positive outcome is not guaranteed.

In terms of the net benefit (benefits less costs), the proposal will deliver benefits that are between -$0.3m and $11.7m. The range is due to the discount rate. Taking the present value and spreading it out over 25 years returns an annual value ranging between $10,300 to $470,000. The mid-point is estimated at $202,000. Importantly, this value is the annual average and is lowered by the early years when capital spending (costs) outweigh the benefits. In future years, when the facility and secondary businesses operate at the assumed capacity, then the district will see a gain of $3.8m (per year and undiscounted).

[6] http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/currentdiscountrates

There are several uncertainties around the spa and hot pools project. The project spans a long time and the exact capital costs will only crystallise during construction, and the market growth for the spa and hot pools might not manifest. In addition, the project financials and estimates could be affected by optimism bias. Therefore, a separate sensitivity analysis was completed to shed light on how downward changes to key assumptions was undertaken. Essentially, the sensitivity analysis reflects more pessimistic settings. The following three scenarios were considered:

- Higher development costs (capex +20%, in addition to the 20% deadweight loss),
- Higher costs in the wider economy (the resources used to meet the additional activity in the local economy are 20% greater than estimated)
- Lower spending levels, i.e. the level of visitors attracted to the facility and the secondary business opportunities is 20% lower than the anticipated visitation levels.

Table 1 offers a breakdown of the sensitivity analysis.

Table 1: Sensitivity Analysis

Setting	Discount rate	*Costs $m*	*Benefits $m*	*Net $m*	*BCR*
Base	4.0%	111.1	122.8	11.7	1.11
	6.0%	91.9	96.9	5.0	1.05
	8.0%	77.6	77.9	0.3	1.00
High Capex +20%	4.0%	115.0	122.8	7.8	1.07
	6.0%	95.7	96.9	1.2	1.01
	8.0%	81.3	77.9	(3.4)	0.96
High Opex +20%	4.0%	128.5	124.0	(4.5)	0.97
	6.0%	105.7	97.9	(7.8)	0.93
	8.0%	88.7	78.6	(10.1)	0.89
Low Visitors -20%	4.0%	92.5	96.7	4.2	1.05
	6.0%	77.1	76.3	(0.9)	0.99
	8.0%	65.7	61.2	(4.5)	0.93

The sensitivity analysis suggests that the net benefits of the proposed development is sensitive to encountering higher costs when delivering the goods and services associated with the visitors. If the anticipated visitor numbers do not materialise, then over 25 years, the proposal's costs will outweigh the benefits, returning a BCR smaller than one (1) for the 6% and 8% discount rates. But, looking at the lower discount rate suggest that the project will continue to deliver benefits greater than the costs. This means that it is entirely possible to manage the risks associated with lower visitor numbers. Looking past the impacts of discounting, under the low visitor scenario, the proposal will still deliver positive outcomes. Ultimately this scenario highlights the need to pro-actively manage and grow the visitor numbers. The modelling suggests that the visitor numbers can be 13% lower than the estimates and the project will still return a positive outcome.

Using higher capital expenditure (+20%) also impacts the deadweight loss but the proposal is not as sensitive to higher capital costs as the other shifts. Even if 20% is added to the capital costs (including the future capital reinvestments), the proposal is expected to continue to deliver positive outcomes

(i.e. a BCR >1). Only under the high discount rate will the costs outstrip the benefits. As already explained, this is in part impacted by the discounting process which places less importance on benefits that are expected in future.

The sensitivity analysis shows that the proposal is most sensitive to higher operating costs. Increasing the operating cost by 20% will lift the cost to levels that exceed the benefits generated. In reality, it is unlikely for the operational costs to be 20% higher than those estimated for the project and this is seen as an extreme position. Based on the modelling, the operating cost can increase by 8% before the project's costs are greater than the benefits.

The sensitivity analysis was set up in a way to illustrate the underlying sensitivities of the BCR. The analysis suggests that the project is sensitive to higher operational costs and lower visitor numbers. But, the analysis also shows that there is some margin before the project turns negative (costs > benefits). This suggests that the proposed development is likely to deliver positive benefits, even if the anticipated growth does not materialise or if the project costs are exceeded.

Other Considerations

The CBA focuses on the additional effects of the spa and hot pools as well as the secondary business opportunities. The project will unlock a range of benefits and other activities with benefits. For example, the district's profile and exposure will be enhanced. The value of these benefits, and any further resulting effects are not included in the assessment. Excluding such benefits from the analysis means that the true benefit position is understated.

There will be other areas that will see gains and losses. These are more difficult to (robustly) estimate and quantify. Examples include:

- The environmental effects from construction activity, including any demolition waste (specifically the ecological effects), the emissions associated with the lift in visitors and their travels, and so forth.
- The externalities, risks and other costs associated with maintaining and developing roading and other infrastructure is excluded.
- A lift in the number of people visiting and travelling through the district affecting perceptions (i.e. becoming too crowded).
- The potential implications on the accommodation market, e.g. the growth in the AirBnB market and the need to provide additional accommodation is not considered. In addition, the flow on effects like AirBnB displacing households from the rental market is not included.
- Social effects such as the potential impacts on inequality and negative impacts on local cultural considerations.
- Costs associated with managing visitors around sensitive areas (cultural or environmental).

As with all modelling, this analysis is subject to limitations. As mentioned, the analysis focuses on the district and the relative costs and benefits to the district. It is acknowledged that the PGF costs (if the

proposal attracts PGF funding) are spread across NZ taxpayers[7], with only a portion of NZ's taxpayers residing in the district, while the benefits will be felt locally. Yet, the entire capital funding is treated as a 'local cost'. This means that the 'net local benefit' will be higher than that stated in the analysis because only a share of the capex (cost) will accrue to local residents. Therefore, the funding (PGF) that is injected into the local economy to fund the capital investment can also be seen as a benefit flowing to the district.

Contact person:

Lawrence McIlrath

Director
Market Economics
DDI: 09 915 5523
Mobile: 021 042 1957
Email: lawrence@me.co.nz

[7] It is beyond the scope of this assessment to consider the New Zealand level costs and benefits of the project. The focus is locally. If a national level focus is used, then only the (new) international visitors attracted to the district should be included and assessed relative to investment in the spa and hot pools.

APPENDIX 8 - TE AROHA ACCOMMODATION

This section briefly summarises the accommodation capacity available in Te Aroha.

There were 13 accommodation providers identified in or beside the town (Table A8.1). Between them they provided around 75 double rooms, allowing for some extra capacity for a few single rooms and the camping options at Te Aroha Holiday Park and Backpackers. This accommodation capacity is considerably less than that which would have been available in Te Aroha's spa-resort heyday.

Table A8.1: Summary of Te Aroha Commercial Accommodation

Name	Double $/ night from…	Type	Double rooms	Address	Notes
The Chocolate Box	$320*	Rooms in villa	3	13 Church St, Te Aroha	At base of Mt Te Aroha near Domain. (*$ for whole villa).
Goldminers Cottage	$180	Rooms in period cottage	3	9 Church St, Te Aroha	At base of Mt Te Aroha near Domain
Shaftesbury Glade Cottages	$170	Rooms in 2 cottage units	2	19 Shaftesbury Rd, Te Aroha	1x Double room in 2x cottages, rural site outside town (~10km).
Aroha Mountain Lodge	$145	Rooms in large period house/lodge	6	5 Boundary St, Te Aroha	At base of Mt Te Aroha beside Domain.
Hot Springs Lodge	$145	Rooms in period cottage	3	7 Boundary St, Te Aroha	At base of Mt Te Aroha beside Domain
Te Aroha Motel	$120	Motel	12	108 Whitaker St, Te Aroha	At base of Mt Te Aroha beside Domain.
Pedal Inn	$120	Farm homestay	2	Gordon Avenue, Te Aroha	Close to Rail Trail link outside of town, a short drive to Domain.
The Cavern	$110	Room in unit	1	69 Te Kawana Road, Te Aroha	1x doubles in unit, rural site outside town (~10km).
Te Aroha Holiday Park and Backpackers	Cottage $105 Cabins $75	Holiday park with multiple room and camping options	17	217 Stanley Rd, Te Aroha	Options - 6 Cottages, 4 cabins, 2 apartments, 5 caravans, camping. Outside town, 5min drive to Domain.
Te Aroha Hillside Homestay	$100	Rooms in 1 cottage unit	2	41 Tui Rd, Te Aroha	At base of Mt Te Aroha near Domain.
The Backhouse at Thackray's Hall	$100	Rooms in unit	2	389 Manawaru Road, Te Aroha	2x doubles in unit, rural site outside town (~10km).
The Nunnery	$85	Converted period nunnery	9	16 Burgess St, Te Aroha	4x double and 5bdr apt wing. Close to Domain.
Palace Hotel and Restaurant	$80	Rooms in period hotel, shared bathroom	12	165 Whitaker St, Te Aroha	Upstairs from pub in town centre, near Domain.

Te Aroha Holiday Park and Backpackers provided the largest single number of rooms, followed by Te Aroha Motels and the Palace Hotel and Restaurant. None of these could be considered high-end facilities, with many of the rooms available being simple in their offer. Higher end offers would occur among some of the other smaller providers, but their number would be small.

Overall this brief review shows a relatively small nightly accommodation capacity in Te Aroha, with nightly bed-night capacity being well fewer than 200 (excluding camping). And the accommodation facility offer available is weighted more towards that portion of the market requiring only basic facilities. A brief review of customer ratings for these facilities does show high satisfaction in most cases, indicating the provision is meeting the needs of its current users. However, these accommodation capacity and quality issues will become more significant constraints in relation to any future planned development of new attractions and visitation initiatives.

APPENDIX 9 - ZIPLINE ATTRACTIONS

This section briefly summarises examples of the main zipline attractions in New Zealand.

Table A9.1: Summary of Zipline Experience providers

Name	Adult Cost* (from)	Address	Notes
Adrenalin Forest (3 sites)	$45	-TECT All Terrain Park Upper Pyes Pa Road, **Tauranga** -Okowai Rd, Aotea, Porirua, **Wellington** -105 Heyders Road Spencerville, Christchurch	Not primarily a zipline attraction but some ziplines as course components of the different high-rope courses. Currently in 3 locations (Bay of Plenty Wellington, Christchurch) and soon to be in Auckland (12 Stone Road Bombay). Have options for night use ($50) and GoPro camera hire $16). Cost for 3 hours duration.
Cable Bay Adventure Park	$95 (1hr) for Skywire	194 Cable Bay Rd, **Nelson**	An adventure park featuring the unique 'skywire' flying fox experience of almost 2km. Also has quad bikes, horse treks, amphibious vehicles, archery, paintball, and E-MTBs at different costs.
Rotorua Canopy Tours	$159 Original $249 Ultimate	147 Fairy Springs Road, **Rotorua**	Two canopy-tour high course circuits of 3-3.5hours duration (Ultimate and Original Canopy Tours). Use multiple ziplines connected with raised swing bridges and platforms. Have options for combos including zorb rolls, rafting, caving and thermal soaking (starting at $194 and $274) and GoPro camera hire $49).
Skyline Rotorua	Zipline combos $99, $104, $149	178 Fairy Springs Road, **Rotorua**	Gondola-ascent based attraction with numerous descent options including 400m dual ziplines, luge, mountain biking and large gravity swing. Ziplines available in combos with Gondola and Luges (Gondola and 5 luge rides $104, plus various combos and family packages).
Christchurch Adventure Park	Zipline tour $130	225 Worsleys Rd, Cracroft, **Christchurch**	Chairlift-ascent based attraction (and function venue) with numerous descent options including a zipline tour with dual ziplines (including 1 of 1.1km length), and mountain biking downhills on multiple trails ($75 day pass plus multi-visit pass options). Have options for night zipline use and edited GoPro video summary ($70). Cost for 2.5-hour experience.
Ziptrek Ecotours	$95/1hr 2 line $145/2hr 4 line $195 3hr/6 line	Brecon St, **Queenstown** (accessed via Queenstown Gondola)	Gondola-ascent based attraction with numerous zipline descents through 3 main tour options. Options increase in duration and number of ziplines. Including worlds steepest tree-to-tree zipline. Ziplines available in combos with other iconic Queenstown attractions). Night options.
Paradise Ziplines	$189 (or $159 at Glenorchy)	Via 88 Beach St, **Queenstown,** (or via Glenorchy pickup)	Wilderness 8-zipline course over 1km accessed by foot track at the Oxburn Stream site near Glenorchy. Cliff, streambed canyon and tree canopy lines. Scenic drive to Glenorchy part of the offer.
EcoZip Adventures	$129 adult $79 child $337 family.	150 Trig Hill Road, Waiheke Island, **Auckland**	A 3-hour zipline attraction package comprising 3x 200m+ dual ziplines, combined with island highlights tour in the shuttle and a ride-end forest tour. The shuttle also does ferry pickups and drop-offs.
Waitomo Caves Zipline Park	$55	24 Te Anga Rd, **Waitomo**	A 1.5-hour experience using 10 ziplines with longest 280m in the hills around Waitomo Caves. A rural setting with lines through forest canopy and limestone bluffs. Involves some uphill walking. Note that some cave adventure providers at Waitomo also offer small zipline sections on caving tours.
Kawerau Ziplines	$50	Kawarau Bungy Centre, State Highway H6, Gibbston Valley, **Queenstown**	A shorter 130m dual zipline off the Kawerau Bridge as an option at the AJ Hackett Bungy attraction. Zipline and Bungy combos available. Very high tourism exposure at this site.
Tree Adventures	$20-$46	Tree Adventures, Eastern Boundary Rd, Woodhill Forest, **Auckland**	Not primarily a zipline attraction but some ziplines as course components of the different high-rope courses. The 'easier/beginner' courses are cheaper.

Name	Adult Cost* (from)	Address	Notes
Coromandel Zip Line Tours	$tbc	Driving Creek Railway, 380 Driving Creek Rd, **Coromandel**	A zipline option is currently being constructed as a descent option for the unique Driving Creek Railway attraction (bush railway) near Coromandel town.
Canyon Fox	$169	Via 34 Shotover Street, **Queenstown**	A dual zipline across the Shotover canyon and then another to return, with total length around 450m. Around 2 hrs from pickup to dropoff in Queenstown. Starts with a jump into a 5m drop. Available in combos with the Shotover Swing or separate Shotover Jet/Rafting options.

*Prices from quoted figure for a single Adult, with concessions available

From these diverse examples, zipline experiences can be broadly provided in four main contexts:

1. High-ropes/canopy courses – including Zipline sections in longer high-ropes courses (or in other non-canopy high-adventure tours (e.g. caves);
2. Zipline Parks - where various combinations of ziplines provide multiple course/line options, sometime with night options.
3. Feature Ziplines – where a feature 'high-thrill' zipline is the main attraction due to its scale, ride features, location and/or associated attraction options; or
4. Zipline add-ons – where zipline options are added as complements to take advantage of some other feature attraction (e.g. a high viewpoint, gondola, luge, mountain biking, bungy jump attraction etc).

Overall this brief review shows a variety of ziplining experiences. Many providers also offer combo-deals with other attractions at the zipline sites or with feature attractions in nearby areas.

In the case of any zipline options being considered for Te Aroha, it is likely that developments associated with other facility/experience developments (e.g. at the Domain or on Mount Te Aroha) would offer the best competitive advantages / synergies.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