

Rocket Launch Tourism Project Scope

Report to Hawke's Bay Regional Council
August 2016

Prepared by
Giblin Group and TRC Tourism





Giblin Group is a specialist consultancy assisting local and central government, and iwi, hapū and whanau to develop and deliver on their plans and projects.

Giblin Group's reputation is built on attracting millions of dollars to social infrastructure projects across regional New Zealand; including museums, galleries, theatres, sports facilities and environmental projects.



TRC Tourism (TRC) www.trctourism.com is a leading international tourism and recreation consulting business with offices in New Zealand and Australia. For over 30 years, we have engaged with businesses, governments and communities to enhance people's lives and the places they live through sustainable tourism and outdoor recreation.

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1.0 EXECUTIVE SUMMARY

Introduction

The establishment of a launch site on the Mahia Peninsula by Rocket Lab, a US corporation with a New Zealand subsidiary, has opened up the opportunity for rocket tourism in the Wairoa District with potential benefits for the Hawke's Bay and Tairāwhiti/Gisborne regions. It is believed a well-developed tourism offering will significantly benefit the Wairoa District through growth in employment and investment, improvement to the general economy and, as a consequence, enhanced social outcomes to an area of regional New Zealand which requires a boost in terms of economic and social wellbeing.

Giblin Group working in partnership with TRC Tourism was contracted by the Hawke's Bay Regional Council (HBRC) to undertake a project scope on the tourism opportunities presented by Rocket Lab testing and launching electron rockets on the Mahia Peninsula in the Wairoa District. The approach taken involved:

- A review of material currently available;
- On-site visits and interviews with stakeholders in Wairoa, Hawke's Bay and Gisborne;
- Scoping of the tourism market including current trends, lessons learned from other tourism developments, identification of potential tourism product associated with rocket launches and a SWOT and risk assessment of the rocket launch tourism activity;
- Identification of potential funding sources for future tourism developments; and
- Recommendations and an Action Plan going forward.

Rocket Industry and Tourism

The rocket industry is new to New Zealand and central government is taking a strong interest in Rocket Lab's operations. MBIE states that space is of immense strategic importance and that globally the space economy is a multi-billion dollar business with opportunities for New Zealand to take a more active role in this high value, knowledge-intensive economy. To that end, the Government has announced the development of a new regulatory regime for space and high altitude activities and has established a New Zealand Space Agency within MBIE to be the lead agency for space policy and legislation.

Central government is also currently focused on regional economic growth and announced funding in the 2016 Budget of \$94.4 million of new funding over the next four years for regional economic development initiatives that will boost economic growth and benefit communities in regional New Zealand.

The tourism industry plays a very important role in the New Zealand economy. It is one of New Zealand's top export industries contributing directly and indirectly 8.5% to total gross domestic product and 6.9% of total people employed in New Zealand (168,012)¹. The number of international tourists to New Zealand is growing significantly and the regions are eager to capitalise on this growth

¹ Ministry of Business, Innovation and Employment (MBIE), Tourism Satellite Account 2015

and attract visitors to their area. Both Eastland and Hawke's Bay are experiencing growth in visitor numbers.

Wairoa District has a plan to grow and develop a sustainable tourism industry and establish the district as a multi-faceted tourist destination. The district is geographically beautiful, culturally rich, and potentially has a lot to offer tourists including an abundance of water activities (swimming, water skiing, fishing, surfing, diving) based around its beaches, the Wairoa River and Lake Waikaremoana. The natural beauty of the district provides bush walks and scenic drives. The opportunity to host rocket launches in the area is an added bonus and a drawcard to come to Wairoa/Mahia.

There is a market for rocket tourists as is evident internationally at "Big Rocket" launch sites such as Cape Canaveral in the United States. In New Zealand there also appears to be an appetite for space-related tourism as demonstrated by the recent launch of the super pressure balloon at Wanaka where over 1,000 people turned up to watch, despite the fact that the launch had previously been "scrubbed" three times. A further 10,000 watched the launch on YouTube.

Given that rocket launches are unreliable in terms of scheduling, the weather balloon launch is a good indication of the interest in such an event and the fact that visitors will turn up despite cancellations. It is also imperative to have other activities and interests in the area for visitors to do while waiting for the launch.

Stakeholder Meetings

A number of stakeholders in Wairoa, Hawke's Bay and Gisborne were interviewed to inform this report. One group we failed to meet with was iwi representatives in the Wairoa District. We consider this a gap in our stakeholder engagement and would still seek to meet with this group if possible.

Our conversations with local business people indicated a "wait and see" attitude with regard to the rocket launch activity in Mahia and whether it would boost the local economy. There was a feeling that while anything like this that comes to town and supports the community is good, there are opportunities without Rocket Lab to improve the tourism offering of the district.

A repeated message from local business people with whom we spoke was that the Council should be ready to act quickly to support the establishment of new business or development of existing business in terms of consents if the test rocket launches are successful and there proves to be a tourist market for this.

It should be noted that many people we spoke with have an energy and vision for Wairoa District that is not dependent on the rocket launches.

In the wider region, it is clear that Gisborne and Napier are gateways to Wairoa and the Mahia Peninsula and tourism opportunities that come their way as a result of the rocket launches will be capitalised on.

A list of stakeholders consulted is attached as *Appendix 2*.

Potential Community Benefits

There is potential for economic, social and cultural benefits to accrue to the Wairoa District and greater East Coast region through the rocket launch activities. A recent Economic Impact Assessment by Sapere Group has modelled the expected economic benefits to New Zealand from the development of a rocket launch industry. From this modelling, which is based on a scenario of between 52 and 120 launches per year (after 5 years), Sapere estimates that Rocket Lab could contribute between \$600 and \$1,550 million of value-add to New Zealand over 20 years, of which direct, indirect and induced effects could be between \$400-\$1,150 million.

Rocket Lab has made it a priority to use local contractors where possible in the construction phase of the project and to source consumables such as fuel and food within the region. Rocket Lab has actively engaged with the local Mahia Peninsula community, ensuring they have been kept well-informed through public meetings of the project's progress.

Rocket Lab has made it clear that they are in the business of launching rockets and are not focused on tourism activities related to rocket launching. However, the company is keen to support scientific education and outreach activities involving schools and educational institutes in the Hawke's Bay area.

There is scope to include cultural activities as part of a tourism product and to share local Māori legend and tradition as part of this. The Tairawhiti Navigations Project - the story of first journeys - also links in well with the first journey into space from a New Zealand launch site.

The possibility of establishing a Space Education and Information Centre in the District is an idea that should be further tested through a business case. It is noted that rocket launch sites located overseas are supported by a centre with an education focus, and it could also be seen as an important driver for economic development in the region.

A Staged Approach

There are three stages to the rocket launch programme:

- Construction - current development of the launch site at Onenui Station;
- Test Launches - planned for a 6 month period commencing sometime after 1 August 2016;
- Commercial launches – normal operations, 2017 and beyond.

If properly organised, the test stage could be used to gather important market information for the assessment of rocket launch tourism.

Wairoa District Council (WDC) needs to be prepared for the visitors that turn up to watch the test launches. The tests will not be publicised, but Rocket Lab is required to notify the local community of pending test launches as defined in the resource consent. It is expected that word will spread and locals, day-trippers from north and south, and journalists, who are eagerly awaiting the launches, will

arrive in the district. Management of visitors in terms of traffic, safety and provision of essential services such as toilets and food needs to be planned for.

Recommendations

At this point in time, the rocket tourism market is unknown in New Zealand and reference can only be made to similar products in the same area of interest, e.g. space products such as the Wanaka Super Pressure Balloon and the Space Centre at Te Awamutu; or activities that also hold a risk of not eventuating, e.g. whale watching at Kaikoura, to evaluate what effect rocket launches may have on tourism for the Wairoa District and greater Hawke's Bay and East Coast region.

However, there is an opportunity to undertake some on-the-ground market research during the rocket launch testing phase and our recommendations are based around this:

1. **Undertake market research** during the three test launches, gather data from those who turn up to watch, analyse and report back.
2. **Have infrastructure in place** to cater for the visitors who come to view the test rocket launches.
3. **Be good hosts** to the visitors who come to view the test rocket launches.
4. **Establish a Steering Committee** to manage three action groups through the test launch period to ensure that the actions recommended in 1-3 are delivered upon. The three action groups could focus on Market Research, Infrastructure and Hosting. The Rocket Launch Testing Steering Committee (RLTSC) could comprise the following representatives:

- Independent Chair
- Wairoa DC
- Hawke's Bay RC
- Onenui Station
- Rocket Lab
- Activate Tairāwhiti
- REDS Strategy Rep or HB Tourism
- MBIE Space agency rep
- Committee Support

It would appear there are opportunities for tourism associated with rocket launches in the Wairoa District, but at this point a cautionary approach is advised and further groundwork recommended before any permanent infrastructure is put in place.

At the same time, preparation for and a quick response to the changing environment that the rocket test launches will create in Wairoa District is recommended.

Figure 1: Onenui Station comprising the southernmost tip of the Mahia Peninsula - the rocket launch site



2.0 INTRODUCTION

2.1 Giblin Group profile

Giblin Group is a specialist consultancy assisting local and central government and iwi, hapū and whanau to develop and deliver on their plans and projects. The company's reputation is built on attracting more than \$63 million in public and private funding to restoration, extension or new construction projects in communities across New Zealand. Giblin Group also works extensively in the area of stakeholder engagement and community consultation, a vital ingredient for the success of any major project.

Giblin Group has positioned itself as a champion of regional renaissance, working with organisations from greenfields planning, helping to build support for projects through to the realisation of visionary projects, which are often capital projects and a visible sign of regional renaissance.

Giblin Group is owned and managed by director, Jenni Giblin. A multi-disciplinary team of consultants with a range of specialist skills is based regionally in Hawke's Bay. There are also two associate consultants based in Wellington, who work within the machinery of government, ensuring Giblin Group is connected with ministers and government officials.

2.2 TRC Tourism profile

TRC Tourism is a leading international tourism and recreation consulting business with offices in New Zealand and Australia. For over 30 years, TRC Tourism has engaged with businesses, governments and communities to enhance people's lives and the places they live through sustainable tourism and outdoor recreation.

TRC Tourism works with clients all over the world to create superb, competitive destinations. Services include: Tourism Planning, Destination Management and Development, Recreational Trails, Product Development and Feasibility Studies, Indigenous Tourism, Planning and Business Support, Business Strategy, Parks, Protected Areas and Resource Management.

The team, led by Director Janet Mackay, is made up of in-house consultants and support staff and associate consultants based in Australia and New Zealand. Teams are picked to undertake large and small scale projects across New Zealand, Australia, Asia and the Pacific and beyond. Dave Bamford provided the professional inputs for this project.

2.3 Scope of Project

Giblin Group working in partnership with TRC Tourism was contracted by the Hawke's Bay Regional Council to undertake a project scope on the tourism opportunities presented by Rocket Lab testing and launching electron rockets on the Mahia Peninsula in the Wairoa District. The terms of reference sought to:

- Focus on space tourism opportunities

- Consider tourism potential in terms of in-bound and national markets and demand
- Identify potential tourism product around space tourism
- Provide a high-level outline of potential external funding to get space tourism off the ground
- Provide lessons learnt from other innovative tourism innovative startups
- Provide recommendations on next steps.

The development of the project scope has involved consultation with officers from Hawke's Bay Regional Council, Wairoa District Council, Ministry of Business Innovation and Employment (MBIE), staff from Rocket Lab, an Onenui Station representative, tourism personnel in the Hawke's Bay and Gisborne regions, members of the local iwi, the business community and other stakeholders identified as appropriate.



Figure 2: Portland Island and the tip of the Mahia Peninsula

3.0 METHODOLOGY

3.1 Approach taken

Giblin Group and TRC Tourism have expertise in different areas and our approach has been to work alongside each other with Giblin Group taking the lead on the project and providing funding expertise, and TRC Tourism providing tourism information, expertise and analysis for the study.

3.2 Work plan

Appendix 1 shows the Work Plan for undertaking the Project Scope.

4.0 BACKGROUND

4.1 Rocket Lab launch project

The establishment of a launch site on the Mahia Peninsula by Rocket Lab, a US corporation with a New Zealand subsidiary, has opened up the opportunity for rocket tourism in the Wairoa District with potential benefits for the whole Hawke's Bay region. It is believed a well-developed tourism offering will significantly benefit the Wairoa District through growth in employment and investment, improvement to the general economy and, as a consequence, enhanced social outcomes to an area of regional New Zealand which requires a boost in terms of economic and social wellbeing.

Rocket Lab's CEO, Peter Beck has been quoted as saying "We're creating a billion-dollar space industry down here." "If we can launch one rocket a week we are going to change the world."² The New Zealand government through MBIE has financially supported Rocket Lab's research and development, and Economic Development Minister Hon Steven Joyce expects there will be significant spin-offs for the Wairoa economy and the eastern region from Rocket Lab's operations in the area.³

The Hawke's Bay Regional Council, as the representative council for the whole of Hawke's Bay and a strong advocate for economic development in the region, is taking the lead in scoping the opportunity presented by Rocket Lab's decision to locate a launch site in the Wairoa District. The potential for tourism opportunities in particular are examined in this document.

4.2 Technical specifications of the rocket of relevance to viewers

The principal offering to tourists/visitors will be to see the rocket actually take off. To that end the following details should be kept in mind⁴:

- The rockets are 17 metres long (compared to 50 metres for standard rockets);
- They do not have people aboard (compared to some other space rockets);

² Stuff.co.nz 30 July 2014

³ HB Today 27 June 2016

⁴ Details provided by Catherine Moreau Hammond at Rocket Lab

- It is difficult to predict the distances at which launches will be effectively visible. On fine days with good visibility, it is possible that the site and launch will be visible from somewhat more than 20km away;
- The rocket climbs to over 50 000 feet in altitude in a minute and a half. This altitude is almost 1.5 times as high as commercial aircraft cruise. The rocket itself will be exceedingly difficult to make out with the naked eye at this height. The flame plume would likely still be visible at night (clouds permitting), but during daylight could be too hard to make out somewhat before this time;
- While a large steam cloud at the launch site itself can be expected (and would be visible from anywhere with direct line of sight to the pad, such as Black's Beach), the launch vehicle leaves almost no visible exhaust until at an altitude where contrails (like those of commercial aircraft) will form. The puffy white exhaust plume of the NASA Space Shuttle Orbiter launches - created by the solid-fuel booster engines - will *not* be created by the Rocket Lab launch vehicle;
- The audibility of launches will diminish with viewer distance and intervening terrain. By way of example, at Mahia township expected launch volumes should be no louder than the equivalent of a conversation in a quiet office. Prevailing winds will affect this significantly;
- Rocket take-offs can be at any time within the four-hour take-off window. For all tests there will be no forewarning of the take-off. No announcements from Rocket Lab of the duration of delays or "holds" should be expected. This may also be the case during established take-offs from 2017;
- Rocket Lab will likely be managing traffic through the marine exclusion zone by VHF and some details of delays or "holds" may be inferred from this, but this will only be to the level of "launch delayed by more than one hour" and similar notifications;
- During the test period (2016) it is assumed that planned take-offs may be "scrubbed", i.e. postponed and rescheduled to a subsequent day. There are a wide range of reasons for scrubbing - technical, weather, planned aircraft movements, large ships etc.;
- Rocket Lab will endeavour to announce the decision to scrub a launch as soon as possible after it is made in order to reduce the burden on marine and air traffic;
- Rocket Lab's immediate priority is for onsite effective testing of the rockets;
- Rocket Lab does not plan any visitor management during the test period (2016). They have no plans for providing visitor services post test phase;
- Rocket Lab will provide dates for proposed launches and windows to the public two weeks before each launch;
- Rocket Lab is required to account for large concentrations of people around the launch area in its risk assessment prior to each launch. A dramatic increase in viewers in an area outside the existing exclusion zones (such as on a boat at the edge of the marine zone, or hundreds of people on a hilltop on Mahia peninsula) would need to be accounted for in Rocket Lab's safety analysis, and may result in the exclusion zone being extended accordingly. Rocket Lab will need to be informed of proposed high densities of viewers to avoid late delays while complex risk analyses (taking multiple days) are repeated.

5.0 OVERVIEW OF GLOBAL/NATIONAL/REGIONAL/LOCAL CONTEXT

5.1 Global context

The Sapere Report (Sapere Research Group, 2016) contains a summary of the globalisation of the space sector. Key points to note are:

- The OECD (2014) characterises the global space sector as a high-technology niche with a complex ecosystem comprised of: public administrations (space agencies, space departments in civil and defence-related organisations), the space manufacturing industry (building rockets, satellites, ground systems); direct suppliers to this industry (components), and the wider space services sector (mainly commercial satellite telecommunications) and also universities and research institutions;
- The OECD estimates the global space economy represented around US\$256.2 billion in revenues in 2013;
- The OECD further notes a strong trend toward the globalisation of the space sector. In contrast to the 1980s where only a handful of states were engaged in the space industry, now many more countries and corporates across a wide range of industrial sectors are engaged in space related activities;
- There has been significant interest in the economic impacts of space projects even though they typically represent a small proportion of directly measureable/attributable economic activity (for example NASA's budget represented less than 1 per cent of GNP during peak activity years in the late 1960s);
- Bloomberg analysis⁵ puts the value of the commercial launch industry at approximately US \$6 billion dollars;
- In the last year the number of launches and attempts has nearly doubled on the previous year driven by the demand from the satellite industry. Spaceworks forecasts⁶ between 2,000 and 2,750 nano/microsatellites will require a launch from 2014 through 2020 (based on announced and future plans of developers and programs);
- The small satellite market is growing – they are much less costly and are beginning to change the space business. Recent projections by Spaceworks estimates an average annual growth rate of small satellites of nearly 24 per cent over the six years from 2014-20.⁷

⁵ Bloomberg.com, Julie Johnsson (13 April 2015) 'Forget Musk's Mars: Billionaires Branson, Allen Seek Earth Orbit' <http://www.bloomberg.com/news/articles/2015-04-13/forget-musk-s-mars-billionaires-branson-allen-seek-earth-orbit>

⁶ Spaceworks (2014) *Nano/Microsatellite Market Assessment*.

⁷Spaceworks (2015) Small Satellite Market Observations, summary accessed online: http://www.spaceworksforecast.com/docs/SpaceWorks_Small_Satellite_Market_Observations_2015.pdf

5.2 National context

Space Policy and a Lead Space Agency

In June 2016, the Ministry of Business Innovation and Employment (MBIE) announced the development of a new regulatory regime for space and high altitude activities. Its purpose in doing so is *“to ensure the development of a peaceful, safe and responsible and secure space industry that meets New Zealand’s international obligations.”*⁸

MBIE states that space is of immense strategic importance and that globally the space economy is a multi-billion dollar business. There are opportunities for New Zealand to take a more active role in this high value, knowledge-intensive economy.

The regulatory regime includes a new law – the Outer Space and High Altitude Activities Bill, due to be introduced to parliament in August 2016, a treaty with the United States – the Technology Safeguards Agreement (TSA) and Accession to the United Nations Convention on Registration, both of which are currently undergoing Parliamentary treaty examination.

The New Zealand Space Agency will be established within MBIE and be the lead agency for space policy and legislation.

Rocket Industry in New Zealand

Sapere states there is an emerging comparative advantage for New Zealand in the rocket industry, which has the potential to be seized and turned into a sustained competitive advantage.

New Zealand can offer the following to the rocket industry:

- Geographical advantages – the Mahia site can reach a wide range of inclinations from sun-synchronous through to 45 degrees.⁹
- Remote location, surrounded by water with comparatively low levels of shipping and air-traffic;
- New Zealand Trade and Enterprise (NZTE) marketing material aimed at overseas investors in a high value manufacturing sector notes that New Zealand has a small and well-educated population with one of the highest tertiary qualification rates in the world and an established history of high-quality production and innovation;
- New Zealand’s skilled labour force is cost competitive by developed country standards. Engineering employee costs are also lower in New Zealand, making it an attractive place to set up a high-value manufacturing business.
- New Zealand is English-speaking, non-corrupt and has a trusted government from a US perspective. New Zealand is consistently ranked as one of the easiest places in the world to do business.¹⁰

⁸ MBIE Press release NZ Space Agency, 16 June 2016

⁹ <http://www.rocketlabusa.com/worlds-first-commercial-launch-site>

Challenges for a New Zealand rocket industry include:

- Starting from scratch – having to build an industry from nothing. Setting up in New Zealand will require huge investment and change, e.g. regulatory change and significant investments in infrastructure;
- No access to the US supply of rocket componentry due to technology controls.

Centre for Space Science Technology

As part of the 2015 budget, an MBIE initiative was announced which will establish Regional Research Institutes around New Zealand to support innovation in the regions. \$25 million was allocated to this. In the 2016 budget, the Government announced it would commit \$40 million of additional funds to support this initiative, bringing the total funding to \$65 million.

Initial concept proposals were called for and after an evaluation process, a shortlist of three applicants was invited into further business case development with MBIE. One of the short listed proposals is for a Centre for Space Science Technology in Central Otago, led by Bodeker Scientific. The Regional Research Institute would undertake research allowing the use of space-based measurements and unique to New Zealand satellite imagery to develop solutions tailored to regions and key sectors, for example, in water resource management and regional planning.

A second of the three proposals also involves satellite technology - Earth+Vantage, Southland, led by Venture Southland is looking to establish a research facility where real time satellite and ground-based data would be used to lift primary industry productivity across New Zealand, in areas such as precision farming, forestry and marine management.

The Central Otago Space Science Technology Centre proposal was developed by a consortium of eight “parent organisations” across New Zealand which includes Rocket Lab. The other organisations are Bodeker Scientific (lead organisation), AgResearch, Callaghan Innovation, MetOcean Solutions, University of Canterbury, University of Otago and WakeScience.

If established, the Centre for Space Science Technology will have its head office in Alexandra with satellite offices established in New Plymouth, Lincoln and Dunedin.

5.3 Tourism

The tourism industry plays a very important role in the New Zealand economy. It is one of New Zealand’s top export industries. It directly and indirectly contributes 8.5% to total gross domestic product and 6.9% of total people employed in New Zealand (168,012)¹¹.

There were a record 3.27 million international visitor arrivals to New Zealand in the year ended April 2016. The largest increases were driven by China, Australia and the United States¹².

Domestic tourism expenditure grew to \$18.1 billion in the year ended March 2015¹³.

¹⁰ World Bank Group ‘Doing Business Index’ - <http://www.doingbusiness.org/data/exploreconomies/new-zealand>

¹¹ Ministry of Business, Innovation and Employment (MBIE), Tourism Satellite Account 2015

¹² MBIE International Visitor Arrivals, April 2016

The New Zealand Tourism Strategy 2025 recognises New Zealand's natural environment as a valuable asset and a compelling reason why international visitors choose New Zealand over other countries. Twenty-nine percent of international visitors said New Zealand's spectacular landscapes and natural environment was the most important factor in their decision to visit New Zealand.¹⁴

The New Zealand cruise industry has been recognised as a rapidly growing segment within New Zealand's holiday market within the New Zealand Tourism Strategy 2025. The cruise sector currently contributes an estimated \$436.1 million in added value to the economy, from 201,370 passengers, 75,400 crew, and 716 port days¹⁵.

New Zealand Tourism Market profile (YE Sept 2015)¹⁶:

- 3 million international arrivals into New Zealand in 2015 (↑4.6% p.a. since 2013), ALOS (average length of stay) 14 nights and spending approx. \$188.60/night;
- Holiday (65%) was the main purpose of visit for international visitors. Total guest nights increased 13% since 2005;
- Holiday & VFR (Visiting Friends & Relatives) (37%) were the main purpose of visits for domestic visitors (2012);
- Hotel (36%) was the most popular type of accommodation for international visitors, followed by staying with family/friends (28%);
- Private homes (46%) were the most popular type of accommodation for domestic visitors;
- 3 places visited on average per international visitor in NZ;
- Mostly aged between 25-29 years. Visitors under 20 years have seen the highest growth since 2010;
- Most international visitors are from Australia, followed by Europe;
- The most popular recreational activities for adult New Zealanders include walking (60%), swimming (30.2%), cycling (24.8%), and fishing (19.5%). Tramping is the 9th most popular activity (9.7%) and canoeing/kayaking is the 12th most popular (8.1%)¹⁷.

¹³ MBIE Tourism Satellite Account 2015

¹⁴ New Zealand Tourism Strategy 2025, 2014/15

¹⁵ Cruise New Zealand, 2014/2015

¹⁶ Hamilton & Waikato Tourism Opportunities Plan April 2016

¹⁷ Sport New Zealand, Key results of the 2013/2014 Sport and Active Recreation NZ Survey

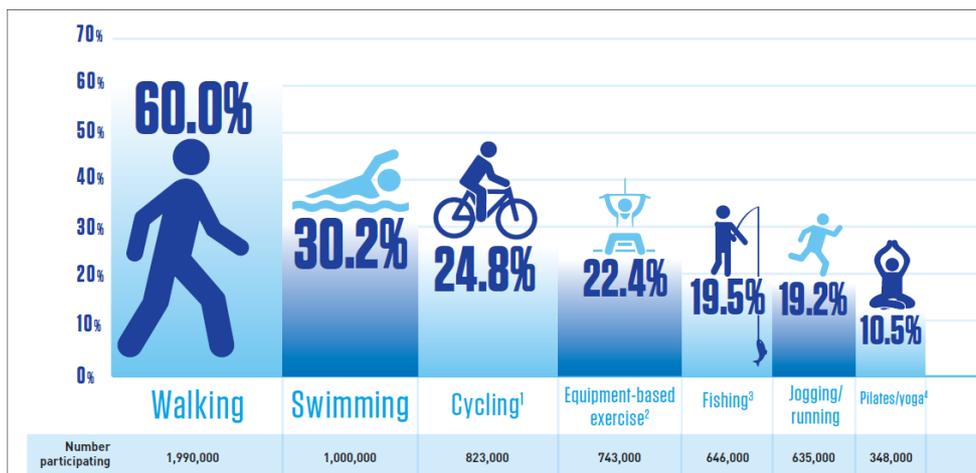


Figure 3: Top 10 Recreation and Sport Activities for participation by New Zealand adults

5.4 Hawke's Bay/Gisborne

Eastland Region

Tourism Eastland represents the Gisborne, Wairoa and Opotiki Districts as the Regional Tourism Organisation (RTO) for the Eastland region.

Destination Development Plan (Stafford Group, 2016)

Estimated visitation to the Eastland region (includes Gisborne, Opotiki, Wairoa, the East Cape, Lake Waikaremoana and the Mahia Peninsula – see map below) based on the commercial accommodation monitor, the private accommodation survey, i-Site visitation as well as discussions with stakeholders gives the following figures for the 2015 calendar year:

- Approximately 428,000 visitors to the Eastland region;
- Of this the majority were VFR (visiting family and relatives) comprising 55% (or 234,000 visitors)
- The next largest group is commercial accommodation visitors at 36% (or 155,000 visitors);
- Day trippers make up the balance at 9% (39,000 visitors).

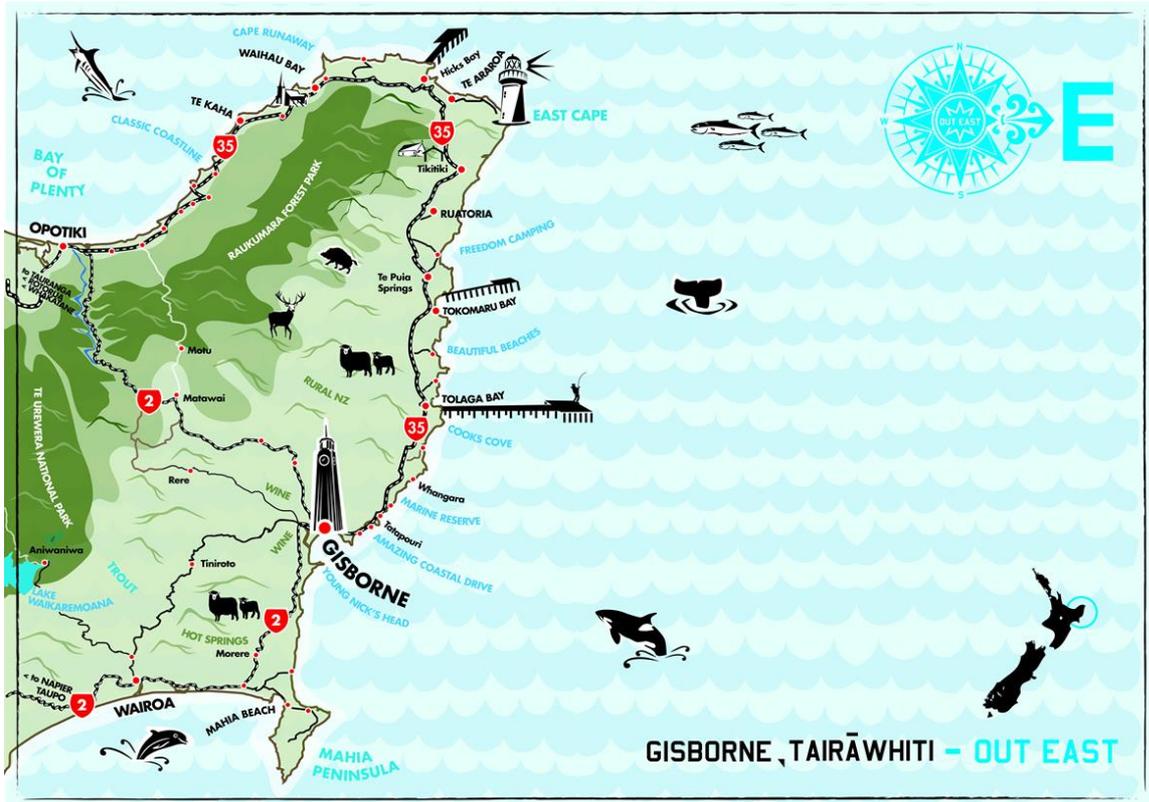


Figure 4: Eastland Region (Eastland Tourism, 2016)

It is estimated the majority of visitation to the Eastland region currently is undertaken by domestic visitors, comprising 89% of total visitation. International visitors are estimated to make up the remaining 11% of visitation.

Primary market sources for visitors to the Eastland region are:

- For domestic visitors Auckland (24%), followed by Bay of Plenty (20%) and Wellington (17%);
- For international visitors, over half are estimated to originate from Australia (57%), followed by the UK (12%).

A series of visitor growth forecasts have been developed from a low-growth scenario to a high-growth scenario as follows:

- Under the low growth scenario, visitation, over the 10-year period, grows from 441,000 to 530,000, a total growth of 89,000 visitors (or a 20% increase). This level of growth reflects natural growth in visitation to Eastland, with little-to-no new product development.
- Under the medium growth scenario, visitation grows by 53%, increasing from 458,000 to 700,000 visitors. To achieve this level of growth, it is assumed that it would necessitate undertaking some of the opportunities identified within the Destination Development Plan (DDP).

- Under the high growth scenario, visitation increases from 471,000 to 856,000, a total growth in 385,000 visitors. This growth has been based on Eastland adopting the majority of the suggested opportunities within the DDP.

The Eastland Destination Development Plan identifies a number of tourism opportunities for Wairoa based around the rocket launches. These include rocket launch viewing sites, a Space Science Experiential Centre, walking and cycling trails, events associated with the rocket theme such as a science fiction movie festival and triathlon event from Mahia to Lake Waikaremoana. For a full list of Wairoa tourism opportunities identified in the plan see *Appendix 3*.

Hawke's Bay Region¹⁸

For the year ending December 2015, 1,219,149 visitors arrived in Hawke's Bay, a 6.8% increase over the previous year. Of these, 260,074 (21.3%) were international tourists and 959,075 (78.7%) were domestic tourists. The international visitor numbers provided a significant 13% increase over the previous year. Domestic visitations experienced a slight drop at -0.2%.

For the year ended April 2016, compared with the previous April year, total guest nights for the Hawke's Bay RTO area increased 7.9%. Holiday parks had the largest increase, followed by backpackers (Statistics NZ, 2016).

Primary market sources for tourists to Hawke's Bay, based on MBIE expenditure figures, for visitors to Hawke's Bay are Australia, United Kingdom, Germany and the USA. China is an emerging market.

From within New Zealand, the primary markets are Waikato, Bay of Plenty, Wellington, Auckland and Manawatu-Wanganui.

¹⁸ Information provided by Hawke's Bay Tourism. Base data sourced from Ministry of Business, Innovation and Employment (MBIE).

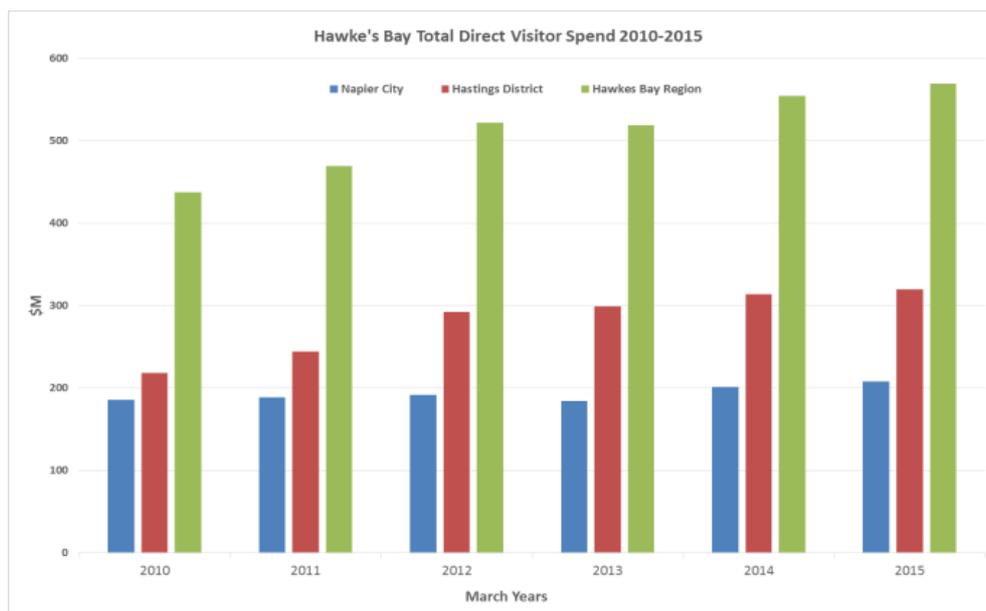


Figure 5: Total Direct Visitor Spend Years ending March 2010-2015

Hawke's Bay Tourism is aiming for a 5% annual growth in visitor spend. This meets the national framework set by the tourism industry.

Hawke's Bay has recently launched a Regional Economic Development Strategy and Action Plan 2016 (REDS, 2016). In this document an identified action under the heading *"Become a beacon for investment, new business and migrants"* is to *"Work with Rocket Lab to develop opportunities to leverage business attraction off their Te Mahia initiative."*

A further identified action under the heading *"Enhance visitor satisfaction and increase spend"* is to *"Undertake a feasibility study for a Napier to Gisborne cycleway"*. It may be assumed that Wairoa District would be part of such a cycleway.

The strategy states the arrival of Rocket Lab at Te Mahia Peninsula provides a unique opportunity to build tourism products centred on *"space-launch tourism"* while also allowing the natural beauty and the extensive history of the area to be showcased.

5.5 Wairoa District

Te Wairoa Visitor Strategy

The aim of Wairoa's Tourism Strategy (Wairoa District Council, 2015) is to grow and develop a sustainable tourism industry in Te Wairoa, and establish the district as a multi-faceted tourist destination.

The strategy outlines high level objectives and goals and contains a SWOT analysis of tourism in the District. This shows that the District has many things going for it without the rocket launch tourism aspect.

Table 1: SWOT Analysis Wairoa District Tourism

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Geographically beautiful, culturally rich and varied district – potentially a lot for tourists to see and experience: <ul style="list-style-type: none"> ○ Mahia Peninsula – surfing, fishing, diving and other recreational activities ○ Te Urewera and Lake Waikaremoana – fishing, Great Walk, Onepoto caves, rich in cultural history ○ Morere – hot pools, native bush walks ▪ Friendly welcoming people ▪ Fertile land which produces quality Angus beef, lamb, venison, fruit and vegetables ▪ Abundance of kaimoana – crayfish, paua, kina, fresh fish ▪ Whitebaiting in season ▪ Gaiety Theatre ▪ Rocket Lab launches ▪ Equidistant between Napier and Gisborne on the coastal touring road 	<ul style="list-style-type: none"> ▪ Low tourist numbers ▪ Limited number of (quality) accommodation providers ▪ Few tourist activity operators, transport providers ▪ Limited publicity/awareness of accommodation/activities on internet (HBT web, WDC web, NZT web, promo brochures) ▪ Wairoa District doesn't have a positive, known identity ▪ Little known about tourism numbers/profiles/spends/needs ▪ Little collaboration amongst operators/providers ▪ Lack of authentic cultural tourist activities/products (which tourists want) ▪ Limited communication/promotion of the district to neighbouring districts (Gisborne, HB, Rotorua, Taupo) ▪ I-Site lacks WOW factor ▪ Lack of tourist-focused infra-structure ▪ Lack of skilled service industry workforce
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ▪ Maximise potential for outdoor recreation tourist activities ▪ Encourage new business – accommodation and activity providers, including authentic cultural activities ▪ Increase visibility/presence of Te Wairoa as a tourist destination through websites/ i-Sites/promo brochures ▪ Support and promote new business ▪ Create job opportunities ▪ Share great experiences by word of mouth ▪ Work closely with RTOs and neighbouring councils ▪ Create community pride and a strong sense of place amongst residents (Visual identity project) ▪ Improve broadband connectivity ▪ Improve transport connectivity ▪ Improve the i-Site ▪ Have a dedicated focus on sustainable tourism 	<ul style="list-style-type: none"> ▪ Natural disasters ▪ Increased gang activity damages Te Wairoa's reputation ▪ Population decline → reduced rate take → reduced \$ available for tourism support ▪ Damaged environments, polluted waterways reduces attraction of Te Wairoa as a destination ▪ Bigger, competitive neighbours in Hawke's Bay and Gisborne ▪ Working age population forecast to reduce by 10% between 2011-2031 ▪ Unwarranted perception of high crime rates and personal security risk as a barrier

Visitor Numbers Wairoa i-Site

Visitor enquiry numbers provided by the Wairoa i-Site indicate visitor interest in the Wairoa district is growing:

Table 2: Total Visitor Enquiries at Wairoa i-Site

Year	Total	International	Domestic
2014	12,730	2,120	10,610
2015	14,081	2,093	11,988
2016 ¹⁹	15,933	3,099	12,834

The Wairoa i-Site also records where the visitor enquiries are from in terms of international enquiries and over the last 3 years, the largest numbers of international enquiries have been from Germany, France, the UK and Australia in that order.

Draft Economic Development Strategy

Wairoa District Council has a draft Economic Development Strategy (Wairoa District Council, 2015a) which stands on four interconnected objectives:

- Arresting and reversing historical population decline in both urban and rural Te Wairoa through encouraging natural growth and by attracting new residents;
- Developing and maintaining high quality, attractive infrastructure, events and Council services;
- Attracting new businesses and visitors; and
- Supporting existing businesses and community organisations.

The Council's vision is focused on developing and maintaining high quality infrastructure and Council services while ensuring that Te Wairoa prospers.

The strategy notes the potential for tourism growth in the district, which has an abundance of attractions, albeit under-developed at this point in time. However, tourist potential is hindered by some infrastructure issues such as the unsealed sections of State Highway 38 from Wairoa to Murupara, which effectively stops international tourists in rental vehicles from access to Te Urewera. Accommodation options are also lacking, especially higher end of the market options.

¹⁹ These are projected figures for 2016. 8,225 enquiries had been received up to the 20th June. If the average visitor numbers are extrapolated out over the remainder of the year, taking into account a considerable dip in numbers over the three winter months as per previous years, predicted numbers for 2016 could be 15,933 which is an increase over 2015. The same has been done for international versus domestic visitor numbers.

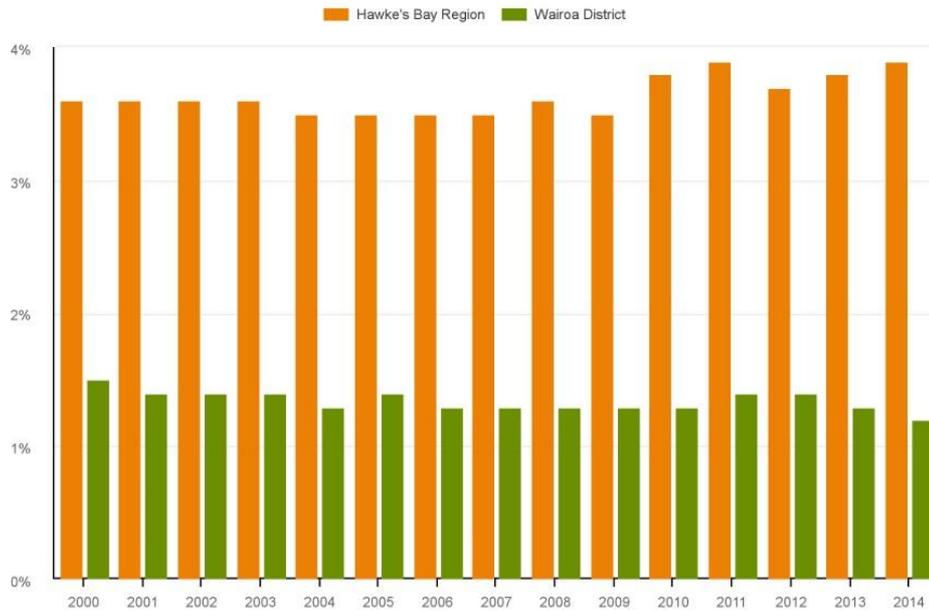


Figure 6: Tourism as a proportion of annual GDP in Te Wairoa and Hawke's Bay²⁰



Figure 7: Annual Tourism GDP growth in Te Wairoa and Hawke's Bay

²⁰ Graphs sourced from Infometrics <http://www.infometrics.co.nz/>

The Wairoa District Council's initial focus will be on strategic roading improvements and upgrading facilities for tourists that bring accommodation with them, i.e. campervans and freedom camping. To complement this, a plan to develop and support bed and breakfast and home-stay/farm-stay/marae-stay accommodation is underway.

The Council's primary focus to encourage economic development in the district is on supporting existing businesses and providing a supportive environment that makes it easy for them to stay and to do profitable business.

Support for businesses takes two forms:

- Is the environment (natural and business), the infrastructure (hard, community, soft) and council regulation supportive and attractive to profitable businesses?
- Are there available business support services from the Council, government agencies and the private sector that will support profitable businesses?

Wairoa District Identity Project

Initiated by the Wairoa District Council and the Te Matare o Te Wairoa Trust, the community has recently been led through a visual identity project with the aim of developing a consistent image of Te Wairoa, at the same time strengthening and uniting the community in a common purpose and project. As a result a Community Identity Guide has been produced (Wairoa District Council, 2016).

The first stage of the Identity Project involved a six week communications campaign to create awareness about the project across the entire district. This involved a comprehensive set of activities that sought to maximise local resident input into the development of a distinctive identity and brand for the district.

Some key findings of the project were:

- The most popular descriptor for Wairoa District was *Beautiful*;
- The most commonly mentioned historic event was *Cyclone Bola*;
- *Blues and Greens* were the most popular choices of colour for the District. *Yellow* was a close third;
- *Wairoa River, Mahia, Waikaremoana, Lakes/Rivers/Sea, the Lighthouse* and *Maraes* were the dominant six sites of significance selected by respondents;
- *Carving* and *Scenic Photography* were the two most popular types of imagery depicting the District;
- *Reggae* and *Kapa Haka* were the types of music which best depicted the District;
- *Water sports and activities (Beach/Swimming and Fishing/Boating)* were the most popular preferred activities with *Walking/Hiking* third;
- *AFFCO, Retail* and *Farming/Agriculture/Horticulture* were named as the key businesses and industries in the District.

In summary, the dominant themes that came through from the residents of Wairoa about their community were the importance of the river, waterways and landscapes, reflected in the green and

blue colours of choice; strong respect for Māori culture; significance of farming to the economy; and the hospitality, authenticity, generosity and resilience of local people.

Tourism Summary

In terms of the tourism industry some points to note are:

- There is current significant growth in international visitor numbers to New Zealand;
- There is also growth in the Eastland and Hawke's Bay RTOs and the Wairoa i-Site is recording increasing visitor numbers year by year;
- The most popular recreational activities for adult New Zealanders of walking, swimming, cycling, and fishing, plus tramping and canoeing/kayaking which also feature in the top 12 activities, are perfect activities for Wairoa District;
- Twenty-nine percent of international visitors said New Zealand's spectacular landscapes and natural environment was the most important factor in their decision to visit New Zealand. Wairoa District can offer this;
- Wairoa District Council is aware that its priority is to focus on infrastructure development - roading improvements, and facilities for self-provided accommodation (camping, campervans);
- Wairoa District Council's focus to encourage economic development in the district is on supporting existing businesses and providing a supportive environment that makes them easy to stay and to do profitable business;
- Regional tourism was a focus of the 2016 Budget with \$45 million in additional funding over four years directed towards the region.

6.0 POTENTIAL COMMUNITY IMPACTS ON WAIROA/MAHIA

6.1 Economic Impact

An Economic Impact Assessment by Sapere Group (Sapere Research Group, 2016) has modelled the expected benefits to New Zealand from the development of a rocket launch industry. The scenario modelled is a base case with an upper and lower bound and relates specifically to Rocket Lab launches. The lower and upper bounds are one launch per week (52 launches per year) to close to two launches per week (120 launches per year). 120 launches per year represent the number of launches the Wairoa District Council has consented and therefore represents a natural upper limit in the base case scenario. 52 launches, or a launch a week, reflect current forward orders. They have assumed that reaching this steady-state number of launches takes five years. In years one to five they assume the number of launches slowly “ramps up” to this steady-state.

From this modelling Sapere estimates that Rocket Lab could contribute between \$600 and \$1,550 million of value-add to New Zealand over 20 years, of which direct, indirect and induced effects could be between \$400-\$1,150 million.

Sapere does not estimate how much of the economic benefit would accrue directly to the Wairoa District or even the East Coast region.

We would advise caution when considering these numbers as even the lower case scenario assumes a rocket launch per week. It is our understanding at the present time however, that Rocket Lab has orders for 25 launches and, in the first year at least, is looking at no more than one launch per month. The likelihood of one launch per week, let alone two launches per week is still some years away.

Further it should be noted that the test period, originally planned to commence in February 2016, has been pushed back six months to August 2016 with the likelihood of further delays in the test programme.

We can be cautiously optimistic that once the rocket launches are underway and happening regularly, there will be business opportunities for the local Mahia/Wairoa communities and for their neighbours, Eastland and Hawke’s Bay, to leverage off the rocket launch occasions to expand or establish small business enterprises.

Our conversations with local business people indicated a “wait and see” attitude with regard to the rocket launch activity and whether it would boost the local economy. There was a feeling that while anything like this that comes to town and supports the community is good, there are opportunities without Rocket Lab to improve the tourism offering of the District. Council needs to look at sustainable tourism activity going forward. Some ideas mentioned were:

- Need a really good backpackers;
- Revitalisation of existing accommodation (including County Club, Clyde Hotel);
- Events calendar, e.g. Hummer of Summer, Matariki.

At a regional level, if visitor numbers jump from the Rocket Lab project, there will be a need to consider wider infrastructure issues including roading, airport and communications (broadband accessibility and cell phone coverage).

There was a concern expressed that if tourism got too big, it would be detrimental to the District. Another concern was that “all the eggs were being put in the rocket launch basket” and this was not a wise strategy.

A repeated message from local business people with whom we spoke was that the Council should be ready to act quickly to support the establishment of new business or development of existing business in terms of consents – as quickly as they moved with the consents for Rocket Lab!

Local business people considered Council’s role in the first instance is to ensure a plan is in place to deal with parking, road blockages, and rubbish collection should a huge number of people arrive for the rocket launches. Whatever people encounter when they come to see the launches will reflect on Wairoa and Mahia, and if they encounter chaos, they may not wish to come again.

6.2 Social & Cultural Impact

The CEO of Wairoa District Council, Fergus Power, has said “...the people of Te Wairoa are excited about Rocket Lab’s activities in the district. They are confident that the sacrifices being made by the community (i.e. the exclusion zone for fishing, etc.) to enable rockets to be launched at Mahia will be more than compensated through job creation and business support, which will result in a reduction in reliance upon social support, an associated improvement in health and wellbeing for the community.” (Wairoa District Council, 2016a).

The Wairoa District Council speaks of an implied “social contract” with Rocket Lab. The Wairoa District community has allowed this commercial operation to take place in its territory and there should be a return to the community for its trouble.

Rocket Lab for its part has endeavoured to use local industry where possible, e.g. local roading firm, QRS, has had the work to develop the launch pads at Onenui Station, and to upgrade the roading to the site; and consumables such as fuel and food are sourced from within the region. Rocket Lab has also undertaken a programme of community engagement with the Mahia community, holding public meetings and making staff available to liaise with locals and answer their questions.

There are opportunities for education and training in trades and business through the local college, Wairoa College, and a local advisory group has recently been established between the College, Careers New Zealand and key local businesses to better support the transition of young local people into local jobs. These opportunities are not, however, dependent on the rocket launch programme, nor have they been put in place because of it. Such initiatives need to be undertaken for the benefit of Wairoa’s young people regardless of rockets in the district.

Onenui Station, a working beef and sheep farm and the site of the launches, is owned by a Māori Incorporation with 1,800 shareholders. They are keen to be part of the rocket industry and have already benefited in terms of the infrastructure (roading, fences) put into the farm by Rocket Lab.

Onenui Director, George Mackey, has indicated that they will be looking for the best opportunities that present themselves for the shareholders, whether that is cultural, social, environmental or economic. They certainly see the potential for a high-end of the market tourism opportunity on the Station however; they will not do anything until they see how the test launches proceed and understand any potential market demand for Onenui tourism products.

A local Māori resident spoken to has a vision to share his culture and stories from legend and history with visitors to Mahia. He has taonga to show and stories to tell of the area.

The planner's report for the resource consent states that Rocket Lab intends to be involved with scientific education and outreach activities involving schools and educational institutes in the Hawke's Bay area and will endeavour to support the surrounding community by sponsoring social and cultural events (Montgomery, 2015).

6.3 Environmental Impacts

The environmental impact of rocket launches from the Mahia Peninsula is not known at this point in time. However, the planner's report for the resource consent stated that the adverse effects of the activity on the environment are considered to be no more than minor (Montgomery, 2015).

Rocket Lab has provided the following statement in a FAQ fact sheet (Rocket Lab, 2015) on potential rocket launches at a South Island site, Kaitorete Spit at Birdlings Flat on Banks Peninsula. This was an alternative site to Onenui Station selected by Rocket Lab for launches; however, they were unable to secure consents in the timeframe they were hoping.

In answer to the FAQs, Rocket Lab said it is committed to being good tenants of the land and plans to closely monitor any environmental impacts. It can be assumed that they have undertaken to do this also for Mahia.

Noise

The planner's report indicates that *"the majority of the sound energy will be expended prior to reaching the boundary of Onenui Station, as sound dissipates with distance."* The noise will be of short duration (11 seconds if taken until the rocket is at 500ft and up to approximately 1 minute if the total duration is taken) and the effects are considered to be less than minor in terms of the requirements of the Resource Management Act. The report also notes that Rocket Lab has attempted to suppress some of the noise generated by the launch within the design of the launch sites.



Figure 8: Computer generated image of proposed rocket launch site

Wildlife

A colony of shore plover will be monitored by the Department of Conservation (DOC) to see if there are any effects from the rocket launch activity. Rocket Lab's response to questions about the natural environment at Birdlings Flat was that wildlife reserves and launch sites have been proven to work well together, with Cape Canaveral showing how successful this can be. Should there be any major adverse effects, the resource consent conditions allow for a re-examination of the consent (Montgomery, 2015).

Safety - Exclusion Zone

To ensure public safety during launches, a safety perimeter will be established around the site and downrange over the sea as shown in Figure 9. The safety perimeter will be maintained at least 30 minutes prior to and 30 minutes after the launch for a maximum of eight hours (Rocket Lab, 2015a). At this point, the safety perimeter is an indication for the first test only but will be reduced in scale after each launch once safety has been proven.

All on-shore safety restrictions are within the property boundary of Onenui Station. Safety restrictions on the sea are under the control of the Hawke's Bay Regional Council and the Hawke's Bay Harbour Master. The Hawke's Bay Harbour Master will administer a Temporary Maritime Event in advance of each launch (Montgomery, 2015).



Figure 9: Safety perimeter - exclusion zone for launches (from resource consent application)

7.0 VISITOR ANALYSIS

There are currently no comparable rocket launch operations anywhere in the world. Whilst there is considerable interest in “Big Rockets” at Cape Canaveral and elsewhere, assuming similar markets are interested in “smaller” rockets warrants caution.

For Mahia rocket launch visitors to be satisfied, there is the need to provide some information and education infrastructure e.g. parking, toilets, viewing facilities.

Currently there is no infrastructure available for rocket launch observers in the Mahia area.

7.1 Lessons learned from innovative tourism start-ups

Over the last 30 years, TRC Tourism has been involved with a wide range of successful and innovative tourism start-ups, as well as assessing some that failed to take off.

Whilst every innovation is different, there are considerable lessons that can be learned from over 30 years of tourism development.

Examples of relevance with an involvement by the consultants include:

1. Whale watching at Kaikoura

www.whalewatch.co.nz

This well-established Māori owned and managed whale watching company was formed in 1987. The award winning company combines Manaakitangi (hosting) with state of the art technology and boats. Whale Watch Kaikoura now hosts over 100,000 visitors a year. The community-owned trust turns over \$10 million annually. The business has helped create over 100 related businesses in the Kaikoura area.

2. Nga Haerenga, The New Zealand Cycle Trail

www.nzcycletrail.com

NZ Great Rides was an innovative idea that came out of the NZ Job Summit in 2009, during the Global Financial Crisis. Regarded as somewhat improbable by many, the concept was to build on the success of the Otago Central Rail Trail (www.otagoentrail.co.nz). This 150km multi (3-4) day cycle trail was developed in 2000 and within 10 years had become a very successful tourism attraction that created several small medium enterprises (SMEs) and tourism operations in a declining rural community. With over 12,000 cyclists spending several days in the area, the Otago Central Rail Trail is regarded as a very successful concept.

The NZ Cycle Trail evolved this idea into 23 Great Rides throughout New Zealand. Over \$100 million has been spent by local and central government on infrastructure. Many of these Great Rides are now established, open for business, and creating jobs and SMEs in rural communities such as Ohakune, Pipiriki, Westport and Seddonville.

3. Forgotten World Adventures

www.forgottenworldadventures.co.nz

This tourism concept of riding golf carts along the disused Taumarunui to Whangamomona railway line in the heart of the North Island now hosts over 6,000 visitors a year. The company offers a range of products expanding on the original tunnel-rail trail day trip and is now a significant economic driver for the Taumarunui area.

4. Wildlife Island Sanctuaries

There are several large scale, fenced wildlife sanctuaries in New Zealand. These include Zealandia (www.visitzealandia.com) and Sanctuary Mountain Maungatautari (www.sanctuarymountain.co.nz). These innovative wildlife sanctuaries focus on the protection of large forest and wildlife reserves. They have all relied on a mixture of government, donor and private sector funding. A core assumption has been that tourism will partially or completely fund the operations of these island reserves. With capital costs exceeding \$15 million and operating costs in the tens of thousands these reserves, while innovative, have often struggled financially. The conservation benefits have been widely applauded.

Other innovative tourism products that we draw lessons from include:

- Kapiti Island Nature Lodge
- AJ Hackett's Bungy Jump
- Hobbiton
- Large scale adventure races (e.g. Eco-Challenge)

Lessons Learned

- Ideas (such as the examples above) need champions/leaders who drive the concept;
- Successful innovations can transform communities, and quickly - e.g. Kaikoura, Hobbiton, Te Papa;
- Successful innovators understand the markets - either by good research (which is sometimes not possible if the concept is new), by intuition or by trialling or testing the market;
- Innovative product development often needs nimble and decisive changes to the product in the early development stages;
- Usually local and/or national government is best to help enable the concept (e.g. RMA approvals or policy support) rather than being the developer of the idea;
- Initial government grants for innovators can be effective;
- Involving the community at the start of the project, whilst sometimes challenging for new ideas, is important. Innovative projects have had lots of doubters, e.g. Hobbiton, Whale Watching, Kapiti Island Nature Lodge, the NZ Cycleway. Sharing the concept but remaining focused on it is crucial;
- Often financing an innovative tourism concept is not a major constraint. It is the belief and commitment by the developers that is required;

- Moving from the initial start-up of the tourism idea to the ongoing management with systems, staff delegation and back-of-house support can be a challenge, especially for the initial innovator;
- Successful innovators are sometimes, at the initial stages, over-focused on protecting their idea rather than on the start-up.

7.2 Potential markets, visitor groups for viewing or learning about rocket launches

Possible markets for viewing rocket launches include:

1. **VIPs/Rocket Lab staff** - Potentially up to 100. Rocket Lab will limit VIP/staff at the launch site. This will only take place when the launches are commercial, not through the test launch phase;
2. **Mahia/Wairoa residents** - Fewer than 1,000;
3. **Eastland/Hawke's Bay residents and visitors to the area** - Residents/visitors within two hours of Mahia could potentially visit the area for rocket viewing;
4. **Dedicated rocket viewers** - Both in New Zealand and internationally there are groups and individuals prepared to travel to space launch sites. In New Zealand there was considerable interest in the launch of the "Wanaka Space Balloon" in March 2016;
5. **Other markets** - Could include the education sector and a segment of the New Zealand domestic and international markets with an interest in space and rockets.

7.3 CASE STUDIES

Te Awamutu Space Centre

(Te Awamutu Space Centre, 2015) www.spacecentre.nz



Located in Te Awamutu, the Space Centre is the brainchild of a local, Dave Owen, who has privately funded this. The website describes it as follows:

"Te Awamutu Space Centre is an inspiring educational attraction for all ages. Experience the world of space and astronomy through displays and interactive activities. Our centrepiece exhibit is a small but fascinating collection of artifacts from the American and Russian/Soviet space programmes. You'll also

find informative displays about the Universe, the history of space exploration and scientific research. Use the interactive screens to see what's in the night sky, tour the Solar System, create your own orbital systems and more. Watch videos, ask us questions and just hang out chatting about space.

We have a small space shop featuring new and second-hand items.

We have weather-dependent options such as telescope viewing, including a solar telescope for safely looking at the surface of the Sun. We also visit schools and provide guest-speaking services.”

The Space Centre gets a large number of school groups visiting and charges a modest entry fee of \$7 for adults/high school students, \$5 primary school students and \$3 for pre-schoolers. The Centre was established in 2009 and has seen slow but steady growth in visitor numbers, but is still well short of the 20,000 visitors per annum needed to break even.

Wanaka Weather Balloon

American Space Agency NASA recently launched a super pressure balloon (SPB) from Wanaka. Unfavourable winds prevented the launch from happening three times in April but a successful launch occurred on 17 May. On 1 June, NASA's Wallops Flight Facility (WFF) in Virginia, which manages the agency's scientific balloon flight programme, recorded on its Facebook page that the balloon had circumnavigated the globe after 14 days of flight. On 2 July, blogs.nasa.gov reported that the second test flight of its SPB had been completed setting a new flight duration record for a mid-latitude flight of a large scientific research balloon.

Over 1,000 people turned up to watch the launch despite it having been cancelled three times prior to the successful launch. A YouTube video of the launch has attracted 9,635 views (NASA's WFF, 2016).



Figure 10: Launch of weather balloon at Wanaka

Rocket Tourism Globally

Wairoa District Council intern, Gautier Lavina has undertaken a comparative analysis of space tourism for four rocket launch sites around the world: Cape Canaveral in the US, Kourou in French Guiana (European launching site), Baikonur in Kazakhstan (Russian launching site) and Tanegashima in Japan (Lavina, 2016).

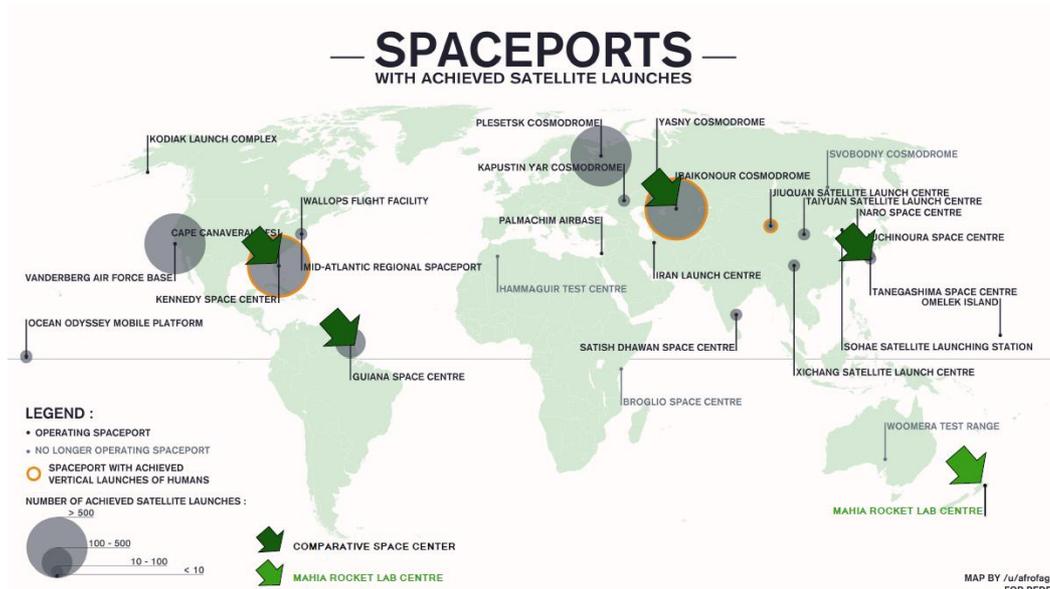


Figure 11: Global Spaceports

While the four other sites generally launch much larger rockets than the 17m Electron rocket which will be launched at Mahia, there are some common themes that are present at all sites.

- There is a market for rocket launch tourism and for space-related activities generally;
- All launch sites have a space centre for education and interpretation;
- All sites also rely on other attractions and activities e.g. beaches, caves, museums, boat tours, in the vicinity to entertain visitors during their trip to see the rocket launch;
- Some official viewing platforms are established to offer visitors an optimum experience.



Figure 12: Official viewing platform. Bus specific site, NASA Causeway



Figure 13: Official viewing site: VIP bleachers, NASA Causeway

A summary of Gautier's comparative analysis is included as *Appendix 4*.

7.4 Viewing Sites Analysis

A map of potential viewing sites is below.

Until it is clear what can be actually seen and heard when the rocket launches, it is difficult to comment definitively on the advantages and disadvantages of each site other than the distance from the launching site. However, the table below shows an analysis of the sites based upon the information we do have currently.

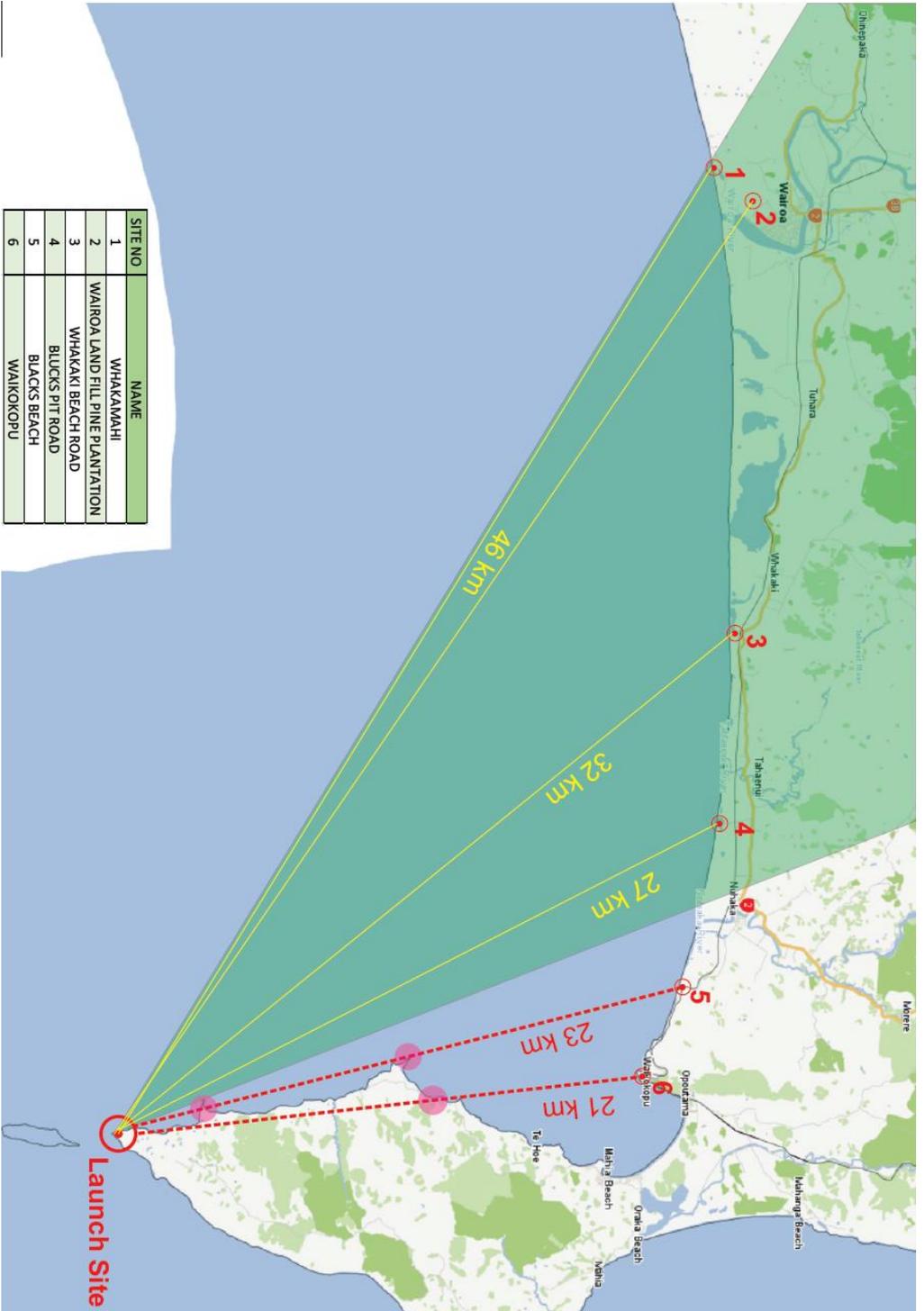


Figure 14: Potential Viewing Sites

Table 3: Wairoa - Mahia Rocket Lab Potential Viewing Site Analysis ²¹

	Distance from RL Site	Current car parking	Future car parking	Can see Rockets take-off	Serves food	Toilets	Comments
Whakamahia Beach	46km	Yes-plenty	Yes- plenty	Unsure – maybe with binoculars	Nil at present – easy to host mobile food carts	Yes	Distant but has space for viewing and hosting. What can be seen from there is uncertain.
Whakaki Beach Road	32km	Nil	Potentially off road	No	Nil at present – possible to host mobile food cart	No	Did not view this site
Bluck's Pit Road	27km	Limited - 10-15 cars approx. at present	Yes but site needs levelling	Potentially yes May be marginal	Nil at present – easy to host mobile food carts if site is levelled	No	Has potential for hosting and viewing.
Black's Beach	23km	Nil	Private land – up to land- owners	Subject to site availability. Potentially yes.	No	No	Limited opportunities. Would be a private enterprise.
Nuhaka	22km	Minimal	Yes	No	Some basic services?	Yes	Good centre to support visitors
Waikokopu/Opoutama	21km	Minimal	Yes	No	Nil at present	Yes	Limited opportunities. No viewing.
Mahia Village		Room for over 200		No	Café/dairy-grocery store/ tavern	Yes	Good base for visitors but no

²¹ Some additional locations have been added, from where the rocket launches will not be visible, but support services may be available.

								viewing
Mahanga	20km	Over 100?	Yes	No	Nil at present	Yes	Well away from launching site	
Onenui Station	2km	Yes	Yes	Yes	Potentially yes	Potentially yes	Site not viewed but this would be a private operation with a high-end market viewing offering.	
At sea	10km	N/A	N/A	Yes	Nil	No	There are opportunities for individual boat operators to take out passengers. Potentially the best viewing other than Onenui Station.	

7.5 Local Infrastructure Required

Given the uncertainty of the Rocket Lab schedules and the potential interest from media, local residents and visitors, a cautious approach to managing visitors and visitor expectations is encouraged. The development of infrastructure for rocket launch viewing could be staged.

Visitor Needs

- Information/education – ranging from websites to an information centre
- Accommodation
- Wairoa/Mahia area
- Gisborne
- Napier

Test Launch Phase

This phase could be treated and managed as an event, with the aim of being able to respond to visitor demand in the two weeks prior to the first launch.

Requirements:

- Carparks, roading
- Information
- Toilets, rubbish disposal
- Safety/risk management
- Investigation of future options – sites/surveys

Established Phase, i.e. Commercial Launch Phase

- Permanent carparks and facilities
- Visitor information
- Education and information centre

7.6 Visitor Flows

The Mahia Peninsula is a relatively remote and isolated location, which is one of the primary reasons Rocket Lab has selected it for a launch site. Tourism websites variously describe how to access the Mahia Peninsula:

“You are able to catch a regular flight from Auckland and Wellington to Gisborne or Napier, and easily pick up a rental car for the drive to Mahia Peninsula. Mahia is located 1 hour’s drive from Gisborne, 2 hours’ drive from Napier, or a 6 hour drive from Wellington. The voyage to Mahia Peninsula is an enjoyable one” (Voyage Mahia, 2016).

“Mahia is an easy 90 minute drive north from Napier via Wairoa, Hawkes Bay’s northern most town” (Hawke's Bay Tourism, 2016c)

The main entry points to Mahia Peninsula are therefore from Gisborne and Napier:

- Air access to Gisborne (40 minutes), Napier (1 hour) from Auckland. Wairoa Airport could be readily extended to accept small private jets;
- Road access from Gisborne to Mahia (1 hour 40 mins), Napier to Mahia (2 hours 50 mins - difficult road), Rotorua to Mahia (5 hours 30 mins - poor road, SH38 partly unsealed)²²;
- Sea marine - currently no commercial boats; potential from Mahia/Opoutama.

²² Travel times are from Google Maps www.google.co.nz/maps

7.7 SWOT Analysis of Space Tourism at Mahia

The table below outlines the key strengths, weaknesses, opportunities and threats associated with the project. The strengths and opportunities presented by this project far outweigh the weaknesses and threats identified, however it would be prudent to address the major weaknesses and threats and put in place mitigation strategies to minimise their impact should they occur.

Table 4: SWOT Analysis

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> 1. Long term contract with Rocket Lab. 2. First orbital rocket launch in Southern hemisphere. 3. Supportive New Zealand government/regional council/district council. 4. Land approval. 5. One land owner. 6. Isolation for tests. 7. Greenfields/Blue sky tourism potential. 8. Growing NZ rural tourism industry (10% p.a.) 9. Leadership from East Coast local councils. 10. Ability of smaller councils/communities to act rapidly, e.g. RMA. 	<ol style="list-style-type: none"> 1. Unknown viewing experience. 2. For test period significant exclusion areas on land and water. 3. No established NZ/international market for space/rocket tourism in this country. 4. No relevant infrastructure in place for viewing, e.g. toilets, car parking, signage. 5. Unprepared communities – iwi, business, resident. 6. Distant from tourism flows and centres. 7. Minimal supporting tourism services – accommodation, transport, food. 8. Under-resourced WDC. 9. Tenuous event – rocket launch may be delayed or “scrubbed”.

OPPORTUNITIES	THREATS
<ol style="list-style-type: none"> 1. Tell iwi stories/engage iwi. 2. Tell and share the Rocket Lab/space stories within a Centre. 3. Build on the work of the Tairawhiti Māori Economic Development Plan. 4. NZ/Southern hemisphere leading rocket tourism experience. 5. Mahia/Wairoa/East Coast can benefit economically from space tourism development. 6. Onenui Station to provide quality rocket tourism experience – hosting, accommodation, viewing. 7. Marine rocket viewing. 8. Land-based rocket viewing. 9. Provision of goods and services including innovative products. 10. Improved infrastructure in the district, e.g. roading, communications. 11. Greater collaboration/co-operation for NZ/East Coast/HB/District to work together. 12. Leadership in co-ordination. 13. Hawke’s Bay REDS (Regional Economic Development Strategy) supported by central government. 14. Use the three tests to clearly understand the market. 	<ol style="list-style-type: none"> 1. Community antagonism. 2. Over promising/over-expectation. 3. Development with no serious business rationale. 4. Mahia/Nuhaka overloaded/congested with people therefore chaos. 5. Services not available e.g. safety, accommodation, transport, food. 6. Media focus on failures, e.g. Mahia boat ramp jammed or marine chaos. 7. NZ/East Coast/HB/District don’t work together. 8. No leadership demonstrated. 9. No resources for test stage. 10. Environmental impacts not known. 11. Economic Impacts - over-expectation from Sapere report.

7.8 Risk Identification and Mitigation

Table 5: Risk Register

Risk	Comment	Impact (H/M/L)	Likelihood (H/M/L)	Risk management approach
Over-promising, creating false expectations	Sapere report talks of 120 launches per year for 20 years which is what has been consented. Reality is likely to be one launch a month for the first 3 years.	High	High	Clear communications with stakeholders by a co-ordinated regional voice.
Not being ready for the test period.	There will be three tests after 1 st August over a 6 month period. Visitors will come to see them and need information, direction, car parking and hosting.	High	Medium	Establish support services. Plan for this as an event.
Significant disruption by protestors closing land/air or sea access.	A group exists which is against the rocket launching at Mahia evidenced by a Facebook page "Mahia against Rocket Launches" with 355 "likes".	High	Medium	Talk to the group. Share information with them. Be prepared for protests. Enforcement as appropriate.
Disruption of Mahia roads and infrastructure. Issues	There is the potential for a large number of people to turn up to view the test	High	High	Be prepared for the three tests. Have a plan for directional signage, car parking areas, information for visitors, rubbish collection,

with car parking, freedom camping, access for medical services, rubbish and waste disposal.	launches. Journalists/media, day trippers from Gisborne and Napier/Hastings are likely.			toilet provision and support services. Mobile food caravans could be an option.
Unreliability of rocket launches.	Rocket launching rarely goes to schedule. The chance of turning up and actually seeing a rocket launch is low (1 in 5) ²³ .	High	High	There must be other activities available for visitors to fill in the time if launches are delayed or cancelled altogether. Good communication regarding launch delays and cancellations is very important.
Failure of test rocket launches.	This could put the launch programme back significantly.	High	Low	This is in the hands of Rocket Lab to manage, however good communication with the Rocket Lab team will ensure that information regarding the launches can be conveyed to the public in a timely manner.

²³ According to Dave at Te Awamutu Space Centre

8.0 ROCKET LAUNCH TOURISM PRODUCT OPTIONS

8.1 Mahia context

Mahia's strengths for being a Rocket Lab station - remote, coastal and away from major cities and infrastructure - are also its major tourism attributes.

Mahia Peninsula, east of Mahia, is all in private ownership and consists of the significant Onenui Station plus several sheep and beef farms.

Mahia and the surrounding villages, Mahanga, Orawa, Opoutama and Nuhaka, are small coastal villages with fewer than 1000 permanent residents in total (Statistics NZ, 2016a) (Statistics NZ, 2016b), which host up to approximately 7000 summer holiday visitors. The visitor infrastructure at Mahia comprises a hotel and a motor camp. There is a petrol station at Nuhaka.

8.2 Rocket launch tourism product options

Although the local infrastructure that may support Rocket Lab visitors/tourism will be largely public sector driven, there are considerable possible tourism opportunities for the private sector to consider. These can be grouped into:

- Transport to and from the cities of Napier and Gisborne;
- Accommodation and services (food, guiding, etc.);
- Viewing sites – land and sea.

1. Transport options

These include air transportation to and from the main cities via public or private aviation operators.

Marine tourism options could be considered. At present there are limitations on launching large vessels from the Mahia/Opoutama beaches. A considerable number (over 200) of recreational fishing boats regularly use the Mahia area for fishing/boating. There is the potential opportunity for tours via cruise ships from Gisborne and Napier.

2. Accommodation

Whilst Rocket Lab visitors may not be sufficient to justify investment in new build accommodation in any market (from backpacker to 6 star), Rocket Lab staff, VIPs and visitors may create the tipping point to justify new accommodation establishments or the revitalisation of hotels in the Wairoa/Mahia area, for example the Wairoa County Club, by growing potential domestic and international markets to the Mahia area.

There is potential on the Mahia Peninsula, especially at Onenui Station, to build 3-4 star+ accommodation and services that focus on Rocket Lab VIPs/staff and selected clients.

There may be options for marae hosting and stays.

3. Food and beverage

These opportunities are very dependent on significant visitor flows into the area. Currently there are two or three excellent cafés in Mahia and Wairoa that service the local residents, holiday makers and visitors. Mobile food/coffee carts, more established cafés and restaurants will increase as visitor numbers grow. The regional tourism sector plus potential Rocket Lab visitors may provide opportunities.

4. Other opportunities

These could include the development of temporary or permanent rocket launch viewing platforms and services such as guiding and space interpretation/story telling.

The most desirable location is on the privately owned Onenui Station. The owners will assess whether there are appropriate opportunities for their business.

Elsewhere, especially in the area of Black's Beach (east of Nuhaka) there may be appropriate private farm land that can provide opportunities for commercially led rocket launch viewing locations. This could be developed in association with "space rocket story telling" by an expert/s or with effective modern media - e.g. large outdoor screens.

9.0 SUPPORTING PRINCIPLES

There is a great deal of enthusiasm at present with rocket launches gaining a lot of media coverage, particularly as central government has been vocal about the impact of the industry on Wairoa District, East Coast regions and the New Zealand economy. Economic Development Minister, Stephen Joyce has been quoted as saying: "The space economy is becoming immensely important to the world and is growing and changing rapidly" and that there will be significant spin-offs for the Wairoa economy and the eastern region.²⁴

It would be prudent when considering the tourism possibilities associated with rocket launch tourism to put in place some principles to work to ensure that any tourism service or product developments move smoothly.

The following visitor management principles are recommended:

- Respect Rocket Lab
- Respect Tangata Whenua
- Focus on the local community first
- Share the benefits across the East Coast communities
- Communicate with stakeholders
- Focus on delivering a quality service rather than the branding
- Act as fast as the legislation allows
- Seek funding where possible to support local infrastructure initiatives (e.g. car parks, toilets)
- Enable the private sector.

²⁴ HB Today 27 June 2016

10.0 A STAGED APPROACH

10.1 Three Stages

There are three significant stages to the establishment of regular Rocket Lab launches.

Stage 1: Rocket Lab Site

The development of the Onenui rocket launch site on the eastern tip of Mahia Peninsula is the first stage in establishing the Rocket Lab operation at Mahia. The site on Onenui Station requires the development of a launch site and infrastructure including internet/satellite communications, roading and construction.

This work started in 2015 and will be completed by late 2016.

Rocket Lab has resource consents and appropriate approvals to launch rockets from Mahia Peninsula. Manufacturing of the rockets is based in Auckland.

Stage 2: Testing Rocket Lab – mid to late 2016

Rocket Lab will test up to three rocket launches in 2016, after 1 August. The test launches will take place at the Mahia Peninsula launch site. It is clear that there is considerable uncertainty as to when or if a rocket will be launched.

The 17 metre rocket will launch to the south (see map Pg. 32). There will be an exclusion zone extending south for up to approximately 50 km (to the south) for all boats and people, and 100 km for aircraft. This exclusion zone will be managed by Rocket Lab, in association with Onenui Station, local commercial fishermen (about 12), the local Mahia community, the Wairoa District Council, Maritime NZ, LINZ, Airways NZ, CAA NZ, and local iwi representatives. Before each launch attempt, the exclusion zone will come into effect: at midnight on land, two hours before launch on the water, and one hour before launch for aircraft.

Two weeks prior to each test launch Rocket Lab will advise all local stakeholders of the series of scheduled launch ‘windows’. A four-hour window will be announced for each day of the two-week series of launch attempts. The window begins at the scheduled time of the launch attempt, but allows up to four hours for delays or “holds” caused by technical issues, weather limitations, exclusion zone violations, or similar.

Stage 3: Post Rocket Lab testing – normal operations, 2017 and beyond

Once Rocket Lab has successfully tested the launch vehicle from the Mahia launch site, it will establish regular scheduled rocket launches. These launches are likely to be monthly and will be announced two weeks prior.

10.2 Implications for visitors and the community interested in viewing rocket launches

Test Phase and Beyond

Public viewing of the launch is not permitted on Onenui Station and the site will have only essential Rocket Lab staff. There will be road closures on the Mahia East Coast Road east of the Nuku Tairua Road in place for the launch period.

Viewing from the Hawke's Bay marine environment, north of the rocket launch site exclusion zone, is possible.

The Black's Beach area of the Nuhaka – Opoutama Road (about 22kms ± from the Rocket Lab launch site) is likely to be suitable for land based viewing of the rocket take-off. There is limited car parking available at present. Other sites may be suitable including the Wairoa River mouth (Whakamahia Beach), 47kms away. Rocket Lab suggests waiting to develop any infrastructure at this site until it is confirmed during the test phase that launches are visible from Whakamahia Beach.

More detailed analysis by Rocket Lab of the technical details of viewing and hearing rocket take-offs is required. Rocket Lab is focused on preparing the launch vehicle and recommends that this analysis is undertaken during the test phase (not in advance). It is believed take-offs will be able to be sighted from the Black's Beach area during daylight.

Viewing sites for rocket launches post-2016 could be assessed during or after the test phase in 2016.

Wairoa District Council needs to be prepared for the visitors that turn up to watch the test, which will not be publicised, but Rocket Lab is required to notify the local community of pending test launches as defined in the resource consent. It is expected that word will spread and locals, day-trippers from north and south and journalists, who are eagerly awaiting the launches will arrive in the District. Management of visitors in terms of traffic, safety and provision of essential services such as toilets and food needs to be considered.

11.0 FUNDING ASSESSMENT

There are a number of possible external funding streams that could be explored once the tourism infrastructure has been identified. Partnerships between central government, local government, trusts, iwi and the private sector can add significant value to projects and to communities. If developed and maintained properly, it can be an effective way to maximise and leverage ratepayer investment.

Public perception and public engagement are critical to the length of time it takes to secure funding for a project. Most capital infrastructure projects take between two and four years to complete. In Giblin Group's experience, expectations for a quicker completion are rarely met and projects that take any longer lose traction and or community support.

For the purpose of this report, external funding refers to grants, donations, sponsorships or in-kind support through channels such as ministerial grants, contestable funds, community fundraising or corporate sponsorship arrangements. This report does not endeavour to examine "financing" or "commercial investments".

The funding sector is ever changing and is heavily dependent on the economic and political climate at both a local and national level. This funding assessment is made on current conditions and with high-level information only.

Once supporting projects have been identified and the scope and the design of each project is completed then a detailed Revenue Generation Strategy should be developed for each project. The grants each project may receive are dependent on the value they will deliver to the Wairoa and Gisborne communities and the wider Hawke's Bay and East Coast regions as well as the priorities of individual funders at the time.

Giblin Group gives its advice based on our reputation in the funding sector, however no application or approach resulting from this document can be guaranteed as many factors are out of an applicant's control such as changing funder priorities, tightening financial climates or significant competition for funds. This is especially relevant if fundraising is unlikely to commence within the next 12 months, during which time many things can change.

Central Government

In order to access most central government funding, projects generally should demonstrate that at least one-third of the project cost has already been secured. This is most often a combination of the project owner, with support from the local territorial authority and regional council²⁵.

Ministry of Business, Innovation and Employment

As part of the Regional Economic Development Strategy (REDS) the government may announce funding support for tourism infrastructure to support visitors once Rocket Lab is established. The

²⁵ The local territorial authority or regional council could also be the project owner.

extent of the amount is not yet known as REDS has yet to be announced. MBIE grants have been allocated in other parts of the country to improve economic development. For example, in February 2016, Economic Development Minister, Steven Joyce announced a \$4 million grant to Whangarei's Hundertwasser Art Centre to support tourism, which had been identified as the number one priority in Northland's Regional Growth Strategy and Tai Tokerau Northland Economic Action Plan. Northland is similar to Wairoa in that it is also a high-deprivation/high-needs region where large amounts of community funding would be difficult to secure. The Hundertwasser was identified as a project that would have a tangible and immediate impact on the local economy. A similar argument could be mounted for tourism infrastructure such as a Space Education Centre to support the rocket launches as an important driver of economic development.

The Ministry for Business, Innovation and Employment also administers the Tourism Growth Potential (TGP) Fund, which could be accessed if a strong case was made that rocket launches would attract international visitors to lift the national visitor industry.

The fund is a government initiative, which co-invests in projects that will help the tourism sector achieve greater and wider commercial returns from high-value international visitors. The fund is contestable and in order to achieve maximum value for its investment, the Government wants to invest in projects that are not only commercially driven, but which will also deliver wider economic benefits.

To receive funding, projects must align with the TGP's objectives, meet the fund's criteria and also have elements of one or more of the following inter-related government priorities for tourism:

- Regional economic development - tourism initiatives that support economic development;
- Greater seasonal /regional dispersal - to grow the shoulder seasons;
- Improved contribution of Māori - leverage unique cultural aspects;
- Christchurch and Canterbury rebuild; and
- Alignment with Tourism New Zealand's marketing priorities - alignment to target markets.

Projects may target one or more points along the tourism value chain. These points could include market development, distribution, or product and service development.

Other regions to benefit from this fund include Rotorua which recently received \$350,000 for investigations into a waterfront hotel and Peter Jackson's Omaka Aviation Heritage Centre in Blenheim received \$1.5 million for the expansion of the centre. Tourism Minister and Prime Minister, John Key identified regional growth as a key priority for the fund.

A new Regional Mid-sized Tourism Facilities Fund of \$12 million over four years was established to co-fund mid-sized infrastructure projects that deliver facilities utilised by visitors and that enhance the visitor experience.

The Fund reflects the reality that some districts have a limited ability to respond to the pressure created by high or increasing levels of visitor numbers, because of their small ratepayer bases.

It will mean communities can afford to fund visitor-related facilities such as restrooms, carparks or minor water management projects, to help communities maximise their tourism growth potential.

A working group has been established, comprising of Tourism Industry Aotearoa, Local Government New Zealand and MBIE. This group is providing Ministers with advice on the parameters of the Fund including the sorts of projects that could be funded, eligibility criteria and the application processes.

The aim is to ensure the funding both enhances regional tourism offerings and delivers facilities that are useful and relevant to visitor needs. Details of the final application process will be released to the sector once they are finalised.

New Zealand Lottery Grants Board

The Lottery Grants Board administers three funds that could be applied to for tourism infrastructure. Lottery grants are made for community purposes only. The funds are as follows;

- Significant Projects Fund
- Community Facilities Fund
- Environment and Heritage Fund

Lottery Grants Board funding is tightening. All but two of the ten Lottery Grants Board funds reduced by two percent in the 2015/2016 Budget release, and the Significant Projects Fund (SPF) was put on hold. This highly competitive funding area is becoming increasingly over-subscribed by council projects in particular.

Significant Projects Fund

As mentioned above the SPF is currently in hiatus but may be re-announced at a future date. The fund was established to support organisations undertaking major community-based capital expenditure projects.

This fund is considered a “last resort” fund so the lottery committee would expect to see the majority of funding secured before an application. Highlighting the national significance of a development, such as Rocket Lab is key - while regional applications are considered, they are lower down the committee’s priority list.

Further information on the criteria for this fund can be found in *Appendix 5*.

Community Facilities Fund

This fund is for community facilities that support participation in community activities and social interaction to foster community cohesion and strengthen communities. Typically, the Committee makes grants between \$10,000 and \$750,000.

The benefits the Committee expects a project to contribute to will include:

- Increase community self-reliance, capacity building and stability;
- Provide opportunities for social, recreational, civil or cultural participation;
- Reduce or overcome barriers communities face to such participation.

The application will need to demonstrate wide community use for the funding committee to support the project; the more user groups the stronger the application. Projects must have at least 33 percent funding confirmed, resource consent underway, a project manager, Quantity Surveyor report and Feasibility Study. Despite the online guidance for this fund, the recommendation from DIA is that, for a strong case, Council should demonstrate two-thirds of the funding has been secured.

Further information on criteria for this fund can be found in *Appendix 5*.

Environment and Heritage

This committee makes grants to organisations to foster the conservation, preservation and promotion of New Zealand's natural, physical and cultural heritage, such as museums, whare taonga and art galleries.

This includes providing support to organisations for projects in the following categories: WW1 Commemorations, natural, physical and cultural heritage projects. Depending on what tourism infrastructure projects emerge, this fund may be worth approaching particularly if any heritage buildings are used or any environmental or cultural projects become part of a tourism offering.

The Lottery Committee meets nationally twice a year, the rounds closing in February and September with an outcome three months later. Typically, the Committee makes grants between \$10,000 and \$500,000.

Further information on the criteria of this can be found in *Appendix 5*.

Trust Funding

Trust funding (community, gaming and private) is an established and common avenue for generating revenue for councils and not-for-profit organisations at a variety of levels. Recent changes to the gaming legislation means that trusts now need to be stricter on returning at least 95 percent of the funds directly back into the communities they came from.

A targeted approach to gaming and community trusts would need to be undertaken for any supporting projects to ensure the maximum investment is achieved through as many different trusts as possible. Selection of suitable trusts is usually based on trust size, mandate, location, personnel, and connection to the project.

The following trusts could be applied to

- Eastern and Central Community
- Eastland Community Trust

- First Light Community Foundation Limited
- Grassroots Trust Limited
- New Zealand Community Trust
- The Lion Foundation
- Infinity Foundation
- Pub Charity Ltd
- The North and South Trust Limited
- The Southern Trust
- Hawke's Bay Foundation
- Joan Fernie
- Gwen Malden
- Pam Torbett

Corporate sector

Sponsor partnerships should be explored once any tourism infrastructure is identified in the next phase. The opportunity for a corporate sponsor to support a tourism infrastructure project associated with Rocket Lab could be a very attractive proposition. Hawke's Bay has benefited over many years from strong corporate partnerships, which have enabled projects such as McLean Park, Hawke's Bay Opera House, the MTG and Cape Sanctuary to be delivered to the community. Not all regions around New Zealand have corporates willing and able to invest in community infrastructure.

Signing up corporate partners not only generates funding success in the short term, but sponsorship renewals will ensure future cash injections to fund any upgrades, further expansion or in some cases operational expenditure. In the longer-term, the value of a strong corporate partnership can often go beyond financial contributions with expertise and network opportunities.

12.0 ROLE OF VARIOUS PARTIES

12.1 Wairoa District Council

As has been mentioned previously in this document the role of the Wairoa District Council initially is a hosting and regulatory role. WDC needs to be ready for the test launch period and the possibility of large numbers of visitors coming into the District.

- Ensure a plan is in place to deal with parking, road congestion, directional signage, provision of toilets and rubbish collection;
- Recruit “hosts” to welcome visitors. These may be Māori Wardens. Training and “uniforms” should be provided for those recruited;
- i-Site have a list of all accommodation available²⁶ and activities to do in the district.

Following a successful test launch period WDC’s role will be to:

- Support the private sector in its development plans through timely processing of consents and provision of infrastructure where appropriate;
- Marketing of the District through its i-Site;
- Improve the offering of public facilities such as the Museum. Look at developing an integrated culture and heritage service offering with heritage trails, archives, the Library, iwi;
- Investigate through a Business Case the proposal to establish a Space Education Centre in the District and to what level this should be developed, i.e. whether it is a multi-million dollar Weta Workshop experiential centre or a static information centre or somewhere in between the two.

12.2 Hawke’s Bay Regional Council

As the primary funder of HB Tourism, the Council has a role in promoting the tourist opportunities of Wairoa District. This should be done through its normal tourism marketing activities.

Should a Business Case determine that a Space Education Centre would be of benefit to the Wairoa District, there would be the potential for the Regional Council to support the facility - both capital and operations - with some funding input.

HBRC can support WDC through the rocket launch test phase with resources to the market research and analysis described in the recommendations.

12.3 Gisborne District Council/Activate Tairāwhiti

The Gisborne District Council (GDC) has a role through its agency Activate Tairāwhiti in promoting the tourist opportunities of Wairoa District. This should be done through its normal tourism marketing activities.

²⁶ The comment was made more than once that there is a lot of accommodation available that is not known about because it’s not on the internet. There should be a comprehensive database of accommodation in the District available for visitors.

Eastland has also seen an opportunity to directly link the rocket launch programme to the **Navigations Project** being undertaken for the sesstercennial (250 year anniversary) in 2019 of the landing of Captain James Cook and celebration of the first place where Māori and European met. Cabinet has determined this to be a Tier 1 Anniversary for the country. Eastland considers the Rocket Lab activity to be part of the Tairawhiti story (which covers the region to the Mohaka River) and part of the history of navigation in the region: a first journey such as that of Kupe (first waka to land in NZ), Cook (first sailing ship to land in NZ) and now Rocket Lab (first rocket to take off from NZ).

Napier and Gisborne will be the gateways to Wairoa District in the first instance and so need to be a part of promoting rocket launch tourism should launches become a regular event. Rocket Lab personnel currently use Gisborne as the gateway to Wairoa District, flying in to Gisborne airport and driving to Mahia. There is no reason to believe that this will change.

12.4 NZ Inc (MBIE)

Central government is currently focused on regional economic growth and announced \$94.4 million of new funding over the next four years for regional economic development initiatives that will boost economic growth and benefit communities in regional New Zealand.

There is a funding support role for MBIE both during the test phase and when rocket launches go commercial. This funding should be directed to market research, infrastructure upgrade and possible new facility establishment. See recommendations.

13.0 RECOMMENDED ACTIONS

13.1 Test Phase

The rocket launch test phase can be used to do a number of things which will assist in getting a clearer picture of the rocket tourism market in New Zealand, and what will be needed in the Wairoa District to accommodate rocket launch tourists. The following actions are recommended for the test phase:

1. **Market research:** (see *Appendix 6*) Surveys should be undertaken to capture information from the audience that turns up to see the test launches. It is envisaged this will involve on-the-ground surveys with people interviewing and collecting emails to send out an online survey; i-Site surveys and collection of data; Various data from cellphone movements; subsequent analysis of data and the opportunities and implications that result.
2. **Infrastructure preparation:** The test phase will need some infrastructure and services put in place for visitors coming to see the launches, i.e. signage, traffic management, car parking, management of the boat launch area, toilet and mobile food facilities. It is recommended that Wairoa District make preparations for this as they would for an event.
3. **Hosting:** The welcome that visitors receive from Wairoa District during the test phase is exceedingly important for any tourism product in the area. Hosting by locals during the tests is important for the image of Mahia and Wairoa District. It is recommended that individuals (possibly Māori Wardens) are recruited to act as hosts. They will be identifiable and available on the day of the launch to provide information and direction to visitors.
4. **Steering Committee:** In order for the test phase to be used productively for market research and preparation for an influx of visitors to Wairoa District, we recommend a Rocket Launch Testing Steering Committee (RLTSC) is established with an overview of activities, and three action groups focusing on Market Research; Infrastructure; and Hosting would report to the Steering Committee.

Recommended Steering Committee representation (following discussions with stakeholders):

- Independent Chair (strongly supported by most parties we talked to)
- Wairoa DC
- Hawke's Bay RC
- Onenui Station
- Rocket Lab
- Activate Tairāwhiti
- REDS Strategy Rep or HB Tourism
- MBIE Space agency rep
- Committee Support (minutes, admin)

The RLTSC could be supported by Wairoa District Council and external technical/professional tourism support. Giblin Group and TRC Tourism would be keen to remain involved in the next stage of the project and would ensure the momentum is continued.

Terms of Reference will need to be drafted and roles and responsibilities assigned. Our recommendation is to move quickly on this so as to be ready for the test launches, the first of which may be as early as 1 August 2016.

An indicative budget to cover this period of activity is attached as *Appendix 7*. There would be benefits in sharing the budget costs as there are a range of stakeholders involved in this project.

The important thing is to be ready for the test phase. As one local put it *“Rocket Lab is providing the gasoline and we don’t have a car. If we don’t build a car, it will blow us up!”*

13.2 Longer Term

We met some incredibly energised people in Wairoa, small business owners and operators who had their own vision for their business or enterprise and for the Wairoa District. Their vision was not dependent on rockets being launched.

There are a number of actions we would recommend for the long-term:

- Wairoa District Council’s role is as an enabler of private sector enterprise, whether that’s establishment of new business or development of existing business. Council needs to be responsive to the private sector in this regard;
- In order to encourage visitors to the Wairoa District, access roads need to be improved, particularly SH 38 from Rotorua and SH 2 from Napier;
- Provision of better quality motel accommodation is a gap in the Wairoa market, i.e. for business people visiting during the week, and those tourists seeking a higher quality product than what is currently available;
- Alongside this is the need for a good quality food offering i.e. restaurant. The Beach Café at Mahia currently caters 75 meals on a Thursday night for their lamb shank special. In Wairoa, the only sit-down restaurant choice is the Vista, which is not open on the weekends.

14.0 APPENDICES

1. Work Plan
2. List of Stakeholders Consulted
3. Eastland Destination Development Plan – Wairoa Opportunities
4. Comparative Analysis of Rocket Launch Sites Globally
5. Funding Criteria for Funding Assessment
6. Example Survey Questions
7. Indicative Budget for Rocket Launch Test Phase

15.0 REFERENCES

- CSBF NASA. (2016). *Balloon Tracking*. Retrieved July 4, 2016, from CSBF NASA: <http://www.csbf.nasa.gov/newzealand/wanaka.htm>
- Eastland Tourism. (2016). *Home Page*. Retrieved July 12, 2016, from Outeast: <http://www.outeast.co.nz/>
- Hawke's Bay Tourism. (2016). *Statistics*. Retrieved July 12, 2016, from Hawkes Bay Tourism: <http://www.hawkesbaytourism.co.nz/>
- Hawke's Bay Tourism. (2016b). *Year end December 2015 Summary for Tourism Results*.
- Hawke's Bay Tourism. (2016c). *Mahia Peninsula*. Retrieved July 13, 2016, from Hawke's Bay: <http://www.hawkesbaynz.com/index.php/visitor-info/areas-and-districts/mahia-peninsula>
- Infometrics. (2016). *Regional*. Retrieved 2016, from Infometrics: http://www.infometrics.co.nz/products-services/regional/?current_tab=overview
- Lavina, G. (2016). *Economic and Tourism Opportunities Analysis*. Wairoa: Wairoa District Council.
- Lottery Grants Board. (2010, May). *Grants Board General Information Sheet*. Retrieved July 13, 2016, from Department of Internal Affairs: [http://www.dia.govt.nz/pubforms.nsf/URL/Lottery_Grants_Board_General_Information_Sheet.pdf/\\$file/Lottery_Grants_Board_General_Information_Sheet.pdf](http://www.dia.govt.nz/pubforms.nsf/URL/Lottery_Grants_Board_General_Information_Sheet.pdf/$file/Lottery_Grants_Board_General_Information_Sheet.pdf)
- MBIE. (2016). *The Scope of Space policy and a Lead Space Agency*. Wellington: Ministry of Business Innovation & Employment.
- MBIE. (2016). *Tourism*. Retrieved July 14, 2016, from MBIE: <http://www.mbie.govt.nz/info-services/sectors-industries/tourism/regional-mid-sized-tourism-facilities-fund>
- Montgomery, H. (2015). *Decision report - Non-Notified Consent - RM150016*. Wairoa: Wairoa District Council.
- NASA's WFF. (2016). *Lift-Off! NZ Super Pressure Balloon Launch*. Retrieved June 28, 2016, from You Tube: <https://www.youtube.com/watch?v=95NDkABAsSk>
- REDS. (2016). *Matariki, Hawke's Bay Regional Economic development Strategy and Action Plan 2016*. Napier.
- Rocket Lab. (2015, July). *Rocket Lab response to FAQs Proposed launch site on Kaitorete Spit*. Retrieved July 6, 2016, from Waihora Ellesmere Trust: <http://www.wet.org.nz/wp-content/uploads/2015/07/FAQ-Sheet-Launch-Site.pdf>
- Rocket Lab. (2015a). *Application for Resource Consent Rocket lab Complex Mahia Peninsula*.

- RTONZ. (2016). *Tourism Eastland*. Retrieved July 13, 2016, from Regional Tourism Organisations of New Zealand: <http://www.rtonz.org.nz/gisborne.html>
- Sapere Research Group. (2016). *Economic Impact Analysis of the Development of a Rocket Industry in New Zealand*. Wellington: MBIE.
- Space Centre. (2016). *About Us*. Retrieved June 28, 2016, from Te Awamutu Space Centre: <http://www.spacecentre.nz/>
- Stafford Group. (2016). *Destination Development Plan*.
- Statistics NZ. (2016). *Commercial Accommodation Monitor: April 2016 Hawke's Bay*. Wellington.
- Statistics NZ. (2016a). *Quick Stats about a Place- Mahia*. Retrieved July 13, 2016, from Statistics NZ: http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=14030&parent_id=14021&tabname=#14030
- Statistics NZ. (2016b). *Quick Stats about a place - Nuhaka*. Retrieved July 13, 2016, from Statistics NZ: http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=14029&parent_id=14021&tabname=#14029
- Te Awamutu Space Centre. (2015). *About Us*. Retrieved July 2, 2016, from Te Awamutu Space Centre: <http://www.spacecentre.nz/about/index.html>
- Tourism New Zealand. (2014). *Tourism 2025 Growing Value Together*. Wellington: Tourism NZ.
- Voyage Mahia. (2016). *The Location of the Mahia Peninsula in New Zealand*. Retrieved July 13, 2016, from Voyage Mahia: http://www.voyagemahia.com/where_are_we.asp
- Wairoa District Council. (2015). *Te Wairoa Tourism Strategy 2015-2016*. Wairoa: Wairoa District Council.
- Wairoa District Council. (2015a). *Draft Economic Development Strategy*. Wairoa District Council.
- Wairoa District Council. (2016). *Community Identity Guide Te Wairoa*.
- Wairoa District Council. (2016a). *The Wairoa Opportunity - Rocket Lab Manufacturing and Tourism*.

APPENDIX 1: WORK PLAN

Table 1: Work Plan for Rocket Tourism Project Scope

Phases	Activities		Outputs
Phase 1: Project Scoping and Development	Briefing Meeting Establish agreed parameters with HBRC on timing and objectives of the project scope	Finalise work parameters	Detailed work plan with defined dates
Phase 2: Review material, On-site visit, meetings, consultation	Desktop Review of Documents, Plans and Strategies relevant to Rocket Launch tourism Identification of (with HBRC and Wairoa DC) and engagement with key stakeholders Meetings and/or workshops as appropriate Site visits as appropriate	Issues, Needs and opportunities identified Alignment with existing HB and Wairoa District tourism goals and objectives, strategies and plans Existing infrastructure assessed .	Background to proposal Background to the area (Demographics) Local government role Overview of current situation/infrastructure Identification of gaps Identification of opportunities Community benefits
Phase 3: Scope size and impact of market. Develop potential tourism product.	Trends in tourism Macro-Economic Analysis High level assessment of accessibility/connectivity	Tourism market review Tourism product assessment	Lessons from other tourism development projects
Phase 4: Funding /SWOT/Risk Analysis	Identify project's potential funding sources Identify strengths, weaknesses, opportunities and threats Identify risks	Assessment of funding requirements, implications and risks Risk assessment and possible mitigations	Funding assessment report. Identification at a high level of funding options. SWOT Analysis Risk Register

Phase 5 : Prepare report and recommendations	Consider any partnership arrangements, community support and ownership of the project	Prepare Action Plan: Where to from here? Submit Draft report and receive feedback	Delivery of draft report and Action Plan
Phase 6: Report finalisation	Incorporate feedback and submit Final report	Finalise individual parts of the document into one report	Final report Submitted Formal presentation to Council

APPENDIX 2: STAKEHOLDERS CONSULTED

- Hawke’s Bay Regional Council: James Palmer, Tom Skerman
- Hawke’s Bay Tourism: Annie Dundas
- Wairoa District Council: Craig Little, Fergus Power, Helen Montgomery, Kitea Tipuna, Jaime Cox, Roz Thomas, Katie Bowen, Jaime-Leigh George (i-Site), Interns
- Rocket Lab: Catherine Moreau Hammond
- Onenui Station: George Mackey
- Wairoa Business People: Sue Wilson (Event organiser), Geoff Hole (Property owner), Min & Kerry Johanssen (Council and Business) , Zach Stark (Gaiety Theatre), Angela Whitworth (East End Café)
- Mahia Business people: Alan & Vanessa Dickson (Crayfish operators); Sandy Woodham & Carla (The Beach Café)
- Mahia resident: Pua Taumata
- Wairoa Museum: Mike Spedding
- Activate Tairāwhiti: Steve Breen
- Gisborne Chamber of Commerce/GM Eastland Group: Gavin Murphy
- Eastland Tourism: Stu Perry
- Māori Economic Development Plan: Judith (Huti) Watson
- Rongowhakaata Iwi Trust: Alayna Watene
- Te Ha Navigations Project: Nicky Solomon
- MBIE: Dr Peter Crabtree

Informal conversations were held with homestay hosts, Futch and Andrea Couper and the couple at lunch at the East End café who ran 3 businesses in Wairoa and owned a farm.

1.3.3. Wairoa Opportunities



The following are Wairoa-specific opportunities.

Rocket Lab Viewing Site: Develop a viewing platform for visitors to safely experience the rocket lab launches from, with interpretive signage to explain the launches and other related information.

Space Science Experiential Centre: Development of an immersive experience centre which provides visitors and locals with the opportunity to learn, in an exciting format, about space, rockets and other aspects of related science.

Science Fiction Movie Festival: Leveraging off the quality theatre experience which is offered at the Gaiety Theatre, the potential exists to create an annual sci-fi movie festival which could be run at the theatre and which could tie in with the space/rocket theme Wairoa is hoping to build.

Charter Vessels for Rocket Launching Viewing Experiences: The provision of maritime viewing experiences for Rocket Lab. This could provide visitors with the opportunity to view rocket launches from the sea (outside the exclusion zone).

Mahia Peninsula Pop-up Food Facilities: The Mahia Peninsula offers an opportunity for quality toilet facilities and a seasonal pop-up food facility/food truck.

Mahia Peninsula Walking Trails and Glamping: The potential exists to consider developing a walking and cycling trail around the Mahia Peninsula which could potentially be supported by glamping accommodation.

Light Aircraft Aviation Hub and Business Park: Leveraging off the uncontrolled airspace at Wairoa Airport, position the airport as a hub for light aircraft including gliders, hot air ballooning, micro lights, flight instructor training, helicopter training etc. Consider developing an aviation business park aimed at aviation-related businesses and also potentially includes the provision of private hangars, maintenance and storage. An approach should be made to one of the small regional airlines such as Sunair or Air Chatham's to discuss introducing commercial services once Rocket Lab commences operations.

Packaging for Lake Waikaremoana Supporting Product: Lake Waikaremoana offers one of the "Great Walks", as advertised by the Department of Conservation. Opportunities exist to support the various accommodation options in and around the area to package and promote these with local transport operators, tours on the Lake itself and guided experiences for part or all of the Great Walk.

Investigate Reactivation of Rail Corridor (Wairoa – Napier): The reactivation of the rail corridor linking Wairoa to Napier needs to be decided. Whilst there apparently has been much speculation and discussion on this, a decision needs to be made whether the rail corridor can be reactivated and, if so, how the cost of maintenance and services will be provided for. If it cannot be reactivated, it could be developed as a rail trail cycle or walkway.

Dive Wreck Trail at Mahia Peninsula: It is noted that there are up to 22 ship wrecks around the Mahia Peninsula with the potential to offer a dive wreck trail. Further research is required to assess the location and difficulty (the depth and tides, etc.) to see whether a variety of experiences can be offered, and how seasonal this might be.

Rocket to Lake Marathon Event: The strength of the Eastland region as a sporting region, particularly for water-based and cycling, is recognised. The potential exists to develop a "Rocket to Lake" triathlon event which could offer a circuit that runs from the Mahia Peninsula through to Lake Waikaremoana, offering kayaking, cycling and running legs.

Mangaone Caves Tour Experience and Packaging: Assess guided tours of the caves to provide visitors with the opportunity to explore the caves and to have this overlaid with the cultural and scientific background of the caves. This experience could be packaged with other tourism product throughout the region, including with Morere Hot Springs and Mahia Peninsula options.

Additional Retail Mix (Popups): To overcome the social and community challenge of shop at home trucks and to provide Wairoa residents and visitors with a broader retail mix, the opportunity exists to investigate the introduction of seasonal popup stores. The popup stores could potentially range from food experiences through to homewares and clothing. Council needs to introduce policies to protect lower income households from being exploited and to encourage spaces for popups to be located.

1.3.4. East Coast Regional Opportunities

The following opportunities have been treated separately as they are not focused on a major urban hub or gateway into the region but reflect the unique coastal and hinterland settlements from Wairoa around the East Cape to Opotiki.

Sealing and Improving State Highway 38: Advocate for the sealing of State Highway 38 (approximately 92km is unsealed) and straightening (where needed).

Auto-Based Tourism: Develop auto-based tourism to support visiting car clubs and motorcycle enthusiasts looking to undertake various road trips.

Film Tourism: The screen industry and film-based tourism is well recognised. The significant success of major filming sites relating to Lord of the Rings and The Hobbit and the development of the Hobbiton in the Waikato is but one example of successful operations (Hobbiton receives close to 300k visitors per annum). Noting that various films have been filmed in the Eastland region which have not only New Zealand but international interest, such as Whale Rider, Boy, Footrot Flats and The Dark Horse, the potential may exist to develop guided film site tours within the region.

Horse Trails and Tours: Horse trails and equestrian activity is a product often overlooked in many parts of the country. Potential exists to develop a series of horse trails utilising fire breaks and forest trails, where this is possible, both on the east coast as well as inland. It is important that these ideally be guided experiences, partly for safety but also to generate a commercial return, where value-added benefit through interpretation is able to be offered.

Coastal Caravan Park Network: An assessment is required on the ability to create a network of three to five quality camping and caravan parks, noting that a variety already exists in different ownership (Department of Conservation, local Iwi, councils and privately owned). With fewer coastal locations in New Zealand able to offer as many coastal holiday and camping opportunities, a network of sites to support a variety of visitor markets should be considered offering higher quality amenities, collective marketing and introducing chalets/cabins now well used in many holiday parks.

Tourism Training Workshops: A series of hands-on training workshops is required on the ground rather than in a classroom environment. These are needed to help actively encourage local Iwi who have an interest in being involved in different forms of cultural tourism, including: the link between craft art and design and offering art trails to visit artists and to see where local items are sourced from; to visit local Marae and other sites where a high quality interpretative experience can be offered; to undertake tours looking at horticultural and agricultural operations; and to identify tours for fishing excursions from a variety of locations along the east coast, either from the beach or by boat. Importantly, these need to be tagged to a guided experience where a commercial return is able to be generated.

Network of B&Bs and Farmstays: Eastland has a number of B&Bs and Farmstays; a number of which are good quality accommodation facilities. Potential exists to develop a network of these properties to help encourage collective marketing efforts and to offer visitors a network of locations as part of a consistent quality journey around the region.

Economic and Tourism Opportunities Analysis



Presented by:
Gautier LAVINA



Comparative analysis of space tourism

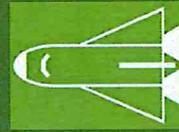
Places with rocket launching activity



To develop the best tourism activity in the Wairoa district we analyze 4 others rocket launching sites to analyze Wairoa

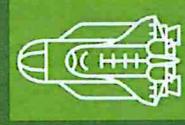
District needs:

- Cape Canaveral in Florida, US
- Kourou in French Guyana
- Baikonur in Kazakhstan, Russian Launching site
- Tanegashima in Japan
- *Mahia, Commercial site in New Zealand*



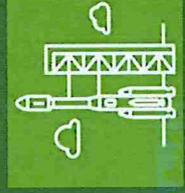
Cape Canaveral

Nasa owns the biggest tourism activity around space of the world formed in 1962



Kourou

European spaceport close to the equator established in 1968



Baikonur

Kazaks cosmodrome is the world's first and largest space launch facility built in the 1950s



Tanegashima

Japan's largest space development known as the world's most beautiful rocket launch complex established in 1969

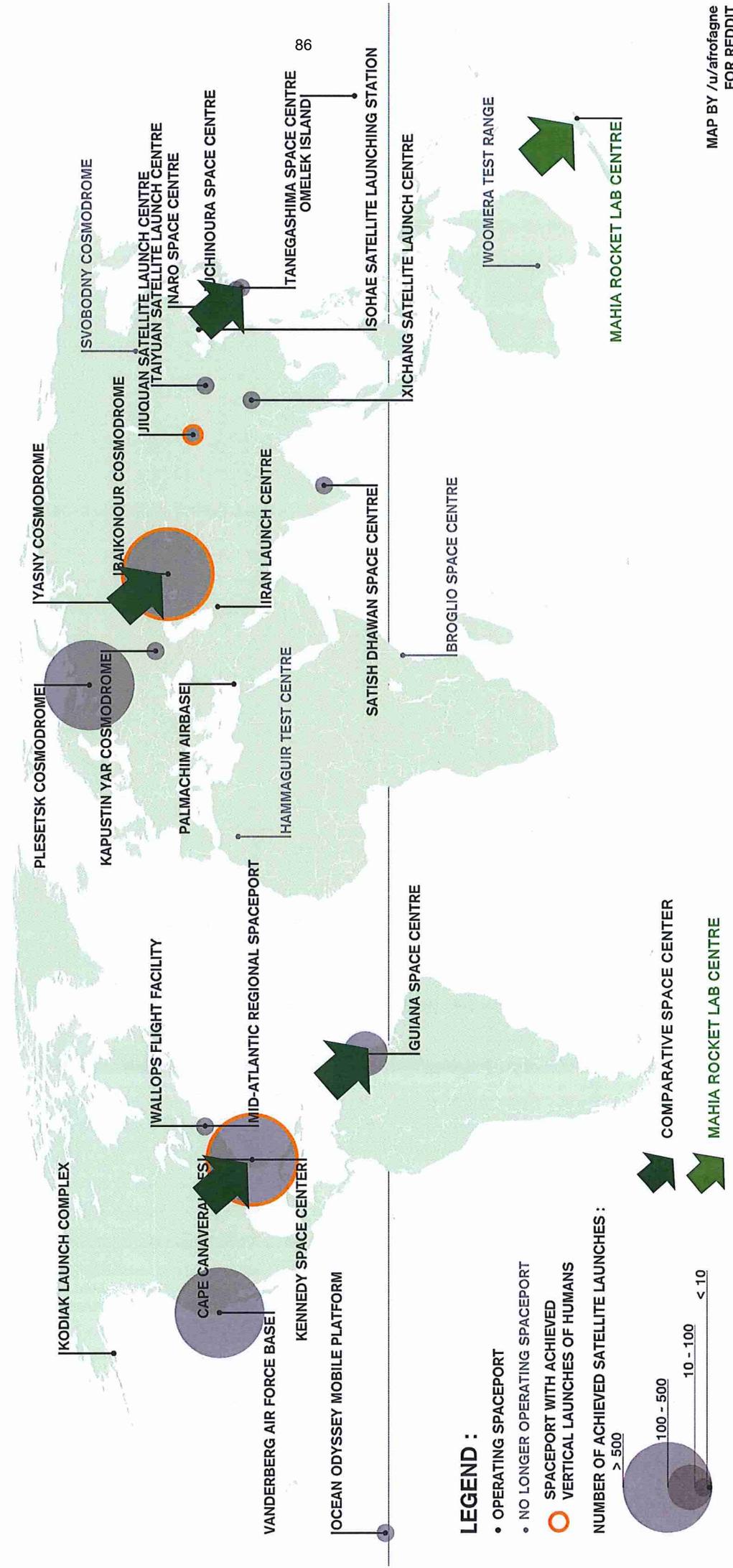


Mahia

Rocket Lab will be the world's first company to build a commercial launching site in 2016

— SPACEPORTS —

WITH ACHIEVED SATELLITE LAUNCHES





Tourism Comparison

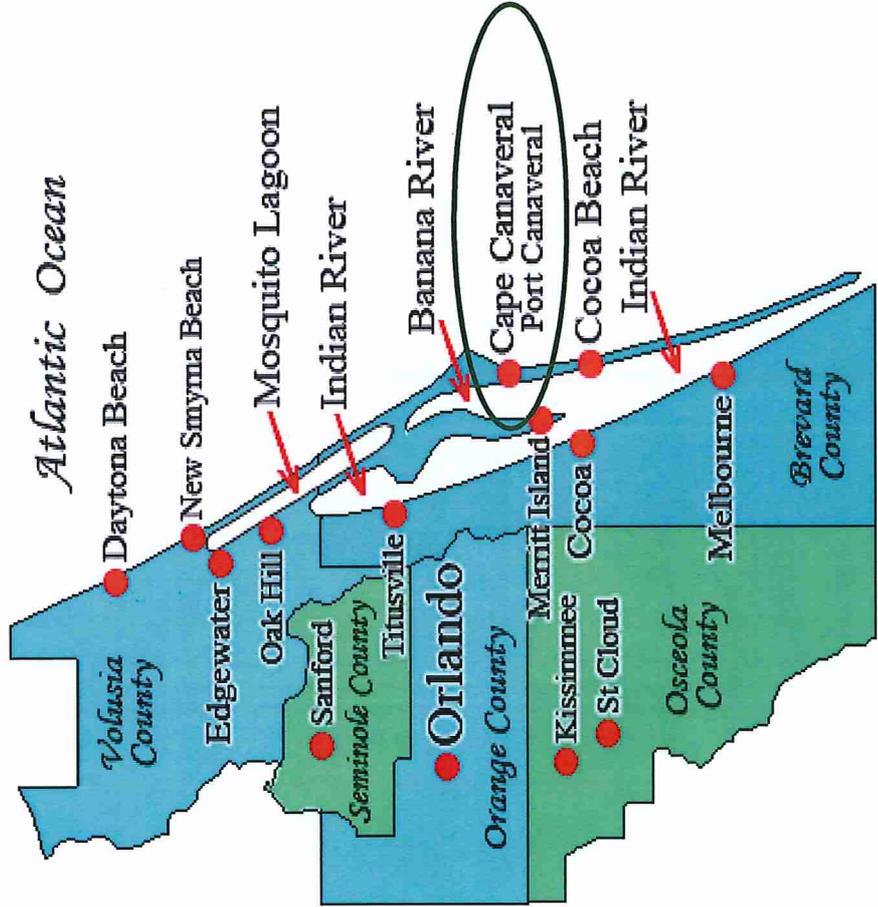
Cape Canaveral



Comparative analysis of space tourism

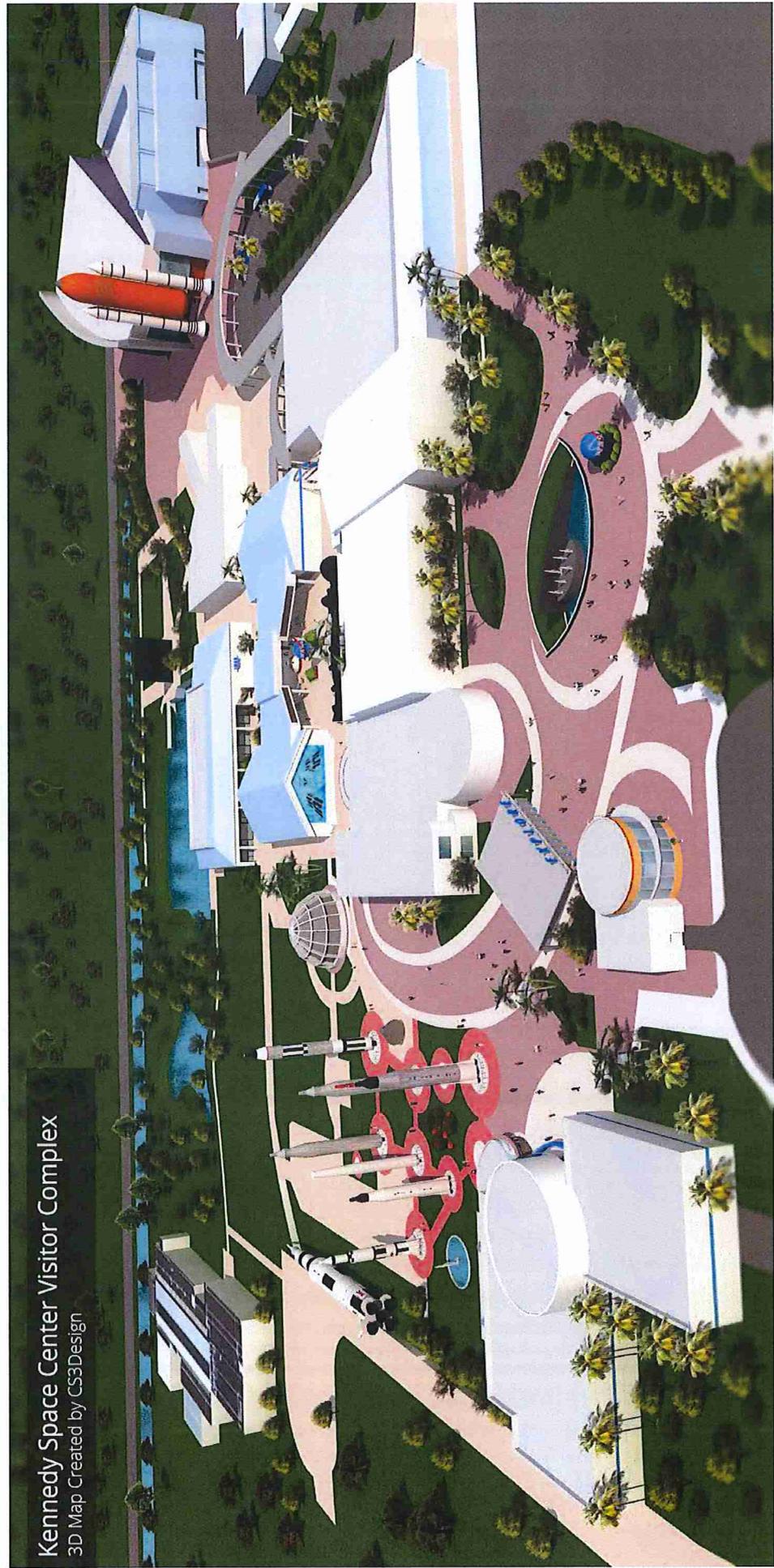


Cape Canaveral



Comparative analysis of space tourism

Kennedy Space Center



Comparative analysis of space tourism

Things to do at Kennedy space center



Click on
picture for
the Youtube
Video!



Space Shuttle Atlantis Exhibit (museum + small attractions)



Shuttle Launch Experience (attraction)



Kennedy Space center Bus Tour



Apollo/Saturn V (museum)



Astronaut Encounter (ask your question to an Astronaut!)



Rocket Garden



IMAX Theater



Eyes on the universe (live presentation)



Fly with an Astronaut (200\$ attraction)



Science on a sphere in IMAX



Journey to Mars : Explorers Wanted (theatre presentation)



Nasa Now (future of Nasa – next projects)



Astronaut Memorial



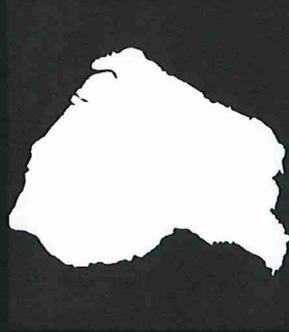
Children's Play Dome

More information on
the Kennedy Space
center website :
www.kennedyspacecenter.com



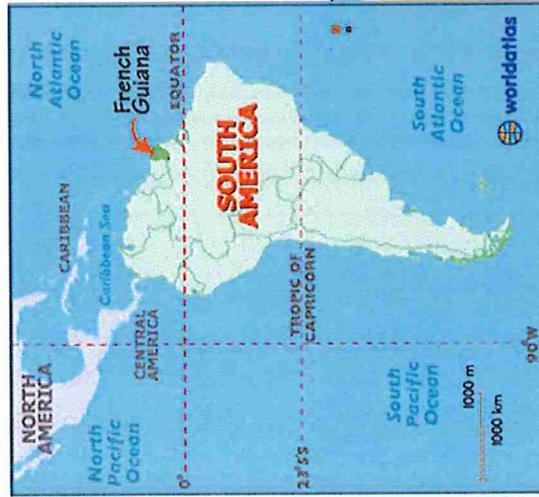
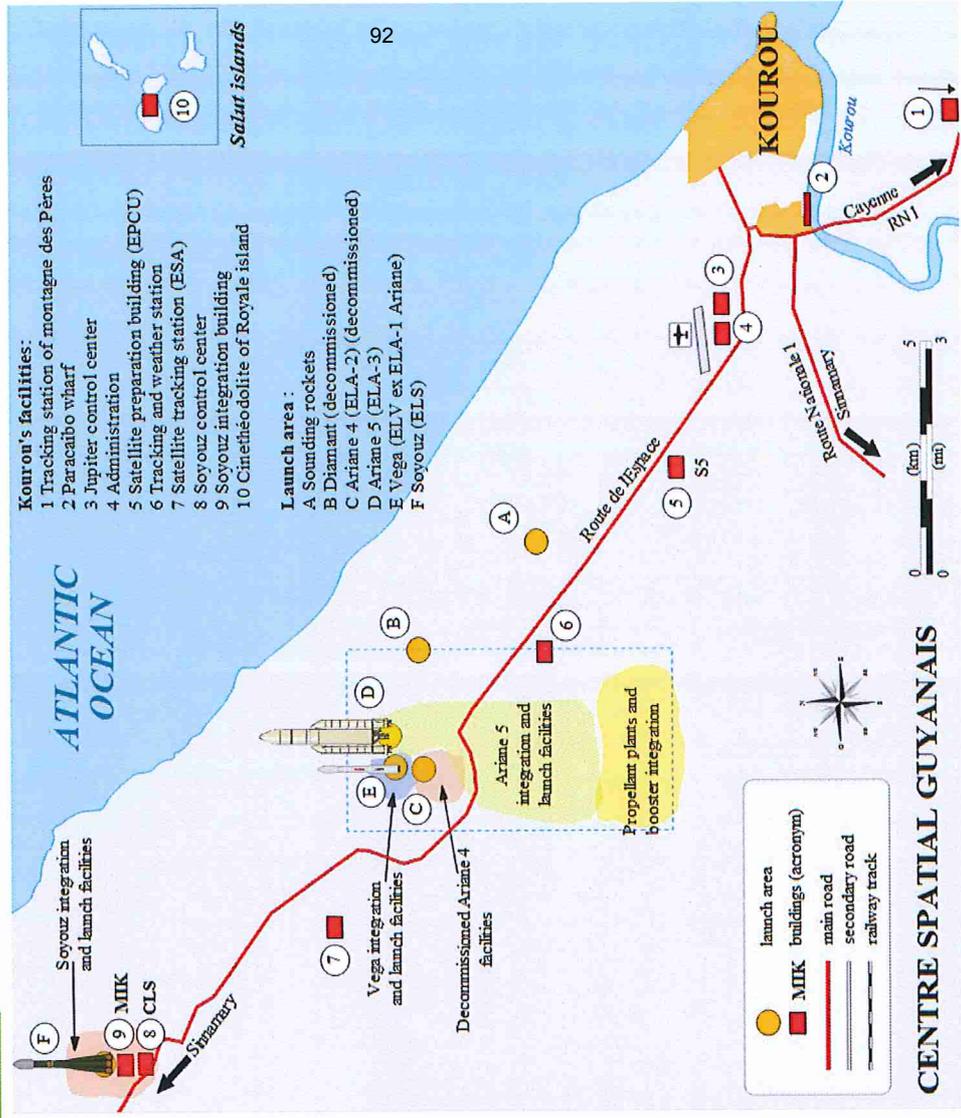
Tourism Comparison

Kourou



Comparative analysis of space tourism

Kourou



Comparative analysis of space tourism

Kourou



Let's analyze the activities outside and inside the restricted area...

Activities	Location	Managed by	Characteristics
Launch Sites Visit	CSG (Kourou Space center)	CNES-CSG	Ariane 5, Soyouz and Vega launching site can be visited twice a day under reservation
Attend a rocket launch	CSG	CNES-CSG	Online registration for free attending
Visit the Space Museum	CSG	CNES-CSG	Available from January 2016, 7€ for adults
Visit the savannas	CSG	CNES-CSG	One a month discover the nature and the animals around the space center with a specialist

93

To be continued...



Tourism Comparison

Baikonur



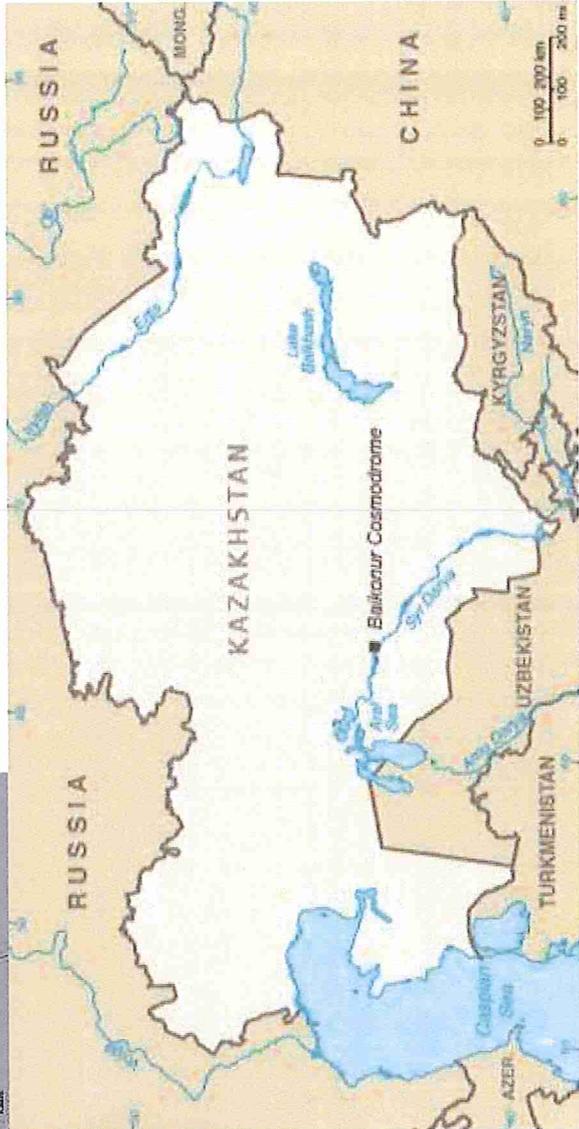
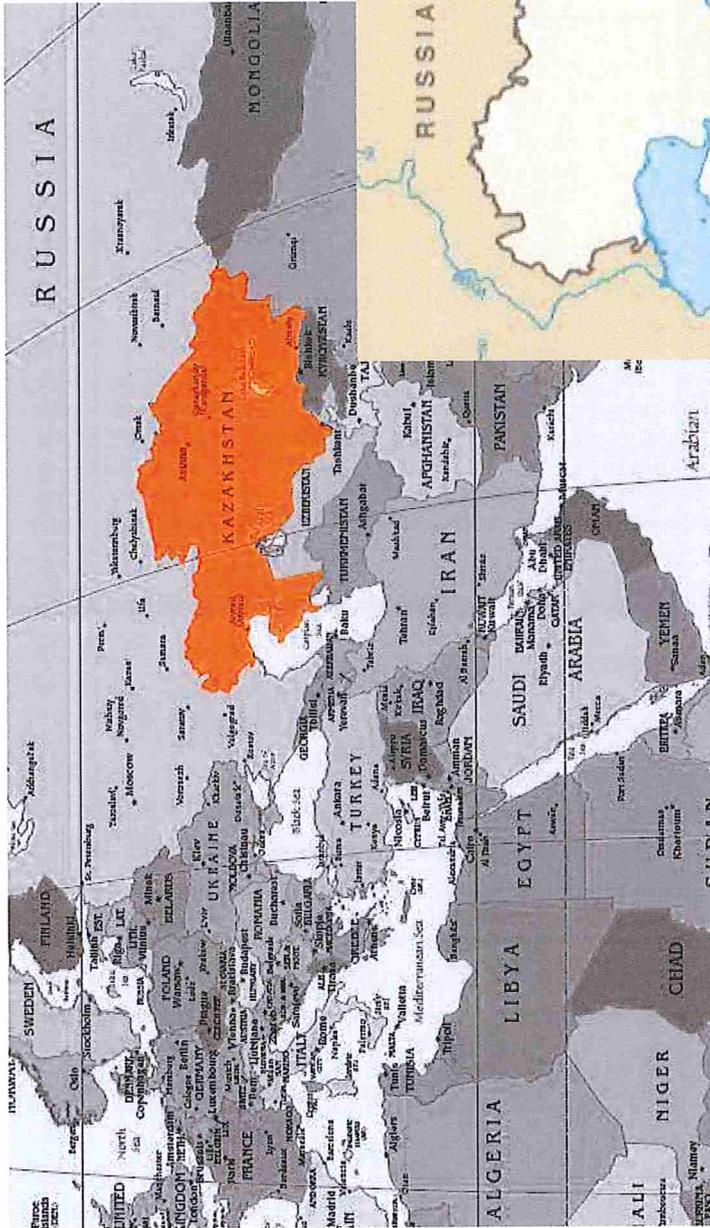


Comparative analysis of space tourism

Baikonur Map

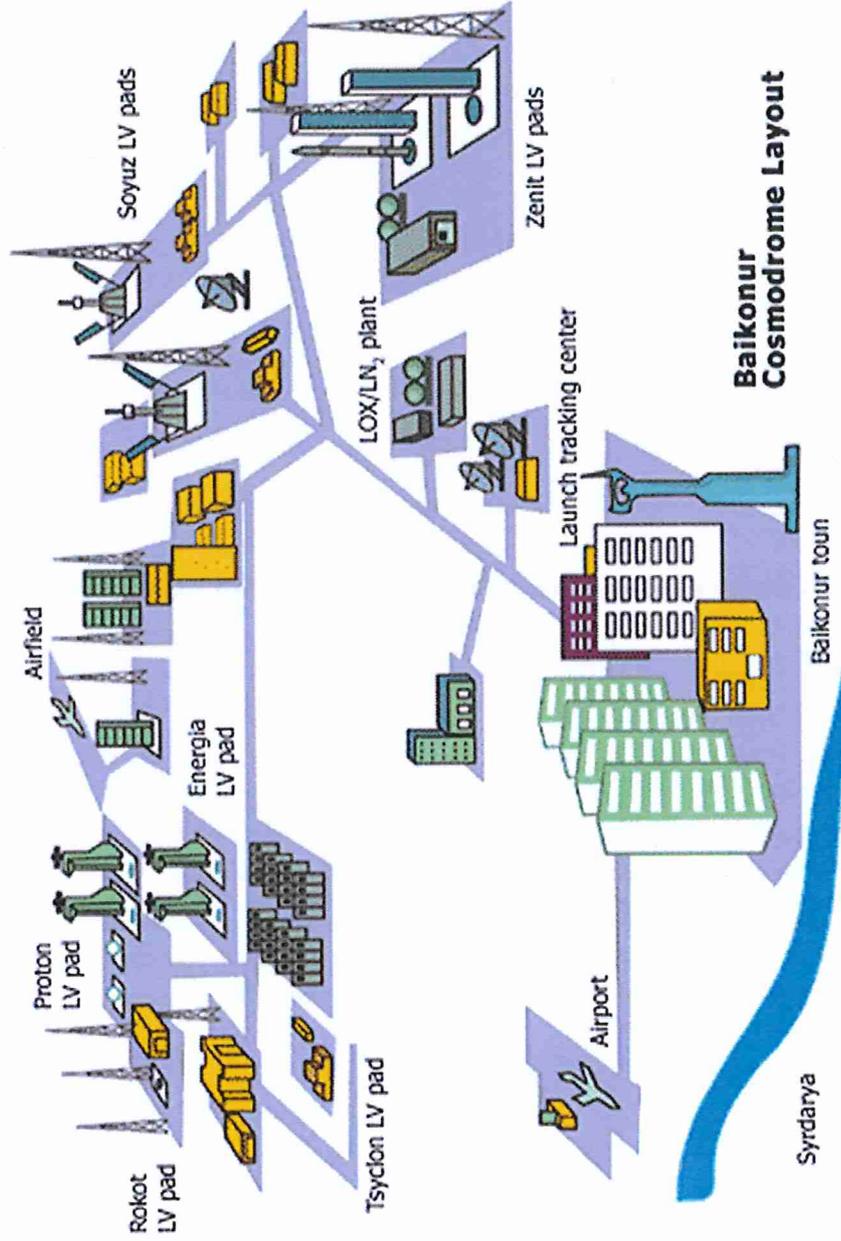


Baikonur is on lease to Russia until 2050.



Comparative analysis of space tourism

Baikonur Space Center Map



- It is located in the desert about 200 km east of the Aral Sea.
- The complex is just north of the Syr Darya River and measures 85 km on 90km.
- Cosmodrome covers 3,000 square miles (7,650 km²).



Comparative analysis of space tourism

Baikonur Space Tourism



How to attend a manned space flight in Baikonur?

There are only 10 companies taking tourists to Baikonur (turnover estimates at over \$100 million a year)

*“Seeing the launch of a manned spacecraft is one of the most popular programs in Earth-based space tourism. Spaceships with cosmonauts aboard are launched from Baikonur **four times a year**. There are also launches of cargo spacecraft, which are more frequent, but they go into space without pilots and are therefore less popular among tourists, according to Avgustinovich.”*

*“In 2014 it launched **21** spacecraft, while Cape Canaveral in the U.S. launched **18**.”*

Tourist are from :
U.S., Canada, the UK, Germany, France, the Netherlands, Switzerland, Japan, India and Australia.

COSTS :

\$5,000 for foreigners

\$1,500 for Russians



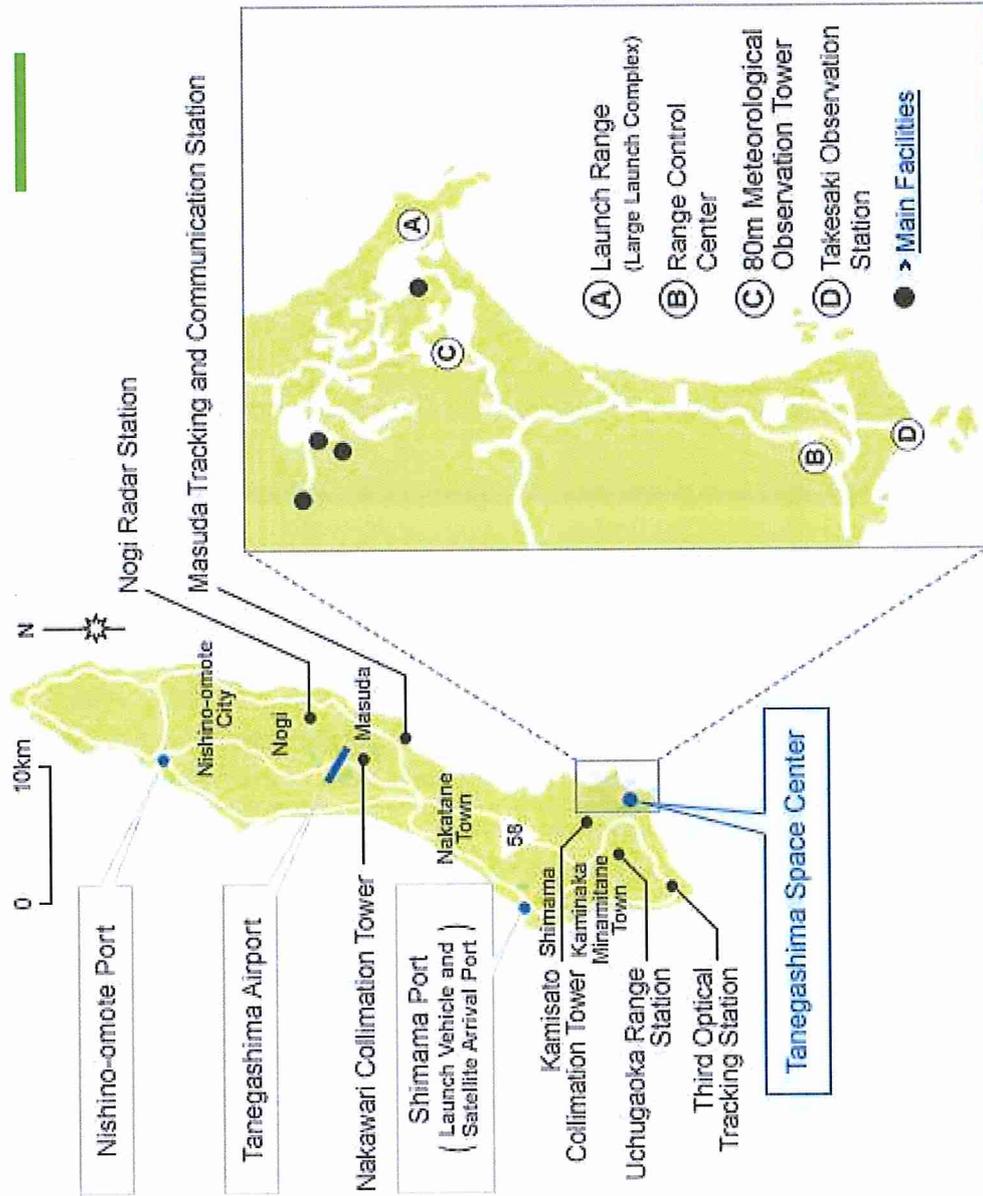
Tourism Comparison

Tanegashima



Comparative analysis of space tourism

Tanegashima Map



Comparative analysis of space tourism

Tanegashima Space Activities



Let's analyze the activities outside and inside the restricted area...

Activities	Location	Managed by	Characteristics
Attend a Rocket Launch	Tanegashima Space center (TNSC)	JAXA (eq NASA)	Observation sites
Visitor Space Center	TNSC	JAXA	Museum, information center, Theater, Shop, full-scale models...
Guide tours of the space center	TNSC	JAXA	Free tours, Advance Booking (depend on vacancies)
...			

To be continued...

Comparative analysis of space tourism

Tanegashima Space Center Visitor Complex

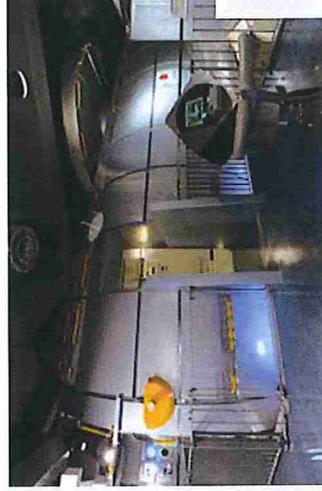
Space Museum



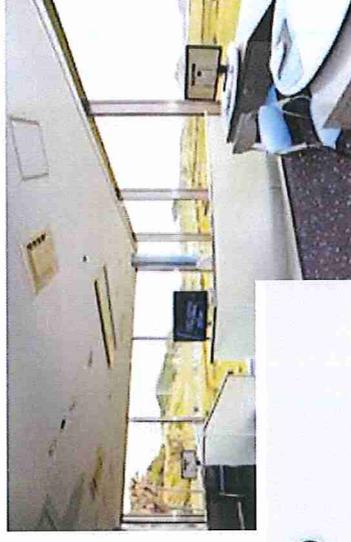
Rocket Launch Theater



Full-scale model of the Japanese Experiment Module "Kibo"



Space Information Center



101

Museum Shop



5

main activities

How is the business managed in Cape Canaveral ?

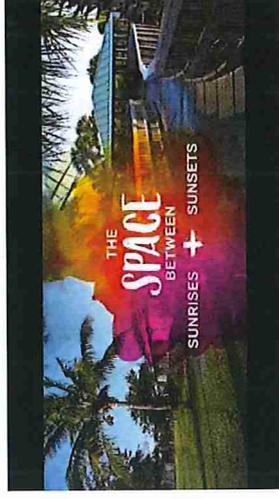
Trip Advisor Tourism activities

10 of top 28 things to do around Cape Canaveral

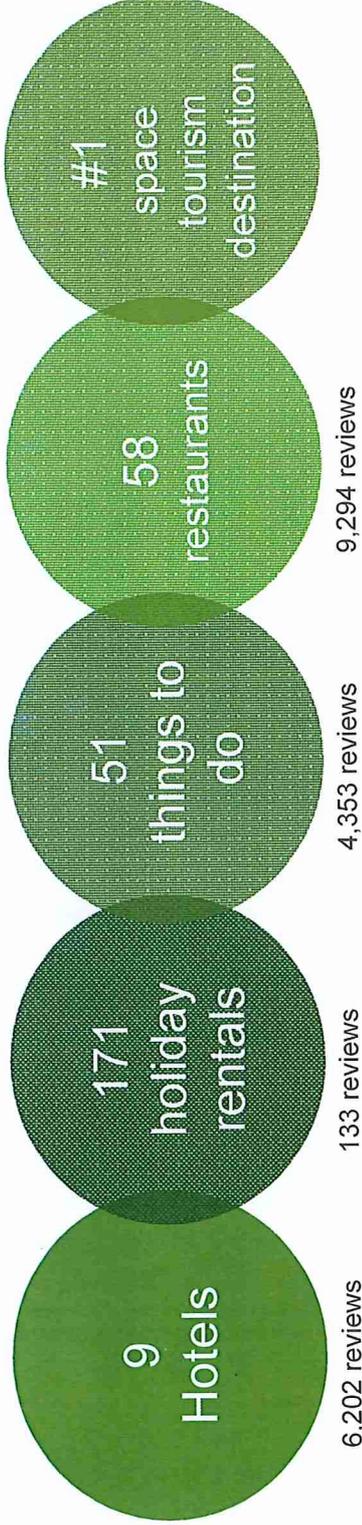
according to Trip Advisor website :

1. KSC Kennedy Space Centre (Space Shuttle & 12 more attractions)
2. Jetty Park (Cheap beach and umbrellas rentals)
3. Fishing charters & tours
4. Exploration tower (7 floor of area interaction information)

5. Victory Casino Cruises (Casino Ship)
6. US Air force space & missile museum
7. Monatee Sanctuary Park
8. Segway tours
9. Dolphin & whale watching
10. Bus tours



Cape Canaveral City Vidéo



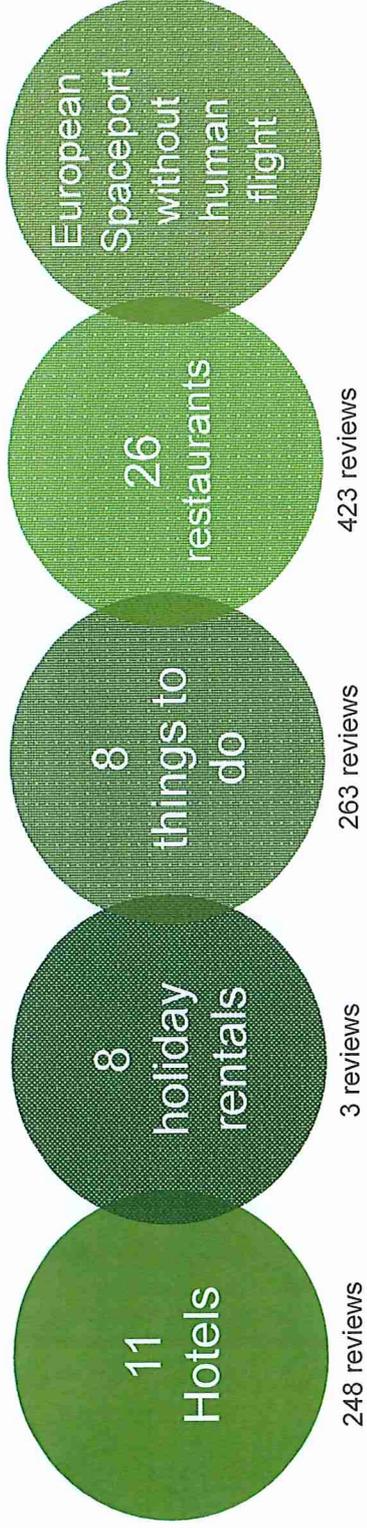
How is the business managed in Kourou?

Trip Advisor Tourism activities



7 things to do around Kourou according to Trip Advisor website :

1. Kourou Space Centre
2. Visiting islands "Les îles du salut"
3. Kourou river
4. Space museum
5. Boat tours
6. The mountain of monkeys
7. Native American archaeology centre



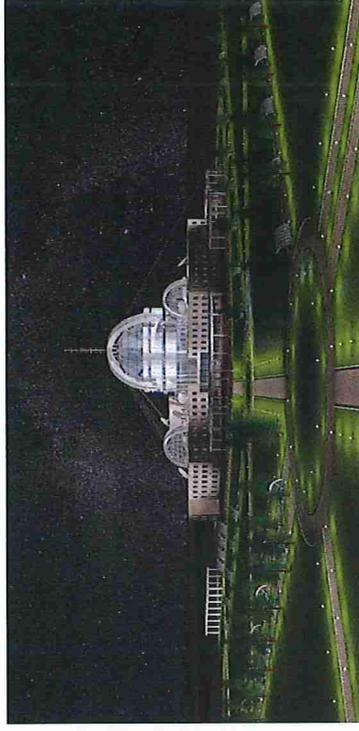
How is the business managed in Baikonur?

Trip Advisor Tourism activities



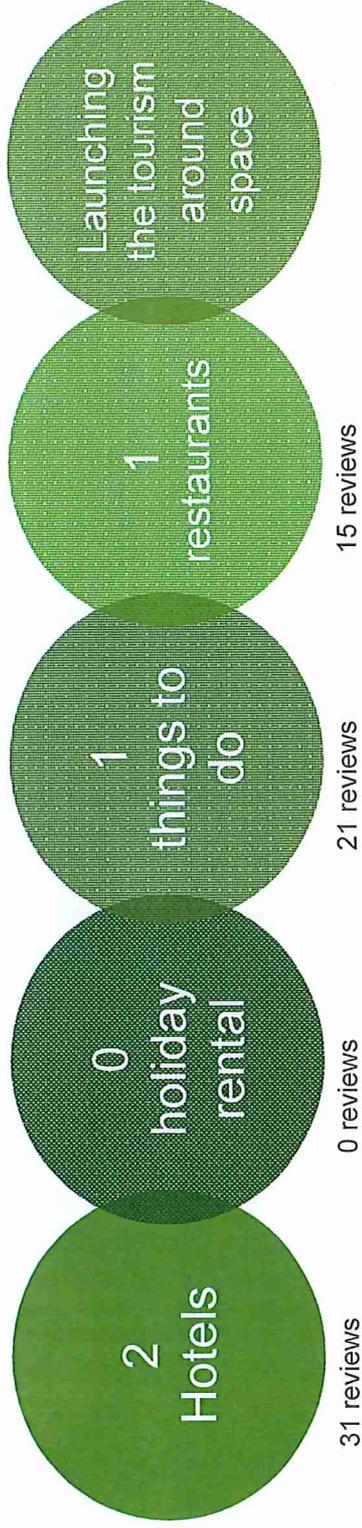
1 things to do around Baikonur according to Trip Advisor website :

1. Museum of Baikonur Cosmodrome History



Baikonur Space Complex is now actively seeking more visitors to a new « Space Harbor » being built with a visitor's complex platform to watch launches.

Source : <http://www.edgekz.com/kazakhstan-hopes-draw-space-tourism-secret-star-city/>

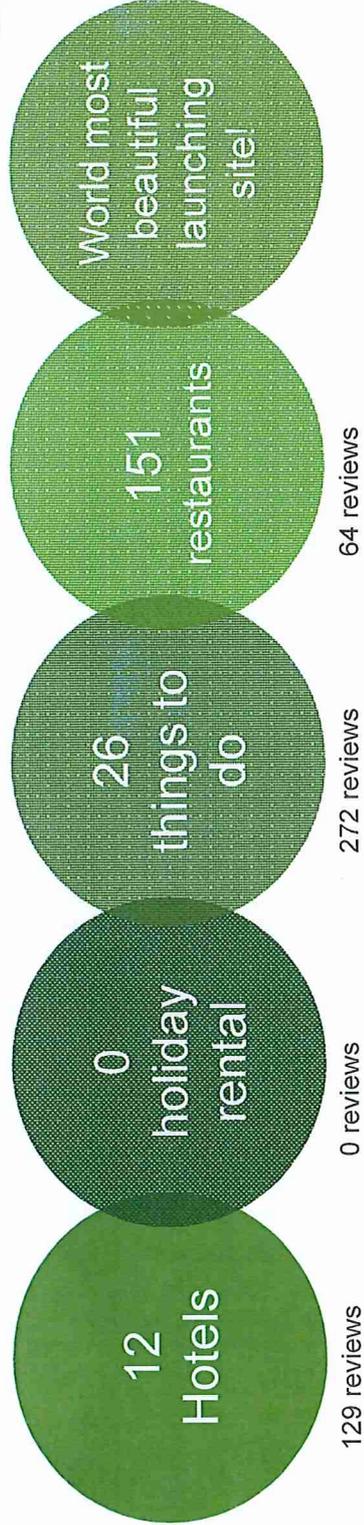
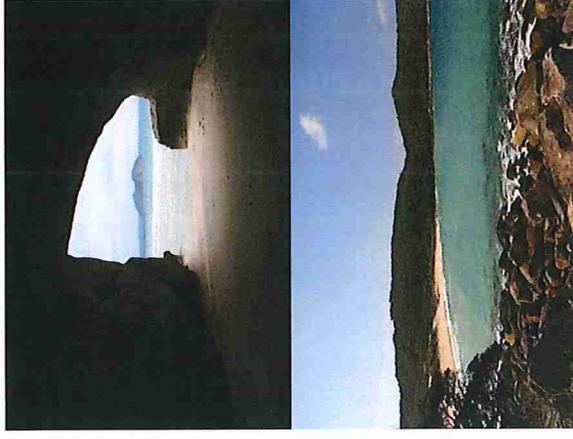


How is the business managed in Tanegashima?



Trip Advisor Tourism activities

- 10 of top 26 things to do around Tanegashima according to Trip Advisor website :
1. Tanegashima Space center
 2. Chikuranoiwaya Cave (picture)
 3. Tanegashima Space center space science and technology Museum
 4. Teppokan (City History Museum)
 5. Cape Kadokura (scenery)
 6. Urada Beach
 7. Madate no Iwaya (scenery)
 8. Tahezahi Seacoast
 9. Hamada Beach
 10. Homan Shrine (cultural site)



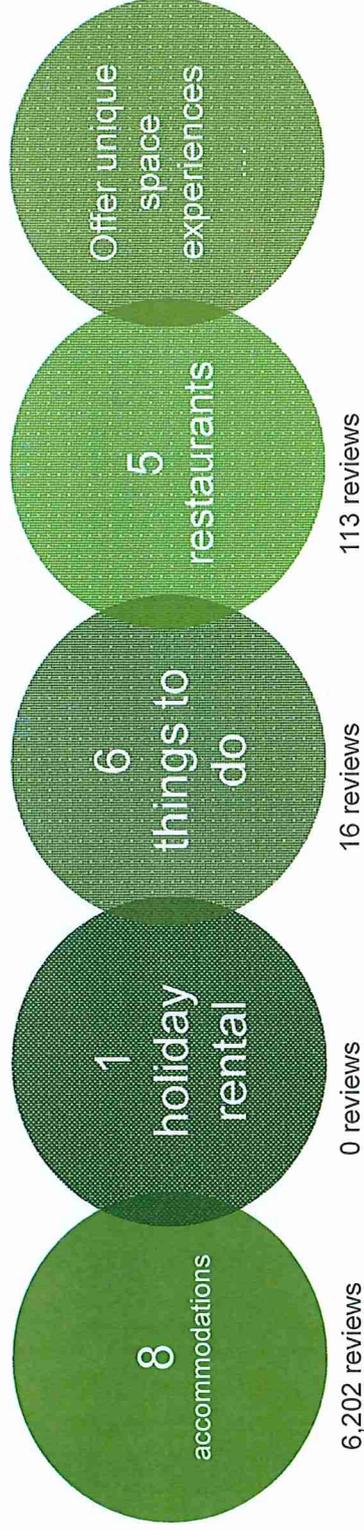
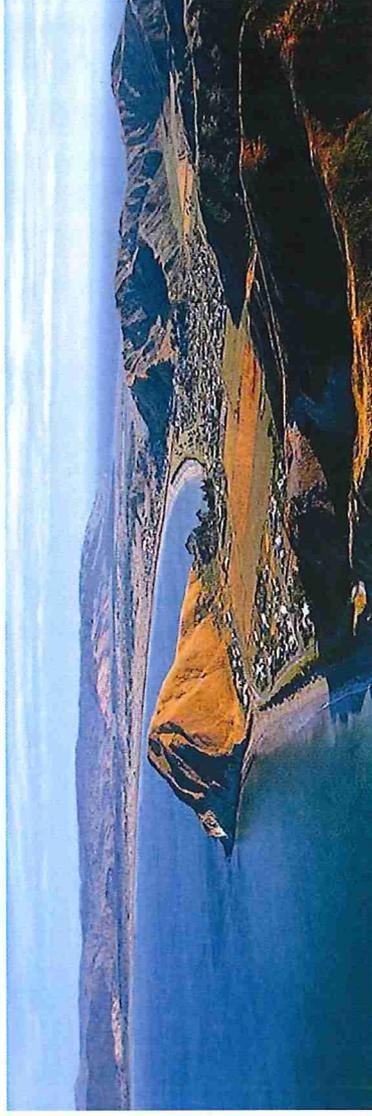
How is the business managed in Wairoa?



Trip Advisor Tourism activities

Currently, 6 things to do around Wairoa according to Trip Advisor website :

1. Gaiety Theatre
2. Wairoa i-Site Visitor Information Centre
3. Wairoa Museum
4. Mangaone Caves
5. Coast Park Gardens
6. Whakamahia Beach





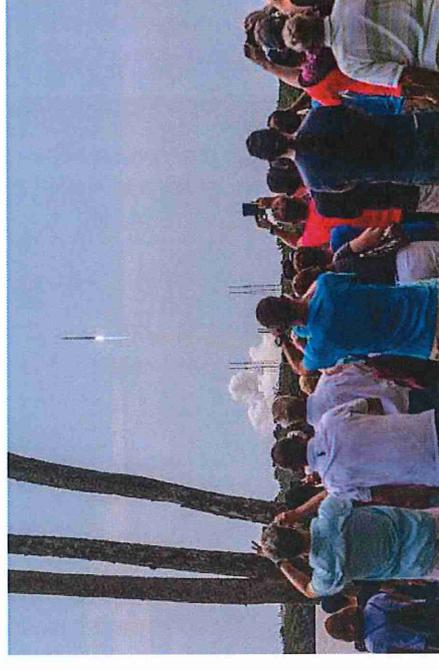
Comparative Analysis

Viewing platforms

Customers requirements

Key Success Factors

- **Proximity :**
 - Avoid seeing the rocket's flames ignite before hearing the thundering roar of the engine
 - Hear the sound becomes louder the higher the rocket climbs)
 - Feel the powerful sound waves that may give goose bumps
- **Visibility**
 - Best picture/movie
 - Some people are ready to wait plenty of hours (more than 15hours!) to get a good spot for that.
 - Have the greatest launching window time (normally approximately 45 minutes)
- **Live a unique experience**
 - Importance of the launch (human spaceflight for instance)
 - Only few launch pad in the world
 - Bucket list experience



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To be
continued...

Customers requirements

What to expect and bring?



For official viewing platform:

- Earplugs (for sensitive)
- Hats, umbrellas, sunglasses, sunscreen and bug spray (day only)
- Blankets or “umbrella-style” folding chairs carried in shoulder bags
- DSLR cameras
- Binoculars

Once you board the bus for one of our launch viewing locations, you cannot easily return to the main visitor complex until the rocket has launched. Please take all supplies with you before you board your bus for the launch.

Customers requirements

What to expect and bring?

For unofficial viewing platform according to forums :

- Good binoculars
- Radio (specific radio)
- Get there plenty of hours in advance to get good seats
- Poles to film
- Bring swimming clothes if you want to watch it in the water from the beach
- Hats, umbrellas, sunglasses, sunscreen and bug spray (day only)
- Blankets or “umbrella-style” folding chairs carried in shoulder bags
- DSLR cameras



Customers requirements

Problems in viewing platforms

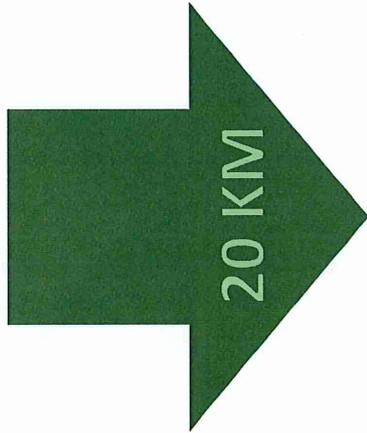
- Setting tripods into the water to get the best spot
- Lack of parking – cars everywhere
- Big waiting lines (toilets, restaurants, snacks)



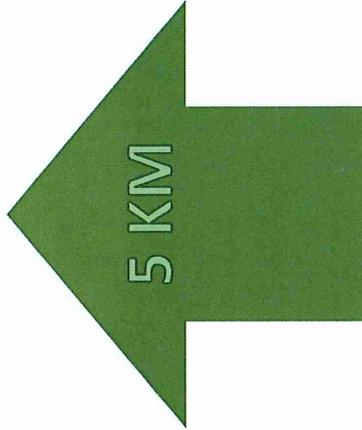
To be
continued...

Customers requirements

Viewing platform difference between 5km and 20km



The first sound its
heard 40 seconds
after the launch,
you see only a
yellow ball, no
tremors



You “feel” the rocket
: the sound, the
view, the tremors

Customers requirements

What will the people see?

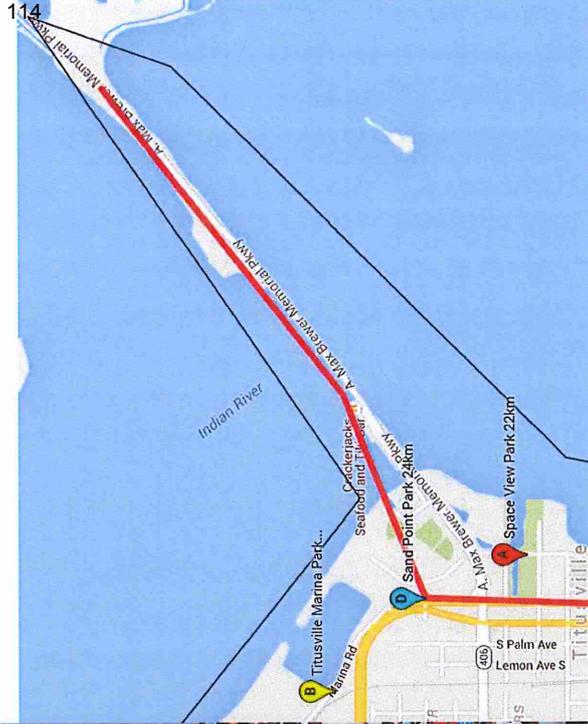


Viewing platforms comparison

Unofficial viewing platform organization



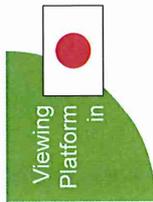
A. Max Brewer Bridge during a rocket launching event





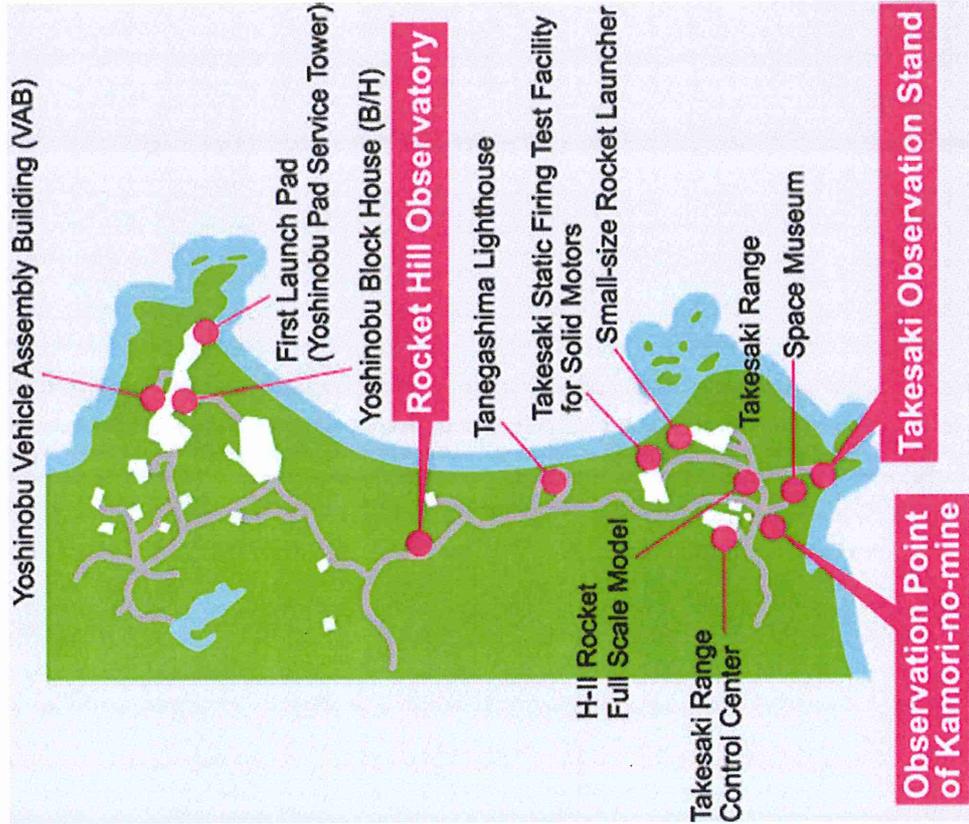
Comparative Analysis

Tanegashima viewing platforms

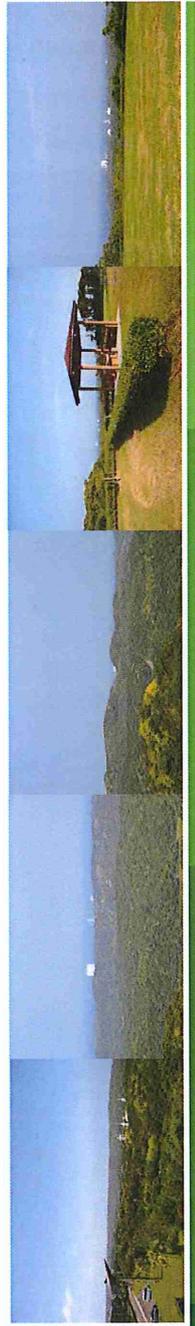


Viewing platforms comparison

Tanegashima Viewing platforms organization



'Launches can be viewed from anywhere beyond a radius of three kilometers from the rocket. The following locations are recommended observation points, where the countdown to liftoff can even be heard. Reservations are not necessary, but these areas are expected to be crowded on the day of a launch.'



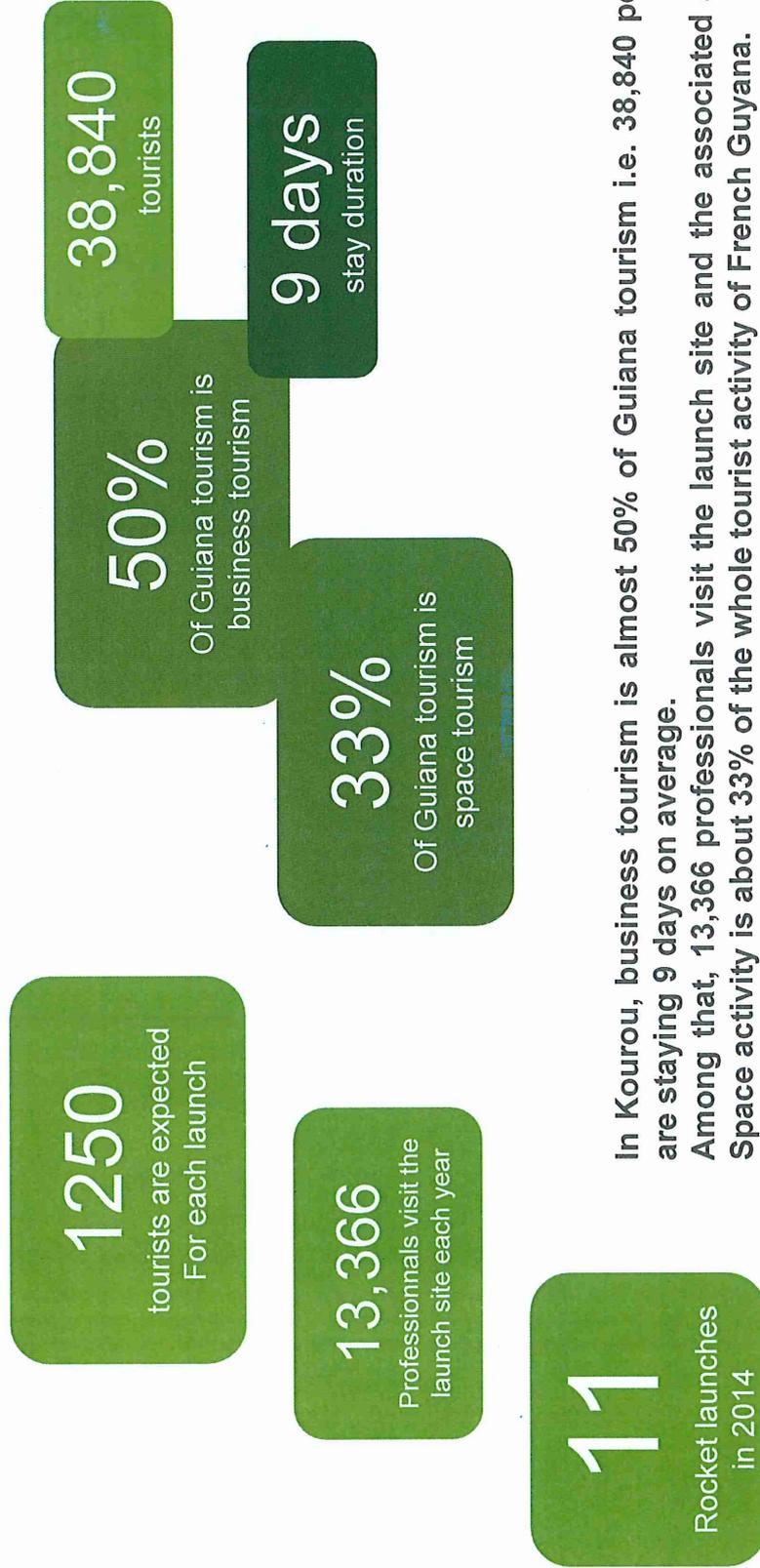


Comparative Analysis

Kourou viewing platforms

How many people are we expecting?

First launching is coming soon...



In Kourou, business tourism is almost 50% of Guiana tourism i.e. 38,840 people. In general they are staying 9 days on average. Among that, 13,366 professionals visit the launch site and the associated attractions each year. Space activity is about 33% of the whole tourist activity of French Guyana.



Comparative Analysis

Rocket Education

Aerospace education

Tanegashima

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Educational Activities



> Space Education Center

The Space Education Center aims to "foster broad-minded youths that are taught about a wide range of views." The Space Education Center's desire is to arouse in children's minds the limitless affection to nature, space and life and at the same time create a desire to contribute to the future of human beings and living creatures on earth by utilizing suitable materials from space and achievements from space activities. To accomplish this, we will deploy our activities in cooperation with various people, teachers and organizations that share our goals.

At the Space Education Center, various education programs like the following can be provided.

Educator Cooperative Program

We will support classes at schools or provide teaching materials in cooperation with teachers.

Youth Program

We will provide an educational program for elementary/junior high/high school students using JAXA's original space education program.

Aerospace education

Rockets.co.nz

Teachers' One Day Rocketry Workshop October 2015

This is a one day Workshop tailored for Teachers, where you will learn how to deliver a Rocketry program at your school. You will also hear all you need to know about to enter a team from your school in the Schools Rocketry Challenge 2016 where pupils are tasked to launch a rocket carrying a bio-payload (raw hen's egg) and a digital altimeter to a target altitude, recovering the payload intact!

Topics covered include:

- *How to Build a Rocket - Parts and their Purpose*
 - *Example Class Activities*
 - *Forces at Work*
 - *Applying the Laws of Motion*
 - *Using Software - for Rocket Construction*
 - *Using Software - for Simulating Flight*
 - *Water Rockets*
 - *Rocket Propellant- Can I Make It?*
 - *Rocket Stability*
 - *Construction Hints*
 - *Safety Procedures*
 - *Launch Analysis (Calculating Altitude and Speed)*
 - *How to Participate in the Schools Rocketry Challenge 2016*
- Date: Tuesday, 6 October 2015*

Time: 8.45am - 4.30pm

Venue: Mt Roskill, Auckland

Cost:

Free - For the first Teacher from Schools who have already experienced or will be experiencing a rocketry program as part of the Unlocking Curious Minds initiative delivered by Aerospace Education.

\$95 + GST - Any other Educators

REGISTER HERE

Queries: info@rockets.co.nz or phone 0274 932 766

[http://www.aerosp
aceducation.co.nz
/rocket-science-
for-teachers](http://www.aerosp
aceducation.co.nz
/rocket-science-
for-teachers)

To be
continued...

APPENDIX 5: FUNDING CRITERIA FOR FUNDING ASSESSMENT

For a number of projects within the Funding Assessment there are grants available from national funders, these include Lottery Grants Board funds, administered by the Department of Internal Affairs (DIA) and central government administered funds.

Table 1: National Funders

Agency	Fund	Description
Department of Internal Affairs: Lottery Grants Board	Significant Projects	Major community-based capital projects of regional or national significance.
Department of Internal Affairs: Lottery Grants Board	Community Facilities	Community facilities that support participation, foster community cohesion and strengthen communities
Department of Internal Affairs: Lottery Grants Board	Environment & Heritage	Projects which foster the conservation, preservation and promotion of New Zealand's natural, physical and cultural heritage
Ministry of Business, Innovation and Employment	Tourism Growth Potential	To drive strategic change and lift value that international tourism delivers.

Lottery Grants Board

The New Zealand Lottery Grants Board is governed by the Gambling Act 2003. Its purpose is to benefit the New Zealand community by distributing the profits from state lotteries run by the New Zealand Lotteries Commission. (Lottery Grants Board, 2010).

“In line with the Gambling Act 2003, Lottery grants are made for community purposes only. A Lottery grant is for a community purpose if it contributes to the building of strong sustainable communities by encouraging or enabling community self-reliance, capacity building, and stability; or opportunities for social, civil or cultural participation and reducing or overcoming barriers to such participation; or community or environmental health; or development and preservation of New Zealand's arts, culture, heritage and national identity; or sports and recreation.”

The New Zealand Lottery Grants Board is a non-political, independent body. The funds it governs are administered by the Department of Internal Affairs and advisors are available to discuss and guide applicants.

Lottery Grants Board: Significant Projects Fund

This fund is currently in hiatus but may be re-announced at a future date. The fund is administered by an independent board and has a number of priorities around community outcomes and strict criteria.

The Significant Projects Fund was re-opened in December 2013 (after a hiatus of two years when it was re-directed to Rugby World Cup and World War One Commemorations) with an allocation of \$30 million over two rounds. In March 2014, the committee announced it had allocated \$28 million of the fund. Applications requested had totalled \$65 million, showing the fund was in great demand.

In July 2014, the Minister of Internal Affairs announced that there would be a funding round with a total fund of \$15 million for allocation and the successful projects were announced in June 2015. The following is the criteria the fund followed in previous rounds but this is subject to change when or if the fund re-opens:

Priority projects will:

- Increase community self-reliance, capacity building and stability;
- Provide opportunities for social, recreational, civil or cultural participation; and
- Reduce or overcome barriers communities face to such participation.

Projects must meet the following criteria:

- Be for a purpose relating to a community benefit of a public nature;
- Meet a clearly identified community need;
- Provide opportunities for widespread and significant community interaction and cohesion;
- Have wide community support and/or result from a community initiative;
- Be an appropriate size for the community; and
- Involve collaboration between the applicant and community organisations, local/central government and/or Māori organisations/iwi.

Priority may be given to projects that can start on site within six months of the Committee's funding being granted. Applicants must demonstrate that their project:

- Is for a community purpose;
- Has a total project cost of at least \$3 million;
- Has secured at least one-third partnership funding;
- Has a Project Manager;
- Has a completed feasibility study or other report in support of the project;
- Has an approved resource consent;
- Contributes to a regional and/or national outcome, in one or more of the following areas:
 - Arts, culture and heritage;
 - Sport and recreation;
 - Conservation and the environment; and
 - Economic development; and/or visitor services and tourism.

It should be noted that:

- This fund is currently on hold but will possibly be reinstated in the future. If a project is not yet ready to apply, submitting an “expression of interest” if this fund is reopened would be recommended. This is also a good way to get feedback on your application;
- The fund is considered a “last resort” fund so the committee would expect to see the majority of funding secured before an application; and
- Highlighting the national significance of a development is key – while regional applications are considered they are lower down the committee’s priority list.

Lottery Grants Board: Community Facilities Fund

This fund is for community facilities that support participation in community activities and social interaction to foster community cohesion and strengthen communities.

The Lottery Community Facilities Distribution Committee meets nationally twice a year and it has a six-month turnaround for a decision. Typically, the Committee makes grants between \$10,000 and \$750,000.

Priority is given to projects that meet multiple criteria and that:

- Meet clearly identified community need;
- Provide opportunities for widespread and significant community interaction and cohesion;
- Have wide community support or result from community initiative;
- Provide facilities for:
 - Rural and isolated communities;
 - Disadvantaged groups;
 - Those who do not have ready access to similar or suitable facilities; and
 - Locations of need.
- Are multi-purpose or shared facilities that are accessible to the community;
- Are an appropriate size for the community, and the community has the capacity to develop;
- Run and maintain the facility in the long term, independent of further support from the Lottery Grants Board; or
- Provide opportunities for collaborative approaches by community groups for the provision of social services programmes.

Lottery Grants Board: World War One Commemorations, Environment & Heritage

This committee makes grants to organisations to foster the conservation, preservation and promotion of New Zealand’s natural, physical and cultural heritage, such as museums, whare taonga and art galleries.

The Lottery Committee meets nationally twice a year, the rounds closing in February and September with an outcome three months later. Typically, the Committee makes grants between \$10,000 and \$500,000.

In the 2015/2016 year the fund has \$12,719,515 to allocate, with \$3 million specifically for World War One Commemoration activities.

All projects must contribute to a community benefit of a public nature to:

- Increase access to New Zealand's cultural heritage;
- Preserve and protect New Zealand's natural environment; and
- Preserve New Zealand's history for future generations.

Funding is only available for one-off projects. A one-off project may include either:

- A discrete stage of a larger, ongoing project; or
- A single, stand-alone project.

Cultural Heritage Funding

The following list shows the priorities for funding cultural heritage projects.

- Protect collections at risk;
- Make collections available to the community;
- Enhance the learning experience and involvement of young people;
- Conserve moveable cultural property; and
- Consideration has been given to the fire protection or seismic strengthening needs of the completed project.

The types of projects considered include:

- The preparation of feasibility studies for capital works projects;
- The development, redevelopment or upgrade of museums, art galleries or archive facilities, including earthquake strengthening projects;
- Development of education centres for young people within existing museums;
- The construction of memorials;
- The conservation of moveable cultural property;
- Historical research, writing and publications;
- Salary costs and equipment for oral history projects;
- Development of heritage trails including the design and incorporation of interpretive panels and material;
- Providing exhibition related material which enhances understanding of a collection; and
- Archiving and digitalisation of records.

It should be noted that:

- The Committee will consider funding towards the development, redevelopment or upgrade of museums, art galleries or archive facilities including appropriate storage systems, collection management systems, environmental control systems, fire protection systems and display facilities;
- There is no limit to the amount for which applicants can apply. However, because of pressure on funding, Lottery WW1 Commemorations Environment and Heritage Committee is rarely able to provide funding to the level requested and is more likely to consider only a

contribution towards the project. Grants have traditionally been about \$500,000 at the top end.

Physical Heritage Funding

Physical heritage applications should be for projects related to the conservation and preservation of places, structures and large built objects associated with the physical heritage of New Zealand.

Preference will also be given to projects in which the applicant has considered fire protection (i.e. installing sprinklers) and seismic strengthening as part of the project.

The types of projects considered include:

- Undertaking conservation or restoration work as detailed in a conservation plan;
- The preparation of specific reports, including seismic assessment reports;
- Preservation and conservation of buildings, structures or large built objects, including earthquake strengthening projects; and

APPENDIX 6: EXAMPLE SURVEY QUESTIONS TO PUT TO MAHIA/WAIROA ROCKET LAUNCH VISITORS

- Did you enjoy your visit? YES/NO
- Did you see a rocket launch? YES/NO
- Did you:
 - Spend fewer than 8 hours in the area
 - Overnight in the area
 - Spend money locally (provide options)
- Did you have:
 - Not enough information re the launch
 - Enough information

Collect personal data:

- Did they come especially because of the rocket launch?
- Are they:
 - Rocket Lab staff
 - Rocket Lab VIPs
 - Journalists/media
 - Dedicated space rocket followers
 - Mahia/Wairoa residents
 - East Coast (Hawke's Bay, Gisborne) residents
 - New Zealanders on holiday
 - International visitors

APPENDIX 7: INDICATIVE BUDGET FOR TEST LAUNCH PHASE

The below costs are indicative only at this stage.

1. Survey

Conduct over 3-4 weekends or weekdays as necessary when test rocket launches are due to take place:

- Development
- Implementation
- Analysis
- Writing Report
- Present results

Cost: \$60 - \$70k

2. Infrastructure

- Car parking
- Traffic management
- Signage
- Toilets
- Boat launch management
- Safety

Cost: \$70k (\$50k for car parking at Bluck's Pit Road viewing site + \$20k for signage, traffic control, etc.)

3. Hosting

Training session for Mahia "hosts", possibly Māori Wardens to convey key messages, expectations

Cost: \$5k - \$10k

4. Steering Committee Support

- Committee establishment
- Organisation of meetings
- Administration

Cost: \$15-\$20k

5. Technical Support

- Specialist tourism advice and analysis

Cost: \$30k

TOTAL: \$200k