



# Kaikoura: Tourist travel behaviour and recovery framework

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## **Notes**

This report, commissioned by the Ministry of Business, Innovation and Employment (MBIE), is independent advice from the writers of this report, Lincoln University and Geozone. It sets out the view of the authors, and does not necessarily represent the views of MBIE.

This report may be useful to tourism stakeholders in the regions impacted by the earthquake (e.g. the Kaikoura RTO and the Kaikoura District Council) as an input into their planning for recovering and growing their local tourism economies.

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## Summary

Initial recovery focus is on road access (especially the inland SH70) although attention also needs to be focussed on the timelines for reopening SH1 to the south. Information on progress and projected timelines is updated daily via NZTA ([www.nzta.govt.nz/eq-travel](http://www.nzta.govt.nz/eq-travel)). Network analyses indicate potential day trip access and re-establishment of the Alpine Pacific triangle route. When verified against 'capacity to host' (Part 2 (15<sup>th</sup> December) there appears to be potential for the reestablishment of overnight visits. Establishing secure road access is the key constraint to recovery.

In terms of the economic recovery the Kaikoura District has traditionally attracted a large number of visitors which can be grouped as: second home (and caravan) owners, domestic New Zealand and international travellers. These have been seen through a behaviour lens as "short stop", 'day' (where Kaikoura is the specific focal destination) and overnight visitors. At the present restricted access appears to make the latter group less amenable to visiting Kaikoura, not the least because the two large marine mammal operators have a strong focus on international visitors. For the present the domestic market provides a greater initial pathway to recovery.

Our experiences in and reflections on Christchurch suggest Kaikoura will not go back to what it once was. A unique opportunity exists to reframe the Kaikoura experience around earthquake geology and its effects on human and natural elements. To capitalise on this opportunity there appears to be a need to move quickly on programming and presenting such experiences as part of a pathway to re-enabling domestic tourists while international visitor bookings and flows can be re-established.

The framework developed for this study appears to be robust for rapid post-disaster assessment. It needs to be regularly updated and linked with emerging governance and recovery processes.

## Objectives

This report provides a framework for destination area recovery for the Kaikoura District following the 7.8 ( $M_w$ ) earthquake that occurred two minutes after midnight on 14 November 2016 NZDT in the South Island of New Zealand. At that time road access to Kaikoura became unavailable and at the time of writing access is achieved only by a registered weekday convoy of approximately 200 vehicles on one northbound entry (0800 – 1000) and one southbound exit (1600 – 2000). Public access is only available on week days in order to allow more extensive road repairs over the weekends. Information on progress and projected timelines is updated daily via NZTA ([www.nzta.govt.nz/eq-travel](http://www.nzta.govt.nz/eq-travel)). Road access is tenuous, and is limited to times of dry weather and absence of severe aftershocks.

The objectives of this short report are to

- Develop and test a framework for tourist destination area disaster recovery
- Test that framework in relation to the recent earthquake event in Kaikoura, New Zealand
  - a. Report on tourist access pathways, travel itineraries and tourist behaviour relevant to the Kaikoura area.
  - b. Reframing the tourism product to meet anticipated changes in access and demand.

# Destination Recovery Framework

To facilitate the report we first developed an overall framework within which to assess tourism destination recovery for Kaikoura (Fig 1). While all tourist destinations have a number of common elements, this framework has been established taking into account the authors' detailed knowledge of Kaikoura as a destination and past work in recovery assessment and research following the Christchurch earthquake sequence.

The framework is established around two main components

- Visitor itineraries and safe access possibilities (demand side considerations)

These are presented in part one of this report

- Community and destination attributes
  - a. Basic services
  - b. Establishing supply chains
  - c. Visitor services

These constitute the supply side considerations as presented in part two of this report

These latter elements are based on the premise that tourism can only function well and contribute to community wellbeing and recovery when basic resident needs have been attended to (CDEM, 2005), and are examined in part two of this report.

Part one of this report (written on 9<sup>th</sup> December 2016) provides an initial assessment of the re-opening of overland access, with a view to framing a recovery plan for the Kaikoura as a tourist destination. It examines past patterns of visitation and makes observations on re-emerging tourist flows as land access is re-established.

Part two written the week commencing 12<sup>th</sup> December reflects the rapidly changing situation and progress in physical recovery.

Figure 1 Kaikoura Tourism Recovery Framework

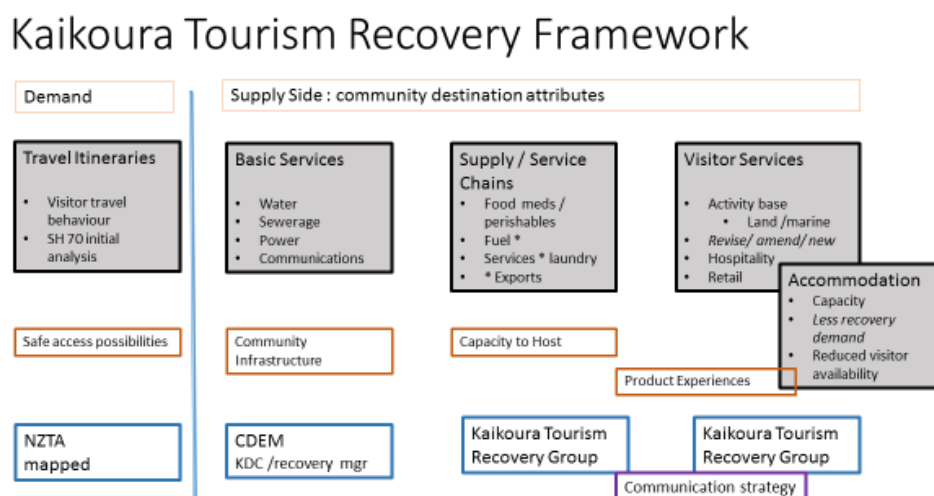


Figure 2 Roding network map: current status (NZTA)



## Part one: Tourist access routes, and travel behaviour

### Travel demand and itineraries

Kaikoura is a coastal destination which has traditionally attracted 'short stop visitors' travelling between Christchurch and Blenheim / Picton; specific 'day visitors', and overnight visitors (Simmons *at al .*, 1998).

Most visitors access Kaikoura via SH1 (travelling in both north and south directions) Fig 2. SH70 offers an alternative inland route to/from Kaikoura and is often used by visitors travelling between Hanmer Springs and Kaikoura. This route (including a leg of SH1) is marketed/promoted as the Alpine Pacific Triangle. While independent self-drive visitor and some tours travel the inland route the majority of scheduled transport services used SH1.

The route between Christchurch and Picton is also served by the Coastal Pacific rail service and is popular with both international visitors and domestic tourists. In recent summers a number of cruise ships have also called at Kaikoura. While Kaikoura has an airstrip it was not serviced by regular scheduled flights prior to the earthquake.

### Access

The earthquake removed overland access. Roads to the north, south (SH1) and south west (SH70) were blocked by slips, rail lines were significantly impacted, and visitors who were in the District had to be evacuated by helicopter and military ships (weather permitting). Supplies to residents were initially taken in by same means.

### Graphic portrayal of FIT (campervan) visitor movements

We have been able to work with GeoZone who have visualised GPS data captured from mobile devices and through deployment of "mobile phone applications" (app) for visitors to New Zealand. Their suite of apps includes 'CamperMate' which is provided to the majority of campervan renters in New Zealand. The company now reports 70 – 80 % of campervans (26,000 active users per day at the time of writing) connected to one of their apps. While the apps are publically available penetration rates into other rental vehicle types such as independent drivers of rental cars (currently self-drive apps are available for AVIS, Budget and Thrifty Rentals) is occurring however the take up rate is unknown.

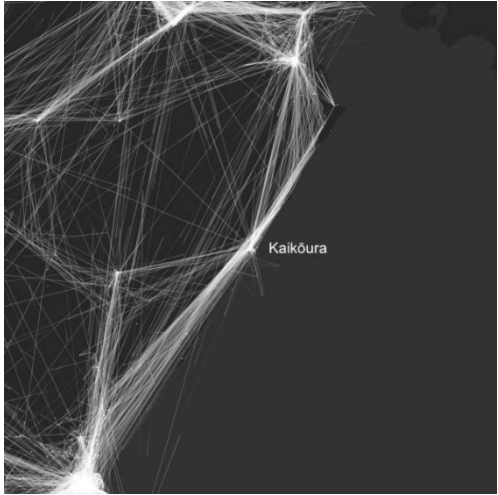


While these data are novel they hint at the type of data that could come available in the future as anonymous data systems are designed and enabled.

Figure 3 presents three weekly summaries of visitor locations and destination links (enabled via cell phone towers 'polls') for the Kaikoura District. In sequence these represent 24 hour trails of users 7 days before the quake, on the day of the quake and the 7<sup>th</sup> day after the earthquake.

The third image in the sequence illustrates the 'hollowing out' of tourist flows through Kaikoura compared to prior to the earthquake, and the subsequent dispersal of travellers around the affected area on to the Lewis Pass.



Figure 3 Daily profiles of three week sequence of tourist flows and destination links

	<p><b>Kaikoura</b> : Commercial campervan movements and stay data: 24 hours 7th November (Source : GeoZone)</p>
	<p>Day of Earthquake (00:02; 14<sup>th</sup> November)          Commercial campervan movements and stay data: 24 hours :14<sup>th</sup> November          (Source : GeoZone)</p>
	<p>Commercial campervan movements and stay data: 24 hours 21st November          (Source : GeoZone)</p>

Source: Geozone, 9 December 2016

## Land Transport Options

### SH70 (in/out)

This route is 70 km long from its junction with SH7 just north of Culverden. It has been promoted in the recent past as part of the Alpine Pacific triangle and promoted on a number of leading tourist information websites (e.g. <http://www.newzealand.com/int/trips-and-driving-itineraries/south-island/christchurch-hanmer-springs-christchurch/>). SH70 (also known as the inland road, and less commonly the 'whalesback') is currently a priority for reopening.

### SH1 (south) in/out: re-established Alpine Pacific Triangle

SH1 to the south is a second priority for repair and a more robust route for visitor access. On its own it offers a more nuanced tourist experience with numerous en route visitor attractions and stopping opportunities such as Cheviot and the Waipara wine region. In conjunction with SH70 it also offers the opportunity of re-establishing the Alpine Pacific triangle, which in the past was commonly undertaken by Christchurch-based visitors as a day trip.

### SH1 (north) in/out): Triangle: throughput

We understand that re-opening of SH1 to the north will be some time off. This would restore the roading network to its pre-earthquake status and allow for day visits from the north as well as previous short day stop visits.

The first and second immediate access options have been subject to network analysis and are reported below.

## Network Analysis

This analysis was carried out to determine potential stopping areas for tourists going to and from Kaikoura following the November earthquakes.

The analysis was informed by:

- Previous work on tourist itineraries. While these are informed from a detailed analysis of West Coast visitors (2000 /1 sample data), (and subject to the specific destination attributed found there) they represent the most in-depth data on visitor movements in New Zealand. These indicate the average drive time between stops (of greater than 15 minutes) to be 1.5 – 2.0 hours with a median time of 1:50.
- Calibrated with Google Map analytics and AATRAVEL calculators which report average destination to destination drive times. These have generated the base velocity of 75 km per hour on clear State Highways.
- Referenced to the NZTA (2016) visitor publication *Driving in New Zealand* which makes strong reference to fatigue and the need to stop every two hours.

Existing digital road data were used to construct a network dataset for modelling consisting primarily of the State Highway system linking Christchurch to Nelson and Picton. The network also included the Waiau-Kaikoura inland route SH70. As NZTA reports it likely that SH1 south of Kaikoura will be open relatively soon, both the Inland Route SH70 to Kaikoura and SH1 are included in this analysis. To calculate travel times, assumptions were made regarding the average speed on these roads. With the exception of the Inland Route, average speeds were assumed to be 75 kph while 50 kph was adopted on the Inland Route. The 50kph was calibrated by GPS for two of the research team's travel on this road on Tuesday 6<sup>th</sup> December. This metric is based on average moving times and convoy stops of one hour cumulative were

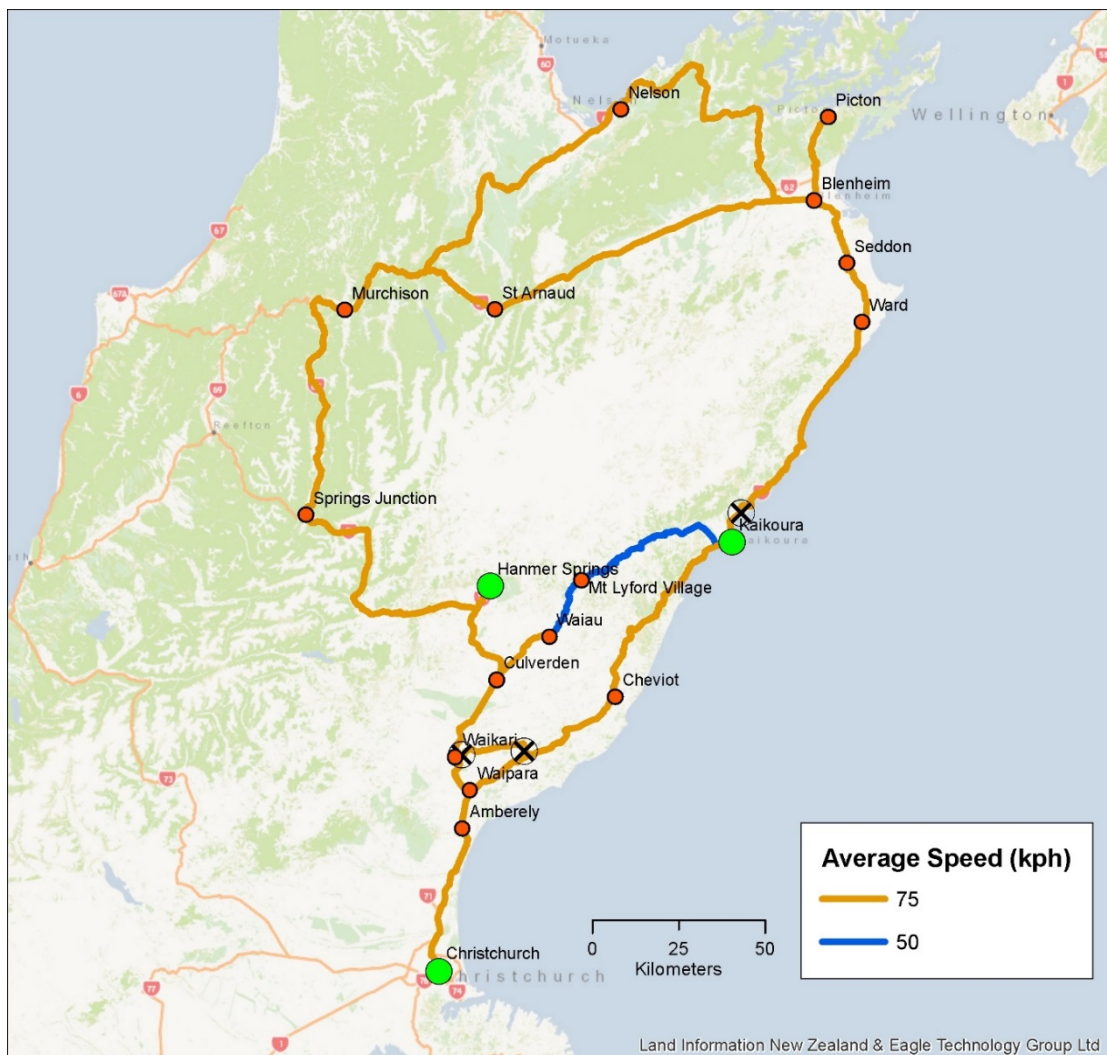
recorded at that time for both north and south based trips. It is assumed these will reduce significantly as the road becomes open to unrestricted travel.

The mapped simulations below can be easily rerun should more reliable figures become available.

The regional road network is shown below in Figure 2 with the currently restricted access on SH70 highlighted in blue. Three route origins are considered in the analysis: Christchurch, Hanmer Springs and Kaikoura.

The network analysis allows travel times to be modelled along the road network. To identify potential stopping areas, three travel times were considered: 1.5 hours, 2 hours and 2.5 hours. This allows some flexibility in fitting stopping areas into existing infrastructure. In the maps below, the distances achievable within the time frames are shown with a particular emphasis on the areas reached within 1.5 – 2.5 hours

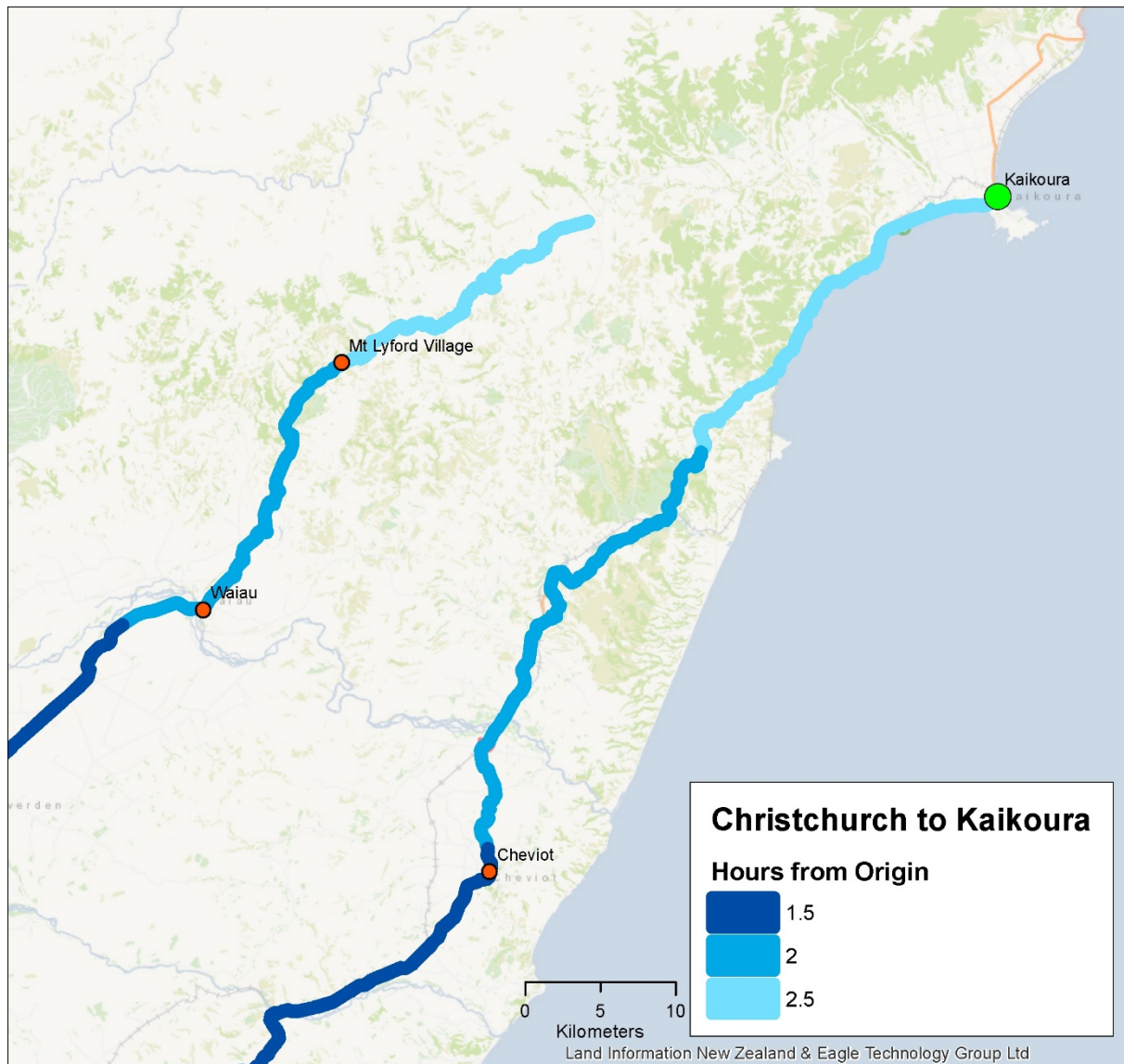
Figure 4 Road network overlaid with average speeds



## Christchurch to Kaikoura

Figure 5 below shows two access routes: the Inland Route which uses SH1 to the SH7 turnoff and accessing Kaikoura via the Inland Route at Waiau and direct access via SH1.

Figure 5 Approaches to Kaikoura from the South

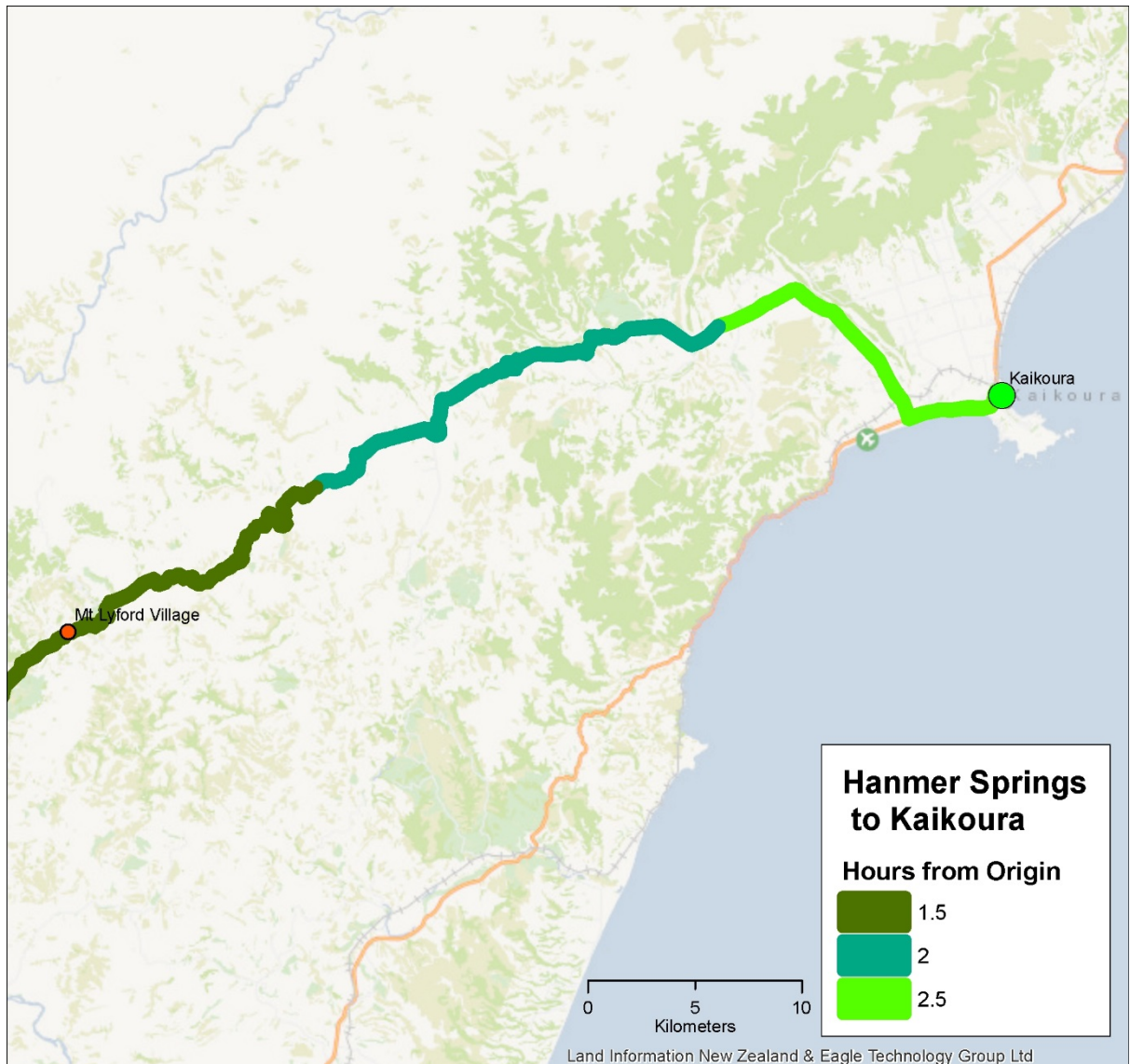


Along the Inland Route, travellers reach the 1.5 hour mark approximately 5 km before Waiau while Mt Lyford village can be reached roughly 2 hours from Christchurch. This would suggest rest stops or activities at either Waiau or Mt Lyford to intercept those travelling to Kaikoura. Travellers could be expected to reach this area between 10.00 and 12.00 (assuming an early departure from Christchurch). Via SH1, Cheviot is the primary existing stop point before reaching Kaikoura with travellers arriving approximately 1.5 hours after departure from Christchurch. With slower onward travel anticipated for the foreseeable future Cheviot needs to be identified more clearly as an appropriate refreshment stop.

## Hanmer Springs to Kaikoura

Kaikoura can be reached from Hanmer Spring within 2.5 hours. As shown below (Figure 4), Mt Lyford village is reached after approximately one hour, providing an obvious opportunity for rest stops or activities. . After Mt Lyford, there is little existing infrastructure, such as lay-bys, safe stopping areas, available before arriving in Kaikoura.

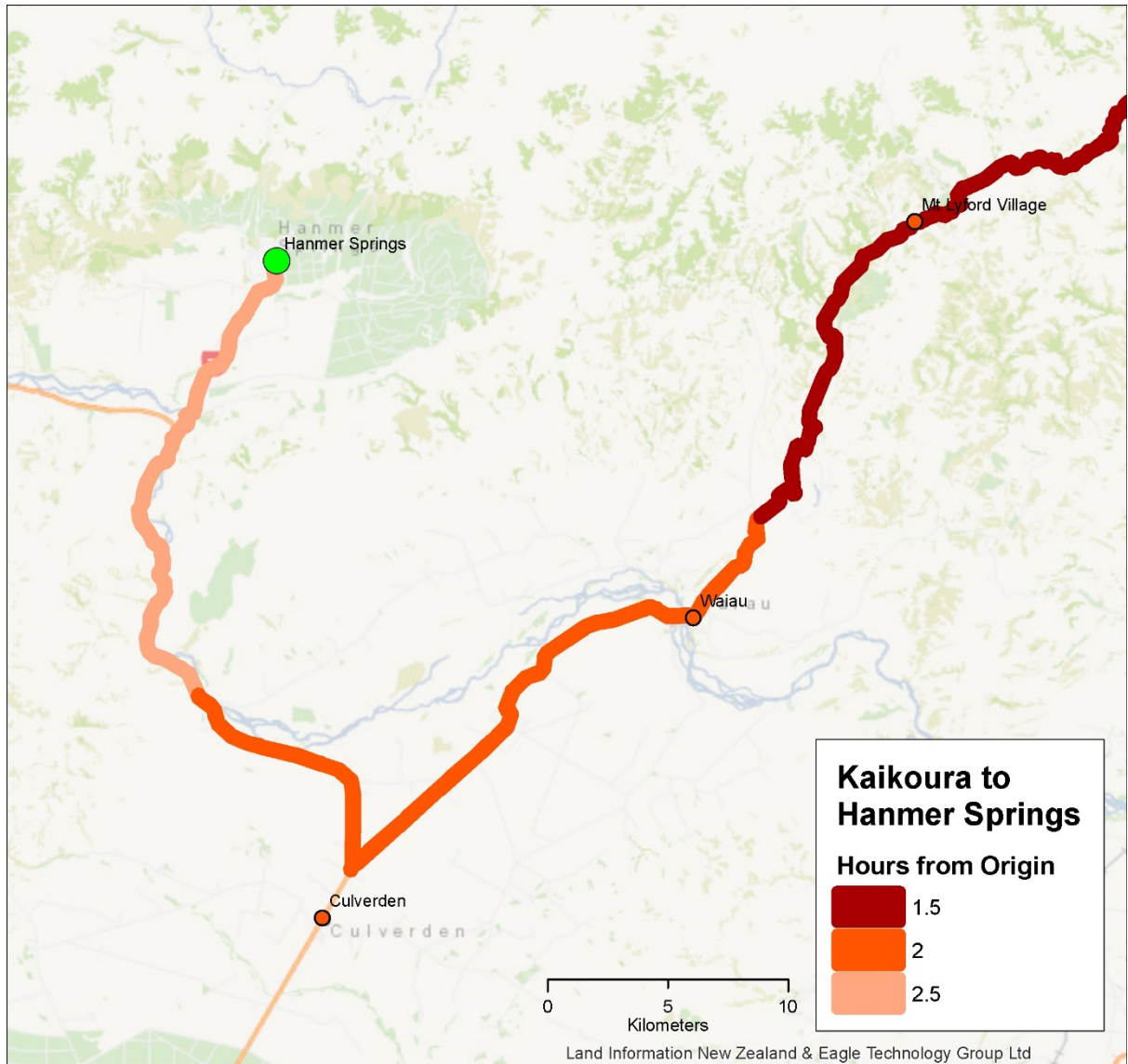
Figure 6 Kaikoura from the west: SH70 from Culverden and Hanmer



## Kaikoura to Hanmer Springs – Inland Route

The route from Kaikoura to Hanmer Springs follows the Inland Route and SH7 (Figure 5). Mt Lyford Village can be reached approximately an hour after departing Kaikoura, Waiau and Culverden within 2 hours and Hanmer Springs within 2.5 hours.

Figure 7 Kaikoura to Hanmer Springs

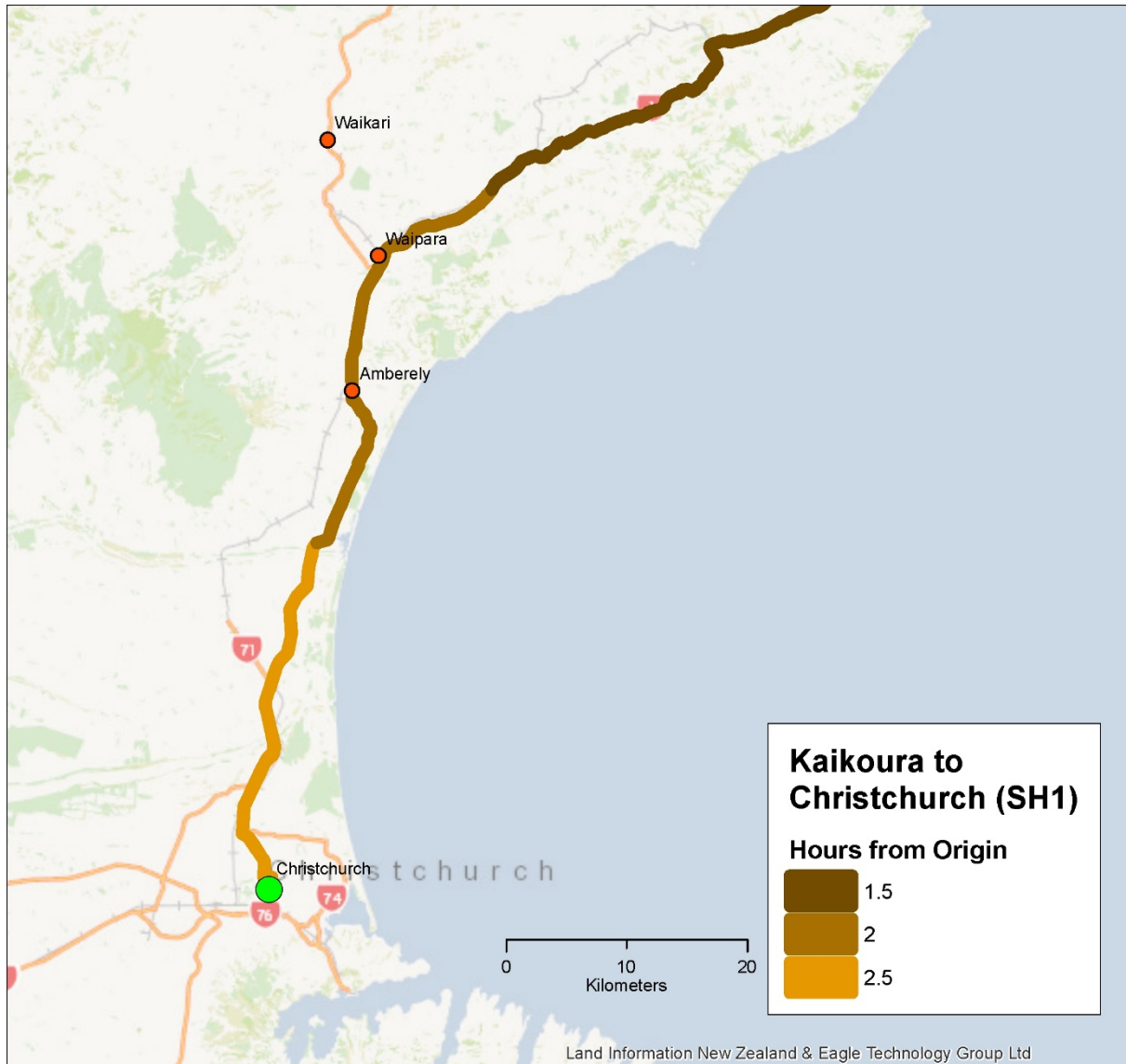


The Waiau plains and smaller settlements again emerge as useful resting / stopping areas.

## Kaikoura to Christchurch (SH1)

NZTA report solid progress on clearing SH1 south of Kaikoura, suggesting this route may be open sooner than expected. Once the road is reopened, expected travel times on this route are shown in Figure 6. The SH70 northward journey is depicted below.

Figure 8 Kaikoura to Christchurch (SH1)

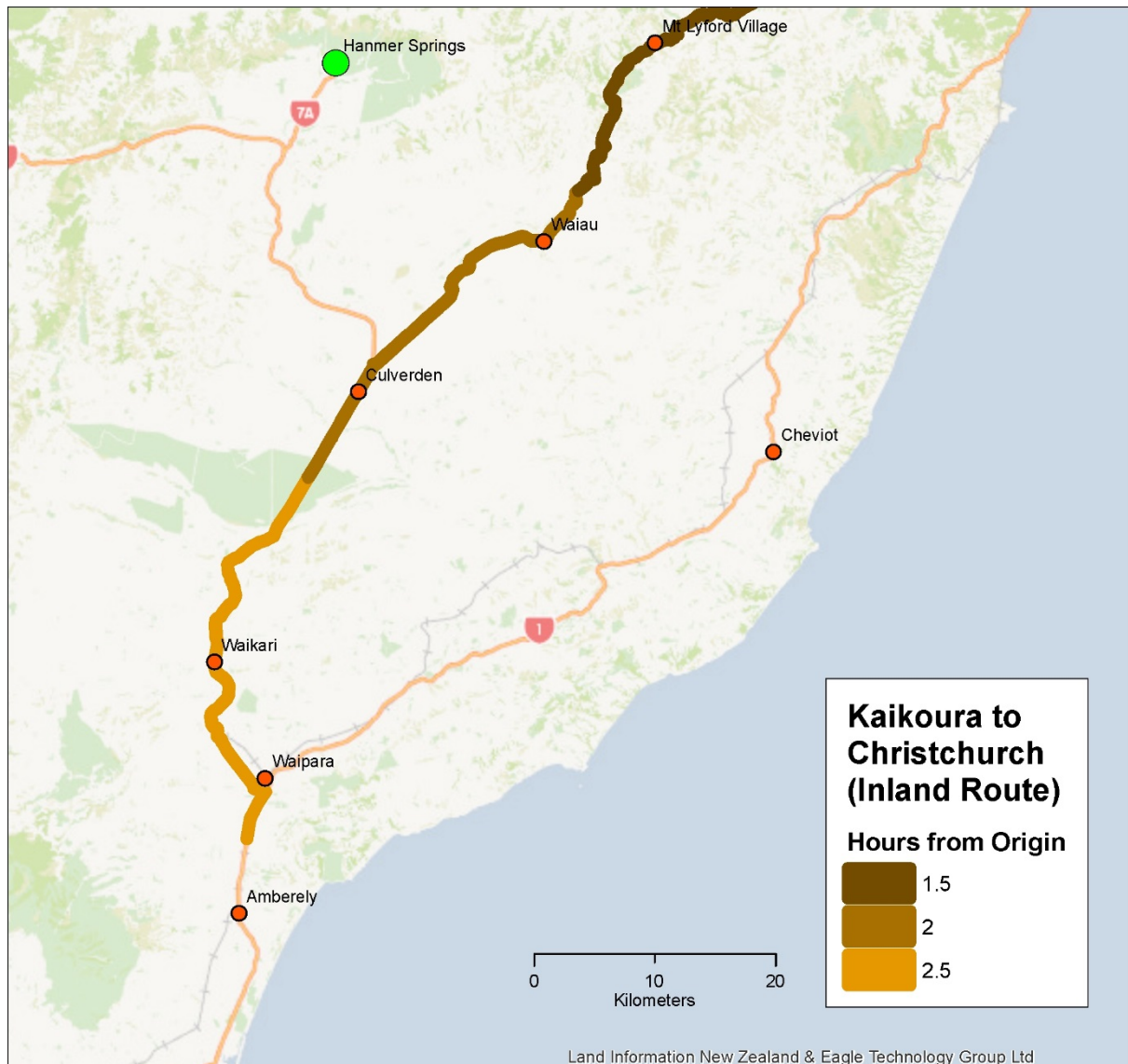


Both Waipara and Amberley are achievable within 2 hours from Kaikoura and represent opportunities to highlight the wineries and other stops within that area. South of Amberley there are multiple stops available (e.g. Woodend and Kaiapoi).

## Kaikoura to Christchurch – Inland Route

Christchurch can also be accessed via the Inland Route/SH7/SH1 (Figure 7). While longer, and a more difficult road to navigate, this route may appeal to those travellers wishing to get a more direct sense of the earthquake impacts on inland hill country as well as impacts along the coastal road (Fig 6).

Figure 9 Kaikoura to Christchurch (Inland Route)



Mt Lyford Village can be reached in approximately an hour while Waiau and Culverden are within two hours. Waikari and Waipara (wine district) are closer to the 2.5 hour mark and may be less attractive stops for travellers. Waipara offers a promising opportunity for travellers on either route south (provided there is a designated, non-drinking driver).



## Summary of Network Analysis

For travellers to and from Kaikoura along the Inland Route, Waiau (and Rotherham or Mt Lyford Village) appear to offer opportunities to provide for rest stops, visitor information and interpretation, and activities in both directions. The route is currently constrained by significant earthquake repairs and as an 'in-out' tourist route is constrained. It could be enhanced by stopping / refreshment opportunities (e.g., Waiau, Rotherham, Culverden), and by earthquake interpretation and lay-bys that seek to enhance and shape the tourist experience. These ideas are elaborated in part two of this report.

SH1 has numerous existing stops which had evolved to support long term patterns of visitor and commercial travel. The location of Waipara gives it a potential advantage for Christchurch bound travellers on using either the Inland Route or SH1.

Although travel times via either route are likely to be slower in the immediate future, and during the period when safe access is secured, a 6 hour return drive from Christchurch and marginally longer Alpine Pacific triangle based out of either Christchurch or Hanmer re-emerge as (long day) touring options especially when stops and activities are taken into account.

This analysis is based on assumed average speeds for the roads modelled; changes in these based on NZTA estimates or monitored travel may alter these results. It is also fair to assume additional delays e.g. one-lane sections and on-going road maintenance to restore access fully, and travel times are initially likely to be slower than those reporting here.

### Air and sea access

There is limited air access with a number of fixed wing and helicopter services currently using the Kaikoura airstrip 8km to the south of the township. After the earthquake, Sounds Air started a new air service on the Blenheim-Kaikoura-Christchurch route for a short time period. At the time of writing, they are still providing air service on the Blenheim-Kaikoura route. The fixed wing options on smaller STOL aircraft are increasingly becoming available to residents and visitors.

Kaikoura has received scheduled visits in December 2016 and January 2017 by passengers ferried from the small cruise ship Caledonian Sky. Of the three further visits originally scheduled for this summer, one call by another small ship is expected to go ahead but the two visits by larger ships will not proceed due to uncertainty over access to landing areas for the tenders that the ships use to carry passengers to shore.

### Road access: constraints and risks

A key issue is providing safe and reliable road access opportunities and means to communicate these to visitors. At the time of writing access is constrained by:

- Permitted travel (currently focussed on residents and emergency workers). NZTA states its goal of restoring single-lane access to residents and essential services by mid-December. <http://nzta.govt.nz/traffic-and-travel-information/travel-information-for-canterbury-and-marlborough-regions>

- Permitting requires pre-registration and then allocation of space within a convoy which is only confirmed a few hours prior to travel.

Visitor travel will not be re-established until unrestricted passage is permitted.

Temporary constraints include

#### Operating hours

Initially the road may be open only during day-light hours for heavily impacted sections of SH70 and SH1 south of Kaikoura.

#### One way sections

These can add delays into journeys

#### Road repair delays

It is assumed that considerable long term work will be required to return both SH70 and SH1 back to safe operating standards.

### **Ongoing risks / Future closures**

#### **Weather**

At the present the road is checked one hour prior to convoys and is being shut in the event of rain events. Future severe rain events may require roading authorities to close the road, although it is safe to assume these risks will diminish over time as repairs proceed.

#### **Aftershocks**

Earthquakes are followed by a sequence of aftershocks. Given the tenuous nature of current access, aftershocks present a risk to unstable hillsides by triggering rockfall and debris slides, which pose a significant risk to road users.

#### **Both of these impact safety management and traffic flow management.**

The mapping exercises above are based on slow but continuous driving. In the initial stages of road opening there is a high probability of delays, by both road repair activities and supply of materials for rebuild activities. Accidents caused by unusual road and access conditions (e.g. one way sections) are also an additional risk at the present which could add further (short-term) delays. Negative media focussed on roading issues and delays may continue to slow the recovery of tourist numbers back into the region. NZTA has reported an increased probability of road accidents of 240% on SH7 / 65 / 63 currently identified as the most direct route available between Christchurch and Blenheim.

## **Kaikoura tourist demand**

This section describes pre-earthquake tourist demand in Kaikoura and identifies visitor categories drawn from past research in Kaikoura (Simmons, Horn and Fairweather, 1998) and informed by broader knowledge of the visitor mix that might be expected to be encountered in a destination such as Kaikoura.

Kaikoura visitor research undertaken in the late 1990s (Simmons et al., 1998) identified three visitor types:

- Short stop visitors (43% of visitors, 75% domestic) stopping for fewer than two hours;
- Day visitors (16% of visitors, 59% international) stopping for more than two hours but not staying overnight;
- Overnight visitors (41% of visitors, 75% international) with an average length of stay of 1.8 nights.

While these data are almost 20 years old we are informed the basic patterns of visitation remain the same – but significantly increased in volume.

### **International visitors**

The majority of visitor data collected in recent years relates to international visitors only. While international visitors most likely continue to visit in the three ways described above, data collected via the International Visitor Survey (IVS) and Commercial Accommodation Monitor (CAM) does not include short stay visitors and only partially represent day visitors. Further, while the CAM reports both international and domestic guest nights, it misses those visitors staying in smaller accommodation premises (which are not required to collect guest data) and in a variety of non-commercial accommodation premises, such as camping sites, Airbnb and holiday homes. As a result, we conclude the existing data on day visitation significantly underestimates the current tourist activity in Kaikoura.

### **Domestic visitors**

One group that is often missed across multiple data collection measures are the holiday home visitors who are often habitual visitors to a destination. The number of unoccupied dwellings in a location at Census night can be used as a proxy to give an indication of holiday home prevalence. At the 2013 Census, for example, there were 939 occupied dwellings and 387 unoccupied dwellings in Kaikoura township and 1,584 occupied dwellings and 573 unoccupied dwellings in Kaikoura District as a whole. These unoccupied dwellings represent 41% and 36% of Kaikoura dwellings, respectively and suggest a high level of holiday home ownership. Holiday home visitors include those visiting their own holiday homes, those visiting holiday homes owned by friends and family members and visitors renting holiday homes (Book a Bach, Airbnb). The majority of Kaikoura holiday home owners are likely to be resident in the Canterbury area, particularly urban Christchurch. It would be expected that holiday home visitation will continue post-earthquake and the potential limitation of road access to the south (i.e., via SH1 and SH70) will not change visit patterns substantially.

Another group of habitual domestic visitors are those who regularly stay (in caravans or camping) at the various commercial campgrounds and coastal camping areas located along the Kaikoura coast.

## Visitor data

The available tourism datasets do not normally present data at the Regional Tourism Organisation (RTO) area unit level represented by Kaikoura. International Visitor Survey (IVS) data, for example, uses a combined North Canterbury area (which represents both Kaikoura and Hurunui). Some data are, however, available at Territorial Local Authority (TLA) area level within which the Kaikoura District can be isolated. As a consequence, some of the data presented in this section were specifically sourced from Statistics NZ and MBIE post-earthquake. Because Kaikoura RTO is represented by a relatively small TLA area, high levels of error may be associated with the data.

The data presented below include:

- Monthly Regional Tourism Estimates (MRTE) – Destination Kaikoura RTO
- Commercial Accommodation Monitor (CAM) – Kaikoura District (Territorial Local Authority)
- International Visitor Survey (IVS) – Kaikoura District

These data are also limited because they do not represent each of the categories of visitor described above. The IVS collects data relating to visitor numbers and activity participation for international visitors only. Monthly Regional Tourism Estimate (MRTE) data includes spending by both international and domestic visitors. While CAM data are also reported for both international and domestic visitors, the Kaikoura-specific data set was only available for total guest nights (i.e., the data were not differentiated for international and domestic tourists).

## Visitor numbers and spend

For the year ended March 2016, there were 136,445 international visitors to Kaikoura. The average number of international visitors (over the past five years) to Kaikoura was 125,698 per year, generating an average of 260,086 visitor nights per year. Figure 9 shows spend by visitor origin of these international visitors (for year ended September 2016) and provides some indication of where the majority of international visitors to Kaikoura are from. No domestic visitor number data are available.

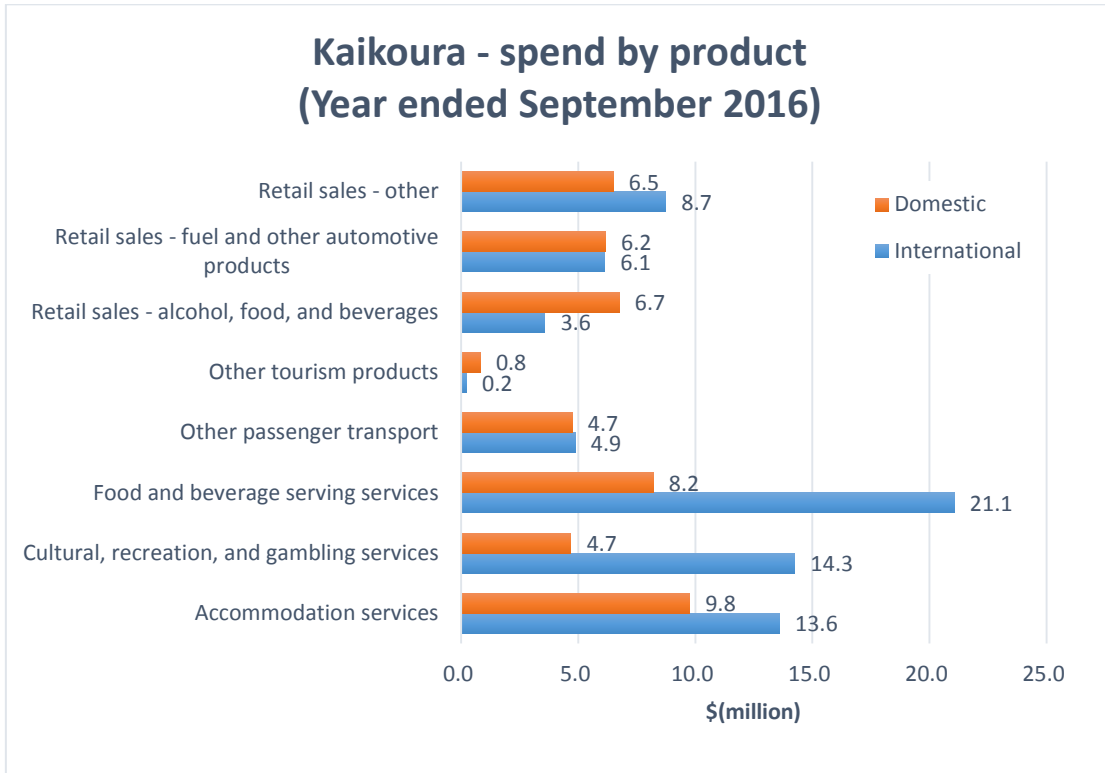
For the year ended September 2016, Regional Tourism Estimate (RTE) data shows that total visitor spend in Kaikoura was \$120.1 million of which \$72.5 million (60.4%) was by international visitors and \$47.6 million (39.6%) by domestic visitors. These show some variability over the past 8 years with domestic expenditure ranging from 40% to 57% of total visitor spend with an average of 48%.

Figure 10 shows the variation in spend by product for international and domestic visitors to Kaikoura. As might be expected, international visitors outspend domestic in respect of food and beverage serving services, cultural, recreation and gambling services (which includes attractions and activities), accommodation and some retail sales. Domestic spending is higher on alcohol, food and beverage retail sales and fuel and other automotive products and probably reflects high levels of recreational boat ownership by habitual domestic visitors.

Figure 10 Kaikoura visitor spend by international visitor origin (Year ended September 2016)



Figure 11 Kaikoura spend by product (Year ended September 2016)



## Guest nights

Annual guest nights (commercial accommodation) in the Kaikoura District TLA are shown in Figure 12, with Figure 13 showing the number of guest nights for the three busiest and three quietest months and provides an indication of the strong seasonality patterns of visitation. As noted above, however, these data do not include those staying in more informal accommodation premises or in private holiday homes, and are a weak indicator of domestic travel activity.

Figure 12 Annual guest nights – Kaikoura District (Year ended July 2008-2016)

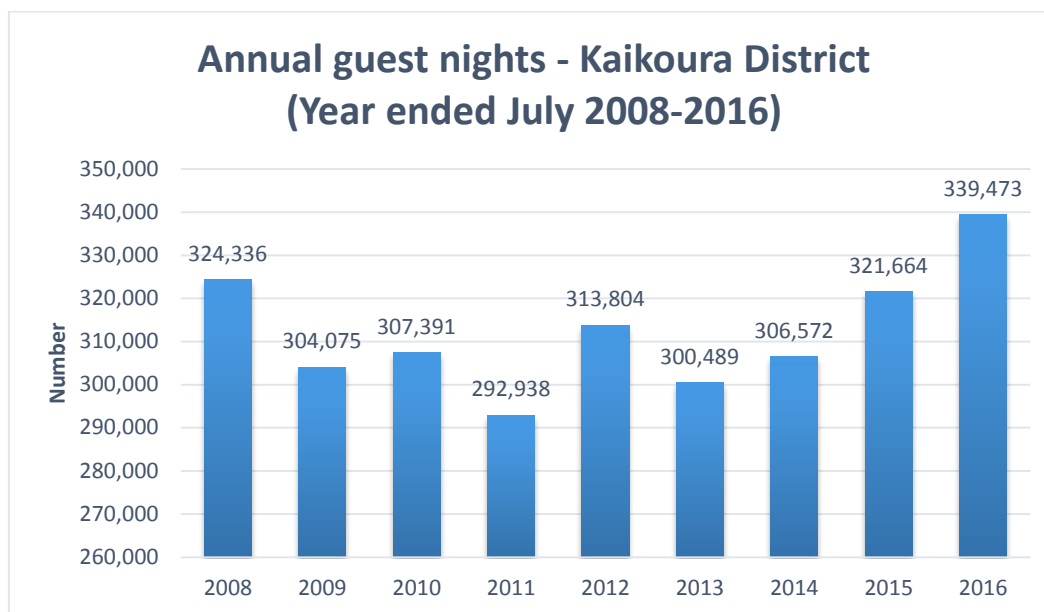
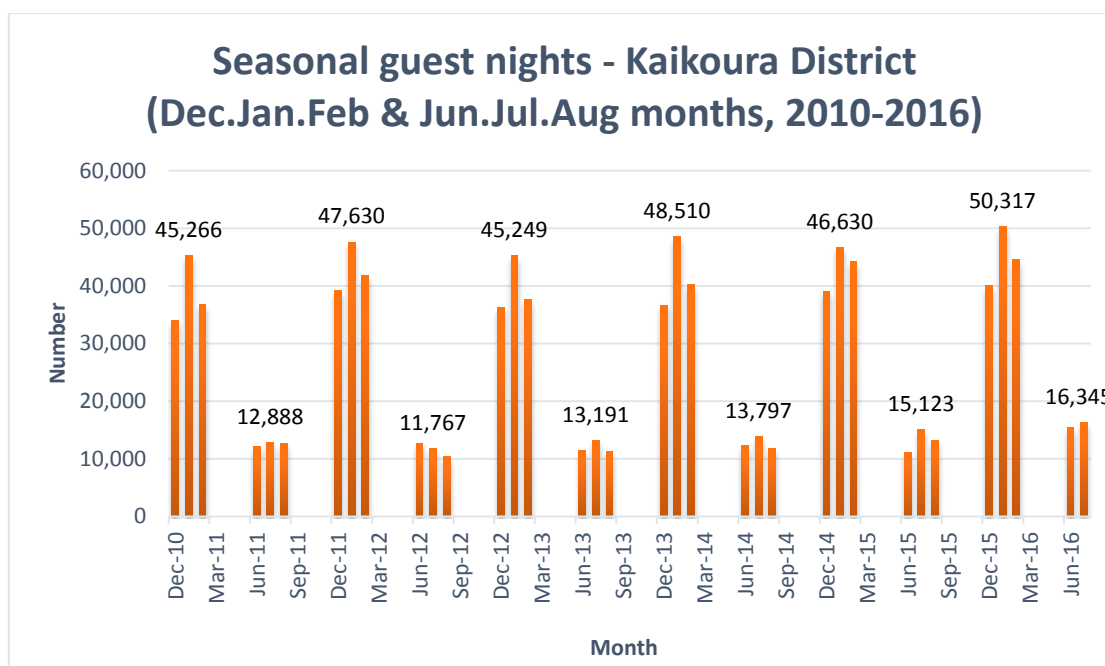
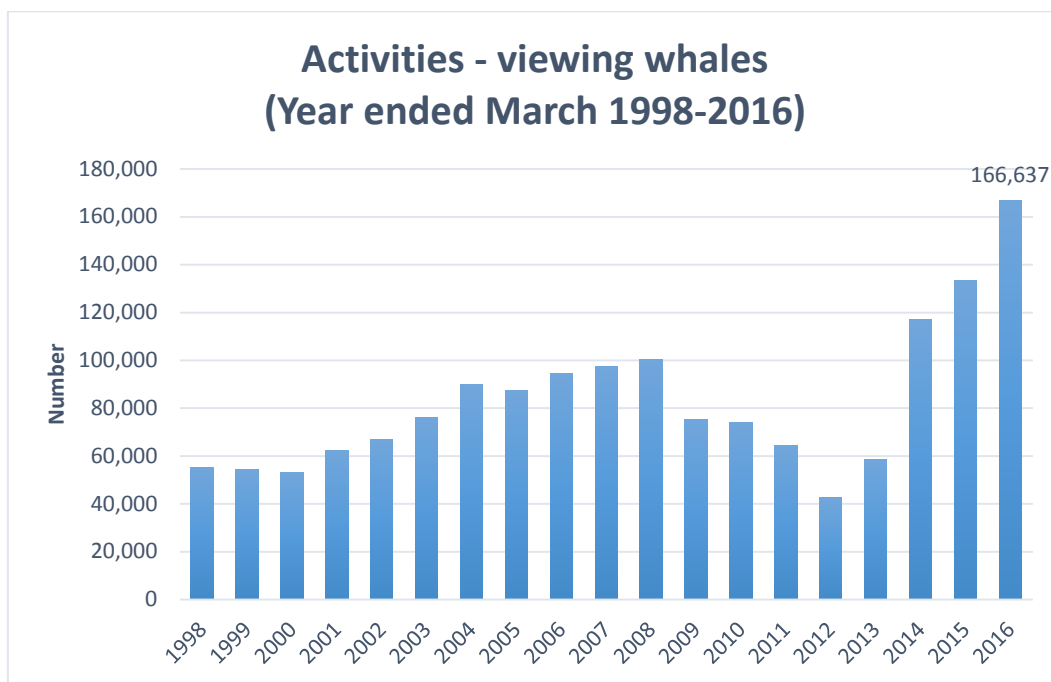


Figure 13 Seasonal guest nights – Kaikoura District (2010-2016)



While the IVS also collects data pertaining to tourist activity the only category of activity reported that is able to be isolated to Kaikoura are 'Whales'. Figure 12 shows that 166,637 international visitors 'viewed whales in their natural habitat' during their New Zealand visit in the year ended March 2016. Some caution is advised with respect to the data shown in Figure 14 as there was a change in the way activities were measured in 2013.

Figure 14 Activities – viewing whales (Year ended March 1998-2016)



### GeoZone visitor flow data

As discussed above existing data generated by independent campervan renters has been able to be analysed for the recent past. Data from the past year indicate that:

- 13.5 % of campervan travellers between Picton and Christchurch stop for more than two hours in Kaikoura.
- That campervanners overnight in Kaikoura in roughly the same propensity as they do in Picton (but half the rate of Blenheim, and a tenth of the rate of Christchurch)
- Kaikoura generated twice the number of visits than did Akaroa, which are both significantly higher than (campervan driven) visits to Milford

### Assessing 'new' tourism demand

There is an expectation that tourist demand may change considerably from that described above as a result of ongoing and unresolved access issues. At the time of writing few visitors have been able access Kaikoura although there have been one media report of international visitors traveling in via the SH70 convoy and it is known that holiday home owners have also been able to gain access in order to inspect their Kaikoura properties.

In addition to the compromised road access the earthquake also affected use of the marina at South Bay, especially by larger vessels such as those operated by Whale Watch Kaikoura and Encounter Kaikoura. While Destination Kaikoura (Kaikoura Information and Tourism Inc: KITI) advised that 53% of the 45 activity/attraction operators they have listed (7<sup>th</sup> December) were open for business these did not include the aforementioned larger operators. These data are also regularly updated.

A significant medium term question is what might tourism demand look like in the absence of access to marine mammal watching? At the time of writing the projected recovery of access to the South Bay marina remains unknown.

Kaikoura has been both an overnight destination and substantial stopping place. Careful repositioning of land and shore based tourism opportunities will need to be developed and promoted.

From the above patterns the pathway to short term recovery appears to be via domestic visitors, although rapidly improving access will pave the way for more adventurous international visitors.



## Part Two: Kaikoura recovery framework

We now turn our attention to the supply side considerations identified in Fig 1 p.3. Data for this section was initially collated during a site visit on Tuesday 6<sup>th</sup> and re-assessed by telephone call with the tourism convenor - recovery management on Tuesday 13<sup>th</sup> December.

### Destination attributes

In keeping with CDEM 2005 and international tourism recovery literature we have taken the view that tourist visitation and activity can best fit with community recovery once community infrastructure and the capacity to host are re-established. Our report follows this logic.

In Kaikoura there is mixed progress in re-establishing core components of community infrastructure. With the earthquakes occurring on the cusp of what promises to be the largest tourism season in New Zealand considerable local and national resources have been deployed to re-establishing both road access and local infrastructure elements. These are changing daily, and as with the access and visitation sections above, are subject to potential future disruptions especially aftershock and weather events.

### Basic services

#### Community infrastructure

Community infrastructure is essentially intact, but at the time of writing fragile in places.

Power distribution is reported as the most consistent and resilient of infrastructure components.

Communication networks (telephone, cell coverage, and internet services) are operational, but are currently being redirected via northern networks. Difficulties are being encountered in re-establishing an (overland) fibre optic cable to the south which indicate some fragility in the event of future significant disruptions.

The sewerage system is reported as 'coping' and improving daily, but may not be able to cope with an influx of visitors in the short term<sup>1</sup>.

The water reticulation system is functional but with some quite significant restrictions that impact on community life and at the time of writing will be unable to cope with additional visitor demand. Water is currently classified as not potable (safe for drinking) and requires boiling for all human consumption. This has direct flow on effects for food preparation (including meat packaging and bakeries at the supermarket) and dishwashing and food preparations at local cafes and hospitality outlets. Residents are restricted to showering every second day and strong water conservation measures are in place. While water infrastructure is a key priority for the District Council the lack of reticulated potable water is a limiting factor on the tourism sector at the present. Close coordination between the tourism recovery group, Council (now bi-weekly updates), roading / access infrastructure and tourism promotion and marketing is essential as the destination slowly reopens to visitation.

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<sup>1</sup> NZTA are currently (13th December) the possibility of having one way access vis SH1 south from 20<sup>th</sup> December.

## **Supply chains / services**

With reasonably consistent access now provided via SH70 immediate supply chains and consumables have reasonable security.

Dry and perishable foods, medicines and other essential supplies now have a supply line across SH70, but are subject to interruption, as with the wet weather event of 12<sup>th</sup> December. Fuel supplies are also provided by tanker along the same route. These supply lines will become more resilient with the re-opening of restricted and then open one-way access from the south (SH1). This route is estimated for opening on or about the 23<sup>rd</sup> December.

A consequence of the weak water supply is that food preparation is not able to be safely undertaken within the Kaikoura community and that the supermarket and other food suppliers are having to bring in fully prepared foods until repairs are made and safe standards re-secured.

Laundry services are also impacted by both access and water supply restrictions. At the present laundry services are mainly supplied overland from Nelson but a couple of businesses are reported to draw on Christchurch suppliers. We have been advised that if Kaikoura were to get an influx of visitors staying in commercial accommodation this would definitely put pressure on the ability to supply adequate linen. There is some laundry stored in Kaikoura but this could only meet short term (2 – 3 day demand).

## **Visitor Services**

As indicated in the framework (Fig 1, p 3) visitor services are seen as a step beyond essential community services which together represent a destination's 'capacity to host' visitors.

## **Business needs**

### **Staffing**

Labour challenges are most difficult because of the lack of current and uncertain short and medium term visitor demand across the summer.

As anticipated from experience following the Canterbury Earthquake Sequence retaining casual labour is emerging as a challenge. While the government's business assistance programme has been extended from 8 to 16 weeks many non-local workers are either choosing to leave town at the present or being 'let go' from businesses. The extent of this situation is not known or quantified.

The two largest operators, Whale Watch and Dolphin Encounter, both report approximately 75 % of staff as locals, but as noted above may be only partially operational across the peak summer period. Tourism dependent hospitality and accommodation businesses are seen as more exposed to the loss of casual summer staff, especially if demand were to increase rapidly.

This is a component of the framework that will need to be regularly monitored and adapted as visitor flows recommence.

## Activities

Land and shore based activities (walking, kayaking, shopping and hospitality) are largely functional, albeit with different specific location based constraints. Some new activities options have emerged such as the 'water vent', and geographical intrigue brought about by the peninsula's significant land upthrust. This could be well evidenced and interpreted via a guided peninsula walk (but at the present is constrained by the same issues as have occurred historically – i.e. landowner resistance).

## Marina

Ocean based activities (whale and dolphin watching in particular) are the key major attractions for Kaikoura. Both these operators report in excess of 80% international visitor participation in their activities. Thus, the current inoperability of the south Bay Marina is a significant business constraint for them. While remedial work is enabled by the Hurunui/ Kaikoura Earthquakes Recovery Act (currently awaiting Royal Assent) there is no identified timeline for recovery with the tourism recovery group estimating a 3 – 4 month programme of dredging recovery.

Short term access may be able to be provided by a temporary channel, but ongoing works are anticipated to restrict recreational access. An alternate launching site for recreational visitors is being discussed at the peninsula's northern town / pier site, but this too will involve remedial works<sup>2</sup>.

As well as being identified as a tourism asset the marina also provides the basis for part of the District's fisheries industry.

## Hospitality

The majority of hospitality businesses are reported as operational and able to secure supplies. Security of water supply is a major limiting factor for all human facing operations: baking, dish-washing, cleaning.

There is some visible damage to street frontages along the northern end of the lower town (the Esplanade) with less visible damage along the northern SH1 access (Beach Rd). Information from the tourism recovery group indicates that additional closures may become apparent as the need for deconstruction /rebuilding activities impact on adjacent buildings.

At the time of writing three bars / hotels are closed and scheduled for demolition. These are the Adelphi (a significant hotel on the central esplanade 'CBD') the Commercial Hotel (south end of the CBD) and the Sonic Bar adjacent to the visitor's centre. Other bars remain open and able to meet resident and visitor demand.

## Retail

The retail sector has not reported any operational constraints, and has been part of a Facebook initiative "shop Kaikoura" as an innovation to move Christmas and other stock.  
<https://www.facebook.com/search/top/?q=shop%20kaikoura>

Banking services were originally restricted in the immediate aftermath of the earthquakes but have been re-established.

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<sup>2</sup> On 15th December the Government announced \$5mn funding to commence work on the marina.

## Accommodation

KITI reports that while there are 65% of visitor accommodation rooms are operational. More recent information indicates that while there is visitor capacity the influx of recovery / rebuild workers are currently taking up some of this capacity. Informal commentary indicates significant pressure on accommodating recovery and rebuild workers in second home rentals – some of which are commanding premium prices.

The RTO (KITI) is maintaining a spreadsheet of availability on a daily basis.

## Recommendations

The framework presented above has proved useful for initial rapid assessment in post-disaster tourism destinations. While framed around the Kaikoura earthquakes of November 2016 as a basic framework it has the capacity to be deployed elsewhere.

What are not described in the framework are the governance and management systems required to support recovery. These are well documented elsewhere in both the practical (see for example: <http://sustain.pata.org/sustainable-tourism-online/business-operations/planning/business-and-strategic-planning/risk-management-plan/>) and academic literature (Glaesser, 2006; Faulkner, 2001). Such frameworks and approaches have been tried and reported in New Zealand (Becken and Hughey; 2013, Hughey and Becken, 2014).

For the Kaikoura situation a governance and management has emerged, via the appointment of a recovery manager and establishment of a tourism recovery group. This latter group comprises by a senior staff member from each of the two larger marine tourism operators and CEO of KITI. These groups have formal linkages to the District Council with bi-weekly scheduled updates. From our two community-based interactions these are processes that work.

Assessment and recovery processes proceed across the framework (Fig 1, p 3) at different velocities and continued calibration of data and integration is required. These will aid in ensuring that the community's 'essential services' and 'capacity to host' are not overrun by untimely or unanticipated demand.

The key to recovery of the Kaikoura tourism sector is securing regular, safe road access.

Recovery was initially focused on securing road access (especially the inland SH70). Throughout the assessment process increasing attention has been focussed on the possibility of reopening SH1 to the south. A secure (open in daylight hours) route is now being discussed as a possibility prior to Christmas. Information on progress and projected timelines is updated daily via NZTA ([www.nzta.govt.nz/eq-travel](http://www.nzta.govt.nz/eq-travel)). Network analyses indicate potential day trip access both from SH70 and SH1 south. If these are both achieved the Alpine Pacific triangle route can be re-establishment. When verified against 'capacity to host' there appears to potential for the reestablishment of overnight visits. Establishing secure road access is the key constraint to recovery.

The community's capacity to host is hinged on securing safe (consistent, potable) operation of the town water supply. While this is a District Council priority in the interim the water supply is barely adequate to address residents' needs (e.g. boiling of drinking water, daily shower restrictions) and inadequate to address standards required in the hospitality sector. Clear understanding of this requirement should precede any attempts to re-advertise Kaikoura as 'open for visitation'.

In terms of economic recovery, the Kaikoura District has traditionally attracted a large number of visitors which can be grouped as: second home (and caravan) owners, domestic New Zealand and international travellers. These have been seen through a behaviour lens of “short stop”, “day” (where Kaikoura is the specific focal destination), and overnight visitors. In the short term difficult or restricted access appears to make the international visitor less amenable to visiting Kaikoura, not the least because the two large marine mammal operators have a strong focus on international visitors. For the present the domestic market provides a greater initial pathway to recovery.

Our experiences in, and reflections on, the Christchurch earthquake sequence (Simmons and Sleeman, 2012; Wilson, 2013; Lambert and Shadbolt, 2013; Smith *et al*, 2016) suggest Kaikoura will not go back to what it once was. Without immediate access to the marine mammals and compromised access to the marina, or through route between Christchurch and Picton, the destination will not have the “pulling power” that it has traditionally enjoyed. For the mid-term future until SH1 to the north is re-established Kaikoura will need to find its way as a standalone destination. To reframe the destination experience a unique opportunity exists to reframe the Kaikoura experience around earthquake geology and its effects on human and natural elements. To capitalise on this opportunity there appears to be a need to move quickly on programming and presenting such experiences as part of a pathway to re-enabling domestic tourists while international visitor bookings and flows can be re-established. For the present, boat based marine tourism activities are inoperable, and the timelines to partial or full operation of the commercial marina unknown. Land and shore based activities are operable and not known to have any restrictions, though these may vary in different locations. Furthermore, the extent of land-based changes on the land areas (marine platforms) and access corridors provide a unique opportunity to engage both international and locals visitors with New Zealand’s dynamic geography and with the human stories of settlement and adaptation<sup>3</sup>.

The points noted above, and reflected in the framework proposed, suggest the following recommendations:

- Continued close liaison between community and destination recovery that then informs marketing messages. It is essential the tourism development and activity support (and not overrun) community recovery.
- Initial market focus should be on the domestic day visit market (with accommodation capacity further explored to enable overnight tourist visits). The second home visitors group could be anticipated to lead to some immediate increase in demand for visitor services.
- Visitor routes be informed and re-presented in-conjunction with road openings (SH1, and SH70 to establish the Alpine Pacific Triangle
  - Novel ways be found (e.g. as in the taitokerau itineraries map) to present these as pdf portable itineraries ([http://www.taitokerau.co.nz/e\\_brochure.htm](http://www.taitokerau.co.nz/e_brochure.htm) )
- The visitor experience should be refocussed on an evolving landscape /adapting community.

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<sup>3</sup> A lesson learnt from the Christchurch earthquakes was that visitors were more interested in the human stories of earthquake experience and less on the physical (building) damage than first expected. Ceismic, and quake city (Canterbury museum) are a rich source of expertise that may be able to assist in bringing these forward as interpretative visitor experiences.

- In the short term visitors (both domestic and international) are likely to hold some interest in “what happened here?”
  - Itinerary analyses indicate stopping points (pop-up or container base’ displays / guided interpretation or the like) could be provided at
    - Oaro coast (physical elements: shoreline uplift, faults, biological adaptation)
    - Kaikoura Township (human elements: stories, adaptation... visitor opportunities). This could be housed in either the new Museum, visitor carpark or visitor centre noting that the latter is traditionally used more by international visitors.
    - Waiau– refreshment and information stop, as the villages here serve as a necessary rest stop into / out of the slow SH70 route.
  - A core consideration here is that residents are able to adapt to the ‘new normal<sup>4</sup>’ and particularly in the case of a small community are not drained further by what could be a constant stream of well-meaning, but repetitive enquiries.
- If this recommendation is followed an immediate start on interpretative narrative and preparations is needed prior to significant road openings across the summer. To be done well, this project is of such significance that it warrants additional resourcing.

Finally we note that this is an immediate recovery framework and assessment. The tourism sector has not been well engaged with various disaster / resilience initiatives that have developed in the recent past. A consistent theme that is emerging is a strong focus on ‘communities’ as the focal point of resilience to the suite of nature’s challenges. The authors are aware of interest in Kaikoura from the Resilience to Nature’s Challenges – national science challenge <https://resiliencechallenge.nz/> (for which work had just been commenced on studying Kaikoura as a laboratory in the rural research programme), the Natural Hazard Platform <https://www.naturalhazards.org.nz/> , QuakeCore <http://www.quakecore.nz/> , and the like.

We advocate the preparation of an ongoing visitor and sector monitoring – to examine what works, measure what happens to visitor flows that can inform preparations for and recovery from other similar events which may occur. Again the size and wellbeing of the destination community itself should be at the forefront of any such programme of activity.

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<sup>4</sup> A term that emerged from the Christchurch Earthquake experience.

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