

**Return of the Stampeders:  
Planning for Sustainable On-Shore Cruise Ship  
Excursions to Remote Destinations**

**by  
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B.Sc. (Environmental Management), University of Redlands, 2008

PROJECT SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF RESOURCE MANAGEMENT

in the  
School of Resource and Environmental Management  
Faculty of Environment

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Summer 2011**

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**Report No.:** 510  
**Title of Thesis:** Return of the Stampeders: Planning for Sustainable On-Shore Cruise Ship Excursions to Remote Destinations

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## **Abstract**

This study investigates the sustainability of an on-shore cruise ship excursion to the remote destination of Bennett, at the terminus of the Chilkoot Trail in northern British Columbia. A shore excursion assessment framework is developed using indicators selected from the literature on sustainable tourism. The framework is used to assess the social, environmental and economic impacts of the shore excursion to Bennett. The findings suggest that the shore excursion cannot be considered sustainable tourism because of substantial negative environmental and social impacts. The assessment provides evidence to support the adoption of a guided tour in Bennett, as well as increased stakeholder involvement in the planning and operation of the shore excursion. These recommendations may contribute to the sustainability of the shore excursion. The study demonstrates the usefulness of the assessment framework for generating site specific planning recommendations for sustainable on-shore cruise ship excursions.

**Keywords:** cruise ship tourism; sustainable tourism; assessment framework; the Chilkoot Trail; shore excursions

This work is dedicated to all those  
who live and work in Bennett.

## **Acknowledgements**

This work would not have been possible without the support of the following people and organizations. I would like to thank Wolfgang Haider for sending me up to the Yukon before he ever met me as well as all the valuable feedback he has provided; Ulrike Pröbstl and Murray Rutherford for their constructive comments; Parks Canada's Yukon Field Unit was tremendously supportive, and informed this research substantially. I would also like to thank all the participants of the surveys, who patiently stood in the wind, rain, and clouds of mosquitoes to complete the long survey. To the stakeholders involved in Bennett, I greatly appreciate your time and feedback during the interview process. Thank you to the WPYR management, conductors, train agents, and on-site staff for your input and help during the summers. To the Helms, thank you for letting me be your neighbour in Bennett.

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# Chapter 1. Arriving in Bennett

## 1.1. Introduction

This study investigates the sustainability of an on-shore cruise ship excursion to the remote destination of Bennett, at the terminus of the Chilkoot Trail in northern British Columbia. Bennett was once the site of a gold rush tent city, where in 1898, 20,000 gold rush stampeders built tents on the shores of Bennett Lake as they travelled north to the Klondike. Currently, very little remains in Bennett from the gold rush period other than scattered artefacts, a Presbyterian church, and a renovated train station. The only permanent residents of Bennett are Mrs. Edna Helm and Mr. Walter Helm, and they and their family have lived in and around Bennett continuously for generations. Most of Bennett is managed by Parks Canada as the final backcountry campground on the Chilkoot Trail National Historic Site of Canada. The remainder of Bennett is the private property of the White Pass and Yukon Route (WPYR) railway company.

I first visited Bennett in 2008 to administer a questionnaire on the Chilkoot Trail as part of a research partnership between Parks Canada and Simon Fraser University. This partnership was the continuation of 20 years of social science research on the visitors to the Chilkoot Trail National Historic Site of Canada (CTNHS). My project was the first study of the newest and largest growing visitor group to the trail, the cruise ship passengers arriving by train.

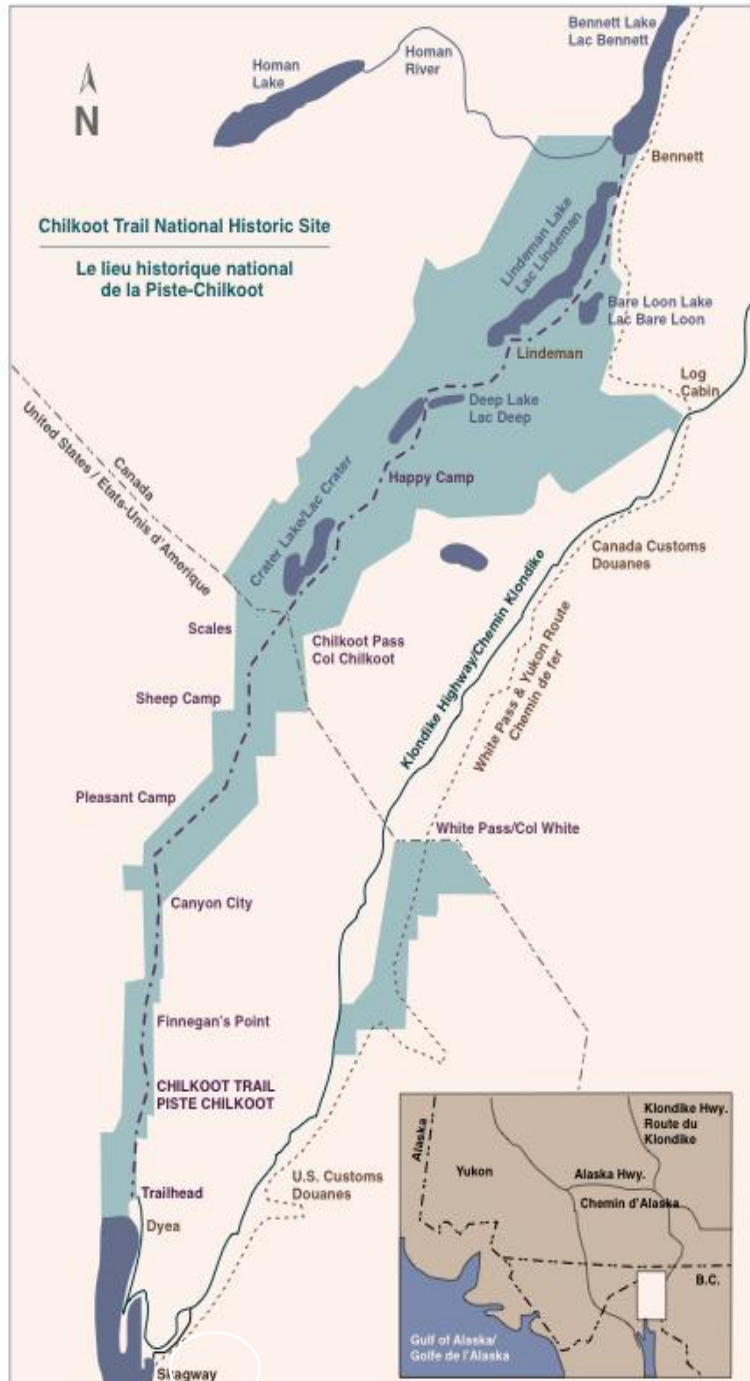
During that summer of 2008, a total of approximately 14,000 cruise ship passengers arrived in Bennett from shore excursions off of cruise ships. They arrived by train from either Skagway on the coast of Alaska, or from Carcross in the Yukon (Figure 1). Those who came via Skagway transferred from a cruise ship directly to the train, while those who came via Carcross concluded a two week overland bus tour through Alaska and the Yukon with a train ride through Bennett back to Skagway. The

development of this overland bus tour in 2007 was the catalyst for the White Pass and Yukon Route (WPYR) train company to transport cruise ship passengers to Bennett on a daily basis. As a result, visitation to Bennett increased dramatically.

This new type of visitor prompted Parks Canada, together with the recreation and tourism research group from Simon Fraser University, to conduct a study on the motivations, preferences, satisfaction and demographics of these new visitors who were arriving in Bennett in large numbers. I was hired to administer the questionnaire and to present Parks Canada with a report of the findings. However, after living in Bennett for three summers, as well as hiking the Chilkoot Trail and meeting the stakeholders, I saw that many of the negative impacts of tourist visitation to Bennett could be reduced, and that the benefits could possibly be augmented further. From this initial investigation into the day use visitors in Bennett, I developed this present research project in order to investigate and possibly ameliorate negative impacts of the shore excursion to Bennett.

The purpose of Chapter 1 is to describe the shore excursion to Bennett, identify the stakeholders involved in Bennett, and present the research questions and project goals that guide this research. Chapter 2 develops a broad assessment framework which draws indicators from the literature on sustainable tourism that would measure some of the impacts of shore excursions. Chapter 3 modifies that broad framework for use in Bennett and details the methodologies used to measure the indicators. Chapter 4 presents the results of the assessment in Bennett, including an evaluation of sustainability of the shore excursion to Bennett. Chapter 5 uses the results presented in Chapter 4 to develop site specific management actions, and Chapter 6 discusses the utility of the indicators used and the assessment framework itself.

Figure 1. Regional setting of study (Parks Canada Agency 2011)

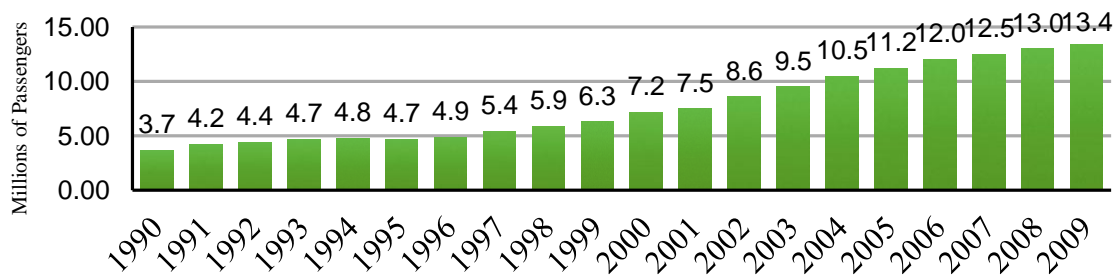


## 1.2. The Problem

Tourist visitation in Bennett increased from a few thousand people each summer to 14,000 people in 2008 as a direct result of the introduction of the shore excursion. Dozens of shore excursions are offered at each of the cruise ship ports in British Columbia and Alaska, and the impacts of these shore excursions have not been examined yet. Furthermore, many new shore excursions are developed continuously in the region as the cruise industry continues to attract new passengers and requires new attractions for repeat clients

Globally, the cruise tourism industry is growing (Douglas and Douglas 2004) as the total number of cruise ship passengers has risen from 3.7 million in 1990 to 13.35 million passengers in 2009 (Figure 2) (Cruise Lines International Association (CLIA 2010a). Consequently, the fleet of cruise ships is also growing; in the 1980's, 40 new ships were built, in the 1990s, nearly 80 ships were built, and by the end of 2009, over 100 new ships were introduced since 2000, with 15 new vessels under construction for 2011 (CLIA 2010a). These new ships carry even more passengers and staff, are more technologically advanced and can access destinations that were previously inaccessible (Johnson 2002).

**Figure 2. Number of cruise ship passengers worldwide (in millions)**



The demand for cruising is expected to increase further (CLIA 2010a). Cruise lines attempt to capture this increasing demand by developing new geographical markets, offering better products, and attracting new passengers (Johnson 2002). One way that the cruise lines can accomplish all these goals is to promote “unique” shore

excursions which “provide in-depth perspective and access to events and sights not otherwise available” (Holland America Line 2008). Shore excursions are organized tours based in and around the ports of call. Typically, a port of call offers several shore excursions, and cruise ship passengers can purchase shore excursions when they arrive in the port, on the cruise ship, or before they begin their cruise vacation. Most shore excursions take place within the port city (Jaakson 2004; Andriotis and Agiomirgianakis 2010) but some shore excursions take passengers far from the port city (Marquez and Eagles 2007; Stewart et. al, 2007; Scherrer et. al 2011).

The specific shore excursion that I am researching is Holland America Cruise Line’s shore excursion on the White Pass and Yukon Route (WPYR) railway to Bennett, British Columbia. The shore excursion can begin in Skagway, where cruise ship passengers board the WPYR train for a six hour train ride through the mountains. Halfway through the ride, the passengers stop in Bennett for lunch and have the opportunity to walk around the site. When they leave Bennett, the cruise ship passengers continue on the train until they reach Carcross, a small city in the Yukon. In order to return to the cruise ship, the passengers board busses in Carcross, and travel by highway back to Skagway in time to re-board their ships (Figure 1)

Alternately, cruise ship passengers can arrive in Bennett from Carcross instead of Skagway. Those who arrive in Bennett from Carcross have just completed a two week overland bus tour with Holland America Cruise Lines that began in Anchorage, Alaska. It was the development of this overland tour, and the subsequent popularity of the trip that allowed WPYR to increase their service to Bennett and Carcross

Many stakeholders were affected by the increased visitation to Bennett. Because Bennett is part of the CTNHS, Parks Canada is responsible for protecting the natural and cultural resources, managing the visitors to the park, and passing on commemorative messages of national significance (Parks Canada Agency 2010). The thousands of cruise ship passengers visiting the site were an unknown user demographic for Parks Canada, and the impacts of increased visitation on the site were unclear. At the time in 2008 and 2009, Parks Canada was updating their management



plan for the CTNHS and needed to set goals and strategies for managing these cruise ship passengers to ensure they were meeting their mandate.

The region surrounding Bennett is home to the Carcross Tagish First Nation, an inland group of indigenous people who used the passes between the mountains and ocean to conduct trade with the coastal Tlingit First Nation. One of these passes is now known as the Chilkoot Trail. The thousands of cruise ship passengers who are visiting Bennett on the WPYR train are the newest guests to the CTFN land, and a potential source of income, a new clientele for local shops, and a new market for cultural tourism development. At the time of writing, the Carcross Tagish First Nation (CTFN) are still settling their land claim with the Canadian government, and once settled, all management recommendations related to the shore excursion to Bennett will have to be conducted in consultation with CTFN.

Before the cruise ship passengers began to arrive in such great numbers, the primary visitors to Bennett were the Chilkoot Trail backcountry hikers. The hikers generally begin the hike on the coast in Skagway, where they “retrace” the steps of the gold rush stampeders over the Chilkoot Pass and conclude the three to four day hike in Bennett. Now, when they arrive in Bennett after several days of relative solitude, they are greeted in Bennett by crowds of cruise ship passengers. However, the increased train service due to the shore excursion also means improved train service for the hikers.

The small town of Carcross in the Yukon has also seen a dramatic rise in visitation as a result of the development of the shore excursion. Cruise ship passengers now wander the streets of Carcross as they wait to board, or depart from the WPYR train. The local shops and businesses in Carcross capture economic benefits from the cruise passenger’s expenditures, but might also experience the social impacts typical of tourist host interactions (Faulkner and Tideswell 1997). Furthermore, the Yukon Territorial Government has established a program called *Destination Carcross* to maximize economic benefits of tourism to Carcross, and the shore excursion to Bennett may be an integral part of the economic development of Carcross.

The cruise ship passengers themselves also must be considered, for if their expectations are not met, it is unlikely that they will return or recommend the shore excursion to future passengers, and the economic viability of the shore excursion itself might become doubtful. Finally, and certainly not least, the few residents of Bennett are very directly impacted by the surge of cruise ship passengers to their home.

An investigation of the impacts of the shore excursion to Bennett may improve the specific operation of that shore excursion, but should also provide insight into improving shore excursions throughout the region as well as furthering the academic investigation into the sustainability of shore excursions.

### **1.3. Research Questions and Project Goals**

The questions that will guide this study are:

- What are the economic, social, and environmental impacts of the on-shore cruise ship excursion in Bennett?
- Can the Bennett portion of the shore excursion be considered sustainable tourism?
- What are the strengths and weaknesses of using a sustainable tourism framework to propose site specific planning?

The answers to these research questions will lead to site-specific management recommendations that can be used by Parks Canada and WPYR to ensure that the natural and cultural resources in Bennett are protected, the cruise ship visitors receive a high quality visitor experience where accurate commemorative messages are conveyed, the operational needs of site staff are recognized, and the current residents (Helm family) and other recreational users are respected. These site specific recommendations may also be useful for the Carcross Tagish First Nation and Holland America Cruise Lines as they consider the future of the shore excursion to Bennett.

## **Chapter 2. Developing the Framework**

The purpose of this chapter is to develop a sustainable tourism assessment framework for shore excursions using indicators drawn from the literature about sustainable tourism and cruise tourism. This assessment framework will provide a basis on which to measure and evaluate the impacts that a shore excursion exerts on a destination. The ultimate goal of this exercise is to test if a sustainability framework can contribute to the destination planning process.

### **2.1. Sustainable Tourism**

The idea of sustainable tourism originates mainly from the World Commission on the Environment and Development's concept of sustainable development, which is development that meets the needs of present generations without compromising the needs of future generations (WCED 1987). Sustainable tourism is simply an extension of the ideals and components of sustainable development to the tourism industry, but requires an adapted framework. For this study, the concept of sustainable tourism is extended to the context of shore excursions in order to determine if the shore excursion to Bennett can be sustainable.

#### ***Defining Sustainable Tourism***

Choosing a definition of sustainable tourism is difficult because there are so many available (Butler 1999) (Table 1).

**Table 1. Some definitions of sustainable tourism, expanded from Butler 1999.**

Source	Definition
Eber 1992	Sustainable tourism is tourism and associated infrastructures that; both now and in the future operate within natural capacities for the regeneration and future productivity of natural resources; recognize the contribution that people and communities, customs and lifestyles, make to the tourism experience; accept that these people must have an equitable share in the economic benefits of local people and communities in the host areas.
World Tourism Organization 1993	Tourism which meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future.
Payne 1993	It must be capable of adding to the array of economic opportunities open to people without adversely affecting the structure of economic activity. Sustainable tourism ought not interfere with existing forms of social organization. Finally, sustainable tourism must respect the limits imposed by ecological communities.
Woodley 1993	Sustainable tourism in parks must primarily be defined in terms of sustainable ecosystems.
Countryside Commission 1995	Tourism which can sustain local economies without damaging the environment on which it depends.
Bramwell et al. 1996	Sustainable tourism is tourism which develops as quickly as possible, taking into account of current accommodation capacity, the local population and the environment and, tourism that respects the environment and as a consequence does not aid its own disappearance. This is especially important in the saturated areas, and sustainable tourism is responsible tourism.
Wight 1997	Sustainable tourism is tourism which is developed so that the nature, scale, location and manner of development is appropriate and sustainable over time, where the environments ability to to support other activities and processes is not impaired.
Faulkner 2001	Sustainable tourism safeguards and enhances natural and cultural assets of a destination; enhances the resident populations quality of life and life opportunities; satisfies the needs and expectations of the tourist market; is economically viable and achieves a return on investment for tourism operators; achieves equity in the distribution of costs and benefits.
World Tourism Organization 2004.	Sustainable tourism should make optimal use of environmental resources, respect the socio-cultural authenticity of host communities, and provide socio-economic benefits to all stakeholders.
The Global Sustainable Tourism Council (TSC) 2010	Maximize social and economic benefits to the local community. Maximize benefits to cultural heritage and minimize negative impacts. Maximize benefits to the environment and minimize negative impacts

While these authors and organizations have provided specific definitions for sustainable tourism, some authors suggest that a single universal definition of sustainable tourism will never emerge (Butler 1999). Similarly, McCool and Moisey (2001) elaborate further on this notion and describe sustainable tourism as a “guiding fiction”; an idea that serves a socially valuable function but lacks a concrete definition. While this may be true, and sustainable tourism might be most useful as a telic idea, rather than a specific formula, Sharpley (2000) writes that “this conceptualization of sustainable tourism as a kind of free-floating development process is undoubtedly attractive, neatly side-stepping the need for a concise definition, [but] it nevertheless does little to sharpen the focus of study onto the processes and overall viability of the concept”.

So, rather than relying on a vague definition of sustainable tourism, the World Tourism Organization’s (WTO) definition (2004) for sustainable tourism is adopted for this study, because it captures the triple bottom-line of benefits to the economy, the environment and society that is alluded to in almost all definitions of sustainable tourism (Table 1). Furthermore, the WTO is an internationally recognized organization that provides standardized measures and guidelines for achieving sustainable tourism (WTO 2004). Under the WTO’s definition, “sustainable tourism should make optimal use of environmental resources, respect the socio-cultural dimensions of host communities, and provide socio-economic benefits to all stakeholders” (WTO 2004).

### ***Applying Sustainable Tourism: Indicators***

Given this working definition of sustainable tourism, a number of different frameworks exist for measuring and implementing sustainable tourism. However, as Heinen (1994) accurately wrote, “sustainability must be made operational in each specific context, at scales relevant for its achievement, and appropriate methods must be designed for its long-term measurement”. As a result, many different approaches may be useful to make sustainable tourism a reality depending on the context and situation.

Garrod and Fyall (1998) suggest using methods from environmental economics to ensure that sustainable tourism is put into practice. For example, the authors propose that all capital, human and natural, should be incorporated into an accounting spreadsheet, where natural and cultural resources are assigned a monetary value, and the activities of tourism must not deplete any of these resources over time. This methodology may be one way to measure sustainable tourism, but it is difficult; the shortcomings inherent in environmental economic tools present ecological, economic and political challenges (Ring et al. 2010). This approach would also be difficult for one student to accomplish in a Master's project.

A widely used method to assess and evaluate the sustainability of tourism is to use the goals and standards of sustainable tourism, and measure the attainment of these goals using sustainability indicators (WTO 2004; McCool and Moisey 2001; Bell and Morse 2000). Sustainability indicators "are measures of the existence or severity of current issues, signals of upcoming situations or problems, measures of risk and potential need for action, and means to identify and measure the results of our actions" as they relate to sustainable practices (WTO 2004). Harger and Meyer (1996) recommend that sustainability indicators cover environmental, social and economic issues. They should also be simple, quantifiable, easy to assess, and sensitive to change. If used appropriately, good indicators can result in better decision-making, identification of emerging issues, identification of impacts, performance measurement of plans, and reduced risk of planning mistakes (WTO 2004). Indicators can be quantitative or qualitative, can be used before or after tourism plans are in place and should be used iteratively over time (WTO 2004). The use of indicators organized in a sustainable tourism framework may be an efficient and useful way to determine whether shore excursions can be considered sustainable as well as a technique to generate site specific plans.

Because shore excursions encompass such a wide range of activities that take place in a variety of locations, the impacts of shore excursion may be very broad. Therefore a broad set of indicators is necessary to measure if a shore excursion can be considered sustainable. The indicators in the following proposed framework are

organized according to environmental, social, and economic indicators and each indicator is intended to provide information on a particular issue of sustainable tourism.

### ***Environmental Indicators***

It is well known that tourism relies on environmental resources, and at the same time risks destroying or degrading those very natural resources upon which it depends to attract tourists (Murphy & Price 2005). Hillery et. al (2001) discuss this paradox that the more attractive a destination is, usually as a result of the wealth of natural resources, the more popular it may become, and the more likely that the natural resources will be degraded due to heavy visitation. Since cruise lines are trying to target new and attractive destinations to increase their business, it is very likely that they make deliberate decisions to situate shore excursions in scenic locations. If a shore excursion is to be considered sustainable, it must not degrade the environmental resources of the destination.

In a proposed assessment framework for measuring the environmental impacts of tourism, Williams (1994) wrote that the degree of impact which a tourism operation will exert on natural resources depends on the resiliency of the ecosystem, the intensity of site development and perhaps most importantly the management of tourism activities. Similar findings in a shore excursion context were substantiated by Scherrer et. al (2011), who found that the primary factor influencing the impact of a shore excursion on cultural sites was the practices of tour guides. Based on these studies, possible environmental indicators to measure the environmental impacts of a shore excursion include: the type of ecosystem, the number of facilities developed for tourists, and the existence of a code of applied standards for tourism operators (Table 2).

One study that explored the benefits of cruise tourism in the Pacific claims that the extent of environmental impacts of cruise ship tourism is dependent on the number of tourists disembarking from the boat (Macpherson 2008). While this study provides no empirical evidence to support this speculation, the number of visitors allowed ashore at one time, and the average size of a tourism group may be important indicators of the environmental impacts of a shore excursion and have been included in Table 2. It

should be noted that different studies such as Williams and Gill (2005) have found there is not necessarily a causal connection between the number of tourists to a site and the amount of environmental degradation. For example, the impacts of a few irresponsible tourists in an ecologically sensitive environment may be more damaging than thousands of well managed tourists. Nonetheless, measuring the number of people on a shore excursion may be important measurements for site specific planning.

In a study conducted in the Caribbean, Johnson (2006) reports that many of the negative impacts of shore excursions result from the transportation of tourists. He examined 205 shore excursions offered in 28 ports and found that 80% of the shore excursions required some form of secondary transportation. The negative impacts of secondary transportation, including fossil fuel use and carbon emissions were the primary environmental impacts of shore excursions in the Caribbean. Consequently, distance travelled from the port, and the types of transport used are important indicators to incorporate into an assessment framework.

The degree of legislated protection at a shore excursion destination is also a factor that may influence the environmental impacts of shore excursions (WTO 2004). If an area has strong legislative protection, there is a higher probability that key species and vegetation will be protected. Species diversity and vegetation are useful assets to the sustainability of a shore excursion, particularly in destinations where tourists visit to observe unique species or vegetation (WTO 2004). Therefore, indicators measuring the sightings of key species may be useful to assess the environmental impacts of a shore excursion. Other possible indicators related to environmental protection include the extent that tourism revenues are used to finance environmental conservation (WTO 2004).

**Table 2. Possible environmental sustainability indicators**

Issue	Possible Indicators	Purpose	Source
Resiliency of ecosystem	- Type of bioregion	Factors influencing the degree of a shore excursion's environmental impact on a destination.	Williams 1994



Issue	Possible Indicators	Purpose	Source
Intensity of site development	<ul style="list-style-type: none"> <li>- Number of trails</li> <li>- Number of facilities for tourists</li> <li>- % Use of facilities</li> </ul>	Factors influencing the degree of a shore excursion's environmental impact on a destination.	Williams 1994
Operator regulations and site regulations.	<ul style="list-style-type: none"> <li>- Existence of applied codes of conduct designed to minimize negative impacts</li> </ul>	Indicates whether tourism operators and managers are trying to minimize environmental impacts through codes of conduct.	WTO 2004 (pg. 125) Scherrer et. al 2011
Number of people allowed on shore	<ul style="list-style-type: none"> <li>- Number of people allowed on shore excursion</li> <li>- Average number of people per party</li> </ul>	These indicators may reveal a relationship between the number of people on a shore excursion and the extent of environmental impacts	Macpherson 2008
Transportation	<ul style="list-style-type: none"> <li>- Distance travelled from Port</li> <li>- Type of transit</li> </ul>	To measure the impacts and type transportation required for the shore excursion	Johnson 2006
Area protected, and to what degree	<ul style="list-style-type: none"> <li>- Existence of protected area at the destination</li> </ul>	The area protected can be an important measure of potential protection for natural assets for tourism.	WTO 2004 (pg. 147)
Disturbance to species and fragile systems	<ul style="list-style-type: none"> <li>- Sightings of key indicator species</li> </ul>	In some destinations, species are the reason why tourists visit, or influence tourist satisfaction.	WTO 2004 (pg. 147)
Financing environmental conservation	<ul style="list-style-type: none"> <li>- Value generated through visitor fees</li> <li>- % of Tourism Products with specific contributions built into the price</li> </ul>	These indicators document the level of opportunities available to the tourist and operators to be a part of environmental conservation.	WTO 2004 (pg. 124)

In Bennett, the primary activity for visitors is to walk the trails through the historic site. Therefore, a set of indicators that are specific to the quality and sustainability of a trail system should be included in the shore excursion framework for Bennett (Table 3). Possible indicators have been defined by the field of recreation ecology, which is the scientific study of the impacts of recreation on the environment (Leung and Marion 2000). Studies on the impacts of recreation have been undertaken in wilderness settings and in protected areas (Belnap 1998; Lueng and Marion 1999; Nepal and Way 2007), and provide suitable indicators to measure whether the impacts of shore excursion in Bennett can be considered sustainable. These indicators may also be useful for other shore excursions where the primary activity for visitors is walking a trail system.

The first indicator included from recreation ecology measures trail side trampling. Trail side trampling is one of the most common impacts of overused trails, and occurs when too many visitors stray from the center of the trail and cause erosion alongside the trail, resulting in the loss of native vegetation and the potential introduction of non-native species (Liddle 1991; Marion et. al 2006). Therefore an indicator is needed to measure the percentage of a trail system with trail side trampling.

Closely related to trail side trampling, is the existence of social trails. Social trails are user created, unsanctioned trails. The negative impact of social trails includes increased compaction of soil, which disrupts natural nutrient and hydrologic cycles, and reduced subsurface microfaunal biomass (Belnap 1998). The existence of social trails may also indicate that the level of use on the trail system is too high, or the trail system is poorly designed. In either case, the result is a degraded environment as a result of visitation.

In addition to the wilderness studies on trail impacts, the Parks Canada's Trail and Back Country Facility Design Guidelines; Mountain Parks (Parks Canada Agency, 2008b), further provides a useful set of indicators. This guidebook indicates that Parks Canada trails should be designed to ensure ecological integrity, improve visitor experience, educate users, and protect historic and cultural resources. Therefore, indicators related to these issues are essential for the assessment framework for

Bennett, so that Parks Canada can measure whether the trails in Bennett are meeting the standards for Parks Canada trails (Table 3). These indicators may also be useful for shore excursions to other Parks Canada sites.

**Table 3. Possible environmental sustainability indicators from the field of recreation ecology**

Issue	Indicators	Purpose	Source
Trail side trampling	- % of trail with trail side trampling	Trail side trampling reduces vegetation alongside trails, and is unsightly. This indicator will help indicate if tourists are staying on the trails	Liddle 1991; Marion et al. 2006
Level of use	- Number of tourists on a trail - % of total visitors on trail	Visitor traffic can exacerbate erosion and damage to trails	Marion et al. 2006
Social trails	- Number of social trails	Social trails increase overall site erosion, and damage vegetation.	Belnap 1998; Marion et al. 2006
Trail condition	- Trail width - maximum incision due to erosion - tread surface characteristics	These indicators provide baseline measurements for trails, where changes can be monitored over time	Nepal and Way 2007
Education	- Number of interpretive signs - Presence of messages of national significance	Interpretation alongside the trail can increase education amongst visitors.	Parks Canada 2008
Visitor experience	- % of visitors satisfied with trails - Visitor's reported highlights of trip	These indicators reveal the visitor's satisfaction with the trail system.	Parks Canada 2008
Protect cultural and historic resources	- Presence of artifacts near trail	The presence of artifacts near the trail will indicate if the trail needs to be kept in good condition	Parks Canada 2008

## ***Economic Indicators***

The second component of the sustainable shore excursion framework addresses economic impacts. In order for tourism to be considered sustainable, the shore excursion must generate economic benefits to the stakeholders (WTO 2004).

Research on cruise tourism has found that some of the regional economic benefits include: generating new employment, improving regional infrastructure, increasing the average income level, and generating revenue from taxes (Johnson 2002; Pearce 1989). Therefore, the following indicators may measure the economic impacts of a shore excursion: the number of jobs created because of the shore excursion, the level support for shore excursion infrastructure, the average wage of a shore excursion employee; and the revenue from shore excursion taxes (Table 4).

At the community level, the economic impacts of a shore excursion can be significant. Jackson (2004) describes the buzz of economic activity in a Mexican port following the arrival of a cruise ship, where hundreds of street vendors, musicians, and panhandlers flooded the streets around the port to benefit economically from the cruise tourists. Similarly, in Jamaica, Henthorne (2000) found that cruise ship passengers frequently patronized the local shops, but the more time they spent in a port, the more money they spent. These studies reveal several possible indicators that may measure the economic impacts of a shore excursion, including: tourist and operator spending, the percentage of shore excursion employees that are local; the amount of time spent on a shore excursion; the average expenditure per visitor; and the number of community shops patronized by cruise ship passengers.

One of the negative economic impacts of cruise tourism is profit leakage (Macpherson 2008). For example, the cruise industry is predominately controlled by just a handful of cruise companies (Johnson 2002), and the possibility that a majority of profits is channelled back to the company's country of origin is a real threat (Macpherson 2008; Dwyer and Forsyth 1998). Therefore, an indicator to represent the possibility of

leakage of funds based on whether the shore excursion tour operator and cruise company is local or foreign has been included.

Macpherson (2008) points out that cruise ship tourism is more seasonal than many other forms of tourism, and therefore employment may only be temporary. In Alaska and northern BC, the cruise season only operates from May to September. As a result, the majority of employment generated by cruise operations may be seasonal. Possible indicators that measure the seasonality of shore excursions are included in Table 4.

**Table 4. Possible economic sustainability indicators**

Issue	Indicators	Purpose	Source
Regional economic impacts	<ul style="list-style-type: none"> <li>- Number of jobs created because of shore excursion</li> <li>- Level of support for shore excursion infrastructure</li> <li>- Number of facilities developed for shore excursion.</li> <li>- The average wage of a shore excursion employee</li> <li>- Revenue from shore excursion taxes</li> </ul>	These indicators may measure the regional economic impacts of the shore excursion	Johnson 2002; Pearce 1989
Local community economic benefits	<ul style="list-style-type: none"> <li>- % of employees that are local</li> <li>- Amount of time spent on a shore excursion</li> <li>- Average expenditure per visitor</li> <li>- Number of community shops patronized by visitors</li> </ul>	These indicators may reveal the extent of community benefits as a result of the of a shore excursion..	Henthorpe 2000; Jaackson 2004

Issue	Indicators	Purpose	Source
Leakage	<ul style="list-style-type: none"> <li>- Country of origin of tour operators</li> <li>- Country of origin of cruise company</li> </ul>	These indicators will measure the location of origin of both tour operators and cruise companies, key factors influencing the degree of leakage	Macpherson 2008; Dwyer and Forsyth 1998
Seasonality	<ul style="list-style-type: none"> <li>- Tourist arrivals by month</li> <li>- Number and % of shore excursion related jobs which are permanent or full-year</li> </ul>	These indicators are direct measures of seasonality and can show the economic impact of seasonality	WTO 2004 (pg 112)

### ***Social Indicators***

The third and final dimension of the sustainable shore excursion assessment framework measures the social impacts of shore excursions. Faulkner and Tideswell's (1997) framework for assessing the impacts of tourism on a community is also applicable to cruise tourism and shore excursions. Their framework is based on the assumption that the degree of impact on a community is based on two broad dimensions, the extrinsic and intrinsic dimensions. The extrinsic dimension includes characteristics of the location, including the stage of tourism development, the tourist/resident ratio, the type of tourist and the seasonality of the operation. Also included in the extrinsic dimension are tourist behaviour and overcrowding. All of these issues may provide useful indicators to measure the social impacts of a shore excursion and are included in Table 5.

Faulkner and Tideswell (1997) also describe the intrinsic dimension of a tourist destination, which includes characteristics of the host community that influence the degree of social impacts. These characteristics include: the involvement of the community in the operation, the socio-economic characteristics, the residential proximity to the operation, and the period of residence. Possible indicators to measure these factors have been included in Table 5. The authors posit that the greatest negative impacts of tourism will occur at a mature stage of tourism development, which is typically

characterised by a high ratio of tourists to residents, an emphasis on international tourism and high seasonality.

In a recent review of the literature on the social impacts of tourism, Deery et. al (2011) suggest that an alternate way to measure the quality of life of residents is to measure the support for tourism development. For example, useful measures to reveal the perceptions of the host community may include whether they support the current tourist development or whether they support an alternate form of tourism development. Accordingly, the sustainable shore excursion framework includes indicators to measure the support for tourism development (Table 5).

Many authors state that the local communities must be involved in the planning of the tourist operation (Timur and Getz 2009; WTO 2004). Community involvement in tourism planning may range from participation in a town hall meeting, to an in-depth ongoing collaborative process. Therefore, the sustainable shore excursion framework proposed for this study includes indicators which measure the degree that the local community is involved with the planning process as well as measures of satisfaction with the planning process.

For a shore excursion to remain viable over time, the visitors must be satisfied, and tourist satisfaction is central to whether tourists return, recommend the excursion to others, or advise others to stay away (WTO 2004). Possible indicators to measure visitor satisfaction include: overall satisfaction, likelihood to recommend return visits, satisfaction with the services and activities provided, and satisfaction with opportunity to fulfill motivations to visit a destination (Table 5).

In its management plan for the Chilkoot Trail (Parks Canada Agency 2010), Parks Canada set satisfaction benchmarks for visitors to the CTNHS. By 2013, Parks Canada wants 90% of the visitors, both hikers and cruise ship passengers, to the site to be satisfied, and 50% very satisfied, with activities, facilities and services provided in Bennett. These objectives provide measurements of Parks Canada's mandate to "protect and present nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that

ensure the ecological and commemorative integrity of these places for present and future generations” (Parks Canada Agency 2010).

Of unique importance in Bennett is Parks Canada’s mandate to successfully deliver messages of national significance. As part of Parks Canada’s policy on managing national historic sites, Parks Canada must pass on messages of national significance. In Bennett, such messages include an awareness of the role of the Chilkoot Trail in the gold rush of 1898, and an awareness of Parks Canada’s management plan for the site (Parks Canada Agency 2010), Parks Canada has set the goal that at least 60% of visitors consider that they learned about the heritage of the site. A relevant indicator for the shore excursion framework would be to measure the retention of relevant messages by the visitors to Bennett. This indicator would be applicable to other shore excursions to National Historic Sites in Canada.

**Table 5. Possible social sustainability indicators**

Issue	Indicators	Purpose	Source
Extrinsic Dimension	<ul style="list-style-type: none"> <li>- Stage of tourism development</li> <li>- Tourist/resident ratio</li> <li>- Motivations of tourists</li> <li>- Seasonality</li> <li>- Tourist behavior</li> <li>- Overcrowding</li> </ul>	To measure the characteristics of the external conditions which will influence the degree of social impacts as a result of a shore excursion	Faulkner and Tideswell 1997
Intrinsic Dimension	<ul style="list-style-type: none"> <li>- Number of stakeholder groups involved in planning of shore excursion</li> <li>- Socio-economic characteristics</li> <li>- Residential proximity to shore excursion (miles)</li> <li>- Period of residence (years)</li> </ul>	To measure the characteristics of the host population that will influence the degree of social impacts as a result of a shore excursion	Faulkner and Tideswell 1997



Issue	Indicators	Purpose	Source
Community participation	<ul style="list-style-type: none"> <li>- Percentage of partners and key stakeholders who are involved with shore excursion planning</li> <li>- Percentage of stakeholders who are satisfied with planning of shore excursion.</li> </ul>	The more the community participates in the shore excursion, the more likely they will be to support its development.	Timur and Getz 2009; WTO 2004 (pg. 206)
Tourist Satisfaction	<ul style="list-style-type: none"> <li>- Overall satisfaction</li> <li>- Likelihood to recommend return visits</li> <li>- % satisfaction with services and activities provided</li> <li>- % satisfied with opportunity to satisfy motivations</li> </ul>	To determine whether tourists will return, recommend, or advise to stay away.	WTO 2004 (pg.87)
Education	- % of correctly identified educational messages	To determine if Parks Canada is conveying messages of national significance	Parks Canada Agency 2010

## Chapter 3. Methods

A multifaceted methodological approach was needed to measure the sustainability indicators presented in Chapter 2. However, not all of the indicators presented in Chapter 2 were feasible for the scope of this project. The indicators that were not included in the modified framework for Bennett are presented in Table 6. Also included in Table 6 are justifications why the indicators were excluded.

**Table 6. List of indicators excluded from modified framework**

Indicator	Justification for Exclusion
<b>Environmental Indicators</b>	
- Number of trails	In Bennett, there is one trail system consisting of multiple connected trail segments. Therefore, the number of trail is not meaningful for Bennett.
- Distance travelled from Port - Type of transit	These indicators were not included because some of the cruise ship visitors to Bennett arrived as part of a two week overland tour where multiple forms of transportation were used. Measuring these indicators would have required interviews with tour operators at each of the stops, and therefore these indicators were excluded because they were beyond the scope of this research project.
<b>Economic Indicators</b>	
- The average wage of a shore excursion employee	- This indicator was too difficult to assess, and would have required sensitive information from participants.
- Number of community shops patronized by visitors	- There was no way to assess this indicator with the pre-designed survey.
- Country of origin of tour operators - Country of origin of cruise company	While measuring these indicators would have been possible, no meaningful measurements of leakage could have been assessed through the methods available.
<b>Social Indicators</b>	

Indicator	Justification for Exclusion
- Stage of tourism development	There was not a clear method for measuring this indicator and Bennett has undergone several different stages of overlapping tourism development.
- Tourist/resident ratio	Not relevant for Bennett, as only one family of residents lives in Bennett.
- Socio-economic characteristics	This indicator is not relevant for Bennett because of the small residential population.

After excluding these indicators from the broader assessment framework, the methodologies presented in this chapter were used to measure the indicators for an adapted sustainable shore excursion framework specific to the shore excursion to Bennett (Table 7, 9, and 10). Each methodology is described in this chapter. Following the procedural description of the methodology, the indicators that were measured by the methodology are listed as part of the sustainable shore excursion framework for Bennett.

### 3.1. Questionnaire

A questionnaire was administered to 528 cruise ship passengers while they visited Bennett during the summer of 2008. The main purpose was to measure the indicators presented in Table 7, as well as to provide background information on the cruise ship passengers who visit Bennett. The full questionnaire is included as Appendix A.

#### ***Survey Instrument***

The questionnaire was an adaptation of a visitor satisfaction survey and a hiker survey previously developed and administered by Parks Canada and Simon Fraser University. The previous survey was developed to measure the preferences, motivations, demographics and heritage communication of the traditional visitors to the

Chilkoot Trail, and was administered previously in 1993, 1995, 1998, 2001 and in 2004. The new questionnaire was adapted to the cruise ship passengers who were the newest type of visitor to the trail. As a result, the survey instrument was designed so as to be relevant for those visitors who only spent part of an afternoon in Bennett. The questionnaire primarily consisted of closed-ended questions, including multiple choice, Likert-scale, numerical and categorical types of questions. A few short open-ended questions were also included in the questionnaire which asked respondents to volunteer suggestions about how the experience could be improved.

### ***Survey Protocol***

I administered the questionnaire to cruise ship passengers in Bennett during the summer of 2008. I asked one member per party if they would be willing to participate in a study examining their trip to Bennett. The visitors completed the survey either on site in Bennett or during their train ride to Carcross or Skagway. I provided clipboards, pencils and the survey so that the cruise ship passengers could complete the survey on-site. If the visitors completed the survey while on the train, the train agents were able to return the completed surveys to me the next day. While on site, I intercepted visitors as on their way to return to the train station. This way, the visitors would have had an opportunity to look around Bennett before completing the survey.

### ***Target Population***

One member from each party of cruise ship passengers who visited Bennett during the data collection period of June 20th to August 18th, 2008 was intercepted if possible. Many groups would pass the intercept point at the same time, so sometimes groups would not be intercepted.

### ***Survey Population***

A total of 528 visitors completed the survey. For statistical analysis, surveys were removed if more than one section of the survey was incomplete. These surveys

were removed because apparently the respondent had rushed through the survey, and therefore the quality of the responses was in doubt. As a result, only 453 surveys were used for statistical analysis.

### ***Sample Frame***

Sampling occurred in five shifts varying from four days to eleven days for a total of 29 sampling days. The five shifts were June 30th thru July 8th, July 13th-21st, July 29th, thru August 5th, and August 11th thru August 20th, 2008.

### ***Sampling Schedule***

Sampling days were conducted on all days of the week excluding Saturdays, when no trains were operating and thus no cruise ship passengers visited Bennett. Passengers off the cruise ships stayed in Bennett either from 12:00-13:30, or from 13:30 to 15:00. Sampling occurred for both groups throughout the entire period

### ***Sample Selection***

I used the floating random sampling technique to intercept participants. In other words, I selected study participants as they returned to the train station near the interpretive signs within the National Historic Site boundary. After an individual had agreed to participate in the study, I moved on to the next available group of cruise ship passengers. Only one member of each party was asked to complete a survey. This approach was useful because of the high number of day use visitors passing by the intercept site. Randomness in the sample selection process was assured by the equal likelihood of each visitor in Bennett being intercepted throughout the five sampling periods.

## **Response Rate**

An estimated 14,000 day use visitors came to Bennett during the summer of 2008. A total of 528 day use visitors completed the survey. Given the short period of time available for conducting the intercepts, no records were kept about refusals, but the majority of day use visitors agreed to participate in the survey, and the refusal rate is estimated between 10-15%.

## **Making the Indicators Operational: Questionnaire**

While the survey instrument was originally designed to meet the needs of Parks Canada's managers for the Chilkoot Trail National Historic Site, rather than being designed specifically to measure the indicators presented in the sustainability framework developed in Chapter 2, the survey did cover many of these indicators. The survey specifically addressed the following indicators.

**Table 7. Making the indicators operational in the survey**

<b>Indicator (s)</b>	<b>Item on Survey</b>
<b>Environmental Indicators</b>	
- % Use of facilities	Please indicate which of the following services and activities you participated in or used during your trip to Bennett.
- Average size of tourism group or party - Number of people per party	Please tell us about yourself and the group you travelled from home with (includes size of group).
- Time spent at destination	How much time did you spend on the self-guided trail to St. Andrew's Church and viewpoint?
<b>Economic Indicators</b>	
- Level of support for shore excursion infrastructure	-For each facility you participated in, please rate your level of satisfaction
- Amount of time spent on a shore excursion	How much time did you spend on the self-guided trail to St. Andrew's Church and viewpoint?

Indicator (s)	Item on Survey
- Average expenditure per person in region	Please estimate your total vacation related expenditure for food, accommodation, souvenirs, excursions etc in the area in and around Bennett including Skagway, Carcross, and Whitehorse.
<b>Social Indicators</b>	
- Motivations of tourists	How important was your opportunity to...(list of twelve motivations)
- Overall satisfaction	Please indicate your overall Bennett City day trip experience.
- Visitor motivations - Purpose of visit	How important was your opportunity to...(list of twelve motivations)
- Likelihood to recommend return visits	Would you recommend a day trip visit to Bennett City to your friends and family members?
- % satisfaction with services, facilities and activities provided	Please rate your level of satisfaction with the services and activities you participated in or used.
- % satisfaction with opportunity to fulfill motivations	How satisfied were you with your opportunities to: (list of 31 aspects of the trip).
- % of correctly identified educational messages	A six question true or false quiz.

### 3.2. Key Informant Interviews

I conducted semi-structured interviews (Longhurst 2010) with key informants involved in the planning, management and operation of the shore excursion to Bennett. A total of ten people were interviewed, who represented six stakeholders in Bennett (Table 8). The primary purpose of the interviews was to obtain measures of the sustainability indicators in the sustainable shore excursion assessment framework for

Bennett (Table 9), but some interview questions were used to identify the stakeholders' desired future conditions for the shore excursion to Bennett.

Each individual was contacted and informed about the purpose of the study, as well as of the SFU research ethics approval process. Once the interviewee consented to the study, I asked them a series of prepared open-ended questions about their current role in the shore excursion to Bennett. The full list of prepared interview questions is included as Appendix A.

The interviews lasted from 15 minutes, to over two hours. The length of the interview was determined by the depth and quality of discussion, because if a new issue arose, I deviated from the standard line of questioning in order to capture as much information as possible (Longhurst 2010). During the interviews, I took notes for reference, and immediately following each interview I typed up a detailed summary of the interview and e-mailed the summary to the interviewee for confirmation of accuracy. If the interviewee did not agree with the accuracy of the summary, they made suggestions or clarifications. As a result, the accuracy of all my interview summaries was confirmed by the interviewees.

**Table 8. Stakeholders interviewed**

Stakeholders	Relevance to Bennett	Method of Communication
Parks Canada	Management Responsibilities of Bennett as part of the Chilkoot Trail National Historic Site of Canada.	Interview with Park Planner, two Park Staff, and Park Superintendent
White Pass and Yukon Route Railway	Train station located in Bennett. Contracts with Holland America and Princess Cruise lines to provide shore excursions to Bennett City.	Interviews with management and cook staff in Bennett City.
Carcross Tagish First Nation Land Use Planning Team	Traditional and current territory.	Focus Group (Longhurst 2010) with Carcross Tagish Land Use Planning team



Stakeholders	Relevance to Bennett	Method of Communication
Mrs. Edna Helm and Mr. Walter Helm	Seasonally live in Bennett and use trap line in Bennett.	Interview with Mrs. Edna Helm
Holland America Cruise Lines	Operates shore excursion to Bennett.	Phone interview with manager of shore excursions to the Yukon.
Destination Carcross	Territorial economic development program for Carcross, the gateway to Bennett.	Interview with director of program

**Table 9. Making indicators operational in the interviews**

Indicator (s)	Questions from Interview
<b>Environmental Indicator</b>	
- % of tourism products with specific contributions built into the price	- Does the cost of the train ticket contribute to the Parks Canada fees?
- Sightings of wildlife species	- How would you change tourism to Bennett so your needs were better met?
<b>Economic Indicators</b>	
- Number of jobs created because of shore excursion	- How does the shore excursion in Bennett currently benefit you
- Local support for such infrastructure	- Do you support, or want to see the shore excursion to Bennett continue?
- Percentage of employees that are local - Number and percentage of shore excursion related jobs which are permanent	- How does the shore excursion in Bennett currently benefit you - Would you like to see cruise ship tourism in Bennett continue?
<b>Social Indicators</b>	

Indicator (s)	Questions from Interview
<ul style="list-style-type: none"> <li>- Number of stakeholder groups involved in planning of shore excursion</li> <li>- Residential proximity to shore excursion (miles)</li> <li>- Period of residence (years)</li> </ul>	<ol style="list-style-type: none"> <li>1) Do you feel your voice is heard in the planning of tourism to Bennett?</li> <li>2) What is your role in tourism to Bennett?</li> <li>3) How does tourism in Bennett currently benefit you?</li> </ol>
<ul style="list-style-type: none"> <li>- Percentage of key stakeholders who are involved with shore excursion planning</li> <li>- Percentage of partners and key stakeholders who are satisfied with tourism planning</li> </ul>	<ol style="list-style-type: none"> <li>1) Do you feel your voice is heard in the planning of tourism to Bennett?</li> </ol>

### 3.3. Trail Assessments

I personally conducted trail assessments measuring the trail indicators presented in Table 10. The assessments covered the trail system in Bennett. In total, I used 15 trail indicators which were gleaned from both the Parks Canada backcountry trail guidelines (Parks Canada Agency, 2008b) and the Parks Canada and IMBA *Guidelines for Sustainable Trails* (Parks Canada and IMPBA, 2008)(Table 10).

**Table 10. Trail assessment indicators and units of measurement**

Indicator	Unit of Measurement
- Trail width	Cm
- Maximum incision due to erosion	The average depth of the trail from three points along it's width.
- Tread surface characteristics	Material
- Number of interpretive signs	Presence and number of interpretive signs
- % of trail with trail side trampling	Percent of trail segment with trail side trampling
- Number of social trails	Number of social trails

Indicator	Unit of Measurement
- Presence of artifacts near trail	Presence of artifacts visible on surface alongside trail segment
- Tread surface characteristics	Materials used in trail construction
- % of total visitors on trail	Whether or not the trail segment is part of the guided tour.
- Level of use	The mean percentage of train passengers who walk along the trail segment.

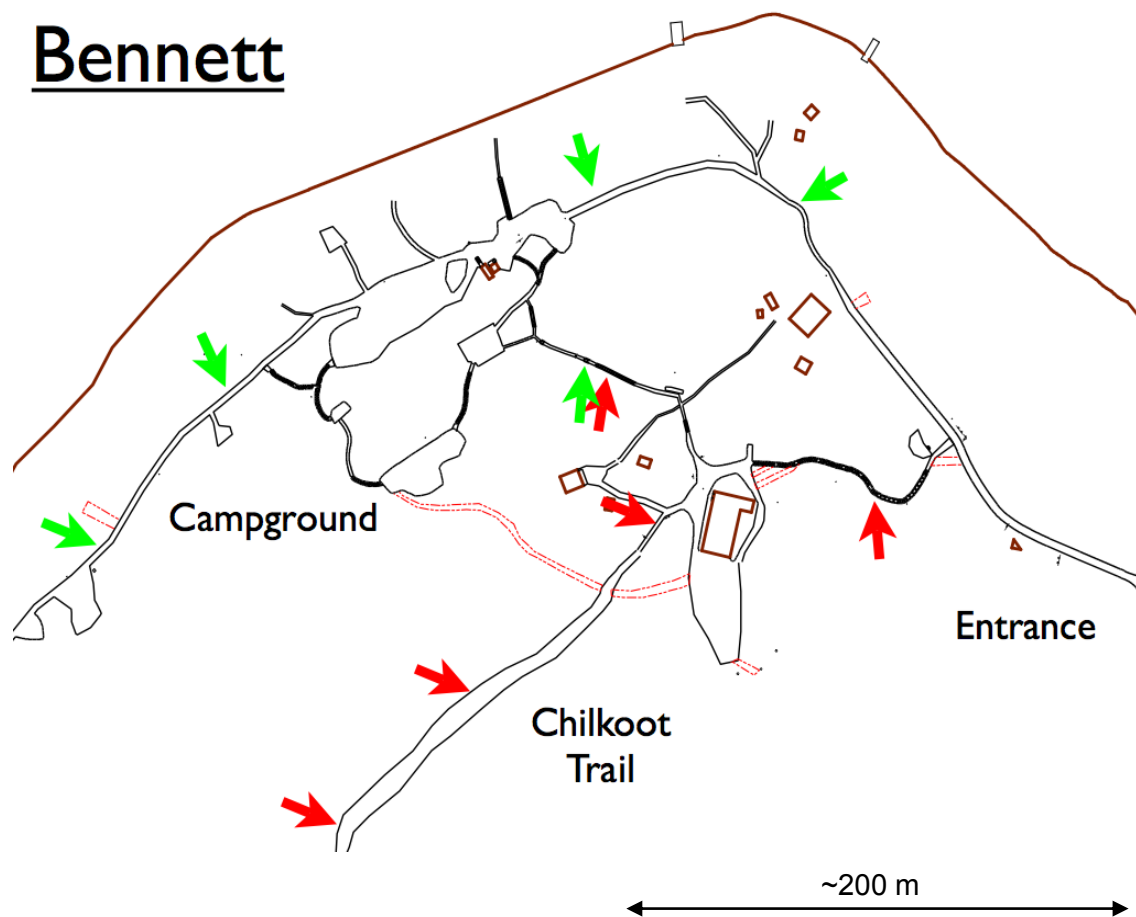
The trail system in Bennett was divided into nine trail segments to conduct the impact assessments. For each trail segment I measured the indicators (Table 10), photographed the trail segment, and recorded notes. For additional accuracy, the trail segments were reassessed with the assistance of a Parks Canada trail staff member who has worked on site for 32 years. While assessing the impacts with the Parks Canada trail staff, additional notes and observations were recorded for each trail segment.

Infrared trail counter devices were employed to measure the level of use for each trail segment. These devices recorded the number of times a heat source moved through the device's field of view. The five trail counters were placed in different locations throughout Bennett in locations hidden from view of visitors and in locations where visitors must pass, i.e. choke-points.

In order to ensure accuracy and prevent repeated counts (multiple counts are recorded if one person stands in front of the trail counter or walks past the trail counter twice) each trail counter was calibrated on five separate occasions by manually counting the number of visitors who walked past the counter. These counts were used to form a correction ratio for each trail counter, i.e. manually observed counts/recorded counts= correction ratio. The mean correction ratio was applied to each trail counter's recorded counts.

For every train that arrived in Bennett, the position of the trail counters was rotated into one of two predetermined scenarios. In Figure 3, the red arrows indicate scenario one, and the green arrows indicate scenario two. Scenario one measured the number of visitors who hiked up along the Chilkoote Trail (one direction of the trail system). The second scenario measured the number of visitors who walked down the beach (the alternate direction of the trail system). There was sufficient time in between the two trains to switch the counters because the visitors participated in a lunch for 20-30 minutes upon their arrival. This rotation allowed for a complete coverage of the trails in Bennett while only using five trail counters.

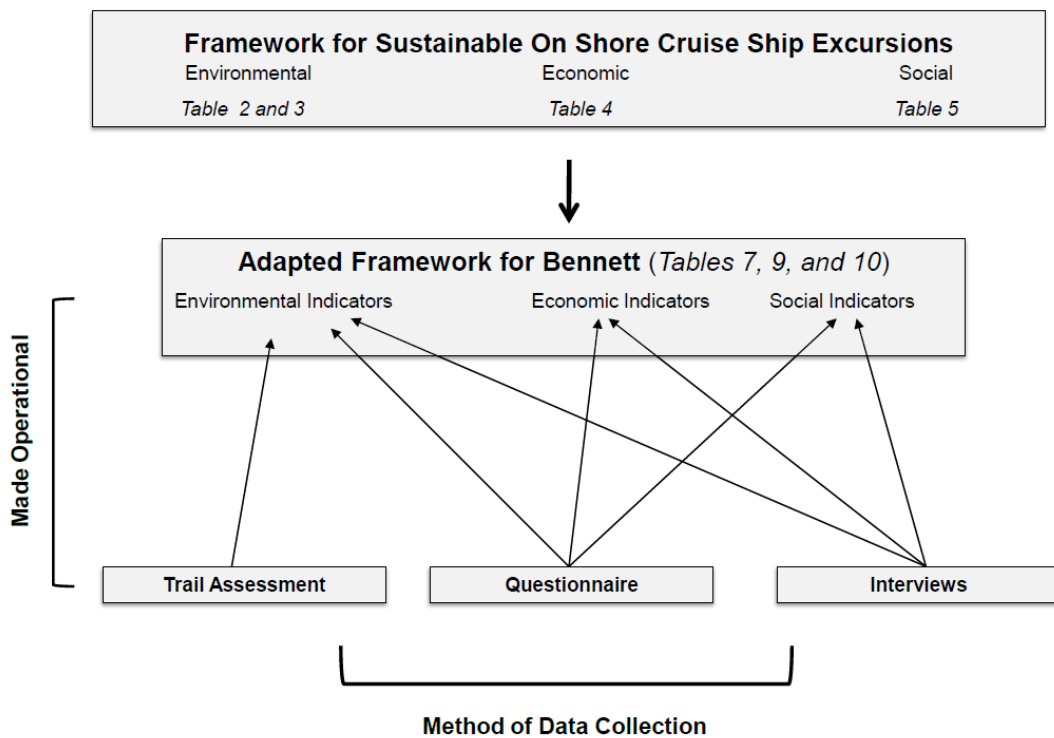
**Figure 3. Map of Bennett and location of trail counters**



### 3.4. Summary of Methods

The suite of methodologies is summarized in Figure 4. The diagram illustrates how a set of indicators was selected from the literature to form a framework for assessing the sustainability of shore excursions. From this original framework, an adapted framework was developed from the original indicators. This adapted framework assessed the sustainability of the shore excursion in Bennett using the three methodologies, which are linked to the specific indicators they measure.

**Figure 4. Overview of the methodological approach**



## Chapter 4. Results

The results of the three methodologies employed to measure the indicators in the adapted shore excursion assessment framework are presented in this chapter. First, the results of the questionnaire are presented, followed by the results of the interviews and the trail assessments. The results are then summarized, providing an overall assessment and evaluation of the sustainability of the shore excursion to Bennett.

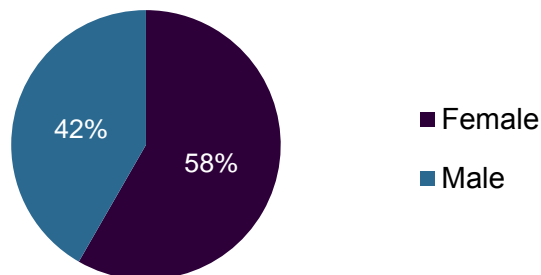
### 4.1. Results of the Questionnaire

In addition to the indicators measured by the questionnaire, basic information about the demographics of the cruise ship passengers visiting Bennett is included in this section. This information may help provide site-specific planning recommendations.

#### *Respondent Demographics*

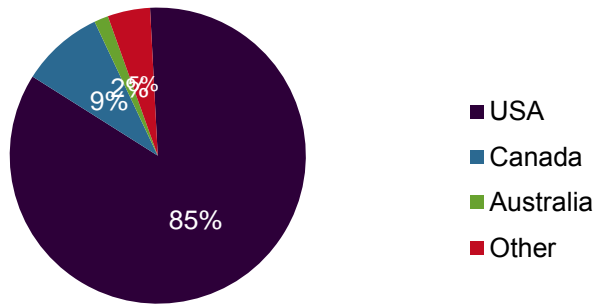
The majority (58%) of respondents were female (Figure 5) (n=309).

*Figure 5. Respondent's gender*



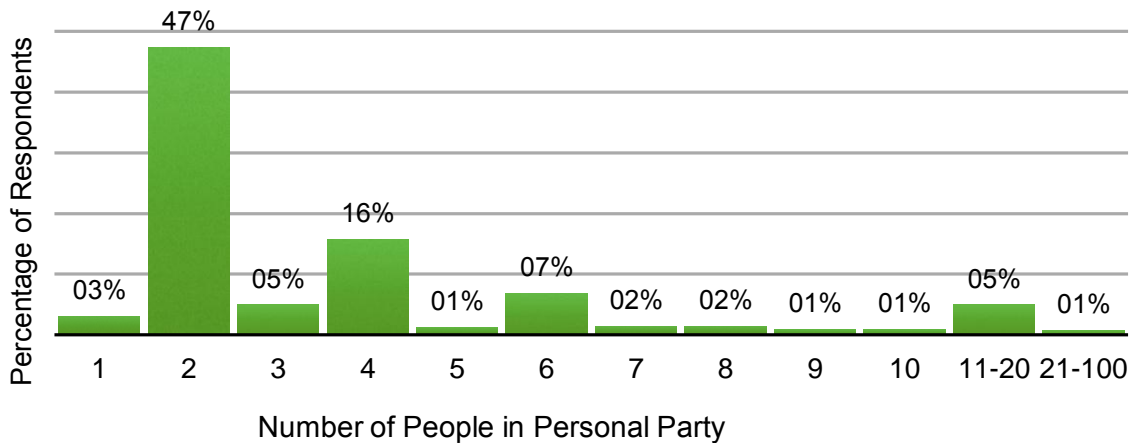
The three most commonly reported countries of origin were USA (85%), Canada (9%), and Australia (2%). England, New Zealand, France, Germany, Czech Republic, Italy, Scotland, Slovenia, and the Netherlands represented the remaining 5% of countries of origin (Figure 6) (n=388).

**Figure 6. Respondents location of origin**



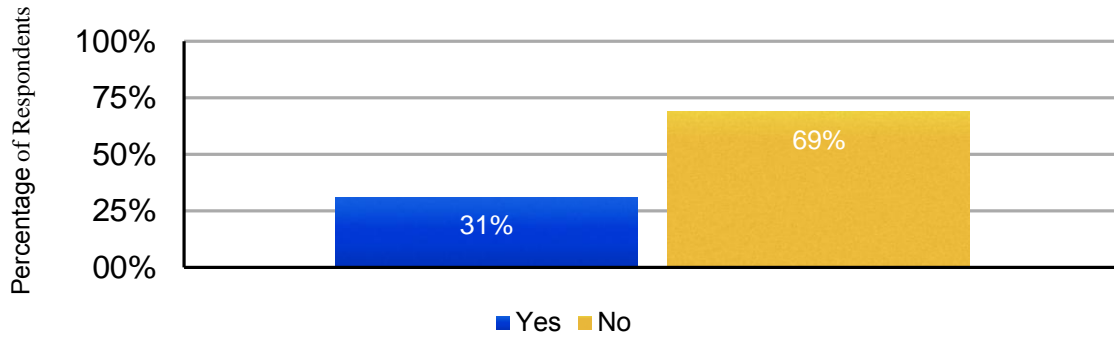
The average number of people per party was 7.12 (s.d.= 11.03) (Figure 7). The most frequently reported (47%) group size was two. A few respondents interpreted their “personal” travel party as a tour group originating from the cruise ship. Such an interpretation of the question accounts for some respondents indicating as many as 100 individuals in their party. A personal party was intended to mean the number of people the respondent had travelled from home with; as a result the calculated average is likely higher than the actual average for a personal travel party (n=448).

**Figure 7. Number of people per personal party**



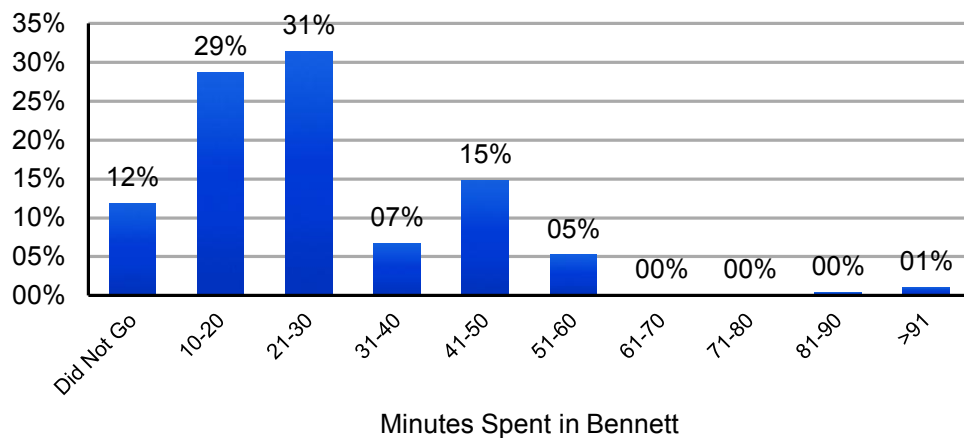
While the visitors to Bennett received a small handout that contained information about what to see and do in Bennett several minutes prior to arriving there, most respondents (69%) indicated that they did not know what to expect when they arrived in Bennett (Figure 8)(n=447).

**Figure 8. Did respondents know what to expect when they arrived in Bennett?**



Most respondents (60%) spent between 10 and 30 minutes on the self-guided tour. The response to this question most likely indicates time spent walking in Bennett, rather than time on the self-guided tour. Future surveys should clarify this question in order to differentiate between the self-guided and the train agent guided tours (Figure 9) (n=450).

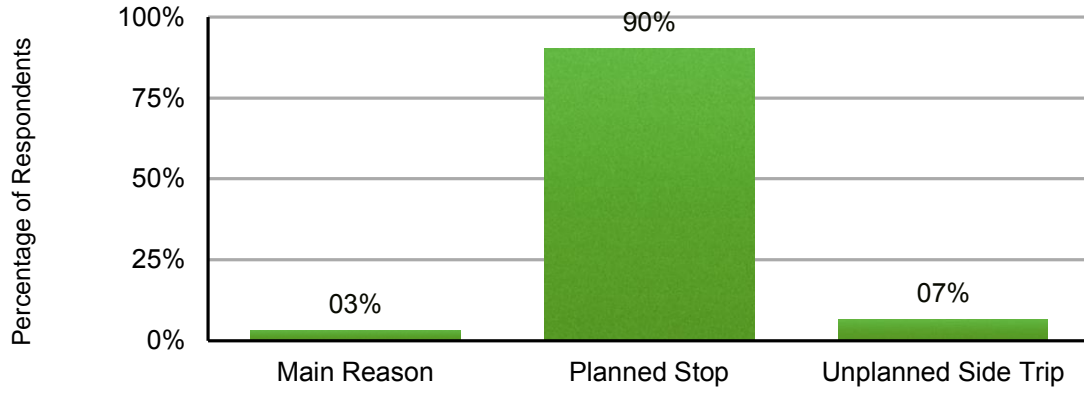
**Figure 9. Time spent walking in Bennett**





For the majority of respondents (90%) their trip to Bennett was a planned stop on a trip to the Yukon/Alaska (Figure 10) (n=449).

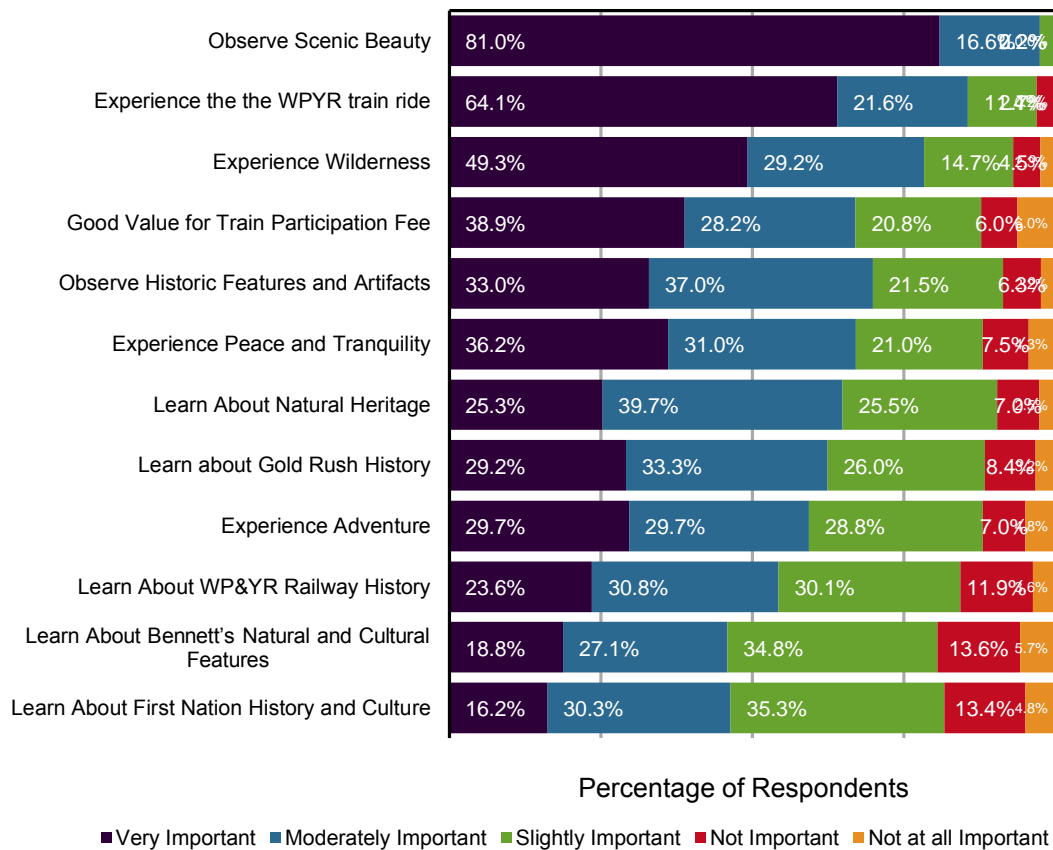
**Figure 10. Respondent's purpose of trip**



## Respondent Motivations

Of the reasons to visit Bennett provided in the questionnaire, to *observe scenic beauty* received the highest number of ratings of *most important*. The responses in Figure 11 are ordered based by mean response, where the most important motivational factors are listed at the top and the least are at the bottom. The mean importance is calculated based on 5= *very important*, to 1= *not at all important*. The second most important motivation for visiting Bennett was to “experience the WPYR train ride” while the least important motivation was to “learn about First Nation history and culture” (Figure 11). The motivations for visiting Bennett were further analyzed using a principle component analysis with varimax rotation to identify more general underlying relationships and patterns between variables (Table 11) (n=432 to 452).

**Figure 11. Respondent motivations**



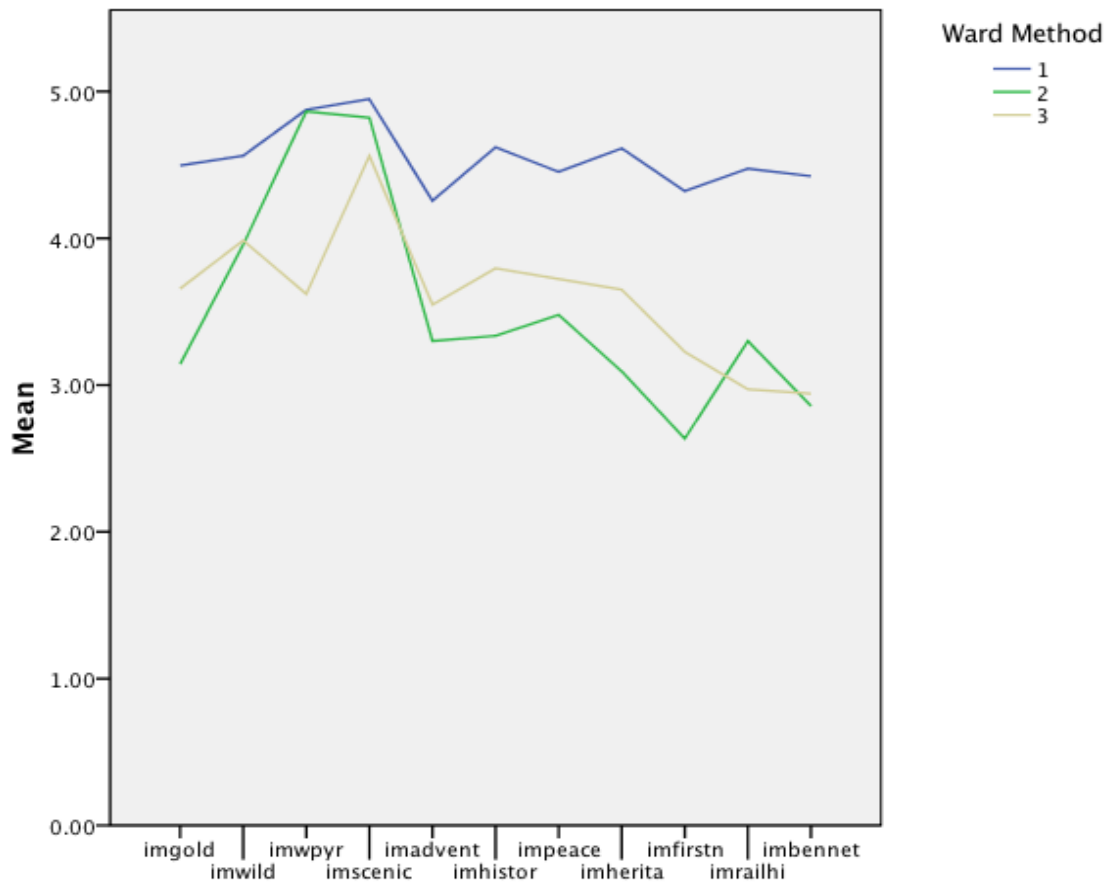
The twelve motivations reduced to three factors, which can be labelled as: historical motivation, outdoor recreation motivation, and train motivation (n=432 to 452).

**Table 11. Principle component analysis of motivations for visiting**

Motivations	Mean importance	Varimax rotated factor loadings by factor		
		1	2	3
<b>HISTORICAL MOTIVATION</b>	3.63			
Learn about First Nation Culture and History	3.39	0.781	0.29	0.051
Learn about natural heritage	3.78	0.777	0.328	0.041
Learn about Bennett City's natural and cultural features	3.39	0.761	0.183	0.311
Learn about gold rush history	3.77	0.724	0.04	0.17
Observe historic features and artifacts	3.92	0.688	0.276	0.078
Learn about WPYR railway history	3.58	0.687	-0.054	0.508
<b>OUTDOOR RECREATION MOTIVATION</b>	4.13			
Experience wilderness	4.18	0.15	0.765	0.072
Experience adventure	3.72	0.29	0.661	0.005
Observe scenic beauty	4.78	-0.072	0.616	0.005
Experience peace and tranquility	3.87	0.323	0.598	0.05
<b>TRAIN MOTIVATION</b>	4.16			
Experience the WPYR train ride	4.46	0.123	0.044	0.844
Good value for your train excursion participation fee	3.87	0.251	0.226	0.596

A cluster analysis on the twelve motivational factors grouped respondents that reported similar motivations. Three distinct clusters emerged (Figure 12). Cluster one (n=149) indicated that all motivational factors were very important and they indicated a motivation to *observe scenic beauty* was the highest. Clusters two (n=154) and three (n=150) were unmotivated to learn about *First Nation history and culture* and *WPYR railway history*. However, these two clusters are differentiated by the fact that cluster two indicates that *experiencing the train ride* is very important while cluster three does not.

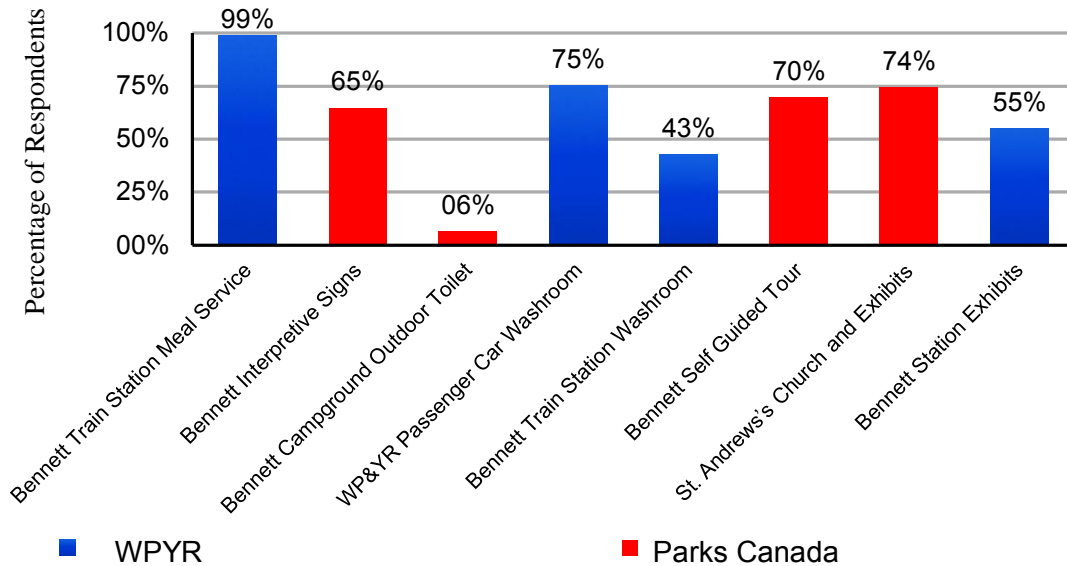
**Figure 12. Cluster analysis of respondent motivations**



## Respondent Satisfaction

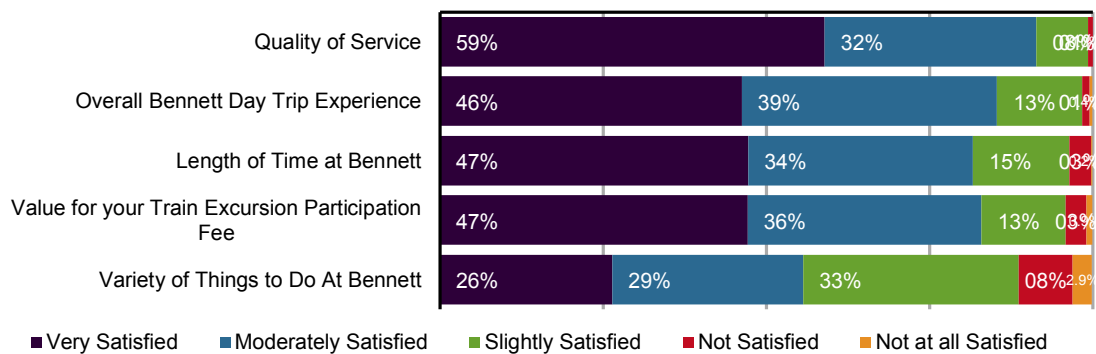
Figure 13 presents the percentage of respondents that used the services and activities in Bennett. The figure is designed so that services provided by Parks Canada are displayed in red and those by WPYR are displayed in blue (n=394 to 420).

**Figure 13. Services and activities used**



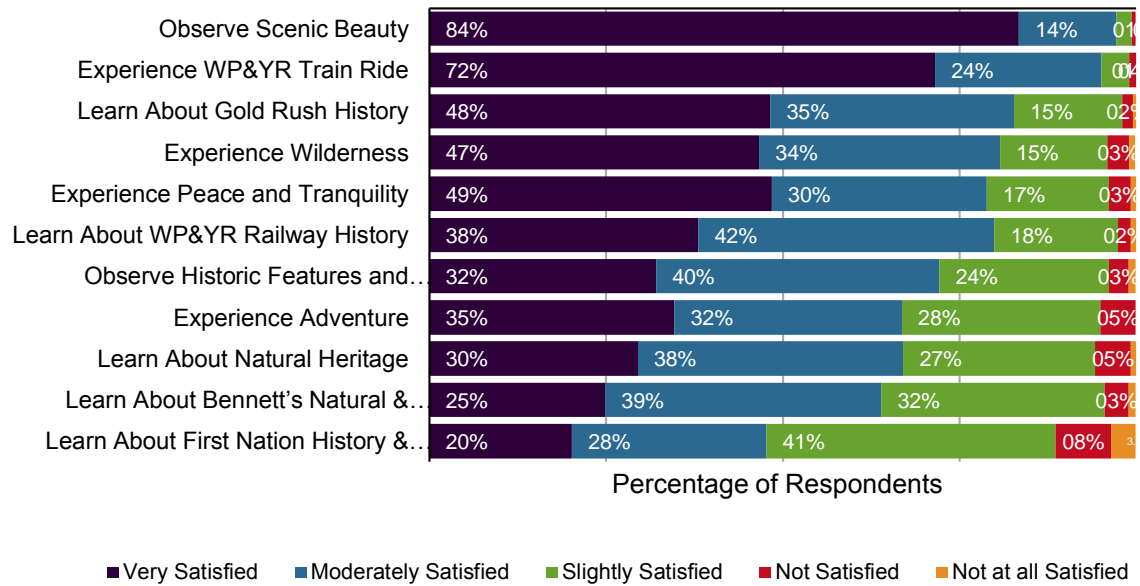
The respondents indicated their levels of satisfaction with the facilities and activities in Bennett on a scale of very satisfied (5) to not at all satisfied (1) (Figure 14) (n=380 to 407).

**Figure 14. Respondent satisfaction with facilities and activities**



The respondents also indicated their level of satisfaction with the opportunity to satisfy their motivations for coming to Bennett (Figure 15). The levels of satisfaction with the different motivations are organized in Figure 15 from most satisfied to least satisfied based on mean response. Respondents were most satisfied with their opportunity to *observe scenic beauty, experience the WP&YR train ride, and to learn about Gold Rush history* and least satisfied with their opportunity to *learn about natural heritage, learn about Bennett's natural and cultural resources, and learn about First Nation history and culture*(n=381 to 415).

**Figure 15. Respondent satisfaction with opportunities to satisfy motivations**



The clusters identified in Figure 12 allow for further analysis of the respondents' opportunity to satisfy their motivations. Table 12 presents the mean response of each of the clusters' opportunity to satisfy the different motivations. The mean response of Cluster 1 is significantly higher than all other clusters. Cluster 2 and 3's responses are not significantly different except for Cluster 2's mean response for opportunity to experience the WPYR train ride was significantly higher than Cluster 3. Cluster 2 had previously reported a greater mean importance of experiencing the WPYR train ride than Cluster 3 (n= 363 to 415).

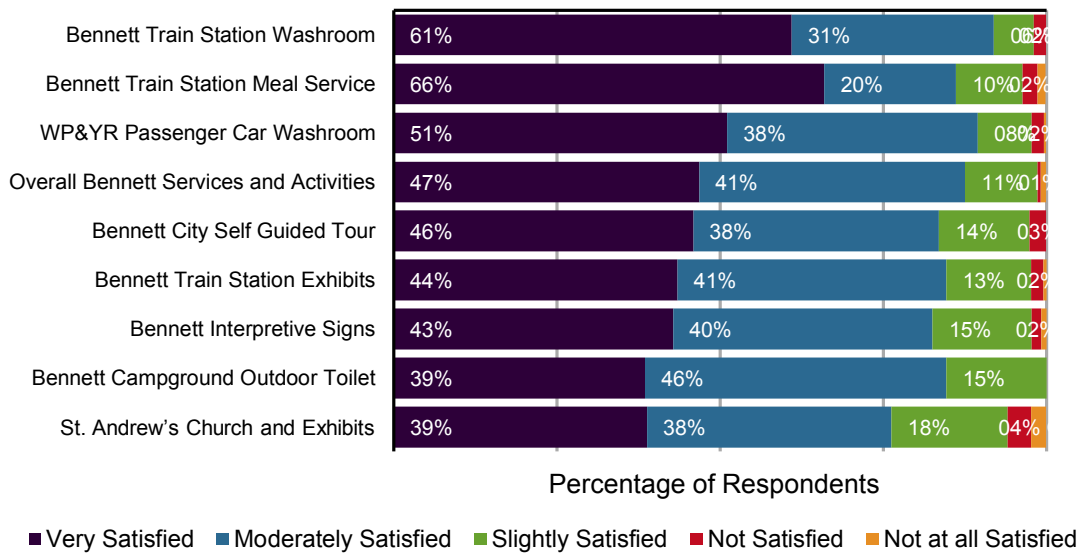
**Table 12. Cluster satisfaction with opportunity to satisfy motivations**

Motivation	Cluster 1	Cluster 2	Cluster 3
Observe scenic beauty	4.90*	4.80	4.71
Experience the WPYR train ride	4.85*	4.73*	4.39
Learn about gold rush history	4.51*	4.12	4.23
Experience wilderness	4.46*	4.16	4.05
Experience peace and tranquility	4.56*	4.13	3.98
Learn about WPYR railway history	4.48*	4.10	3.87
Observe historic features and artefacts	4.36*	3.81	3.81
Experience adventure	4.34*	3.79	3.76
Learn about natural heritage	4.27*	3.68	3.76
Learn about Bennett's natural and cultural resources	4.14*	3.70	3.67
Learn about First Nation history and culture	3.92*	3.30	3.40

\* indicates Tamhane's T2 mean difference is significant at the 0.05 level

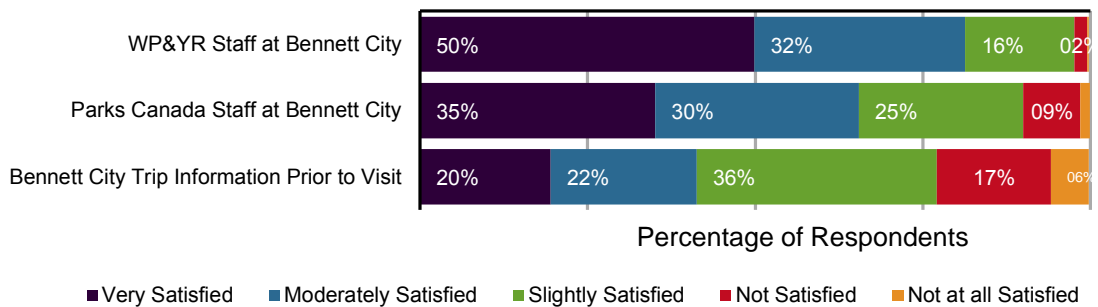
The respondents indicated their satisfaction levels with the services and facilities that they reported using or experiencing. The results are summarized in Figure 16, where satisfaction with activities and services are listed from highest to lowest based on mean satisfaction. Only respondents who participated in the service or activity have been included in analysis (n=26 to 430).

**Figure 16. Respondent’s satisfaction with services and facilities**



The respondents were satisfied with the availability of both Parks Canada staff and WPYR staff but over half (58%) were neutral or dissatisfied with the availability of trip information prior to their visit (Figure 17) (n=342-368).

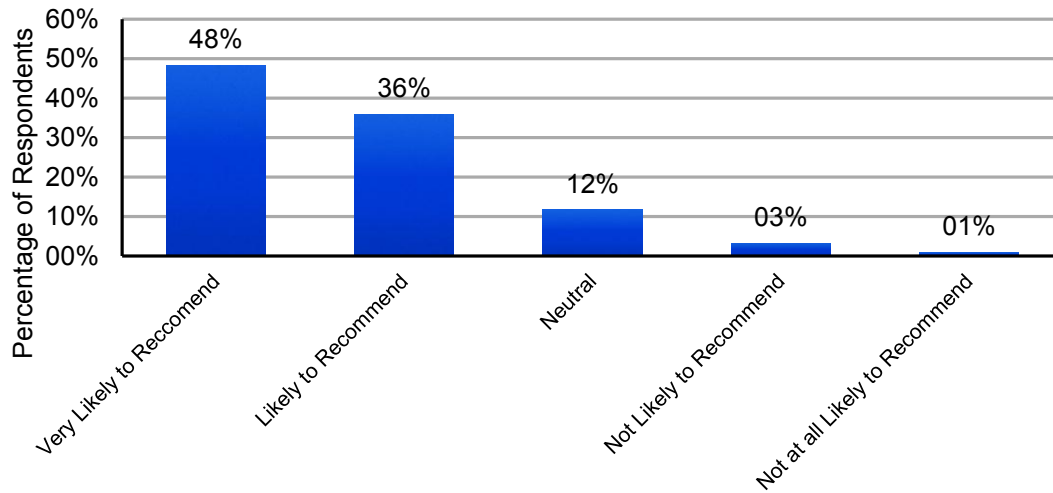
**Figure 17. Respondent satisfaction with staff and pre-trip information**





Respondents were asked if they would recommend the day trip to Bennett and the majority (84%) indicated that they were likely or very likely to recommend the trip (Figure 18). Only a small number (4%) indicated that they would be unlikely to recommend the trip (n=426).

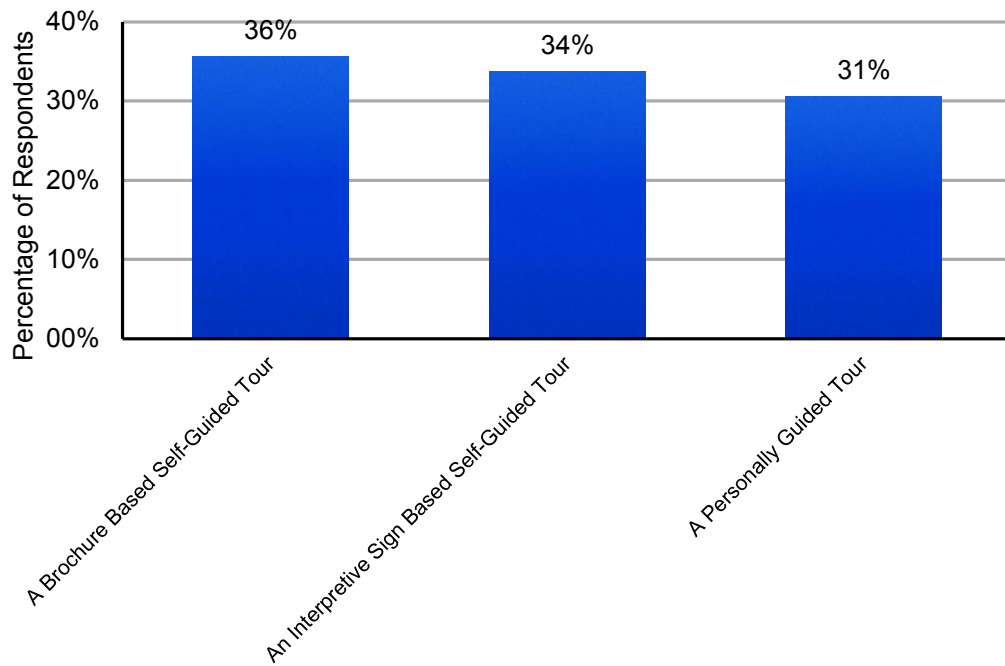
**Figure 18. Respondent's likelihood to recommend the trip**



## ***Future Development***

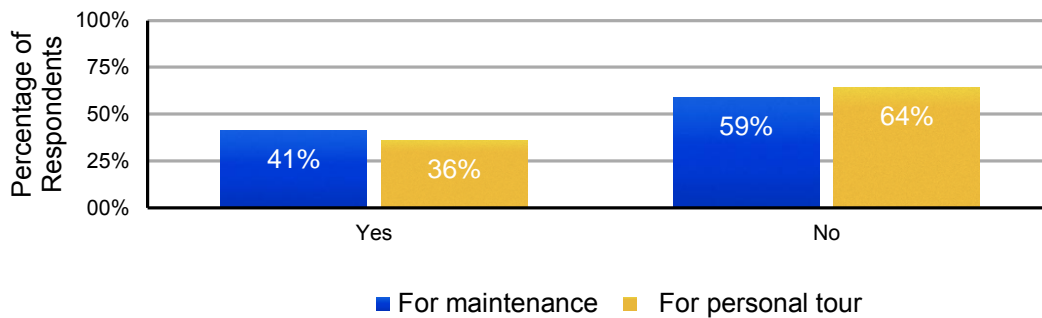
Respondents were asked which of three guided tour options they would prefer in the future (Figure 19). The three walking tour options all had similar levels of support (n=418).

***Figure 19. Future preference for guided tour***



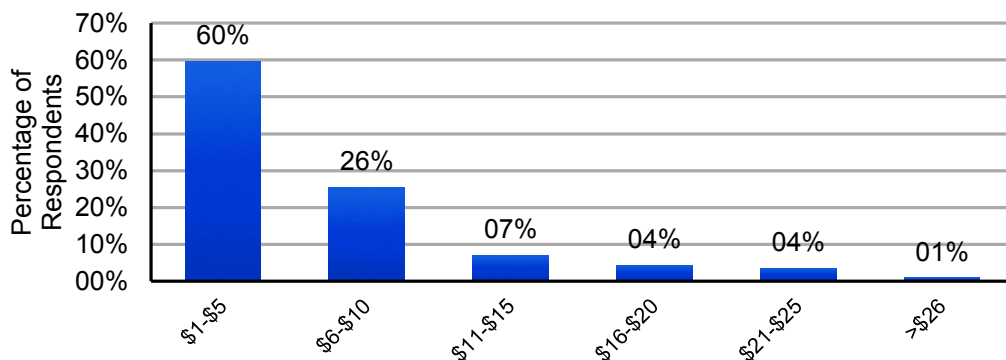
Respondents were asked if they would be willing to pay an additional fee to maintain Parks Canada facilities as well as if they would be willing to pay an additional fee for an optional guided historical walking tour delivered by Parks Canada staff. Well over half of the respondents indicated they would be unwilling to pay additional fees (n=405 to 431).

**Figure 20. Respondent's willingness to pay additional fees**



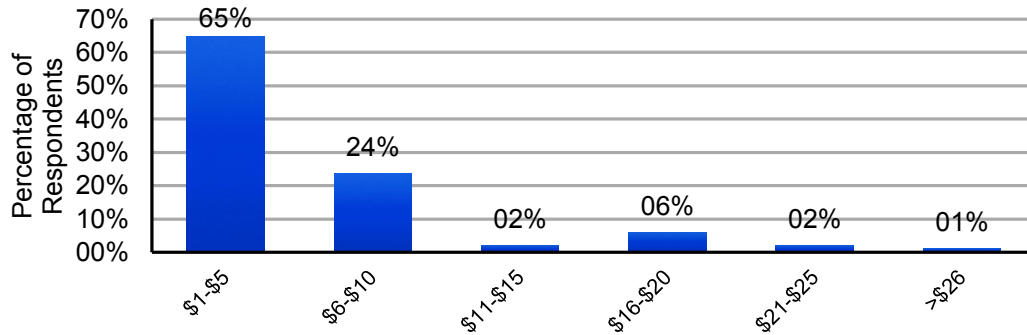
If respondents indicated that they would be willing to pay additional fees, they were asked how much they would be willing to pay. The amount a respondent was willing to pay for maintenance on site varied from \$1 to \$50 with a mean of \$7.48 and median of \$5 (s.d.=\$ 7.71) (Figure 21). Sixty percent were willing to pay between \$1 and \$5 (n=151).

**Figure 21. Respondent's amount willing to pay for maintenance**



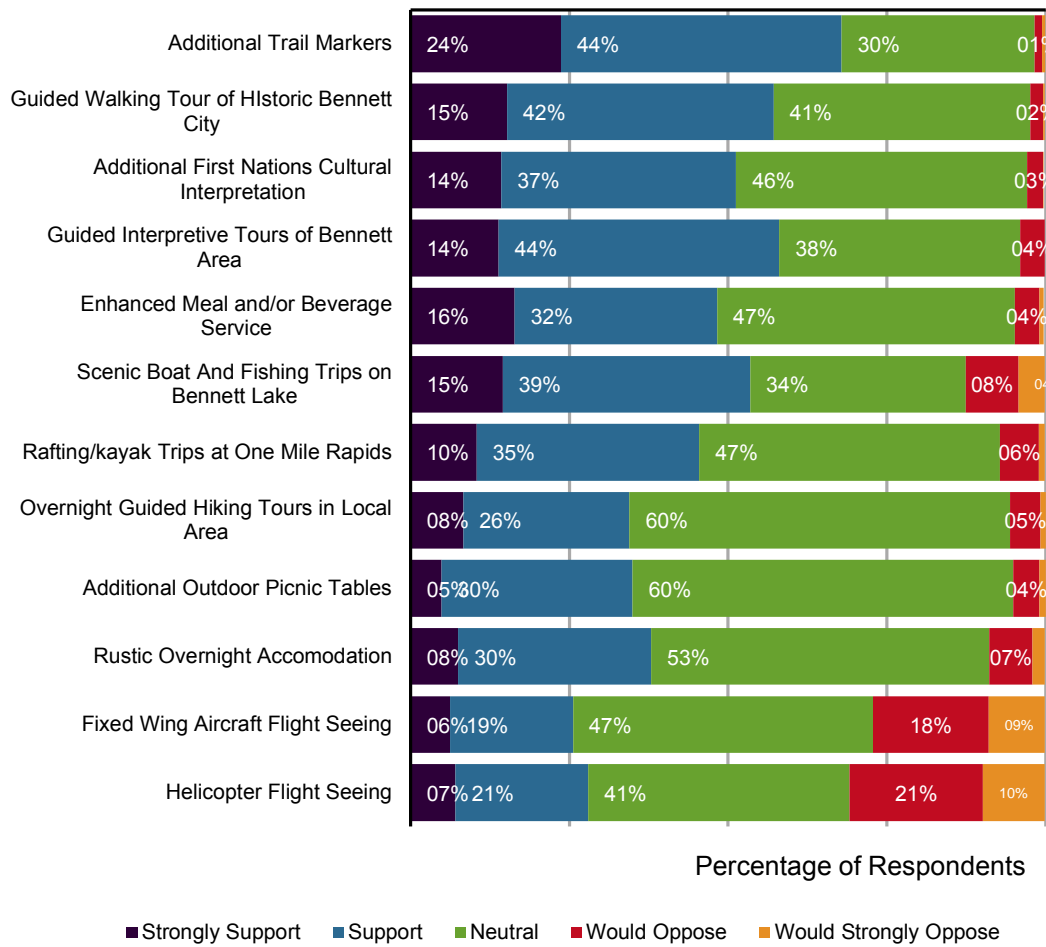
The amount a respondent was willing to pay for an optional guided tour varied from \$1 to \$40 with a mean of \$7.61 and median of \$5 (s.d.= \$6.24) (Figure 22). Most respondents were not willing to pay more than \$10 for either maintenance (89%) or a personally guided tour (86%) (n=114).

**Figure 22. Respondent's amount willing to pay for optional guided tour**



On a scale ranging from *strongly support* (5) to *strongly oppose* (1), respondents were asked to rate desirability of possible future developments in Bennett. The most acceptable types of development listed at the top of the Figure 23 based on mean importance. Additional trail markers are supported by a majority (67%) of respondents. Interpretive development is generally accepted by a majority of day use visitors and motorized activities are the least supported activities by respondents (n=393 to 410).

**Figure 23. Level of support for different types of development**



A principal component analysis of the mean acceptability for the different types of development shows four distinct factors of development exist: interpretation, motorized activities, and outdoor activities (Table 13). Interpretation development has the highest level of support, while motorized activities have the lowest level of support (n=393 to 410).

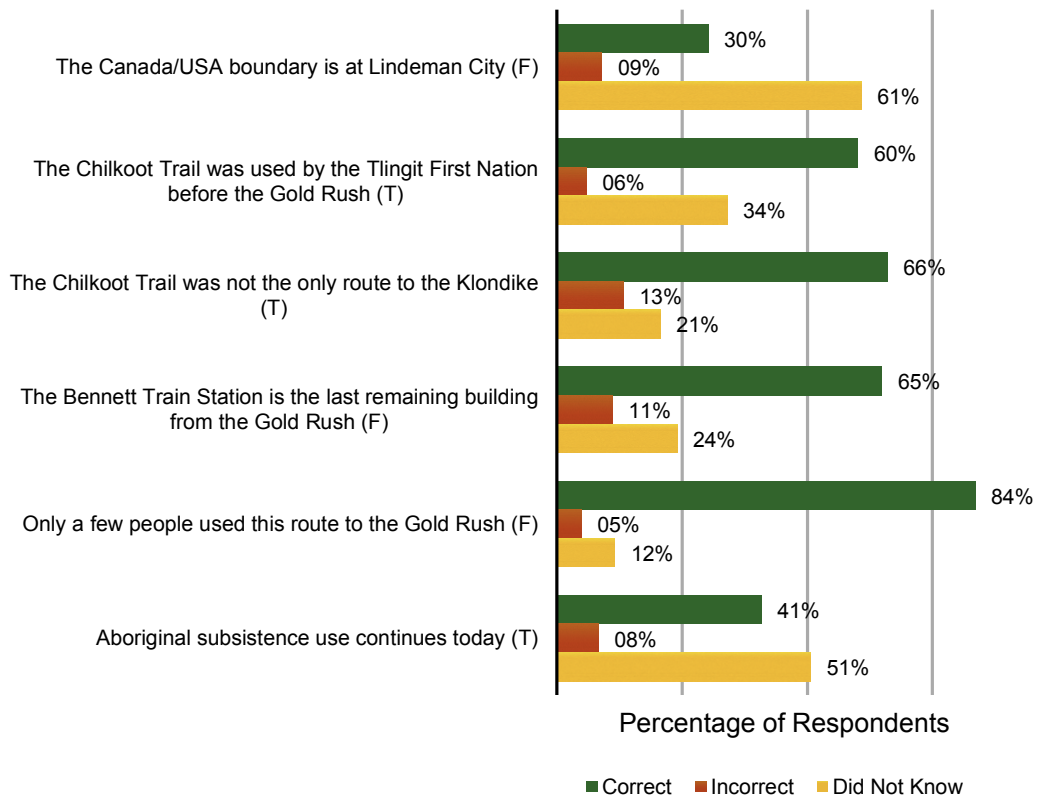
**Table 13. Principle component analysis on preferences for future development**

Possible Development	Mean Response	Varimax rotated factor loadings by factor		
		1	2	3
<b>MOTORIZED ACTIVITIES</b>	<b>3.14</b>			
Helicopter flight seeing	2.95	0.906	0.019	0.11
Fixed wing aircraft flight seeing	2.96	0.881	0.035	0.163
Scenic boat and fishing trips on Bennett Lake	3.51	0.567	0.073	0.463
<b>INTERPRETIVE ACTIVITIES</b>	<b>3.7</b>			
Guided interpretive tours of Bennett area	3.68	0.127	0.813	0.093
Guided walking tour of historic Bennett City	3.7	0.113	0.829	0.041
Additional First Nation cultural interpretation	3.67	-0.211	0.595	0.344
Enhanced meal and/or beverage service	3.59	0.379	0.497	0.066
Additional trail markers	3.89	-0.075	0.393	0.319
<b>OUTDOOR ACTIVITIES</b>	<b>3.41</b>			
Overnight hiking tours in local area	3.36	-0.02	0.39	0.579
Rafting/kayak trips at One Mile Rapids	3.47	0.378	0.183	0.607
Rustic overnight accommodation	3.35	0.252	0.11	0.674
Additional outdoor picnic tables	3.34	0.114	0.03	0.635

## Education

As part of the heritage theme communication by Parks Canada, respondents were asked to identify messages of national significance. The respondents answers to several true or false questions indicate that messages of national significance are not reaching a larger proportion of respondents (Figure 24) (n=375 to 391).

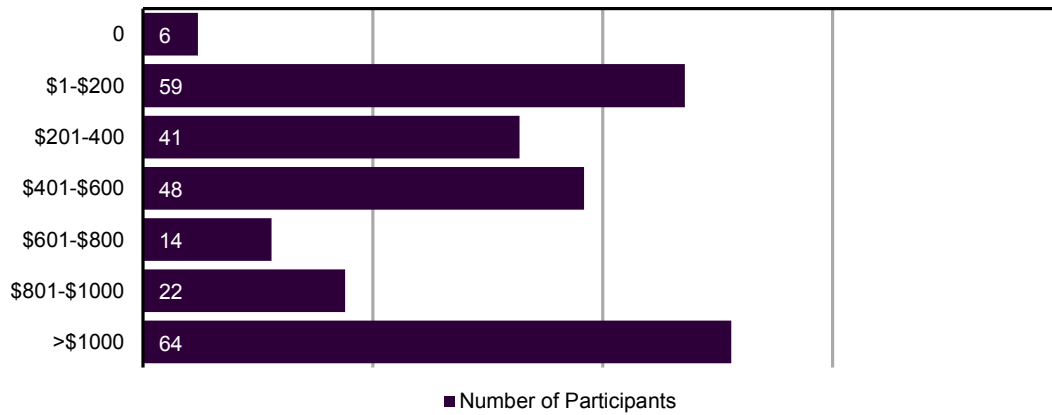
**Figure 24. Messages of national significance**



## ***Economic Contribution***

The expenditures made by respondents within 160 km of Bennett, including Skagway and Carcross, varied greatly, ranging from \$0 to \$16,000. After outliers were removed, the mean expenditure was \$513 (s.d.= \$261). The median expenditure was \$500 (Figure 25).

***Figure 25. Expenditures in Bennett and region***





## **4.2. Results of Key Informant Interviews**

The interview results are presented along with the measurement of the indicators of the assessment framework.

### ***Environmental Indicators Measured by Interviews***

The interviews covered two of the environmental indicators in the framework: the percentage of tourism products with specific contributions to the preservation of the environment built into the price; and the sightings of wildlife (Table 9). Based on interviews with both Parks Canada management and WPYR management, the cruise ship passengers currently do not pay any fees to help finance environmental conservation in Bennett on top of the price of the train ticket, and none of the ticket price is directly used to conserve the environment. This means that no fees from visitation are specifically used to finance conservation of the environment.

The interview with the CTFN land use planning team revealed that sightings of wildlife in the Bennett area had decreased. This was according to members of the team that use the area for subsistence use. No empirical measures have been made, however the local knowledge of the wildlife conditions is assumed to be accurate because they are most familiar with the wildlife patterns in the region. Whether this decline in wildlife sightings has occurred because of the shore excursion is not known.

### ***Economic Indicators Measured by Interviews***

The interviews included the following economic indicators: local support for infrastructure; employee satisfaction; percentage of shore excursion related jobs that are permanent; resident perceptions of change in cost of living; percentage of employees that are local; and number of facilities developed for shore excursion (Table 9).

From interviews with the on-site WPYR staff, Parks Canada, and Mrs. Edna Helm, the primary facilities developed for the shore excursion were reported to be the redevelopment of the rail line from Bennett to Carcross. This section of the railway was

unused for many years before the development of WPYR's and Holland America's shore excursion to Bennett. Once the shore excursion was developed, WPYR repaired the rail bridge in Carcross, and repaired and maintained the 30 miles of train tracks from Carcross to Bennett.

Local support for this infrastructure development was high. Mrs. Edna Helm reported that the increase in train service, including the redevelopment of the rail line to Carcross, has resulted in fewer Chilkoot Trail hikers staying in Bennett because of the increased train service leaving Bennett. With fewer hikers staying overnight in Bennett, Mrs. Edna Helm "feels like she has the place to herself". The WPYR train also provides free train rides to the entire Helm family, and WPYR considers the family "stewards of the land". Given this evidence, support for this infrastructure improvement is high.

Further support for the expanded train service to Carcross came from the manager of the territorial economic development program, Destination Carcross. He reported that Destination Carcross and WPYR are working in partnership in order to develop tourism in Carcross. At the time of the interview, Carcross was not incorporated as a municipality, and therefore was left out of funding and infrastructure developments provided by the territorial government. The expansion of the railway to Carcross as a result of the shore excursion has increased tourism and revenue to Carcross. In summary, Destination Carcross sees the shore excursion as a "tourism tool". The results of these interviews indicate that local support for the infrastructure development as a result of the shore excursion is positive.

The interviews were not successful at identifying the number and percentage of shore excursion related jobs which were permanent or full-year, the number of jobs created because of the shore excursion, and the percentage of employees that are local. However, I can make the following claims based on inferences from the interviews with the on-site WPYR staff, Parks Canada, and my personal observations from three summers in Bennett. First, the shore excursion only takes place from May 22nd thru August 31st, therefore the employment that is created solely by the shore excursion is likely seasonal. A few management positions would be permanent, but no staff is present in Bennett during the winter. The indicators related to employment were not

measured because the interview with the WPYR on-site staff was brief, and many of the topics were not covered.

### ***Social Indicators Measured by Interviews***

The interviews covered the following social sustainability indicators: the number of stakeholder groups involved in planning of shore excursions, the percentage of partners and key stakeholders who are satisfied with the tourism planning, the residential proximity to the shore excursion, and the period of residence (Table 9).

Interviews with Mrs. Edna Helm revealed that the residential proximity to the shore excursion for the only residents of Bennett, the Helm family, is 0 miles, and that the period of residence is several generations.

The results of the interviews indicate that several stakeholders are working together to plan the shore excursion to Bennett. Parks Canada reported working with the public, the WPYR management and the Carcross Tagish First Nation land use planning team as they developed their management plan for the Chilkoot Trail. The management plan includes strategies and key actions for the entirety of the Chilkoot Trail, however, a chapter of the management plan is dedicated to the future of tourism to Bennett.

Holland America and WPYR had a formal contract under which WPYR supplied the “bulk of business” for Holland America in Skagway, and the two worked together to offer “attractive shore excursions” that offer quality experiences, appeal to passengers, and provide tour mixes. In turn, both Holland America and WPYR reported working with Parks Canada when new operations are planned. The reported discussions between the two stakeholders included how they will be promoting the tour and what messages they will pass on to their visitors when the shore excursions visit Canadian National Parks. The CTFN land use team and Mrs. Edna Helm reported that they did not have contact with WPYR or Holland America, but Mrs. Edna Helm stated that Parks Canada has worked very well with her family in the planning of operations in Bennett.

The information suggested that most stakeholders work together, with the exception that WPYR and Holland America have not worked with the CTFN and the Helm family. The interviews also revealed that not all stakeholders are satisfied with the tourism planning. Parks Canada reported that while WPYR has helped with Parks Canada operations and does communicate, it would be ideal to have a more “harmonious” working relationship. The interviews with the Park Wardens and the on-Site WPYR staff indicated poor communication between the staff of the two organizations in Bennett, where, for example, the WPYR on-site staff report that they have no way to contact Parks Canada in the event of an emergency. Representatives of the two organizations also reported that they would like to have joint training days, where Parks Canada would conduct bear safety training for WPYR on-site staff, however they have been unable to do so.

Interviewees from Parks Canada also reported that while their relationship with the CTFN has improved, it could still be improved further. In the past, Parks Canada followed hiring policies that favoured CTFN members for positions on the trail crew. However, Parks Canada reported they would like to see more jobs in management positions offered to the CTFN. Also, all Parks Canada members that I interviewed suggested that they would like to see a greater CTFN presence in Bennett. At the time of the interview, the CTFN had not settled their land claim, but the Parks Canada managers considered co-management or shared management of the as a future option. However, the CTFN land use planning team suggested they may push to assume complete control of the CTNHS. The CTFN also reported they did not have a partnership with Destination Carcross. All of this evidence suggests that Parks Canada, WPYR, and the CTFN could benefit from improved working relationships.

### **4.3. Results of the Trail Assessment**

The trail indicators were measured for each trail segment in Bennett and the results are presented in Table 14. The table is organized so each row represents a trail segment, and the trail indicators for the segment are presented in the columns. The level of trail use for all of Bennett is presented in Table 15 and Figure 26. The data

indicate high levels of trail side trampling for all trail segments, and the existence of social trails throughout the site.

**Table 14. Results of the trail assessment**

Trail Segment	Erosion (cm)	Tread Surfacing	Interpretive Opportunities	Trail Side Trampling	Social Trails	Artefacts	Design Detail	Guided Tour	Level of Use
Entrance to Interpretation Signs	3.7	Parent material	2	20%	1	No	Natural boundaries	Yes	High
Stairs to Church	0	Wood steps	11	90%	2	Yes	Varied	Yes	High
Church Loop	1	Artificial gravel	1	25%	2	Yes	White stone boundaries	Yes	High
Mrs. Edna Helm's Loop	1.2	Parent material	0	10%	0	Yes	Varied	No	Medium
Chilkoot Trail to Overlook	0.4	Parent material	1	90%	7	Yes	Natural boundaries	No	Low
Chilkoot Trail, Overlook to Cemetery	0.4	Parent material	0	NA	4	Yes	Natural boundaries	No	Low
Church Loop to Campground	1.7	Artificial gravel	0	75%	0	Yes	Varied	Yes	Medium
River Trail	1	Parent material	0	80%	3	Yes	Natural boundaries	No	Low
Bennett St. from Campground to Interpretation	2	Parent material	0	40%	1	Yes	Varied	Yes	High

Erosion was greatest on the trail segment *Entrance to Interpretation Signs* and on the *Church Loop to the Campground*. Erosion on the Chilkoot Trail segments was minimal primarily because of the tread surfacing of the trail; the soft sand on these trail segments has not eroded significantly on the trail.

All trail segments had some level of trail side trampling. The trail side trampling was greatest on the *Stairs to the Church* and the *Chilkoot Trail to Overlook*. Both these segments have almost no trail definition, but vary in degree of use by visitors. Trail side trampling was also very high (80%) on the *River Trail*.

Social trails were present on all trail segments except *Mrs. Edna Helm's Loop* and *Church Loop to Campground*. These social trails varied in length and level of erosion, but were generally shortcuts to other parts of Bennett or the trail system. A total of 20 social trails exist in Bennett. The *Chilkoot Trail to Overlook* trail segment had seven social trails. These trails appeared to be shortcuts created between the campground and the church, which would intersect the *Chilkoot Trail to Overlook* trail segment. The next segment along the trail is the *Chilkoot Trail, Overlook to Cemetery* and there were a total of four social trails on this segment. The data suggest that the trails with natural boundaries, or varied boundaries, had the greatest number of social trails and trail side trampling (Table 14).

All trail segments but the *Entrance to Interpretation* had artefacts visible from the trail. However, all of Bennett contains artefacts, whether they are visible or not. For example, the gold rush stampeders built tent platforms by raising the soil. These platforms remain today even though they are covered in vegetation. Such an abundance of artefacts illustrates the sensitive nature of Bennett, where the probability is high that travel off rails will affect artefacts.

Four trail segments contain interpretive signage. The *Stairs to Church* trail segment contains eleven interpretive signs. These signs are arranged in a semi-circle, and describe traditional First Nation life. The *Church Loop* contains one interpretive sign which describes the origin of the St. Andrews Presbyterian Church. None of the trail

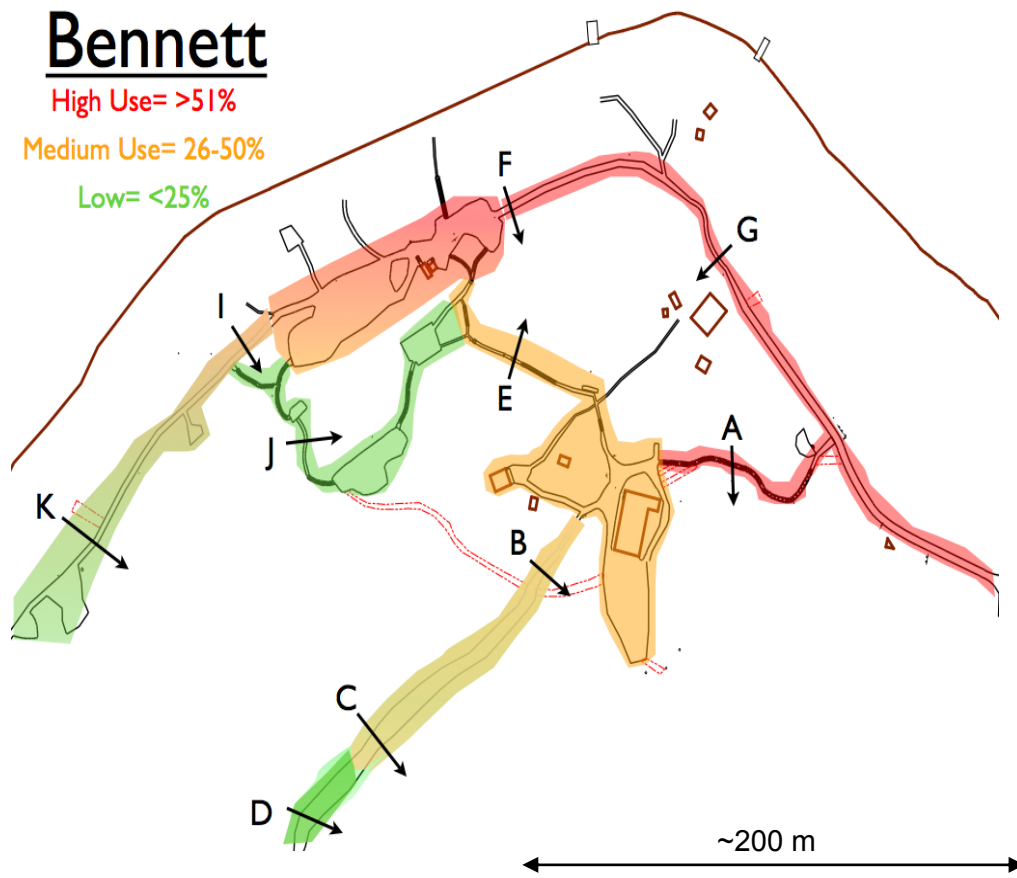
segments along the Chilkoot Trail contain any interpretive signage, nor does the campground or *River Trail*.

The level of use on each trail segment by visitors was variable (Table 15, Figure 26). The *Stairs to Church* is a trail segment that most visitors use to get to the Church, however the trail counter placed on the trail segment indicated a mean of 66.4% (s.d.= 51.7%) of all visitors on a given day pass by the trail counter. For example, on July 9th, 11:30-13:30, 69 visitors were reported in Bennett, and of those the trail counter recorded 68. Once the mean correction ratio for that counter (0.63 +/- 0.07) is applied, 62% of visitors that day walked the *Stairs to Church* trail segment. However, that afternoon (13:30-15:00), 34 reported visitors were in Bennett, and 0 counts were recorded by the *Stairs to Church* trail counter. Such variability is evidenced by all other trail counters, while the correction ratios for some of the trail counters also varied (Table 15) In general, it appears that the highest levels of use for each trail segment corresponded with whether the trail segment was part of the self guided walking tour, or part of the informal WPYR train agent tour.

**Table 15. Level of use by trail counter**

Trail Counter	Position	Mean Percentage of Visitors passing trail counter	Standard Deviation	Mean Correction Ratio	Standard Deviation
1	A	66.40%	51.70%	0.63	0.07
1	J	1.40%	3.10%	NA	NA
1	K	17.90%	28.70%	NA	NA
2	B	26.40%	30.20%	0.64	0.03
2	I	31.80%	45.80%	1.175	0.69
3	C	30.80%	29.70%	0.91	0.35
3	F	74.60%	60.10%	1.22	0.5
4	D	16.40%	24.30%	0.5	NA
4	G	60.50%	53.50%	0.82	0.34
5	E	37.70%	24.70%	0.91	0.08

Figure 26. Trail counter locations and level of use





## 4.4. Summary of Impacts

In this section I compile the results for all indicators presented in Chapter 3 to form an assessment of the sustainability of the Bennett shore excursion. The results are presented in three tables with each table containing one suite of indicators (Table 17-20). The results for each indicator are also evaluated on their contribution to sustainability. The evaluations are color coded and the legend is presented in Table 16 and the justification for evaluation is detailed in the tables.

**Table 16. Evaluation Key**

<b>No Judgement Possible</b>	<b>Negative contribution to sustainability</b>	<b>Unknown contribution to sustainability</b>	<b>Positive contribution to sustainability</b>
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**Table 17. Summary of environmental impacts**

Indicator	Results	Evaluation
- Type of bioregion	- Sub-alpine boreal forest	- Does not provide measurement of environmental sustainability by itself.
- Number of facilities for tourists	- 5	- Does not provide measurement of environmental sustainability by itself.
- % Use of facilities	<ul style="list-style-type: none"> <li>- 99% use train station meal service</li> <li>- 6% use campground outhouse</li> <li>- 75% use passenger car washroom</li> <li>- 43% use train station washroom</li> <li>- 55% use train station exhibits</li> </ul>	- Requires standard for evaluation to be made.

Indicator	Results	Evaluation
- Existence of applied codes of conduct for tourism operators	- None	- Scherrer et. al (2011) and Williams (1994) stress the importance of visitor management. This indicator reveals a sub-standard level of visitor management.
- Number of people allowed on shore excursion	- 350	- Requires standard for evaluation to be made.
- Average number of people per party	- 7.12 (s.d.=11.03)	- Requires standard for evaluation to be made.
- Existence of protected area at the destination	- National Historic Site	- The WTO (2004) reports that legislative protection supports environmental sustainability.
- Value generated through visitor fees	- \$0	- This measurement is below the standard of sustainable tourism set by the WTO (2004).
- % of tourism products with specific contributions built into the price	-0	- This measurement is below the standard of sustainable tourism set by the WTO (2004).
- Sightings of key indicator species	- Carcross Tagish Land Use team and Mrs. Edna Helm reported less wildlife in the Bennett area since the increase in visitation	- This measurement is below the standard of sustainable tourism set by the WTO (2004).

**Table 18. Summary of economic impacts**

Indicator	Results	Evaluation
- Number of jobs created because of shore excursion	- Missing	- Missing

Indicator	Results	Evaluation
- Level of support for shore excursion infrastructure	- 92% satisfied with train station washroom* <i>*respondents indicated very satisfied or moderately satisfied</i> -The interviews revealed high levels of support for expansion of railway to Carcross as a result of the development of the shore excursion	This level of support is above Parks Canada standards and the interviews suggest positive local economic benefits from the development of the railway to Carcross.
- Level of support for shore excursion infrastructure	- 89% satisfied with passenger car washroom* - 87% satisfied with campground outhouse* - 86% satisfied with meal service* - 85% satisfied with train station exhibit* <i>*respondents indicated very satisfied or moderately satisfied</i>	These levels of satisfaction are below Parks Canada's standard for satisfaction with facilities and services.
- Amount of time spent on a shore excursion	- Most respondents (60%) spent between 10 and 30 minutes walking in Bennett	- Requires standard for evaluation to be made.
- Average expenditure per person in region	- \$513 (s.d.=\$261)	- This measurement is higher than previous findings (BREA 2008) on per person cruise ship expenditures.
- Percentage of employees that are local	- Missing	- Missing
- Number and percentage of shore excursion related jobs which are permanent	- Missing	- Missing

**Table 19. Summary of social impacts**

Indicator	Results	Evaluation
- Overall satisfaction	- 85% were <i>very</i> or <i>moderately</i> satisfied with their overall Bennett day trip experience	- These levels of satisfaction are below Parks Canada's standard for satisfaction with facilities and services.
- Likelihood to recommend return visits	- 84% were <i>very likely</i> or <i>likely</i> to recommend the day trip to Bennett to their family and friends.	These levels of satisfaction are below Parks Canada's standard for satisfaction with facilities and services.
- Visitor motivations	- The motivations that received the greatest number of ratings of "very important" were to <i>observe scenic beauty</i> and to <i>experience the WPYR train ride</i> .	- Does not provide measurement of environmental sustainability by itself.
- Purpose of visit	- 90% reported trip to Bennett was a planned stop, and only 9% reported it was the main reason for their trip from home.	- Does not provide measurement of environmental sustainability by itself.
- % satisfaction with facilities, services and activities provided	- 92% satisfied with train station washroom - 91% satisfied with quality of service* <i>*respondents indicated very satisfied or moderately satisfied</i>	This level of support is above Parks Canada satisfaction standards.

Indicator	Results	Evaluation
<p>- % satisfaction with services and activities provided</p>	<ul style="list-style-type: none"> <li>- 89% satisfied with passenger car washroom*</li> <li>- 87% satisfied with campground outhouse*</li> <li>- 86% satisfied with meal service*</li> <li>- 86% satisfied with meal service*</li> <li>- 85% satisfied with train station exhibit*</li> <li>- 84% satisfied with self guided tour*</li> <li>- 83% satisfied Bennett interpretive signs*</li> <li>- 83% satisfied with value for train excursion fee*</li> <li>- 81% satisfied with length of time at Bennett*</li> <li>- 82% satisfied with WPYR staff*</li> <li>- 64% satisfied with Parks Canada staff*</li> <li>- 55% satisfied with variety of things to do at Bennett*</li> <li>- 42% satisfied with trip information prior to visit*</li> </ul> <p><i>*respondents indicated very satisfied or moderately satisfied</i></p>	<p>These levels of satisfaction are below Parks Canada's standard for satisfaction with facilities and services.</p>
<p>- % satisfied with opportunity to fulfill motivations</p>	<ul style="list-style-type: none"> <li>- 98% satisfied with opportunity to <i>observe scenic beauty</i>*</li> <li>- 96% satisfied with opportunity to <i>experience the WPYR train ride</i>*</li> </ul> <p><i>*respondents indicated very satisfied or moderately satisfied</i></p>	<p>This level of support is above Parks Canada satisfaction standards.</p>
<p>- % of correctly identified educational messages</p>	<ul style="list-style-type: none"> <li>- 84% know that more than a few people used the Chilkoote Trail to in the Gold Rush</li> <li>- 66% knew that the Chilkoote Trail was not the only route to the Klondike</li> <li>- 65% knew that the Bennett train station is not the last remaining building from the Gold Rush</li> <li>- 60% know that the Chilkoote Trail was used by the Tlingit First Nation before the Gold Rush</li> </ul>	<p>This level of support is above Parks Canada standard for percentage of respondents who learned about the site's heritage.</p>
<p>- Residential proximity</p>	<p>- 0 miles</p>	<p>Requires standard for evaluation to be made.</p>

Indicator	Results	Evaluation
- Period of residence	- Generations	Requires standard for evaluation to be made.
- % of correctly identified educational messages	- 41% knew that aboriginal subsistence use continues on the trail - 30% knew that the Canada/US boundary is not at Lindeman City	This level of support is below Parks Canada standard for percentage of respondents who learned about the site's heritage.
- Number of stakeholder groups involved in planning of shore excursion	- 4	- Timur and Getz (2009) and WTO (2004) state that all relevant stakeholders should be involved in planning process.
- Percentage of stakeholders who are satisfied with planning of shore excursion.	- 33.3%	- WTO (2004) state that all relevant stakeholders should be satisfied with the planning process.

The results of the trail assessments are evaluated in Table 20. The evaluations are based on the extent of trail side trampling, the level of use, the number of social trails and personal observations on the condition of the trail segment. The evaluations are again color coded according to the key presented in Table 16 with the following qualifications. Green indicates that the trail segment is in an acceptable condition, with minimal social trails and trail side trampling. The color blue indicates that the trail segment is of concern, where trail side trampling and the number of social trails are high, and the segment may or may not have high levels of use. The blue trail segments are in need of repairs or improvements in the near future. Trail segments which are coloured red indicate severe trail side trampling, high numbers of social trails, poor trail condition and may or may not have high levels of use. These trail segments need immediate improvements and repairs.

**Table 20. Evaluation of trail assessments**

Trail Segment	Erosion (cm)	Tread Surfacing	Interpretive Opportunities	Trail Side Trampling	Social Trails	Artifacts	Design Detail	Guided Tour	Level of Use
Entrance to Interpretation Signs	3.7	Parent material	2	20%	1	No	Natural boundaries	Yes	High
Stairs to Church	0	Wood steps	11	90%	2	Yes	Varied	Yes	High
Church Loop	1	Artificial gravel	1	25%	2	Yes	White stone boundaries	Yes	High
Mrs. Edna Helm's Loop	1.2	Parent material	0	10%	0	Yes	Varied	No	Medium
Chilkoot Trail to Overlook	0.4	Parent material	1	90%	7	Yes	Natural boundaries	No	Low
Chilkoot Trail, Overlook to Cemetery	0.4	Parent material	0	NA	4	Yes	Natural boundaries	No	Low
Church Loop to Campground	1.7	Artificial gravel	0	75%	0	Yes	Varied	Yes	Medium
River Trail	1	Parent material	0	80%	3	Yes	Natural boundaries	No	Low
Bennett St. from Campground to Interpretation	2	Parent material	0	40%	1	Yes	Varied	Yes	High



## **Chapter 5. Recommendations**

This chapter discusses alternative management actions that could be implemented to reduce or eliminate the negative impacts of the shore excursion to Bennett. These alternatives are based on the sustainability assessment summarized at the end of Chapter 4. The chapter is organized into three sections. The first section reviews a wide range of possible management actions to optimize environmental impacts, economic impacts, and social impacts. The second section considers the trade-offs among these alternatives. This leads to the final section, in which concrete recommendations are made to Parks Canada and WPYR for managing the shore excursion in the future.

### **5.1. Development Scenarios**

#### ***Optimize Environmental Impacts***

The sustainability assessment of the environmental impacts of the shore excursion to Bennett shows that the excursion performs poorly in the following areas: the lack of applied codes of conduct for tourism operators, a lack of visitor fees that finance conservation, and reduced sightings of wildlife species. Furthermore, the trail assessment results indicate that certain trail segments are experiencing trail side trampling and social trails have formed. Thus, while much of Bennett is protected by legislation as a National Historic Site of Canada, the cruise ship passengers are exerting negative environmental impacts on the site. In order to reduce these negative environmental impacts, potential management actions that would minimize the environmental impacts of the shore excursion to Bennett are described.

*Don't operate the shore excursion to Bennett*

This management action would eliminate all the negative environmental impacts of the shore excursion to Bennett. Stopping the shore excursion to Bennett would alleviate the impacts on the trail system, as well as remove a large number of cruise ship passengers who may be disrupting the wildlife in the area. Furthermore, the stress on the site as a result of the shore excursion would be eliminated, and therefore no financial contributions to conservation would be needed.

*Bring fewer tourists to Bennett.*

Reducing the total number of tourists in Bennett may reduce the environmental impacts in Bennett. Currently, 100 to 350 cruise ship passengers visit Bennett each day, but if this number was significantly reduced, the impacts on the trail system may be reduced. Fewer visitors would provide for a quieter environment, which may be favoured by those visitors who are motivated by outdoor recreation (Table 11), which includes experiencing wilderness, and experiencing peace and solitude. Mrs. Edna Helm also reported that she enjoyed the peace and quiet of there being fewer visitors in Bennett at night. This management action is also suggested by Macpherson (2008) as a method for an on-shore destination with little infrastructure to reduce the environmental impacts of visitation. Future studies could make explicit attempts to measure whether fewer people actually reduced environmental impacts.

*Require WPYR to pay a fee to Parks Canada*

The shore excursion to Bennett is currently the most expensive tour option WPYR offers for cruise ship passengers in Skagway because of the length of the trip and the costs of maintaining the railroad from Bennett to Carcross. However, if WPYR charged even more for the tour, it may reduce the number of passengers visiting Bennett, which may result in the reduced environmental impacts mentioned above. As an alternative, some of the additional revenue could be passed on from WPYR to Parks

Canada for the use of the site by WPYR passengers. These funds could directly finance conservation in the area, which currently is not occurring.

Parks Canada and WPYR management both identified that in the past, visitors paid an additional fee for a Parks Canada guided tour of Bennett. However, now that no tour is provided by Parks Canada, the WPYR management is hesitant to pay a fee because the stop in Bennett may become an optional part of the tour.

Nonetheless, both stakeholders agree that if Parks Canada were to require a fee and provide a guided tour of Bennett, the overall tour experience would be improved. WPYR management suggested that if Parks Canada built up infrastructure and improved the services it offers, the quality of the trip to Bennett would improve and add value to the train's operation.

While pleased that WPYR has “picked it up where Parks Canada has failed” (Parks Canada Warden 2009) by providing guided tours of Bennett, Parks Canada is insistent that there is a “real necessity” to staff a Parks Canada member in Bennett. The staff would be able to enhance public safety through bear and fire management and could “welcome” guests to Canada. Furthermore, the Parks Canada guide could ensure that the visitors to Bennett received the messages of national significance.

#### *Improve pre-trip information*

Currently, only 42% of respondents were *very satisfied* or *satisfied* with the pre-trip information. If more pre-trip information was provided to the passengers either before they begin the cruise, on the cruise ship, or on the train, visitor satisfaction may increase and they may be less likely to leave the trail system and impact the environment. The pre-trip information should include information that explains the impact of leaving the trail, including damaged vegetation and increased erosion. The pre-trip information could be made available for participants in the shore excursion either while on-board the cruise ship, before they board the cruise ship, or while on-board the WPYR train.

*Provide a guided tour of Bennett.*

A well trained guide, with an established code of conduct could significantly reduce the environmental impacts of the cruise ship passengers in Bennett. A tour guide could monitor visitor actions while in Bennett, and could prevent most of the visitors from walking off the trails, and from creating social trails. The tour guide could also inform the visitors of the sensitive nature of the environment before entering Bennett. Scherrer et. al (2011) found that the way visitors were managed by tour operators on shore excursions in Western Australia greatly influenced visitor behaviour at sensitive sights, potentially reducing impacts on the environmental site assets.

The tour guide should also choose trail segments that can accommodate large groups of people. Currently, the informal guided tour offered by WPYR train agents has stopping points in Bennett where passengers actually must stand off the trail when they congregate around the guide to listen to the stories. These locations have experienced significant trail side trampling. More suitable locations for group stops would be in the Bennett campground and at the St. Andrew's Church. If WPYR continues to offer informal guided tours, they should train with Parks Canada staff to ensure that messages of national significance are passed on to the visitors and stopping points are chosen in appropriate locations to minimize adverse effects on the trails. Alternatively, Parks Canada could provide the guided tour to ensure these results.

### ***Optimize Economic Impacts***

The only negative economic impacts revealed by the sustainability assessment of the shore excursion to Bennett are levels of satisfaction for infrastructure in Bennett that are below Parks Canada's standards for satisfaction (Parks Canada Agency 2010). However, the assessment failed to measure the seasonality of the shore excursion. It can reasonably be assumed though, that the economic benefits of the shore excursion are mainly seasonal. The shore excursion only operates from May 22nd to August 31st, therefore it is likely that most of the employment created by the shore excursion is also

seasonal. Currently, the average per person expenditure reported by the cruise ship passengers is higher than previous findings of cruise ship passengers in Canada (BREA 2008), where the average is \$513 (s.d.= \$213) per person. The following management strategies may enhance the economic benefits of the shore excursion, or alleviate the negative impacts.

*Keep the cruise ship passengers in Bennett or Carcross for a longer period of time*

If studies such as Henthrope's (2002) are accurate, which claim that the longer a tourists spends at a destination, the more money they spend, a management decision that increased the amount of time cruise ship passengers spent either in Bennett or Carcross could increase the economic benefits. Currently, the cruise ship passenger only spend an hour and a half in Bennett, and of that time, the majority (60%) of passengers report spending only between 10-30 minutes outside of the train station in Bennett. If the shore excursion were to spend more time in Bennett, it is possible that the visitors would spend more money, which would directly benefit the local residents of Bennett. In my interview with Mrs. Edna Helm, she reported that the visitors did not have enough time to walk around Bennett and visit her gift shop.

If visitors were to spend more time in Bennett, there is also the possibility that further infrastructure could be developed in Bennett. Currently, just over half of the respondents (55%) reported that they were *very satisfied* or *moderately satisfied* with the variety of things to do in Bennett. These data suggest that a greater variety of activities could be offered in Bennett, and if some of these activities included food shops or gift shops, there would be the potential to capture more economic benefits. Currently, Mrs. Edna Helm operates a small craft shop in Bennett, but she does not want to be forced to keep it open all season long. Her shop could be complemented with an additional gift shop in Bennett operated by either the CTFN, Parks Canada, or WPYR.

Alternately, if the visitors had more time in Carcross, they would be more likely to visit the different shops in town. The interview with the CTFN land use team revealed that cruise ship passengers in Carcross only spent about 15 minutes and primarily only

visit one shop in town. Keeping the visitors in Carcross for longer than 15 minutes was a reported goal for the future of tourism to Carcross by the manager of the program Destination Carcross. Any management action that would keep the cruise ship passengers in Carcross for longer may therefore improve the economic impacts of the shore excursion for those in Carcross.

### ***Optimize Social Impacts***

The shore excursion assessment framework indicated several social problems which are reducing the sustainability of the shore excursion to Bennett including: the visitors to Bennett report levels of satisfaction with services which fall below Parks Canada's established standards of satisfaction; a low likelihood to recommend the trip to future passengers; not all messages of national significance were retained, less than all stakeholders are involved with planning; and only 33% of stakeholders are satisfied with the planning process. The following management actions could be implemented so that the negative social impacts of the shore excursion could be reduced and the positive social benefits enhanced.

#### *Involve all stakeholders in the planning process*

If all stakeholders involved with the shore excursion were involved in the planning process, more stakeholders may be satisfied with the implementation of the shore excursion. Currently, while some aspects of the shore excursion, such as increased train service to Bennett are supported by the stakeholders, some aspects of the tour are viewed as a problem, such as the lack of guided tours and lack of fees for upkeep. If all stakeholders were involved in the planning process for the shore excursion, the satisfaction amongst the stakeholders with the operation of the shore excursion may increase.

#### *Improve interpretation*

The results suggest that the interpretation provided on the shore excursion can be improved. Most visitors (69%) did not know what to expect when they arrived in

Bennett (Figure 8), and over half of the respondents (58%) were *neutral* or *dissatisfied* with the availability of trip information prior to their visit. Furthermore, the results from the questionnaire indicate that the cruise ship passengers are not completely retaining all of the messages of national significance while in Bennett (Figure 24). One method to alleviate these problems would be to increase the amount of interpretation provided, either through personal guided tours or more effective signage.

A tour guide could pass on messages of national significance as they lead a group through Bennett. A guided tour was the preferred method to tour Bennett for under a third (31%) of respondents. The guide could ensure that all the messages of national significance are passed on to the visitors, and also inform them of safety and conservation issues. The majority of the cruise ship passengers (64%) indicated that they would not be willing to pay an additional fee for the personal guided tour of Bennett, so the tour should either be free of charge or the cost should be hidden into the price of the train ticket.

The majority of the cruise ship passengers only spend between 10-30 minutes in Bennett and they may not have enough time to learn all the messages of national significance. However, they spend several hours on board the train. Parks Canada could partner with WPYR to teach the train agents to pass on the messages of national significance while the cruise ship passengers are on board the train. If they were to do so, satisfaction with the availability of pre-trip information may increase.

Interpretive signage in Bennett could also be increased. A total of fifteen interpretive signs exist in Bennett at the time of research, however the cruise ship passengers are not receiving the messages of national significance, as evidenced by some low scores on the true false quiz on the questionnaire (Figure 24). Either this is a result of poor sign placement, or more probably, many of the cruise ship passengers are not motivated to visit the site because of historical reasons (Figure 11). Nonetheless, the respondents indicated levels of satisfaction for the Bennett interpretive signs that were below Parks Canada's established standards. Therefore, the interpretive signs should more clearly present the messages of national significance in order to improve the likelihood that the cruise ship passengers will learn these messages.

### *Increase satisfaction with infrastructure in Bennett*

The cruise ship passengers and other stakeholders reported some sub-standard levels of satisfaction with several facilities in Bennett (Figure 14). Parks Canada's management plan for the site established a target that all visitors to the site report 90% satisfaction with services and facilities at the site, yet the only service for which respondents indicated over 90% satisfaction was the train station washroom. Services such as the passenger car washroom, the campground outhouse, the meal service and the train station exhibits all received less than 90% satisfaction from visitors (Figure 14). However, it should be noted that Parks Canada is only responsible for the campground outhouse while the other facilities are the responsibility of WPYR, and it is not known if WPYR has set standards for satisfaction levels with their facilities.

The expansion of railway service to Carcross led economic benefits for the stakeholders. Perhaps other infrastructure developments could further enhance the economic benefits of the shore excursion. Rustic overnight accommodation in Bennett was *strongly supported* or *supported* by over a third of respondents (38%). While most cruise ship passengers could not use overnight accommodations and still return to their ship, the overnight accommodations may bring new tourists to Bennett, and create additional employment and revenue for the staff operating overnight accommodation. This action was a future goal for development for Parks Canada, WPYR, and Destination Carcross.



## 5.2. Trade-offs

Each of the above management scenarios would be effective towards optimizing some of the environmental, economic, and social impacts of the shore excursion to Bennett. However, many of these actions require trade-offs in the sense that if one of these actions is taken, then others cannot be taken, or will not be effective in the same way, or other areas of sustainability may be negatively affected. In this section, I identify some of the important potential trade-offs.

### *Reduced operation*

Stopping the shore excursion, or reducing the number of visitors allowed ashore may minimize the environmental impacts of the shore excursion. However, reduced service, or the termination of the shore excursion to Bennett may result in decreased local resident satisfaction. Mrs. Edna Helm reported that she enjoyed the increased train service to Bennett because it allowed more hikers to leave the Chilkoot Trail regularly, resulting in fewer overall people in Bennett in the evenings. If the shore excursion were to cease, or the train were to run less frequently, the number of hikers who stay in Bennett overnight may increase.

Furthermore, if the train were to run less frequently or not at all, the Helm family would have fewer free rides into Bennett, and may therefore have to take their boat more frequently, which would have associated gasoline costs. Parks Canada has also benefited from the frequent train service to Bennett, and the service allows the Park Wardens easy and regular access to and from Bennett. If the management action to reduce or halt the shore excursion to Bennett is considered, it would be important to also consider that the service is providing valuable help to the Helm family as well as the Parks Canada operations.

### *Guided Tour*

Parks Canada should offer a guided tour of Bennett to help reduce the negative environmental impacts of the shore excursion to Bennett. However, if a guided tour was offered, there would be less time for the visitors to Bennett to visit Mrs. Edna Helm's gift shop in Bennett. Offering a guided tour may also conflict with the proposed management action of keeping the visitors in Bennett for a longer period of time for economic benefits. Therefore, if a guided tour is to be offered in Bennett, the tour leader may want to consider ensuring that they lead the group to the gift shop, or allow enough time for visitors to go to the gift shop in order to ensure economic benefits for the local residents. However, should Mrs. Edna Helm desire not to operate the shop on certain days, the tour guide could have more time for stories or to answer questions from visitors.

### *Contribute money for conservation*

If WPYR increases the price of the ticket to help finance some conservation initiatives at the site, or requires the passengers pay an entrance fee into Bennett, it is possible that the increase in the cost of the tickets may reduce the number of passengers visiting Bennett, or decrease the satisfaction of the visitors currently coming to Bennett. Less than half of the cruise ship passengers (36%) were willing to pay an additional fee for the maintenance of the site, and less than half (41%) were willing to pay for a guided tour (Figure 22). These findings suggest that the respondents may be unwilling to pay higher overall fees. Furthermore, if the price of the shore excursion is too high, the visitors may be less likely to recommend future trips. Most (83%) of respondents indicated that they were *satisfied* or *very satisfied* with the value of the train excursion, and if the fees to participate increased, it is possible that satisfaction levels would decrease.

### *Keep Visitors in Carcross Longer*

In an effort to maximize the economic impacts of the shore excursion in Carcross, the shore excursion could stay longer in Carcross so that the visitors would have more time to visit the shops in Carcross. A longer duration in Carcross may have positive economic benefits in Carcross, but the longer stay in Carcross may reduce the satisfaction of the visitors. The visitors reported that their primary motivations were to *observe scenic beauty* and to *experience the WPYR train ride*, and not motivations related to shopping or experiencing a new culture. If the shore excursion was to be changed, and these most important motivations were not satisfied, the visitors may report lower levels of satisfaction. Furthermore, the longer the shore excursion spends in Carcross, the less time the visitors will have in other locations, either in Bennett, or on-board the train itself.

### *Build commercial overnight accommodation and gift shops in Bennett*

Building commercial overnight accommodation and gift shops in Bennett would be a management decision that could increase the economic benefits accruing from the shore excursion. While building overnight accommodation may provide additional employment and revenue, the cruise ship visitors may report lower levels of satisfaction because the experience of the shore excursion may change. While over a third (38%) of the cruise ship passengers reported they would *strongly support* or *support* the development of rustic overnight accommodation, it is unlikely that cruise ship passengers would be the people actually using the overnight accommodations. The cruise ship passengers only have one day per port, and therefore could not stay in Bennett overnight. However, those who spend all the time in Bennett, such as the Helm family are opposed to any sort of commercial development. Furthermore, the cruise ship passengers who have reported that they are motivated by experiencing wilderness may report lower levels of satisfaction with the shore excursion if overnight accommodation were to be developed.

*Involve all stakeholders in the planning process.*

All stakeholders should be involved in the planning process of the shore excursion in order to maximize the social impacts of the shore excursion. Other than the additional time it would take to organize more stakeholders in the planning process, this is one management action that does not require any explicit tradeoffs of benefits.

#### *Improved Signage Interpretation*

This management action might alleviate some of the negative environmental and social impacts of the shore excursion by educating the cruise ship passengers about the sensitive nature of the environment in Bennett, the importance of walking on the trails, and providing the passengers with the messages of national significance. However, for the signage to be more effective than it currently is, it may require visitors to spend more time looking at the signage. If this were the case, there may be less time for the visitors to stay in Carcross, or visit Mrs. Edna Helm's gift shop in Bennett.

### **5.3. Management Recommendations**

After considering the tradeoffs discussed above, I recommend that Parks Canada and WPYR take the following management actions to improve the sustainability of the shore excursion to Bennett.

#### ***Management Recommendations for Parks Canada***

##### *Guided Tour*

The principal component analysis on the preferences of respondents for the different type's future development reveals three distinct types of development: interpretation, motorized activities, and outdoor activities. Interpretation development

has the highest level of support, while motorized activities have the lowest level of support (Table 13)

One way to develop more interpretation in Bennett would be to have Parks Canada offer a guided tour of Bennett. A guided tour of Bennett is the preferred method of visiting Bennett by 31% of respondents as well as a future desired condition for Mrs. Edna Helm. The guided tour could offer accurate historical information which is a goal of Parks Canada. Furthermore a guided tour may increase the enjoyment of visitors who are coming to Bennett primarily for natural and historical reasons (Table 11).

The tour should be free of charge, as more than half (64%) of the respondents would be unwilling to pay an additional fee for an optional guided tour. However, if it is impossible to offer such a service free of charge, perhaps WPYR and Parks Canada could arrange for the fee to be incorporated into the price of a train ticket. WPYR train agents should continue to provide stories and information during lunch and while on the train because the train agents are popular among the day use visitors.

A guided tour may also alleviate some of the negative environmental impacts of cruise ship visitors on the trail systems in Bennett. The tour guide could help ensure that visitors stay on trails and prevent the formation of any new social trails. The guide could choose appropriate locations for instructional stops that could accommodate large numbers of visitors, reducing the amount of trail side trampling. For shore excursions in Australia, researchers (Scherrer et. al 2011) found that tour guides greatly influenced the behaviour of visitors in sensitive sites

*Chilkoot Trail National Historic Site of Canada Management Plan.*

Parks Canada has recently completed a Management Plan for the Chilkoot Trail National Historic Site of Canada (Parks Canada 2010), and within the plan are five key strategies and their associated objectives, targets and actions. Many actions proposed in the management plan can find support from the present research. The key actions

that Parks Canada will undertake in the next five years that are supported by my research are:

- Expand personal on-site interpretation by Parks Canada
- Work with Carcross Tagish First Nation to increase opportunities for First Nation interpretation.
- Update the bear management plan.
- Identify targeted audiences and strategies for promoting the site.
- Explore opportunities with WPYR and others, including interpretation possibilities on trains and cruise ships.
- Develop a Site Plan for Bennett that addresses a need for a greater variety of interpretation and day use-activities, manages visitor flow at the site and incorporates new staff accommodation.
- Work with WPYR and Holland America to develop and present a Parks Canada interpretive product at Bennett to train passengers.
- Work with groups like Destination Carcross to promote understanding and appreciation of the site.

All of the above actions have quantitative and qualitative justification in my project. However, the management plan also cites that cruise ship passengers support alternative forms of accommodation in Bennett, such as commercial cabins and wall tents. It is important to understand that the vast majority of these visitors to Bennett are cruise ship passengers who are part of a much larger cruise tour. They may report that they don't mind commercial accommodation, but there is no evidence to show that they will return and actually use such accommodation. If it can be shown that local residents from the Yukon will use commercial accommodations, then the decision to build wall tents may be appropriate because the Yukon residents could be a more dependable clientele than cruise ship passengers.

Parks Canada should recognize that the standards it has set in its management plan for the site regarding satisfaction levels are higher than reported levels of satisfaction for all but one service. Either Parks Canada needs to improve services offered, or consider lowering their standard of satisfaction. A careful investigation of how

services can be improved, and incorporating a range of suitable satisfaction levels in the management plan may be an optimal solution. Or, Parks Canada may want to consider setting different standards of satisfaction for the cruise ship passengers and the traditional users.

## ***Management Recommendations for WPYR***

### *Provide Pre-trip information*

At the time of research, the cruise ship passengers to Bennett receive very little pre-trip information that details the sensitive environment in Bennett. Less than half of the respondents (41%) were *very* or *moderately satisfied* with the pre-trip information. Before arriving in Bennett, day use visitors were given a brochure that contains a map of the historic Bennett town site including information about bear safety, historical information and ecological context. In addition to the brochure, train agents informed passengers of the following information while on the train:

- Lunch will be served immediately following arrival in the train station.
- After lunch, visitors can take the self-guided tour of Bennett.
- While on the tour, it is a crime to handle or remove artefacts.
- This is bear country so do not carry any food with you, and if you see a bear, throw rocks at the animal.
- Respect the private property.
- No smoking, except in designated areas.
- Use the restrooms on the train.

The preceding information can be improved in several ways.

- If possible, more information should be provided prior to the train ride either online or while prospective visitors are on the cruise ship. The pre trip information could provide a historical and natural background of Bennett that may enrich the day use visitor's experience, particularly those that are motivated by outdoor recreation and historical interests (Table 11).

- In addition to telling day use visitors not to handle artefacts, train agents should inform passengers to stay on existing trails so as not to further the trail side trampling and creation of social trails.
- The bear safety information is flawed and dangerous, and train agents should not tell passengers to throw rocks at the bears. Rather, the train agents should inform passengers to travel in groups of four or more, report bear sightings to Parks Canada staff, and under no circumstance feed the bears.
- When requesting passengers to be respectful of the private residence, train agents can also inform passengers that Mrs. Edna Helm operates a craft store near her house. Train agents can also inform passengers that the Helms still use the land for subsistence; currently, only 41% of day use visitors are aware that aboriginal subsistence use continues today.
- Very few (6%) of the respondents indicated that they used the Bennett campground outhouse; 75% reported using the WPYR passenger car restroom and 43% reported using the train station washroom. Train agents should continue to encourage day use visitors to use WPYR restroom facilities so as not to put additional use on the campground outhouse. Furthermore, satisfaction levels were high for WPYR restrooms; almost all (90%) respondents were satisfied or very satisfied with the condition of the train station washroom and even more (92%) were satisfied or very satisfied with the passenger car restroom.

#### *Future shore excursion planning*

The cruise ship passengers traveling on the WPYR were very satisfied with the shore excursion to Bennett, where:

- Almost all (90%) of respondents were satisfied or very satisfied with the overall condition of facilities in Bennett.
- Almost all (91%) of respondents were satisfied or very satisfied with the overall quality of service.
- Most respondents (85%) were satisfied or very satisfied with the overall Bennett day trip experience.



- The majority (78%) of respondents indicated that their trip to Bennett either greatly exceeded, or exceeded their expectations.
- Most (84%) of respondents indicated that they were likely or very likely to recommend the trip.

These positive results indicate that WPYR's train service to Bennett was a memorable part of the trip, where the *train trip itself* was the most memorable part of the trip for more than half (59%) of respondents, and almost all of the passengers were primarily motivated by the desire to *observe scenic beauty* and *experience the WPYR train ride*. Furthermore, passengers reported high levels of satisfaction with the WPYR staff in Bennett. This evidence indicates that WPYR meets the expectations of its visitors and provides a shore excursion that satisfies the visitors. Therefore, in order to ensure the visitors continue to experience high levels of satisfaction, WPYR should continue focusing the tour on the beauty of the site, as well as the train ride itself.

For those respondents who were primarily motivated to come to Bennett to experience the WPYR train ride (Table 11), their opportunity to satisfy their motivations was very high. These respondents can be considered train enthusiasts whose destination is not Bennett, but rather the main purpose of their trip is to ride the train itself. These enthusiasts have reported high levels of satisfaction in this regard.

The virtual museum that was proposed in an interview with WPYR management would be an excellent tool to further increase the satisfaction of passengers on the train, as well as help meet the need for more pre-trip information. This virtual museum would be available to train passengers and cruise ship passengers online and would provide interpretation on Bennett before they arrive. WPYR could develop the website, and seek input from Parks Canada. Such a partnership may improve the working relationship between the two organizations and the online museum would help meet the shared goals of stakeholders to increase interpretation in Bennett.

### *On-site staff training with Parks Canada*

WPYR should partner with Parks Canada before the start of the summer season to conduct training workshops. The workshops should be focused on bear safety training, as well as enhancing the visitor experience. The WPYR on-site staff reported that their biggest concern was what to do in the event of a bear attack on a passenger, furthermore, they reported they had no way of contacting Parks Canada in the event of an emergency. For both these reasons, Parks Canada should provide bear safety training to the WPYR on-site staff as well as ensure that the on-site staff has radio access to Parks Canada.

This workshop before the season starts would also be beneficial in strengthening the working relationships between Parks Canada and WPYR. The workshops could be an opportunity for the staff to meet each other in a casual environment, with a shared lunch in the train station dining rooms. After the meal, Parks Canada could provide bear safety training in Bennett, and also work with the train agents to ensure that the train agents pass on accurate messages of national significance. These workshops may benefit the working relationships between WPYR and Parks Canada, as well as provide tangible benefits for visitor safety and experience.

Dual training sessions could also be used to improve the working relationships between the other users. Currently, WPYR provides free train ticket rides to the elders of the CTFN each summer for an event called “Elders Day”. This event is a positive step in making strong working relationships, but WPYR could also work with the CTFN to incorporate First Nation stories into the shore excursion to Bennett, hire CTFN interpreters, or offer to sell CTFN crafts alongside some of the WPYR merchandise.

## **Chapter 6. Discussion and Conclusion**

### **6.1. Discussion**

#### ***Sustainable Tourism***

Choosing a definition of sustainable tourism was difficult because dozens of different definitions have been published (Table 1). Even after twenty years of research and discussion, there is not one universally accepted or recognized definition. This study used the WTO's (2004) definition because the UN's WTO is an internationally recognized organization, and has been involved with the concept of sustainable development since its inception. The WTO's definition of sustainable tourism still leaves many questions unanswered about whether or not tourism can be considered sustainable.

None of the definitions of sustainable tourism that I reviewed is able to determine the sustainability of a shore excursion without qualifications. For example, the shore excursion to Bennett currently has several social, economic, and environmental benefits, but negative social, economic and environmental impacts exist as well. A definition alone provides no evaluation of whether mixed benefits and problems constitute sustainability. This shortcoming is also highlighted in the following example: almost all shore excursions to remote destinations rely on some form of secondary transportation, and the carbon emissions associated with this secondary transportation may offset all the precautions that the tour operator has taken to practice sustainable tourism at the destination. But a definition of sustainable tourism does not prescribe whether sustainable tourism can have some positive impacts, and some negative impacts. Clearly, the definitions of sustainable tourism do not provide fine detail and prescriptive practices to determine whether a tourism operation can be considered sustainable.

Also, as Bell and Morse (1999) observe, tourism cannot be deemed sustainable at only one point in time. Rather it has to stand the test of time, and be in operation for a period of time before it can be considered sustainable. This project was only a snapshot in time, as opposed to an evaluation of the tourism operation over the course of its lifetime. Many definitions of sustainable tourism and this project do not capture the issue of sustainability over a time scale.

In light of the lack of consensus on a definition, and the many questions left unanswered by definitions, sustainable tourism must therefore be a telic goal rather than a static end state (McCool and Moisey 2001). The principle value of the concept of sustainable tourism is to encourage tourism planners and operators to think, plan, and act in order to optimize the economic, social, and environmental impacts of tourism. This is a fundamental change in how tourism has operated in the past, where often only the economic impacts were considered (Williams 1994). So in spite of the variety of definitions of sustainable tourism, applying the concept should lead to tangible benefits and an improvement in how tourism is operated.

### ***Assessment Framework and Indicators***

The purpose of using indicators of sustainable tourism is to assess the severity of issues, signal upcoming problems, and measure the results of management actions as they relate to sustainable tourism (WTO 2004). The criteria for good indicators proposed by Harger and Meyer (1996) are that indicators must be simple, measure economic, social and environmental impacts, be quantifiable and easy to assess, and be sensitive to change. Prior to the present study, an assessment framework for shore excursions did not exist. As a result, indicators for the assessment framework used in the present study were drawn from the literature on sustainable tourism in other contexts. Some indicators proved more useful than others to inform on-site planning. Table 21 provides an evaluation of the quality of the indicators used in this assessment framework. The following symbols are used in the evaluation:

“+” represents a useful indicator for site planning,

“+/-“ represents a somewhat useful indicator for site planning, and

“-“ represents an indicator that was not useful for generating planning recommendations.

**Table 21. Evaluation of the indicators in the shore excursion assessment framework for Bennett.**

Indicator	Evaluation
- Type of bioregion	+/-
- Number of facilities for tourists	+/-
- % Use of facilities	+/-
- Existence of applied codes of conduct for tourism operators	+
- Number of people allowed on shore excursion	+/-
- Average number of people per party	+/-
- Visitor motivations	+
- Purpose of visit	+
- Existence of protected area at the destination	+/-
- Value generated through visitor fees	+
- % of tourism products with specific contributions built into the price	+
- Sightings of key indicator species	+/-
- Number of jobs created because of shore excursion	-

Indicator	Evaluation
- Level of support for shore excursion infrastructure	+
- Amount of time spent on a shore excursion	+/-
- Average expenditure per person in region	+/-
- Percentage of employees that are local	+
- Number and percentage of shore excursion related jobs which are permanent	-
- Overall satisfaction	+
- Likelihood to recommend return visits	+
- % satisfaction with services and activities provided	+
- % satisfied with opportunity to fulfill motivations	+
- % of correctly identified educational messages	+
- Residential proximity	-
- Period of residence	-
- Number of stakeholder groups involved in planning of shore excursion	+
- Percentage of stakeholders who are satisfied with planning of shore excursion.	+
- Erosion	-
- Tread surfacing	-
- Interpretive opportunities	-

Indicator	Evaluation
- % Trail side trampling	+
- Number of social trails	+
- Artifacts	-
- Design detail	+/-
- Guided tour	+
- Level of use	+/-

### **“+” Indicators**

Many indicators met the criteria for good indicators and provided valuable measures of the impacts of a shore excursion that lead to useful planning recommendations. For example, the percentage of tourism products that contributed to environmental conservation was a good indicator. In Bennett, the percentage of tourism products that contributed to environmental conservation was zero percent. Such a clear signal may prompt managers to require fees to support environmental conservation. If this management action occurs, this indicator will be sensitive to the change, where the percentage of tourism products that contribute to environmental conservation will increase. This indicator would be relevant in different locations and was easy to assess in one interview.

Other good indicators in the assessment framework were the *percentage of visitor satisfaction* and the *percent of visitors likely to recommend the shore excursion*. These indicators were easy to collect in a questionnaire, and provided clear signals of whether the shore excursion was providing social benefits to the visitors themselves. In

Bennett, the percentage of visitors who were satisfied with the shore excursion was below Parks Canada standards (Figure 14 and 16), as was the percentage of visitors who were likely to recommend the shore excursion (Figure 18). These indicators provide quantitative measures of the performance of tour operators and destination managers related to visitor satisfaction. The indicators would be applicable in any shore excursion context and would be sensitive to change if the shore excursion experience was to improve or diminish.

Some of the indicators drawn from the field of recreation ecology for the trail assessments were also good indicators. The *percent of trail side trampling*, and *number of social trails* were the most useful trail indicators to generate planning recommendations. They were easy to collect quickly, and would be very sensitive to change. A subjective evaluation of trail condition proved to be sufficient for the trails in Bennett. For example, the trails that had the greatest degree of trail side trampling and the most social trails appeared degraded compared to those trails with good design detail and low levels of trail side trampling. Such a subjective evaluation was fast and accurate enough to make planning recommendations for a relatively small site.

A longitudinal assessment of the trail conditions in Bennett using these useful indicators would provide excellent measures of visitor management, trail maintenance and management decisions. Currently, these indicators could serve as baseline measures to measure the change in the condition of the trails.

The existence of applied codes of conduct for tour operators is another example of a good indicator. The indicator was easy to assess in one interview, which revealed that in Bennett no codes of conduct exist for the tour operator. This is another clear signal to management that a code of conduct is required. Studies such as Scherrer et. al (2011) also support this management action. Therefore, this indicator was easy to assess, relevant to current literature, and sensitive to a change in management decisions.



## **“+/-” Indicators**

Some indicators included in the assessment framework were not useful by themselves, and did not necessarily provide useful planning recommendations. The type of bioregion was an indicator that did not measure any issue of sustainability, but rather provided information useful to characterize a shore excursion. By itself, it is not a useful indicator, however as part of the entire assessment framework, this indicator may reveal that shore excursions in sensitive environments tends to exert higher environmental costs. It may also be possible that certain types of shore excursions are not appropriate in all bioregions. This indicator applies to a larger scale, and further research would be needed to confirm if this indicator would be useful as part of a complete shore excursion assessment framework.

Some indicators that were evaluated as “+/-” tended to be general descriptions of the characteristics of the shore excursion, rather than measurement of specific impacts or measures of previous management decisions. For example, *the existence of protected area at the destination*, and *the number of facilities for tourists* were indicators that would be useful to classify a shore excursion rather than provide measurements of impacts that would lead to specific management recommendations. Should further studies research and refine shore excursion frameworks, these indicators that have been evaluated as “+/-” may prove valuable for the classification of different types of shore excursions.

Two trail indicators were evaluated as “+/-”: *design detail* and *level of use*. The design detail described the boundaries of a trail, where if a trail was well defined, there tended to be less trail side trampling. For example, the trail segment “Bennett St. to campground” had a lining of white rocks for a portion of the segment, and consequently there was very little trail side trampling. Where this line ended, the trail side trampling reoccurred. Alone, this indicator is not particularly useful, however, paired with trail side trampling the indicator provides some useful information.

The level of use for each trail segment was assessed using the infrared trail counters. The results indicated high variability for the level of use of each trail segment (Table 13), and as a result the usefulness for planning recommendations diminished.

Had the trail counters indicated clearly which trail segments were used the most, the planning recommendations, and trail repairs could have focused on the trail segments that received the highest levels of use. Perhaps, if the trail counters had been used for two months instead of one, the variability of the results may have decreased and the usefulness of this indicator may have increased.

The remainder of the indicators that were evaluated as “+/-“ lacked sufficient information to reveal whether the measurement was important, and in what way it was important. Standards would have given these indicators much more meaning. Examples of indicators that lacked meaningful standards include: *number of passengers allowed on shore; average number of people per party; average expenditure per person in the region; and amount of time spent on a shore excursion.* Without standards, there is no way to determine how many passengers ashore are sustainable in a particular context, or the appropriate amount of time for cruise ship passengers to spend on a shore excursion to maximize economic benefits. Had standards been established prior to the measurement of these indicators, the “+/-“ indicators would have proven far more useful to assess sustainability and generate specific planning recommendations. Currently these measures will be useful as baseline information that could be used to develop standards in the future.

### **“-“ and Missing Indicators**

Some indicators in the assessment framework proved to be not at all useful to generate specific planning recommendations and as a result were evaluated “-“.

Unfortunately, I was unable to assess some key economic indicators, such as: the *number of jobs created because of the shore excursion, the percentage of shore excursion jobs which are permanent, and the percentage of jobs that are local.* Consequently, these indicators were not useful to generate site planning recommendations. Should future evaluations of shore excursions be able to measure these indicators, they may be useful measures of the economic impacts of shore excursions, and planning recommendations could then be made.

Some trail indicators which received a “-“ for usefulness included: *erosion, tread surfacing, interpretive opportunities, artefacts, and guided tour*. These indicators provided no useful planning recommendations. The other trail indicators such as *trail side trampling, and number of social trails* were much more useful measurements of trail condition, and would have been sufficient to generate trail related planning recommendations. In Bennett, the presence of artefacts is not a useful indicator because the entirety of the landscape of the town site is considered a cultural resource; the hillsides and vegetation patterns were shaped by the gold rush stampedes. Therefore, information about the presence of artefacts near trails is less important for sustainable tourism planning if all the landscape must be treated with cultural sensitivity. However, this indicator may be more useful in different locations.

Some unique characteristics of Bennett rendered potentially useful indicators moot. For example, *the period of residence and residential proximity to the shore excursion* contained little value in Bennett because only one family lives in Bennett. A residential proximity of 0 miles indicates that the shore excursion is occurring in the family’s backyard, but little else. In different contexts, with more diverse residents, these indicators may be more useful.

After assessing the impacts of the shore excursion to Bennett, it became clear that some potentially important indicators were not included in the assessment framework. A good example was the lack of indicators measuring the carbon emissions of the secondary transportation required to visit Bennett. This study had no measurement of the carbon emissions of operating a train 40 to 80 miles each day, nor the carbon emissions produced by the motor coaches as they drove the highway from Carcross to Skagway. Each of these measurements would be useful indicators to evaluate the environmental impact of a shore excursion.

Furthermore, no indicators measured the cumulative effects of all the shore excursions in the region. For example, the train ride to Bennett is one of approximately sixteen shore excursions based out of Skagway, and is one of three shore excursions that visit Carcross. An indicator that measured the total number of shore excursions in a

region, with their associated impacts would be very useful information for assessing the sustainability of shore excursions.

Overall, the assessment framework successfully accomplished the study's objective to measure some of the impacts of the shore excursion to Bennett. The indicators in the assessment framework measured economic, environmental and social issues. Most indicators were easy to assess, and could be repeated by future researchers. Many were sensitive to change and would reflect management decisions. While the indicators had not been used together before in the context of shore excursions, this assessment framework is a useful tool to assess the impacts of a shore excursion. It could become more useful as the indicators included in the framework are refined, and accompanied by standards for each indicator.

### ***Selection of methods***

Three methodologies were used to measure the indicators in the assessment framework, a questionnaire, interviews and trail assessments. The suite of three methodologies was necessary to measure all the indicators in the assessment framework. Each methodology satisfactorily measured its indicators, however there were several shortcomings.

While the questionnaire was extremely useful, and provided quantitative data, the particular questionnaire that was administered was not originally designed to measure the indicators in the sustainable shore excursion framework. Rather, it was developed by Parks Canada to meet their needs in developing a revised management plan for the Chilkooot Trail. Some of the questions on the questionnaire were unique to measure previous Parks Canada management decisions. Fortunately, most of the questions could be used to measure sustainable shore excursion indicators. However, if the questionnaire was designed solely to measure sustainable shore excursion indicators, the entirety of the questionnaire could have been used in the sustainability assessment, or more indicators could have been measured.

A second shortcoming of the questionnaire was associated with quality of responses. Initially, all questionnaires in which respondents marked identical scores on all sections were excluded, as it appeared that respondents had rushed through the questionnaire without thoughtful consideration of many of the questions. For example, most scores on many motivational factors were very high, where respondents indicated a high level of importance for all motivations (Figure 11). This tendency may have carried throughout the other sections of the questionnaire. Such a trend may reduce the accuracy of the survey results, and may have occurred because the survey was too long. On average, the questionnaire would take 15-20 minutes to complete, and when visitors only have an hour on site, many respondents would want to complete the survey quickly. Future surveys could be shorter, and still be effective tools to measure sustainability indicators.

The interviews were effective at measuring the sustainability indicators, however some interviews were more productive than others. For example, the interviews with Parks Canada planners and wardens would frequently last over an hour. These interviews were long and in-depth compared to the interview with the WPYR on-site staff which only lasted 15 minutes. This discrepancy may have been a result of the interviewee's perception of the importance of this study. Unfortunately, the short interview meant that no information was collected for some key economic sustainability indicators; there simply was not enough time to discuss all the indicators. Follow up interviews would have been useful in order to measure any indicators that were not measured.

The trail assessments were very useful, but provided only baseline measurements rather than a trend in the condition of the trails. Had measurements been taken several times through the season, or over the course of a few years, then trends in trail conditions could have been analyzed.

Overall the methodologies were easy to conduct. The assessments were accomplished in two summers by one researcher with a limited budget. The combination of methodologies provided both quantitative and qualitative data through the measurement of sustainable tourism indicators. The data will be most effective as

baseline measurements to monitor the sustainability of the shore excursion in Bennett over time.

### **6.3. Conclusions**

The research questions posed at the beginning of this work were successfully answered. The shore excursion framework measured some of the economic, social, and environmental impacts of the shore excursion to Bennett. The results indicate that currently the shore excursion to Bennett cannot be considered sustainable due to negative environmental and social impacts. However, the assessment framework proved very useful to generate management recommendations that could improve the sustainability of the shore excursion to Bennett.

#### ***The Shore Excursion to Bennett is Currently Unsustainable***

The sustainable shore excursion assessment identified negative environmental, economic and social impacts, therefore the shore excursion to Bennett in its current operation cannot be considered sustainable tourism. However, the shore excursion could be on the path towards sustainable tourism if managers can remedy the negative impacts.

Unfortunately, currently no value is generated through visitor fees to finance conservation, reported sightings of wildlife have decreased in the area, and there is a lack of codes of conduct to guide the actions of tour operators. These negative environmental impacts preclude the shore excursion to Bennett from being considered sustainable.

The level of support for some of the infrastructure developed for the shore excursion to Bennett has fallen short of standards set by Parks Canada. Consequently, the economic benefits of building this infrastructure are in doubt, whereas a sustainable shore excursion would have high levels of support for the infrastructure.

Furthermore, satisfaction with almost all of the services provided for the shore excursion are below established standards, not all messages of national significance are retained by visitors, and not all stakeholders are satisfied or involved with the planning of the shore excursion. These are all indications that the shore excursion to Bennett is currently unsustainable.

### ***The Sustainable Shore Excursion Framework Contributes to Site Specific Planning***

The sustainable shore excursion framework has proven useful to organize measurements of impacts under the broader context of sustainable tourism. These measurements were used to generate site specific management actions that may alleviate the negative impacts of the shore excursion to Bennett, as well as further the existing benefits.

The indicators identified shortcomings in the current operation of the shore excursion to Bennett. Similarly, they identified where Parks Canada and WPYR can improve the shore excursion to Bennett. The indicators measured by the assessment framework now can serve as baseline measurements to evaluate the shore excursion's sustainability in the future. Without such measurements, the destination managers would not be able to evaluate any change resulting from their management decisions.

Not all of the indicators included in the assessment framework proved useful for generating site specific plans, and the weaknesses are identified in Table 21. Future research could refine the selection of indicators in a shore excursion framework. If the framework is applied to new shore excursions, the utility of different indicators could be confirmed and eventually a reliable and replicable shore excursion framework could be developed for use at other shore excursion destinations. The work contained in this study provides a first step towards this goal.

## Reference List

- Archer, B., Cooper, C., Ruhanen, L. The positive and negative impacts of tourism. In Global Tourism, Third Edition, edited by William F. Theobald. Elsevier Inc. pp. 213-229
- Bell, S., Morse, S. 2000 Sustainability Indicators; measuring the immeasurable. Earthscan Publications Ltd. Sterling, VA.
- Belnap, J. 1998. Choosing indicators of Natural Resource Condition: A case study in Arches National Park, Utah, USA. Environmental Management, Vol. 22, No. 4, pp 635-642
- Bramwell, B. 2004 Coastal Mass Tourism: Diversification and Sustainable Development in Southern Europe: Channel View Publications, 357 pages
- Business Research and Economic Advisors BREA 2008. The Economic Contribution of the International Cruise Industry in Canada 2007. P.O. Box 955, Exton, PA 19341.
- Business Research and Economic Advisors (BREA) 2009. The Contribution of the North American Cruise Industry to the U.S. Economy in 2008. P.O. Box 955, Exton, PA 1934. Accessed April 21st at <http://www.cruiseindustryfacts.com/media/newsroom/dataand-reports/Executive%20Summary%20-%202008%2007-28-09.pdf>
- Butler, R. Sustainable tourism: a State-of-the-Art review. Tourism Geographies, 1 (1), 1999, 7-25.
- Cruise Lines International Association (CLIA) 2010a. 2009 CLIA Cruise Market Overview. (July)
- Cruise Lines International Association (CLIA) 2010b. Cruise Industry Waste Management Practices and Procedures. Accessed April 14th, 2010, [http://www2.cruising.org/industry/PDF CLIA WasteManagement-Attachment .pdf](http://www2.cruising.org/industry/PDF%20CLIA%20WasteManagement-Attachment.pdf)
- Deery, M., Jago, L., Fredline, L. 2011. Rethinking social impacts of tourism research: A new research agenda. Tourism Management. In Press
- Douglas, N., Douglas, N. 2004. Cruise Ship Passenger Spending Patterns in Pacific Island Ports. International Journal of Tourism Research. Vol 6 pp. 251-261.



- Dwyer, L., Forsyth, P. 1998. Economic Significance of Cruise Tourism. *Annals of Tourism Research*, Vol. 25, No. 2, pp. 393-415
- Faulkner, B. 2001. Destination Australia: A Research Agenda for 2002 and Beyond. Paper presented at Australian Tourism Research Institute Conference, October 30-3<sup>rd</sup>, Hobart.
- Garrod, B. 2000. Beyond the rhetoric of sustainable tourism? *Tourism Management*. Vol 19. No. 3. pp 199-212
- Getz, D., Seldjan, J. 2005. Stakeholder involvement in sustainable tourism: balancing the voices. In *Global Tourism, Third Edition*, edited by William F. Theobald. Elsevier Inc. pp. 213-229
- Ham, S. and Weiler, B. (2002) Toward a theory of quality in cruise-based interpretive guiding, *Journal of Interpretation Research* 7(2), pp. 29 – 49. e
- Harger, J., Meyer, F. 1996. Definition of indicators for environmentally sustainable development. *Chemosphere*, vol 33 (9) pp 1749-1775
- Heinen, J. 1994. Emerging, diverging and converging paradigms on sustainable development. *International Journal of Sustainable Development and World Ecology*, vol 1. pp. 22-33
- Hiller, M., B. Nancarrow, G. Griffin, and G. Syme. 2001. Tourism Perception of Environmental Impact. *Annals of Tourism Research*. 28(4): 853-867
- Holland America Cruise Lines. 2011. Company Information. Accessed June 9th 2011, at <http://www.hollandamerica.com/about-best-cruise-lines/Main.action?tabName=Sustainability>
- Hritz, N. and A.K. Cecil (2008) Investigating the sustainability of cruise tourism: A case study of Key West. *Journal of Sustainable Tourism*, 16(2), 168-181
- Jaakson, R. 2004. Beyond the Tourism Bubble?: Cruiseship Passengers in Port. *Annals of Tourism Research*. Vol 31; 1. pp. 44-60.
- Johnson, D. 2006. Providing Ecotourism Excursions for Cruise Passengers. *Journal of Sustainable Tourism*, Vol. 14, No. 1. Page 43-54
- Liddle, M. 1991. Recreation Ecology: Effects of Trampling on Plants and Corals. *TREE* Vol. 6; no 1. pp 13-17
- Longhurst, R. 2010. Semi-structured interviews and focus groups. In *Key Methods in Geography*, 2<sup>nd</sup> edition. Edited by N. Clifford, S. French, and G. Valentine. Pp. 103

- Lueng, Y., Marion, J. L., 1999. Assessing trail conditions in protected areas; application of a problem-assessment method in Great Smoky Mountains National Park, USA. *Environmental Conservation* 26 (4), 270-279
- Leung, Y., Marion, J. L., 2000. Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review. USDA Forest Service Proceedings, RMRS-P-15-VOL-5.
- Marion, J. L., Lueng, Y., Nepal, S.K. 2006. Monitoring Trail Conditions: New Methodological Considerations. *The George Wright Forum* 23(2) 36-49
- Macpherson, C. 2008. Golden goose or Trojan horse? Cruise ship tourism in Pacific development. *Asia Pacific Viewpoint*, 49 (2) pp 185-197
- Murphy, P. Price, G. Tourism and Sustainable Development. In, *Global Tourism*, Sydney: Elsevier. 167-193
- Nepal, S. K., Way, P. 2007. Characterizing and Comparing Backcountry Trail Conditions in Mount Robson Provincial Park, Canada. *Royal Swedish Academy of Sciences* 2007. Vol 36 (5) 394-400
- Parks Canada Agency (2008a). Ecological Integrity. Retrieved October 16, 2008 from [http://www.pc.gc.ca/progs/np-pn/eco/eco1\\_e.asp](http://www.pc.gc.ca/progs/np-pn/eco/eco1_e.asp)
- Parks Canada Agency, (2008b). Trail and Back Country Facility Design Guidelines; Mountain Parks
- Parks Canada Agency, 2010. Activity Policies: National Historic Sites Policy. Accessed May 2011 at <<http://www.pc.gc.ca/docs/pc/poli/princip/sec2/part2d/part2d4.aspx>>
- Parks Canada Agency, 2010. Chilkoot Trail National Historic Site Management Plan. Accessed July 16<sup>th</sup>, 2011 at < <http://www.pc.gc.ca/lhn-nhs/yt/chilkoot/plan.aspx>>
- Parks Canada Agency 2011. Regional Map. Accessed July 21<sup>st</sup> at <<http://www.pc.gc.ca/lhn-nhs/yt/chilkoot/visit/visit8.aspx>>
- Parks Canada & International Mountain Biking Association (IMBA) 2008. Draft Compilation of Principles and Best Practices for Sustainable, Multiple-Use Trails.
- Pearce, S. 2005. Future Trends in Cruise. Leisure Travel and Destination Management, Tourism Vancouver. Presented at Cruise BC Conference Presentations. Accessed April 21st at [http://www.cruisebc.ca/pdfs/presentation\\_Pearce.pdf](http://www.cruisebc.ca/pdfs/presentation_Pearce.pdf)
- Ring, I. Hansjurgens, B., Elmqvist, T., Wittmer, H., Sukhdev, P. 2010. Challenges in framing the economics of ecosystems and biodiversity: the TEEB initiative. *Current Opinion in Environmental Sustainability*, 2: 15-26.

- Sharpley, R. 2000. Tourism and Sustainable Development: Exploring the Theoretical Divide. *Journal of Sustainable Tourism*. Vol. 8, No. 1
- Teye, V. Leclerc, D. 1998. Product and service delivery satisfaction among North American cruise passengers. *Tourism Management*, 19 (2) pp 153-160
- Timur, S., Getz, D. 2009. Sustainable Tourism Development: How do destination stakeholders perceive sustainable urban tourism? *Sustainable Development*. No. 17, 220-232
- Tourism Sustainability Council (TSC) 2010. Global Sustainable Tourism Criteria. Accessed <[http://www.sustainabletourismcriteria.org/index.php?option=com\\_content&task=view&id=58&Itemid=188](http://www.sustainabletourismcriteria.org/index.php?option=com_content&task=view&id=58&Itemid=188)> on January 11th, 2011.
- United Nations. 2002. Agenda 21 and Sustainable Tourism. Chapter IV. Protecting and managing the natural resource base of economic and social development. Accessed <[http://www.un.org/esa/sustdev/documents/WSSD\\_POI\\_PD/English/POIChapter4.htm](http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter4.htm)>\_January 11th 2011.
- Wight, P. A. 1997. Sustainability, Profitability and Ecotourism Markets: What Are They and How Do They Relate? Paper presented at an International Conference on Central and Eastern Europe, September 22-23, 1997. Parnu, Estonia.
- Williams, P.W. 1994. Frameworks for assessing tourism's environmental impacts" In J.R.B. Ritchie and C.R. Goeldner, *Travel, Tourism and Hospitality Research, A Handbook for Managers and Researchers*, (2nd edition). New York: John Wiley, 425-436
- World Commission on Environment and Development. 1987. *Our Common Future*. Oxford: Oxford University Press
- World Tourism Organization (WTO). 2004. *Indicators of Sustainable Development for Tourism Destinations, A guidebook*. Madrid, Spain: World Tourism Organization.

## **Appendices.**

### **Appendix A: Questionnaire**



## Bennett City Day Use Visitor Survey

Simon Fraser University is working with Parks Canada and White Pass & Yukon Route (WP&YR) to plan for services and facilities at Bennett City. Thank you for offering to help us learn about your day use trip experience and what you might like to see in the future at Bennett City. Please take the time to fill out this short questionnaire about your recent visit. By filling out this questionnaire, you are consenting to participate. Your participation in this survey is voluntary. You may choose not to respond to any question or terminate the survey at any time. All information that you provide in this survey will be kept strictly confidential. Your responses will be analyzed in aggregate only and will not be identifiable in any publications. If you have any concerns or complaints: please contact Dr. Hal Weinberg, Office of Research Ethics at 778-782-3447 or hal\_weinberg@sfu.ca. For questions or research results, please contact Dr. Wolfgang Haider at 778-782-3066 or whaider@sfu.ca.

Please complete this questionnaire and return it to any Parks Canada staff or WP&YR train agents prior to your trip departure at Carcross, Fraser, or Skagway. Your input is important to us and we look forward to hearing from you. Thank you for taking the time to complete this survey.

It is important that you shade your answers like this.



Survey #

Date

1. Where did you start your day trip to Bennett City?  
 Skagway  Carcross  Fraser  Other (specify) \_\_\_\_\_

2. When you planned your visit to Bennett City, how important were each of the following?

How important was your opportunity to...

	Very important				Not at all important
	5	4	3	2	
Learn about gold rush history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience wilderness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience the WP&YR train ride	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Observe scenic beauty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience adventure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Observe historic features and artefacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience peace & tranquility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about natural heritage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about First Nation history and culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about WP&YR railway history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about Bennett City's natural & cultural features	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good value for your train excursion participation fee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How many people were in your "personal" travel party during your trip to Bennett City \_\_\_\_\_

4. Which of the following best describes your day trip to Bennett City on the Chilkoot Trail?

- The **main reason** for your trip from home  
 A **planned stop** on a trip to the Yukon or Alaska  
 An **unplanned side trip** taken while in the area

5. How much time did you spend on the self-guided trail to St. Andrew's Church and viewpoint?

\_\_\_\_\_ Minutes OR Check here  if you did not go on the self-guided walking tour.

6. Would you be willing to pay an additional fee on top of your rail excursion fee in order to help maintain Parks Canada's facilities (signs, exhibits, walking trails, stairways, hand rails, chairs etc.) at Bennett City?

- Yes  No (skip to Q 7)

If Yes, how much more would you be willing to pay? \_\_\_\_\_

Satisfaction  
 ↓  
 Preferences  
 ↓  
 Heritage  
 ↓  
 Comments

7. Would you also be willing to pay an added fee for an "optional" personally guided historical walking tour delivered by Parks Canada staff during your Bennett stop over?

- Yes ↓       No (skip to Q 8)

If Yes, how much more would you be willing to pay for this service? \_\_\_\_\_

8. Please indicate which of the following services and activities you participated in or used during your trip to Bennett City. For each in which you participated or used, please rate your level of satisfaction.

	Participated		Very Satisfied 5	4	3	2	Not at all satisfied 1
	No	Yes					
Bennett train station meal service	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett City interpretive signs	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett City campground outdoor toilet	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP&YR passenger car washroom	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett train station washroom	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett City self guided tour	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
St. Andrew's Church & exhibits	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett train station exhibits	<input type="radio"/>	<input type="radio"/>	→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
OVERALL Bennett City services & activities			→ <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. In terms of your Bennett City walking tour experience, which of the following would you prefer (check only one):

- A brochure based self-guided walking tour  
 An interpretive sign based self-guided walking tour  
 A personally guided walking tour

10. Did you know what to expect or to do when you arrived at Bennett City?

- No ↓       Yes (skip to Q11)

If no, do you have any suggestions on how to improve the information we provide to you so you know what to expect or to do on arrival at Bennett City. \_\_\_\_\_

11. Parks Canada is working with WP&YR to plan for the future at Bennett City. Please indicate your level of support for the following services and facilities. Some of these assume you would be able to stay longer at Bennett.

	Strongly Support	Support	Neutral	Would Oppose	Would Strongly Oppose
Additional trail markers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional outdoor picnic tables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rustic overnight accommodation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fixed wing aircraft flight seeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helicopter flight seeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenic boat and fishing trips on Bennett Lake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rafting / kayak trips at One Mile Rapids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guided interpretive tours of Bennett area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional First Nations cultural interpretation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overnight guided hiking tours in local area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced meal and/or beverage service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guided walking tour of historic Bennett City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: please specify _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. In the previous question, please underline the services that you would actually use on a future trip to Bennett City if they were available at a reasonable price.

13. The Chilkoot Trail National Historic Site of Canada protects and presents significant aspects of Canada. Which of the following statements are true and which are false?

	True	False	Don't Know
The Canada/USA boundary is at Lindeman City	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The Chilkoot Trail was used by the Tlingit First Nation before the Gold Rush	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Chilkoot Trail was not the only route to the Klondike	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Bennett Train Station is the last remaining building from the Gold Rush	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Only a few people used this route to the Gold Rush	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Aboriginal subsistence use continues today	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. How did we do? Please rate your level of satisfaction with all applicable aspects of your trip, where 5 represents "very satisfied" and 1 represents "not at all satisfied." Shade N/A for those you did not use or experience.

		Very Satisfied					Not at all satisfied
		5	4	3	2	1	
<b>How satisfied were you with your opportunities to...N/A</b>							
Learn about gold rush history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience wilderness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience WP&YR train ride	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Observe scenic beauty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience adventure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Observe historic features & artefacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience peace & tranquility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about natural heritage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about First Nation history and culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about WP&YR railway history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn about Bennett City's natural & cultural features	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Availability of:</b>							
Bennett City trip information prior to visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parks Canada staff at Bennett City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WPYR staff at Bennett City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Parks Canada Staff:</b>							
Staff knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff courteousness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service in official language of choice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>White Pass &amp; Yukon Route Staff:</b>							
Staff knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff courteousness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Condition of:</b>							
Bennett train station & dining room	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett City outdoor toilet/washroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condition of WP&YR washroom facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP&YR passenger car washroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP&YR rail passenger cards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bennett City self guided walking trail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
OVERALL facilities at Bennett City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Overall:</b>							
Length of time at Bennett City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value for your train excursion participation fee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Variety of things to do at Bennett City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
OVERALL Bennett City day trip experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



15. What was the most memorable experience from your trip to Bennett City? (check only one)

- The train trip itself
- The self guided walking tour
- Bennett train station and lunch experience
- St. Andrews Church and viewpoint
- Wildlife and scenery along trip route
- Wilderness peace and tranquility
- History and artefacts seen during trip
- Other: please specify: \_\_\_\_\_

16. My day trip visit to Bennett City:

**Greatly exceeded my expectations**

5

4

3

2

1

**Did not meet my expectations at all**

17. Would you recommend a day trip visit to Bennett City to your friends and family members?

**Very likely to recommend**

5

4

3

2

1

**Not at all likely to recommend**

18. What was the highlight of your trip to Bennett City? \_\_\_\_\_

19. What was the worst part of your trip to Bennett City? \_\_\_\_\_

20. If you had to choose one thing that we could do to make your visit better, what would it be?

21. Other comments you would like to share with us

22. Please tell us about yourself and the group you travelled from home with.

Person	If CANADIAN:		If AMERICAN: Year of Birth	If from ELSEWHERE:		Zip Code	Country of Residence
	Sex			Postal Code			
Yoursself	<input type="radio"/> M	<input type="radio"/> F			or		or
Person 2	<input type="radio"/> M	<input type="radio"/> F			or		or
Person 3	<input type="radio"/> M	<input type="radio"/> F			or		or
Person 4	<input type="radio"/> M	<input type="radio"/> F			or		or
Person 5	<input type="radio"/> M	<input type="radio"/> F			or		or
Person 6	<input type="radio"/> M	<input type="radio"/> F			or		or

23. Please estimate your total vacation related expenditures for food, accommodation, souvenirs, excursions etc in the area in and around Bennett City including Skagway, Carcross, and Whitehorse.

\$ \_\_\_\_\_ Estimates are in:  Canadian dollars  US dollars

Thank you for your time. Please return your completed survey to any Parks Canada staff or WP&YR train agent on the trail or in Carcross, Fraser or Skagway.



## Appendix B: Interview Format

Below is a list of the open ended interview questions that were used when conducting interviews with stakeholders.

### Semi-Structured Interview Format

- What is your role in tourism to Bennett?
- How does tourism in Bennett currently benefit you?
- How do you think tourism to Bennett could benefit you in the future?
- How does tourism to Bennett negatively affect you?
- Could tourism to Bennett negatively affect you if things were different?
- Would you like to see tourism in Bennett continue? In it's current form?
- How would you change tourism to Bennett so that your needs were better met?
- What are the most important qualities of Bennett that you would like to preserve?
- How would you manage things differently?
- Do you feel your voice is heard in the planning of tourism to Bennett?
- What would your goals for tourism to Bennett be?
- What objectives would you set to ensure those goals?
- How would your quality of life/business be different if there was no tourism to Bennett?
- Why do you think tourism to Bennett should continue/stop?

Is there anything else you would like to add?