

**Village of Haines Junction
Integrated Community Sustainability Plan
2007**

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- Introduction -

As a society and as a community we are becoming more aware every day of the importance of sustainability. The journey towards sustainability will not be completed overnight, and in some cases will require changes on a national and global level. However, as a community, Haines Junction is committed to working towards the ultimate goal of becoming truly sustainable. To ensure we continue moving in the right direction, we will use sustainability principles to help us examine our current practices and to align our future actions with the needs of our residents and the natural cycles of our local ecosystem and our planet.

This sustainability plan contains long-term goals and sustainability objectives for the community of Haines Junction. While some of these goals and objectives are the responsibility of the municipal government, others will require the cooperation and involvement of other governments, community groups and residents. The Village of Haines Junction supports the needs and aspirations of its residents while respecting the legal and financial limitations of a municipal government. We look forward to working with the Champagne and Aishihik First Nations, the federal and territorial governments and all residents of our community in realizing the goals contained in this document.

Where the phrase the "community of Haines Junction" is used in this document, it includes all residents - those that live outside of the municipal boundaries as well as those within. Regardless of any lines on a map, we all live, shop, work and go to school in the same community and consider Haines Junction to be our home.

- Community Profile -

Haines Junction is a village on the edge of a vast and spectacular wilderness landscape, with a mountain backdrop that captures the imagination. The community is located at the junction of the Alaska Highway and the Haines Highway, 158 kilometres west of Whitehorse.

Because of its location north of the 60th parallel, winters in Haines Junction are long and dark with as few as four hours of light each day. January temperatures average minus 21°C and the mean temperature is 11° Celsius in June. Summers see up to 19 hours of daylight.

"Dakwakada", a Southern Tutchone word meaning "high cache", was the original name for the site of Haines Junction. It was common for Southern Tutchone people to use raised log caches to store food temporarily or year-round while they hunted and fished in the area. This region was also an important travel and trade route for First Nations. Its proximity to the Chilkat Pass, one of only three passes that allowed travel between the coast and the interior, made for extensive use by coastal Tlingit and Southern Tutchone people. There were a number of trading settlements, and well-travelled trails led in all directions.

In 1993, after more than 20 years of negotiations, the Champagne and Aishihik First Nations (CAFN) Final Agreement was signed by CAFN, the Government of Canada and the Government of Yukon.

CAFN's Land Claim Agreement provides for the ownership of some 2,427 square kilometers of land. It also continues to provide access to fish and wildlife resources. CAFN is a full partner on the Kluane National Park Management Board, the Alsek Renewable Resources Council and has representation on numerous other regional and territorial boards that make recommendations on heritage, educational, environmental and economic issues.

The village itself was established in 1942, during construction of the Alaska Highway. The following year a branch road was built from Haines, Alaska over the Chilkat Pass to join the new highway. Portions of ancient travel routes became pioneer roads built for vehicle traffic. Situated at the junction of these two roads, Haines Junction was a construction camp and an important supply and service centre for the U.S. Army Corps of Engineers building the highway.

Haines Junction is perhaps best known as the access point to Kluane National Park and Reserve, a dramatically beautiful wilderness park, famous for its glaciers, mountains, and wildlife. Kluane National Park and Reserve, together with Tatshenshini-Alsek Provincial Park in British Columbia, Wrangell-St. Elias National Park and Glacier Bay National Parks in Alaska, form the largest internationally protected area on earth. In 1980, Kluane National Park and Reserve was designated a UNESCO World Heritage Site as a globally significant mountain wilderness. The park encompasses a portion of the St. Elias Mountains, including Mount Logan, Canada's highest peak.

Community facilities include an arena, curling rink, swimming pool, outdoor basketball court and skateboard park, community library with public Internet access, youth centre, and a community hall. The Recycle Centre operates seven days a week, and provides weekly recyclables pick-up for residents within municipal boundaries.

Haines Junction is served by a local community Health Centre, a volunteer ambulance service, a locally based social worker, and a locally based counselor. Recently, a Seniors' Centre has opened with limited hours.

The RCMP operates a detachment in Haines Junction with one corporal and two constables and the local Haines Junction Community Justice Committee provides alternative justice systems. There is a volunteer fire department, with staff trained in first aid and CPR.

St. Elias Community School offers kindergarten to Grade 12 and the Haines Junction campus of Yukon College offers full-time academic upgrading programs and delivers a variety of continuing education courses. The campus's location near the St. Elias Mountains provides opportunities for such courses as avalanche training, wilderness guiding and wilderness survival. Youth employment training, early childhood courses and office administration are also offered.

The Yukon Electrical Co. Ltd. supplies hydroelectric power from Aishihik Lake, with diesel generator back-up. The village has a piped water supply that is also available to some properties owned by CAFN. Other areas use trucked-in, chlorinated well water or personal wells.

Mail is trucked in and out of the Haines Junction postal outlet five times a week. High-speed Internet access is available in the community. The community has a bank with regular hours and an ATM in the general store. The General Store supplies fresh produce, groceries and hardware.

Other retail outlets and services include a women's clothing store, ATV and snowmobile sales, a bakery and deli, and an art gallery. Gold jewelry and local First Nations crafts are sold through several home businesses.

Several ecotourism businesses provide a full range of experiences, including rafting, canoeing, horseback riding, dog-sled tours, cross-country skiing, fishing, llama treks, biking and hiking, as well as canoe and bicycle rentals. Flight services are available by helicopter or fixed-wing aircraft.

The community boasts a number of year-round and three seasonal motels, hotels and lodges. Several restaurants and a bakery/deli provide a full range of cuisine from fast food take-out to fine gourmet dining. Several B&B locations provide accommodation and there are three Laundromats available in the area. RVs and campers can choose from various commercial RV sites that provide electricity and water hook-ups. Two operators provide tenting space. The Yukon government and Kluane National Park also have campgrounds in the area.

Automotive gas and diesel as well as propane can be obtained at numerous outlets. A full range of mechanical services is available, including towing.

The population of Haines Junction was slightly under 800 in 2003, much the same as it has been for several years. The Champagne and Aishihik First Nations (CAFN) is estimated to be about half of the overall community population. Census results for the Village of Haines Junction identify First Nations people at 40 percent of the population. However, this does not take into account the overall community area or CAFN villages outside the incorporated area.

The population of the community is slightly older than the Yukon average. 25 percent of the population of Haines Junction is in the 25 to 44 age group compared to 31 percent Yukon wide. Community members between 45 and 64 make up 32 percent of the population (29 percent Yukon wide) and residents over 65 make up 10 percent of the community (7 percent Yukon wide).

- The Planning Process -

The Village of Haines Junction began its planning process in the winter of 2006. To ensure that residents had an opportunity to provide input into the sustainability planning process, a short survey was distributed to every household in the community and an initial public meeting was held.

ICSP Public Meeting #1 – February 21, 2006.

Advertisements notifying residents of the meeting were placed in the Yukon News two weeks and one week prior to the meeting.

At this time, the Village of Haines Junction was also embarking on an Economic Development planning exercise. It was decided to delay the ICSP planning until the Economic Development planning was complete to ensure residents and community organizations were able to focus their attention on one process at a time.

The Economic Development project was spearheaded by an Economic Development Committee established by the Village of Haines Junction that included representatives from Kluane National Park, the St Elias Chamber of Commerce, the Champagne and Aishihik First Nations, the municipal council and the community at large. An extensive public consultation effort was included in the planning, and the input gathered in this project was also incorporated into the ICSP to ensure the two documents were complimentary.

Subsequent public meetings to review the ICSP were held in the fall of 2007. Residents were informed through the distribution of 1st class letters to every household in the vicinity of Haines Junction, the Mayor's Newsletter, the community newsletter the "Echo" and the use of posters in the community.

ICSP Public Meeting #2 – October 30, 2007.

ICSP Public Meeting #3 – November 28, 2007.

The Village of Haines Junction Integrated Community Sustainability Plan was ratified by the Mayor and Council at a regular council meeting following the public meeting on November 28, 2007.

The Village of Haines Junction understands the importance of working closely with the Champagne and Aishihik First Nations to the benefit of all residents of the Haines Junction area. A Memorandum of Understanding relating to cooperation in community planning and infrastructure was signed by the two governments on May 25, 2006. In addition to CAFN participation in the Economic planning that fed into the ICSP, drafts of the ICSP have been provided to CAFN. The Village of Haines Junction and CAFN are committed to continue working together on planning and projects whenever it is appropriate.

Mayor and Council adopted the Village of Haines Junction Integrated Community Sustainability Plan at the regular council meeting on November 28, 2007.

- Sustainability -

The concept of sustainability includes the ability of people to meet their basic personal needs. These needs include the infrastructure and resources that allow people to live comfortably, as well as the physical and emotional health to allow them to realize their full potential. It is equally important that these personal needs are met in a way that does not make it more difficult for others to meet their own needs. This includes the needs of future members of our community and of society in general.

We are all dependant on nature to provide the basic necessities of life including clean air and water. As well, nature provides the food we eat, the raw materials that provide shelter and many of the objects that enhance our lifestyle.

There are limits on the ability of nature to provide these necessities, and too often we damage nature beyond its capacity to renew itself. For generations the people of the Haines Junction area lived within the limits set by nature. To be truly sustainable today and in the future, society must re-learn how to exist within the natural cycles of the planet we live on. The damage that we do to nature can be divided into three categories:

Increasing Accumulations of Substances Extracted From the Earth

Many substances that we extract from the earth such as oil, gas, metals and minerals, contribute to the lifestyle that we enjoy today. These substances will eventually break down and return to the earth's crust. However, at the current rate of consumption, these substances build up in the ecosystem harming living organisms and the ecosystem itself. Problems can include an increase in greenhouse gasses contributing to climate change, and metal levels in nature such as mercury that can impact our wildlife.

In practical terms, this means we should increase recycling and reuse of these materials, and reduce our dependence on fossil fuels.

Increasing Accumulations of Substances Produced by Society

Society also produces matter that is not found in nature. Chemical fertilizers and pesticides are among many synthetic compounds that we produce and disperse into nature. These manmade compounds can takes thousands of years to completely break down. The build up of these compounds in the food chain harm wildlife, and can cause diseases such as cancer in humans. This means discouraging the use of these persistent human made substances, and finding safer, natural alternatives.

Physical Degradation of Nature

We meet many of our needs as a society from renewable resources. This includes harvesting fish and other animals for food, and harvesting trees for the manufacture of wood and paper products.

We can continue to use these resources, but we must do so at a rate and methods that allows them to replenish themselves.

In practice, this means minimizing the destruction of habitat that supports the natural diversity of the ecosystem, and using wood and paper from sustainably harvested forests.

- Our Sustainability Principles -

In order to begin the journey towards becoming a truly sustainable community, Haines Junction has chosen to use adopt sustainability principles. These principles are valuable tools to help us examine our current practices and align our future actions with the natural cycles of our local ecosystem and our planet.

As we plan for the future, Haines Junction will use these sustainability principles to help guide our decisions. Based on The Natural Step sustainability principles, our community sustainability objectives are to:

1. Minimize and eventually eliminate our contribution to the accumulation of substances extracted from the earth.
2. Minimize and eventually eliminate our contribution to the accumulation of substances produced by society.
3. Minimize and eventually eliminate our contribution to the physical degradation of nature.
4. Ensure that all residents are able to meet their own needs and realize their full potential, in a way that does not reduce the ability of others to do the same.

- Our Vision for the Future -

"To develop our economic, social, and personal well being by capitalizing upon and supporting the natural ecosystem which defines Haines Junction"

- Community Values and Goals

The values of the residents of Haines Junction define the character of the community as it is today and guide us as we plan for the future. We would like to ensure that our values continue to be reflected in the decisions we make as a community. While we recognize that our residents have different perspectives on many things, we believe these broad values are a reflection of those who live and work in Haines Junction.

Community Value: A healthy natural environment

Residents and visitors alike have cited the natural environment in and around Haines Junction as its most attractive feature. The pristine surroundings encourage tourism, provide opportunities for unique recreation, and contribute to the quality of life we all enjoy here.

Goal: Maintain the unspoiled nature of the environment surrounding and supporting Haines Junction.

Understanding that the natural environment supports the economic, emotional, and physical well being of our community, we will maintain the health of our surrounding ecosystem. We will ensure that development proceeds in a way that minimizes and mitigates its impact on our environment. Land Use and other resource planning that respects our community value of a healthy natural environment will guide our decisions.

We will incorporate sustainability principles into all planning processes and consider the ICSP before major decisions are made by the Municipal government. We will measure our success in meeting this goal in these ways:

- A decrease in energy required to run Municipal buildings and operations
- A decrease in waste entering the landfill
- A decrease in the amount of water used per capita within areas serviced by Municipal water distribution/delivery.

Community Value: Economic stability and autonomy

The community of Haines Junction recognizes that diversification is important to avoid boom and bust cycles and to offer a variety of employment opportunities to our citizens. We understand the importance of year round employment and alternative lifestyle options. Economic stability supports community infrastructure and services and local independence ensures the community evolves according to the desires and needs of the residents of Haines Junction.

Goal: A diverse local economy that reflects the needs and desires of local residents

The community of Haines Junction will diversify its economy through the expansion of current businesses and support for the development of new, small enterprise. We will increase opportunities for retail and commercial endeavors by capitalizing on local resources, especially Kluane National Park. Furthermore, we will build on our reputation as a tourist destination by expanding the ecotourism sector and increasing services based on the unique experiences in the Kluane region. The community of Haines Junction will work to attract government, education, and private sector departments and satellite offices in order to build year round employment options. This will support our efforts to enhance Haines Junction's position as the economic hub for the area.

- An increase in the value of the municipal tax base over the ten year period of 2006 to 2016
- An increase in the number of "industry divisions" in which residents are employed over the ten year period of 2006 to 2016
- An increase in the employment rate over the ten-year period 2006 to 2016.

Community Value: The well being of our residents

The health of our residents is essential to the future of our community. We believe that a healthy community is based, not only on the ability of each resident to meet their basic needs, but also on the opportunities that support their physical, spiritual, and mental growth including recreation and other leisure activities. The residents of Haines Junction recognize that our health and well-being are linked to the spectacular natural setting of our community.

Goal: All community members are able to meet their basic needs and access healthy living opportunities.

The community will work together to ensure basic services are accessible to all residents. We will facilitate the development of opportunities to teach and learn which are related to healthy living and the outdoor experience, while maintaining and upgrading recreational programming, facilities, and outdoor opportunities to encourage healthy lifestyles and a connection to the land.

Recognizing that residents have varied needs, we will encourage housing and care appropriate for our whole population, and affordable childcare to support the ability of parents to contribute to the work force.

We will measure our success in these areas in the following ways:

- An increase in the participation rate of residents, of all ages, in organized community activities and events
- An increase in the total dwellings suitable for residents with mobility issues and/or requiring a higher level of care

Community Value: Learning, Education, and Knowledge

The opportunity to learn is a key to building and growing capacity within our community. We believe that both formal and informal education develops an individual's knowledge, capacity and lifestyle. Furthermore, education and training of our population enables each person to make a strong contribution to our community goals. The residents of Haines Junction respect all knowledge building including learning related to culture, economic development, our social and physical health, and our critical connection to the land. Many of the educational experiences available in Haines Junction are unique and sharing these opportunities with visitors contributes to a sustainable economy.

Goal: Accessible and inclusive opportunities for education and knowledge building.

As a community, we will work together to ensure that residents of all ages and needs have access to appropriate education. We will support each child as they progress through school from kindergarten to Grade 12 and encourage adults to further their education and training. We will work toward the expansion of our Yukon College campus to include programming which enhances the expertise and opportunities existing in the community. Furthermore, we will use the surrounding natural environment, including Kluane National Park, to establish Haines Junction as the outdoor learning centre of the Yukon.

Although capacity is difficult to measure and differs for each individual, we feel these indicators touch on essential skills related to community well being:

- An increase in the number of apprentices and licensed, ticketed trades people
- An increase in the number of courses completed at Yukon College

Community Value: A supportive community where all residents have access to art and culture.

Haines Junction is committed to offering its citizens a high quality of life. Important aspects of life quality include participation in the community, and access to enriching cultural experiences. We believe we share a collective responsibility to support and encourage the cultural and social growth of our community and its residents. The culture and heritage of the Champagne and Aishihik First Nations is an important part of the fabric of our community, and the collective success of our community is based in large part on open and authentic communication between all community members.

Goal: A vibrant community rich in diverse culture.

We will ensure that the culture, events and volunteers that enliven, enrich and bond our community are supported. We will develop increased capacity to capitalize on recreational and cultural opportunities and continue to host large-scale events that draw visitors to our community and enrich our lives. We will also stage a greater number of small events focused on residents and held throughout the year. The community of Haines Junction will support efforts to preserve and maintain the culture and heritage of the Champagne and Aishihik First Nations in appropriate ways.

Success in reaching this goal will be measured in these ways:

- An increase in the number of community events held in Haines Junction
- An increase in the number of volunteers and participants in community events

- Infrastructure Evaluation -

Community infrastructure in areas that are eligible for Gas Tax Agreement funding can be evaluated for contributions made, both positive and negative, to the sustainability principles of the Village of Haines Junction.

Solid waste disposal/recycling/hazardous waste collection

The landfill site on the south end of the Village of Haines Junction consists of a series of pits within a fenced area. Separate pits exist for domestic, compost, metal, brush, and tire waste. Domestic waste is collected at a transfer station outside the landfill and the domestic pit is closed to the public. There is no burning at the site outside of special approval brush burning.

Next to the Transfer station is a Compost area and a recycling depot privately run by the Haines Junction Recycling Group. The group offers in-town recycling collection at no charge to residents and goods are shipped to Whitehorse for processing with backhauls offered by various trucking companies in the Territory. The Village of Haines Junction built the recycling centre with funds from the Yukon Canada Infrastructure Program.

While the lifespan of the landfill site was previously estimated at twenty years, current projections expect the site now only has 10 years left. This is partly a result of compacted waste, which is not bound, expanding over time

- Recycling, compost, re-use, and other waste diversion increases the lifespan of the site, decreases off gassing, and reduces the possibility of toxic leaching.
- Binding compacted waste would reduce the occupied physical space, increase the lifespan and boost the efficiency of the site.
- Healthy air, water, and land around the landfill site are dependant on proper separation, no burning, and no leeching at the site.

Community Energy System

There is currently no effective community energy system in place in Haines Junction. Potential abounds for geothermal and biomass heating systems with the existence of a warm (17 degrees Celsius) water aquifer and an abundance of beetle-killed forest surrounding the community. There are no imminent plans to access these potentials but the Village of Haines Junction is currently investigating a geothermal district heat pilot project for the Mezzanine and Convention Centre.

Energy Efficiency

The cost of lighting and heating is generally low indicating high rates of energy efficiency in most municipal buildings. The Village is investigating a retrofit of the old heating system in the arena. The current system is inefficient and not suited to the expansion currently being considered. We are also looking into diverting the waste heat from the Ice Plant to use as heat for surrounding buildings. The fire hall has low efficiency rates and the community hall experiences significant heat loss. Age and current condition should be considered before improvements are made.

- Upgrading inefficient buildings ensures the minimization of energy use, the comfort of residents, and the maximization of Village resources.
- Heating systems should be upgraded using the most efficient and/or renewable energy available

Active Transportation

Outside of informal trail systems created by residents, Haines Junction has little active transportation infrastructure. The Yukon Government previously identified and proposed the building of trails from the river to the center of town and on toward the cemetery but funding fell through and no discussion has been renewed on this matter.

In spite of the lack of dedicated active transportation infrastructure, the quiet, rural nature of the road system allows residents to choose to walk or bike through the community quite easily and safely. In 2006, the Village commissioned a study entitled "*Village of Haines Junction Trail & Signage Strategy - A Master Plan*" and the council is committed to implementing the strategy.

Sewer and Waste Water System

Throughout the core of the community, wastewater is collected through a traditional underground collection system to a lift station, which is equipped with an overflow lagoon. The Champagne and Aishihik First Nations also have a lift station which ties into the main municipal system. The collection pipes are approximately 30 years old and are generally in good condition.

The lift stations pump to a 3-cell lagoon, which is discharged approximately every 6 years. Because the discharge eventually runs into wetlands within the borders of Kluane National Park, there is a higher than normal standard applied to the effluent before it is released.

Most buildings outside of the core, developed area, have their own septic fields although several residential and commercial buildings are on pump-out systems.

- By maintaining high standards in our waste treatment and discharge practices we ensure the health of the ecosystem, food, water, and therefore residents in and around our community.
- By implementing best practices for waste treatment we extend the lifespan of our treatment infrastructure and save money on its operation.

Water Infrastructure

The core of Haines Junction is serviced by a distribution system and fed by two well sites.

Well site #3 is located near the river and provides two thirds of the water in the system. #3 has the capacity to supply 100% of the town's demand. It provides water at 7 degrees Celsius, and although it has artesian characteristics, well #3 operates off a pump.

Well #5 operates completely on the Artesian flow and offers significant potential for geothermal as it has a temperature of around 17 degrees. Recent drops in volume are likely due to a physical barrier in the system, but regardless of the cause, the vulnerability of relying on the artesian properties of the well are apparent.

The high temperature of both sources decreases freezing risk and offers opportunity for alternative energy usage.

Drinking water in the community will soon require more intensive treatment as a result of new Yukon water regulations around arsenic content. The Village is working with the Yukon Government Department of Community Services to identify a solution. Water from each well is currently treated separately, and well #3 pumps directly into the distribution system. The most economical response to the arsenic issue may be to feed both well sites into a common treatment plant prior to distribution. The water tower is the most likely treatment site.

The Champagne and Aishihik First Nations delivers water to its citizens living on settlement land through its Public Works department. Residents who do not get their water from the Village water distribution network or CAFN delivery access their water on an ad hoc basis through a carded water distribution system at the water tower.

- Water treatment should strive for the maximization of cleanliness with the minimization of chemical treatment to ensure the health of residents and the surrounding ecosystem.
- The warm temperature of our water resources reduces the threat of freezing thus moderating the expenses associated with winter water warming/bleeding and cold related repairs.

Public Transportation

There is currently no public transportation in Haines Junction. The local economy and the size of the Village make it unlikely that it would be able to support an economically sustainable public transportation system at this time. However, the community has shown support for a regional public transportation system of some kind.

- *Priority Setting* -

Water system

New regulations for levels of arsenic in community drinking water will require the Village of Haines Junction to introduce new filtration technology to the water system. This will positively affect the community by increasing the safety of public drinking water.

The artesian flow of well #5 is unable to meet the full demand of the community should well #3 break down. Building redundancy into the system will ensure the integrity of the water supply. Even more challenging, the capacity of both pumps may be unable to meet the needs of local fire crews in the case of a forest fire. Improvement to the volume capacity of the water pumps will ensure that the water is accessible at all times.

Recreation Facilities

The recreation facilities in Haines Junction are aging, inefficient, and poorly suited to the needs of the community. Recreation is an important part of a community's well being. Although most recreation is focused on healthy bodies and healthy living, social and mental health benefits which are important factors. Well-suited, well-maintained recreation centres are often a hub of activity in a small community and can help residents meet their needs in a variety of ways. Priorities for the community include expanded and more efficient recreation facilities.

Land Use Planning

Currently, there is no regional land use plan in the Haines Junction Area. The lack of a plan can be an impediment for government projects, resource development and environmental protection. By developing a land use plan, the residents of the Kluane area would be able to ensure the land is used efficiently in a way that entails the greatest benefit to the economy, the community, and the environment.

Economic Development

The economy in Haines Junction faces similar challenges seen by many northern communities. Typical patterns of boom and bust associated with resource exploration and extraction are not part of the recent past in Haines Junction,

In order to continue building a sustainable economy, the community must concentrate on undertakings that maximize benefits to local residents while minimizing and mitigating environmental impacts. Education, Eco-tourism, and Outdoor Recreation have been cited as focuses for future economic development. Each of these sectors will increase job opportunities, provide operating revenues to local governments, and can be developed and maintained in a sustainable manner.

Infrastructure and Services for Seniors

Haines Junction has an aging population and demand for housing, services, and programs is increasing. It is critical that homecare, appropriate recreation and housing options are available to ensure that older residents and retirees are able to maintain healthy lives close to family and friends. The high quality of life offered by Haines Junction combined with increased amenities for seniors can serve as an economic opportunity as well.

Limited facilities for seniors are an issue for Haines Junction residents. While this directly impacts seniors and their families, there are broader consequences for the whole community. The social, cultural, and economic fabric of the community is affected when long term residents are forced to leave the community as a result of increased care needs.

An increase of housing and care options would have a direct and positive impact on all residents of Haines Junction.

Outdoor Education Centre/Education development

Haines Junction is a perfect setting for Education related to Environmental Studies and Outdoor Education. Offering programs and courses related to the natural environment and wilderness activities around Haines Junction supports an understanding of the local spectacular natural environment as well as an increased environmental ethic.

Educational opportunities in Haines Junction would entice people from all around the Yukon and beyond to live here, bringing disposable income, energy, and enthusiasm to the community. Developing this natural niche market in the Kluane region can be a significant boost to sustainable economic development and diversification.

Energy Efficiency/Renewable Energy

Several existing municipal buildings are inefficient and expensive to heat. Where efficiency can be increased, the municipality will be able to reallocate funds from energy costs to other community priorities. Options and opportunities exist with district heating, waste heat, ground source heat pumps, a warm water aquifer, and biomass. Although some of these options will require further investigation and time to develop, priority should be given to maximizing the energy efficiency of existing buildings to realize cost-savings.

By cutting municipal energy usage, the community will be less reliant on fuel trucked in from long distance, will have more resources to allocate to community projects, and will be contributing to a decrease in environmental damage caused by the community.

- *Infrastructure Priorities* -

The following infrastructure projects represent priorities for the Village of Haines Junction that will enhance the sustainability of the community. They are not listed in any particular order of priority.

Water treatment system for arsenic: New Yukon water regulations will require expanded water treatment capacity by 2011 to deal with arsenic. While the community drinking water meets current standards, the limit will be cut in half under the new regulations.

Tie well #3 and #5 together at water tower: Well #3 currently feeds directly into the distribution system for some homes. The required new water treatment system noted above will likely require that all community water be brought to a central location for treatment prior to distribution. The logical location for this is at the existing water tower.

Increased water volume at well #5: The newest well in the community is an artesian well that provides its own pressure. While the pressure has remained relatively constant, the volume produced by the well has dropped recently. The solution to this problem has not been completely confirmed, but addressing the issue is a priority to ensure continued supply of water to the community.

Pump and pump house at well #5: Despite well #5 being an artesian well providing its own pressure, it is desirable to install a pump and pump house to ensure continued supply and mitigate any potential decrease in natural pressure.

New pump for well #3: A larger pump with soft start would increase the capacity for the whole system while reducing negative impacts on the distribution from the sudden starts of the current pump.

Bailer/compacting system for landfill: The landfill currently employs a compactor at the landfill to reduce the volume of waste entering the pits. There is nothing in place, however, to bind the compacted waste resulting in severely decreased effectiveness of the system. In conjunction with increased waste diversion efforts, the capacity to bail the compacted waste would increase the limited lifespan of the facility.

Geothermal district heat: The lucky discovery of the warm water aquifer under Haines Junction has created enormous potential for a community wide district heat system. Such an undertaking has significant technical, financial and regulatory issues that must be addressed, but represents an opportunity to dramatically reduce the community's reliance on fossil fuels for home heating. The enormous amount of beetle-killed timber around the community may also play a role in a community district heat system.

Geothermal heating for convention centre: While a large district heat system will require and investment of significant time and effort, the utilization of the warm water aquifer to heat the largest building in the community would be good first step.

Energy efficiency in recreation centre: The existing recreation centre is older and poorly insulated. Increasing the energy efficiency of the building would result in ongoing annual savings for the municipality as well as make the facility more comfortable for users.

Fire hall energy efficiency: The fire hall also suffers from poor insulation and building envelope,

Energy efficiency in community hall: The existing community hall has a low level of energy efficiency. Snow melting off the roof in the winter is a sure sign of poor insulation. Given the age and condition of the building, the lifespan of the current building should be considered prior to investing in energy efficiency improvements.

Ice plant waste heat capture: More and more municipalities - including Teslin and Whitehorse in the Yukon – are using the waste heat from their ice plants to heat the building rather than pay the cost of cooling the plants. Benefits include reduced fossil fuel use and reduced costs for the municipal government.

Affordable housing: There is a shortage of affordable housing options in the community. While providing housing is not a municipal responsibility, there is a community need for this kind of infrastructure. There may be a role the municipality can play in relation to municipal regulations and zoning to facilitate the development of affordable housing.

Appendix 1

Community Inventory and Assessment Checklists: Capital Project Infrastructure Inventory and Assessment

Capital Project/Infrastructure	Do you have it? Yes/No	What is the condition? Good/Avg/Poor	Is there enough? Yes/No	Do you need it? Yes/No
City Hall	Yes	Good	Yes	Yes
Airport	Yes	Good	Yes	Yes
Community buildings	Yes	Avg	No	Yes
Community Hall	Yes	Poor	no	Yes
Dock facilities	No	n/a	n/a	No
Community energy systems	No	n/a	n/a	n/a
Fire station	Yes	Good	Yes	Yes
Health clinic	Yes	Good	No	Yes
Housing	Yes	Avg	No	Yes
Internet service	Yes	Good	yes	Yes
Library	Yes	Good	No	Yes
Police building	Yes	Good	Yes	Yes
Post office	Yes	Good	Yes	Yes
Recreation (parks)	Yes	Good	No	Yes
Roads	Yes	Avg	Yes	Yes
Schools	Yes	Good	Yes	Yes
Sewage collection and disposal	Yes	Good	No	Yes
Solid waste disposal	Yes	Good	No	Yes
Water service	Yes	Good	No	Yes
Public transportation	No	n/a	n/a	No
Active transportation				
Youth centre	Yes	Good	No	Yes
Other				

**Community Inventory and Assessment Checklists: Social, Health, and Cultural Services
Inventory and Assessment**

Resource Category	Type of Service	Does this exist? Yes/No	Can it be improved? Yes/No
Health	Nutrition	Yes	Yes
	Weight loss	Yes	Yes
	Aids prevention	Yes	Yes
	Substance abuse	Yes	Yes
	Family planning	Yes	Yes
Public Safety	Police protection	Yes	Yes
	Fire protection	Yes	Yes
	Emergency response	Yes	Yes
	Search and rescue	Yes	Yes
Recreation Programs	Small children	No	Yes
	Teens	Yes	Yes
	Adults	No	Yes
Social Service Programs	Child care	No	Yes
	Domestic violence	Yes	Yes
	Seniors	Yes	Yes
	Disability services	No	Yes
	Counselling – adults	Yes	Yes
	Counselling – teens	Yes	Yes
	Legal services	Yes	Yes
	Suicide prevention	Yes	Yes
Self Government	Self government status		
Cultural Programs	Elders group		
	Music		
	Subsistence food preparation		
	Dance group		
	Arts and crafts		
	Language programs		
	Spirit camps		
	Storytelling		
	Other		

Community Inventory and Assessment Checklists: Economic Inventory and Assessment

Type of Typical Job	Number of jobs?	Is the job filled by a person in the community? Yes/No	Full time? Yes/No	Seasonal? Yes/No	Wage example
Arts and crafts					
CAO	2	Yes	Yes	No	\$35 per hr
Accounting officer	2	Yes	Yes	No	\$25 per hr
Environmental specialist					
Logger/Forester					
Health aide/Nurse	5	Yes	Yes	No	\$30 per hr
Heavy equipment operator	7	Yes	Yes	No	\$24 per hr
Mechanic	2	Yes	Yes	No	\$40 per hr
Construction					
Housing manager	1	Yes	Yes	No	YTG
Public safety officer					
Fire fighters	12	Yes	Yes	No	Volunteers
Emergency response	6	Yes	Yes	No	Volunteers
Business owners	64	Yes	both	both	?
Counsellor					
Water treatment operator	3	Yes	Yes	No	\$24 per hr
Sewage treatment operator	3	Yes	Yes	No	\$24 per hr
Landfill operator	3	Yes	No	No	\$20 per hr
Power plant operator	0				
Other					
Other					
Other					
Other					

Community Inventory and Assessment Checklists: Environmental Inventory and Assessment

Environmental Assets/Needs	Do you have it? Yes/No	If this is lacking, does your community need it? Yes/No
Safe drinking water	Yes	Improvements needed
Adequate supply of water	Yes	“ “
Certified water treatment operators	Yes	n/a
Safe sewage disposal and treatment	Yes	n/a
Permitted landfill	Yes	n/a
Recycling program	Yes	n/a
Used oil storage area	Yes	n/a
Lead acid battery collection area	Yes	n/a
Developable land	No	Yes
Fuel spill prevention plan	Yes	n/a
Hazardous waste response plan	Yes	n/a
Erosion control	No	No
Contaminated sites identified	Yes	n/a
Healthy subsistence food	Yes	n/a
Environmental Education programs	Yes	n/a
Healthy wildlife populations	Yes	n/a
Hazardous waste collection area	Yes	n/a
Protected watershed plan	No	Maybe
Environmental impact statement	Partial	Yes
Other		
Other		

**Community Inventory and Assessment Checklists: Capacity Building and Job Training
Inventory and Assessment**

Capacity Building/ Training/Education Opportunities Category	Type	Does this job exist in the Community?	Training/education needed?	Is training available in the Community?
		Yes/No	Yes/No	Yes/No
Municipal or First Nation Administrative Positions	CAO	Yes	Yes	No
	Accounting Officer	Yes	Yes	No
	Other			
	Other			
	Other			
Education	Principal	Yes	Yes	No
	Teachers	Yes	Yes	No
	Teacher aides	Yes	Yes	No
Health	Health aide	Yes	Yes	No
	Nurse practitioner	Yes	Yes	No
	Doctor			
Transportation Utilities	Driver/pilot			
	Water treatment operator	Yes	Yes	No
	Sewage treatment operator	Yes	Yes	No
	Landfill operator	Yes	No	n/a
	Power plant operator	No	n/a	n/a
	Water delivery service operator	Yes	Yes	No
Justice	Other			
	Other			

Community Inventory and Assessment Checklists: Inventory and Assessment of Other Items

Asset or Need	Do you have it? Yes/No	How would you rate it? Good/Avg/Poor	Do you need it? Yes/No
Construction/House Builders	Yes (2)	Good	Yes – more
Electricians	Yes (1)	Good	Yes – more
Other Journeymen	No		Yes