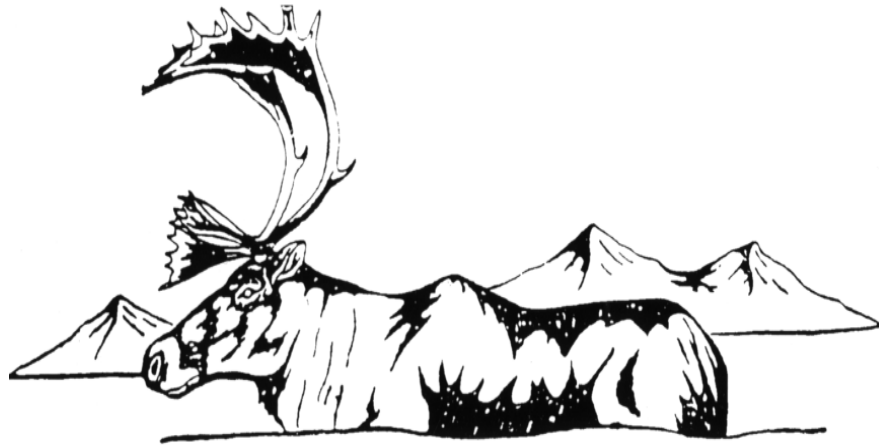




**Vuntut Gwitchin First Nation  
Integrated Community Sustainability Plan  
January, 2009**



## Vuntut Gwitchin First Nation

ICSP Community Meeting

Date: \_\_\_\_\_

Recommended for Approval,  
Executive Director

Date: \_\_\_\_\_

Presented to Chief & Council

Date: \_\_\_\_\_

Approved by Chief & Council

Date: \_\_\_\_\_

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Joe Linklater, Chief  
Vuntut Gwitchin First Nation

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## Executive Summary

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The Vuntut Gwitchin First Nation (VGFN) is eligible for \$740,265.00 under the New Deal Gas Tax Agreement over 5 years on completion and acceptance of their Integrated Community Sustainability Plan. The Gas Tax extension was extended in 2007 for another 4 years at \$296,424.00 per year. In all VGFN is eligible for \$1,924,689.00. The ICSP was done in conjunction with an update to the larger Community Physical Development and Capital Plans and includes priorities and projects that are not eligible for Gas Tax funding at this time. The plan takes a holistic planning approach and includes areas such as health and wellness that are not traditionally discussed in community planning.

Old Crow is the only community in the Yukon that is not accessible by road. This has significant implications for the provision of services and infrastructure. Old Crow is almost entirely dependent on air resupply making costs considerably higher than any other part of the territory. For this reason, planning for infrastructure and service improvements requires close cooperation between the Yukon and Vuntut governments. The Vuntut Gwitchin is a self-governing First Nation and the majority of land within community boundaries is settlement land. However as an unincorporated community the Government of Yukon retains a number of infrastructure program delivery responsibilities. Coordination and cooperation between the two governments is essential for efficient and effective service delivery.

At present service delivery remains a shared responsibility. VGFN covers eighty percent of the cost of water delivery and sewage education. They also operate the youth centre, heritage hall recreation facilities and cemetery YG operate and maintain the municipal hall solid waste disposal facility, sewage lagoon road system the fire department including maintenance of the fire hall, fire truck for volunteer fire service and the airport. YG is also responsible for flood protection and river bank stabilization, the school, RCMP, and the nursing station. Both VGFN and YG recognize that infrastructure and service provision for a community of 300 will be limited due to its size, but should be of a comparable standard to other communities in the Yukon. YG is responsible for all road maintenance with the exception of Crow Mountain road

The ICSP reflects Vuntut Gwitchin values, current priorities and goals. It is also based on the principles of holistic community health, self-government empowerment and transparency as well as providing the best quality of infrastructure and services possible.

This document is an expression of where VGFN sees Old Crow going in the future. As a vision for the community it includes all aspects of the community – the economy, culture, environment, health, and government. This plan will help VGFN “create a sustainable community that provides a safe, supportive environment in which to live and work consistent with our Vuntut Gwitchin land ethic.”

## 1.0 Old Crow Yesterday and Today

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The Vuntut Gwitchin First Nation (VGFN) is a self-governing First Nation. Old Crow is the most northerly community of the Yukon and is located above the Arctic Circle. As an unincorporated community there is no municipal government so VGFN functions as the municipal equivalent. VGFN is the main governing body. The Yukon Government (YG) and VGFN effectively share responsibility for the provision of municipal services.

The Vuntut Gwitchin is part of the Gwitch'in people and Athapaskan language group. Their traditional territory extends across northern Alaska, Yukon and Northwest Territories. They were traditionally a nomadic people and in their traditional rounds moved freely between Fort Yukon, Johnson House, LaPierre House and Whitestone Village. In 1867 the Yukon Alaska border was defined and many Vuntut Gwitchin settled in Rampart House. By 1950 with the establishment of a permanent store and services in Old Crow the Vuntut Gwitchin moved to Old Crow.

Old Crow is the only community in the Yukon without road access. As such, Old Crow faces unique logistical challenges in obtaining goods and services and significantly higher costs than other Yukon communities. The Vuntut Gwitchin has preserved their traditional ways and special relationship with the Porcupine Caribou Herd. The isolation means residents rely on subsistence harvesting for a significant portion of their diet.

VGFN settled their land claims in 1993 and now employ 43 permanent staff. Departments include: Finance, Human Resources, Natural Resources, Government Services, Health and Social Services, Education, Youth and Recreation and Information Systems. VGFN covers eighty percent of the costs of water delivery and sewage education. They operate the youth centre, heritage hall and recreation facilities (ball diamond, playgrounds, Skateboard Park,) VGFN maintains the Alice Frost Community Campus building that Yukon College offers courses in. Old Crow also has a volunteer fire department. Volunteer retention and training proficiency are a challenge

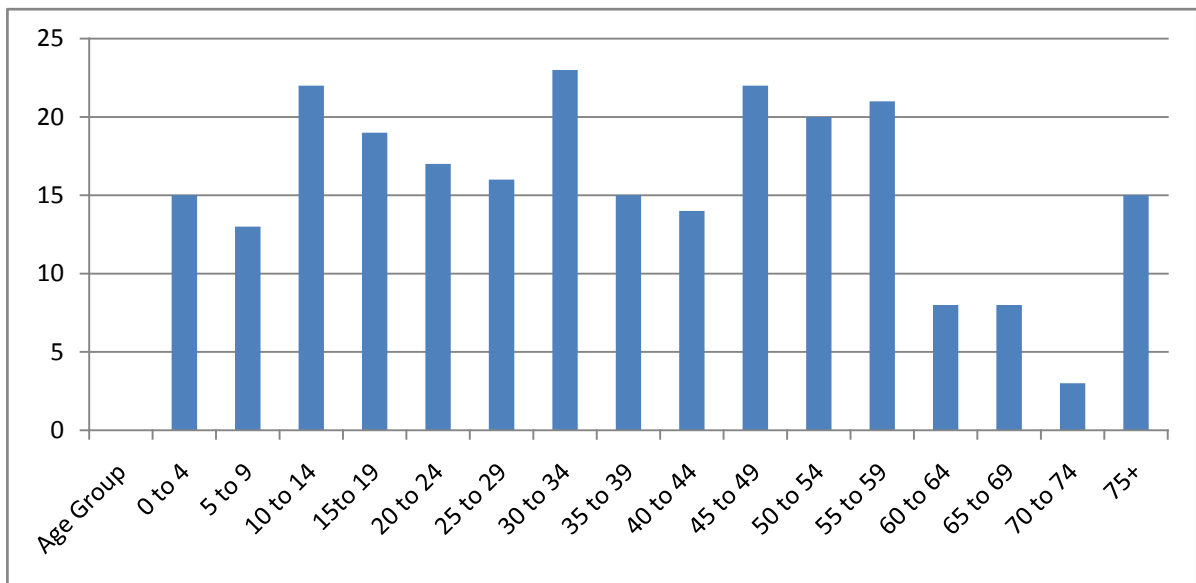


Service provided by the Yukon Government includes the RCMP, health centre, and the Chief Zzeh Getlit School which offers kindergarten to grade 9. YG also maintains and operates the water well, sewage lagoon, solid waste disposal facility, airport, fire hall and roads.

Residents of Old Crow make ample use of the surrounding natural environment for recreational and traditional activities. There is a network of cross-country ski trails with a ski lodge maintained by the Ski Society. The North Yukon contains important historical and archaeological sites such as Rampart House (co-managed between VGFN and YG) and Bluefish Caves. Old Crow flats, a traditionally important Vuntut Gwitchin site for trapping muskrats, has also been recognized as a Ramsar Site – a wetland of international importance. Residents still depend on the Porcupine Caribou Herd and salmon stocks for subsistence food. The community actively takes part in exploring their history with projects such as the 2007 Diniizhoo Cultural Technology Camp which brought Elders, youth and parents out on the land to learn how the Vuntut Gwitchin traditionally made tools, played games, sewed, made caches and constructed dwellings.

Old Crow’s population was 251 in December 2008 according to the Yukon Bureau of Statistics. Approximately, 90 percent of population is First Nations. As of August 2007 there were 509 registered members of the Vuntut Gwitchin, however only 246 reside in Old Crow due to the limited economic and educational opportunities. The majority of the remaining beneficiaries live in Whitehorse and Old Crow.

**Figure 1: Community Population by Age Group December, 2008**





## Old Crow Population

Year	Population	%Change
1991	270	
1992	285	5.3
1993	267	-6.7
1994	258	-3.5
1995	272	5.1
1996	287	5.2
1997	305	5.9
1998	292	-4.5
1999	298	2.0
2000	292	-2.1
2001	284	-2.8
2002	277	-2.5
2003	262	-5.7
2004	263	0.4
2005	259	-1.5
2006	255	-0.9
<b>Average rate of change:</b>		<b>0.1</b>

Figure 2: Old Crow Age Group Comparison, 1996, 2001, 2006

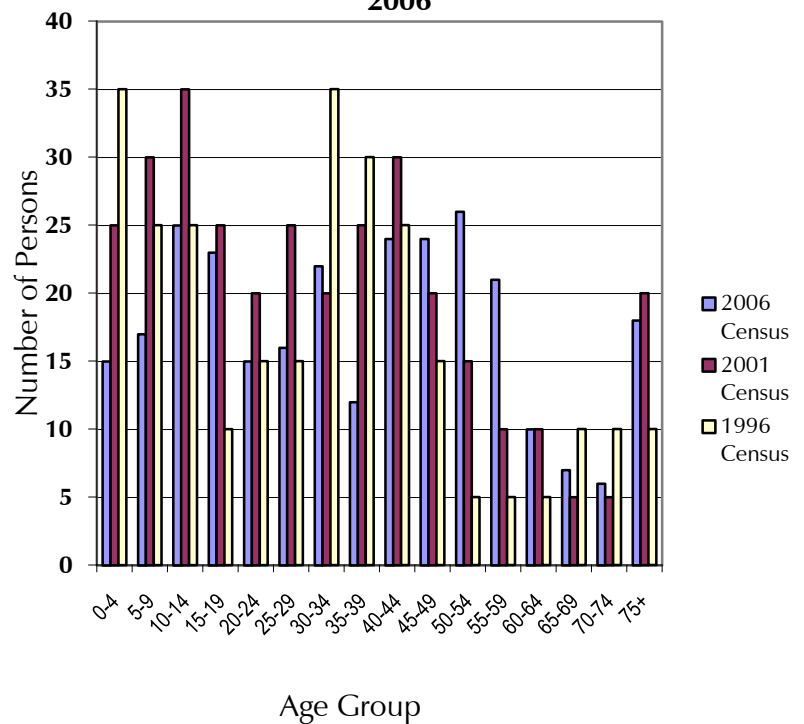


Figure 1 shows the Community population in Old Crow by its age groups for 2008 from the Yukon Department of Health and Social Services and Yukon Bureau of Statistics. The above statistics shows that the number of people in the 60 to 74 age group is extremely low, while people in the age group of 30 to 34 and 45 to 59 were higher, again the number of people in the age group of 75+ is significantly high, which shows that majority of the people in Old Crow wanted to come back and retire in their community.

Figure 2 above depicts the age breakdown for Old Crow for the years 1996, 2001 and 2006. The 0 to 4 age group has seen a dramatic fall from a high of 35 in 1996 to a low of 15 in 2006. The lower birth rate will have a number of implications for the community over the next decade. For example, the school will be underutilized and recreation needs will change, as children and youth make more use of recreational facilities and programming than other age groups. The drop in population for the 15 to 19 and 20 to 24 age groups is most likely due to high school students leaving to finish high school and then pursuing higher education or job opportunities elsewhere. The population then starts to increase again as people choose to return to the community.

Old Crow has had an average population of 278 over the past 16 years (see Table 1 Old Crow Population). The average rate of population growth has been 0.1 percent. This will effect future service provision, facility use and housing need.

With less than 300 people, Old Crow can only support a limited number of jobs and business opportunities. The community's isolated location means economic leakage is significant and there are limited opportunities to create sustainable employment within the community. Part-time and seasonal employment is important and the subsistence economy is an essential component of every day life.

The Vuntut Development Corporation is 100 percent Vuntut Gwitchin owned. The Corporation owns 49 percent of Air North and 51 percent of Porcupine Enterprises Ltd. among other investments. Table 1 (below) shows the unemployment and participation rates for Old Crow according to the 2006 Census. Due to the isolation and limited economic opportunities in the community Old Crow has higher unemployment rates, and lower participation rates when compared to the Yukon averages. This means economic development in the community must be built one job at a time. The proper coordination of capital projects can help the community generate sufficient work to retain basic trades people and maximize local employment.

It is important that wherever possible when development is proposed in the North Yukon that the local economic benefit agreements be designed to ensure the community receives either direct employment benefits, royalties or other forms of business opportunities that provide revenue streams that can advance the ICSP goals and priorities.

Table on Unemployment in Old Crow (Source: Census 2006)

	Old Crow	Yukon
<b>Unemployment Rate 15-24</b>	40%	21.5 %
<b>Participation Rate 15-24</b>	62.5 %	67.7 %
<b>Unemployment Rate 25 +</b>	14.8 %	9.9 %
<b>Participation Rate 25 +</b>	75.0 %	82.4 %

## **2.0 Preparing the Integrated Community Sustainability Plan (ICSP)**

Completion of the ICSP is required to access funding under the Canada Yukon Gas Tax Agreement. The ICSP builds on and integrates the updated Physical Development and 5 Year Capital Plans into one integrated document. The plan is intended to act as a guide to the community's needs and community development priorities over the next ten years. The community of Old Crow recognizes that community health is holistic, and the ICSP takes this approach. As such, more than just infrastructure priorities are included and it addresses alternate funding sources where applicable. As an unincorporated community service delivery is provided in conjunction with the Yukon Government and the ICSP recognizes this relationship between the territorial government and the Vuntut Gwitchin First Nation.

The content of the ICSP builds upon previous planning initiatives:

- *Vuntut Gwitchin First Nation Strategic Plan 2004-2008,*
- *Old Crow Capital Plan 2001-2006*
- *Old Crow Physical Development Plan 2000*
- *1997 Old Crow Community Development Plan*

VGFN worked with a consultant to prepare the plan. The consultant organized a series of workshops in Old Crow with department heads to determine the community's current and future needs. They then helped determine priority recommendations for expenditure of the available funds, and the staff recommendations were presented to Chief and Council with a draft ICSP in September 2007. Chief and Council then organized a public meeting to present the ICSP and get feedback from the community. Based on the views expressed at the community meeting the ICSP was finalized and approved for submission.

Vuntut Gwitchin First Nation held a community meeting on XX date, to confirm support for the priorities in this final plan. The meetings were advertised in the Yukon News and the community notice board.

The Chief and Council adopted this ICSP by resolution at its meeting of .....February, 2009

## **3.0 Old Crow's Special Challenges**

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### **3.1 Lack of an all-season road**

Old Crow is the only community in the Yukon above the Arctic Circle without all-season road access. Almost all materials and goods required for community life are delivered by air, such as, heating fuel, building materials, food, and government service support. Each year, Air North delivers mail, food supplies and building materials into the community and approximately 1.1 M. litres of fuel.

In the past a winter road has been constructed connecting Old Crow to Eagle Plains on the Dempster Highway. Due to the high cost of the road, it has only been built under special circumstances such as when construction materials were brought in for the school and the new airport terminal. Permanent roads is prohibitively expensive and even an ice road, open for only a few weeks can now cost more than 1M dollars to build and maintain. It is possible that due to climate change even the ice road option may no longer be possible in the next 25 years.

### **3.2 Cost of living**

The cost of living in Old Crow is related to the lack of an all season road. The community relies on air service for basic necessities. Therefore, the cost of living is much higher than in any other Yukon community. An accurate detailed record of the cost differential has not been calculated by the Bureau of Statistics. The Federal Government does have an isolated post allowance that illustrates the cost differential relating to Whitehorse and similar northern communities. To offset the extra costs a federal government employee living in Old Crow would receive an isolated post allowance of \$18,260.00 and in Whitehorse they would receive \$4,069.00. This allowance is made up of an environment allowance, living cost differential and fuel and utilities differential. It is expected to "facilitate the recruitment and retention of staff delivering government programs in isolated locations" (Treasury Board website, 2007). Under this scheme the living cost differential for Old Crow makes up close to half of the amount (\$9,725.00). In Whitehorse there are no funds for living cost differential as the cost of food and other goods and services is not considered abnormally high.

### **3.3 Environmental risk**

Due to the location along the Porcupine River portions of Old Crow are susceptible to seasonal flooding during break-up. This leads to increased maintenance costs and reduced building life. Global warming poses a threat to the community due to its location on a floodplain and on permafrost. There is substantial scientific evidence emerging that suggests the effects of global warming on northern Canada will occur sooner and have a longer impact than on more southerly latitudes. The Vuntut Gwitchin has made a commitment to the preservation of the Porcupine Caribou herd, and salmon stocks. They are dedicated to protecting these resources from future development that may harm their survival, and to sustainable harvesting methods. Both caribou and salmon are an important part of the Gwitchin diet, culture and the community's way of life.

### **3.4 Quality and durability of housing**

A significant portion of homes are substandard and don't meet basic health and safety requirements. Many have a limited lifespan before replacement will be required. Housing issues fall into variety of broad categories including:

- Design, construction and maintenance (durability, ease of repair)
- Administration (housing policy, rent collection)
- Affordability, and housing suitability (high cost of materials and repairs in an isolated community, changing family structures)
- Capacity of First Nation to maintain existing housing stock and meet future demands

Housing quality issues range from the suitability of present designs to local climate conditions, the functional layout of the houses themselves and their appropriateness for occupant needs. Poor initial construction methods coupled with lack of personal ownership and repair responsibility leads to replacement or major renovations much sooner than should occur with an average Yukon home. Housing costs make up a significant portion of the infrastructure budget. It is a basic need and affordability is also an issue. Rental income is insufficient to cover routine maintenance, refurbishment and replacement costs. A lack of housing is a factor in staff turnover and recruitment. It also makes it hard for beneficiaries to return home to take up jobs locally.

### **3.5 Evolving VGFN and YG Relationship**

There is no elected municipal government structure in Old Crow. Services such as the water well solid waste disposal facility, sewage lagoon, road and airport maintenance are provided by YG. Water delivery and sewage education is funded by both YG and VGFN. VGFN has expressed interest in taking on more responsibilities for municipal service delivery, as their capacity as a self-governing First Nation evolves. It is important that VGFN and YG maintain a forum for discussion regarding capital planning needs, inter-governmental project coordination, and scheduling. Negotiations for program transfer have to recognize the cost differential of an isolated community, the present infrastructure condition, current and future liabilities and the fact that VGFN would be functioning as an equivalent municipal government and funded accordingly

## **4.0 Sustainable Community Development**

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### **4.1 Our Vision for the Future**

Our vision is one that reflects our traditional values, sustainability principles and long term goals as a self-governing First Nation in the Yukon and Canada. Our vision is...

*"...to create a sustainable community that provides a safe, supportive environment in which to live and work consistent with our Vuntut Gwitchin land ethic."*

Our vision promotes a sustainable community within the context of the Vuntut Gwitchin land ethic. We want the same services and amenities as other Yukon communities have, in so far as our unique location can support them. We want to see Old Crow as a healthy community with the resources to meet current and future needs without compromising the environment and our children's future.

## 4.2 Community Values

VGFN have sustained their traditional values for thousands of years and will continue to do so in the future. Our community values are a reflection of our Gwitchin culture, relationship to the natural environment, desire to develop and prosper both outside and inside the local economy, increase our local governance capacity and have a happy, healthy community.

**We value the empowerment of our people to contribute to a strong and healthy Vuntut Gwitchin First Nation.**

VGFN recognizes that our people are our greatest capital. As such, we want to educate and empower our members to actively contribute to Old Crow's economic development and create a healthy community.

**We value all that is living, and strive to create a balance in our interactions with them.**

The Gwitchin people have maintained sustainable harvests of their natural resources for thousands of years, and will continue to do so. It is in the best interest of the community as well as the environment to make conscientious, sustainable infrastructure and land use choices.

**We value children and youth, and are committed to a safe and healthy environment within our traditional ways.**

Our children and youth are our leaders of tomorrow. VGFN wants to provide a safe environment where our children and youth can learn and play to become confident, healthy leaders that continue to direct VGFN and Old Crow towards achieving our long-term goals.

**We value our traditional language, culture, spirituality, and the oral teachings of our elders.**

Our traditional ways are the backbone of our community. Elders provide an essential link to our past, and help us maintain our strong Gwitchin heritage. VGFN endeavours to promote programs that enhance traditional knowledge in the community such as language training, hunting, fishing, traditional crafts and oral history.

**We value accountable and transparent governance.**

As a self governing First Nation VGFN understands that accountability and transparency are essential to building trust with its members. An open, accountable government encourages participation by its membership and allows citizens to understand how decisions are made on their behalf. It also allows them to question how and why decisions were made and promotes dialogue between government and the public.

## 4.3 Long Term Goals

The following four goals reflect our Vuntut Gwitchin values and long-term development objectives:

- **To provide residents and beneficiaries desiring to return to the community with the opportunity to live and work in their community by encouraging a healthy, stable and sustainable economy;**
- **To enhance the physical and social character of Old Crow by ensuring future development occurs in a timely and orderly manner reflecting the quality of life desired by residents and respect for the local environment;**

- **To encourage sustainable development through the adoption of appropriate technology and environmental procedures that promote energy conservation, recycling, heritage protection and environmental stewardship consistent with Gwitchin culture; and**
- **To make Old Crow a better place to live by providing a range of educational, employment, housing and recreational opportunities consistent with the changing demographics of the community.**

#### **4.4 Sustainability Principles**

Sustainable development requires meeting the needs of the community today without compromising the ability to meet future needs. This concept is very similar to the VGFN land ethic and can be applied to all aspects of community life. Old Crow as a community will not be sustainable without a diverse economy, healthy environment, and good governance. The community's small size and isolation are a major sustainability challenge. Unique solutions are required.

Old Crow's sustainability principles reflect the community's desire to be sustainable in all areas to the greatest extent possible. They also reflect the Vuntut Gwitchin culture and heritage which underlie the plan:

- **To develop a self-sufficient First Nation Government that can support sustainable infrastructure.**

Good governance is essential to making long-term sustainable decisions. As the primary governing body in Old Crow VGFN recognizes that they have to be the initiator of sustainability initiatives.

- **To manage the lands and resources in and around Old Crow in a sustainable manner.**

Residents of Old Crow make use of the natural resources in and around Old Crow on a daily basis as part of their traditional lifestyle. Resources have to be managed in such a way that there is a balance between what is taken and what remains. In the context of Old Crow, this means taking into account the location of Old Crow on a floodplain, understanding permafrost change, forest fires susceptibility and how climate change will affect the environment. All of these have to be monitored so that what residents of Old Crow do to the land remains in check with what the environment can support.

- **Reduce Old Crow's dependence on resources obtained outside the community.**

Old Crow's isolated location and small size affects re-supply cost and limits the type of businesses and services that can be provided locally. The community is dependent on daily Air North flights bringing in basic necessities. Of these, fuel is a large portion, and Old Crow would like to reduce this dependence on diesel generation if possible. As part of developing a self-sufficient, sustainable community VGFN would also like to reduce the dependence on outside contractors, and educate VGFN members to provide such services. A Community of 300 can only support so many tradespeople. Cross-training, job shadowing, and other initiatives that result in a stable local labour force are key initiatives.

- **To pass on our traditional Vuntut Gwitchin land ethic and stewardship principles to future generations.**

Vuntut Gwitchin means “people of the lakes”. The name demonstrates the close bond that VGFN people have with their surrounding environment, as well as the land ethic and stewardship that they must maintain in order to live off the land. This bond is maintained by passing down the oral history and stories from generation to generation. To continue with the traditional lifestyle VGFN relies on community elders to teach community youth. Adapting classroom curriculum, holding culture camps and recording elders history are priorities the teachings of the Elders in the community, have instituted programs in the school and hold community events that reinforce these ethics.



## 4.5 Measuring Our Success

Values	Priorities	Measures of Success
"We value the empowerment of our people to contribute to a strong and healthy Vuntut Gwitchin First Nation."	<p>To provide a range of education and employment opportunities.</p> <p>To provide a similar quality and quantity of services and infrastructure as other Yukon communities.</p> <p>To provide a range of health, social and recreational services and opportunities that meet the present and future needs of the community.</p>	<p>Reduction in drug and alcohol abuse.</p> <p>Reduction in crime rates.</p> <p>Healthier food choices offered by the Northern Store as desired by the community.</p> <p>VGFN citizens choosing to return to Old Crow after successfully pursuing higher education.</p>
"We value all that is living, and strive to create a balance in our interactions with them."	Use technologies and environmental procedures that promote energy conservation, recycling, heritage protection and environmental stewardship.	<p>Increase in use of the recycling centre.</p> <p>Reduce landfill waste and extend life</p> <p>Concentrate industrial activities in one location.</p> <p>Identify and implement an alternative to diesel generators.</p>
"We value children and youth, and are committed to a safe and healthy environment within our traditional ways."	<p>Provide children with opportunities to experience traditional Gwitchin culture such as experiential programs on the land.</p> <p>Continue with the Health &amp; Fitness Program and integrate it with further recreation and healthy living programming.</p> <p>Enhance cultural programming in new Vuntut Visitor centre. Increase visitor understanding of Vuntut culture</p>	<p>Continue with land-based programs in the school.</p> <p>Parents take an active interest in the well-being and health of their children.</p> <p>Programming that provides healthy alternatives for children and youth.</p> <p>New recreation centre built</p> <p>Participation rates in recreation programs offered meet needs of all age groups.</p>
"We value our traditional language, culture, spirituality, and the oral teachings of our Elders."	<p>Upgrade administration building entry/reception improvements to reflect Old Crow's heritage.</p> <p>Assisted living and social housing for Elders.</p> <p>Programs to provide land based cultural leadership skills.</p>	<p>Visible evidence of pride in our art, culture and language.</p> <p>Greater range and quality of services available to Elders.</p> <p>Elders participation rate in the community.</p> <p>Increase in participation in land based cultural activities.</p>

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"We value accountable and transparent governance."

A healthy, stable economy.

Increase self-governing capacity.

Provide a range educational and employment opportunities to meet the needs of Old Crow without having to go outside the community.

Fill key vacant positions with VGFN citizens.

Decrease in staff turnover.

Less need for outside contractors. community can support a minimum of one journeyman level person per trade

Increase in participation rate by community at meetings, elections and community events.

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## 5.0 Community Profile

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### 5.1 Water and Sewer

The community relies on a single sub-permafrost artesian well constructed in 1982 with a flow rate of 80 GPM at 2°celcius. The low temperature discourages bacterial growth. Complete chemical analysis is done on a yearly basis and bacteriological testing is done monthly. Recently the Canadian Drinking Water Guidelines lowered the acceptable levels of arsenic and Old Crow needs to update its water treatment system to comply. Due to the similarities in water quality between Old Crow and Ross River an ion exchange system is being tested in Ross River. If it proves successful a similar approach will be used in Old Crow. The new system will be too large to fit in the current pump house and will be located in the government garage.

The sewage lagoon is meeting the current and projected population's needs. The proximity of the lagoon to the Porcupine River has been a concern for the community. YG has tested the land surrounding the lagoon for 4 years. The tests confirm there is no leakage and the lagoon is working properly. As such, YG feels that it does not pose a health or environmental hazard.

In the past there have been problems with cross-contamination of the water. This is largely due to the close location of the hook-ups for water and sewer education at individual homes. In many of the newer homes this has been rectified with the sewer and water hook ups placed farther apart. Colour coding intake and discharge caps would also help.

### 5.2 Recycling and Waste Management

Old Crow initiated a recycling program in 2005 and currently has the facilities for gathering and sorting recyclable materials. There is community pickup of recyclables monthly. When facilities reach their capacity the recyclables are flown to the Whitehorse Raven Recycling Centre. Community interest in the recycling program has been limited, but VGFN continues to support the recycling program as part of enhancing community stewardship and their commitment to the Global Action Against Climate Change.

A burn vessel was installed in the summer of 2006 to help extend the life of the landfill and reduce general litter. Currently, the landfill is meeting the community's needs. Eventually a new site will be required and the old dump reclaimed. A potential new site needs to be identified.

An electric fence was installed in 2006 as required by new regulations from the YG Department of Environment. The fence is meant to keep out local wildlife and prevent bears

from becoming 'garbage bears' and a future hazard to the community. The fence has been vandalized several times and subsequently repaired by YG employees. This is a community education issue

### 5.3 Communal Energy Management

Old Crow relies on diesel generators for electricity. Due to the rising cost of fossil fuels VGFN is looking at alternative energy sources (E.g. wind) and the potential for district heat. Improving energy efficiency and reducing fossil fuel consumption is the goal. Studies commissioned to date<sup>1</sup> have examined the feasibility of installing wind turbines on Crow Mountain, utilizing waste heat from the diesel generators, and explored the potential for district heating. VGFN is working with the Yukon Energy Solutions Centre to produce a Demand Side Management Plan to reduce electrical consumption in the community. With the addition of the new visitor's centre and the possibility of a new residential subdivision there will be load capacity issues with the current generators making alternative energy sources a timely issue. Studies such as these help further VGFN understands of what the most practical and economical way to reduce Old Crow's dependence on fossil fuels and electricity is.

### 5.4 Community Transportation Issues

There are only 12 private vehicles in Old Crow due to the difficulty of getting vehicles into the community. The primary modes of transportation are ATV and snowmobile as well as active transportation methods such as cycling and walking.

As the population profile on page 2 shows, there is currently a high proportion of people in the 65-plus age bracket making mobility for the elderly a concern. This highlights the community's use of the school bus for community events as a form of public transportation. The bus is a 2001 model and can carry 21 passengers. If the Crow Mountain subdivision is built as planned to link back to the Ski Chalet Road, a natural bus loop road would exist making a dial-a-bus transit service a possible future consideration. It should be considered a mode of public transportation given the location, size and demographics of the community.



The limited access of the community means all levels of government need to work together on logistical coordination and planning. Getting equipment and materials into the community requires careful planning and scheduling to minimize costs and make the most effective use of Hercules aircraft the ice road or cat train. For example, if the ice road is planned on a 3 year cycle both YG and VGFN need to consider this cycle in planning capital project logistics. By improving joint planning, costs should be kept to a minimum, duplication of efforts eliminated and economies of scale met.

#### 5.4.1 Winter Road

When undertaking major capital projects in Old Crow such as the new airport terminal in 2004 and the school in 1998 there are limited logistical options. Oversized equipment may need to be hauled in on a cat-train or a winter road if the volume justifies the cost. The route starts in Eagle Plains on the Dempster Highway and costs between \$750,000 and \$1.2

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<sup>1</sup> NWT Power Corporation. *Heat Recovery and Distribution in Old Crow, Yukon*. August 2003  
The Pembina Institute. *Old Crow District Heating System*. October 2001  
Kattner/FVB District Energy Inc. *District Heating Feasibility for Old Crow, Yukon*. August 2001  
The Pembina Institute. *Old Crow Clean Energy and Energy Conservation Opportunities*. January 2000

million in 2008 dollars depending on the length of the season of operation and the weather conditions. With climate change it is becoming increasingly difficult to predict winter weather conditions with any certainty, and it is possible that within 25 years this option will no longer be available.

#### ***5.4.2 Roads & Drainage***

None of the roads have been built to any type of standard and vary substantially in width, surface quality and condition. In spring when the ground is frozen surface water cannot drain properly, and where it does, it usually floods an adjacent property. During the summer road dust becomes a problem. Upgrading the roads and drainage in the community has been identified as a key priority by the community. With the exception of Crow Mountain road, the Yukon Government is responsible for road upgrades and on-going maintenance.

A Northern Strategy Trust application was approved in 2008 to determine the cost and extent of upgrades required. Timing is a concern because the availability of equipment provided by Porcupine Enterprises is dependent on there being sufficient work in the community to justify keeping the equipment there. If this project is put off for an extended period of time the cost of the repairs could escalate substantially especially if outside equipment has to be brought in.

The responsibilities of YG and VGFN on this matter need to be clarified so a cohesive strategy towards upgrading community roads and drainage and future maintenance can be devised that is satisfactory to both governments.

### **5.5 Airport**

Old Crow is the only community that relies on year-round air service and the airport therefore plays a significant role in the life of the community. The air terminal building is the “gateway” to the community and the visitor’s first impression. Space is available in the building to showcase Gwitchin art and culture.

The new airport terminal has been completed and the runway has been upgraded, resurfaced and partly fenced in, along with an expanded airport apron. These projects were all recommended in the last Capital Plan and are good examples of what can be accomplished when YG and VGFN cooperate. The importance of the completion of these projects is highlighted by the fact that they were dependent on finding a new gravel source. The new Crow Mountain Quarry provided the materials to complete the runway upgrades, put in riprap along the river and can now be used for upgrading local roads.

The length of the airport runway is sufficient to bring in a Hercules aircraft. A Hercules is chartered to bring in larger bulk materials and specialized equipment when a winter road is not feasible or the freight will not fit on Air North’s available aircraft. The typical charter Hercules aircraft rate was approximately \$40,000 per flight in 2007 dollars. The cost of chartering such an aircraft reinforces the need for proper capital planning and careful logistical planning between all levels of government.

The remaining airport challenge is whether or not to pave the runway. The costs of paving would be dependent on their being a winter road because much of the equipment would have to be brought in from outside the community. A paved runway requires dedicated maintenance staff and specialized equipment and cannot yet be justified given present traffic volumes.

## **5.6 Housing & Land Development**

Of the 143 houses in Old Crow, VGFN owns and maintains 120 units. Nineteen homes were built through VGFN's sweat equity program while 29 were built with CMHC assistance. Until the sweat equity program was initiated, only 5 homes were privately owned.

The 2000 Physical Development Plan noted that 60% of existing housing was substandard. The situation has not improved. Poor original construction, deferred maintenance and inadequate O&M budgets are contributing to shorter building life. Insufficient rent is being collected to cover operating expenses and there is no reserve fund for eventual building replacement.

The provision of adequate, affordable and sustainable housing is an ongoing challenge that needs to be resolved. Availability of housing limits the ability of the 50% of beneficiaries living away from Old Crow to return to the community to take up local jobs.

The lack of rental accommodation is a concern, as is the issue of providing different types of housing units to accommodate different needs. For example, of the 30-35 applications for housing received each year, singles, couples and young families make up for majority of the applicants. Housing once allocated can also end up vacant for extended periods of time with some who have moved away using the home only on a seasonal basis.

Vuntut residents have identified the need for a new residential subdivision and a site has been identified near Crow Mountain. While there is some room for infill development, there is a desire to improve spacing between housing units. There is also a desire to investigate the feasibility of building a small assisted living complex for Seniors. Those elders requiring such support must move to Dawson City or Whitehorse. Elders play a key role in community life in passing on Gwitchin culture to youth.

## **5.7 Economic Development**

Old Crow's economy is limited by its small population and isolation. The Development Corporation has been successful at creating jobs and revenue through ventures such as Air North and Porcupine Enterprises. However, VGFN and YG are the main employers in the community. The small community size also means that part-time, seasonal and individual job creation needs to be a priority. Coordinated capital planning can create employment training opportunities as can a properly planned housing construction program.

## **5.8 Heritage & Culture**

The VGFN have made a concerted effort to keep their cultural and traditional practices part of everyday life in Old Crow. Traditions are taught through special programs run by the VGFN as well as in the Chief Zzeh Gittlit School. All students spend time on the land. For primary aged students this may constitute a day trip. Intermediate students may camp out, assist in trapping muskrat, and learn how to make camp. The senior class spends a week on the land each year at Crow flats where they participate in trapping, camping activities, and learning about their culture.

VGFN runs such heritage programs as oral history documentation, culture camps, traditional route mapping, language training, language documentation and film documenting to mention a few. In July of 2001 an agreement was signed between VGFN and YG to co-manage Rampart House, a site of historic significance to the Vuntut Gwitchin. VGFN members have been active in preservation and upkeep of the site.

## 5.9 Cemetery

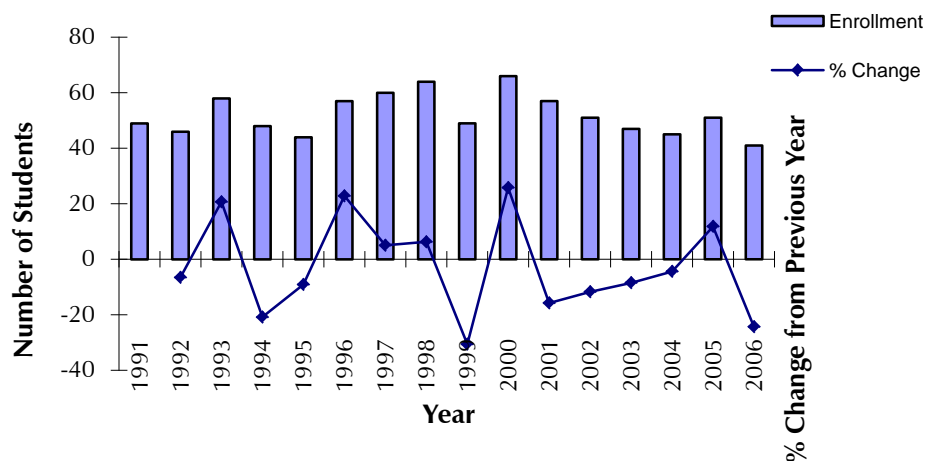
The cemetery is located on several small hummocks of land across from the school. The water table is very high and a drainage ditch has been constructed part way around the site. Space is at a premium as families prefer to be buried close together. There are 2 options available. The first option is to start a new cemetery on higher ground closer to Crow Mountain. The second option is to improve site drainage and bring in clean fill to make the cemetery bigger by filling the depressions and raising the ground level above the water table. The disturbed land would be used for landscaping using local vegetation.

Residents have expressed a preference to expand the existing cemetery. A simple cemetery plan to accommodate community needs for expansion 25+ years is required. The plans also accurately map existing burial sites.

## 5.10 Education

The Chief Zzeh Gittlit School provides kindergarten to grade 9 in Old Crow. After grade 9 students leave the community and generally attend grades 10 to 12 in Whitehorse while staying in residence. There are currently 8 students attending grade 12 outside of Old Crow and another 9 in grade 11.

**Figure 3: Old Crow School Enrolment 1991-2006**



As Figure 3 (above) depicts the number of youth attending school in Old Crow has been declining at a rate of 2.5 percent a year over the last 15 years. The decline in student enrolment means the school is not being used to full capacity. In a small community such as Old Crow many public buildings often serve multiple purposes. Using the gymnasium as a public gathering space or for community recreation events are examples of what could be done to ensure the school building is meeting the community's changing needs. Existing community buildings such as the school should be used to their full capacity potential before considering constructing new buildings.

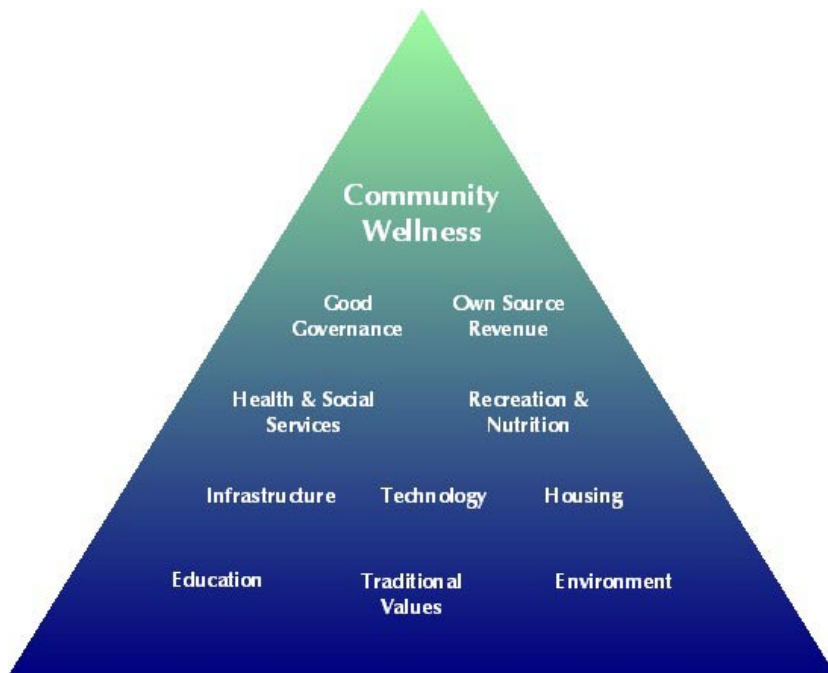
VGFN currently supports 25 members pursuing higher education outside of Old Crow. VGFN needs to identify those career opportunities which are going to be needed in the next 5, 10, and 15 years and encourage students to explore those opportunities. Incentives to encourage

students to return to the community after completing their education also need to be considered.

### 5.11 Community Health & Recreation

Old Crow is doing well compared to other First Nations in Canada according to the Community Well-Being Index. The Government of Canada Community Well-Being Index is similar to the Human Development Index done by the United Nations and ranks communities based on education, income, labour force and housing in conjunction with the census for First Nations communities. In 2001 VGFN was ranked above average at .77 out of 1, where as the average score for First Nations communities across Canada were .656. VGFN would like to continue making positive strides towards community wellness and have integrated health and wellness into community planning.

VGFN recognizes that community health is everyone’s responsibility not just the health and social department, and community nurses. It takes all aspects of the community working together to make the community healthy as Figure 4 (below) illustrates. For this reason, VGFN feels that it is important to recognize that community health is a holistic issue that affects every aspect of community life.



**Figure 4: Holistic Community Wellness**

Proper nutrition is essential for leading a healthier life as well as improving the life expectancy. Old Crow’s remote location and reliance on air resupply means the cost of living and imported food in particular, is 70-100% higher than Whitehorse. This may be contributing to community members making poor nutrition choices and VGFN would like to see community members making healthier food choices. An integrated nutrition program is needed in the community to encourage healthy choices. *Hyperlipidemia* (elevated fat in the blood stream) is currently the largest health problem seen by the community nurse and in many cases could be addressed with proper eating and recreation habits.

Children that are taught healthy lifestyle choices early are more inclined to keep those habits throughout their lives. The Health and Fitness Program has been targeting the 7 to 9 year age group to instil healthy lifestyle habits. More resources are needed to address the needs of other age groups including adults.

The community store has been constructed recently and provides more display and storage space as well as improved the refrigeration and other facilities.

Recreation is a major part of a healthy lifestyle. Recreation facilities in Old Crow are underutilized and, in some instances poorly maintained. An integrated plan needs to be designed to help get Old Crow motivated to establish healthy lifestyle habits with measurable targets for individuals and as a community.

A range of recreation needs have been identified including:

- replacement of existing, out of date playground equipment
- lighting of the cross country ski trails
- replacement of the former Sprung shelter with a new community services centre.



Two site options for the community services centre have been identified option A would be near the nursing station while option B would be the former and current school site. Since energy costs are a substantial portion of on-going O&M costs, the possibility of capturing waste heat from the diesel generators would play an important role in selection of the site for the community services centre. Preliminary site selection and design for the new building is underway and subject to available funding, construction would begin in 2010 or 2011.

## 6.0 Service Agreements

### 6.1 Existing Service Agreements

Service Provided via Agreement	Service Provider	Current End Date	Cost of Service	Rate Service (Good, fair or poor)	Will it be renewed?
Garbage Removal	Choo Denjik Enterprises	March 31, 2009			
Water and sewer operating agreement	YTG (Community Services)	Ongoing			
Snow Removal Roads	Peter Frost YG (Highway & Public Works)	As Needed On going			

### 6.2 Potential Service Agreements

Potential Service	Potential Service Provider	Expected Cost of Service	Is the Service Provided?	Is the service provider interested? Have they been contacted?
Solid Waste/ Recycling				
Water/sewer agreement				
Snow Removal				
Road and Airport Runway Maintenance	VDC			Yes
District Heat				
Recreation				
Social Services				
Yukon College				
District Heat	Yukon Energy Solutions Centre			Yes

### **6.3 VGFN & YG Cooperation**

VGFN and YG cooperate in the provision of typical municipal services such as water and sewer, solid waste disposal facility and road maintenance. The level of services that each government is willing to provide needs to be determined based on clear, mutually agreeable service standards. For VGFN this means determining what level of services the First Nation can reasonably provide to meet the demands of their citizens and which services are best left to the Government of Yukon.

## **7.0 Community Priority Setting**

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Residents of Old Crow feel there are many areas in which the quality and quantity of their services could be improved. There are infrastructure deficiencies, capacity issues and community health issues which the community would like to see addressed.

### **7.1 Water and Sewer**

Old Crow uses a single well for its water needs. The well is artesian, and will provide water even if the pump equipment were to break down. The community is worried about possible water contamination issues (arsenic, manganese).

The close proximity of the sewer and water hook ups in older homes has in the past caused problems of cross contamination. In future homes, and those that are renovated, hook-ups should be placed an adequate distance apart to prevent contamination. and the pipes colour coded. An ion exchange system is currently being tested in Ross River. If successful, the system would be used in Old Crow and located in the government garage, because the existing pumphouse is too small. Water would also continue to be chlorinated

According to Pat McInroy Community Operations Supervisor for the Community Infrastructure Branch there is a second artesian well in the same location. It has been fitted with a casing and is presently capped as the capacity of the present well is adequate for the present and projected community population. The infrastructure is already in place. for the second well and it could be put in service if needed quite quickly at modest cost.

### **7.2 Housing & Land Development**

Existing funding is not sufficient to meet the backlog of basic housing needs including documented health and safety concerns. Despite best efforts, VGFN has been unable to make much of a dent in their “catch up/keep up” requirements, let alone prepare for future needs. Sixty percent of the present housing supply is still substandard. Without significant additional funding, the goal of reducing substandard housing from 60-25% within 5 years cannot be met.

VGFN has received \$3.1 M from the Northern Housing Trust. CMHC has also agreed to fund construction of 5 homes in 2008/09 and 2009/10. VGFN estimates they can complete 3 to 4 homes per year with present resources. VGFN staff estimate 58 houses need immediate repair or renovation to extend their useful life. At an average cost of \$60,000/-per unit the cost of renovating or repair of the 58 houses would be \$3.5 M in 2008 dollars. Assuming 5 houses were renovated each year along with planned new construction, it would take 11.5 years to complete the present backlog.

There is also a need for rental housing that the Vuntut Development Corporation could explore to provide a market housing option, but the viability of such a business investment is questionable, because VGFN is already subsidizing rents.

Staff housing is an issue for incoming VGFN employees and a factor in employee turnover. It is difficult to recruit and retain new staff with substandard housing. VGFN's objective is to provide housing equivalent to that available in other Yukon communities.

While opportunities for infill housing have been identified in the updated Physical Development Plan, a new subdivision will be required in the near future. The Crow Mountain site has better ground conditions and allows for development to be phased. The plan is to build a main road linking the Crow Mountain road to the Ski Chalet Road. Planning and design studies are planned for 2009/2010, with construction costs expected to be at in the million dollars range..

### **7.3 Economic Development**

The Vuntut Gwitchin has been successful in creating economic development opportunities through the Vuntut Development Corporation. Most of these initiatives have occurred outside the community because there are limited economic development opportunities within Old Crow. Given the need for housing, a building construction company patterned on the Tr'ondëk Hwëch'in Han Construction could be examined. Given the community's small size, small scale and part time business ventures could be feasible. For example; a local coffee shop or restaurant would provide 1 to 2 job opportunities and be useful to tourists and visitors. Jobs that can be done on a part-time basis from individual's homes such as hairdressing are ideal for a community such as Old Crow.

With the advancement of technology Old Crow is now connected to the outside world through the Internet. The Gwitchin have a culture that is rich in artistic ability, and it is now possible to export crafts all over the world using the Internet. This would be a project to get Elders and youth involved in together. Youth generally have the technological expertise to use today's technology and Elders have a wealth of knowledge on traditional Gwitchin crafts creating a entrepreneurial activity that helps pass on traditional knowledge to youth and generate community pride.

### **7.4 Community Health & Recreation**

Health and wellness needs to be a priority of the whole community. There needs to be greater integration of programs with facilities, and a coordinated approach with all community members involved in health, wellness and recreation. For example, the Health and Social Director, Health and Fitness Program (H&FP), community wellness worker, community health representative, nurse; RCMP as well as parents and teachers all need to be involved. Targets for individuals and the community need to be set to monitor progress and encourage further efforts. Setting realistic objectives and incremental targets that show visible success helps develop momentum and keep the community motivated.

### **7.5 Heritage & Culture**

Old Crow and VGFN have made a concerted effort to maintain and preserve their heritage and culture. Having a greater range of interpretive facilities and displays throughout the community would highlight the Gwitchin history in the area as well as the more recent history of Old Crow. Improvements to the administration building entry and reception areas as well as displays and interpretive panels highlighting important buildings and locations would emphasise the history of Old Crow to locals and tourists. Both Parks Canada and Yukon Heritage Branch support such initiatives. VGFN has successfully partnered with these organizations to create the internal displays for the new Vuntut National Park Visitor Centre

Proper storage of archival documents is important to any governing body. VGFN would like to see proper archival storage for documents in a secure location separate from the administration building. The secure storage for storage of records and documents has already been constructed, as such the storage issue has will be resolved.

Old Crow and VGFN have successfully run a studio recording facility for locals as well as for Yukoner' from outside Old Crow. To ensure that this program continues updating the present studio recording facilities will be needed within the next few years.

## 7.6 Roads & Drainage

Community roads have not been constructed to a consistent standard. VGFN and YG need to establish an agreed upon road development standard appropriate to Old Crow's location and unique circumstances. During spring runoff when the ground is still frozen water pools either on the roads or on adjacent properties. In the summer dust is a problem. VGFN and Community Services have received Northern Strategy Trust funding for a feasibility study of upgrades to the community roads and drainage. Work will continue on this project through fiscal 2009/10 with implementation started in 2010.



## 7.7 Tank Farm & Fuel Delivery

The current fuel truck is not an appropriate method for fuel delivery (see picture below). VGFN has therefore purchased a purpose built fuel truck which is likely to be shipped to Old Crow by March-April this year; this would reduce the risk of fuel spills and monitor the amount of fuel being distributed into the community.

When the tank farm was inspected by the Fire Marshall in September 2006 he noted technical modifications were needed to meet current National Fire Code of Canada Standards. Updating the existing tank farm is an interim solution to the larger problem of whether or not to move the tank farm and consolidate it with YG's Department of Highways tank farm located at the airport. This is a priority and requires more discussion with Department of Highways & Public Works, and others (e.g. RCMP, YEC) who have bulk fuel storage requirements.



A conceptual plan and location for a new tank farm has been completed. Some of the existing tanks would be reused. It is difficult at this point to estimate the cost because it would also require remediation of the existing site.

## 7.8 Fire Department

The fire department currently does not have a fire chief but has trained volunteers. There is equipment for 6 fire fighters and YG would provide equipment for up to 15 if there were

enough volunteers. Equipment consists of hoses, nozzles, SCBA's (self-contained breathing apparatus), bunker gear (fire suits) and radio communication units. The community has a 1991 model fire truck. The useful life from an insurance underwriter's standpoint is 20 years. The fire truck will need to be replaced in 2011 and this needs to be reflected in the Yukon government capital budget planning. The Fire Marshall office will provide training when there is sufficient volunteer interest to accommodate the present stock of volunteers.

The fire pull system is out of date and needs to be replaced. The Fire Marshall's office is trying to find a way to incorporate the current pull system with new technology because the community is used to the alarm and knows where the pulls are. Old Crow is the first on the list to receive a new system and will serve as the 'test' for other rural Yukon communities once a new system is found.

The fire department needs to be reactivated as soon as possible. The following steps would be involved:

- a volunteer recruitment drive
- development of a training and motivation plan in conjunction with Fire Marshall's office
- agreement on realistic training targets including cross-training of other emergency service volunteers
- Initial visits every 1 to 2 months from the Fire Marshall to get program running and ensure continuity

## **8.0 Physical Development Plan**

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### **8.1 Natural Site Conditions**

Hughes and Pilon mapped the regional geomorphology of the Old Crow area in 1973. More detail is included in a study by Gartner Lee Ltd. in 1999 that assessed the environmental and hydrological implications associated with continued gravel extraction from the gravel bar at the confluence of the Crow and Porcupine rivers. The upland terraces below Crow Mountain is part of a large pediment. Rock and soils from the exposed bedrock outcrops are carried by gravity down-slope through soil creep, sheet erosion, rain-wash, mudflow movement or solifluction. Thicker wedges of sediments cover the lower parts of the upper terrace as evidenced by the presence of tree cover. Permafrost is present in this organic layer that appears to be 1-3m thick overlying bedrock.

The implication for planning is that surface water is absorbed into the ground and flows downhill in "sheets" along the interface with the permafrost layer or bedrock until it reaches the terrace edge where it has eroded a series of gullies along the escarpment face. Most of the Crow mountain drainage is intercepted by the lowland basin north of the airstrip draining southwest across the Ski Chalet and Sewage Lagoon roads into the Porcupine River below the community. The small lakes effectively act as a catch basin.

When the Crow Mountain Road was constructed, the ditches were not adequate to control the natural drainage and the increased flow created by road construction and ditching resulting in several washouts at the culvert to the Tetchik subdivision.

To develop the lower slopes of the upper terrace and extend the Ski Chalet Road requires careful engineering design to intercept the natural sheet drainage and control the discharge to the lake system below.

The main portion of the community is situated on an alluvial terrace of the active floodplain 6m above the normal river level. The small lakes between the airport and escarpment are less than 3 m deep and were probably created when the glacial melt-waters flooded the valley (Mathews et al., 1987). The lakes and surrounding marshlands are maintained by the sheet drainage from the upper pediments on Crow Mountain.

The 1986 Physical Development Plan recommended against building near these areas noting the potential for environmental concerns and prohibitive construction costs. While this remains a prudent recommendation in principle, some encroachment into these areas may be necessary simply because of the absence of viable alternatives. The wetlands also have inherent natural values, not the least of which is their role in managing run-off from the upper terrace. Thus prior to considering encroaching into these areas, a biological assessment of the values present should be undertaken.

This should be accompanied by a study of the surface drainage to determine what the consequences of developing the escarpment above would be on the lakes and wetlands below.

Bank erosion and flooding are inter-related conditions that remain an ongoing development issue. Old Crow experiences a flood risk each spring primarily due to the formation of downstream ice jams during spring break-up on the Porcupine River.

The last major flood that did considerable damage occurred in 1991. When an ice jam occurs and during each spring, the back channel adjacent to the Tetchik subdivision also floods. This is gradually eroding the road bank off the end of the runway.

Approximately 520m of riverbank at the east end of the community are subject to continuous erosion as the main flow of the Porcupine River cuts into the bank. Since the 2000 Physical Development Plan much of the riverbank has been rip-rapped to prevent further erosion. Two areas still require bank stabilization. They are the northeast end of the runway on the back channel and by the former landfill. These areas are shown on the updated Physical Development Plan

The 1986 Plan noted that past soil tests within the main portion of the community between the airport and Porcupine River confirm the presence of a 1-2m permafrost layer covered by no more than 0.5 m of moss and organic cover. "This combination of organic soil covering ice rich and sandy sub-soils creates major settlement problems. If building and road foundations are not properly designed and insulated, the permafrost ice will thaw and create a water-saturated slurry (mud) that compresses and creates surrounding wet areas. Ground disruption must always be avoided or minimized in any construction" (Stanley Associates Engineering Ltd., 1986).

The problem is further compounded by the lack of topographic variation in this portion of the community that makes it difficult to create positive drainage away from buildings and road surfaces.

The development of the Crow Mountain Quarry has allowed upgrades to the airport runway and river riprap to be completed and future projects such as upgrades to Old Crow's roads and gravel pads for housing to be feasible.

## **8.2 Summary of Physical Planning Issues & Opportunities**

The following is a list of the main issues and opportunities identified through a review of the

background technical studies, previous Capital and Physical Development Plan and, interviews with YG and VGFN personnel. This summary provides the context for the land use policy recommendations and development priorities set out in the new Physical Development Plan.

- The community's isolation is a positive and negative factor. It is a constraint in terms of cost of living, construction etc. but also an opportunity in terms of doing things differently and more creatively. Old Crow needs to build on its uniqueness.
- Careful, coordinated capital planning is essential to make the best use of limited resources and this will necessitate trade-offs by community residents and government (VGFN, YG) to find practical and affordable solutions e.g. location of various Land Uses, government standards used, delivery of municipal services).
- Most issues (e.g. need for gravel; quality of existing housing stock) are interdependent. Each individual decision on any given issue may limit options for solutions to other problems.
- The infrastructure improvements required involve significant "catch-up" capital expenditures (e.g. roads, replacement of existing housing) beyond the financial capabilities, and in some cases, the responsibility of the community. They must be planned sequentially on a 3 or 5-year cycle to maximize local employment and take advantage of logistical economies of scale.
- While the community is too small to support many types of businesses, a number of opportunities that already exist are being ignored (e.g. need for restaurant/café). Others could work on a part-time, "agent-type" basis (e.g. Sears catalogue), as a home-based business (e.g. hairdresser) or as a concession as part of another building (e.g. crafts booth in new airport terminal)
- While a compact development form is more economical, residents find the core area "crowded". There is interest in "sweat equity" homeownership, a desire for larger lots and more privacy in locations that may be expensive to service.
- Much of the existing housing stock is sub-standard and has a limited life span. The availability of housing and jobs remains a significant impediment to beneficiaries wishing to return to the community. Existing funding is not sufficient to meet the backlog of basic housing needs including documented health and safety concerns.
- There is no proper road hierarchy. While the absence of an all-weather road to the community limits vehicle usage in general, snowmobile and ATV ownership is increasing. As the community spreads out, traffic inevitably increases and the local roads will need to be upgraded. A second access road to the upper bench will be needed if this area is to be developed and it should be linked to the existing Crow Mountain road to create a loop road around the community.
- There is insufficient industrial land suitable for secure, outdoor storage of building materials and a fuel supply tank farm. The feasibility of relocating some existing uses more commonly found in industrial areas should be examined to free up land for other more suitable uses as these pieces of infrastructure reach the end of their service life (e.g. telecommunications, diesel plant, NDB beacon).
- The sewage lagoon has the capacity needed to accommodate future growth. Consideration should be given to concentrating related, compatible uses in this area such as a community dog yard or outside storage.

- The existing cemetery is almost full and the surrounding land is not suitable for burial unless the ground is raised. Residents appear to prefer expansion rather than the creation of a new cemetery. Elders want a buffer around the existing site.
- There is a need to free up land for future commercial use in the core area of the community.
- Only a few heritage buildings remain. They require protection, as they are an important link to the past, a key social asset and potential part of any future community tourism experience (i.e. St. Luke's Church, Old Mission House, Archdeacon McDonald Church, Chief Peter Moses Centennial Hall).

### 8.3 General Development Principles

Following are the general development principles that form the basis for the specific policies contained within this Plan:

- Principle 1** Sufficient serviced land should be made available to meet the community's current and projected needs for commercial, residential and industrial development, in a manner that encourages a compact community form (i.e. looped road system, infill where possible).
- Principle 2** New development should not negatively affect community values, amenities, services, safety of persons and property, health or environmental quality.
- Principle 3** Community development policy should accommodate a range of lifestyle choices consistent with current and projected population demographics.
- Principle 4** Development policy should encourage the highest and best use of land within the community and support relocation of uses no longer considered appropriate to other more suitable locations within the community.
- Principle 5** The range of community infrastructure provided should be affordable, encourage sustainability and be consistent with community resources and public needs.
- Principle 6** Where possible, infrastructure development should encourage shared use, the staging of capital projects to maximize local employment and the adoption of municipal standards that recognize the unique conditions present in the community.
- Principle 7** Environmentally sensitive lands and existing public trails should be protected where possible.
- Principle 8** Community gravel resources should be managed to maximize the potential life of all existing sources and priorities for use established that recognize the value of the limited resources available.
- Principle 9** The airport is a vital transportation link and it will be protected from adjacent land uses that might reduce operational flexibility and safety.
- Principle 10.** Climate change is a reality and climate change adaptability will be considered in all planning and design



## 8.4 Land Use Policies

### 8.4.1 Housing & Residential Development

#### Objectives

- To provide a range of affordable housing choices within the community that encourages home ownership and is consistent with current and future demographics.
- To reduce the proportion of substandard housing within the community over the next ten years with the support and financial assistance of the governments of Yukon and Canada.

To eliminate the community's immediate health and safety housing concerns within the next five years.

#### Policies

- Infill housing will be encouraged where there are pockets of land suitable for development throughout the community such as along the Ski Chalet Road, within the Tetchik subdivision and close to the airport boundary.
- A new housing policy will be adopted that promotes home ownership through sweat equity construction and tenant buy-outs. The housing needs of seniors will continue to have first priority on lands suitable for lot development in the core area.
- The Plan will encourage a variety of housing forms to accommodate changing needs including single family, duplex and multi-family units, and mixed use buildings. Until the backlog of housing needs is resolved, multiple housing unit proposals should have priority over single-family units where practical.
- The VGFN will work with the governments of Yukon and Canada to develop a housing repair and replacement program to reduce the inventory of existing substandard housing in an orderly and equitable manner.
- New subdivisions will be designed to minimize the cost of extending services, the retention of existing tree cover, the maintenance of trail links, and the provision of loop roads where possible.
- Services will not be extended to individual homes constructed outside the developed portion of the community until it is economical to do so.
- The VGFN will work with the Government of Yukon and private sector to encourage the provision of transient staff accommodation to meet local needs and provide opportunities for people to return to the community to live and work.
- Infill development will be encouraged while a new housing subdivision is planned for the escarpment lands between the Ski Chalet and Crow mountain roads.
- Repair and replacement of existing substandard housing will continue to be the first priority as Financial Transfer Agreement funding becomes available.
- A priority list for new housing will be established reflecting local needs and available funding with housing programs designed to provide training and local employment opportunities to the maximum extent possible.

### 8.4.2 Commercial Services

#### Objectives

- To reserve sufficient land within the core area of the community for the establishment of

a range of complementary businesses that will meet evolving resident and visitor needs thereby reducing the amount of economic leakage out of the community.

- To provide a positive business environment that encourages the establishment of part time, seasonal and home-based businesses to meet local needs and resident capabilities.
- To encourage the development of mixed used buildings and other land use policy incentives that support new business establishment and local employment.

### **Policies**

- New commercial development will be encouraged to locate in the area between the RCMP buildings and the new First Nation administration building as well as along Centre Street.
- Mixed-use buildings with ground floor commercial and residential above will be encouraged.
- Existing housing within the core commercial area will be phased out or relocated on an as required basis, with elders provided first priority on any new lots developed, or houses constructed, in the immediate area.
- Home-based businesses may be allowed throughout the community, provided that the activity proposed, does not infringe on the safe use and enjoyment of neighboring properties.
- A compact development form in the downtown area will be encouraged to make the most efficient use of available land and leave open the opportunity to explore the use of district heating.
- Public/private partnerships and other cooperative building initiatives that share space and create opportunities for business “incubator” will be supported.

### **8.4.3 Public Services**

#### **Objectives**

- To provide a safe, environmentally responsible, and economic water delivery and sewage education system consistent with community needs and the arctic climate in which the community is situated.
- To implement a waste reduction and recycling program to increase the utility and life of the existing landfill site.
- To determine the land use setbacks acceptable to the residents of Old Crow from the cemetery, sewage treatment and waste disposal areas.

#### **Policies**

- Old Crow will continue to rely on a trucked water delivery and sewage education system due to ground conditions and the cost of building and maintaining a buried system.
- Water delivery, sewage education and garbage pick-up will be provided to only those road accessible properties within the service boundary defined by Council.
- 
- Individual dog team yards will be discouraged and a common area provided in the vicinity of the sewage lagoons.
- A minimum setback for development shall be maintained around the cemetery, sewage lagoons and landfill site to protect the integrity of these community facilities. Buffer widths will reflect the type of land use affected, the potential for conflict, and the

availability of alternative sites.

- VGFN will work on implementing the waste recycling and reduction program to extend the life of the existing landfill and reduce resident waste generation.
- VGFN will work with the Government of Yukon to define an end use for the existing decommissioned and currently used landfill sites, and to define the location of a future site when and if required
- VGFN will work with elders to protect the existing cemetery and determine ways to extend cemetery life and/or reserve another future site.

#### ***8.4.4 Industrial Development***

##### **Objectives**

- To provide land for the safe storage of bulk building materials, fuel, gravel, machinery and equipment in a central location accessible by air and winter road.
- To provide an area for the relocation of industrial uses and activities that can be phased out over time to free up land for higher and better uses than in their present locations.

##### **Policies**

It is the intention of Council to develop a central bulk storage facility to replace and phase out the use of individual, large fuel storage tanks within the community as they become obsolete.

- Industrial activities requiring large areas for outside storage of bulk materials, such as sand and gravel, log storage for milling etc. will be encouraged to locate in the vicinity of the sewage lagoons.
- Related industrial activities including any manufacturing facilities requiring power and indoor storage will be encouraged to locate in the new industrial subdivision proposed north of the runway.
- The existing Nav Canada NDB site will be reserved for future industrial purposes if and when the beacon is decommissioned.

#### ***8.4.5 Airport***

##### **Objectives**

- To recognize the importance of the airport as the essential transportation link and “gateway” into and out of the community.
- To protect the airport from adjacent village land uses that may reduce operational flexibility and safety.
- To minimize the negative impacts on community development associated with the location of the airport within the community

##### **Policies**

- The VGFN will work with the Government of Yukon to optimize the use of lands adjacent to the airport without compromising the integrity of airport operations.
- The VGFN will work with the Government of Yukon to develop a traffic warning system that will ensure traffic on perimeter roads does not intrude into aircraft arrival and departure paths during take-off or landing.

#### ***8.4.6 Utilities & Communications***

##### **Objectives**

- To ensure the provision of efficient, modern utility and communication infrastructure to support community development and offset, to the degree possible, the limitations of an isolated location.
- To ensure the quality of utility and communication infrastructure including support facilities keeps pace with community needs.
- To examine ways to reduce the capital and operating costs associated with the provision of essential utilities and communication infrastructure through energy conservation, technological innovation, and appropriate community design.

#### **Policies**

- The VGFN will work with Yukon Electrical Company and Northwestel to ensure the efficient and economic delivery of utility infrastructure and communication services.
- The VGFN will work with Yukon Electrical Company to examine alternative energy use options including the use of wind turbines, waste heat and district heating and will encourage the adoption of energy conservation practices in all capital projects.
- Yukon Electrical Company and Northwestel will be encouraged to relocate their facilities to the industrial area as the existing facilities reach the end of their useful life.

#### **8.4.7 Recreation & Parks**

##### **Objectives**

- To provide a range of parks and recreation facilities throughout the community and preserve open spaces for the physical and social well being of the community.
- To protect the community trail system that connects the people of Old Crow to the land.

##### **Policies**

- The VGFN will ensure a range of year round recreational opportunities are available within the community which reflect the age, gender and lifestyle interests of community residents.
- The VGFN will work with the Government of Yukon towards providing a range of recreational activity spaces that provide residents of all ages with the opportunity for quiet solitude, collective participation, education and appreciation of the local culture and environment.
- The VGFN will work with the Government of Yukon to provide supporting infrastructure such as sidewalks, benches, landscaping and lighting to encourage safe walking about the community.
- The VGFN will identify and develop a communal dog yard to support dog-mushing activities.
- The VGFN will ensure any adjustments to the existing cross-country trail system or relocation of the ski lodge required to facilitate development will not compromise the integrity of the trail system and strengthens the connections to the new school.
- The design of a new residential subdivision on the escarpment shall maintain a top-of-bank trail and the existing ski trail link to the lands below.
- Development of a new recreation complex remains a first priority.

- Upgrading and expanding community playing fields at the former school site and relocating portions of the cross-country trail system are the second priority.

#### ***8.4.8 Heritage Protection***

##### **Objectives**

- Heritage resources will be protected to preserve the history of the community and promote awareness of the Gwitch'in culture and language.

##### **Policies**

- Heritage resources within the community will be managed in accordance with Chapter 13 of the VGFN Final Agreement.
- Heritage resources are considered to be a community asset and the Vuntut Gwitch'in will work with the Government of Yukon to actively conserve and document the importance of these resources.
- Heritage resource sites will be protected from incompatible land uses. Where deemed advisable building setbacks, and other development controls may be imposed to ensure the sites and buildings are adequately protected from disturbance.

#### ***8.4.9 Limited Development Area***

##### **Objectives**

- To ensure lands subject to erosion or flooding are protected from unsuitable development activities.
- To ensure development on lands abutting the airport runway conform to the transitional height restrictions set out in the 1994 Old Crow Airport Zoning Regulations (P.C. 1994-95).

##### **Policies**

- No permanent structures will be permitted within the Limited Development Area. Any existing encroachments will not be permitted to expand and will be phased out as resources become available.
- No development will be permitted between the riverfront road and the back channel of the Porcupine River or along the riverfront road in the area subject to erosion except that dikes and other bank stabilization measures intended to reduce ongoing erosion and flooding shall be permitted.
- Seasonal access to the Porcupine River for boat docking and to reach the gravel bar will be provided.
- Future use of the gravel bar in the Porcupine River as a community gravel Source will be discouraged in principle. If material is needed a gravel extraction plan will be prepared to ensure the available material is used effectively and extraction does not create fisheries concerns
- Where possible a minimum 30 m setback from the top-of-bank will be maintained from the edge of the river and along the escarpment edge.
- No residential development should be proposed within 350m of the sewage lagoon.

#### ***8.4.10 Hinterland***

##### **Objectives**

- To retain environmentally sensitive lands such as wetlands in their natural state and

Minimize the impact of trails, fuel wood harvesting and other activities on the land and wildlife.

### **Policies**

- The ponds and wetlands within the community will be retained in their natural state to the extent possible.
- A 30 m development setback will be maintained around each pond and along the top of bank of the escarpment. The potential impact of any new development that may encroach into wetland areas or affect the natural drainage into these ponds from the escarpment will be assessed prior to development proceeding. Cross-country ski trails may be permitted within the setback.
- No further fuel wood harvesting should occur on the escarpment lands identified for future residential development pending completion of a subdivision plan for the area.

### **8.4.11 Transportation**

#### **Objectives**

- To provide a safe and orderly road and trail network throughout the community that recognizes the community's current isolation and reliance on a variety of transportation forms.
- To ensure river, road, trail and air travel infrastructure reflects current and future community needs.

#### **Policies**

- The Crow Mountain, Ski Chalet and Riverfront roads will be designated the main collector roadways and widened, upgraded, and signed accordingly.
- The Crow Mountain and Ski Chalet roads will provide road access to the upper bench while the existing ski trail route up the gully between the two roads will continue to be reserved for pedestrian use.
- As the industrial area is developed, a right-of-way will be reserved to allow a future connection to the Crow Mountain Road to reduce the need for continuous traffic flow through the core area of the community.
- The VGFN will work with the Government of Yukon to develop a set of road and drainage construction and maintenance standards appropriate to local conditions and equipment resources.
- Road access to boat launch and docking sites will be provided near the former school site, and along the back channel in the Tetchik subdivision and access road to the gravel bar.
- The VGFN will work with the Government of Yukon to implement a traffic control and warning measure to alert vehicles and pedestrians traveling by the ends of the runway of approaching or departing aircraft.
- The VGFN will work with the Government of Yukon to ensure all intersection sightlines meet visibility safety standards.
- The VGFN will work with the Government of Yukon to review and upgrade the community's street lighting program to improve pedestrian safety and investigate the long term need to light key trails such as from the school to the proposed escarpment subdivision.

- The VGFN will work with the Government of Yukon to identify the potential location of a future landfill site
- Completion of the airport boundary security fencing for operational safety and security reasons. will be supported including the development of a perimeter trail

#### **8.4.12 Tourism**

##### **Objectives**

- To ensure the land and infrastructure needed to support the development of a local tourism industry is put in place.

##### **Policies**

- VGFN will work with the Government of Yukon to ensure display and advertising space is available for tourism related services in the new air terminal building.
- VGFN will work with Parks Canada to develop external exhibits and land scaping around the new Vuntut National Park Visitor Centre including facilities for camping.
- VGFN will work with the Government of Yukon and Parks Canada to encourage the development of joint use facilities for the preservation, presentation and interpretation of regional heritage and park resources.

#### **8.5 Recommended Land Use Plan**

Updated Physical Development Plan inserted here.

## **9.0 5 Year Capital Plan**

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### **9.1 Infrastructure Priorities**

#### **Upgrade Community Roads and Drainage**

Roads and drainage are the number one infrastructure priority of the community. The community would like to see the roads conform to a standard width, surface quality and condition. Drainage issues such as riprap for the main ditch behind the school should also be addressed to prevent further erosion. Community Services in conjunction with VGFN has received a Northern Strategy Trust funding for the appropriate engineering study to determine the costs of the upgrades. This project would be for Gas Tax and Build Canada funding.

#### **Renovate, Replace and Build New Housing**

VGFN would like to see those houses that do not meet current standards either renovated or replaced. There are numerous young adults that will be finishing high school soon, and will want to live independently. Housing for VGFN staff needs to be upgraded to a level comparable to other Yukon communities to help in the recruitment and retention of staff. Planning for the new Crow Mountain subdivision needs to begin in 2009. The Project should also be Gas Tax and Build Canada eligible.

#### **Social Housing/Assisted Living**

With the changing age dynamics of Old Crow an assisted living facility for Elders and community members with disabilities is needed. This would provide a stable housing environment remove stress from family members and allow those residents to remain in the community.

#### **River Bank Barrier Front Street**

There is no clear delineation between the slope going down to the Porcupine River and the road. This could present safety issues for children and makes it easy for garbage to make its way into the river. A barrier should be erected between the slope and the road to make a clear distinction. This concern can be addressed in the roads and drainage study.

#### **Maintenance Compound/Heated Garage**

Old Crow experiences extremes in weather making it difficult to maintain equipment and vehicles. A heated garage for storage of equipment and vehicles has already been built to respond to higher performance when it is extremely cold outside.

#### **Identify Future Solid Waste Disposal Facility Site and Improve Recycling and waste Diversion**

The current solid waste disposal facility has a burning vessel which will extend the life of the existing landfill. While this postpones the immediate need for a new solid waste disposal facility a new location needs to be determined. Similarly a more concerted effort at waste diversion and recycling would demonstrate community commitment to environmental management

#### **Fuel Truck future and Future Fuel Tank Relocation**

The fuel truck has been purchased and will be sent to Old Crow by March –April will reduce the risk of spills and help in proper fuel being distributed.

The fuel tank farm needs to be updated to meet National Fire Code of Canada Standards. While the upgrades are important, they are only on interim solution. One central tank farm



near the YG Department of Highways garage and airport. Apron is proposed. Relocation and site remediation costs would be part of the same project. This project should be GST and Build Canada eligible

#### **Alternative Treatment System for Water Source**

In case something should contaminate the current ground water supply the community would like to see an alternative treatment system in place for an emergency situation. This project would be Gas Tax eligible.

#### **One Main Industrial Area**

The community would like to consolidate the industrial area to one location to reduce the impact of industrial activities on community lands

#### **Mobility Adaptations**

With the changing age structure of Old Crow there are more Elders who find it difficult to access public buildings. All community buildings should be upgraded to allow for those with mobility problems.

#### **Riverbank Stabilization**

Erosion from the riverbank still needs to be addressed in a couple of locations such as near solid waste disposal facility and the airport runway. The community would like to see proper riprap put in as a more permanent solution to prevent further erosion. This project would be Gas Tax eligible.

#### **Path around Airport and Ski Trail lighting**

Recreation opportunities are important part of maintaining a healthy lifestyle. Once the airport is fenced a designated path around the airport should be built to encourage walking and access to different areas of the community.

#### **Administration Building and Airport Exhibits**

The administration building and air terminal building are used by all members of the community for various purposes and would be a good location to showcase Gwitchin history and heritage and demonstrate community pride.

#### **New Fire Truck**

A new vehicle will be required in 2011. This is a Yukon Government responsibility. VGFN's responsibility is to encourage residents to volunteer. Recruitment and volunteer retention is an issue.

#### **New Community Services Centre**

Two sites have been identified and each has advantages and disadvantages. The former school site may allow access to waste heat from the diesel generators, while the new school location would allow integration into that facility. This would entail a major capital investment as costs are likely to be in the \$10M range from planning work completed to date. The project would be GST and Build Canada eligible for some components.

## **9.2 Implementation Schedule**

The attached chart provides a schedule and preliminary estimate of anticipated costs for planning and budgeting purposes. To be an effective management tool the chart and priorities should be reviewed and adjusted during the annual budget planning cycle by Chief and Council



## **Appendices**

### **Community Assessment**

- Appendix A: Capital Project Infrastructure Inventory & Assessment
- Appendix B: Social, Health, & Cultural Services Inventory and Assessment
- Appendix C: Economic Skills Inventory and Assessment
- Appendix D: Environmental Inventory and Assessment
- Appendix E: Inventory and Assessment of Other Items
- Appendix F: Capacity Building and Job Training Inventory and Assessment
- Appendix G: VGFN Community Capital Projects Priority Ranking List – 2009

## Appendix A: Capital Project Infrastructure Inventory & Assessment

Capital Project/Infrastructure	Do you have it? Yes/No	What is the condition? Good/Average/Poor	Is there enough? Yes/No	Do you need it? Yes/No
Airport	Yes	Average	Yes	Yes
Ambulance	Yes	Average		
Arena/recreation centre	Yes	Poor	No	Yes
Ball diamonds/sport fields	Yes	Average	No	Yes
Buildings on District Heat	No			
Campground	No	N/A	No	Yes
Cemetery	Yes	Poor	No	Yes
Communal Sewage Lagoon	Yes	Average	Yes	Yes
Community bus	Yes	Average	Yes	Yes
Community College Campus	Yes	Average	Yes	Yes
Community Hall	Yes	Average	No	Yes
Community Pool	No	N/A	No	
Curling Rink	No	N/A		
Community Store	Yes	Average	No	Yes
Community Well	Yes	Average	Yes	No
Community Youth Centre	Yes	Average	No	Yes
Day Care	Yes	Average	No	Yes
Diesel Power Plant	Yes	Average	No	
Dock/Boat Launch	No	N/A	Yes	Yes
Fire Hall	Yes	Good	Yes	Yes
Fire Truck	Yes	Poor	No	Yes
Fuel Truck	Yes	Good	Yes	Yes
FN Administration Building	Yes	Good	No	Yes
Health Centre	Yes	Average	Yes	Yes
Heritage Centre	No	N/A	N/A	Yes
▪ Housing for Elders	No	N/A	N/A	Yes
▪ Housing Private/rental	Yes	Poor	No	Yes
▪ Housing Social	Yes	Average	No	Yes
▪ Housing Special Needs	No	N/A	No	Yes
▪ Housing Staff	Yes	Poor	No	Yes
Library	No	N/A	N/A	Yes
Maintenance Garage	No	N/A	No	Yes
Playgrounds/play structures	Yes	Poor	No	Yes
Police station	Yes	Good	Yes	Yes
Post office	Yes	Good	Yes	Yes
Primary/Secondary School	Yes	Good	Yes	Yes
Records Storage Building	Yes	Good	No	Yes
Roads	Yes	Poor	Yes	Yes
Search & Rescue Vehicle	No	N/A	Yes	No
Septic Systems (tanks)	N/A	N/A	N/A	N/A
Sewage Eduction Truck	Yes (YTG)	Good	Yes	Yes

Sidewalks/Paths	No	N/A	No	Yes
Solid waste Landfill	Yes	Average	Yes	Yes
Tank Farm	Yes	Poor/Average	Yes	No
Telephone/HS Internet	Yes	Average	No	Yes
Water Delivery Truck	Yes (YTG)	Good	Yes	Yes
Wellness Treatment Centre	Yes	Good	Yes	Yes
Warehouse	Yes	Good	No	Yes
Ski Trail Lighting	No	N/A	No	Yes
Other				

## Appendix B: Social, Health, & Cultural Services Inventory and Assessment

Resource Category	Type of Service	Does this exist? Yes/No	Can it be improved? Yes/No
Health	Nutrition Programming	Yes	Yes
	Weight Loss Programming	No	Yes
	Aids Prevention programming	Yes	Yes
	Substance Abuse Programming	Yes	Yes
	Family Planning Programming	No	Yes
Public Safety	Police Protection in Community	Yes	Yes
	Crime Prevention Program	Yes	Yes
	Fire protection in Community	Yes	Yes
	Ground Search & Rescue*	Yes	
	Emergency Response Plan	Yes	Yes
	Northern Rangers Program		
Recreation Programs	Small children	Yes	Yes
	Teens	No	Yes
	Adults	No	Yes
Social Service Programs	Child care	Yes	Yes
	Domestic violence	Yes	Yes
	Seniors	Yes	Yes
	Disability services	Yes (SA)	Yes
	Counselling – adults	Yes	Yes
	Counselling – teens	Yes	Yes
	Legal services	Yes	Yes
	Suicide prevention	Sometimes	Yes
Self Government	Self government status	Yes	N/A
Capabilities	Lands & Resources	Yes	Yes
	Education & Training	Yes	Yes
	Recreation	Yes	Yes
	Social Programs	Yes	Yes
	Finance & Administration	Yes	Yes
	Capital Projects	Yes	Yes
	Housing	Yes	Yes
	Heritage & Culture	Yes	Yes
	Economic Development	No	Yes
Special Programming	Wellness Centre	No	Yes
	Language Training	Yes	Yes
	Land Stewardship	Yes	Yes
	Traditional knowledge	Yes	Yes
	Life Skills	Yes	
	Community Greenhouse	No	Yes
	Culture Camps	Yes	Yes
	*RCMP and Canadian Rangers		

## Appendix C: Economic Skills Inventory and Assessment

Type of Typical Job	Number of jobs?	Is the job filled by a person in the community now? Yes/No	Full time? Yes/No	Seasonal? Yes/No	Wage example
Accountant		No			
Accounting Clerk		Yes	Yes		3/4
Arts and crafts producer		Yes	No	Yes	1
Big Game Guide					
Biologist					
Executive Director		Yes	Yes	No	9
Carpenter		Yes	Yes	Yes	2/3
Commercial Contractor		No			
Communications Officer					
Computer Programmer		Yes	Yes	No	6/7
Counsellor		Yes	Yes	No	7
Day Care Provider		Yes	Yes	No	5
Economic Development Officer		No	No	No	N/A
Electrician		No	No	Periodic visits	7/8
Emergency Response Technician					
Environmental Specialist					
Family Support Worker					
Fire Fighters		No			
Forest Fire Fighter		Yes	Yes	Yes	4/5
GIS Technician					
Health & Wellness Counsellor		Yes	Yes	No	7
Health Aide/Nurse		Yes	Yes	No	8
Heavy Equipment Operator		Yes	Yes	Yes	6
Heritage Officer		Yes	Yes	No	6
Housing Manager		Yes	Yes	No	7
Human Resource Officer		Yes	Yes	No	7
Labourer		Yes	Yes	Yes	2/3
Landfill Operator					
Lands & Resources Steward		On hire	Yes	No	4
Lands Administrator		Yes	Yes	No	4
Language Specialist/Instructor		Yes	Yes	No	7/8
Lawyer		No	No	No	
Logger/Forester					
Mechanic		No			
Miner		No			
Natural Resource Planner		On hire	Yes	No	6
Other					
Pilot		No			
Plumber		Yes	Yes	No	5

Power Plant Operator		Yes	No	Yes	
Private Business Owners		Yes	Yes	Yes + No	
Public Safety Officer		Yes	Yes	No	
Recreation Director		Vacant	Yes	No	6
School Bus Driver		Yes	Yes	Yes	5
Secretary		Yes	Yes	No	4
Sewage Treatment Operator					
Special Projects Officer					
Store Keeper		Yes	Yes	No	
Teacher		Yes	Yes	No	8/9
Tourist Outfitter					
Water Treatment Operator		In Training	Yes	No	
Welder		Yes	Yes	Yes	5
Writer		Yes	No	No	

Note: Pay Levels 1-9

Level 1: \$28,396

Level 4: \$37,701

Level 9: \$65,000+



## Appendix D: Environmental Inventory and Assessment

Environmental Assets/Needs	Do you have it? Yes/No	If this is lacking, does your community need it? Yes/No
Adequate supply and availability of healthy subsistence food	Yes	
Adequate supply of safe drinking water	Yes & No	Yes
Adequate supply of water for fire protection	No	Yes
Air quality issues ( only at dump & incinerator)	No	Yes
Built upon land in flood prone areas	Yes	
Certified water treatment operators	Yes	
Community fire guard	Yes	
Community Greenhouse	No	Yes
Contaminated sites identified	Yes, (need data from YTG)	
Developable land	Yes	Yes
Disaster response plan (maybe...is it finalized by Roger?)	No	Yes
Environmental Education programs	Yes	
Environmental impact statements for new development	Yes	No
Erosion control	Yes	Yes
Fuel spill prevention plan	Yes (need materials)	
Hazardous waste collection area	No	Yes
Hazardous waste response plan	No	Yes
Healthy wildlife populations in general area	Yes	
Lead acid battery collection area	No	Yes
Permitted landfill	Yes	
Proper environmental monitoring and record keeping coordination	Yes + No	Need central system for fuel spills, etc.
Protected watershed plan	No	Yes
Recycling program	Yes	
Safe sewage disposal and treatment	Yes	
Uncontaminated groundwater	Unknown	
Used oil storage area	No	Yes
Weather Station	Yes	
Other		

## Appendix E: Inventory and Assessment of Other Items

List any item that has not previously been mentioned. This can be a need or an existing asset that is specific to your community

Asset or Need	Do you have it?		How would You rate it?			Do you need it?	
	Yes	No	Good	Average	Poor	Yes	No
Landfill Treatment Unit		√				√	
Hazardous Waste Removal		√				√	
Used Tire Removal		√				√	
Campground		√				√	
Paper Recycling		√				√	
Energy Efficiency		√				√	

## Appendix F: 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
First Nation Administration	CAO (CEO/ED)	Yes	Yes	No
	Finance Officer	Yes	Yes	No
	Bookkeeper	Yes	Yes	Yes
	Librarian/Records Keeper	Yes	No	Yes
	Lands & Resource Officer	Yes	Yes	Yes
	Payroll Officer	Yes		Yes
	Department Managers	Yes	Yes	Yes
	Family Support Worker	Yes	Yes	No
	Wellness counsellor	Yes	Yes	No
	Librarian/Records Keeper			
	Journeyman Trades	Yes	Yes	
	Game Guardians	Yes	Yes	
	Economic Development	No	Yes	No
	Education	Principal	Yes	Yes
Teachers		Yes	Yes	No
Teacher Aides				
Day Care Provider		Yes	Yes	No
Health	Health Aide			
	Nurse Practitioner	Yes	Yes	No
	Doctor	No	Yes	No
Transportation Utilities	Truck/Equipment Operator	Yes	Yes	Yes
	Water Treatment Operator	Yes	Yes	No
	Sewage Treatment Operator	No	Yes	Yes
	Landfill operator	No	Yes	No
	Power plant operator	No	Yes	No
	Water Delivery Truck Driver	Yes	Yes	Yes
	Sewage Truck Driver	Yes	Yes	Yes
Justice	Justice of the Peace			
	Justice Worker	Yes	Yes	Yes
	Social Worker	Yes	Yes	No
Other				

Note: 1. Distance education available through Yukon College  
 2. Many positions can be learned by doing Job shadowing is a training opportunity.

## Appendix G: VGFN Community Capital Projects Priority Ranking list

Department capital projects needs	Strategic plan priorities	Gas Tax eligible Y/N	Build Canada eligible	Other funding source	Rank
Relocate and upgrade bulk fuel storage facility and current site mediation	Yes	Yes	Yes		1
Transport newly purchased fuel distribution truck	Yes	Yes			2
Build winter road every 3 years	Yes	No	No		3
Renovate /repair existing housing	Yes	Yes	No	CMHC	4
Build new and replacement housing	Yes	No	No		5
Build assisted living facility for Elders	Yes	No	No		6
Community roads/surface drainage	Yes	Yes	Yes		7
Design and engineering for Crow Mountain subdivision and slumping and permafrost conditions	Yes	Yes			8
Landscape grounds in front of Vuntut VRC for outdoor interpretive exhibits and visitor use	Yes	Yes	Yes		9
Design and build Crow Mountain subdivision	Yes	Yes			10
Cemetery expansion	Yes	No	Yes		11
Upgrade community buildings access/washroom facilities for elders with mobility problems	Yes	Yes	No		12
Build path around north side of airport boundary	Yes	No	Yes	CDF/Lotteries Yukon	13
Build Community Services centre at old/new school site	Yes	Yes	Yes	CDF/Lotteries Yukon	14
Upgrade playing fields/playground equipment to current standards	Yes	Yes	Yes	CDF/Lotteries Yukon	15
Consolidate industrial area in one location	Yes	No			16
Erect guard rail between Porcupine River and Front Street	Yes		No		17
Complete river bank stabilization	Yes		Yes		18
Relocate portions of cross country trail system and lighting	Yes	Yes	No	CDF/Lotteries Yukon	19

<b>Department capital project needs</b>	<b>Strategic plan priority Y/N</b>	<b>Gas Tax eligible Y/N</b>	<b>Build Canada eligible Y/N</b>	<b>Other funding source</b>	<b>Not ranked</b>
Develop second well source at natural spring on Crow Mountain Road		Yes	Yes		
Main drainage ditch behind school needs proper riprap & install footbridge to enhance safety		Yes		CDF/Lotteries (boat landing)	
Staff housing	Yes	No	No		
Piped water and sewer	No	Yes	Yes	INAC Water Strategy	
Dog yard – health & environment	No				
Relocation of sewage lagoon	No	Yes	Yes		
Safe house support services	No				
Community greenhouse building program.		Yes	Yes		
Crow Mountain Road		Yes		Rural Roads	
Airport building display					
Protect Heritage building (E.g. St. Luke’s Mission House & Church, Archdeacon McDonald Church, Peter Moses Building)	Yes	No	Yes		
Studio recording facility replacements (within next 2 years)		No	No		

