



**Beaufort Regional Environmental  
Assessment (BREA)  
SCE Working Group  
Results Forum**

**Social, Cultural and Economic Indicators**

# Community Development Division and Office of Intergovernmental Relations

The Office of Intergovernmental Relations works with CDD staff to develop and improve upon program and services to Inuvialuit:

- ✓ Gathers information and conducts research projects to better inform staff and leadership;
- ✓ Develops programs and services;
- ✓ Increase the community capacity to deliver programs and services;
- ✓ Works with other governments;
- ✓ Prepare for self-government and devolution implementation.

Typically the Social Policy Research conducted by or in partnership with government and academic community is carried out by:

- ✓ Development of indicators and gather/organize statistical data;
- ✓ Household surveys
- ✓ Literature and policy reviews;
- ✓ Gap analysis;
- ✓ Program development.




# Social Policy Research Projects

Research projects provides information on Inuvialuit conditions and develops recommendations to improve those conditions:

- ✓ **Indicators Project for the Beaufort Regional Environmental Assessment – partnership with NWT Bureau of Statistics**  
[www.inuvialuitindicators.com](http://www.inuvialuitindicators.com)
- ✓ **Social Policy Research:**
  - ✓ ReDSA (SSHRC/IRC funded) - Education
  - ✓ Addictions & Mental Health Study – (completed 2010)
  - ✓ Social Housing and Income Support – (completed 2012)
  - ✓ Identification and Assessment of Economic Life of Inuvialuit Households (DIAND/IRC Funded) – completed June 2012
- ✓ **Development of Measures to Improve Inuvialuit Social, Cultural and Economic Conditions:**
  - ✓ Beaufort Delta Agenda and MGP Impact Fund Investment Plan
  - ✓ Current IRC Strategic Plan, Wellness Plan and Beaufort Sea Integrated Oceans Management Plan







## **BREA Social, Cultural and Economic Working Group Objective**

Develop social, cultural and economic indicators and monitoring system for Beaufort offshore resource development predicted impacts based on MGP Impact Fund Plan.

There will be a need for additional resources for Beaufort Sea development, using as a starting point the research and data collected, to:

- i) formalize indicators,
- ii) continue the collection and analysis of base line data,
- iii) develop monitoring system and
- iv) develop recommendations for standard mitigation.



# IRC's Indicator Project

- Review other social, cultural and economic monitoring systems and research in related Arctic/northern contexts
  - Communities and Diamonds (NWT diamond-mine socio-economic agreements)
  - Alaska OCS Social Indicators
  - Aboriginal Peoples Survey (SLICA)
  - Arctic Social Indicators
- Develop relationships with the NWT Bureau of Statistics, Statistics Canada, and academia.





## Partnership with the GNWT Bureau of Statistics

- The creation of a joint IRC/NWT Bureau of Statistics position to develop indicators based on departmental administrative data.
  - Completed GNWT Department of Education, Culture and Employment
  - Started GNWT Department of Health and Social Services
- Validation through collaborative research to establish a standardized indicator monitoring system for development and evaluation in the region.



# Baseline Development

Indicator/Data	Found in	GNWT	MGP	APS 2001	Censu s	JR P	IFA s. 16	Sub-regional/ community level	Aboriginal /non-Aboriginal population	Frequency
<b>Vital Statistics:</b>										
Number of Births	4	√		√	√	√		√	√	Annual
Death Rates From Suicides	4	√	√			√	√	√		Annual
Overall Death Rate	3	√				√	√	√		Annual
Death Rates From Accidents	3	√	√			√		√		Annual
Death Rates From Homicides	3	√				√	√	√		Annual
<b>Households and Families:</b>										
Total Number of Houses by Community	5	√	√	√	√	√		√	√	*2-3 Yrs
Family Structure	4	√		√	√	√		√	√	*2-3 Yrs
Tenure	4	√		√	√	√		√	√	*2-3 Yrs
% Needs Major Repairs by Community	5	√	√	√	√	√		√	√	*2-3 Yrs
Number of persons per room	3			√	√	√		√	√	5 Yrs
Number of persons per bedroom	4	√		√	√	√		√	√	*2-3 Yrs





# Master Data File

## Master Data File

	Canada	Northwest Territories	Inuvialuit Region	Aklavik	Inuvik	Paulatuk	Sachs Harbour	Tuktoyaktuk	Ulukhaktok (Holman)	Aboriginal Persons	Inuv./Inuit Persons	Inuvialuit Beneficiaries
i. current education attainment												
[percent-15-or-older-with-high-school-or-more]												
% 15+ with high school or more												
1991	61.8382811	59.9	53.785901	37.755102	66.373626	20.689655	47.058824	34.710744	36.9565217			
1994		63.2	55.589354	38.877339	70.039079	27.118644	56	32.324841	33.59375	34.859155		
1996	65.2302971	63.5	58.47348	48.387097	69.347826	44.827586	47.058824	36.885246	42.3076923	43.713733		
1999		66.1	56.68214	39.72332	71.921602	30.45977	41.584158	34.961832	34.516129	40.439872		
2001	68.7176797	64.8	57.377049	43.333333	70.772947	28.571429	50	37.007874	46.1538462	45.472441		
2004		67.5494576	58.377506	37.577002	73.102374	40.952381	40.909091	36.560694	33.105802	41.150442	36.750999	36.9053118
2006	76.2380271	67.0199101	55.344418	37.5	68.48249	30.232558	47.058824	35.2	29.0909091	41.737649	37.327189	
2009		69.3477616	57.671845	37.972167	68.655098	37.022901	66.315789	46.143251	36.0230548	43.174114	38.555195	38.6183937
[percent-20-to-29-with-high-school-or-more]												
% 20-29 with high school or more												
2001		64.9908592	56.862745	62.5	70			26.666667	40			
2004		71.2701464	58.316222	37.373737	72.156197	35.897436	50	32.960894	48.0769231	41.467066	33.526012	32.6693227
2006	87.4848833	70.1713396	56.994819	42.105263	70.338983	40		33.333333	41.6666667			
2009		73.7698196	59.849906	43.809524	71.100164	25		47.668394	56.4516129	46.553966	43.211921	43.5153584
[percent-20-to-24-with-high-school-or-more]												
% 20-24 with high school or more												
2001		60.4519774	53.246753									
2004		64.6737481	51.963048							40	32.720588	33.2061069
2006	86.1937984	65.0717703	46.875									
2009		72.6398601	50							45.518868	44.057971	42.5770308





# ON - LINE PORTAL OF BASELINE

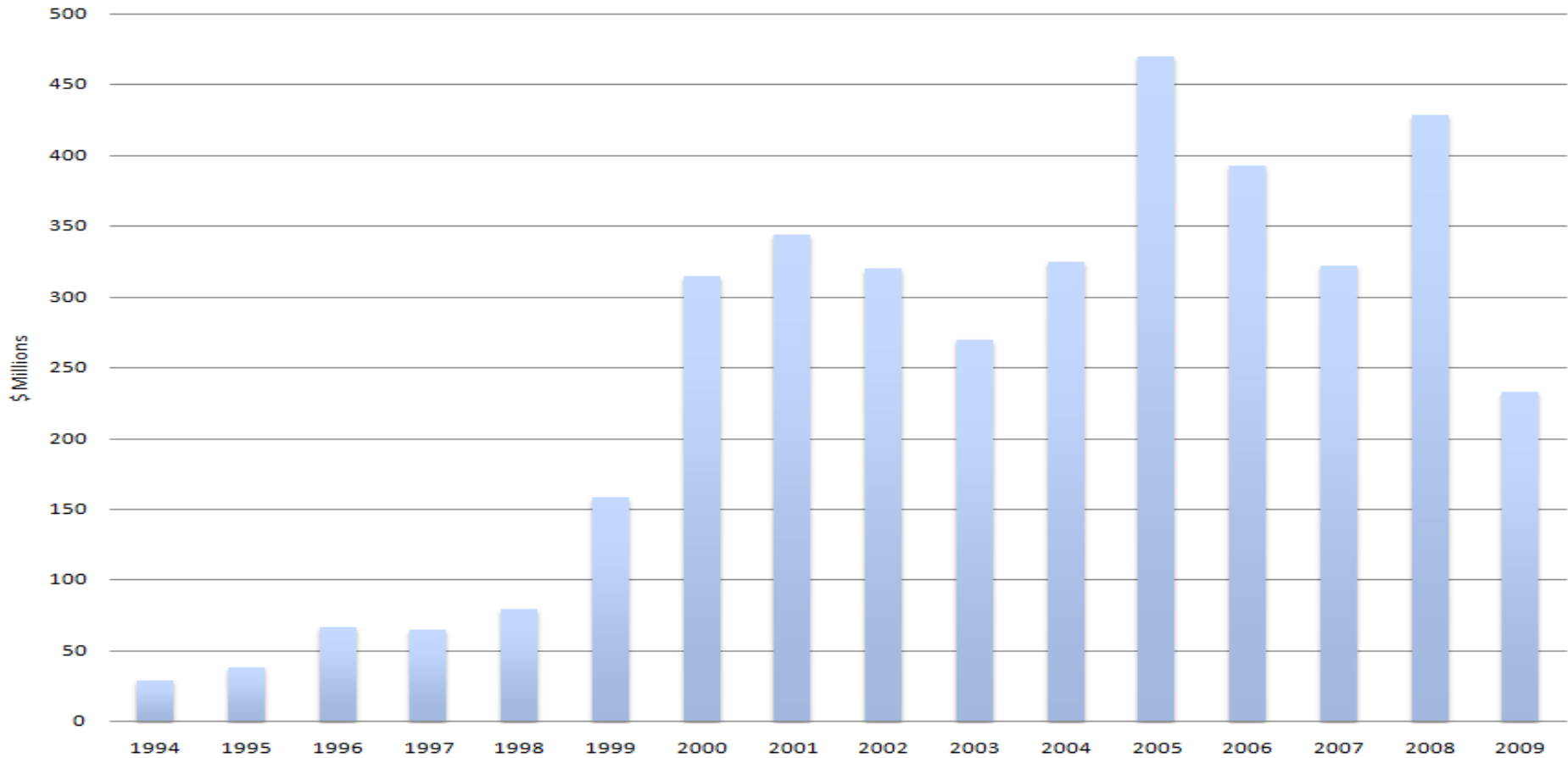
<http://inuvialuitindicators.com>



INUVIALUIT REGIONAL CORPORATION

# Case Study of Resource Development Social, Cultural and Economic Impacts

**Hydrocarbon exploration expenditures in NWT**





# **ReSDA/IRC Indicator Project An Update**

**Andrey N. Petrov & Philip A. Cavin**  
**University of Northern Iowa**  
**Yukon College**

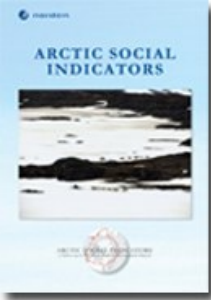
# The Current State of the ReSDA/IRC Indicator Project

- **Purpose:** develop a set of measurable, reliable and accessible indicators to monitor socio-economic conditions in the Inuvialuit Region with an emphasis on tracing impacts of resource development
  - **Partners:** ReSDA, ASI, Inuvialuit Regional Corporation (IRC), NWT Bureau of Statistics
  - **Project team:** Andrey Petrov, Phil Cavin, Joan Larsen, Gail Fondahl, Peter Schweitzer, IRC representatives.
    - Questions: Andrey Petrov [andrey.petrov@uni.edu](mailto:andrey.petrov@uni.edu)
    - First workshop in Fall 2011 (Yellowknife)
    - Second field workshop – August 2012 (Tuktoyaktuk, Inuvik)
  - IRC has a large database of socioeconomic variables 1986-present <http://inuvialuitindicators.com/>



# The Current State of the ReSDA/IRC Indicator Project

- Objectives and Work plan:
  - ☑ Using ASI framework provide a background baseline analysis of IRC socioeconomic characteristics in comparison with NWT, Inuit regions of Canada/USA and Canada as a whole **Summer 2012**
  - Using ASI experience and community consultations identify more relevant domains that are to be included in to the socioeconomic monitoring system **Fall 2012**
  - Define Baseline Indicators within each domain
  - Collect necessary data, expand IRC database **Winter 2013**
  - Develop and disseminate Inuvialuit Baseline Indicators data and analysis to inform IRC decision making and ensure community awareness **2013**  
**2014**



# Arctic Social Indicators Framework

- **Arctic Social Indicators (2010)**
- Arctic Council, circumpolar system to monitor human development in the Arctic

- 6 domains:
  - Health and Population
  - Material well-being
  - Education
  - Cultural Vitality
  - Contact with nature
  - Fate control

DOMAIN	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Health	TEENAGE BIRTH RATE: number of births to mothers under the age of 14 per 1,000 residents.	NET MIGRATION Difference between number of in and out-migrants during the year (estimates)	SUICIDE RATE	
Material well-being	PER CAPITA HOUSEHOLD INCOME Total household income per capita	NET MIGRATION Difference between number of in and out-migrants during the year (estimates)	UNEMPLOYMENT unemployed expressed as a percentage of the labor force	
Education	PERCENT WITH HIGH SCHOOL AND HIGHER LEVEL OF EDUCATION of population aged 15 and over	PERCENT WITH UNIVERSITY DEGREE (BACHELOR OR HIGHER) of population aged 15 and over		
Cultural vitality	LANGUAGE RET. Ratio between percent of respondents who report an ability to conduct a conversation in a Native language and percent of Aboriginal population in total population.	SUBSISTENCE/TRADITIONAL ACTIVITIES ENGAGEMENT percent of people 15 years of age or older that hunted, fished, and trapped during the year		
Contact with nature	CONSUMPTION OF TRADITIONAL FOODS Percent of Households That Half or More of Meat & Fish Consumed in 2008 Obtained Through Hunting or Fishing			
Fate control	PC OF LOCAL/ABORIG IN GOVERNING INST/POSITIONS Pc of Aboriginal people in government and managerial occupations (defined by NOC)	PC OF SELF-GENERATED INCOME (est.) Percent of personal income other than transfer payments	PC SPEAKING MOTHER LANGUAGE Ratio between percent of respondents who report an ability to conduct a conversation in a Native language and percent of Aboriginal population in total population.	PC LAND CONTROL BY ABORIGINAL/LOCAL RESIDENTS
CENSUS (5 years)		Comprehensive Land Claim Agreements		Data from NWT Bureau of Statistics

ASI Indicators matrix for NWT

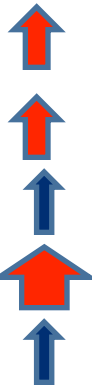
# Inuvialuit Region Baseline Analysis

- Regional Comparisons:
  - Internal differences: drastic gap between Inuvik and Beaufort-Delta communities
    - IR **better than other NWT** regions: unemployment, engagement in traditional activities, land claim status and fate control
    - IR **close to average**: incomes, dependency on government transfers, consumption of country food, education
    - IR **worse**: language retention (23%), Aboriginal leadership, population dynamics (out-migration)
  - Compared to other Inuit communities (in Nunavut):
    - Generally good in material well-being
    - Very low in language retention, low on consumption of traditional food, fate control

# Inuvialuit Region Trends 1986-2010

- Material well-being

- Unemployment – unchanged
- Participation rate
- Professional employment
- Income support payments
- Ownership rate
- Households in core need



- Education

- Population with high school diploma



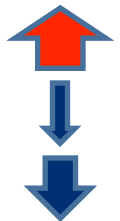
- Social

- Lone parent families
- Crime
- Teen birth
- Mobility



- Traditional activities

- Hunt & Fish
- County food, %
- Speak Language



- Positive
- Negative



# Community Input

- **Important factors to measure (communities)**

- Impacts of resource boom on 'contact with nature' – hunting, etc.

(is resource activity enabling or inhibiting factor?)

- Impact on cultural activities

(does resource activity erode or stimulates culture? Do higher incomes result in better equipment for harvesting activities?)

- **Additional factors to measure**

- Savings
- Income disparity
- Total wealth (wage + traditional)
- Educational attainment/dropout vs. labor market (do jobs sway people away from education? and migration to larger centers)

# Trends in key indicators

ReSDA Inuvialuit Baseline Indicators Project

Category	Years	Trend between Years	Comparison of IRC & NWT
<b>Employment</b>			
Unemployment	86 – 09	0.3 Decline	4.5% Higher
Participation Rate, % working 26+ weeks	93 – 09	3 Decline	4.9% Lower
% employed in managerial/technical/professional employment	04 – 09	1.3 Increase	0.3% Lower
<b>Education Attainment</b>			
% 15+ with high school or more	91 – 09	3.9 Increase	11.6% Lower
<b>Health and Well Being</b>			
% lone parent (Census)	96 – 06	6.4 Increase	7.2% Higher
Violent Crime Rate (per 1,000 persons)	98 – 10	18.8 Increase	30.4% Higher
Accidental Death Rate per 1,000 population	96 – 08	0.2 Increase	0.8% Higher
% of Households in need of Major Repairs	81 – 09	1.9 Increase	2.1% Higher
% of Households in Core Need	96 – 09	5.9 Increase	7.5% Higher
% of Households Owned	81 – 09	22.7 Increase	20.6% Lower
% of live births with low (<2.5 kg) birth weight	95 – 09	0.1 Increase	0.9% higher
<b>Income</b>			
Average Personal Income (\$)	97 – 09	\$16106 Increase	\$8230 Lower
# of tax filers reporting Employment Income	97 – 09	540 Increase	--
Average Employment Income (\$)	97 – 09	\$17817 Increase	\$6870 Lower
Income support payments (\$000) per 1,000 (3 year average)	98 - 11	\$26.4 Increase	\$207.7 Higher
<b>Population</b>			
% Teen Births (of all Births - 3 year average)	98 – 08	3.6% Decline	2.7% Higher
Population Mobility (5 years)	91 – 06	7.2% Decline	1% Lower
<b>Traditional Practices</b>			
% 15+ who hunt & fish	88 – 08	20.2% Increase	9% Higher
% 15+ who spent time trapping	88 – 08	0.7% Decline	2.7% Higher
% households with half or more country food	93 – 08	5.1% Decline	10.4% Higher
% 15+ who speak Aboriginal language	84 – 09	13.1% Decline	15% Lower

# BREA Social, Cultural and Economic Working Group Deliverables Summary

## 1. formalize indicators

*ReDSA Study will provide recommendations on key indicators that can be used by industry government/regulators and Inuvialuit to measure social, cultural and economic indicators*

## 2. continue the collection and analysis of base line data:

*NWT Bureau of Statistics and IRC will continue to collect/organize and analysis base line data.*

## 3. develop monitoring system

*NWT Bureau of Statistics and IRC are having discussions to jointly resource the maintenance of the base line data in the future*

## 4. develop recommendations for standard mitigation

*IRC working with other governments and agencies will develop comprehensive social, cultural and economic plan(s) – will be introduced in the Beaufort Sea Partnership Meeting for feedback this fall.*

