



Tracking economic, social, and demographic trends from a Saskatchewan perspective.

The Socioeconomic Status of Saskatchewan First Nation Members on Reserve

A statistical analysis by Sask Trends Monitor

February 2010 Version

Doug Elliott
QED Information Systems Inc.
444 19th Avenue
Regina, Saskatchewan
S4N 1H1
306-522-5515
sasktrends@sasktel.net
www.sasktrends.ca

Background

- This report is part of a project that was notionally called “Harvard North”. The research question is whether or not there is a correlation between the well-being of First Nation members and the quality of their governance. In simple terms, does good governance yield above-average socioeconomic status?
- The project was originally conceived by the *Saskatchewan Labour Market Commission* but was never formally completed and published. When the Commission was wound down, *Sask Trends Monitor* completed the initial phase of the research and prepared this summary. This material was not reviewed by the Commission and does not represent their views.
- This part of the research is designed to measure the socioeconomic status of individuals for each First Nation. It was intended to eventually be compared with governance indicators.
- There were a number of steps involved in the developing the socioeconomic status.
 - The target group is those individuals whose local level of governance is a Chief and Council. In most cases this will be the on-Reserve population of a single First Nation. In some cases it would include the residents of adjacent communities even though they are technically under the jurisdiction of the provincial government.
 - The second step was to develop a measure of socioeconomic status. The Statistics Canada census is the most reliable information about the on-Reserve population and because there is no universally accepted definition of socioeconomic status, we focused on the extensive range of indicators available from that source.
 - The third step is to determine a methodology for combining the individual measures of socioeconomic status into a single indicator that enables one to compare First Nation members with one another.

Choosing the First Nations

- For each First Nation, we needed to define the group of individuals whose local level of governance is a Chief and Council. These are the people whose socioeconomic status will be most affected by the governance decisions and institutions for that First Nation.
 - In most cases this will be the on-Reserve population of a particular First Nation but in some cases, the residents of adjacent communities were included even though they are technically under the jurisdiction of the provincial government. The fact that all First Nation members can vote in band elections was ignored.
 - The residents of the Little Red River Reserve were allocated to Montreal Lake. Multi-community First Nations such as La Ronge and Peter Ballantyne were treated as single First Nations.
 - We included all those who live on Reserve even though some will not be Registered Indians and therefore not technically under the jurisdiction of Chief and Council.
 - We had to exclude the Joseph Bighead First Nation because the First Nation refused to participate in the census. Statistics Canada suppresses data from communities with only a few persons to help maintain the confidentiality of respondents so the following First Nations could not be included in the analysis.
 - Little Black Bear
 - Nekaneet
 - Ocean Man
 - The Key
 - Wood Mountain
 - Peepeekisis
 - Day Star
 - White Cap
 - Sakimay
 - Okanese
 - Star Blanket
- This left us with 56 Saskatchewan First Nations which had most or all of the socioeconomic factors available.

Adjacent Communities

First Nation	Adjacent Community
Birch Narrows First Nation	Turnor Lake
Black Lake	Stony Rapids
Buffalo River Dene Nation	St. George's Hill, Michel Village
Canoe Lake Cree First Nation	Cole Bay, Jans Bay
Cumberland House Cree Nation	Cumberland House
English River First Nation	Patuanak
Pelican Lake	Chitek Lake
Peter Ballantyne Cree Nation	Pelican Narrows

- In a limited number of cases it was deemed appropriate to include the resident of the nearby “adjacent community” with the on Reserve population because in practise their socioeconomic status will be determined by governance decisions in the nearby Reserve.
- The adjacent communities chosen are shown on the left.

Choosing the Factors to Measure Socioeconomic Status

Measure	Notes
Income per capita	Income per capita is often used as a proxy for the size of the local economy.
Growth in income per capita	We used a ten-year (1995 to 2005) period to measure changes in income over time.
Average household income	This is similar to income per capita but it is a measure of spending power rather than the size of the economy. This is the traditional income measure used for socioeconomic status.
Change in average household income	As with income per capita, we used a ten-year period to measure changes in income.
Educational attainment	This would be the percentage of the adult population (restricted to 25 to 64 years) who have at least a grade 12 education.
Employment rate	The traditional measure of employment is the proportion of the adult (15 and older) population who had a job in May 2005.
Change in employment	This is growth in employment from 1996 to 2006.
Labour force attachment	Rather than just a "snapshot" at the time of the census, this is the proportion of the population who worked throughout 2005 in full-time job.
Private sector	This is the proportion of employment in sectors other than health, education, and government services. Private sector employment is often more indicative of a growing economy than public sector employment.
Dependency	This is the proportion of personal income that comes from sources other than government transfers, that is, from employment, investments, etc.
Housing	As a proxy for wealth, this is the proportion of dwellings that are not in need of major repairs.

- **A total of eleven indicators were chosen using the available data from the census. They are a combination of single year snapshots (2006) and trends over time (1996 to 2006).**

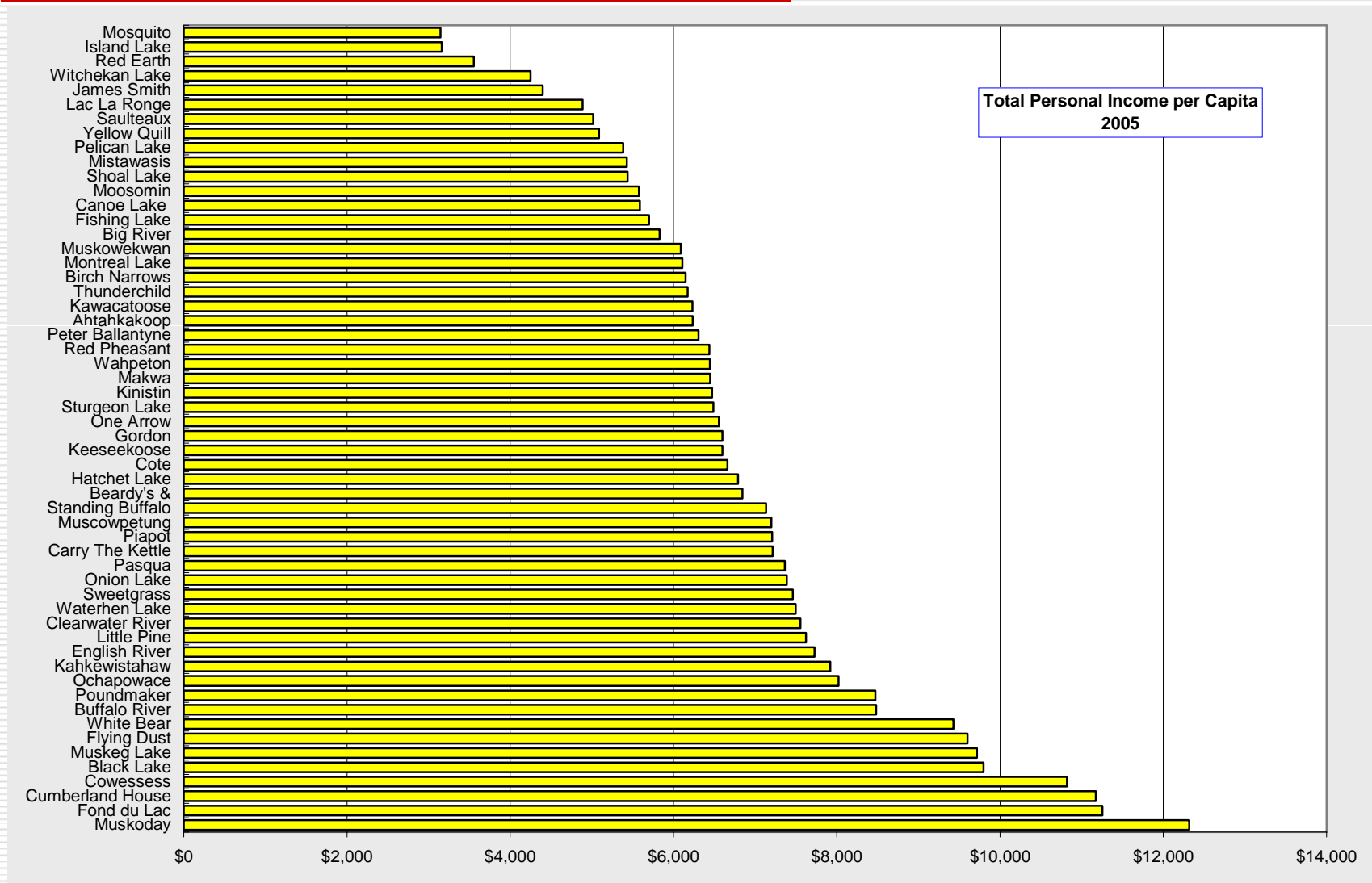
Combining the Factors

- This is a statistical question. How does one combine the eleven individual measures into a single indicator for socioeconomic status? How does one “add” average income to the percentage with a post-secondary education?
- There are lots of sophisticated statistical ways to do this but we used a simple one that is easy to understand and explain. Each of the indicators is ranked from 1 to 58 (the number of First Nations). The socioeconomic status is the simple average of the eleven rankings.
- One of the advantages of this methodology is that some of the extremes arising from small sample sizes do not adversely affect the result.
- The highest possible ranking would be 1 and the lowest possible 58. In fact, the rankings ranged from 7 to 49.

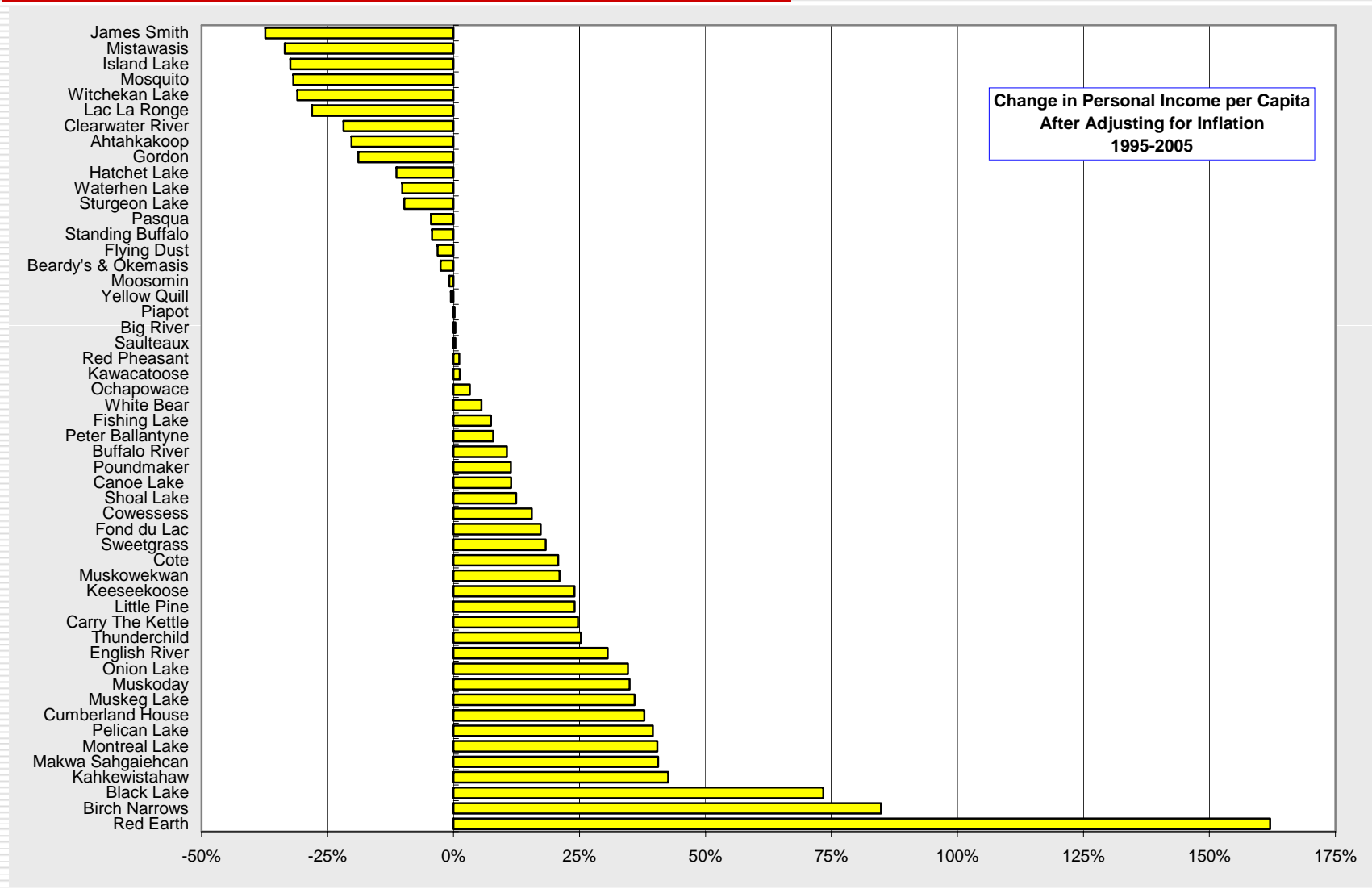
The Eleven Indicators

For each of the eleven indicators, the First Nations are ranked from low to high in this section.

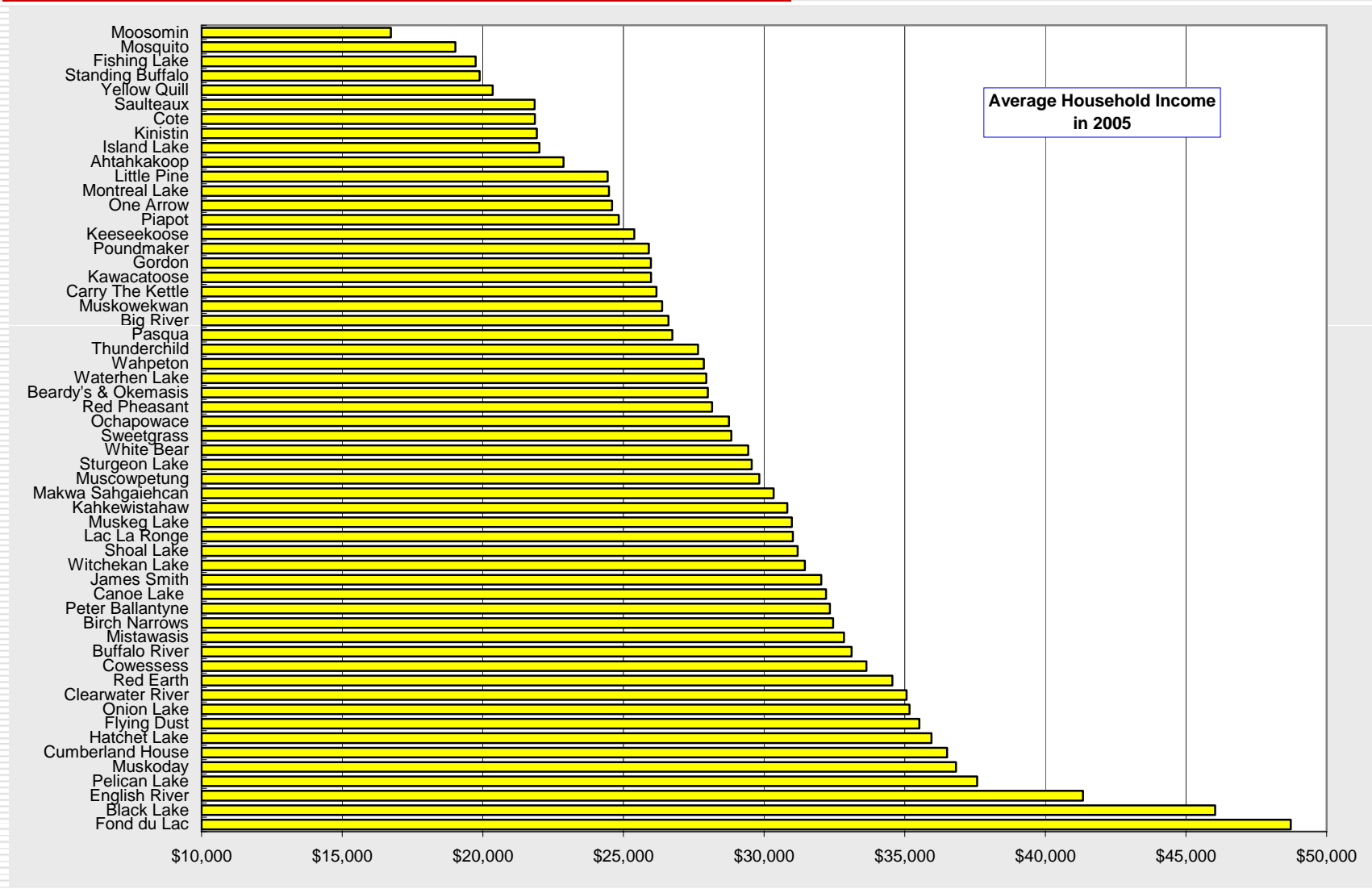
Income per Capita



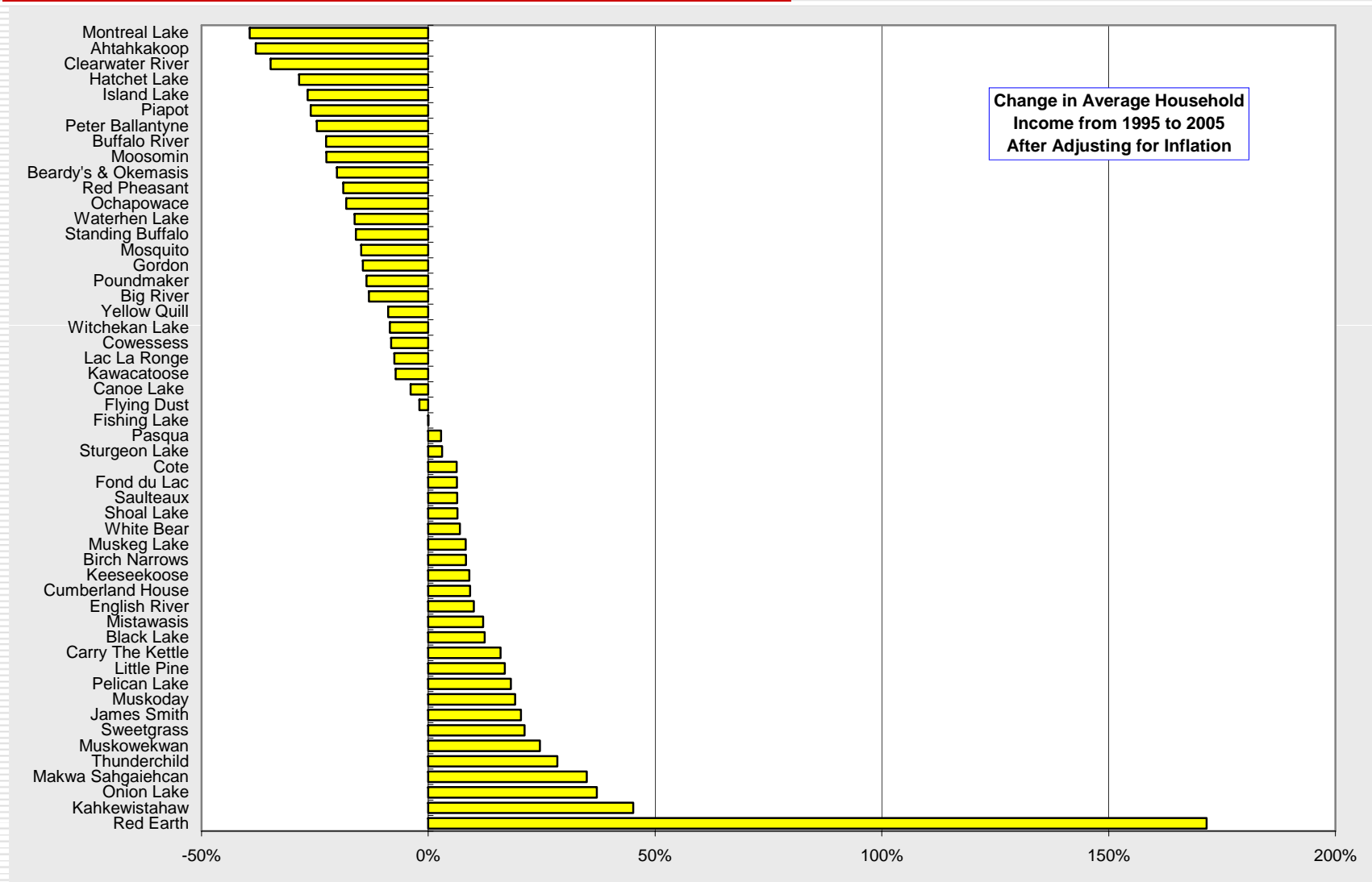
Changes in Income per Capita



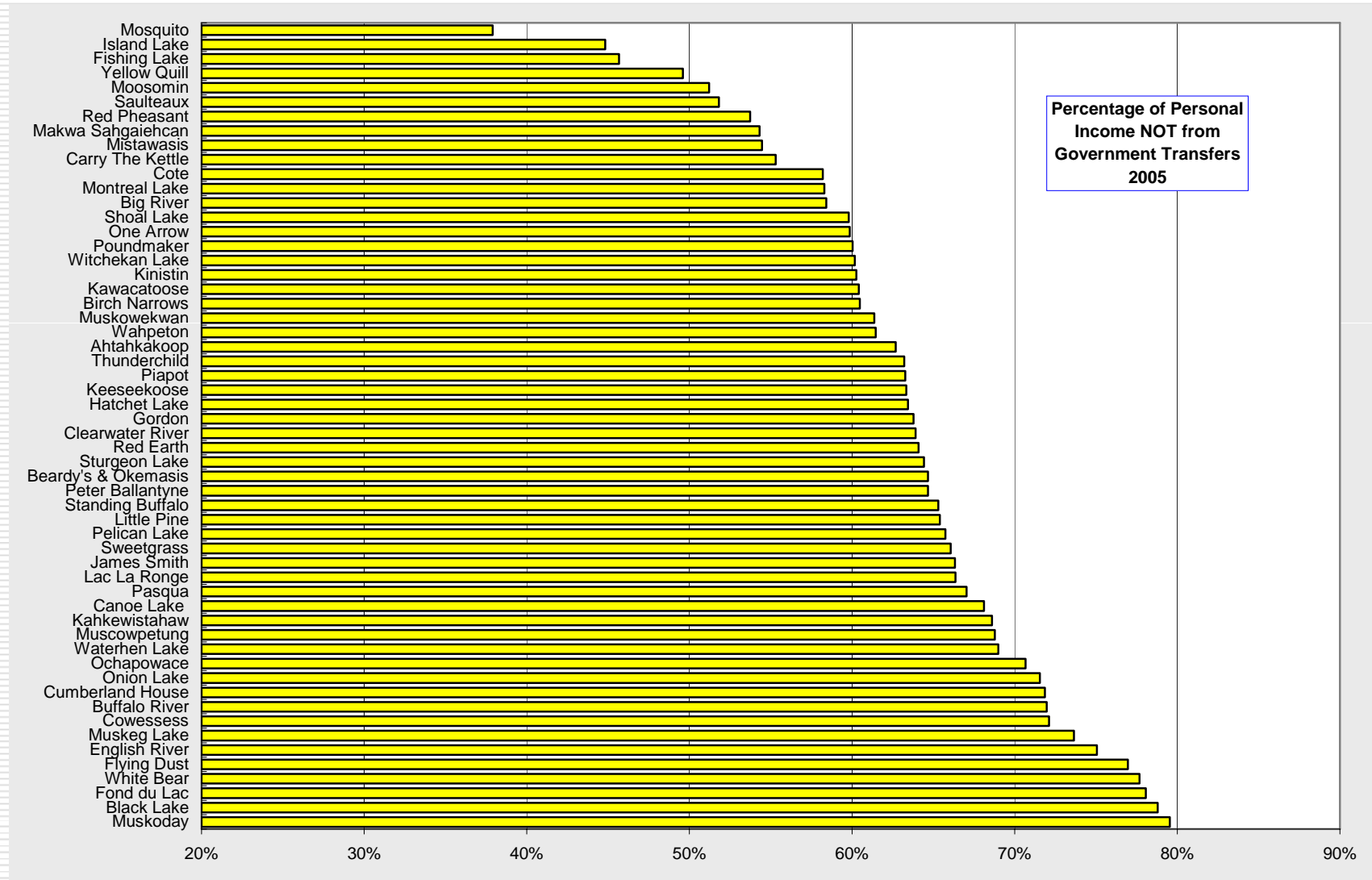
Average Household Income



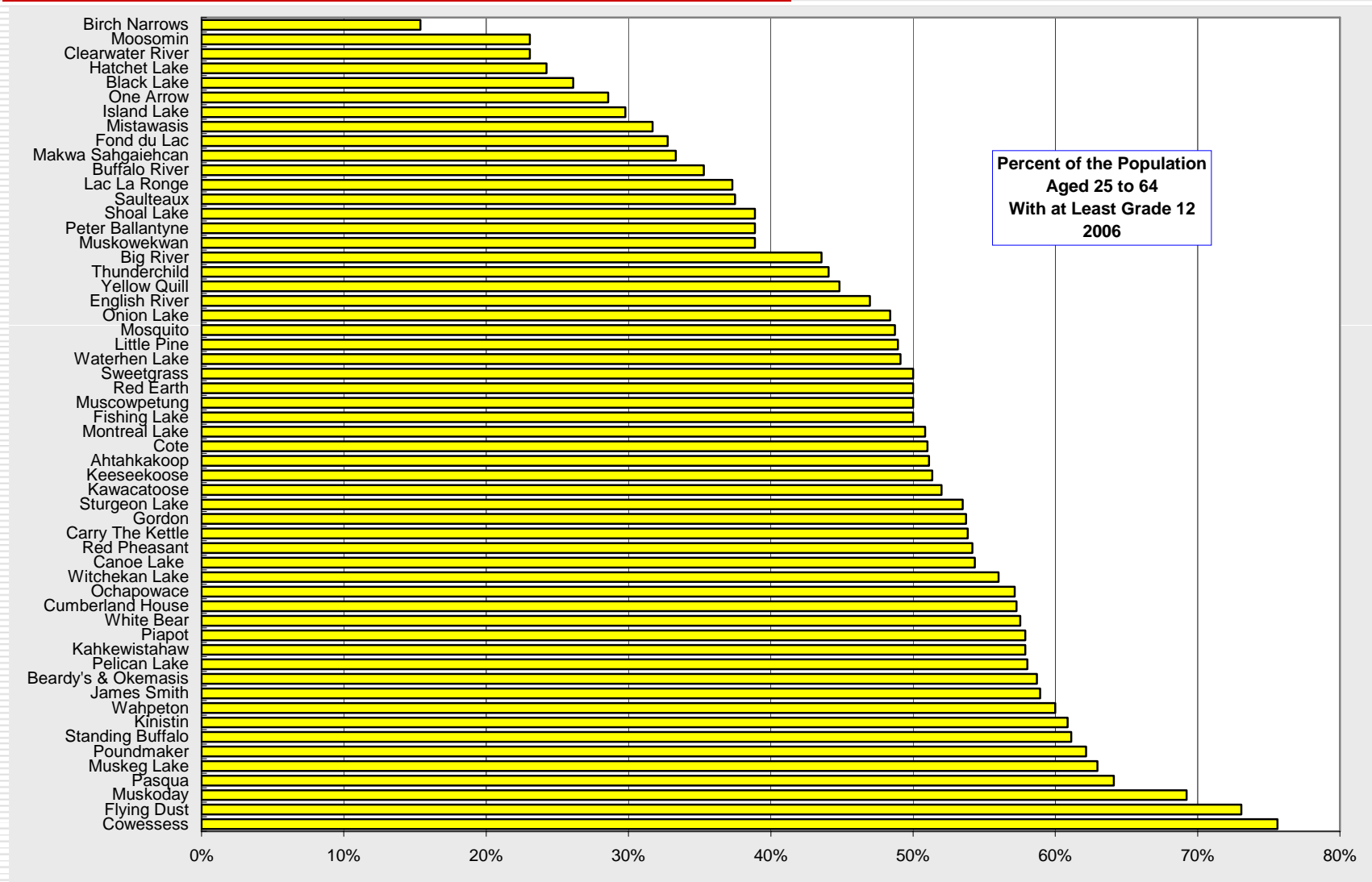
Changes in Average Household Income



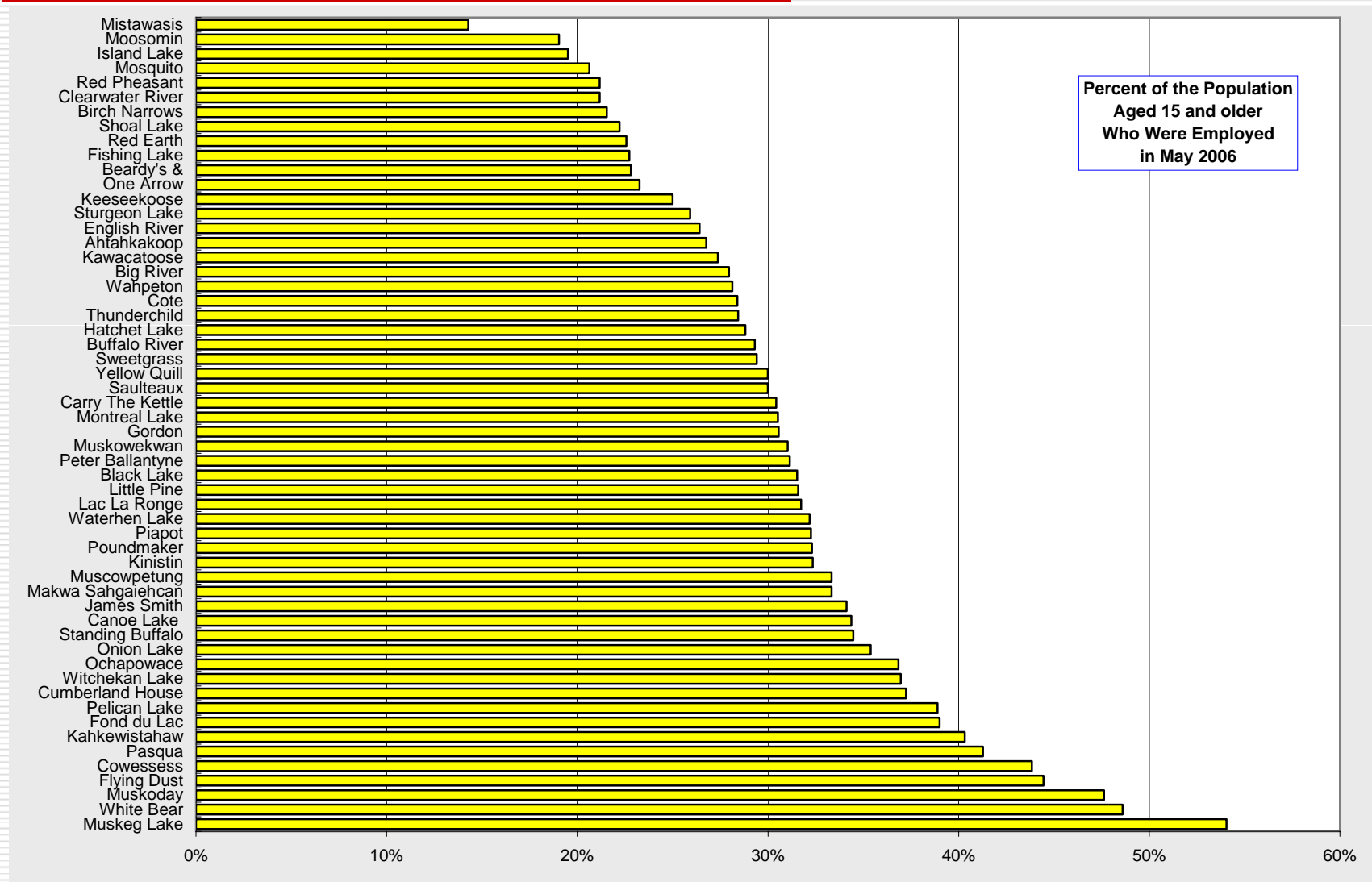
Dependency



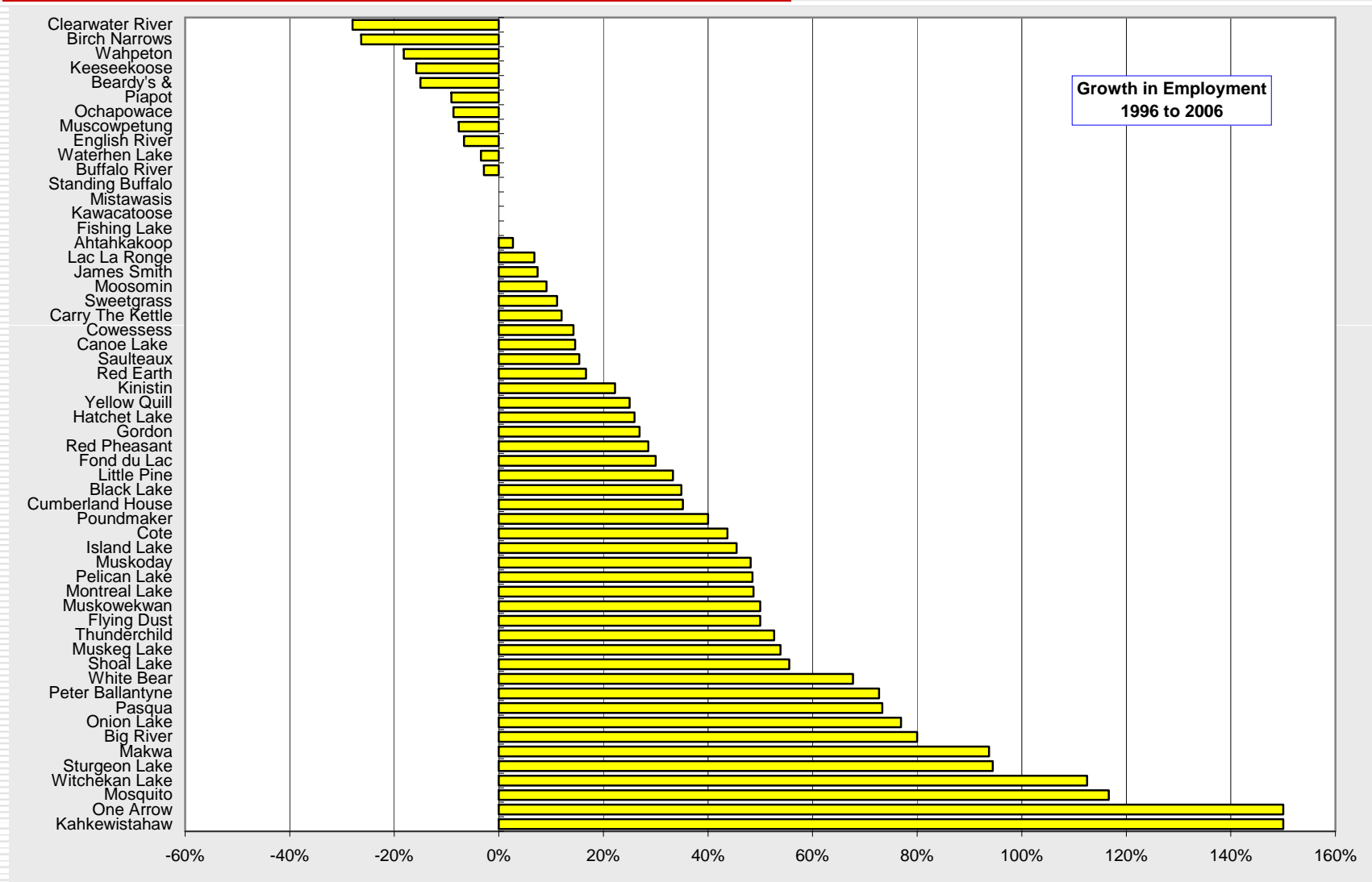
Completed Education



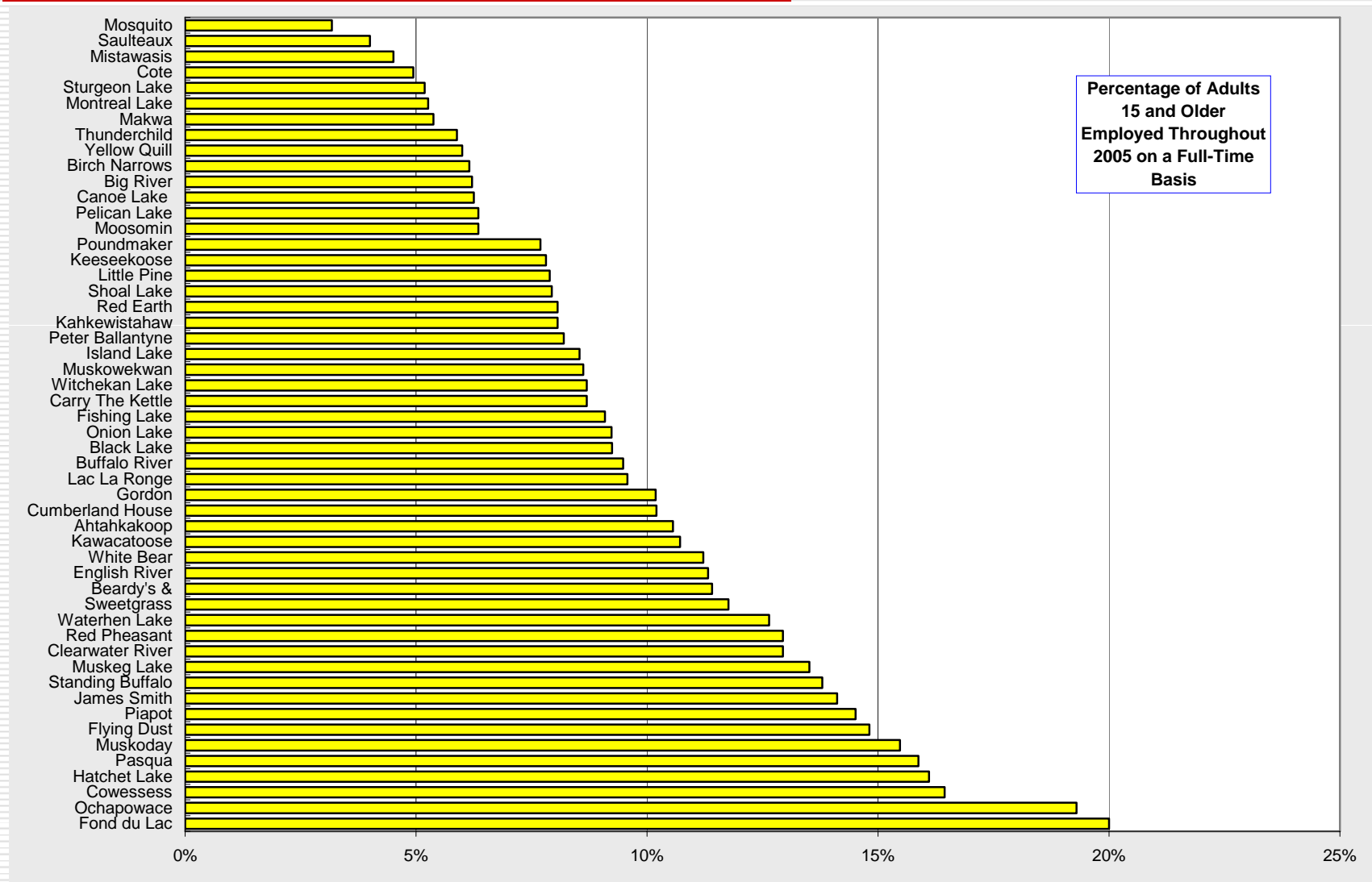
Employment Rate



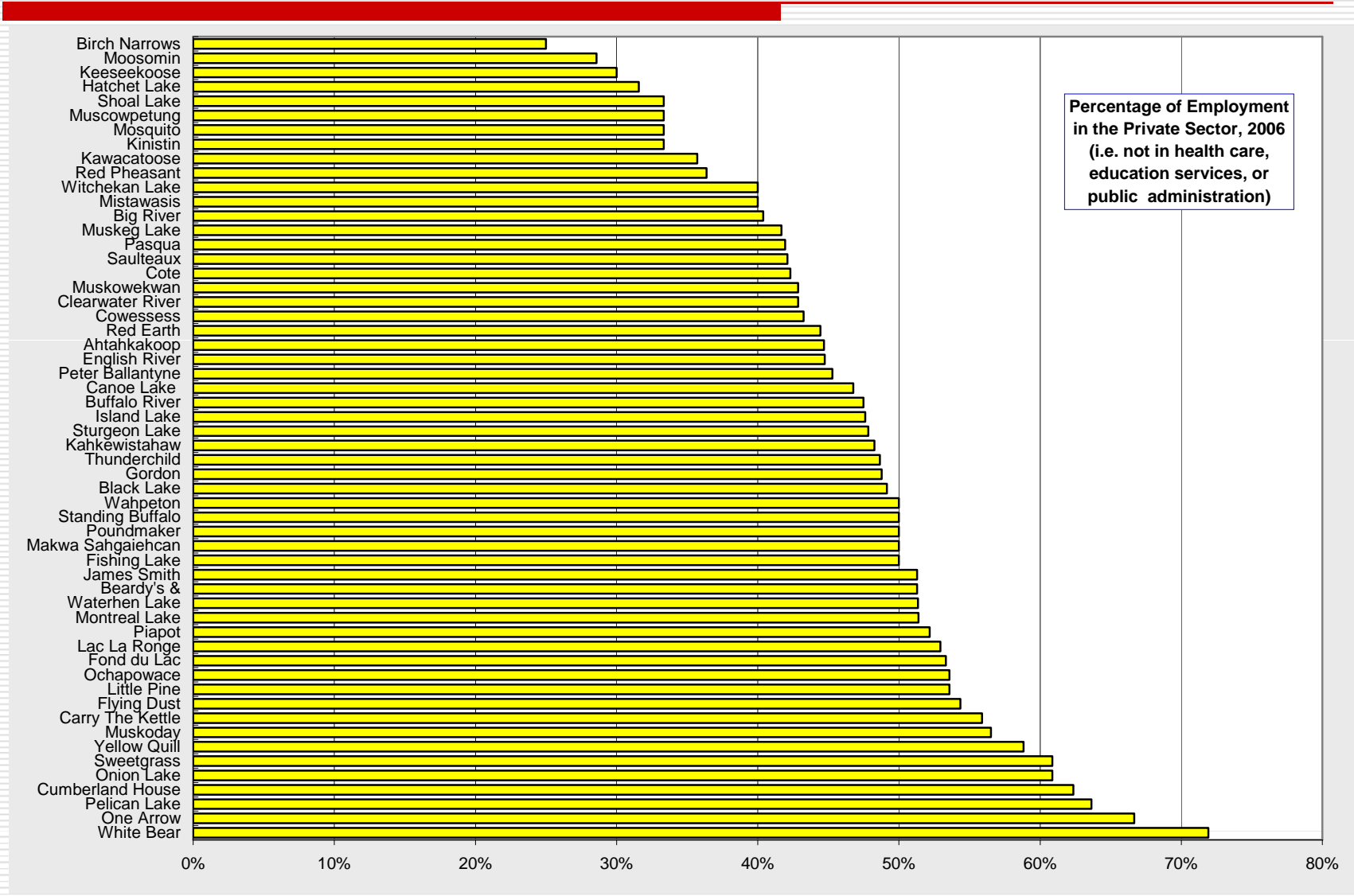
Growth in Employment



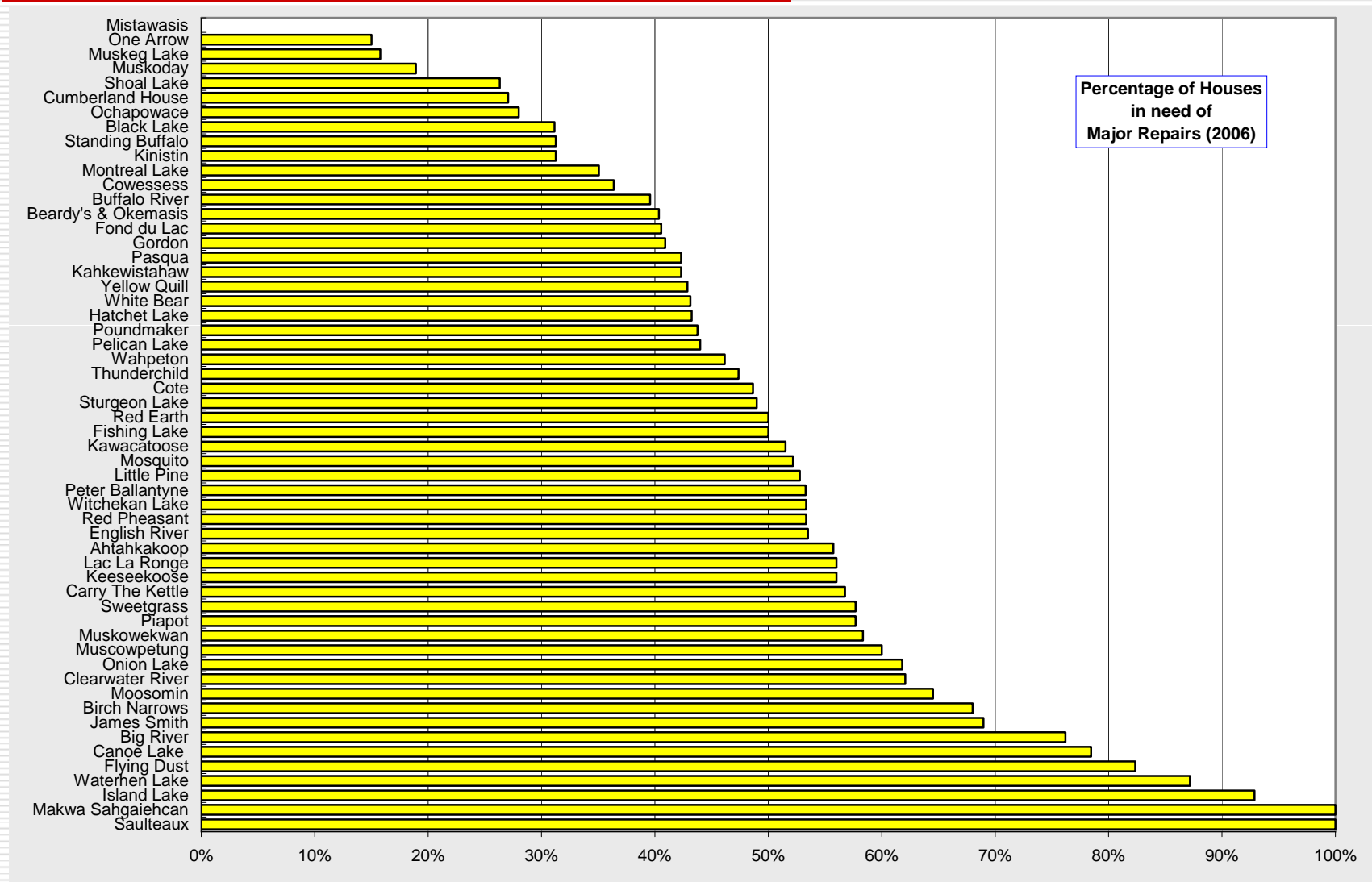
Labour Market Attachment



Private Sector Employment



Housing Condition

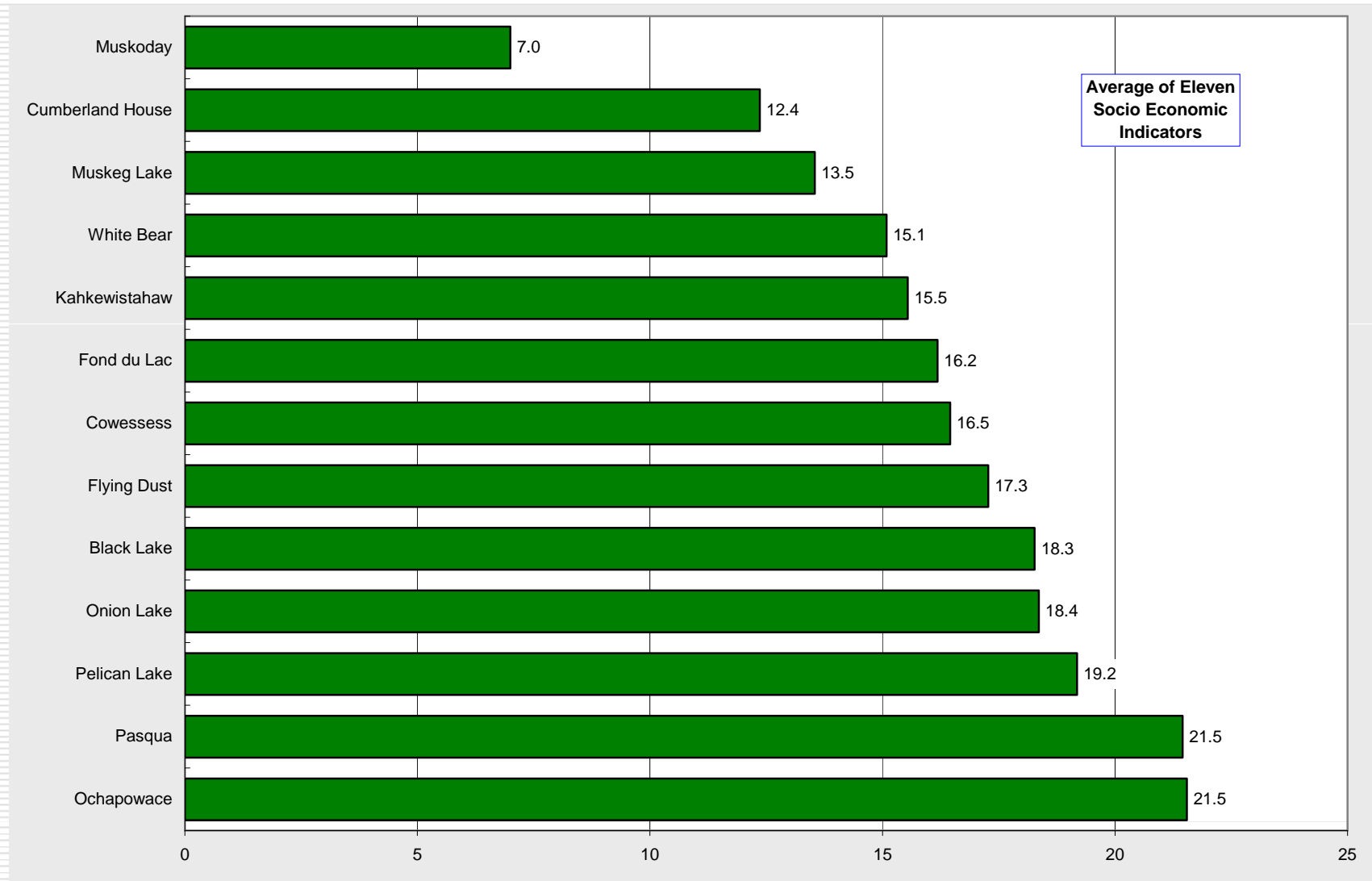


Summary Measures

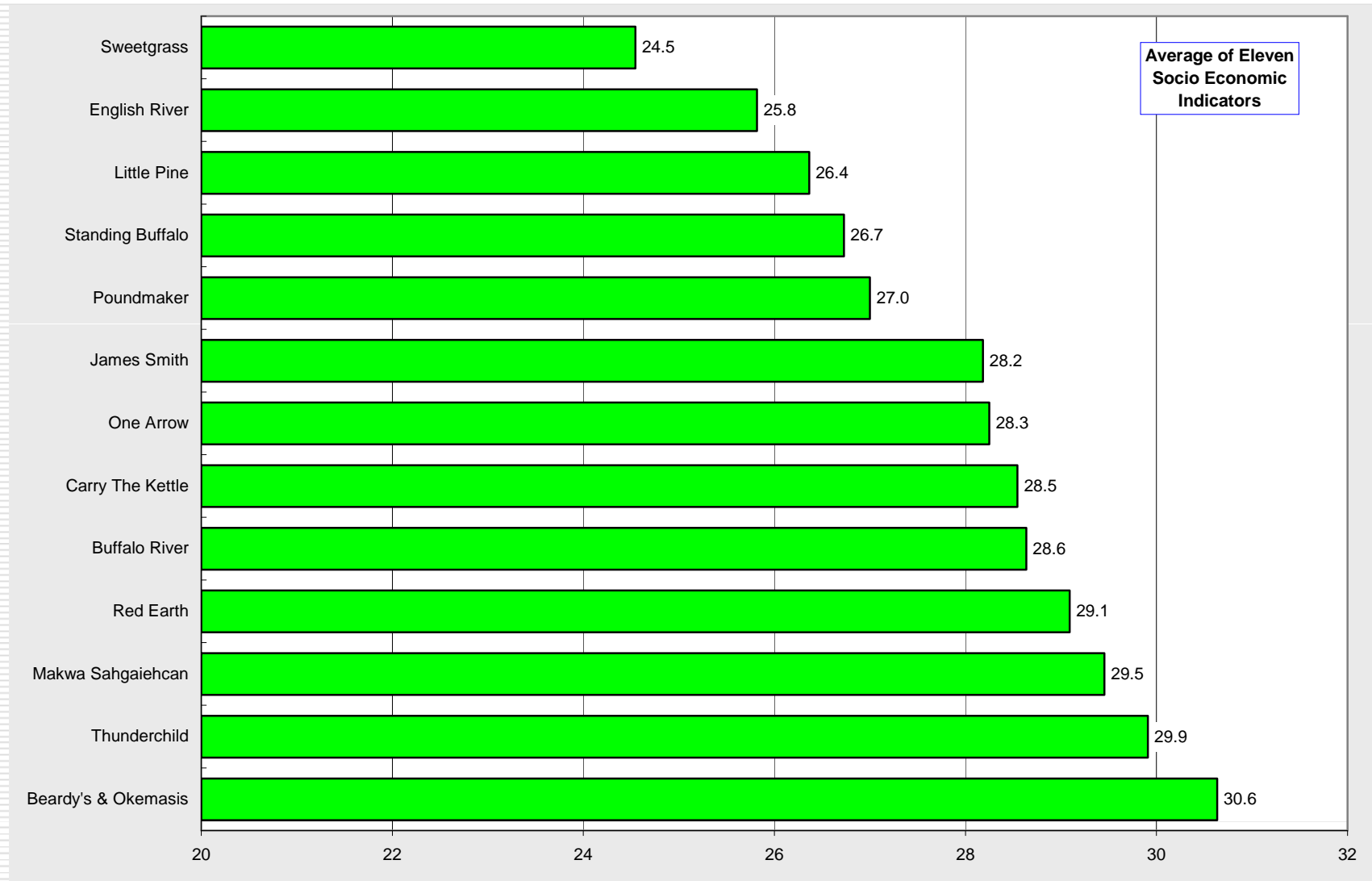
The 56 First Nations are divided into four groups according to the average ranking of the eleven indicators.

Low rankings indicate better socioeconomic statistics than high rankings. Note that differences of one or two in the average rankings are probably not significant.

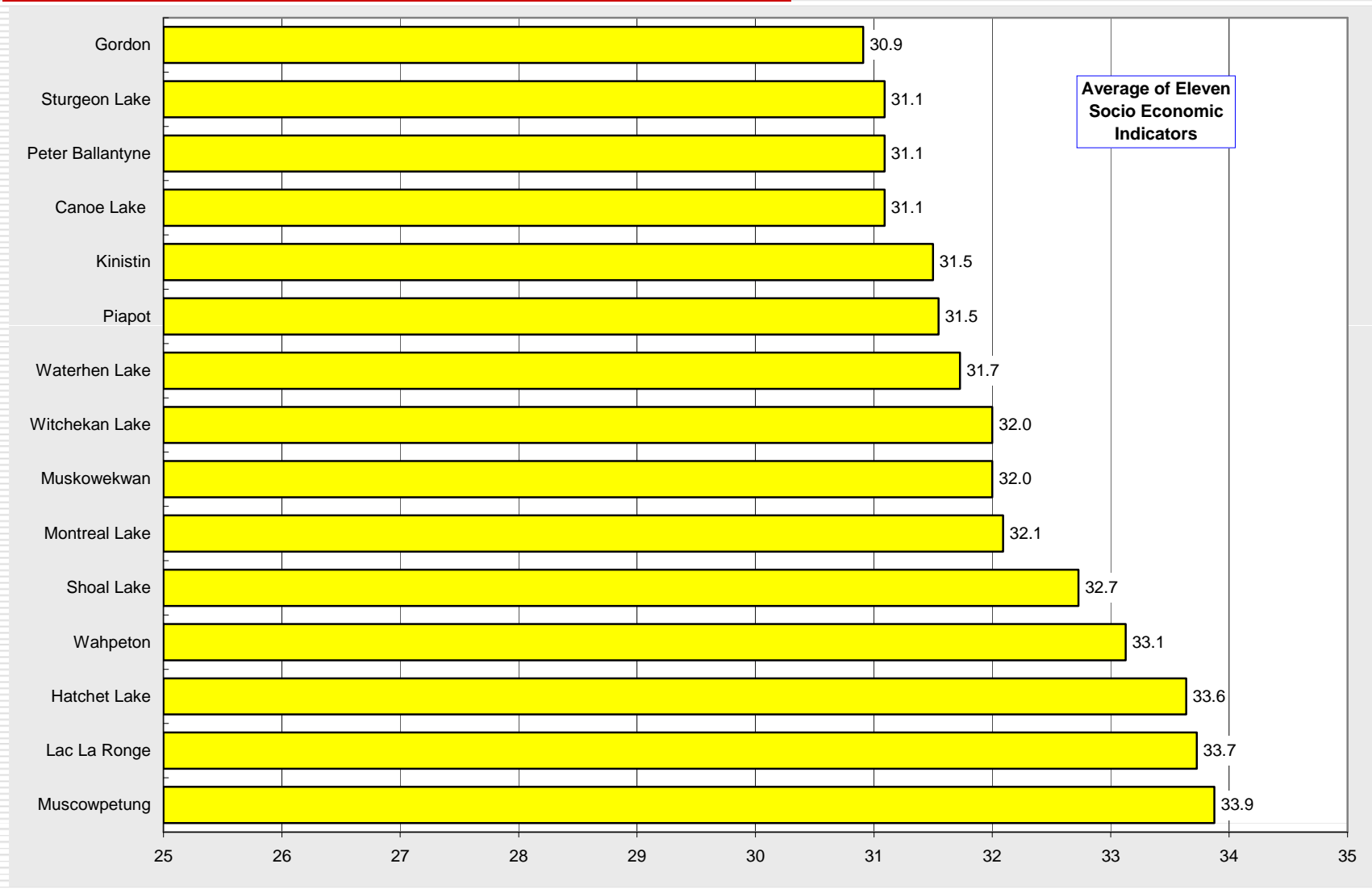
Highest Rankings



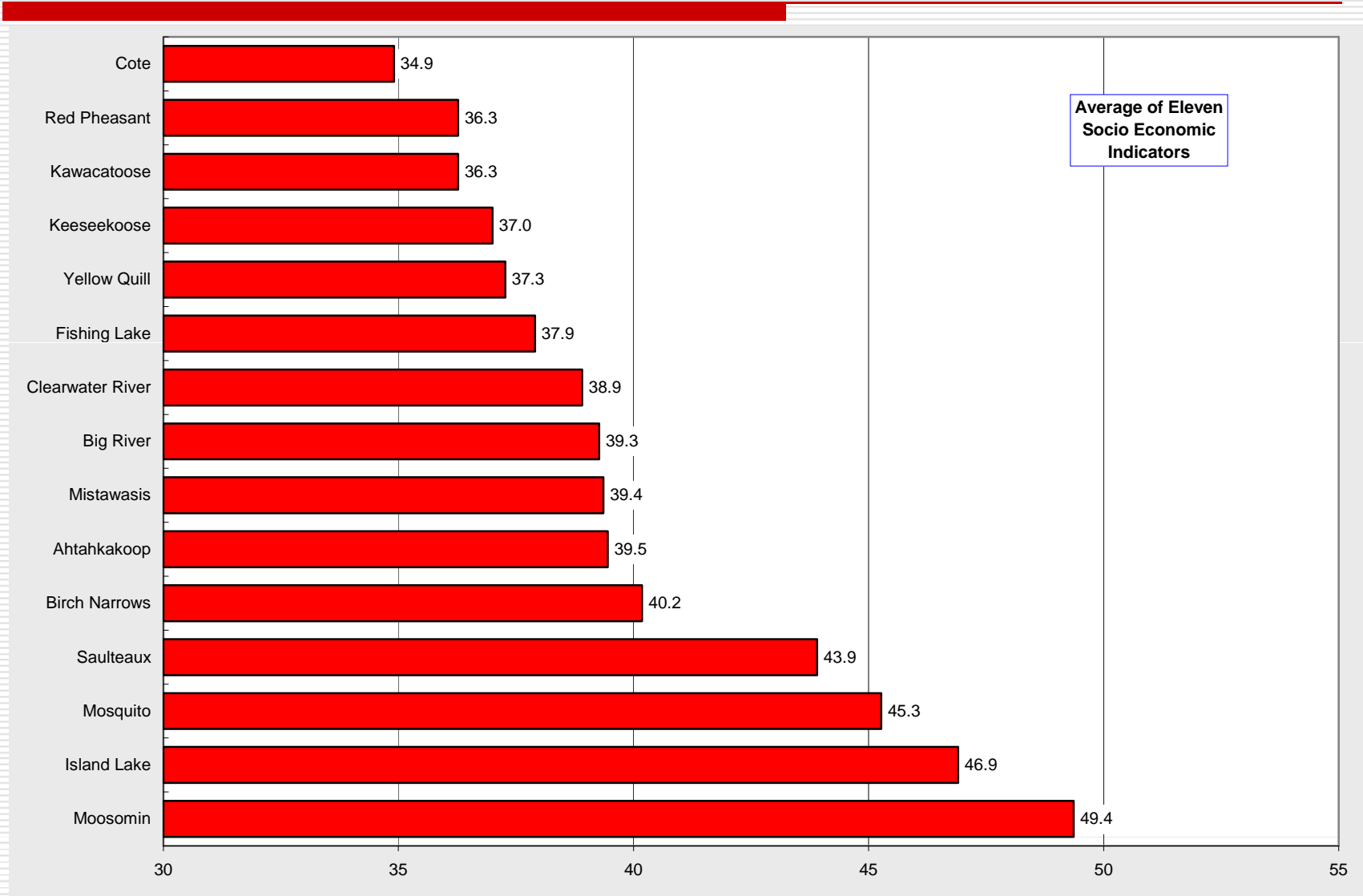
Medium to High Rankings



Medium to Low Rankings



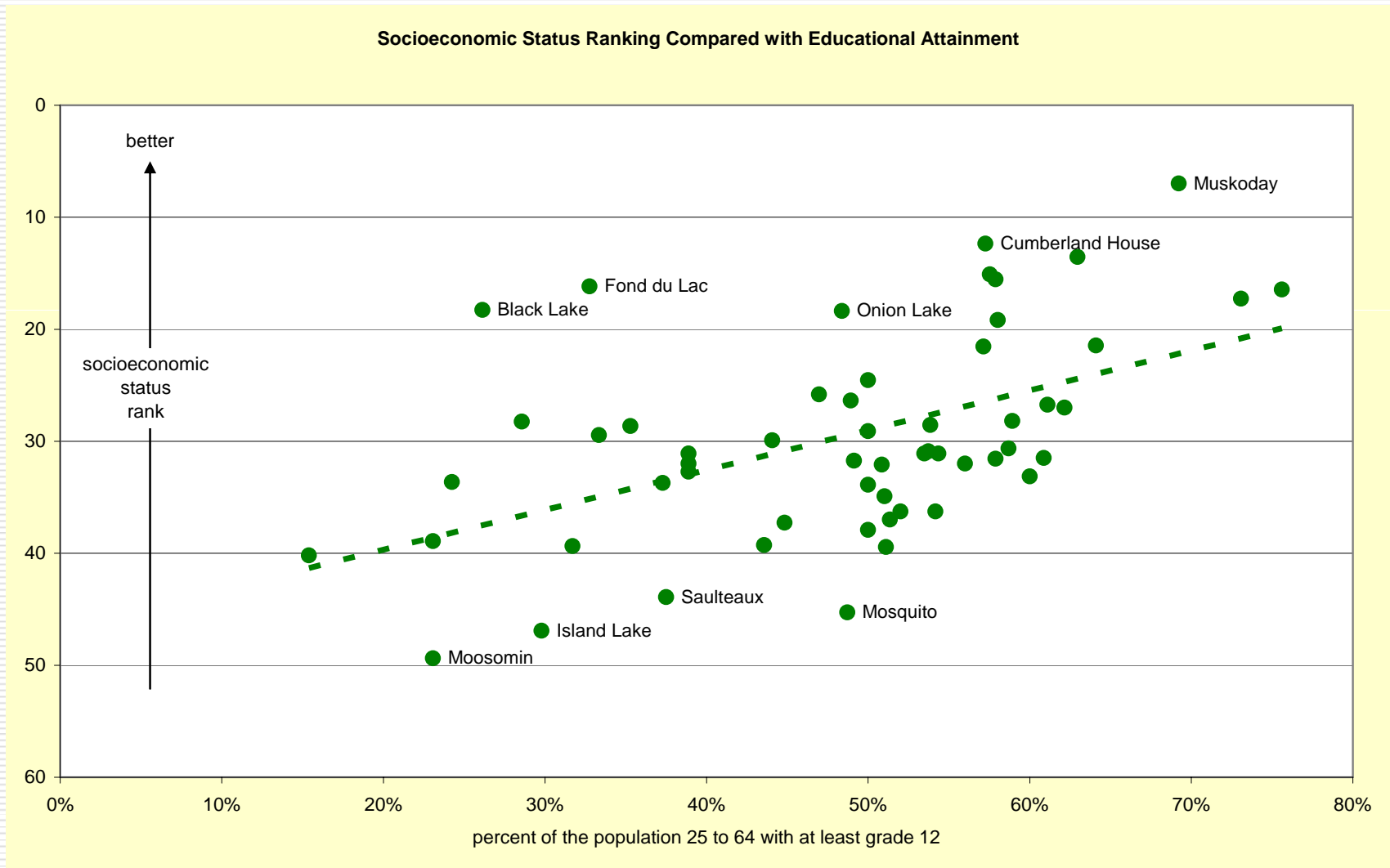
Lowest Rankings



Comparison with Education

- There is a view that is widely held that education is the key to improved socioeconomic status. This view is encapsulated by the expression that education is the “new buffalo”.
- The next step in the analysis was to see if there was a correlation between the level of completed education and the overall socioeconomic status indicator to justify such a view. The percentage of the population 25 to 64 years of age with at least grade 12 was taken as the measure of educational attainment.
- Note that there is a mobility problem with measuring educational attainment among the on-Reserve population. If those who obtain their grade 12 or a post-secondary education have to leave the Reserve to find employment (and this will be necessary for many Reserves), then the educational attainment of the on-Reserve population will be lower than if they had stayed. For this reason it would be better to measure the educational attainment of all those who were born and raised on Reserve rather than just those who are currently living there. Unfortunately this kind of data isn’t available.
- In the figure on the next page, each dot represents a First Nation and the dotted line indicates the correlation. There is correlation between completed education and socioeconomic status but the relationship is not as strong as might be expected. Several First Nations have average levels of education but a low socioeconomic status rank. The three top ranked First Nations do not have the highest level of education.

Socioeconomic Status vis-à-vis Completed Education



Proximity to Urban Centres

- There are some theoretical economic advantages if a Reserve is located close to a major urban centre because:
 - a market for First Nation consumer goods and services is nearby; and
 - First Nation members can live on Reserve and commute to work in the larger economy in the urban centre.

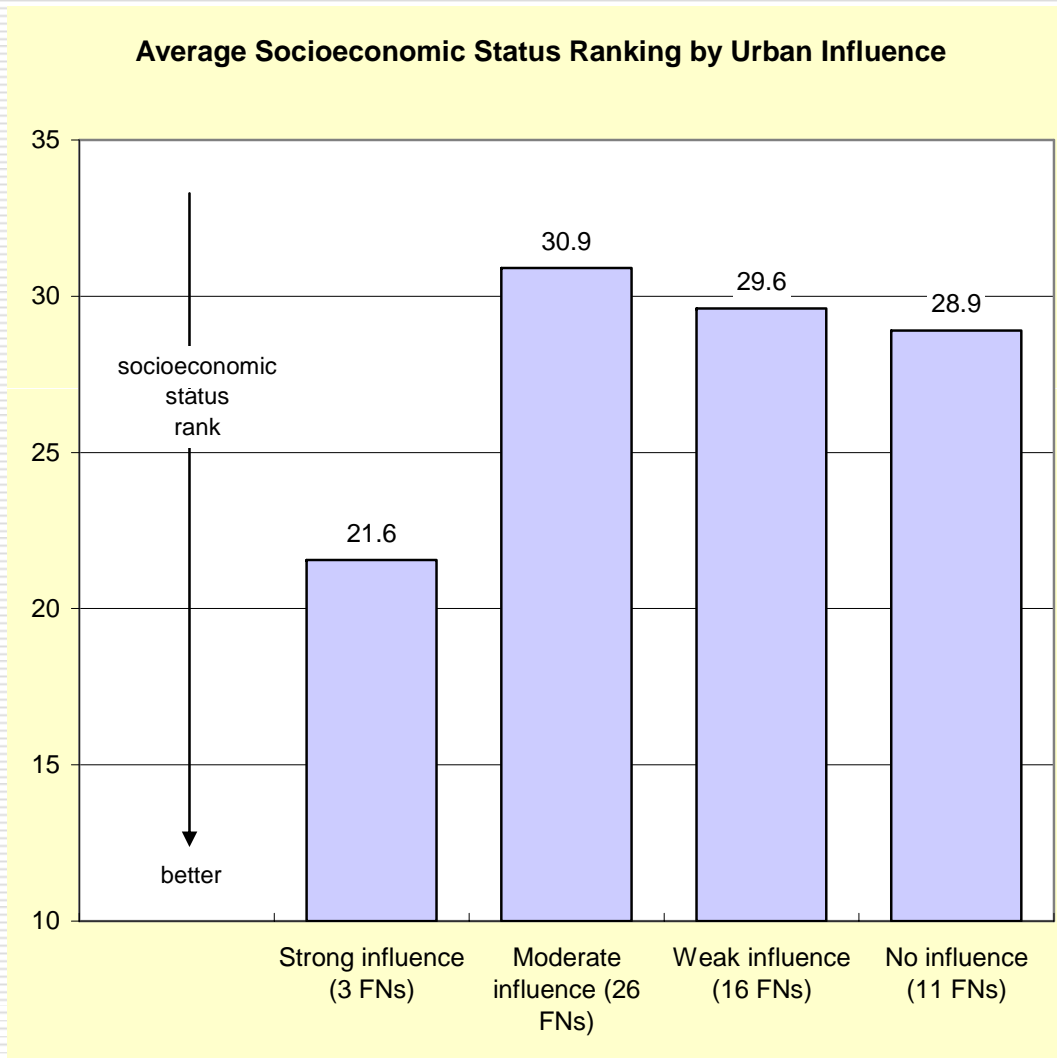
- The next step was to compare the socioeconomic status ranking with proximity to an urban centre. The proximity measure chosen is Statistics Canada's "urban influence" classification. Communities are classified into one of seven categories:

- 1 to 3 are part of an urban centre
- 4 = strong influence
- 5 = moderate influence
- 6 = weak influence
- 7 = no influence

In the classification scheme, "influence" is measure by commuting patterns so in order for the first nation to be classified, for example, as having a moderate influence from an urban area, it must take advantage of the proximity.

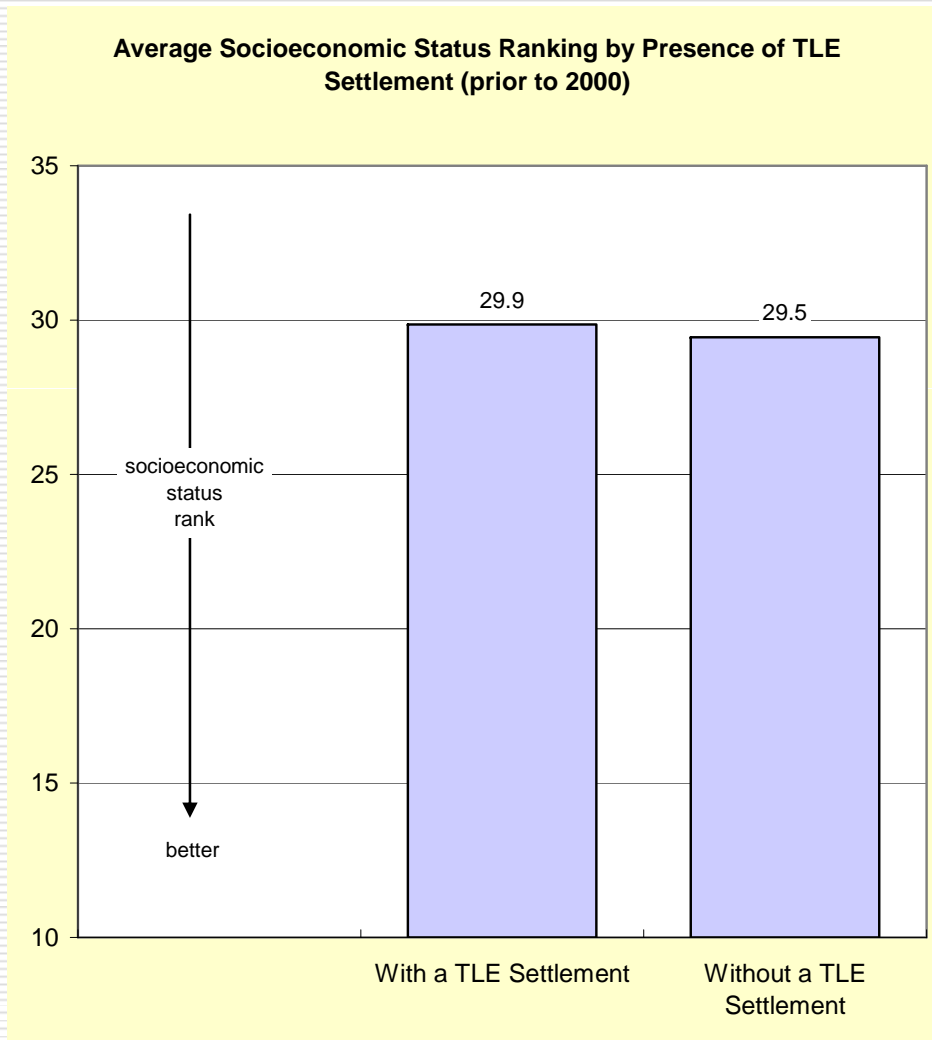
- Only one of the 56 First Nations is part of an urban centre – Wahpeton – and only two have a strong influence – Sweetgrass and Muskoday.

Socioeconomic Status vis-à-vis Urban Influence



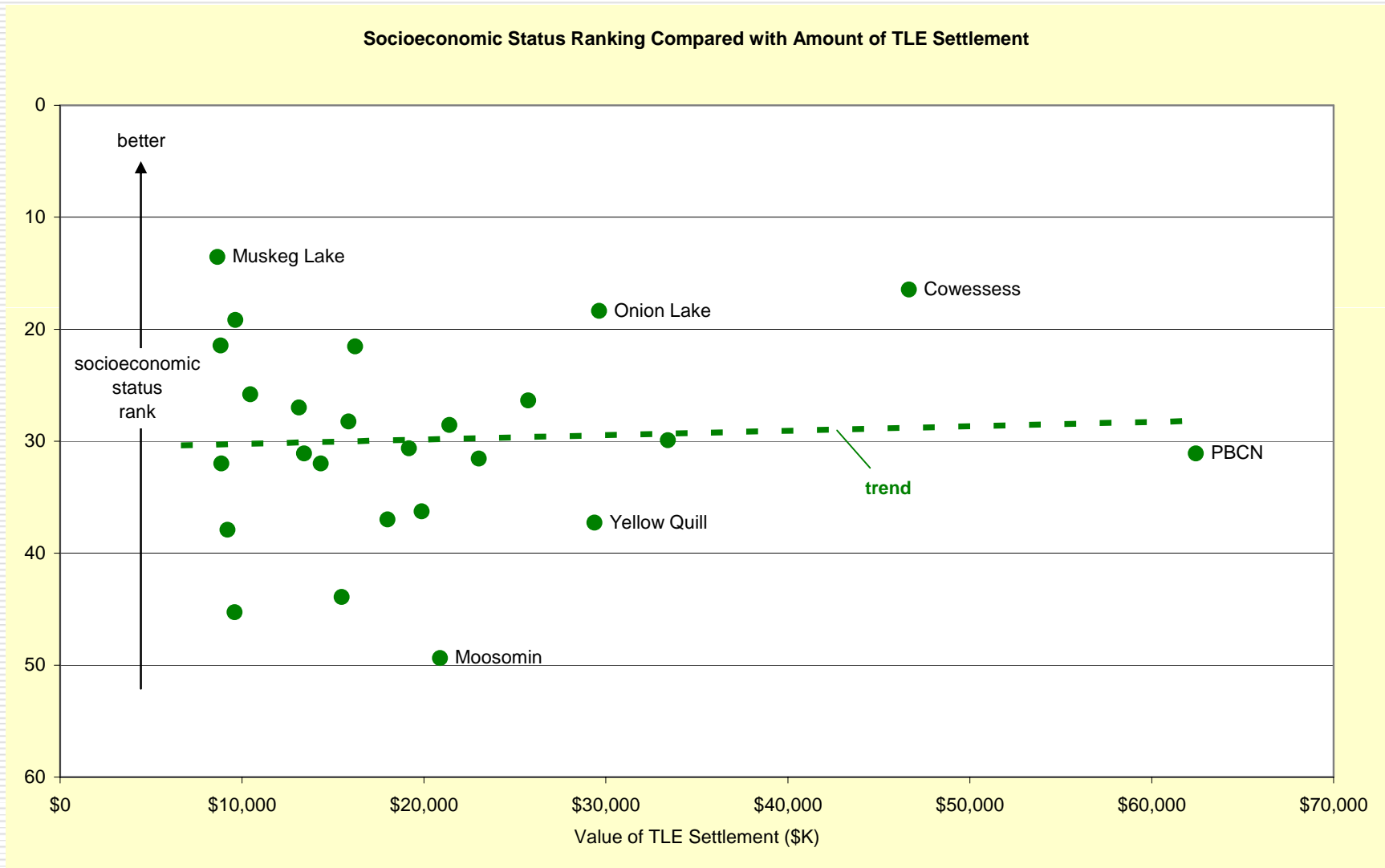
- The three Reserves that are either part of or strongly influenced by an urban centre have better socioeconomic status, an average ranking of 21.6.
- Among the other 53 Reserves influence seems to have the opposite effect, namely poorer rankings among those closer to an urban centre.
- The tentative conclusion one could draw from this imperfect data would be that proximity to an urban centre can improve socioeconomic status. But the improvement will happen only if the Reserve is very close to the urban centre and only if the First Nation takes advantage of the proximity.

Treaty Land Entitlement



- In 1992, Saskatchewan, Canada, and 25 First Nations signed the Treaty Land Entitlement Framework Agreement (TLE). TLE First Nations receive approximately \$516 million over 12 years to purchase land to add to its reserves.
- The socioeconomic status of these 25 First Nations plus Nekaneet which signed in 1992 and Cowessess and Carry the Kettle which signed in 1996 was compared with First Nations that did not have a TLE.
- The presence of a TLE settlement clearly has no effect on socioeconomic status.
- The amount of the settlement for the 28 First Nations with a TLE settlement is compared with socioeconomic status on the next page. There is no apparent relationship with the amount of TLE and socioeconomic status.

Socioeconomic Status vis-à-vis TLE Amounts



Outstanding Research Issues

- There is no consensus about whether the two large multi-community First Nations – La Ronge and Peter Ballantyne – should be treated as a single observation (as they are in this draft) or as separate communities.
- There is no measure of cost of living so First Nations in the far North have higher average incomes than those in the South by virtue of the higher social assistance payments and wage rates.
- Some “special circumstances” (e.g. Red Earth’s individual incomes) need to be documented.
- We have yet to arrive at a proxy for “access to resources” or for “good governance” which are thought to have an effect on socioeconomic status.