The Frontier Centre wishes to acknowledge the generous support of the Lotte & John Hecht Memorial Foundation, without whom this project would not have been possible.

Disclaimer:
The opinions expressed in this paper are exclusively those of the independent author(s) and do not reflect the opinions of the Frontier Centre for Public Policy, its Board of Directors, staff and/or donors.

ISSN # 1491-78 ©2015

Research conducted by the Frontier Centre for Public Policy is conducted under the highest ethical and academic standards. Research subjects are determined through an ongoing needs assessment survey of private and public sector policymakers. Research is conducted independent of Frontier Centre donors and Board of Directors and is subject to double-blind peer review prior to publication.
ABOUT THE FRONTIER CENTRE FOR PUBLIC POLICY

The Frontier Centre for Public Policy is an innovative research and education charity registered in both Canada and the United States.

Founded in 1999 by philanthropic foundations seeking to help voters and policy makers improve their understanding of the economy and public policy, our mission is to develop the ideas that change the world.

Innovative thought, boldly imagined. Rigorously researched by the most credible experts in their field. Strenuously peer reviewed. Clearly and aggressively communicated to voters and policy makers through the press and popular dialogue.

That is how the Frontier Centre for Public Policy achieves its mission.

TOM FLANAGAN

Dr. Tom Flanagan is the Chair of the Aboriginal Futures program at the Frontier Centre for Public Policy. He is Professor Emeritus of Political Science at University of Calgary, where he taught for more than 45 years, serving as Department Head, Advisor to the President and a Distinguished Fellow at the School of Public Policy. Dr. Flanagan has been Chief of Staff to Prime Minister Stephen Harper and a strategy and campaign advisor to numerous federal and provincial political campaigns. He is a Fellow of the Royal Society of Canada. He is a monthly columnist for the Globe & Mail and frequent contributor to national and international press such as Maclean’s and Time magazines, and is the author of several award-winning books on Aboriginal topics.

LAURA JOHNSON

Laura Johnson is an intern at the Frontier Centre for Public Policy. She holds an undergraduate degree from the University of Waterloo in Chemical Engineering with a minor in Economics, and she recently completed the Master of Public Policy program at the University of Calgary’s School of Public Policy. Her graduate studies focused on energy policies, particularly electricity and alternative energies.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>5</td>
</tr>
<tr>
<td>Government and Well-being</td>
<td>6</td>
</tr>
<tr>
<td>The Community Well-being Index</td>
<td>7</td>
</tr>
<tr>
<td>Towards a First Nations Governance Index</td>
<td>9</td>
</tr>
<tr>
<td>Measurement</td>
<td>11</td>
</tr>
<tr>
<td>Technical Appendix</td>
<td>16</td>
</tr>
<tr>
<td>Endnotes</td>
<td>19</td>
</tr>
<tr>
<td>Bibliography</td>
<td>21</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Honest, efficient government that respects property rights and the rule of law facilitates the achievement of prosperity and well-being in all jurisdictions, including First Nations. Therefore, it would be useful to have an index of governmental performance for First Nations. This paper takes the first steps toward constructing a First Nations Governance Index (FNGI). Seven variables, based on publicly available information, have been discovered that correlate with the Community Well-being (CWB) Index calculated for First Nations communities by Aboriginal Affairs and Northern Development Canada. A multiple regression model using these variables explains about 40% of the variance in the 2011 CWB. An additive FNGI constructed from six of the variables performs equally well as a predictor. Given that many other factors contribute to well-being, this version of the FNGI performs remarkably well. It can be used to evaluate the performance of First Nations governments and identify areas for possible improvement. Also, it can probably be further refined when additional explanatory factors are identified and gaps in the data are filled.
GOVERNMENT AND WELL-BEING

A large body of research supports the proposition that governance plays an essential role in achieving a higher standard of living and quality of life. The hallmarks of beneficial governance are open markets, widely dispersed property rights, inclusive political institutions, and stable, predictable constitutional government bound by the rule of law. The general proposition is supported not only by many case studies but by systematic quantitative analyses.¹

Scholars have also found similar results in the study of North American Native peoples. The Harvard Project on American Indian Economic Development reached this conclusion: “When Native nations back up sovereignty with stable, fair, effective, and reliable governing institutions, they create an environment that is favorable to sustained economic development. In doing so, they increase their chances of improving community well-being.”²

Econometric studies conducted by Terry L. Anderson and his collaborators have highlighted the importance of property rights and impartial adjudication of disputes to growth and prosperity on American Indian reservations.³ In Canada, several papers by John Graham have argued the importance of governmental institutions.⁴ In a quantitative study, Tom Flanagan and Katrine Beauregard found that the Community Well-being (CWB) Index for First Nations (discussed below) was positively correlated with four governance factors: use of Certificates of Possession; adoption of property tax on leases; entry into the First Nations Land Management Agreement; and avoidance of third-party financial supervision.⁵

The remainder of this paper explores possibilities for developing a First Nations Governance Index (FNGI). Our best performing model, based on data currently available for six factors, explains over 40% of the variance in CWB scores for First Nations. Improvement of the FNGI should be possible if future research can close some of the gaps in existing data and find additional objective indicators of First Nations governmental performance.

The overall FNGI, as well as the factors that compose it, can be used to evaluate the performance of First Nations governments and to see where improvement would be possible. It should be a useful tool for First Nations as well as other Canadian policy-makers in their ongoing efforts to improve the well-being of Aboriginal peoples.
THE COMMUNITY WELL-BEING INDEX

The CWB Index is a measure of standard of living and quality of life for all Canadian communities, including First Nations. It is calculated by researchers in the Department of Aboriginal Affairs and Northern Development Canada (AANDC), based on Statistics Canada census data. The time series extends back to the 1981 Census, with updates every five years except for the 1986 Census. In earlier versions it was calculated from the Census of Population; for 2011 it was based on the voluntary National Household Survey, which was sent to every household in First Nations communities. The First Nations’ response rate was 82%, higher than for other Canadian households, so the changeover to a voluntary survey is not a problem in this context.

The CWB aggregates four dimensions of well-being—income, education, labour force participation, and housing. Census data for income are logarithmically transformed to reduce the impact of high incomes, on the assumption that attainment of basic sufficiency is more important to well-being than very high individual income. Each of the other three dimensions is measured by two sub-variables, which are then amalgamated into a single score. Measures of all four dimensions are normalized, equally weighted, and added to form a single index varying from 0 to 100.

The CWB, of course, is not the last word about well-being. It does not incorporate measures of personal security, health, language retention, cultural practice, environmental integrity, religious faith, subjective happiness, or many other things that might contribute to quality of life. But it is hard to argue against the importance of income, jobs, education, and housing. Aboriginal leaders frequently state that their people desire these four things and need more of them. So, even if the CWB is not the last word on well-being, it represents a good baseline or common denominator of what almost all people, including First Nations, hope to enjoy in a modern society. In the past, it has been used for research on a variety of social, economic, and legal topics; in this paper, it will be used as a tool for exploring the effectiveness of governing institutions and practices in First Nations communities.

Based on data from the 2011 Census, the CWB calculated for 452 First Nations ranged from 37 to 90, with a mean of 59, compared to a mean of 79 for other Canadian communities.

Figure 1: Community Well-being Index, 1981–2011
Figure 1 shows that this difference in means of 20 points has persisted with minor variations ever since the CWB was first computed on the basis of 1981 Census data.\(^9\)

The good news for First Nations is that their average CWB has been steadily increasing over the last three decades. The less positive news is that the gap between First Nations and other Canadian communities, after seeming to narrow a little in the 1990s, has widened again and is now as great as it was in 1981. One goal of research, therefore, should be to investigate if there are “best practices” in Aboriginal governance associated with higher CWB scores. If so, both federal policy-makers and First Nations leaders could encourage such practices to help close the gap in standard of living between Aboriginal peoples and other Canadians.

Of course, many factors contribute to the CWB. As shown in Figure 2, the difference between the lowest 2011 CWB mean for First Nations (Manitoba) and the highest (Yukon) is as great as the 20-point difference between the overall First Nations mean and the average of other Canadian communities.

Location is a brute fact that is not under anyone’s control. Governance, in contrast, is a set of practices based on human contrivance. There is always a lot of inertia, but it is possible for First Nations to change their practices, bylaws, and (in cooperation with the federal government) provisions of the Indian Act in order to emulate the success of other First Nations. Thus arises the value of measuring the success of First Nations governments, discussed in the remainder of this paper.
TOWARDS A FIRST NATIONS GOVERNANCE INDEX

One method of measuring the performance of governments is through survey research, i.e., asking citizens or subjects what they think of the government under which they live. During the years 2006–2011, the Frontier Centre for Public Policy carried out a number of projects of this type in an attempt to measure First Nations governance. Methodological and practical problems led the Frontier Centre to discontinue the survey approach, but these pioneering efforts put the issue of First Nations governance on the research agenda and have led to the approach proposed here.

Most First Nations are small, and many members do not have telephones or are reluctant to speak with an outside market research firm. Hence it was difficult through telephone contact to construct random samples with adequate size. Personal visits to reserves resulted in more interviews, but that was even more expensive than telephone research, and the samples collected through personal contact were fortuitous rather than random. Also, the survey was voluntary, so the roster of participating First Nations varied greatly from year to year. First Nations receiving low scores one year might drop out the next year. Results, therefore, were highly variable over time. For all these reasons, the Frontier Centre decided that the survey approach was too expensive, and the results too inconsistent, to justify continuation.

Another approach, used for example by the American think-tank Freedom House in its Freedom of the World publications, relies on the opinions of knowledgeable raters, which are aggregated into overall scores. This approach is fundamentally subjective but can be made quite reliable by rigorous training of raters and review of their results. It would be difficult, however, to apply the expert rating approach to Canadian First Nations because there are so many of them—about 600—as compared to the approximately 200 nations of the world. Most Canadian First Nations are small and little known to outsiders, and no independent experts specialize in studying them. It would be a daunting—perhaps impossible—task to find qualified independent raters for all or even most of them.

Finally, it is possible to use variables found in, or constructed from, publicly available objective data. This is in general terms the approach used in the Economic Freedom of the World and other ranking systems for national governments. Most nations generate a wide range of information available to the public, including budgets, treaties, legislation, census data, currency exchange rates, economic reports, trade flows, and criminal justice statistics. But there are three main practical problems in applying this approach to the measurement of First Nations governments.

First, Canadian First Nations are in many respects identical to each other and to all Canadian jurisdictions. They all use the same currency—the Canadian dollar. They are all bound by the same Criminal Code, Charter of Rights and Freedoms, and judicial structures. Civil law varies from province to province, but First Nations do not have their own bodies of civil law. Hence a great many ways in which national and provincial governments differ from one another are irrelevant to First Nations.

Moreover, even where First Nations differ, they do not publish information in the same way as national and provincial governments. They do not, for example, publish digests of by-laws or band council decisions comparable to statute books or compilations of executive orders. Until recently, budgets were also treated as confidential, though that has changed as a result of the First Nations Financial Transparency Act. In general, even though First Nations have governments with the right to make certain decisions that are binding upon their members and within their territories, they are also to some degree considered private entities in Canadian law, with the result that there is much
less information about them available to the public than about national governments, provinces, or municipalities.

Finally, much information that is publicly available about First Nations is not related at all, or at least not closely, to the performance of their governments. For example, some First Nations have favourable locations in metropolitan areas or close to natural resource plays, while others are in remote locations where there is no economic activity. Location will certainly have a statistical association with the CWB, but it does not result from the decisions of First Nations governments. To be useful, an indicator must measure something that is under the control of First Nations themselves.
MEASUREMENT

In a paper published by the Fraser Institute in 2013, Flanagan and Beauregard identified four measurable governmental factors that were positively correlated with the 2006 CWB:

- Number of Certificates of Possession (CPs) divided by resident population: The CP is the highest form of private property available to First Nation members on their reserves. It is granted by the Minister of Aboriginal Affairs and Northern Development after approval by chief and council, so it represents a decision of the First Nation’s government. CPs confer secure, legally protected possession of land for farming, building a home, or running a business. Dividing by resident population creates a measure of the importance of CPs relative to the size of the First Nation.

- Adopting a system of property taxation for lease land on the reserve: A decision in this direction recognizes the economic value of land and raises revenue for the local First Nation government.

- Entering the First Nations Land Management Agreement, which gives the First Nation control over its reserve land, allowing use for economic purposes without having to get approval from the Minister. This shows recognition of the value of land as well as a degree of organizational capacity.

- Keeping its own budget in the black, thereby staying out of the three levels of external supervision imposed by AANDC upon First Nations that start running deficits.

Subsequent research has identified three additional variables that are under First Nation governments’ control and are also statistically associated with the CWB:

- Entering a formal self-government agreement with Canada entrenched in legislation: This gives the First Nation all the powers conferred by the Land Management Agreement and more. It is the ultimate in autonomy available without seceding from Canada.

- Percentage of the First Nation’s budget earned by its taxing and business operations—“own source revenue,” as it is usually called: This indicates how active the band has been in developing its assets into income-generating contracts and businesses.

- Payment of councillors: Perhaps counter-intuitively, this is a negative predictor; higher pay for councillors is negatively correlated with the CWB. Our tentative interpretation of this result is that high payment indicates that local government is highly politicized, serving more as a revenue source for influential individuals and their families rather than as a businesslike custodian of collective assets.

The four previously discovered variables and the three new ones together give us seven factors from which to construct an FNGI (see the Technical Appendix for further details on all variables). Table 1 below shows the bivariate correlations of each of these seven factors with the 2011 CWB. All are statistically significant at better than the .01 level.

<table>
<thead>
<tr>
<th>Table 1: Correlation of Governance Indicators with 2011 CWB Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-government Agreement</td>
</tr>
<tr>
<td>Certificates of Possession</td>
</tr>
<tr>
<td>Property Tax</td>
</tr>
<tr>
<td>Land Management Agreement</td>
</tr>
<tr>
<td>External Financial Management</td>
</tr>
<tr>
<td>Payment of Councillors (logged)</td>
</tr>
<tr>
<td>Percent Own Source Revenue</td>
</tr>
</tbody>
</table>

Table 2 shows the coefficients and probabilities for the multiple regression of the 2011 CWB upon six of the seven governance factors. The variable for self-government agreements is not included in the equation because, when
it was combined with all the other variables, missing cases caused all the variance in self-government to be deleted.

Table 2: Multiple Regression of 2011 CWB upon Governance Factors

\[
2011 \text{ CWB} = 45.44 + 0.32 \text{Independent Property Taxation Score} + 1.17 \text{Default Management Score} + 0.47 \text{Land Management Score} + 9.4 \text{Parcel/Pop} + 4.0 \text{Councillors’ Remuneration} + 9.1 \text{Percent Own Source Revenue}
\]

<table>
<thead>
<tr>
<th></th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>45.44</td>
<td>1.58</td>
<td>28.73</td>
<td>1.66E-92</td>
</tr>
<tr>
<td>Property Taxation</td>
<td>0.31</td>
<td>0.10</td>
<td>3.06</td>
<td>0.00238</td>
</tr>
<tr>
<td>Default Management</td>
<td>1.17</td>
<td>0.17</td>
<td>7.01</td>
<td>1.23E-11</td>
</tr>
<tr>
<td>Land Management</td>
<td>0.46</td>
<td>0.14</td>
<td>3.38</td>
<td>0.000803</td>
</tr>
<tr>
<td>Parcel/Pop</td>
<td>9.36</td>
<td>2.01</td>
<td>4.66</td>
<td>4.54E-06</td>
</tr>
<tr>
<td>Councillors’ Remuneration</td>
<td>-3.97</td>
<td>9.39</td>
<td>-4.23</td>
<td>2.97E-05</td>
</tr>
<tr>
<td>Percent Own Source Revenue</td>
<td>9.10</td>
<td>2.22</td>
<td>4.09</td>
<td>5.35E-05</td>
</tr>
</tbody>
</table>

The multiple correlation (R) of 0.63 is highly significant statistically, and the R Squared of .40 shows that the six factors taken together explain 40% of the variance in the 2011 CWB. This is an impressive result, given that the CWB is undoubtedly affected by factors other than governance, such as the First Nation’s cultural background, location, endowment with natural resources, and access to education and employment. Governance can’t explain everything about differences in CWB, but it explains quite a bit—and what is explained by governance is especially important because it is under the control of First Nations themselves. To some degree, they have it within their power to provide their own people with a higher standard of living and a better quality of life by improving their governance.

One negative feature of multiple regression is that use of so many factors reduces the sample size to 343, out of approximately 600 First Nations. This occurs because several of the variables have a large number of missing values. If a First Nation’s information is missing on even one variable, that First Nation is dropped from the analysis, even if values are present for all the other variables. For example, the list of individual land allotments provided by AANDC contained data for only 463 First Nations; and as other variables are added into the equation, the number of operative cases drops further to 343.

Multiple regression is the best statistical procedure for analyzing the data, but it does not produce intuitively understandable results for readers unless they have quite a bit of formal training in statistics. The results are much easier to convey by combining the governance factors into a single FNGI. (Self-government is included here because of its self-evident face validity, even though it could not be tested in the multiple regression analysis.) This can be done by normalizing all factors on a scale that runs from 0 to 10 and adding the results.

Normalization is done by dividing each value by the maximum value for that variable. To take a random example, average compensation for councillors in Alberta’s Alexander First Nation in 2013–14 was $141,020.86. Maximum average compensation for councillors among all bands in Canada that year was $389,620.80. Dividing the first value for that variable by the maximum value and multiplying by 10 equals 3.62. Then, since the correlation with CWB in this instance
is negative, 3.62 must be subtracted from the maximum value of 10, yielding a final score of 6.38.

Missing data, however, present a problem for construction of the FNGI. As in the multiple regression analysis, a First Nation can only be included if its values are present in all variables. If there is missing data, a First Nation will not have an FNGI score. Broadly speaking, there is a trade-off between predictive value and inclusiveness. If more variables are used to construct the FNGI, it will make it a better predictor but will also exclude more First Nations because of the missing data problem. Table 3 highlights the issue:

Not surprisingly, the six- and seven-factor FNGIs predict CWB more accurately than the four- and five-factor formulas. The most accurate predictor is Formula F, a six-factor FNGI combining these variables:

- Property tax system
- Staying out of default management
- Entry into a Land Management Agreement
- Self-government
- Prevalence of individual allotments (CPs)
- Generation of own source revenue

With a correlation coefficient of 0.65, this six-factor FNGI is an even better predictor than the multiple regression equation (R = 0.63). But there is a price to pay for increased accuracy. Because of missing data, Formula F can be computed for only 343 cases. If and when the missing data can be filled in, another formula may prove to be superior to this one. The results, therefore, should be seen as provisional, subject to improvement by updating and locating missing data.

Nonetheless, the six-factor FNGI performs impressively well, as shown by the scatterplot in Figure 3:

The six-factor FNGI is obviously a useful predictor. The regression line heads up and to the right, showing a positive association. The slope of the regression line (0.43) shows that on average an increase of one point in the FNGI is associated

<table>
<thead>
<tr>
<th>Formula</th>
<th>n included</th>
<th>correlation with 2011 CWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>461</td>
<td>.49</td>
</tr>
<tr>
<td>B</td>
<td>376</td>
<td>.37</td>
</tr>
<tr>
<td>C</td>
<td>426</td>
<td>.49</td>
</tr>
<tr>
<td>D</td>
<td>421</td>
<td>.51</td>
</tr>
<tr>
<td>E</td>
<td>347</td>
<td>.55</td>
</tr>
<tr>
<td>F</td>
<td>343</td>
<td>.65</td>
</tr>
<tr>
<td>G</td>
<td>421</td>
<td>.53</td>
</tr>
<tr>
<td>H</td>
<td>343</td>
<td>.57</td>
</tr>
</tbody>
</table>
with an increase of 0.43 in the 2011 CWB. That is a practically as well as statistically significant association. If a First Nation could take actions to increase its FNGI by 10 points, thereby leading over time to an increase of 4.3 in its CWB, that would represent a noticeable improvement in well-being. That is as much improvement as occurred in the national average of First Nations’ CWB from 1996 to 2011.

As always in statistical analysis, the data points do not lie directly on the regression line; rather, they make up a cloud around it, showing that the FNGI is not a perfect predictor of CWB. But an index does not have to be a perfect predictor in order to be useful; it only has to highlight a general tendency, which in this case is the positive relationship between good governance and well-being in First Nations communities. With a correlation of 0.65, r squared is 0.42; that is, the six-factor Formula F explains 42% of the variation in the 2011 CWB.

The six variables making up the FNGI tap into multiple underlying factors, including property rights and governmental efficiency. Granting CPs, adopting a property tax system, entering the Land Management Agreement, and generating own source revenue show respect for property rights and recognition of real property as a valuable asset that can create a stream of income for the First Nation’s government and members. Adopting a property tax system, qualifying for the Land Management Agreement, and staying out of external financial supervision also show a degree of organization and efficiency. Earning own source revenue is evidence of a business-like attitude toward self-government.

Once it is fully developed, the FNGI will be a measuring stick that First Nations can use to chart their progress toward self-government that improves the well-being of their own people. First Nations will be able to see whether they have adopted “best practices” that are demonstrably linked to higher levels of well-being. If First Nations governments are sluggish, their citizens will have the FNGI to use as an independent standard of evaluation.

Of course, no First Nation pursues all of the paths leading to a higher score on the FNGI. Some encourage their members to create individual income and opportunity through use of semi-privatized land (CPs). Others generate revenue through granting leases and imposing property taxes, while still others have created band-owned business to create own source revenue. Many have taken more control of their own assets by entering the Land Management Agreement. Successful First Nations also tend to stay out of financial trouble and hold councillors’ compensation to reasonable values. And all of these practices can be combined in various ways. The factors of the FNGI represent a menu of possibilities leading to better governance and higher CWB scores—that is, a higher standard of living and better quality of life for those who live in First Nations communities.

Let us close with three qualifications. First, correlation is not causation. It is plausible that better governance causes a higher CWB, but it is equally plausible a higher CWB leads to expectations of better governance. The factors of the FNGI should be interpreted as “best practices” in the sense that they are more commonly found in successful communities, but they are not magic bullets whose mere adoption will automatically improve matters for First Nations. Adopting all or some of them should help First Nations achieve a higher standard of living and quality of life over time, but much other work will also be required.

Second, the FNGI measures a combination of respect for property rights and efficient, honest, economical administration. These values are important but they do not represent everything in life. The FNGI says nothing about the degree of democratic participation in band government, language retention, cultural practices, or many other things that First Nations may consider vital to their way of life. A higher score on the FNGI will not guarantee achievement or preservation of these other values.

On the other hand, nothing in the FNGI is contrary to these values. Indeed, running an honest, efficient, economical
government that respects property rights and finds ways for both individuals and the community to generate own source revenue can help achieve some of them. Additional revenue can help pay for language instruction and cultural events. Economical and efficient government is compatible with, and can benefit from, vigorous community participation. And a higher standard of living and quality of life can assist a First Nation's quest for cultural self-determination.

Finally, this is only an initial version of the FNGI. The authors hope that further research will update the variables described in the Technical Appendix and also lead to the discovery of additional factors that can be incorporated into the FNGI. Addition of further variables would facilitate the creation of sub-indexes—for example, one for financial administration, another for land management, and perhaps a third for administrative efficiency. Such sub-indexes would give more precise indications to First Nations of where they can improve their governmental performance. In the spirit of improvement, we will welcome any suggestions from readers that might make the FNGI a better measuring instrument.
This appendix describes the seven factors or variables that have been used in generating the First Nations Governance Index (FNGI). Data constituting variables 1, 3, 4, and 5 were collected by Frontier Centre interns in late 2014 and early 2015. These factors change frequently and will need to be periodically updated to maintain the accuracy and usefulness of the FNGI. Variables 6 and 7 were derived by Laura Johnson from data posted on the First Nation Profiles pages of the Department of Aboriginal Affairs and Northern Development Canada (AANDC) website. The specific data relate to the fiscal year 2013–14 and were reported pursuant to the First Nations Financial Transparency Act. These data will also have to be updated annually in order to maintain the FNGI. The unique case of Variable 2 will be described in more detail below.

Variables 1, 3, 4, and 5 were originally coded between 0 and 10. The other variables consist of numerical values that had to be normalized to a 0–10 range before they could be added together with the first four variables. Normalization was carried out for each variable by dividing all values by the maximum value for that variable and then multiplying the ratio by 10.

**Variable 1: Self-government Agreements**

Thirty-nine First Nations who are part of a legislated self-government agreement were coded 10, all others 0. The number 39 may seem high, but many First Nations in Quebec, Yukon, and British Columbia that are party to self-government agreements consist of several villages, each of which is coded separately. This variable will have to be updated occasionally as new self-government agreements are legislated.

**Variable 2: Parcel/Pop**

Parcel/pop was constructed for an earlier paper by Flanagan and Beauregard, based on data furnished to the authors by AANDC in fall 2011. At the time, the department had a record of more than 44,000 individual land allotments on Indian reserves, mostly CPs, plus a few others such as veterans’ allotments. AANDC kindly provided the total number of allotments for each First Nation. To construct parcel/pop, the authors then divided that number by the on-reserve population enumerated in the 2006 Census of Canada. The resultant variable measures the density of individual allotments on reserve land and is thus an approximate measure of the First Nations’ utilization of private property in the highest form now available under the Indian Act. Parcel/pop was not updated for this study because the data used to construct it change relatively slowly, and the AANDC civil servant who did the special data run is no longer in the same position. However, it should probably be updated periodically with new census data if the FNGI is to be maintained.

Parcel/pop ranges from 0 to 1.44, n = 463. The median is 0, and the mean is 0.081.

**Variable 3: Property Tax**

A First Nation was coded 0 if it had not adopted a system of property tax and 10 if it had adopted property tax under either Section 83 of the Indian Act or under the First Nations Fiscal Management Act. An up-to-date list is maintained by the First Nations Tax Commission (FNTC). In this database, 85 of 343 First Nations were scored as 10, yielding a mean value of 2.48. The FNTC listed 139 participating First Nations as of September 7, 2015; the number is smaller here because First Nations with other missing data were not included in calculating the FNGI. This variable changes several times a year as additional First Nations adopt property tax, so it will have to be updated regularly in the future to maintain the FNGI.

**Variable 4: Land Management Agreement**

A First Nation was scored 0 if it was not at all under the First Nations Land Management Act, 5 if it was in the
development stage, and 10 if it was fully operational, either under the Act or as part of a self-government agreement. Data were taken from three Internet sources. Of the 635 First Nations in the database, 85 scored 10 and 63 scored 5, with the remainder at 0, for a mean score of 2.60. As with the property tax variable, changes occur from time to time as additional First Nations enter the First Nations Land Management Act, so periodic updating will be necessary.

**Variable 5: External Financial Management**

This variable is based on the level of external management imposed upon a First Nation by AANDC. A First Nation was coded 10 if there was no external management. It was coded 6.67 if it was in the first level, in which it must develop an approved plan to bring its budget back into balance; 3.33 if it was in the second level, in which an external adviser is appointed; and 0 if it was in the third level, in which an external manager is appointed. See the department’s “Default Prevention and Management Policy 2013.” Data were collected in late 2014 from AANDC’s “Report by Region on List of Recipients with Default Management Under Way.” The list changes from time to time, so updating will be necessary to maintain the FNGI. In our database, 483 First Nations scored 10, 72 scored 6.66, 67 scored 3.33, and 13 scored 0, yielding a mean score of 8.84. This distribution is a useful reminder that most First Nations stay out of financial trouble most of the time.

**Variable 6: Payment of Councillors (Logged)**

Data for this variable came from the disclosures for the fiscal year 2013–14 filed under the First Nations Financial Transparency Act and posted on the First Nation Profiles pages of the AANDC website. We added together all payments reported to councillors in each band, including salary, expenses, and travel, then divided by the number of councillors (not all are paid exactly the same) to produce a variable for total average remuneration of councillors. Variable 6 consists of the natural logarithms of these remuneration figures. We logged the data because the distribution of total average compensation for councillors is far from normal, with a long tail of high values to the right. We then normalized the distribution of logarithms by dividing all values by the highest value, multiplying by 10, and then subtracting from 10 to account for the reversed polarity of the variable (it correlates negatively with the CWB). New compensation data will be reported every year, and 2014–15 data have already begun to appear in the First Nation Profiles. However, many First Nations are late with their 2014–15 reports or are perhaps boycotting the process. Prime Minister Justin Trudeau had pledged in August 2014 to repeal the Act, though the 2015 Liberal campaign platform promised further consultation without being specific about repeal. If the legislation is repealed or not rigorously enforced in the future, annual updating of this variable will not be possible and it will gradually lose its validity.

**Variable 7: Percent Own Source Revenue**

Under the First Nations Financial Transparency Act, First Nations are required to file annual audited statements of revenue and expenditures as well as assets and liabilities. These are posted on the AANDC website along with information on compensation of chief and council (see Variable 6 above). Variable 7 is constructed from the 2013–14 financial statements. The revenue that appears to be “own source”—leases, property taxes, business earnings, etc.—is divided by total revenue to produce a ratio varying from 0 to almost 1.0. That ratio is then multiplied by 10 to normalize it for aggregation in the FNGI. Categories and terminology are not entirely consistent across the financial statements, so an element of subjectivity was involved in deciding which revenues to classify as “own source.” The classification could be checked with AANDC and made more precise if the FNGI is to be continued in the future. As other researchers have recently pointed out, it would be useful if AANDC would impose a standard set of categories for reporting.
It should be remembered that a high level of own source revenue may be due as much to good luck as to good management, e.g., being situated near a large city or on top of an oil field. Yet the rewards of good luck are not automatic; even with the best of luck, the First Nation must be ready to take advantage of it to generate own source revenues. As Louis Pasteur said, “fortune favours the prepared mind.”
ENDNOTES


7 In the final stages of preparing this paper, the newly elected Liberal government changed the name of AANDC to Indigenous and Northern Affairs Canada, http://www.huffingtonpost.ca/2015/11/04/aboriginal-affairs-name-change_n_8475496.html. We have continued to use the previous name, as it may be some time until Internet addresses are converted to the new name.


9 Figure 1, https://www.aadnc-aandc.gc.ca/eng/1345816651029/1345816742083.

10 The reports are archived at http://archive.fcpp.org/aboriginal-governance-index.


13 In Montana Band of Indians v Canada (Minister of Indian and Northern Affairs), [1989] 1 FC 143 (TD), the Federal Court held that the Montana Band was not required to release budgetary information to journalists. In Canada (Indian Affairs and Northern Development) v Sawridge Band, 2009 FCA 245, the Federal Court of Appeal held that the Sawridge Band could not withhold financial information from its own members.

14 Flanagan and Beauregard, “The Wealth of First Nations.”

15 The precise number of First Nations is elusive, depending on how certain types of situations are counted (e.g., multiple bands consolidated into one nation, very small bands that may have no members living on reserve, bands in the process of division or consolidation, bands seeking formal recognition under the Indian Act).


18 Flanagan and Beauregard, “The Wealth of First Nations.”

19 Indian Act, s 20.


BIBLIOGRAPHY


