

**Managing the Ksa'a'hko Network:
First Nations Land Governance Practices that Contribute
to Community Wellbeing**

**by
Jordan Brears**

HBA, Western University, 2013

Project Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Public Policy

in the
School of Public Policy
Faculty of Arts and Social Sciences

© Jordan Brears 2020
SIMON FRASER UNIVERSITY
Spring 2020

Copyright in this work rests with the author. Please ensure that any reproduction or re-use is done in accordance with the relevant national copyright legislation.

Approval

Name: **Jordan Brears**

Degree: **Master of Public Policy**

Title: **Managing the Ksa'a'hko Network:
First Nations Land Governance Practices that
Contribute to Community Wellbeing**

Examining Committee: **Chair:** Dominique Gross
Professor, School of Public Policy, SFU

Doug McArthur
Senior Supervisor
Professor

Maureen Maloney
Internal Examiner
Professor

Date Defended/Approved: March 12, 2020

Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

- a. human research ethics approval from the Simon Fraser University Office of Research Ethics

or

- b. advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University

or has conducted the research

- c. as a co-investigator, collaborator, or research assistant in a research project approved in advance.

A copy of the approval letter has been filed with the Theses Office of the University Library at the time of submission of this thesis or project.

The original application for approval and letter of approval are filed with the relevant offices. Inquiries may be directed to those authorities.

Simon Fraser University Library
Burnaby, British Columbia, Canada

Update Spring 2016

Abstract

Self-determination is an important element in achieving improved wellbeing for First Nations communities. The First Nations Land Management Act (FNLMA) allows First Nations communities to self-govern land management functions through the development of community land codes, which houses a community's land policies. Good governance is an important factor in building effective institutions and contributing to improved wellbeing. However, there is little available evidence that identifies what aspects of land codes constitute good governance and how they contribute to the community as a whole. This study utilizes a Qualitative Comparative Analysis to identify governance practices within First Nations land codes that contribute to improved socio-economic and cultural outcomes. The end result culminates into sets of recommended policies that are applicable for specific First Nations communities at different points of time along their FNLMA journey.

Keywords: First Nations Governance; First Nations Self-Determination; First Nations Land Management Act; First Nations Land Codes; Qualitative Comparative Analysis

Acknowledgements

This project would not have been possible without the support and encouragement of many people. In particular, I would like to thank Doug McArthur for his support and guidance throughout the process of this project; my MPP cohort for making the past two years so enjoyable; all of the academic experts that I've consulted and discussed the project with; and most importantly my fiancée Taylor for all of his encouragement, support and patience, this wouldn't have been possible without you!

Preface

Effective governance is an essential component for any developing and functioning community in Canada. Historically in Canada, First Nations community governance has been an ignored policy area by Canadian governments that have continued to administer the antiquated and counter-productive *Indian Act*. Recognition of this harmful policy approach has led to a number of reconciliation efforts that seek to undue the negative effects of the *Indian Act* and restore the nation-to-nation relationship between First Nations and the federal government. Despite the strides made in recent history, there is greater work that needs to address the barriers that are preventing First Nations communities from achieving self-government and to support communities that are stuck in an endless cycle perpetuated from the *Indian Act*. This is not merely a First Nations issue but is a Canadian matter with far-reaching implications. Current events further propagate this claim. Recently there have been a number of protests across Canada that have blocked roads, railway lines, and ferry terminals under the umbrella movement of #ShutdownCanada. This movement represents an escalation of the issue in northern BC involving a Coastal GasLink (CGL) natural gas pipeline and the Wet'suwet'en Nation. Despite the agreement to the project by the Wet'suwet'en elected Chief and Council, the Hereditary Chiefs of the Nation have become vocal opponents of the project. This highlights the importance of good governance in First Nations decision-making processes and the risks associated with misaligned and ineffective conflict resolution mechanisms. The ensuing breakdown of alignment between the Wet'suwet'en government and figureheads provided cause for other interest groups and factions across Canada to extend the issue to include a referendum on the environment, big business, the Canadian judicial system, inequality, and other issues pertaining to Indigenous rights. The blockades have resulted in a number of business, job, and economic losses; especially for the provinces that are highly dependent on rail transportation networks for the export and import of goods. The CGL pipeline case exemplifies the need for First Nations communities to locally develop relevant and legitimate governance systems and demonstrates the fact that all Canadians have a stake in the matter.

Table of Contents

Approval	ii
Ethics Statement.....	iii
Abstract.....	iv
Acknowledgements.....	v
Preface.....	vi
Table of Contents	vii
List of Tables	xi
List of Figures	xii
List of Acronyms	xiii
Executive Summary	xiv
Chapter 1. Introduction.....	1
Chapter 2. Historic Context and the Indian Act	3
2.1. The Historic Pathway of the Indian Act	3
2.2. Land Issues Associated with the Indian Act	5
2.3. Adverse Outcomes from the Indian Act	6
Chapter 3. First Nations Self-Determination & Land	7
3.1. Self-Determination.....	7
3.2. Transitional Pathways to Self-Determination.....	7
3.2.1. Self-Government Agreements	8
3.2.2. The First Nations Land Management Act	8
3.3. Benefits from Self-Determination	9
Chapter 4. Development of Economic Self-Sufficiency.....	11
4.1. The Case for Good Governance.....	11
4.2. Governance in Land Management	12
4.2.1. Dispute Resolution Mechanisms	13
4.2.2. Community Involvement in Decision Making	13
4.2.3. Member Land Interests & Transfers Management.....	13
4.2.4. Access to Public Land	14
4.2.5. Land Advisory Committees.....	14
4.3. Non-Economic Factors in Achieving Self-Sufficiency	15
Chapter 5. Research Methodology.....	16
5.1. Phase I: Planning & Research.....	16
5.1.1. Case Community Selection	16

5.1.2.	Land Code Analysis & Governance Variables	17
	Land Code Maturity Variable.....	17
	Dispute Resolution Variables	17
	Community Involvement in Decision Making Variables.....	18
	Access to Land Variables	18
	Member Interests and Transfers Variables	19
	Land Advisory Committee Variables	19
5.1.3.	Community Characteristic Moderator Variables.....	20
5.1.4.	The CWB and Socio-Economic High-Performance Outcome Definition.....	20
5.1.5.	Cultural Preservation High-Performance Outcome and Definition	22
5.2.	Phase II: QCA Analysis	24
5.2.1.	What is QCA?.....	24
5.2.2.	New FNLMA Community vs Mature FNLMA Community Reporting	26
5.3.	Phase III: Academic Expert Input.....	26
5.4.	Research Limitations and Considerations.....	26
Chapter 6.	Analysis Results and Findings.....	28
6.1.	Analysis 1: Socio-Economic Results Summary	28
6.1.1.	General Findings.....	28
6.1.2.	New FNLMA Community Findings.....	29
6.1.3.	Mature FNLMA Community Findings.....	29
6.1.4.	Community Characteristic Findings	35
	General Implications	35
	Dispute Resolution Implications	35
	Community Involvement Implications	36
	Access to Land Implications	37
6.2.	Analysis 2: Cultural Results Summary	38
6.2.1.	General Findings.....	38
6.2.2.	New FNLMA Community Findings.....	39
6.2.3.	Mature FNLMA Community Findings.....	40
6.3.	Future Research Considerations	41
Chapter 7.	Recommended Policy Approach	44
7.1.	Recommended Governance Pathway and Considerations.....	44
7.1.1.	FNLMA Operational Start.....	45
	General Recommendation	45
	Dispute Resolution	46
	Community Involvement.....	47
	Land Access.....	47
	Member Interests and Transfers	48
	Land Advisory Committees.....	48

7.1.2. 5-Year Strategic Assessment	48
General	49
Dispute Resolution	49
Community Involvement.....	50
Land Access.....	50
Interests and Transfers.....	51
Land Advisory Committees.....	51
7.1.3. 10-Year Land Code Update	52
Dispute Resolution	52
Community Involvement.....	52
Land Advisory Committees.....	53
7.1.4. Long-Term Community Objectives.....	53
Electoral Objectives.....	54
Administrative Capacity Objectives	54
Population and Community Objectives	55
Traditional Language Objectives	55
Self-Government Objectives	56
Chapter 8. Summary and Conclusion	58
References	61
Appendix A. Land Code Variables.....	66
Appendix B. Community Characteristics.....	69
Appendix C. Land Code and Community Characteristic Truth Table.....	70
Land Code Maturity, Dispute Resolution, Community Involvement, Land Access, and Member Interests and Transfers Variables	70
Land Advisory Committee and Community Characteristics Variables.....	71
Socio-Economic and Cultural Outcome Variables	72
Appendix D. Socio-Economic Results	73
General FNLMA Community Results	73
New FNLMA Community Results	73
Mature FNLMA Community Results	74
Appendix E. Community Characteristics Results	75
General Results	75
Dispute Resolution Results	75

Community Involvement Results 76
Land Access Results 77
Appendix F. Cultural Preservation Results..... 78
General Results 78
New FNLMA Community Results 79
Mature FNLMA Community Results 80

List of Tables

Table 1.	Governance Drivers that Improve Socio-Economic Performance (based on CWB) by FNLMA Community Type.....	33
Table 2.	Community Characteristics that Contribute to High Socio-Economic Performance	35
Table 3.	Community Characteristics and Dispute Resolution Governance Variables that Contribute to High Socio-Economic Performance	36
Table 4.	Community Characteristics and Community Involvement Governance Variables that Contribute to High Socio-Economic Performance	37
Table 5.	Community Characteristics and Land Access Governance Variables that Contribute to High Socio-Economic Performance	38
Table 6.	Governance Drivers that Improve Cultural Performance (Prevalence of Indigenous Language) by FNLMA Community Type	42

List of Figures

Figure 1.	Components of Good Governance.....	12
Figure 2.	Project Research Methodology Process Overview	16
Figure 3.	CWB Index Change Over Time by Community Type	21
Figure 4.	Socio-Economic Performance Score Calculation	22
Figure 5.	Culture Intersections with Various Community Aspects.....	23
Figure 6.	Cultural Performance Score Calculation	24
Figure 7.	Considerations in Determining Recommended Policy Approach	44
Figure 8.	Need for Strategic Planning in Determining Community Outcomes	46
Figure 9.	Recommended Land Code and Planning Pathway	57

List of Acronyms

AANDC	Aboriginal Affairs and Northern Development Canada
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
DRP	Dispute Resolution Panel
FNLMA	First Nations Land Management Act
ISC	Indigenous Services Canada
LAC	Land Advisory Committee
RCAP	Royal Commission on Aboriginal Peoples

Executive Summary

There are multiple paths for First Nations to achieve self-determination including the operationalization of the *First Nations Land Management Act* (FNLMA) that provides First Nations governments with self-governing control over their land management functions through the development of community land codes. A land code is a comprehensive law created by the First Nations community to replace the 32 sections of the *Indian Act* that relate to land management. In order to continue towards greater levels of self-determination, First Nations communities aim to achieve economic self-sufficiency through land activities that promote socio-economic development. In order for these activities to be sustainable in the long-term, it is imperative that they are grounded in community cultural values and norms. Good governance of land management functions plays an important role in the development of effective institutions that allows for the full realization of benefits that are derived from self-government. This study intends to identify what land management practices can be considered good governance or best practices in promoting both socio-economic and cultural outcomes that are derived from greater levels of local control over community institutions.

This study's research methodology primarily relies on a Qualitative Comparative Analysis (QCA) approach that takes into account the differentiation of governance variables in community land codes and uses logical algebra to determine variable combinations or causal pathways that contribute to specific outcomes (specifically socio-economic and cultural outcomes). The findings of the QCA process were paired with a number of community characteristics to understand socio-economic performance related to these unique community factors. Furthermore, the research results were grounded in subject matter literature and input from academic experts to provide a contextual lens to the data. The study's research process found a number of causal pathways that contribute both to socio-economic and cultural outcomes.

The aggregation of the study's findings, project observations, and analysis informed the development of recommended policy choices for operational FNLMA First

Nations communities to adopt at different stages of FNLMA maturity. These packages of recommended policies can be extrapolated into a number of key learnings derived from the study. Firstly, self-government maturity matters, and communities at different stages of the FNLMA journey have different needs and different opportunities that emerge over time. Communities that start off operating under the FNLMA require prescriptive processes and high community involvement in project decision making; and mature FNLMA communities benefit from providing community members with greater choice for dispute resolution mechanisms or entrusting Council with greater negotiating powers in respect to residential and non-residential projects. With this understanding, it is imperative that FNLMA communities plan, develop, and coordinate both hard and soft elements of governance transition. The second finding is the importance of greater government initiatives to dedicate resources and time for long-term strategic planning and community engagement. Thirdly, culture and language specifically are harder to restore once they have been lost and require ongoing focus and investment. Long-term community wellbeing and sustainable development requires striking the appropriate balance between socio-economic and cultural performance. Lastly, policies related to community land access are highly localized policy decisions that require community input and the consideration of regional dynamics such as community population size compared to the population of the surrounding area.

Chapter 1. Introduction

First Nations communities across Canada have historically been restricted from choosing their own governance and decision-making capabilities since the introduction of The *Indian Act* in 1876 (RCAP, 1996). This has culminated in a situation where First Nations communities suffer from adverse socio-economic effects and has contributed to a well-being gap with non-Indigenous communities in Canada (NIEDB, 2019). In recent history, there have been a number of political and legal developments that have acknowledged the right of First Nations to self-determination and self-government. One such development is the *First Nations Land Management Act* (FNLMA) that allows First Nations communities to take direct control over their land management activities by replacing a significant portion of the *Indian Act* with a custom land code. A land code is a comprehensive law created by the First Nations community to replace the 32 sections of the *Indian Act* that relate to land management. Despite the FNLMA not being a full self-government solution for First Nations, it is an incremental step that allows for communities to build the capacity, skills, and governance structures necessary to achieving an effective self-governing system. However, since the introduction of the FNLMA, there have been few First Nations communities that have ratified the Act, developed land codes, and operationalized those land codes within their communities (AANDC, 2019). Issues related to economic self-sufficiency are often at the forefront of these challenges, as First Nations governments need to determine how to improve economic development within their communities (Cornell & Kalt, 2003). Additionally, since First Nations groups are highly diverse from community to community, so too are their self-government structures and land codes. There has been some research specifically in the area of First Nations land governance, including the Harvard Project on American Indian Economic Development (the “Harvard Project”) that identified four significant factors of success: governance, institutional effectiveness, leadership, and culture (Cornell & Kalt, 2003).

This study explores what land management governance factors might contribute to improving the wellbeing of Canadian First Nations communities and more specifically identifies good governance practices within First Nations land codes that can drive socio-economic development. This study hopes to assist First Nations communities operating under the FNLMA to improve the effectiveness of their current land codes and to provide potential FNLMA participant communities with evidence needed to make informed decisions and progress towards greater levels of self-determination.

Chapter 2. Historic Context and the Indian Act

In order to understand the current challenges that First Nations face today in regard to achieving self-determination, it is important to understand the historical pathways and structural factors that have contributed to the current situation. This chapter outlines the introduction of the *Indian Act*, land management issues derived from the Act, and adverse community outcomes that stem from the Act. The evolution of this relationship demonstrates the rights-based position of First Nations communities to obtain self-determination, while highlighting land management as a core contributor to tensions between First Nations and non-Indigenous societies and economies.

2.1. The Historic Pathway of the Indian Act

The relationship between First Nations and non-Indigenous peoples has historically been a long and tenuous one. The Royal Commission on Aboriginal Peoples (RCAP) conducted in 1996 continues to be one of the most comprehensive reports about this relationship and its evolution over time.

The relationship of First Nations and non-Indigenous peoples began as a primarily commercial one that benefitted both societies and allowed for an extended period of mutual cooperation (RCAP, 1996). Europeans recognized the capacity of Aboriginal nations to manage their own affairs, possess their own lands, and sign treaty agreements that European nations would sign between themselves (RCAP, 1996). These foundational elements of the relationship would be important to future legal and political developments, recognizing these historical rights to self-determination.

The period of mutual cooperation came to an end with the emergence of conflicting economic systems and the relative growth in European capacity and hard power—which came from significant increased immigration patterns (RCAP, 1996). As the fur trade waned, non-Indigenous settlers turned to other sources of resource exploitation to supply markets elsewhere (RCAP 1996). This contradicted traditional

First Nations approaches to resource and land management and created conflict between the two competing economic systems (RCAP, 1996). Compounding this economic friction was the significant influx of European immigrants and the steady decline in the Aboriginal population rates from disease. In this new relationship, Europeans began to aggressively pursue abolishing economic activities, values, and traditions that conflicted with their economic and societal approaches (RCAP 1996).

The British North America (BNA) Act of 1867 and the creation of the Confederation of Canada led to the increased erosion of First Nations autonomy with policies, such as Section 24 of the BNA Act that designated Parliament with the responsibility for “Indians, and Lands reserved for Indians (RCAP, 1996).” This would lead to policies such as the *Indian Act* and its future amendments that would introduce two segments of civil society: one for non-Indigenous peoples that provided full participation in the state, and one for Indigenous peoples that prevented them from participating in the state and the affairs of their own communities (RCAP, 1996). These policies, many of which continue to exist, have contributed to a sizable gap in socio-economic status between First Nations and non-Indigenous communities.

The First Nations movement for self-government has long reaching roots, however, modern efforts are often credited as a response to the federal government’s White Paper policy of 1969, which sought the dissolution of the special legal status for Indigenous peoples (Belanger & Newhouse, 2004). Many Indigenous groups saw the policy as an affront to Indigenous sovereignty that emanated from pre-existing treaties, as described in the Manitoba Whabung Paper (Belanger & Newhouse, 2004). This response would begin a period of pressure from judicial decisions and First Nations group activism on the federal government to identify the right of First Nations people to self-determination and self-govern matters related to their communities, cultures, language, and land (Belanger & Newhouse, 2004). These legal and political developments would culminate into a number of negotiated self-government agreements between the federal government and Indigenous groups, such as the Nisga’a Final Agreement of 1998 (Nisga’a Government, n.d.).

2.2. Land Issues Associated with the Indian Act

The *Indian Act* has been amended many times since its first introduction in 1876, but still possesses a number of limitations to First Nations governance efforts as it relates to land matters. There are approximately 43 sections, or one-third, of the Act that pertain to land management, resource, and environmental matters (Fligg & Robinson, 2019). One of the greatest challenges with First Nations community development is the fact that reserve land cannot be held in fee simple¹, as the title of the land is held in trust by the Crown (Fligg & Robinson, 2019). This prevents the leveraging of land to secure business loans, which limits the economic development potential on reserve land (Fligg & Robinson, 2019). Additionally, the oversight that comes from Crown control of land title creates long bureaucratic processes where the federal government is involved in every aspect of managing the community's land in a manner that is not rules based or predictable. This further hinders community investment and development by creating an environment of uncertainty and disconnecting local interests from decision-makers in Ottawa.

The *Indian Act* also determines that First Nations communities are the responsibility of the Minister of Indigenous Services Canada. A number of land-related functions, like land registration and transactions, are subject to substantive review and approval processes (Fligg & Robinson, 2019). These additional requirements delay investment and stifle economic development. Flanagan et al (2010) concluded the slow nature and lack of security of the land tenures process under the *Indian Act* limited economic development in First Nations communities (Flanagan et al, 2010). Furthermore, the Act subjects the lands of First Nations communities to expropriation by provincial or federal governments and prevents local regulatory controls over land management functions like environmental protection (Fligg & Robinson, 2019).

¹ a fee simple is an estate in land or a form of freehold ownership. It is a way that real estate and land may be owned and is the highest possible ownership interest that can be held in real property.

2.3. Adverse Outcomes from the Indian Act

According to the Senate Standing Committee on Aboriginal People (2007), The *Indian Act* is an antiquated and repugnant approach to doing business in today's world and many of its provisions actively work against economic development. The lack of control over decision-making and resources has hindered the development of First Nations communities and socio-economic gaps between First Nations and non-First Nations communities persist today. This socio-economic gap not only affects First Nations communities but is an economic burden on all of Canada. The RCAP (1996) predicted that the continuation of poor socio-economic conditions in Aboriginal communities would cost the Canadian economy \$11B in 2016 (Anderson et al, 2006).

First Nations living on reserves experience greater adverse outcomes than non-Indigenous and other Indigenous groups. According to the 2016 Canadian Census, First Nations on-reserve had on average half the median income of non-Indigenous people and the lowest income among all Indigenous groups (Inuit, Metis, and off reserve First Nations) (NIEDB, 2019). Furthermore, First Nations men on reserve tend to have the worst economic outcomes of all groups. In 2016, First Nations men on-reserve experienced employment rates that were one-third of average rates among all Indigenous men, unemployment rates that were triple those of non-Indigenous men, and the lowest median income levels of all other Indigenous and non-Indigenous demographic groups (NIEDB, 2019).

The rigidity and inflexibility of the *Indian Act* also provides a number of issues related to the misalignment of community governance systems with the shared values and norms of different First Nations communities. This misalignment leads to issues pertaining to the legitimacy of community government and affects the abilities of community leadership to make decisions that have widespread community buy-in. The Harvard Project refers to this as the cultural match of these government systems with community social norms (Cornell & Kalt, 2003), while a framework like the McKinsey 7S model that is used to determine organizational change and performance suggests that there are a number of “hard” and “soft” elements that need to align between systems and people (Kaplan, 2005).

Chapter 3. First Nations Self-Determination & Land

This chapter sets out to define the concept of self-determination for First Nations communities, identifies traditional pathways for communities to pursue self-determination, and outlines the benefits that come from self-determination.

3.1. Self-Determination

The concept of self-determination is associated with First Nations communities acting, thinking, and perceiving themselves as self-governing nations and operating independently from other government entities (Kalt, 2001). Self-determination can be achieved through formalized means, such as self-government agreements, or through the embedding of unformalized self-governing practices at the community level (Kalt & Singer, 2004). Isaac (1991) identified three primary components that were essential in building effective First Nations self-governments, which included: the formal recognition of self-government authority, the creation and recognition of rights at the self-governing level, and the achievement of economic self-sufficiency.

3.2. Transitional Pathways to Self-Determination

There are a number of pathways that various First Nations communities have taken in trying to achieve self-determination. There are a few different approaches that First Nations communities can take in order to replace the *Indian Act* with alternative and locally designed regimes, such as full self-government agreements or operating under the FNLMA. This provides First Nations communities with greater control over their institutions and the power to make local decisions to pursue socio-economic and other interests that improve community wellbeing.

3.2.1. Self-Government Agreements

The *Indian Act* is a pan-Canadian piece of legislation that has traditionally dictated First Nations community governance practices for over 140 years. This has historically limited First Nations community administration capabilities, as the *Indian Act* did not take into account local, nuanced circumstances of individual communities (CIRNAC, n.d.). Self-government agreements allow First Nations communities to replace the existing governance structures mandated under the *Indian Act* with locally designed and determined government systems. These agreements grant First Nations communities with the autonomous powers to govern themselves in relation to matters that are integral to their unique cultures, identities, traditions, languages, and institutions (Belanger & Newhouse, 2004).

There have been 22 self-government agreements negotiated between the federal government with 43 different Indigenous communities (CIRNAC, 2018). Each agreement is individually negotiated between the federal government and specific First Nations governments. Once negotiated, the agreement must have approval at both the First Nations community level and at the federal government level through the Canadian constitutional framework (CIRNAC, n.d.). Once final approvals are secured, the agreement can take effect and First Nations governments can create laws to govern their communities and align with provincial and federal legislation such as the Charter of Rights and Freedoms or the Criminal Code of Canada (CIRNAC, n.d.).

3.2.2. The First Nations Land Management Act

The *First Nations Land Management Act* (FNLMA) was enacted in 1999 and represents an additional path to achieving self-determination. It provides First Nations governments with the ability to develop laws that replace *Indian Act* provisions to land, resources, and the environment (AANDC, 2013). These laws are embodied in individual community land codes that dictate the rules and regulations concerning local land matters. It is important to note that the FNLMA does not provide First Nations communities with ownership of the land titles, as the titles remain with the Crown. This

means that First Nations communities do not have the ability to sell reserve lands or land interests in fee simple, unlike some agreed upon self-government agreements (Fligg & Robinson, 2019).

According to the AANDC, there are multiple phases First Nations communities need to go through before operationalizing the FNLMA within the community, which includes: the interest phase, developmental phase, and operational phase. As of 2019, there are 153 First Nations that are at various phases of FNLMA ratification (AANDC, 2019). To begin the process, First Nations communities must express an interest in being a part of the FNLMA by submitting a band council resolution to the federal government. The resolution is reviewed and approved by federal government departments and agencies before the First Nation is allowed to become a signatory to the Framework Agreement on First Nations Land Management. Once complete the First Nation enters the developmental phase, which includes primarily developing a land code, negotiating an agreement with the federal government, and conducting a community ratification vote. This phase takes approximately 2 years to complete and once ratified the First Nations community can become operational by supplanting the 32 sections of the *Indian Act* that relate to land management practices with their own community land code. The FNLMA process allows for First Nations communities to move away from a significant portion of the *Indian Act* and can be considered a “steppingstone” solution towards greater self-determination.

3.3. Benefits from Self-Determination

Self-determination derived from self-government functions provides a number of benefits to First Nations communities. It provides First Nations governments with the ability to make economic decisions at the local level and is an important element to ensure that local needs are prioritized over external agendas (Cornell & Kalt, 2003). This is because the decentralization of governing activities creates an environment of accountability where decision-making is moved closer to those affected and clarifies the linkages between decisions and consequences (Cornell & Kalt, 2003). In terms of the FNLMA, First Nations communities have the ability to establish environmental laws,

protect community lands from provincial or federal expropriation, leverage properties to secure financing, and eliminate the need for ISC approvals of land transactions (Fligg & Robinson, 2019). These additional powers provide First Nations communities with investment incentives by creating unique business and market opportunities through legal, tax, or regulatory approaches (Cornell & Kalt, 2003). Fligg and Robinson (2019) found that land regime choice contributed to greater socio-economic performance, with FNLMA and self-government communities having higher Community Wellbeing Index (CWB) scores than those still under the *Indian Act* (See Section 5.1.3 below for more detail on the CWB). However, when looking specifically at FNLMA communities, there seems to be a “peaking” phenomenon that occurs where CWB rates grew initially after transition and slowed greatly over time (Fligg & Robinson, 2019).

There are also a number of benefits that come from First Nations’ increased autonomy and control over their lands, which includes cultural benefits as well as other benefits that are not captured within traditional economic metrics. Land is highly important in First Nations society and associated with spiritual, ceremonial, and traditional practices (Hanson, 2009). Self-determination allows First Nations governments to control land access and land use policies that have implications on community cohesion and traditional culture (Lavoie & Lavoie, 2017). Additionally, these policies overlap with traditional activities that can benefit the local economy but are not captured within traditional metrics that are used to assess economic performance. For example, one particular study of the Algonquins of Barriere Lake in the 1990s found one reserve of 450 members were 90% reliant on traditional economic activities such as hunting and wood gathering (Wilson & MacDonald, 2010). This understanding emphasizes the importance of taking a comprehensive approach when determining the wellbeing of First Nations communities and the need to consider community benefits that exist beyond traditional economic theory.

Chapter 4. Development of Economic Self-Sufficiency

Despite strides made in recognizing Indigenous self-government authority and rights at the self-governing level, the economic base component described by Isaac (1991) represents a major obstacle for many Indigenous communities from realizing self-determination. In order to achieve self-determination, First Nations communities need to undertake a developmental pathway that promotes ongoing economic development. As Cornell & Kalt (2003) noted, economically rooted challenges are the greatest threat to First Nations communities. There are a number of components that contribute to economic development, many of which communities have little control over like geography, market access, or natural resource availability. However, good governance is one particular economic development factor with which First Nations communities have a high degree of control and it directly influences the overall wellbeing of the community (Cornell & Kalt, 2003).

4.1. The Case for Good Governance

There are a growing number of international studies that suggest that good governance is an important factor in helping communities to govern, generate economic opportunities, and ultimately to improve the wellbeing of their citizens (Kaufman et al, 2009). The Harvard Project is one of the most comprehensive projects on First Nations economic development in North America and found that there are two major factors that contributed to the success of First Nations in achieving self-determination and generating economic opportunity— with the first being practiced sovereignty and the second being effective institutions of self-governance (Cornell & Kalt, 2003). Good governance is often credited to the economic overperformance of some communities that do not possess favourable economic factors such as natural resources or an educated workforce (AANDC, 2013). However, it is often difficult to define what good governance is and how it can be measured. As Figure 1 below illustrates, there are varying interpretations of good governance in the existing literature. This study seeks to identify specific good governance practices in a land management context.

Figure 1. Components of Good Governance

Harvard Project	World Bank	Institute on Governance	Fukuyama
Stable Institutions	Effectiveness	Performance	Effective, Merit-Based State
Competent Bureaucracy	Efficiency	Strategic Vision	Rule of Law
Strategic Direction	Transparency, Consistency, and Predictability	Fairness	Democracy
Fair and Effective Dispute Resolution	Legal Security and Rule of Law	Accountability	
Cultural Match	Integrity and Accountability	Legitimacy and Voice	
Separation of Politics from Business	Subsidiarity, Autonomy and Depoliticization		
	Civic Engagement and Public Participation		
	Equity, Fairness and Impartiality		

4.2. Governance in Land Management

Land management systems are foundational to overall governance and contribute to economic functions that affect community wellbeing, legitimacy of government, and economic self-sufficiency (FAO, 1999). To analyze good governance in a land management perspective, I focus in this study on five areas of land governance within First Nations community land codes, including: dispute resolution systems, the level of public participation in decision-making, approvals for member land interests and transfers, access to public lands, and the effectiveness of land management oversight bodies (or Land Advisory Committees).

4.2.1. Dispute Resolution Mechanisms

Fair and effective dispute resolution mechanisms are an important element to any nation and society. It provides the nation's citizens with equity and justice and provides external stakeholders, such as investors, with confidence and assurance. The building of a fair judicial system is imperative to nation-building that affords the equal treatment of citizens, allows business to flourish, and is the foundation for economic development (Cornell & Kalt, 2003). The Harvard Project found that First Nations communities that operated strong, non-political judiciary systems economically outperformed communities that did not have those systems and specifically provided a boost to community employment levels (Cornell & Kalt, 2003).

4.2.2. Community Involvement in Decision Making

There is conflicting literature on the role of community participation within land related decisions. Community participation can provide a two-way dialogue between citizens and government that can help break political gridlock, inform policy decision makers, improve implementation of policies, and potentially produce better policy decisions (Stansbury, 2004). There are also a number of disadvantages with public participation in decision-making processes, including loss of government control over policy, high financial and time costs, and resulting policy decisions that are grounded in citizen preferences opposed to unbiased evidence (Stansbury, 2004). However, often these debates about public participation relate to what type of process is the most effective as community involvement is viewed as an inevitable element to policy decision-making (Stansbury, 2004).

4.2.3. Member Land Interests & Transfers Management

The adoption of the FNLMA does not provide the transfer of land titles or fee simple interests, however, it does allow First Nations communities to develop policies related to leasehold interests and certificates of possession or allotment (Lavoie & Lavoie, 2017). This power provides communities with the ability to either choose

between approaches that liberalizes the local land market or asserts more collective control over the local land base (Lavoie & Lavoie, 2017). This suggests that the community's policy approach should have an impact on the socio-economic and cultural performance of the community.

4.2.4. Access to Public Land

The access of community public lands for non-members can provide a number of business, social, or recreational benefits to First Nations communities. Public access can have particularly influence on the viability of tourism and its associated economic activities (Hodge, 2016). A 2012 Michigan study found that the public accessibility of lands contributed to \$80 million (USD) of total economic value to the state or about \$2-\$17 in average economic value per acre (Knoche, 2012). Additionally, land accessibility can potentially be a proxy for a community's general openness towards interactions with non-members. The Harvard Project identified a First Nation's community openness to interacting with non-members as a critical cultural component in the success of large-scale manufacturing or tourism development activities (Cornell & Kalt, 2003).

4.2.5. Land Advisory Committees

The Land Advisory Committee (LAC) represents the governance and oversight body of the community's land management functions. The proper functioning of LACs directly impacts the effectiveness of land management functions, which contributes to community wellbeing. There are a number of best practice approaches that help with the ongoing operation of executive committees that prevent internal conflicts of interest and provide clarity of roles and purpose. However, there is also a need for adaptability and flexibility to respond to land variability, variability in social values, or the introduction of new information (National Research Council, 2013).

4.3. Non-Economic Factors in Achieving Self-Sufficiency

An additional factor to consider on the topic of First Nations achieving economic self-sufficiency is the need to consider factors beyond traditionally defined socio-economic indicators and understand the cultural implications of governance practices. Black (1994) points out that traditional economic factors may not be relevant to First Nations communities as they embody an economic system that has historically disenfranchised and marginalized First Nations people. Instead a more balanced approach is necessary for effective community development that can account for various socio-cultural factors (Black, 1994). The Harvard Project referred to the need of governing institutions to “culturally match” with the social norms of the community, which dictate legitimacy (Cornell & Kalt, 1998). This speaks to the complexity of communities in achieving economic self-sufficiency and the need to consider all factors, economic and not, that may contribute to effective development and greater levels of self-determination.

Chapter 5. Research Methodology

The research methodology for this study went through three distinct phases: planning and research, QCA analysis, and expert input (See Figure 2).

Figure 2. Project Research Methodology Process Overview



5.1. Phase I: Planning & Research

The planning and research phase involved selecting case communities, analyzing case community land codes and identifying governance variables of differentiation (the study's independent variables), identifying community characteristics (the study's moderator variables), and defining performance outcomes (the study's dependent variables).

5.1.1. Case Community Selection

The study looked at 16 case communities that have operationalized the FNLMA by developing their own land codes to replace the land management sections of The *Indian Act*. Since a vast majority of operational FNLMA communities reside specifically in Western Canada, case communities were selected from British Columbia, Saskatchewan, and Manitoba (Alberta has no operational FNLMA communities) in order to reduce the level of regional and provincial variations and complexities. Furthermore, in an effort to limit community characteristic variation, other screening criteria were used to select case communities such as excluding communities located within urban centres and communities with insufficient data available through Statistics Canada. As the intention of this study is to help explain the benefits of certain land management governance elements and not to critique the socio-economic performance of individual communities,

community names are not included within this final paper to protect the privacy of individual communities.

5.1.2. Land Code Analysis & Governance Variables

The content of the case community land codes was analyzed to identify differentiated governance variables (the dependent variables in the study). The identified variables were categorized into major thematic areas, including dispute resolution, community involvement in decision-making, member land interests and transfers management, access to land, and the organization of Land Advisory Committees. Additionally, the length of time or maturity of the community's land code was a general variable considered in the analysis. The identified land code variables were then quantified using set criteria into fuzzy-set values between 0 and 1 (See Appendix A for variable descriptions and threshold criteria).

Land Code Maturity Variable

The land code maturity variable was used to indicate the level of maturity a case community had operating under the FNLMA. Since the FNLMA has only been operating for 20 years, communities operating under the FNLMA for less than 10 years were considered new FNLMA communities; while communities operating under the FNLMA for 10 years or more were defined as mature FNLMA communities. The inclusion of this variable was supported by evidence such as Enright et al. (2015), who suggested that autonomy and the duration of that autonomy were important factors in First Nations community wellbeing.

Dispute Resolution Variables

Three variables were identified and analyzed within the dispute resolution governance area, including: the presence of a dispute resolution panel, whether the resolution process was participatory, and if the resolution process allowed for appeals through a court of competent jurisdiction (such as a Canadian provincial or federal court). Dispute resolution panels were observed to be the most common form of formal dispute resolution (if Council or the Land Advisory Committee could not find an agreeable

solution). The selection of dispute resolution panel members could either be participatory and allow complainants with the ability to partially choose panel members or could be non-participatory with Council dictating all members on the panel. The participatory resolution process was assumed to be less exposed to political risks and more capable to deliver impartial decisions. The additional clauses that allowed appeals through provincial or federal courts were also assumed to be positive inclusions, as stable and mature Canadian court systems could provide further certainty and reassurance for potential complainants.

Community Involvement in Decision Making Variables

There were three community involvement variables that were identified and analyzed, including: the number of years of land tenure requirements needed to facilitate a community ratification vote related to the residential, non-residential, and natural resource sectors. The assumption was that greater land tenure required to facilitate community involvement in the decision-making process would decrease the opportunity for community involvement to take place, as Council would be allowed to make decisions without a community ratification vote up to the specified land tenure amount. Increased public participation would suggest that there would be a greater degree of accountability present in land agreements. However, the inverse of these variables was also analyzed to determine if a lack of community involvement had any effect of community wellbeing—as it would allow Council to accelerate the agreement process and provide greater certainty for third-party investors.

Access to Land Variables

Access to land variables involve land code components related to the accessibility of community public lands by non-members. Three variables were identified and analyzed, including: allowed access for government sponsored personnel, the allowance of non-member residency on reserve land, and the general allowance of non-member access to public roads and lands. The level and number of restrictions on access of non-members in each area was accessed to determine the level of accessibility to community lands. Lavoie & Lavoie (2017) indicate that access to community lands can have a number of cultural and social implications on the cohesiveness and culture of a

community. There are also a number of potential implications as well, such as the effects of access on economic development, especially from land-based activities like tourism.

Member Interests and Transfers Variables

Land interest transfer variables were land code components that were regarded as being influential on the lease and transfer processes of member interests. There were four variables in total identified, with three pertaining to the interest and transfer approval process and one pertaining to financial management best practices—which was assumed to affect the confidence level of potential outside investors. The four variables included: Council approval requirements for transfers from members to non-members, Council approval requirements for leases from members to non-members, Council approval required for transfers from member to member, and if the community was financially certified. Council approvals for transfers and leases with non-members was assumed as an important element to preserve community values and reduce reserve population exit rates. Financial Administration Law (FAL) certification from The First Nations Financial Management Board (FNFMB) was used to determine if a community had financial management certification. FAL certification requires the passing of specific laws concerning governance and finance practices.

Land Advisory Committee Variables

There were seven identified variables related to Land Advisory Committees (LAC) analyzed, including: elections for LAC members, the inclusion of Council in LAC membership, the power of Council to create new land laws without LAC involvement, the inclusion of an elder on the LAC, term limits for LAC members, conflict of interest rules regarding family members, and the size of the committee. The election of LAC members was assumed as a positive component that allowed for public participation within the oversight of land management functions. The power of Council to create new land laws without LAC involvement was also assumed to be positive traits in land codes as it provided Council with greater control and determined a clear hierarchy of authority, which reduces the risk of infighting over governing power. In order to determine ideal committee size, private sector Board best practices were used to determine that nine-

twelve members was ideal, with less than six or more than 15 members as non-ideal (ISS Governance, 2019).

5.1.3. Community Characteristic Moderator Variables

A moderator variable is a third variable, outside of dependent and independent variables, that helps explain the significance of the relationship between dependent and independent variables. In understanding that many factors influence the socio-economic outcome of First Nations communities, a number of community characteristic variables were analyzed to determine what community types benefitted the most from identified governance best practices. These governance best practices were identified through the socio-economic QCA analysis.

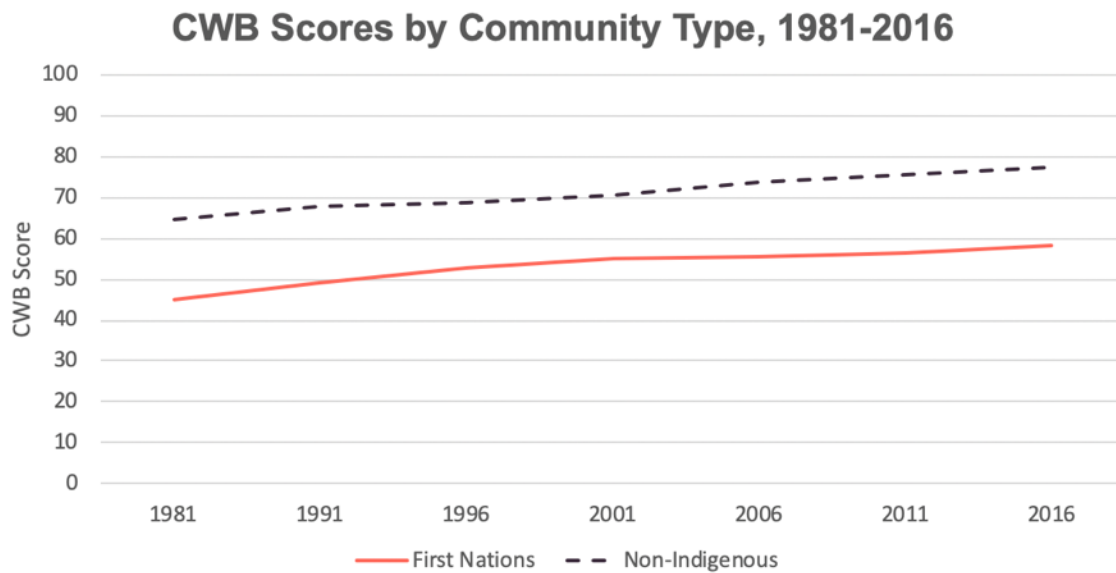
There were seven community characteristic variables that were analyzed in combination with governance best practices that were identified to improve the socio-economic performance of communities. Community characteristic variables used in the study were partly influenced by findings from the Harvard Project that found that specific “ingredients” contributed to economic development, which included market size (both internal community population and nearby population centres), access to markets, and availability of natural resources—among others (Cornell & Kalt, 1998). Other factors that were analyzed were leadership system type and the close-knit nature of communities, as Lavoie & Lavoie (2017) indicated they had a potential effect on community development and wellbeing (See Appendix B for all community characteristic variable descriptions and quantification).

5.1.4. The CWB and Socio-Economic High-Performance Outcome Definition

The Community Well-Being (CWB) Index is one indicator that can be used to determine a community’s socio-economic health by taking into account income, housing, education, and labour factors derived from Statistics Canada Census data. Since the introduction of the data to determine CWB scores in 1981, there has historically been a gap of CWB scores that has existed between First Nations and non-Indigenous

communities. At the start of data collection in 1981, the Index shows that the CWB gap across Canada between First Nations and non-First Nations communities was 19.5 Index points (ISC, 2019). In 2016, despite the gradual growth of CWB scores among First Nations communities the CWB with non-First Nations communities continued to persist at 19.1 Index points (ISC, 2019). This suggests that despite the gradual socio-economic improvement in First Nations communities, progress has been slow to reduce the sizable wellbeing gap (See Figure 3 below).

Figure 3. CWB Index Change Over Time by Community Type



ISC, 2019

The Community Well-Being (CWB) Index was the primary indicator used to determine the socio-economic performance of case communities as it was the most comprehensive measure available to measure socio-economic and political outcomes (independent variable). High-performance communities were defined as communities that were able to outperform other First Nations communities in terms of CWB growth and total CWB value. In order to utilize the QCA analysis methodology, a Performance Score was calculated using a CWB Growth factor and CWB Total factor (see Figure 4). These factors were calculated by comparing the difference of community values with provincial averages in order to address the issues with natural deviations in CWB value

from province to province. The CWB Growth factor was calculated by determining the percentage difference between the average community CWB growth rate from 2001-2016² less the provincial average CWB growth rate for First Nations community. The CWB Growth rate was calculated similarly by determining the percentage difference of the 2016 total CWB Index value of the community less the 2016 provincial average CWB Index value for First Nations communities. In order to effectively capture negative values, 0.5 was added to both factors and represented a switching point of overperformance vs underperformance. These factors were then equally weighted to calculate the Performance Score for each case community.

Figure 4. Socio-Economic Performance Score Calculation

Socio-Economic Performance Score = (CWB Growth + CWB Level)/2

CWB Growth (2001 to 2016 Values) = 0.5 + (Growth_{community} - Growth_{prov avg})

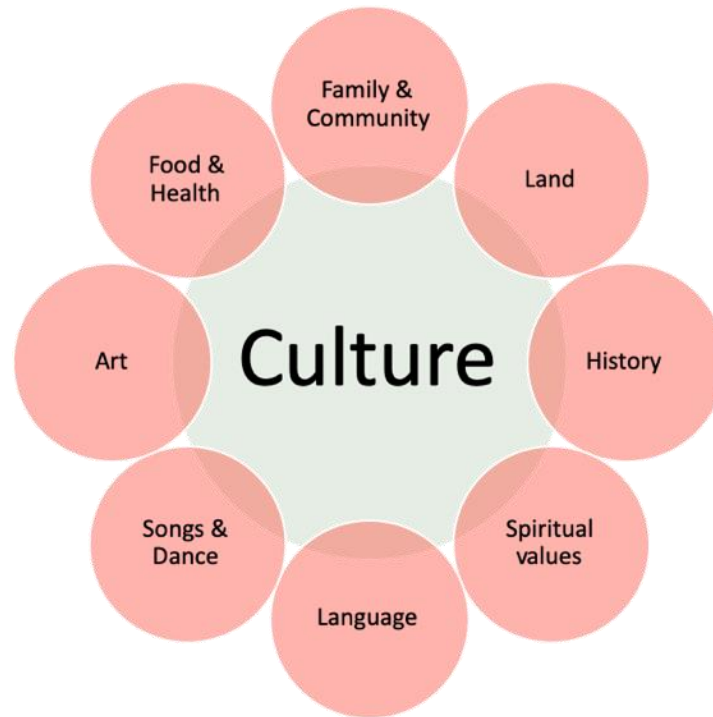
CWB Level (2016 Value) = 0.5 + (Value_{community} - Value_{prov avg})

5.1.5. Cultural Preservation High-Performance Outcome and Definition

Culture is defined by a number of different and interwoven aspects of community and day-to-day life (See Figure 5). Language is one of those aspects identified by the Assembly of First Nations (McDonald, 2011). First Nations language is vital to an individual’s identity and sense of belonging, which in turn contributes to healthier communities that have improved health, education, and economic outcomes (Dunlop et al, 2018). The level of knowledge of local, traditional languages within case communities was used as a proxy to determine cultural outcomes that communities may choose over socio-economic outcomes, which also contributes to community wellbeing and long-term self-governance sustainability.

² 2001 CWB data was used in the calculation as the FNLMA came into effect in 1999 with the first communities operationalizing the Act in 2000. As there was no 2000 CWB data available 2001 data was used. 2016 CWB data was used as it’s the latest data set available.

Figure 5. Culture Intersections with Various Community Aspects



Modified from McDonald, 2011

The presence of traditional local language was used in a second analysis to determine the cultural performance of governance case communities (independent variable). Statistics Canada provides data on the prevalence of Indigenous languages within communities through its Aboriginal Peoples Survey. Data was available for the years 2006 and 2016³, which was used to determine the preservation and level of First Nations language knowledge within the case communities, however, 2006 data was not available for three of the case communities and they were not included in the cultural preservation outcome QCA analysis.

Cultural performance scores were calculated using the same approach as socio-economic performance scores. Both the change in levels of First Nations language

³ 2006 was used as a base year because of data availability from the Aboriginal Peoples Survey (data only available for 2006 and 2016).

knowledge from 2006-2016 and the total value of 2016 levels were weighted evenly and compared to provincial averages (See Figure 6).

Figure 6. Cultural Performance Score Calculation

$$\text{Cultural Performance Score} = (\text{Language Knowledge Change} + \text{Language Knowledge Level}) / 2$$

$$\text{Language Knowledge Change (2006 to 2016 Values)} = 0.5 + (\text{Change}_{\text{community}} - \text{Change}_{\text{prov avg}})$$

$$\text{Language Knowledge Total (2016 Value)} = 0.5 + (\text{Value}_{\text{community}} - \text{Value}_{\text{prov avg}})$$

5.2. Phase II: QCA Analysis

Phase II involved a qualitative comparative analysis (QCA) of the governance variables along two dimensions (one socio-economic and one cultural) to identify combination factors that could be potentially considered “best practice” and identify potential trade-offs. These best practices were then analyzed in consideration with a number of defining community characteristics in order to determine relevancy of best practices to community type.

5.2.1. What is QCA?

QCA is a research methodology that utilizes both qualitative and quantitative research techniques. QCA uses logical algebra instead of traditional correlation methods to establish causal conditions to a particular outcome (Ragin, 2008). Logical algebra is a branch of algebra that uses binary values (0 to 1) to determine the most logical conclusion from a dataset of binary values or, as Schneider and Wageman (2013) explain, is an approach that analyzes social realities through the use of datasets and demonstrates the causal relationships of these sets. ‘Truth tables’ are developed with these binary values, which organizes cases as table rows (or case communities for this study) and table columns represent conditions and a particular outcome (Fiss, 2011). This allows for qualitative information, such as First Nation case community land codes, to be transformed into quantitative values to determine variable distinctions (Fiss, 2011).

There are two primary approaches to QCA: fuzzy-set (fsQCA) and crisp-set. The fsQCA approach assigns values to conditions on a scale from 0 (no presence/membership) to 1.0 (full presence/membership) and is used to determine variability (Fiss, 2011). This study employs the fsQCA approach in order to capture the variation of governance practices that are included in the different case community land codes analyzed. The full fsQCA truth table can be found in Appendix C, which demonstrates the values assigned to the land code, community characteristic, socio-economic outcome, and cultural outcome variables.

There are also two key concepts that are related to QCA's approach to determining causal factors and relationships to particular outcomes: consistency and coverage. Consistency refers to the percentage of causal configurations of similar composition which results in the same outcome value (Fiss, 2011). Meaning that if the consistency is low, the causal relationship is not supported by empirical evidence (Fiss, 2011). Coverage refers to the number of cases that support the causal relationship (Fiss, 2011). This means that a low coverage score does not necessarily imply that a causal relationship is less relevant but low coverage values should be noted to determine confidence in the findings (Fiss, 2011).

This study used fsQCA software sourced from the University of California, Irvine to determine the consistency and coverage rates of individual variables and the causal relationships of solution configurations to determine governance drivers of socio-economic performance in First Nations communities. QCA solutions were interpreted using the intermediate solution analysis, which provides only the most likely defined causal solution configurations (Hennessey et al, 2017). A variable consistency default value of 0.8 or greater was utilized as a threshold to determine sufficient variable consistency and to construct causal solution configurations. As a common approach in the small sample size studies, a minimum of one case was used as a frequency threshold for causal configurations to be considered (Hennessey et al, 2017). This process was conducted for both rounds of analysis, the first that analyzed the relationship of independent and moderator variables with the socio-economic dependent variable. As

well as the second analysis that analyzed the relationship of independent variables with the cultural preservation dependent variable.

5.2.2. New FNLMA Community vs Mature FNLMA Community Reporting

The QCA analysis found a significant distinction among study case communities. The length of time that a case community operated under the FNLMA (or the level of FNLMA maturity) dictated different best practice outcomes. Due to this finding, the study defined communities as either new FNLMA communities or mature FNLMA communities. New FNLMA communities are case communities that have been operating under the FNLMA for less than 10 years; whereas mature FNLMA communities are those communities that have been operating under the FNLMA for 10 years or greater. This distinction was used in this paper to communicate the study's results and determine whether findings were applicable to only new FNLMA communities, mature FNLMA communities, or both.

5.3. Phase III: Academic Expert Input

After the QCA analysis was complete, four academic experts in the areas of Indigenous studies, economic development, community governance, and community engagement were engaged to discuss research results and provide various levels of input. These experts provided some contextual information and validation to the study's findings. They were instrumental in ensuring that this study was grounded in reality and provided the study with useful direction and advice.

5.4. Research Limitations and Considerations

There are some study elements and factors that should be considered by the readers of this paper. Firstly, there is a general lack of available Statistics Canada and government data on First Nations communities, which is a greater systematic issue related to First Nations community research in general. This limitation has been raised by

a number of studies that involve research in the First Nations area (Malhame et al, 2007). The lack of data prevents a more robust effort in collecting and analyzing historical data, which could be used to improve the calculation of socio-economic and cultural outcomes. Additionally, within the QCA fuzzy-set approach there is a level of subjectivity that is implied with the development of the ‘truth table’ and associated construction of variables and values. This consideration is inevitable due to the nature of the methodology; however, variable descriptions, criteria and values have been explicitly stated in Appendices A, B, and C—to provide a level of transparency and understanding as to how a variable is defined and valued.

It is also important to indicate that the primary investigator of this study is not First Nations or a member of any of the observed case communities. This reality could potentially limit the study’s ability to understand certain cultural nuances or implications that are important influences on the effects, feasibility, and/or implementation of certain policies. To mitigate this risk, a number of discussions and consultations with academic experts in Indigenous studies were used to provide a greater level of contextual understanding to the research and findings. Lastly, it is important to understand that First Nations peoples across Canada are far from homogenous entities and it’s impossible to account for the vast diversity that exists between different First Nations communities. In light of this, it is important to understand the primary objective of this study is to provide evidence for First Nations communities to make better informed decisions and not to supplant the knowledge that local decision-makers have in the context of land management.

Chapter 6. Analysis Results and Findings

The following chapter outlines the results and findings derived from the two QCA analysis conducted: one that identified governance variables and community characteristics that improved socio-economic performance and the other that identified governance variables that improved the cultural preservation performance of First Nations communities.

6.1. Analysis 1: Socio-Economic Results Summary

The study's socio-economic analysis found that governance best practices varied significantly depending on the length of land code maturity and the type of community (defined by community characteristics). Results were reported based on this segmentation and whether governance variables were found to be significant based on community FNLMA maturity level and relevant implications based on a community's characteristics and traits. See Appendix D for full QCA socio-economic results.

6.1.1. General Findings

There was one finding related to land access that applied to all FNLMA communities regardless of land code maturity level. First Nations communities in general seem to benefit from a more open access approach to public lands and residency policies. The combination of low restrictions on non-member residency rules with high access for non-members to community lands had a solution consistency value of 0.84 and covered about half of all cases (46%). This suggests that less restrictive access policies for non-members can aid in promoting socio-economic development. One potential reason may come from the fact that open access policies can increase population growth and expand the pool of potential interest holders or investors that can generate economic development. However, it is important to consider the social and cultural implications of such policies as there is a risk that open access policies could lead to the deterioration of community cultural values in close knit communities (Lavoie & Lavoie, 2017).

6.1.2. New FNLMA Community Findings

There was a single causal pathway identified for new FNLMA communities (See Table 1 below), which suggested that the use of dispute resolution panels in land disputes can lead to high socio-economic performance (0.96). As these new FNLMA communities do not yet have entrenched and mature institutions that only come with time under autonomy, there is a greater reliance on procedural mechanisms to ensure that best practices related to judicial fairness and equity are carried out. These best practices are imperative to provide community members with the security and assurances needed for social benefits to be realized from the effective functioning of society and realizing economic benefits by supporting economic activities. The lack of an appeals process through courts of competent jurisdictions was a significant element the causal pathway for new FNLMA communities. One potential reason may be related to the awareness and familiarity of community members with formal dispute resolution processes, such as the documented challenges that First Nations face in the financial sector. The Senate Standing Committee on Aboriginal People (2007) noted that mainstream financial institutions have historically been inaccessible to First Nations because these systems were developed without any consideration of First Nations. Community members that are less familiar with formal dispute resolution processes may not be aware of their options or become intimidated to pursue complex legal options—especially if those options do not reside within the community or have any cultural connection (Tobin et al, 2011). However, this is an observation at this point and further research would be needed to support this notion.

6.1.3. Mature FNLMA Community Findings

As First Nations communities mature as autonomous states, governance institutions become embedded in society and governance needs change (Enright et al, 2015). There were six causal pathways identified that were specific to mature FNLMA communities (See Table 1).

When looking at causal pathways for LAC structure and organization, the combination of all analyzed practices except for the election of LAC members (Council involvement, clear hierarchy established with Council, inclusion of an Elder, termed member appointments, family conflict of interest restrictions, and ideal committee sizes), provided the highest solution consistency value of 0.98. This suggests that a combination of practices (such as those analyzed) contribute to effective land management oversight bodies, which influence land management functions that promote socio-economic development. This phenomenon may be unique to mature FNLMA communities because some of the practices analyzed in this study require an effective governing Council with community confidence and support. The control over law making powers and Council involvement in the LAC can limit internal infighting/power struggles and improve community outcomes only if Council is governing effectively. Mature FNLMA communities have the time not only to develop successful accountability mechanisms at the Council level but are able to embed the institution of effective governance throughout their communities.

As for dispute resolution processes to promote socio-economic development, mature FNLMA communities benefit from having the combination of allowing appeals through courts of competent jurisdictions with a lack of a dispute resolution panel (0.91). An observation from analyzing the various land codes is that some communities have developed more sophisticated, multi-option approaches to resolving disputes that allows complainants to choose from various options, while others have empowered dedicated adjudicators with legal credentials to resolve disputes. These processes are often substitutable and dependent on the preferences of the complainant that provides flexibility and promotes a depoliticized process. Additionally, the inclusion of an appeals process through provincial or federal courts ensures that disputes are handled fairly and provides confidence in the community judicial process. This confidence is essential in incentivizing economic activity and attracting investment. Furthermore, the appeals process may be more effective in mature FNLMA communities than general communities because members in mature communities may have longer exposure and greater familiarity with formal legal processes, which makes the process less intimidating

and more available as an option. Again, this is anecdotal, and more research is needed to confirm these suggestions.

When it comes to access to land and mature FNLMA communities, there were two identified causal pathways that contributed to high socio-economic performance. One pathway that was closed and one that was slightly more open—but both had restrictions placed on government sponsored agents. One pathway was highly restrictive for non-member residency and public land access (0.91), while the other pathway allowed for greater access to public lands (0.94). When it comes to access to land it is important to understand the trade-offs that exist between cultural and economic benefits. Closed communities can benefit from being more close-knit and fostering a community centred identity (Lavoie & Lavoie, 2017). While a more open access policies may contribute to tourism, investment, or population growth factors that drive economic development (Hodge, 2016). Both paths can contribute to improved community wellbeing, however, it seems that mature FNLMA communities do not benefit from open land access policies to the same extent as new FNLMA communities.

In terms of community involvement, two causal pathways were identified for mature FNLMA communities with both pathways involving low levels of community involvement (or high community vote threshold requirements) for non-residential interests. One pathway consisted of higher levels of community involvement in natural resource decisions (0.92), while the other had lower levels of community involvement for residential decisions. Having higher threshold requirements before a community vote is needed for land interest decisions allows Council to negotiate longer tenure terms in agreements without the need of community approval. This provides third party investors with greater certainty negotiating with Council and reduces the time of the project approval process. This seems to be especially beneficial to mature communities in the non-residential and residential areas and less so when it comes to natural resource projects. This may be because of the nature and perception of natural resource projects where finite resources are being extracted and community members may perceive a greater degree of ownership over the resource and stake in the project (Gruber, 2011).

However, more in-depth research would be needed to better understand why these pathways contribute to greater socio-economic development.

Table 1. Governance Drivers that Improve Socio-Economic Performance (based on CWB) by FNLMA Community Type

Governance Area	Governance Variables	New FNLMA Communities Supports Socio-Economic Outcome	Mature FNLMA Communities Supports Socio-Economic Outcome
Dispute Resolution	Reliance on Dispute Resolution Panels to Resolve Land Disputes	●	✕
	Level of Complainant Involvement in Resolution Process		
	Appeals Process Through Courts of Competent Jurisdictions		●
Community Involvement	Level of Involvement in Residential Projects		↓
	Level of Involvement in Non-Residential Projects		↓
	Level of Involvement in Natural Resource Projects		↑
Land Access	Level of Restrictions on Non-Member Residents	↓	↓ ↑
	Level of Restrictions on Public Access to Land <i>(i.e. open access for leisure/social purposes, invitation only, no public access, etc.)</i>	↓	↓ ↑
	Exemption Clauses for Government Sponsored Agents <i>(i.e. police or other government staff)</i>		
Interests & Transfers	Council Approval Required for Interest Transfers to Non-Members		
	Council Approval Required for Interest Leases to Non-Members		
	Council Approval Required for Interest Transfers Between Members		
Land Advisory Committees (LACs)	Inclusion of an Elder on the Committee		●
	Inclusion of a Council Member on the Committee		●
	Elections to Select LAC Members		✕
	Council has Power to Introduce New Land Laws Without LAC Involvement		●
	Limits on LAC Member Terms		●
	Family Conflict of Interest Restrictions		●
	LAC Size is Ideally 9-12 Members		●

<u>Table Legend</u>	
The Presence of a Variable leads to a higher outcome	●
The Absence of a Variable leads to a higher outcome	✕
A High Variable Value leads to a higher outcome	↑
A Low Variable Value leads to a higher outcome	↓
<i>*No symbol indicates that no significance was found</i>	

Note: The above table is a summary of governance practices that were found to be significant in improving the socio-economic performance of case communities. These findings are detailed above in Section 6.1.

6.1.4. Community Characteristic Findings

The community characteristic variables were combined with governance best practices (variables that were identified from the socio-economic QCA analysis as being significant) and were analyzed through a QCA process (See Appendix B for list of community characteristic variables and descriptions). There were four implications identified from the analysis: one that identified community characteristic traits that generally promoted high socio-economic performance; one that determined community types that benefitted the most from using dispute resolution and appeals processes through courts of competent jurisdictions; one that determined community types that benefitted the most from having a high community involvement in non-residential projects; and another that determined community types that benefitted the most from open or closed access policies. See Appendix E for full QCA results.

General Implications

When considering solely community characteristic influence on socio-economic performance, there was a combination of variables that was identified to contribute to a higher socio-economic outcome (See Table 2 below). The combination of small community size, a large surrounding population, high community accessibility, custom electoral system, a close-knit population, and no economic dependency on natural resources contributed to high socio-economic performance.

Table 2. Community Characteristics that Contribute to High Socio-Economic Performance

Governance Action	Community Size	Surrounding Population Size	Community Access	Administrative Capacity	Electoral System	Population Nature	Resource Dependency
Combination of Variables that Contribute to High Socio-Economic Performance	Small	Large	High		Custom	Close-Knit	None/Low

Dispute Resolution Implications

Two dispute resolution governance variables were identified as best practices in the socio-economic analysis and were analyzed with community characteristic

variables—the use of dispute resolution panel mechanisms and the use of an appeals process through courts of competent jurisdictions. There were two causal pathways identified with both pertaining to communities that were small in size, highly accessible, and were close-knit in nature (See Table 3 below). The points of differentiation came in the form of governance and administrative capacity. One pathway required a high level of administrative capacity spending, while the other substituted this with custom electoral models not dictated by the *Indian Act*. This suggests that communities with small, close-knit populations and high accessibility to urban centres would benefit the most from the use of both dispute resolution panels and court of competency appeal processes. However, the analysis suggests these communities require either the administrative capacity or the electoral system to be able to properly implement these mechanisms.

Table 3. Community Characteristics and Dispute Resolution Governance Variables that Contribute to High Socio-Economic Performance

Governance Action	Community Size	Surrounding Population Size	Community Access	Administrative Capacity	Electoral System	Population Nature	Resource Dependency
Communities that Benefit the most from including an Appeals Process through Courts of Competent Jurisdictions with a Dispute Resolution Panel	Small	Small	High	High		Close-Knit	
	Small	Small	High		Custom	Close-Knit	

Community Involvement Implications

All three community involvement governance variables were identified as best practices in the socio-economic analysis and were analyzed with community characteristic variables. There were two causal pathways identified (See Table 4 below). Both pathways involved communities with small populations and a high level of community involvement in decisions related to residential and natural resource projects. One pathway consists of low community involvement in non-residential projects for communities that have low administrative capacity, use government systems dictated by the *Indian Act*, and have populations that are more migratory in nature. While the other pathway involves high level of community involvement in non-residential decisions for communities that have high administrative capacity, custom government systems beyond the *Indian Act*, and are closer knit in nature. These findings propose that community involvement in decision-making may be reliant on other factors such as administrative capacity, government type, and the close-knit nature of the population.

Table 4. Community Characteristics and Community Involvement Governance Variables that Contribute to High Socio-Economic Performance

Governance Action	Community Size	Surrounding Population Size	Community Access	Administrative Capacity	Electoral System	Population Nature	Resource Dependency
Communities that Benefit the most from High Community Involvement in Non-Residential Project Decision-Making	Small			High	Custom	Close-Knit	None/Low
Communities that Benefit the most from Low Community Involvement in Non-Residential Project Decision-Making	Small			Low	Indian Act	Migratory	None/Low

Access to Land Implications

All three access to land governance variables were identified as best practices in the socio-economic analysis and were analyzed with community characteristic variables. There were three causal pathways identified (See Table 5 below). Two of the pathways could be considered open access models, while the third pathway represents a more closed approach. The closed pathway involved high restrictions on non-member residency and land access to the general public for communities that were smaller, close-knit, and highly accessible. The two open pathways involved little to no restrictions for non-member residency and public land access that were highly accessible and close-knit in nature. These pathways differed in community and surrounding population sizes, with one pathway involving large community populations with small surrounding populations and the other involving small communities with large surrounding populations. This suggests that there is not a straightforward development pathway for communities in a socio-economic sense as both closed and open access communities have found success with their respective approaches.

Table 5. Community Characteristics and Land Access Governance Variables that Contribute to High Socio-Economic Performance

Governance Action	Community Size	Surrounding Population Size	Community Access	Administrative Capacity	Electoral System	Population Nature	Resource Dependency
<i>Communities that Benefit the most from a Closed Model Approach to Land Access. (High restrictions on non-member residency and public access to land)</i>	Small	Large	High			Close-Knit	None/Low
<i>Communities that Benefit the most from an Open Model Approach to Land Access. (Low restrictions on non-member residency and public access)</i>	Small	Large	High			Close-Knit	None/Low
	Large	Small	High			Close-Knit	None/Low

6.2. Analysis 2: Cultural Results Summary

There were seven causal pathways and two general findings that were identified from the cultural outcome analysis, five of the pathways were applicable for new FNLMA communities and two pathways for more mature FNLMA communities (See Table 6 below). See Appendix F for full QCA cultural analysis results.

6.2.1. General Findings

The cultural QCA analysis results of this study suggested that there may be a trade-off between traditional socio-economic and cultural preservation performance. Again, there was a direct linkage with length of land code maturity and cultural performance, but the relationship was inverse of the socio-economic connection; meaning that less land code maturity led to greater cultural preservation outcomes (0.82). However, it is important to note that the unique coverage rate was only 0.07. Furthermore, communities that had higher socio-economic outcomes (higher CWB scores) led to lower cultural preservation outcomes (0.88) with a much higher unique coverage rate (0.26). This may suggest that land code maturity may not be as influential on cultural outcomes as the socio-economic or CWB factor; however, it is difficult to definitively conclude as these factors are closely intertwined.

6.2.2. New FNLMA Community Findings

In terms of dispute resolution mechanisms, the use of dispute resolution panels without the inclusion of appeal processes through courts of competent jurisdiction was a causal pathway for new FNLMA communities to improve cultural outcomes (0.84). This finding reinforces the socio-economic analysis results that suggested dispute resolution panels were important elements to new FNLMA community dispute resolution processes and other court appeal processes are not. This may also support the earlier notion that appeal processes through courts of competent jurisdictions represent an intimidating and inaccessible legal mechanism for First Nations communities.

The cultural analysis of community involvement variables identified one causal pathway for new FNLMA communities. This pathway, similar for mature FNLMA communities, identified high levels of community involvement in natural resource project decisions as being a causal factor. However, land code maturity was a factor in whether there were benefits with community involvement in non-residential project decisions. New FNLMA communities benefitted from having high levels of community involvement in non-residential decisions (0.91), whereas mature communities benefitted from giving Council greater control and having lower levels of community involvement (0.92). This result supports the socio-economic analysis that suggested that mature communities benefitted from less community involvement in non-residential projects, while also suggesting that new FNLMA communities may benefit from greater levels of community involvement.

Unlike the socio-economic analysis, the cultural analysis of the land interests and transfers management area identified one causal pathway that was applicable to new FNLMA communities. It suggested that the combination of Council approvals for leases and transfers from members to non-members and the lack of financial management certification were beneficial in contributing to high cultural performance (0.97). At this point there is no clear hypothesis as to why the absence of financial management certification would contribute to a better cultural performance. It may be a side effect of the inverse relationship between the cultural and socio-economic outcomes utilized and

that these factors may represent a drag on the socio-economic outcome rather than a contributor to a better cultural outcome. Regardless, more research would need to be done to better understand the role of these factors.

In regard to cultural preservation performance and the land access governance area, there was one identified causal pathway. The pathway suggested that new FNLMA communities benefitted from having little to no restrictions on public access to lands but more restrictive practices for government sponsored agents (0.81). This finding matches initial socio-economic results that suggested that communities may generally benefit from little restrictions to public access of lands.

When considering LAC variables in relation to the cultural preservation outcome, one causal pathway emerged as being significant. The pathway was applicable for new FNLMA communities and suggested that only the presence of family conflict of interest rules and the absence of all other considered factors (Council involvement, clear hierarchy established with Council, inclusion of an Elder, termed member appointments, elections of LAC members, and ideal committee sizes) resulted in higher cultural performance (0.95). This was surprising because of the assumption that including an Elder on the LAC would be considered a cultural best practice as it incorporates the involvement of traditional leadership roles (Black, 1994). However, this result may underscore the complex and intangible nature of cultural forms within First Nations communities. Alternatively, it may highlight a greater divergence between theory and practice. Such as communities are theoretically involving Elders on the LAC but in practice their roles are not effectively influencing the function or processes of the LAC. Again, this study does not point to a clear solution on this issue and more research would be needed to better understand this dynamic.

6.2.3. Mature FNLMA Community Findings

In terms of mature FNLMA communities, there was one identified causal pathway from the cultural analysis for community involvement variables. The pathway identified high levels of community involvement in natural resource project decisions as

being a causal factor (similar to the new FNLMA community pathway) but mature communities benefitted from giving Council greater control and having lower levels of community involvement (0.92). This result supports the socio-economic analysis that suggested that mature communities benefitted from less community involvement in non-residential projects.

The cultural analysis of the member interests and transfers variables identified one causal pathway for mature FNLMA communities. The pathway suggests that these communities benefitted the most, in a cultural sense, from Council approvals for leases and transfers from members to non-members, Council approvals of transfers between members, and the lack of financial management certification (0.81). Council's power to approve all community land leases and transfers prevents land transfers from occurring that may dilute the close-knit nature of the community and compromise the attainment of community-wide cultural objectives. Furthermore, this supports the theory indicted by Lavoie & Lavoie (2017), which suggested that liberalized land markets can erode community cohesion and the close-knit nature of First Nations communities.

6.3. Future Research Considerations

The study was able to identify a number of causal relationships between land management governance variables and community wellbeing outcomes. Despite these findings there is a need for additional research to understand underlying reasons for these relationships. Future research could improve this study's findings by specifically focusing on land code maturity and understanding why mature FNLMA communities require different dispute resolution, community involvement, and other governance practices. Additionally, understanding that 'culture' is a complex concept that is not easily defined by one metric, further research in understanding the relationship of governance practices with other cultural components (besides traditional language) would help in providing a more comprehensive understanding.

Table 6. Governance Drivers that Improve Cultural Performance (Prevalence of Indigenous Language) by FNLMA Community Type

Governance Area	Governance Variables	New FNLMA Communities Supports Cultural Outcome	Mature FNLMA Communities Supports Cultural Outcome
Dispute Resolution	Reliance on Dispute Resolution Panels to Resolve Land Disputes	●	
	Level of Complainant Involvement in Resolution Process		
	Appeals Process Through Courts of Competent Jurisdictions	×	
Community Involvement	Level of Involvement in Residential Projects		
	Level of Involvement in Non-Residential Projects	↑	↓
	Level of Involvement in Natural Resource Projects	↑	↑
Land Access	Level of Restrictions on Non-Member Residents		
	Level of Restrictions on Public Access to Land <i>(i.e. open access for leisure/social purposes, invitation only, no public access, etc.)</i>	↓	
	Exemption Clauses for Government Sponsored Agents <i>(i.e. police or other government staff)</i>		
Interests & Transfers	Council Approval Required for Interest Transfers to Non-Members	●	●
	Council Approval Required for Interest Leases to Non-Members	●	●
	Council Approval Required for Interest Transfers Between Members		●
Land Advisory Committees (LACs)	Inclusion of an Elder on the Committee	×	
	Inclusion of a Council Member on the Committee	×	
	Elections to Select LAC Members	×	
	Council has Power to Introduce New Land Laws Without LAC Involvement	×	
	Limits on LAC Member Terms	●	
	Family Conflict of Interest Restrictions	×	
LAC Size is Ideally 9-12 Members	×		

<u>Table Legend</u>	
The Presence of a Variable leads to a higher outcome	●
The Absence of a Variable leads to a higher outcome	✕
A High Variable Value leads to a higher outcome	↑
A Low Variable Value leads to a higher outcome	↓
<i>*No symbol indicates that no significance was found</i>	

***Note:** The above table is a summary of governance practices that were found to be significant in improving the cultural performance of case communities. These findings are detailed above in Section 6.2.*

Chapter 7. Recommended Policy Approach

Figure 7. Considerations in Determining Recommended Policy Approach



This chapter involves the summation of land management governance best practices identified through the research approach and a recommended pathway in how to incorporate these practices for various First Nations communities. The objective of this paper, and specifically this chapter, is to provide First Nations communities that are considering or underway in operating under a FNLMA land code, with suggested governance approaches that can enhance community wellbeing (considering both socio-economic and cultural outcomes) and aid in the journey to self-determination. It is important to note that the recommendations are based on this study’s findings and cannot account for all the intricate complexities that define individual First Nations communities. All proposed recommendations should be carefully considered and decided upon in a manner that is deemed appropriate by the community’s social norms and customs.

7.1. Recommended Governance Pathway and Considerations

A primary recommended governance pathway has been developed as a recommended approach for a general First Nations community operating under the FNLMA, with different policy recommendations based on where the community is in its FNLMA journey. This pathway is divided into four main decision periods: the operational start of the FNLMA, a 5-year strategic assessment, a 10-year land code update, and consideration of ongoing and long-term community objectives. Figure 9

below provides a summation of policy actions associated with the recommended pathway.

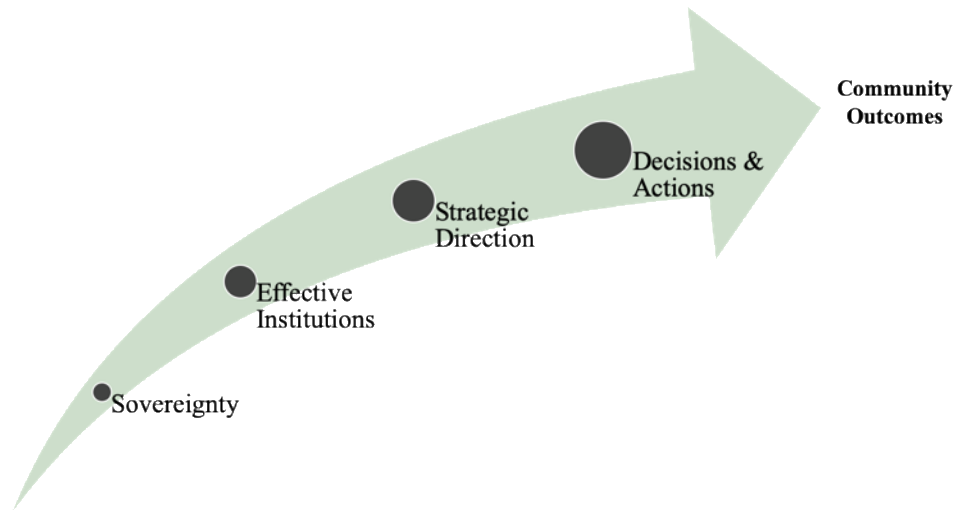
7.1.1. FNLMA Operational Start

In this time period, First Nations communities will have ratified the FNLMA and have developed a land code. The following are recommendations in developing the initial custom land codes and the continued management of those land codes.

General Recommendation

It is recommended, regardless of the chosen approach, that all First Nations communities consider the use of long-term planning processes that will lead to the development of strategic plans to achieve self-determination outcomes. Long-term strategic planning is an important step that takes good governance practices and translates them into decisions and actions that directly impact outcomes—illustrated by Figure 8 below (Cornell & Kalt, 1998). These strategic plans should also include both socio-economic and cultural objectives that are informed by social norms and outline the long-term vision for what kind of society that Council intends to build. The long-term nature of strategic planning could also be helpful in mitigating the socio-economic “peaking” phenomena that Fligg & Robinson (2019) identified where community CWB score growth slowed significantly after operating under the FNLMA for a few years. It prevents communities from making decisions that provide short-term benefits at the expense of long-term growth—as the cost-benefit decision-making process incorporates a longer planning time horizon. These strategic plans should extend to address all aspects of the community and the overall governance structure with updates taking place on a three to five year basis. The strategic planning process will have implications on land code policies and will require ongoing alignment to ensure that land management functions are contributing to long-term community goals.

Figure 8. Need for Strategic Planning in Determining Community Outcomes



Modified from Cornell & Kalt, 1998

Dispute Resolution

In regard to dispute resolution processes, it is recommended that dispute resolution panels should be initially adopted as the primary channel for dispute resolution and should not include provisions for appeals processes through courts of competent jurisdictions. This combination achieves both contributions to greater socio-economic and cultural outcomes for new FNLMA communities. Community governments should focus efforts on refining the dispute resolution panel process by implementing processes that could resist potential efforts for Council influence. These processes include the pre-identification of individuals, either through an election or appointment process, which form a pool of potential panel members. Council can select a panel member(s), the complainant can select an equal amount of panel members, and the selected panel members jointly select the remaining panel member(s). This was an observed best practice from the case communities and ensures there is transparency and fairness in the dispute resolution process, which is key to building trust in the system among community members.

Community Involvement

With respect to the inclusion of community involvement in project decision making, it is recommended that all residential, non-residential, and natural resource projects have high involvement from the community. This is achieved by including low project interval thresholds that trigger community approval requirements for project approval processes. It's recommended that residential and non-residential projects require community approvals that exceed 25 years in length and community approvals for natural resource projects that exceed 1-5 years. This ensures that there is ample opportunity for community input to be included in the decision-making processes but still provides Council with the ability to streamline smaller decisions that don't exceed the project length limits. High community involvement in decision making provides communities that do not have lots of experience operating under the FNLMA with high cultural outcomes (especially for non-residential and natural resource projects). There were no observable impacts of these policies on socio-economic outcomes for new FNLMA communities.

Land Access

Land access policies in community land codes seem to be highly dependent on community characteristics as both closed and open pathways were generally found to contribute to high socio-economic outcomes. Larger communities with little surrounding population sizes that are accessible and have stable populations, benefit the most socio-economically from having low restrictions on non-member residency and land access. For other community types that do not fit this specific profile, there is less clarity as to if an open or closed access pathway is ideal. Generally, low restrictions on access to land does benefit new FNLMA communities culturally and mature FNLMA community's socio-economically. Additionally, it can be inferred that it's easier to loosen non-member residency restrictions over time and more difficult to tighten them as more non-members become part of the community. In considering these observations, it's recommended that communities that do not have strong predispositions on the matter initially include low restrictions on land access and high restrictions on non-member access into the land code.

Member Interests and Transfers

In terms of the management of member land interests and transfers in land codes, it's recommended to require Council approval for all member land transfers or leases. These policies are beneficial for both new and mature FNLMA communities in achieving a high cultural outcome, while no impact on socio-economic performance was observed. This also provides Council with greater control over land transfers and leases, which should be used to help support Council's long-term vision and objectives for the community.

Land Advisory Committees

The most important Land Advisory Committee practice to include in land codes for new FNLMA communities is the inclusion of family conflict of interest clauses—as it provides mature FNLMA communities with socio-economic benefits. This clause prevents the appointment of multiple family members on the LAC and should include, as a best practice, the prevention of distant family members like cousins, uncles, or aunts and family members that may be members on Council. Other optional practices to consider includes the inclusion of an Elder on the LAC, the creation of term limits, a Council member included on the LAC, the ability of Council to make laws without LAC input, and limiting the size of the LAC to 9-12 members. These practices have been observed to contribute to high socio-economic outcomes for mature FNLMA communities but not for new FNLMA communities. One practice that should not be included is the practice of electing LAC members, as it contributes to low socio-economic outcomes for mature communities. Instead it is recommended that LAC members are appointed by Council.

7.1.2. 5-Year Strategic Assessment

The 5-year assessment period is a point in time to review and update strategic plans, which cover land management matters, and to prepare for anticipated land code changes at the 10-year mark of the land code.

General

Typically, strategic plans outline objectives and priorities for 3-5 years to achieve in order to progress towards longer-term goals. The 5-year assessment point in time is meant to update previous strategic plans, which includes an assessment of progress made to date towards short, intermediate, and long-term objectives. In a community wellbeing context this includes progress towards stated socio-economic and cultural outcome objectives. Community governments should also assess the effectiveness of land code policies in contributing to these socio-economic and cultural outcomes, as well as the gradual change in community dynamics. This will allow for comprehensive and incremental adjustments to the community land code to ensure that the land code reflects both the growing maturity of land management self-governance and the evolving realities being experienced at the community level. Areas of land codes that should be expected to change at the 10-year update period includes dispute resolution processes, community involvement in non-residential project decisions, the organization of LACs, and potentially land access policies.

Dispute Resolution

Mature FNLMA communities benefit from not relying on dispute resolution panels as a sole approach to dispute resolution matters and the inclusion of mechanisms to appeal through courts of competent jurisdictions. In understanding that these proposed changes should take place in the coming five years, First Nations governments need to plan and prepare for the transition. The effectiveness and fairness of previous dispute resolution processes through dispute resolution panels is important to build community confidence in the process and government, which is imperative to be able to facilitate future changes in the process. Additionally, as community members become more familiar and comfortable with formal dispute resolution processes over time, it could allow for a smoother transition to the inclusion of appeals processes through courts of competent jurisdiction.

In order to accomplish the future transition to a more complex, multi-channel dispute resolution system, First Nations governments should seek the input of community

members on the matter through community general meetings and other existing touchpoints between Council and community members. This input will help to identify new dispute resolution mechanism opportunities and potential barriers in transitioning. It also will help to inform the development of the strategic plan and facilitate widespread buy-in in the future reforms of the dispute resolution system.

Community Involvement

In terms of community involvement, the First Nations community should review the project length threshold requirements in the land codes that are responsible for triggering community approvals for residential, non-residential, and natural resource projects. First Nations government should assess the project thresholds for natural resource projects and ensure that there has been sufficient community involvement in decisions within the past five years. If projects are not receiving sufficient community involvement, the threshold should be lowered or removed entirely to ensure that ample community involvement will occur in the future. In terms of residential and non-residential projects, unless communities are small, have high administrative capacity, close-knit populations, and custom electoral systems—the community should plan to increase the threshold requirement over the next five years to provide Council with greater power to negotiate and approve residential projects that are short or medium in project length. In order to prepare for these changes, First Nations governments should communicate the changes well in advance of the implementation and provide an opportunity for community members to provide feedback on the issue. This can help identify whether there are local sensitivities in either the residential or non-residential areas, which would require the project areas to be treated differently as opposed to a single increase in project threshold lengths for both areas.

Land Access

In terms of access to land policies, these policies are highly dependent on community preferences and will require extensive ongoing community input and an assessment of demographic changes within the community. Communities that have grown substantially in a sparsely populated area may want to consider an open access

model if they had initially placed high restrictions on non-member residency and public access to land. This was observed to provide a socio-economic benefit for mature FNLMA communities and planning would need to take place at this time if that is the identified course of action. This intention will require considerable input from community members as this policy area can potentially have significant implications on community cohesion and cultural values. Ongoing feedback mechanisms (such as community meetings) should be in place years before implementing any changes to land access policy and should focus on collecting community member input; informing policy design and changes; and communicating back results for additional feedback. This approach to communicating land access policy changes will ensure that there is two-way communication between members and Council, which allows for member input to be considered in policy in a meaningful way.

Interests and Transfers

It's recommended to preserve the interest and transfer policies that require Council approvals for land transfers or leases between non-member or members over the long-term. These policies were observed to provide beneficial cultural outcomes with no observed negative socio-economic consequences for new FNLMA communities. However, it is important to continue to review and assess these policies as they contribute to long-term strategic objectives and could be revised as the FNLMA community matures.

Land Advisory Committees

First Nations should review LAC practices that have been included in the initial development of the community land code and determine if they are contributing to effective land management operations. The review should identify other potential LAC practices not included in the land code that could contribute to improved socio-economic benefits over the long-term, including: the inclusion of an Elder, the inclusion of a Council member, the creation of member term limits, and committee size limits to 9-12 members. The updated strategic plans should include implementation pathways for

identified practices to include and should be communicated with the LAC and the community over time.

7.1.3. 10-Year Land Code Update

The 10-year modification period signifies the transition of a new FNLMA community to a mature FNLMA community. It's recommended that strategic planning on a three to five year ongoing basis be continued and reflect the implementation of an updated community land code.

Dispute Resolution

It's recommended that First Nations governments update their land codes to include the use of multiple dispute resolution processes and an appeals process through courts of competent jurisdictions. This was observed to contribute to greater socio-economic outcomes for mature FNLMA communities. The inclusion of multiple dispute resolution channels is intended to provide complainants with the choice between varying arbitration or mediation mechanisms that differ in time requirements and process. This is to ensure that community members have faith in the impartiality and fairness of the system, while providing freedom to choose a process that fits best with the dispute at hand. In order to ensure consistency, there needs to be a standardized and competent appeals process. Appeals processes through courts of competent jurisdictions allows First Nations communities to leverage effective institutions in surrounding jurisdictions without the need for a substantial investment in developing a community court system.

Community Involvement

In terms of updating the community involvement in project decision making policies within the community land code, it's recommended that First Nations communities update policies to provide greater control to Council to negotiate and approve residential and non-residential projects—while preserving a high degree of community involvement in natural resource projects. The extensive community engagement process from the 5-year strategic assessment should inform the modification of project length threshold requirements that trigger community approvals, as they relate

to specifically residential or non-residential projects. This feedback should be the basis as to what the new project thresholds are in comparison to the 25-year limits recommended in the initial development of the land codes. Threshold limits observed in case community land codes suggests that increasing the threshold limit that triggers a community approval to 49 years or 99 years is sufficient in providing Council with the increased control it needs to negotiate and approve residential and non-residential projects.

Land Advisory Committees

In terms of updating policies that dictate the organization of the LAC, it's recommended that the inclusion of an Elder on the LAC, the inclusion of a Council member as the Chair to the LAC, the creation of term limits, and limiting the size to 9-12 members are added to existing practices (such as the family conflict of interest clause). The combination of these practices contributed to higher socio-economic outcomes for mature FN communities. Observations from case community land codes suggest that including a Council member as the LAC Chair was an effective method to include Council and ensuring that the LAC did not politically interfere with Council. It's important to note that updates to the LAC should be intended to improve the operational efficiency of land management functions and not be used to increase the powers of the LAC. Observations from case community land codes identified that provisions that required Council to only act on land management matters (such as creating new interests or land management laws) only if it was recommended by the LAC, contributed to adverse socio-economic outcomes. Provisions that increase the powers of the LAC can paralyze decision making related to land matters and create political power struggles that do not contribute to good governance practices or favourable community wellbeing outcomes.

7.1.4. Long-Term Community Objectives

Over time, the long-term strategic planning process should continue on a three to five-year planning basis that iteratively assesses progress towards objectives, such as

socio-economic or cultural goals, and be regularly updated to reflect the gradual evolution of community dynamics. This requires the frequent use and formalization of communication mechanisms that facilitates two-way communication between Council and community members, which will ensure that land code changes enjoy widespread support and are implemented more effectively.

Other long-term objectives related to the effectiveness of land management in First Nations communities includes transitioning to custom electoral systems, improving administrative capacity, and nurturing a cohesive community with a stable population. It is observed through the QCA analysis that the combination of these factors can contribute to higher socio-economic outcomes but require long-term planning and incremental approaches to achieve large-scale change. Additionally, First Nations communities should consider the potential benefits that can come from pursuing traditional language and self-government initiatives.

Electoral Objectives

The pursuit of customized electoral systems is a further step that First Nations communities can take in trying to achieve full self-determination. This is achieved by supplanting *Indian Act* requirements that dictate First Nations political government structures and selecting a model that is more relevant to the community and its cultural values. The First Nations Elections Act is one such path that provides First Nations with the power over customizing their community's electoral system, while also providing review and certification support that ensures that there are checks and balances within the chosen electoral system that promote fairness and transparency throughout the process.

Administrative Capacity Objectives

As First Nation communities pursue greater self-determination, there is a greater need for administrative capacity to be able to manage the influx of new responsibilities. As the community achieves greater socio-economic outcomes from FNLMA land management functions and using the best practices outlined with this study—it is important to account for the need to invest in increased administrative capacity over time in order to achieve greater levels of self-determination. This consideration should be

included within the community's strategic plan, which outlines administrative capacity needs over time to reach identified community objectives.

Population and Community Objectives

A close-knit community with a stable, long-term residency population is an important element in community cohesiveness and was identified as a major factor in achieving higher socio-economic outcomes. Strategic plans should incorporate objectives associated with increasing community cohesiveness, and specifically the proportion of the community population that has resided within the community for five years or more. Land code policies, especially those pertaining to non-member residency and the transfer of member interests, can be highly influential on the stability of the community's population. This is one of the primary reasons for providing Council with the power to approve any member interest transfers or leases. These community objectives should be closely aligned with the needs and desires of community members, which comes from ongoing engagement practices.

Traditional Language Objectives

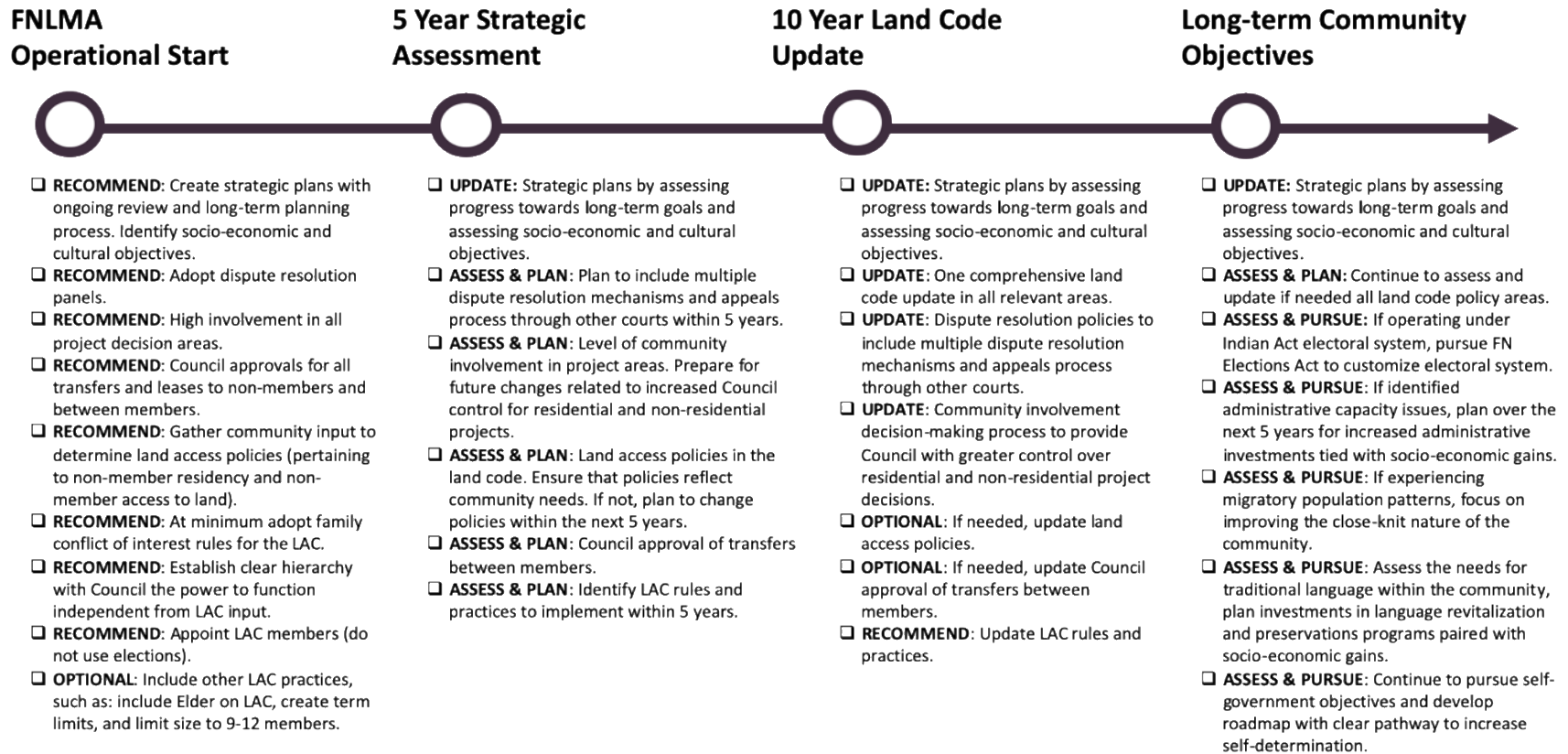
The revitalization of traditional language is significant in contributing to personal and collective identities, which in turn impacts community cultural outcomes. Conversely, the loss of a traditional language contributes to lost cultural stories and perspectives, a loss of individual expression, and adverse health outcomes (McDonald, 2011). Long-term cultural objectives should include the preservation and restoration of knowledge of traditional language. Witnessed in this study's research process was the decline of First Nations language knowledge as communities became more mature operating under the FNLMA. Similar to administrative capacity considerations, it's important that as First Nations communities experience socio-economic benefits from operating under the FNLMA that they also continue to invest and prioritize language revitalization efforts. The Assembly for First Nations has identified a number of initiatives that benefit language restoration, notably among youth. Some of these initiatives include culture camps for immersion programs, adult learning programs, youth

educational programs, or programs to increase the amount of First Nations teachers (McDonald, 2011).

Self-Government Objectives

Lastly, First Nations communities should consider the greater picture of operating under the FNLMA and plan for what results afterwards. The FNLMA is merely a stepping-stone solution to full self-determination by providing self-government control over land matters. As the community matures under the FNLMA it's essential to identify long-term opportunities for greater self-determination and identify potential barriers that can be resolved in the short and medium term. This will provide greater clarity in regard to how shorter-term strategic priorities relate to future self-determination and ensure a smoother transition to full self-government.

Figure 9. Recommended Land Code and Planning Pathway



Note: Above graphic depicts the summary of policy recommendations described in Chapter 7 and the relevant time periods to consider making policy change.

Chapter 8. Summary and Conclusion

This study has analyzed a number of different land management governance practices to determine their effectiveness in promoting socio-economic outcomes without hindering cultural preservation outcomes. There are a number of practices that are dependent on community characteristics and other unique indicators; however, there are a few key lessons that can help First Nations communities progress towards developmental goals.

Firstly, self-government maturity matters and communities at different stages of the FNLMA journey have different needs and are presented with different opportunities. Communities that start off operating under the FNLMA require prescriptive dispute resolution panel processes, high community involvement in project decision making processes, and family conflict of interest restrictions for LACs. They require time to embed institutions across government and within the community in order to build foundational elements of trust, legitimacy, and develop an expectation for fairness and due process. As FNLMA communities begin to set these foundational pieces they need to update their land codes over time to address the different needs that emerge from changed realities within their communities. This includes providing community members with greater choice for dispute resolution mechanisms, leveraging existing courts of competent jurisdiction for appeals processes, entrusting Council with greater negotiating powers in respect to residential and non-residential projects, and incorporating more LAC best practices to improve its effectiveness.

Secondly (and related to the first point), is the importance of greater government dedication of resources and time for long-term strategic planning and community engagement. Adapting land code policies over time and implementing changes requires continuous communication back and forth between Council and the community and requires the careful planning and communication of what Council's vision is for the community. This includes stating socio-economic and cultural objectives and knowing

that trade-offs that exist between the two outcomes when making decisions related to land management. This formalized planning process also provides communities with the ability to pursue other strategic objectives that impact land management functions, such as increasing the community's administrative capacity or developing a custom electoral system to replace the *Indian Act* dictated model.

Third, culture and language specifically are harder to restore once they've been lost and require ongoing focus and investment. Long-term community wellbeing and sustainable development requires striking the right balance between socio-economic and cultural performance. Traditional language is integral to personal identity and community cohesiveness. Investments in traditional language preservation contribute to close-knit and stable populations, which in turn can help drive socio-economic growth and implement land management governance best practices.

And lastly, policies related to access to community lands is a highly localized policy decision that requires community input and the consideration of regional dynamics such as community population size compared to the population of the surrounding area. It's arguably more difficult to restrict land access over time to non-members than to lessen restrictions, which is an additional factor that should be taken into consideration when a community is deciding on access policies.

In conclusion, this study demonstrated the need for good governance within First Nations community land management practices and identified governance practices that could be considered best practice. These best practices can benefit First Nations communities (specifically those operating under the FNLMA) by contributing to long-term, sustainable socio-economic development without sacrificing cultural preservation outcomes. This in turn can provide these communities with the ability to pursue greater levels of self-government and fulfill their right as self-determining nations. Further research in the area of First Nations governance is needed to better understand the contextual nuances that influence governance practices and would be beneficial in providing First Nations governments with more evidence to make more informed developmental decisions. Without ongoing research, support, and effort from all

stakeholder groups in Canada, many First Nations communities will continue to struggle to reach their goals of self-determination. Just as it has been a number of factors that have contributed to the current situation, it will take a collective effort to develop an outcome where individual wellbeing is not determined by whether you are from a First Nations or non-Indigenous community.

References

- AANDC (2003). Creating the Conditions for Economic Success on Reserve Lands: A Report on the Experiences of 25 First Nation Communities. Aboriginal Affairs and Northern Development Canada. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1372346462220/1372346568198>
- AANDC (2013, June 19). First Nations Land Management Act. Aboriginal Affairs and Northern Development Canada. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1317228777116/1317228814521>.
- Anderson, Robert B., Dana, Leo Paul, & Dana, Teresa E. (2006). Indigenous land rights, entrepreneurship, and economic development in Canada: “Opting-in” to the global economy. *Journal of World Business*.
- Belanger, Y., & Newhouse, D. (2004). Emerging from the Shadows: The Pursuit of Aboriginal Self-Government to Promote Aboriginal Well-being. *The Canadian Journal of Native Studies*.
- Canada. Parliament. Senate. Standing Committee on Aboriginal Peoples, & Canadian Electronic Library. (2007). Sharing Canada's prosperity: A hand up, not a handout / Standing Senate Committee on Aboriginal Peoples. (DesLibris. Documents collection). Ottawa, Ont.: Standing Senate Committee on Aboriginal Peoples.
- CIRNAC (2019, August 27). Self-government. Crown-Indigenous Relations and Northern Affairs Canada. Retrieved from <https://www.rcaanc-cirnac.ca/eng/1100100032275/1529354547314#chp2>.
- CIRNAC. (2019, February 28). First Nations Land Management. Crown-Indigenous Relations and Northern Affairs Canada. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1327090675492/1327090738973>.
- Cornell, Stephen, and Joseph P. Kalt. 1998. “Sovereignty & Nation-Building: The Development Challenge in Indian Country Today.” *Harvard Project on American Indian Economic Development*. John F Kennedy School of Government, Harvard University.
- Cornell, Stephen, and Joseph P. Kalt. 2003. “Reloading the Dice: Improving the Chances for Economic Development on American Indian Reservations.” *Joint Occasional Papers on Native Affairs (JOPNA)*. Tucson and Cambridge: Udall Center for Studies in Public Policy and Harvard Project on American Indian Economic Development.

- Cornell, Stephen, and Miriam Jorgensen. 2007. The Nature and Components of Economic Development in Indian Country. In Prepared for the National Congress of American Indians Policy Research Center. Tucson: Native Nations Institute for Leadership, Management, and Policy.
- Crown-Indigenous Relations and Northern Affairs Canada (2018). "Self-Government." Government of Canada; Communications Branch, 12 July 2018, www.rcaanc-cirnac.gc.ca/eng/1100100032275/1529354547314.
- Dunlop, B., Gessner, S., Herbert, T., Parker, A., & First Peoples' Cultural Council. (2018). Report on the status of B.C. First Nations languages 2018 / authors, Britt Dunlop, Suzanne Gessner, Tracey Herbert & Aliana Parker. (Third ed.).
- Enright, Jane, Sapeha, Halina, Winn, Conrad (2015). Self-governance for First Nations: Beyond the Nisga'a Experience - Self-governance and Its Perceived Benefits for the Cree of Northern Quebec and the First Nations of Westbank (Kelowna), Sechelt (Sunshine Coast), and Yukon. Winnipeg: Frontier Centre for Public Policy. Canadian Electronic Library/desLibris Evaluating Community Participation in Environmental Impact Assessment-Chapter 6. (2013). In Evaluating Environmental and Social Impact Assessment in Developing Countries (pp. 113-128).
- FAO (1999). Land Resources and People: Dependence and Interaction. Retrieved from <http://www.fao.org/3/x3810e/x3810e04.htm>
- Flanagan, Tom, Alcantara, Christopher & Le Dressay, André (2010). Beyond the Indian Act: Restoring Aboriginal Property Rights. MQUP
- FISS, P. (2011). BUILDING BETTER CAUSAL THEORIES: A FUZZY SET APPROACH TO TYPOLOGIES IN ORGANIZATION RESEARCH. The Academy of Management Journal, 54(2), 393-420. Retrieved from www.jstor.org/stable/23045087
- Fligg, Robert & Robinson, Derek. (2019). Reviewing First Nation land management regimes in Canada and exploring their relationship to community well-being. Land Use Policy. 90. 104245. 10.1016/j.landusepol.2019.104245.
- Government of Canada (n.d.). Minister of Crown-Indigenous Relations and Northern Affairs Mandate Letter. Retrieved from <https://pm.gc.ca/en/mandate-letters/minister-crown-indigenous-relations-and-northern-affairs-mandate-letter>
- Hanson, E., 2009. The Union of B.C. Indian Chiefs. retrieved from http://indigenousfoundations.arts.ubc.ca/union_of_british_columbia_indian_chiefs/

- Hennessey, R., Pittman, J., Morand, A., & Douglas, A. (2017). Co-benefits of integrating climate change adaptation and mitigation in the Canadian energy sector. *Energy Policy*, 111, 214–221. doi: 10.1016/j.enpol.2017.09.025
- Hodge, I. (2016). Public rights of way and access to the countryside. In *The Governance of the Countryside: Property, Planning and Policy* (pp. 199-213). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511980237.011
- Irvin, R., & Stansbury, J. (2004). Citizen Participation in Decision Making: Is It Worth the Effort? *Public Administration Review*, 64(1), 55-65.
- Isaac, T. (1991). Authority, Rights and an Economic Base: The Reality of Aboriginal Self-Government. *Native Studies Review*, 7(2), 69-74.
- ISC (2019). Community Well-Being index graphs. Indigenous Services Canada. Retrieved from <https://www.sac-isc.gc.ca/SAC-ISC/CWB/index-graphs-en.html>.
- ISS Governance (2019). Governance Quality Score: Methodology Guide. Retrieved from <https://www.issgovernance.com/file/products/qualityscore-techdoc.pdf>
- Kalman, Ian (2013). III. Indigenous Self-Governance: An International Perspective. Institute for the Study of International Development.
- Kalt, Joseph (2001). Policy Foundations for the Future of Nation Building in Indian Country. Retrieved from <http://www.ksg.harvard.edu/hpaied/docs/PequotSpeechFINAL.pdf>
- Kalt, Joseph & Singer, Joseph (2004). Myths and Realities of Tribal Sovereignty: The Law and Economics of Indian Self-Rule, 2004-03 JOINT OCCASIONAL PAPERS ON NATIVE AFF. 5.
- Kaplan, R. (2005). How the balanced scorecard complements the McKinsey 7-S model. *Strategy & Leadership*, 33(3), 41-46.
- Kaufmann, Daniel, Kraay Aart and Mastruzzi, Massimo (2009). Governance Matters 2009: Learning From Over a Decade of the Worldwide Governance Indicators. Brookings. Retrieved from <http://www.brookings.edu/research/opinions/2009/06/29-governance-indicators-kaufmann>.
- Knoche, S., & Lupi, F. (2012). The Economic Value of Publicly Accessible Deer Hunting Land. *The Journal of Wildlife Management*, 76(3), 462-470.

- Lavoie, Malcolm, & Lavoie, Moira. (2017). Land Regime Choice in Close-Knit Communities: The Case of the First Nations Land Management Act. *Osgoode Hall Law Journal*, 559.
- Malhame, C., Langlois, S., & Dagenais, D. (2007). Michael J. Chandler, Christopher E. Lalonde, Bryan W. Sokol et Darcy Hallett, *Personal Persistence, Identity Development, and Suicide : A Study of Native and Non-Native North American Adolescents*, Boston et Oxford, Blackwell Publishing, *Monographs of the Society for Research in Child Development*, vol. 68, 2003, 139 p. *Recherches Sociographiques*, 48(3), 181-184.
- Mcdonald, R. (2011). *First Nations Languages and Culture Impacts on Literacy and Student Achievement Outcomes: Review of Literature*. Assembly of First Nations.
- National Research Council, Division on Earth Life Studies, Board on Agriculture Natural Resources, & Committee to Review the Bureau of Land Management Wild Horse Burro Management Program. (2013). *Establishing and Adjusting Appropriate Management Levels*. In *Using Science to Improve the BLM Wild Horse and Burro Program: A Way Forward* (pp. 195-238). National Academies Press.
- NIEDB (2019). *The Indigenous Economic Report 2019*. The National Indigenous Economic Development Board. Retrieved from <http://www.naedb-cndea.com/wp-content/uploads/2019/06/NIEDB-2019-Indigenous-Economic-Progress-Report.pdf>
- Nisga'a Government (n.d.). *Understanding the Treaty*. Retrieved from <https://www.nisgaanation.ca/understanding-treaty>
- Norat Roig-Tierno, Tomas F. Gonzalez-Cruz, & Jordi Llopis-Martinez. (2017). An overview of qualitative comparative analysis: A bibliometric analysis. *Journal of Innovation & Knowledge*, 2(1), 15-23.
- Northern Affairs Canada. (2013, July 9). *Creating the conditions for economic success on reserve lands: A report on the experiences of 25 First Nation communities*. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1372346462220/1372346568198>
- Northern Affairs Canada. (2018, November 7). *Evaluation of the Impacts of Self-Government Agreements*. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1510084299715/1510084513107>
- Ragin, Charles (2017). *User's Guide to Fuzzy-Set/ Qualitative Comparative Analysis*. Retrieved from <http://www.socsci.uci.edu/~cragin/fsQCA/download/fsQCAManual.pdf>

RCAP. (1996, November 7). The Report of the Royal Commission on Aboriginal People. Retrieved from <http://data2.archives.ca/e/e448/e011188230-01.pdf>

Wilson, D., & Macdonald, D. (2010). The Income Gap Between Aboriginal Peoples and the Rest of Canada. Canadian Centre for Policy Alternatives.

Appendix A. Land Code Variables

Governance Area	Variable Name	Variable Description	Quantification Criteria
General	LC_Maturity	How long the land code has been in operation.	*FNLMA was enacted in 1999 meaning there is up to 20 years that land codes can be operational. LC_Maturity= (Land Code Adoption year – 2019)/ 20
Dispute Resolution	DRPanel	Use of a dispute resolution panel to resolve land disputes.	Presence of a dispute resolution panel= 1 No presence= 0
	Particip_Process	The complainant has opportunity to participate in the resolution process (Council does not have complete control over the panel selection or process).	Complainant has influence in choosing panel or dispute resolution process= 1 Council has complete control over the process= 0
	FedCourt_Appeal	The complainant can appeal the dispute resolution process through a court of competent jurisdiction.	Complainants can appeal through a court of competent jurisdiction= 1 Unable to appeal= 0
Community Involvement	<i>CI_Residential</i>	Number of land tenure years required before a community vote to approve?	CA involvement in decision (No or 100 yrs= 0, every decision= 1)
	<i>CI_NonResidential</i>	Number of land tenure years required before a community vote to approve?	CA involvement in decision (No or 100 yrs= 0, every decision= 1)
	<i>CI_NatRes</i>	Number of land tenure years required before a community vote to approve?	CA involvement in decision (No or 100 yrs= 0, every decision or 1 yr= 1)

Governance Area	Variable Name	Variable Description	Quantification Criteria
Land Access	<i>Gov_Access</i>	The allowance of government sponsored personnel to access lands (such as law enforcement)?	Yes= 1 No= 0
	<i>NM_Residency</i>	The allowance of non-members to reside on reserve lands?	No residency allowed= 0 Only if an interest is held and residence is specified= 0.5 By invitation from a member= 0.75 No restrictions= 1
	<i>PubRd_Access</i>	The allowance of non-members on public roads and lands?	No access allowed= 0 Access for social/business purposes or by invitation= 0.75 No restrictions= 1
Interests & Transfers	<i>Appr_Lease_NM</i>	Does Council need to approve of leases between members and non-members?	Yes=1 or no
	<i>Appr_Trans_NM</i>	Does Council need to approve of transfers between members and non-members?	Yes=1 or no
	<i>Free_Trans_Mem</i>	Does Council need to approve of transfers between members?	No approval= 1, Approval= 0
	<i>FinMgmt_Cert</i>	Is the community FAL certified by the FNFMB?	Certified= 1 Not certified= 0
Land Advisory Committees	<i>LAC_Elected</i>	Are LAC members elected?	Yes= 1, No= 0
	<i>LAC_Council_Incl</i>	Is Council present in the LAC?	Council involved= 1, No Council Involvement=0
	<i>Council_Law_Control</i>	Does Council have full control over implementing new laws? (specifically, without input requirements from the LAC)	Yes= 1, No= 0

Governance Area	Variable Name	Variable Description	Quantification Criteria
	<i>LAC_Elder</i>	Is an elder require to be on the LAC?	Yes= 1, No= 0
	<i>LAC_Term_Appoints</i>	Are LAC member terms limited?	Yes= 1, No= 0
	<i>LAC_FamCOI</i>	Are conflict of interest rules present that restrict the number of family members on the LAC?	Yes= 1, No= 0
	<i>Ideal_CommSize</i>	Is the size of the LAC ideal?	9-12 Members= 1, 6-8 or 13-15 Members = 0.5 Other Sizes= 0

Appendix B. Community Characteristics

Variable Name	Variable Description & Data Source	QCA Quantification Criteria
Market_Internal	The size of the population currently living in the community (Stats Can, 2016)	1K+= 1, 600-1K= 0.75, 400-600= 0.5, 200-400= 0.25, less than 200= 0
Market_External	The size of the population residing within a 50-mile radius of the community (www.freemaptools.com).	1M+= 1, 250-1MK+= 0.75, 78K-250K= 0.5, 40-80K+= 0.25, Less than 50K= 0
Comm_Access	The geographic zone classified by the Government of Canada, which incorporates the distance and access type to major urban centres (INAC, 2019).	Zone 1= 1, Zone 2= 0.5, Other= 0
Admin_Capacity	The percentage of total expenditures spent on administrative and band government functions (AANDC, 2018).	0.35+=1, 0.25-0.35= 0.75, 0.15-0.25= 0.5, 0.1-0.15= 0.25, less than 0.1= 0
Govt_Type	The type of electoral system used by the community (INAC, 2019).	FN Elections Act= 1, Custom= 0.5, Others= 0
Close_Knit	The percentage of the community population that has not moved within the past 5 years (Stats Can, 2016).	Score out of 100%
Resource_Depend	The percentage of all community jobs that are based in the agriculture and resource-based sector (Stats Can, 2016).	0.2+= 1, 0.15-0.2= 0.75, 0.1-0.15= 0.5, 0.05-0.1= 0.25, less than 0.05= 0

Appendix C. Land Code and Community Characteristic Truth Table

Land Code Maturity, Dispute Resolution, Community Involvement, Land Access, and Member Interests and Transfers Variables

Case ID	Land Code Maturity	Dispute Resolution			Community Involvement			Land Access			Member Interests and Transfers			
	LC_Maturity	DRPanel	Comp_Process	FedCourt_Appeal	CI_Residential	CI_NonResidential	CI_NatRes	Gov_Access	NM_Residency	PubRd_Access	Appr_Lease_NM	Appr_Trans_NM	Free_Trans_Mem	FinMgmt_Cert
Community1	0.95	1	0	0	0.65	0.35	1	0	0	0	1	1	0	0
Community2	0.75	0	1	1	0.01	0.49	0.94	1	0.5	0.75	1	1	0	1
Community3	0.7	1	1	0	0.65	0.35	0.97	0	1	0.75	1	1	0	0
Community4	0.7	1	1	0	0	0	0	0	0.5	0	1	1	1	1
Community5	0.4	1	1	0	0.01	0.51	0.94	0	0.5	0.75	1	1	0	1
Community6	0.3	1	1	0	0.75	0.75	0.75	0	0	0.75	1	1	0	1
Community7	0.85	1	0	1	0.6	0.6	1	1	0.75	0.75	1	1	0	1
Community8	0.45	1	0	0	0.75	0.75	0.75	0	0.75	0.75	1	1	0	0
Community9	0.45	1	0.5	1	0.55	0.55	0.95	1	0.75	1	1	1	1	0
Community10	0.95	1	1	1	1	1	1	1	1	0.75	0.75	1	1	1
Community11	0.8	1	1	1	0.85	0.85	1	1	0.5	0.75	1	1	1	0
Community12	0.8	1	0	1	0.75	0.75	1	1	0.5	0.75	0	1	0	1
Community13	0.6	1	1	1	0.75	0.75	0.95	1	0.75	0.75	1	1	1	0
Community14	0.55	1	0	1	0	0	0	0	0	0	0	1	0	1
Community15	0.5	1	0	1	0.51	0.51	1	0	0	0	1	1	0	0
Community16	0.6	0	0	1	0	0	0	0	1	0	0	1	0	1

Land Advisory Committee and Community Characteristics Variables

Case ID	Land Advisory Committee							Community Characteristics						
	LAC_Elected	LAC_Council_Incl	LAC_Law_Control	LAC_Elder	LAC_Term_Appoints	LAC_FamCOI	Ideal_CommSize	Market_Internal	Market_External	Comm_Access	Admin_Capacity	Gov_Type	Close_Knit	Resource_Depend
Community1	0	0	1	0	0	0	0.5	0.75	0.5	1	0.5	0	0.68	0.25
Community2	0	1	1	0	0	1	0.5	0.5	0.75	1	0	0.5	0.47	0
Community3	0	0	1	0	0	1	0.5	0.25	0.25	0	0.25	0	0.49	0
Community4	1	0	0	0	1	1	0	0.25	0.25	0	0.5	0.5	0.76	0.25
Community5	0	1	1	1	1	1	0.5	0.5	0.25	0	0	0.5	0.89	0.25
Community6	0	0	1	0	1	1	0.5	0.5	0	1	0.25	1	0.70	0.5
Community7	1	1	1	1	0	1	0.5	1	0	1	0	0.5	0.68	0
Community8	0	0	0	0	0	1	0	1	0	0	1	0.5	0.72	0.75
Community9	0	0	1	0	1	1	0.5	0.25	0.5	0	0.5	0	0.54	0.25
Community10	1	1	1	0	1	1	0.5	0	0.5	1	1	0	0.67	0.5
Community11	1	0	1	0	1	0	0	0	0	0	0	0.5	0.71	1
Community12	0	1	1	1	0	0	0.5	0	0.75	1	0.25	1	0.77	0.5
Community13	1	1	1	0	1	0.25	1	0.25	0.75	1	1	1	0.64	0.25
Community14	0	1	1	1	0	0	0.5	0	1	1	0.25	0.5	0.89	0.5
Community15	0	0.5	1	0	0	0	0.5	0.5	1	1	0.5	0.5	0.65	0
Community16	0	1	1	1	0	1	0.5	0	1	1	0.5	0.5	0.81	0

Socio-Economic and Cultural Outcome Variables

	Socio-Economic Outcome	Cultural Outcome
Case ID	CWB Outcome	Cultural Outcome
Community1	0.63	0.43
Community2	0.77	0.46
Community3	0.43	0.57
Community4	0.54	0.46
Community5	0.63	0.41
Community6	0.64	0.51
Community7	0.70	0.49
Community8	0.48	0.52
Community9	0.84	0.52
Community10	0.42	0.46
Community11	0.69	0.53
Community12	0.54	0.44
Community13	0.59	0.45
Community14	0.41	NA
Community15	0.47	NA
Community16	0.57	NA

Appendix D. Socio-Economic Results

General FNLMA Community Results

Land Code Governance Area	Solutions	Unique Coverage	Solution Consistency
Access to Land	NM_Res*PubRd_Access	0.46	0.84

New FNLMA Community Results

Land Code Governance Area	Solutions	Unique Coverage	Solution Consistency
Dispute Resolution	~LC_Maturity*DRPanel	0.48	0.96

Mature FNLMA Community Results

Land Code Governance Area	Solutions	Unique Coverage	Solution Consistency
LAC	LC_Maturity*~LAC_Elected*(All other LAC Variables)	0.05	0.98
Access to Land	LC_Maturity*~Gov_Access*PubRd_Access	0.05	0.94
Community Involvement	LC_Maturity*~CI_NonRes*CI_NatRes	0.87	0.92
Dispute Resolution	LC_Maturity*~DRPanel*FedCourt_Appeal	0.19	0.91
Access to Land	LC_Maturity*~Gov_Access*~NM_Res*~PubRd_Access	0.26	0.86
Community Involvement	LC_Maturity*~CI_Res*~CI_NonRes	0.15	0.85

Appendix E. Community Characteristics Results

General Results

Solutions	Unique Coverage	Solution Set Consistency
~Market_Internal*Market_External*Comm_Access*Gov_Type*Close_Knit*~Resource_Depend	0.37	0.96

Dispute Resolution Results

Governance Variables in Solution	Community Characteristics in Solution	Unique Coverage	Solution Set Consistency
DRPanel*FedCourt_Appeal	~Market_Internal*Comm_Access*Admin_Capacity*Close_Knit	0.10	0.89
DRPanel*FedCourt_Appeal	~Market_Internal*Comm_Access*Gov_Type*Close_Knit	0.10	0.87

Community Involvement Results

Governance Variables in Solution	Community Characteristics in Solution	Unique Coverage	Solution Set Consistency
CI_Residential* CI_NonResidential*CI_NatRes	~Mkt_Int*Admin_Capacity*Gov_Type*Close_Knit*~Resource_Depend	0.13	0.96
CI_Residential* ~CI_NonResidential*CI_NatRes	~Mkt_Int*~Admin_Capacity*~Gov_Type*~Close_Knit*~Resource_Depend	0.10	0.94

Land Access Results

Governance Variables in Solution	Community Characteristics in Solution	Unique Coverage	Solution Set Consistency
NM_Residency*PubRd_Access	Market_Internal*~Market_External*Comm_Access*Close_Knit*~Res_Depend	0.13	1
NM_Residency*PubRd_Access	~Market_Internal*Market_External*Comm_Access*Close_Knit*~Res_Depend	0.13	0.96
~NM_Residency*~PubRd_Access	~Market_Internal*Market_External*Comm_Access*Close_Knit*~Res_Depend	0.21	0.90

Appendix F. Cultural Preservation Results

General Results

Land Code Governance Area	Variables	Unique Coverage	Sufficiency Consistency
CWB Performance	~CWB_Outcome	0.26	0.88
Land Code Maturity	~LC_Maturity	0.07	0.82

New FNLMA Community Results

Land Code Governance Area	Variables	Unique Coverage	Sufficiency Consistency
Interests	~LC_Maturity*Appr_Lease_NM*Appr_Trans_NM*~FinMgmt_Cert	0.27	0.97
LAC	~LC_Maturity*LAC_FamCOI*~(all other LAC variables)	0.08	0.95
Community Involvement	~LC_Maturity*CI_NonResidential*CI_NatRes	0.14	0.91
Dispute Resolution	~LC_Maturity*DRPanel*~FedCourt_Appeal	0.09	0.84
Access	~LC_Maturity*~Gov_Access*PubRd_Access	0.08	0.81

Mature FNLMA Community Results

Land Code Governance Area	Variables	Unique Coverage	Sufficiency Consistency
Community Involvement	LC_Maturity*~CI_NonResidential*CI_NatRes	0.05	0.92
Interests	LC_Maturity*Appr_Lease_NM*Appr_Trans_NM*~Free_Trans_Mem*~FinMgmt_Cert	0.09	0.81