



**FIRST NATIONS
MAJOR PROJECTS
COALITION**

Financing First Nations' Participation in Major Projects

HANDBOOK FOR LEARNING MODULE #1

About Us

The First Nations Major Projects Coalition (FNMPC) is a national 80+ Indigenous nation collective working towards the enhancement of the economic well-being of its members. We understand that a strong economy is reliant upon a healthy environment supported by vibrant cultures, languages and expressions of traditional laws. With a project portfolio exceeding a combined total cost of over \$17 billion, our key area of focus at the First Nations Major Projects Coalition is to support Indigenous ownership opportunities of major clean energy, natural resource, and infrastructure projects.

Colliers Project Leaders is a Sustaining Partner of the First Nations Major Projects Coalition. Together, we prioritize our relationship and seek out ways to advance mutually beneficial outcomes that contribute to true, lasting and meaningful reconciliation, including economic reconciliation. Colliers Project Leaders supported the Major Projects Coalition in the development of this learning module handbook: Financing Indigenous Participation in Major Projects.



Foreword

First Nations are increasingly becoming involved in major industrial projects that require large scale financing. Financing for major projects can be a very complex undertaking for First Nations that have not had the experience in securing large scale financing for projects, sometimes costing in the billions of dollars.

The FNMPc has direct experience in working with many First Nations across Canada to secure financing for major project where they are seeking to acquire equity ownership. The FNMPc's professional staff and advisors are seeing in many cases, First Nations lack of understanding of the concepts and constraints that go along with major project financing.

This is the first in a series of modules that will be aimed at assisting First Nations to better understand the key concepts that guide financing of major projects. To accomplish this, this handbook seeks to reduce the level of conventional financing jargon and presents the topic from a non-financial person's perspective.

The overall purpose of this module handbook is to better prepare First Nations to be able to ask questions and enter into a constructive dialogue with major project proponents, financiers or governments and to better understand the processes and challenges that often accompany financing major projects.

As First Nations become more knowledgeable about major project financing, they will be better equipped to negotiate terms in agreements with major project proponents that address the unique challenges First Nations face in financing equity participation in major projects.

First Nation equity ownership in major projects requires proponents and governments to work with First Nations to ensure they can fund their participation. By providing First Nations with the knowledge to better navigate the various financing options, this handbook further assists First Nations in realizing meaningful equity ownership in major projects.

This module has been prepared by individuals that have extensive experience in project financing and it is our sincere intention that it will meaningfully support increased First Nations' knowledge and understanding of major projects financing.

Introduction

Navigating capital markets to finance an Indigenous Nation's participation in major natural resource or infrastructure projects can be extremely complex. This handbook was developed by the First Nations Major Projects Coalition with support from Colliers Project Leaders to provide Indigenous Nations with a fundamental understanding and guidance to effectively address challenges associated with financing their participation in major projects.

This handbook is accompanied by a series of videos, which explain the essential building blocks of project financing and include examples of Indigenous Nations who are leading by example in financing major natural resource or infrastructure projects across Canada.

This handbook and the associated videos can be accessed online here: <https://fnmpc.ca/resources/>

The delivery of major projects is a complicated multidisciplinary process requiring expertise in areas such as Indigenous knowledge, environmental law and science, finance, engineering, and business strategy. This expertise and other financial challenges have historically been a hurdle preventing many Indigenous Nations from financing their meaningful participation in major natural resource and infrastructure projects.

Historically, Indigenous Nations were often held back from participating in major projects. The legacies of colonization have prevented Indigenous Nations from participating in the economy, as Nations were stripped of their wealth, forcibly removed from their lands and resources, and isolated far from urban and business centres on *Indian Act* Reservations.

As reconciliation gains momentum and Indigenous Nations reclaim their rightful place in the Canadian economy, tools and resources that build Indigenous Nations' literacy in navigating capital markets effectively are increasingly needed.

The First Nations Major Projects Coalition plays a vital role supporting Indigenous Nations to successfully participate in major projects. One of the key priorities for the First Nations Major Projects Coalition is to develop tools and support that helps to improve financial literacy of Indigenous Nations, which is a pre-requisite to enabling Indigenous Nations to successfully participate in major projects, understand their options, and get the best outcomes for their communities.

This handbook is designed in a way that compares financing a major project to building a private house. The themes in the analysis used for this case study have many parallels with large, complex projects.

Furthermore, this practical comparative approach should help readers better understand and more easily grasp the fundamental concepts related to project financing. The objective is for readers to conceptualize major project financing by comparing it to something familiar to most people – the construction of a house that is subsequently rented to tenants to create income for paying down debt.

This handbook is part of a larger series of capacity tools intended to support Indigenous Nations in financing their participation in major natural resource and infrastructure projects. The First Nations Major Projects Coalition will develop and release subsequent learning modules over time, which will outline incrementally more advanced concepts related to major project financing.

Case Study: DEVELOPING A RENTAL PROPERTY

To help readers better grasp the key concepts related to major project financing, this handbook uses a case study focused on comparing major projects financing to building a house.

In this scenario, the owner of a plot of vacant land plans to build a house and then lease out the property to collect rental income, which will pay down the debt associated with the house and provide income to the owner. Construction costs are \$500,000 and the house will take 1 year to construct.

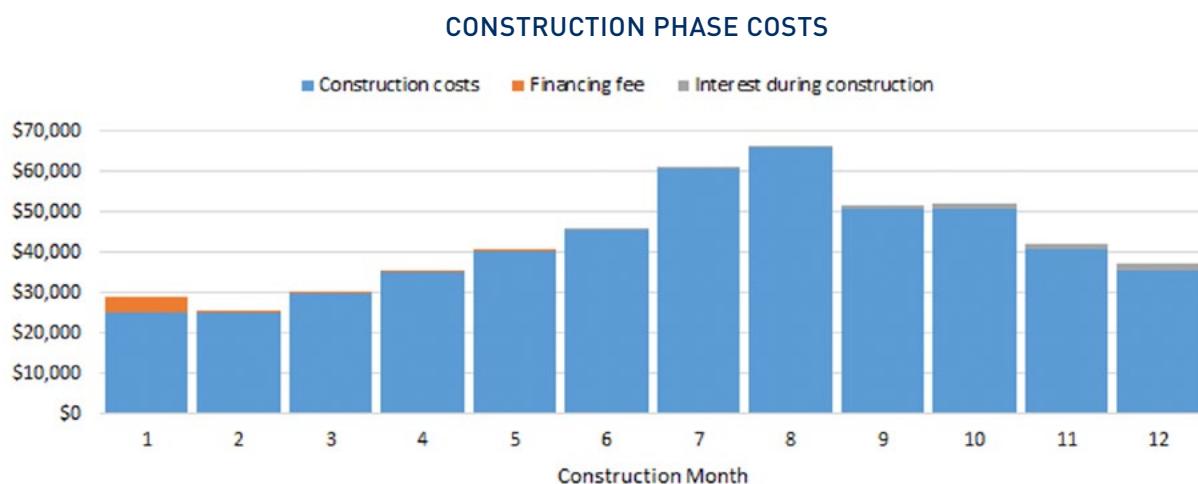
The owner needs to secure a construction loan to finance the construction of the house. The owner also has some savings, which will be used as their own equity contribution (similar to a down payment) of \$150,000. In addition to construction costs, the borrower will have another set of costs. These additional costs will arise during the construction phase and will include financing fees and the interest on the value of the outstanding construction loan as it is drawn upon.

Combined, the payments on the loan for the construction costs along with the financing fees and interest have to be paid monthly. This is similar to most loans or mortgages where payments are typically made monthly.

Construction cost payments by the owner to the construction contractor for construction costs will start at approximately \$25,000 per month. Financing fees begin right away, and interest expenses begin as soon as the construction loan is drawn upon, which will be required once the owner's \$150,000 equity is fully drawn. Construction costs will increase over time to approximately \$65,000 per month as construction activities reach their peak.

As the construction process begins to wind down, the payments will scale back down to about \$35,000 per month. This change in payments over time is called a construction payment draw down schedule and is presented in the following Figure 1.

FIGURE 1 CONSTRUCTION PAYMENT DRAW DOWN SCHEDULE



The construction costs, inflation, financing fees and interest are the uses of funds during construction, while the bank loan and owner's equity are the sources of funds during construction.

The concepts of uses and sources of funds are very important and are referenced throughout this handbook. The values for each of these relative to our case study example are shown in the following Table 1.

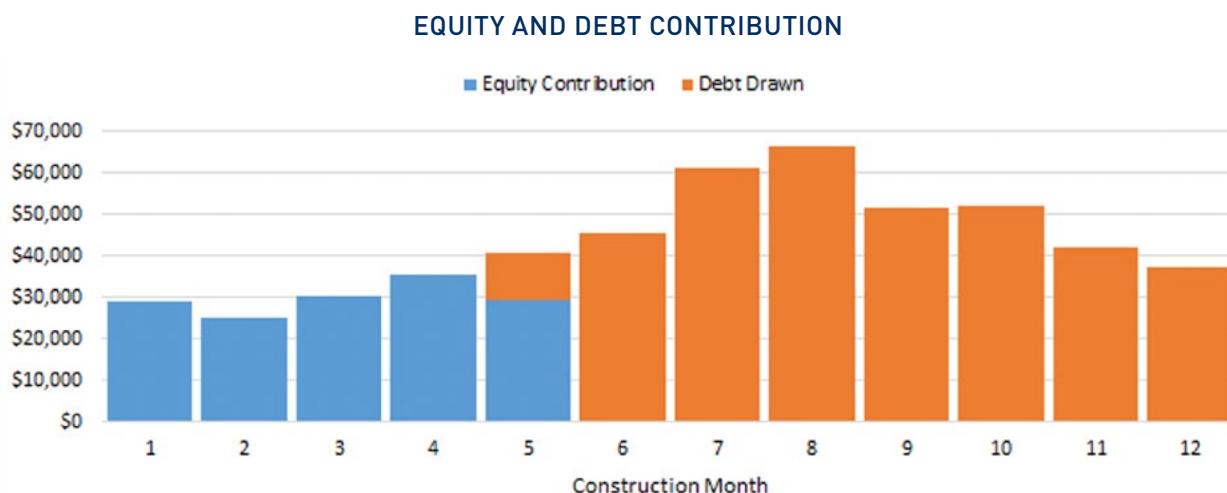
TABLE 1 CONSTRUCTION PHASE USES AND SOURCES OF FUNDS

USES OF FUNDS DURING CONSTRUCTION (\$ NOMINAL)		SOURCES OF FUNDS DURING CONSTRUCTION (\$ NOMINAL)	
Construction	500,000	Owner's Equity	150,000
Inflation 2% Annually	5,837	Bank Loan	367,819
Financing Fees	6,328		
Interest During Construction	5,654		
Total	517,819	Total	517,819

In this example the owner's equity does not need to be borrowed from another lender. It is the owner's cash that is available for investment in this project – this will be the first-in source of funds. The owner will only begin to draw down the interest-bearing loan when the first \$150,000 of his own cash has already been spent.

This financing approach is illustrated in the following figure:

FIGURE 2 EQUITY AND DEBT CONTRIBUTION



A construction loan is a short-term loan, often using a bank financing solution like a line of credit. Usually, a constructed home is worth more than the costs spent on land acquisition and construction because the developer has managed construction risks like delays or cost overruns, which can be significant and expire when the home is built. Operational risks tend to have smaller impacts and lower probabilities than construction risks. The owner has a high degree of confidence that once the home is built and ready for occupancy, risks of additional expense are low. Therefore, the owner can refinance the short-term construction loan with a lower interest rate long-term amortized loan, like a mortgage.

As with any mortgage, the mortgage lender will assess the risk of the mortgage against the credibility of future rental income. The owner will need to demonstrate that future rental income will be sufficient to pay for the home's carrying costs, the mortgage (long-term debt payments). For their own interests, the owner must also prove that they will be able to recover their initial \$150,000 equity (down-payment) investment plus a return on their investment.

We know that the direct costs to the owner were \$517,819 (recall Table 1 above) and we have assumed a modest market value of \$600,000 for the constructed home. Based on prevailing mortgage rules¹, the owner could potentially borrow up to \$565,000. However, mortgage providers will evaluate the credit risk associated with the loan based on a multitude of factors and may not lend the entire amount. Furthermore, the owner may not want to borrow that much and should determine the target mortgage size that will meet their needs and not impose an excessive debt burden going forward.

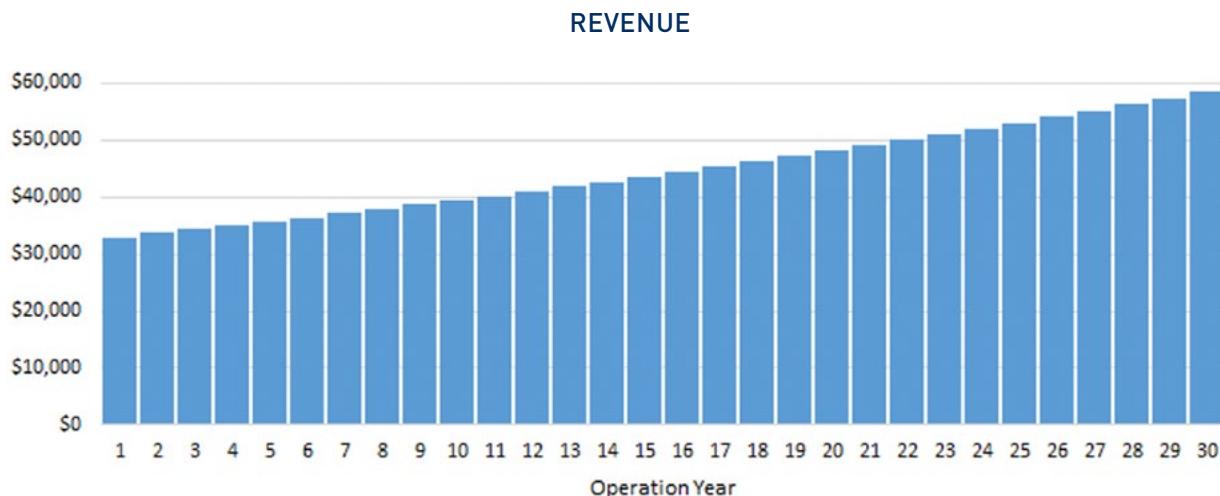
The target mortgage value should repay the construction loan and allow the owner to recover some or all of their invested equity, and above all be a low-risk investment for the lender. The mortgage must repay the \$367,819 short term construction bank loan and provide a return on investment based on analysis of future rental revenues and expenses. This analysis of financing/loan requirements (Sources of funds) against the strength of future cash flows to repay the loan (Uses of funds) is central to the feasibility of the project as a whole. The owner must assess operations phase sources and uses of funds.

The owner has researched similar rentals in the area and determined that a rental rate of \$2,750 per month (\$33,000 per year) is likely achievable, which would be indexed² by an average of 2% per year to match inflation.

This annualized revenue has a cash flow value of \$1,338,747 over 30 years, demonstrated in the following Figure 3 rental revenue; this represents the Sources of funds over the 30-year operational phase.

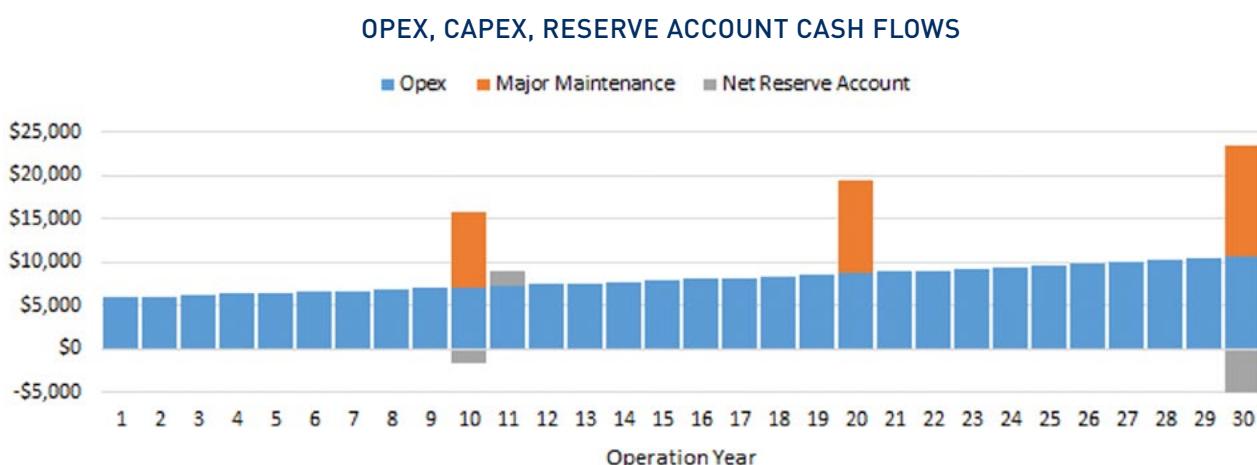
¹ 5% of the first \$500,000 of the purchase price ($5\% * \$500,000 = \$25,000$), 10% for the portion of the purchase price above \$500,000 ($10\% * \$100,000 = \$10,000$), for a combined \$35,000

² Indexation of payment or revenue values defines a cumulative long-term escalation of the first-year values over the term of the contract at a specified percentage rate.

FIGURE 3 RENTAL REVENUE

This revenue will be subject to deductions over the same 30 years to meet operational expenses, which represents the operational phases uses of funds. These obligations are described below and presented in the table that follows, Figure 4 Opex, Capex & Reserve Account Cash Flows:

- Monthly operations expenses, also known as Opex (day-to-day upkeep costs, utility bills, etc.): \$500 monthly (\$12,000 per year), indexed to 2% annual inflation for 30 years. Total: \$243,408.
- Major maintenance Capex (roof, furnace, etc.): \$7,000 every ten years (starting in year 10), indexed to 2% annual inflation for 30 years. Total: \$32,246.
- A reserve account of \$5,000 will be established to deal with major maintenance and unexpected vacancy. The owner will always ‘own’ this cash amount, and it may go unused.

FIGURE 4 OPEX, CAPEX & RESERVE ACCOUNT CASH FLOWS

This means that, in the first operational year, annual rental revenue of \$33,000 is subject to deductions of \$6,000 for operations obligations. The \$7,000 major maintenance expenditure, and the \$5,000 reserve account will be funded by the owner on an as-needed basis, modeled here in year 10; these costs are considered to be owner requirements and are not part of the overall lending / mortgage package.

The year-one revenue of \$33,000 and Opex deduction of \$6,000 leaves \$27,000 as cash flow available for debt service (CFADS) to be used for mortgage repayment and profit to the owner. Timely repayment of loans is prioritized over the owner's interests of generating returns on their equity.

On the home value of \$600,000, we have proposed a loan for 70% of the value or \$420,000, for 25 years³. This would require an annual payment of \$25,231 for a total of \$630,786 over 25 years - \$210,786 of interest. This value provides achievable repayment rate and keeps interest payments to the lender lower than other options. The CFADS will cover 107% of the loan payments in the first year (this is known as a 1.07x debt service coverage ratio 'DSCR'), a metric that increases year-over-year as rental rates will increase over the term while mortgage payments do not. Any funds available following the operations and debt payments described above are considered 'free cash flow' to the owner, or cash flow available to the equity owner(s).

When the owner receives the \$420,000 loan, they will repay the \$367,819 construction loan, and take the remaining \$52,181 as profit or in project finance terms an equity distribution, from which they will use \$5,000 to fund the reserve account. The owner will receive a net distribution of \$47,181. The owner's equity cash flow profile through the construction phase is illustrated below; figure 5 shows the construction phase equity of \$150,000 invested, then upon refinancing, \$47,181 is repaid.

FIGURE 5 CASH FLOW TO EQUITY - CONSTRUCTION PHASE

EQUITY CASH FLOW DURING CONSTRUCTION

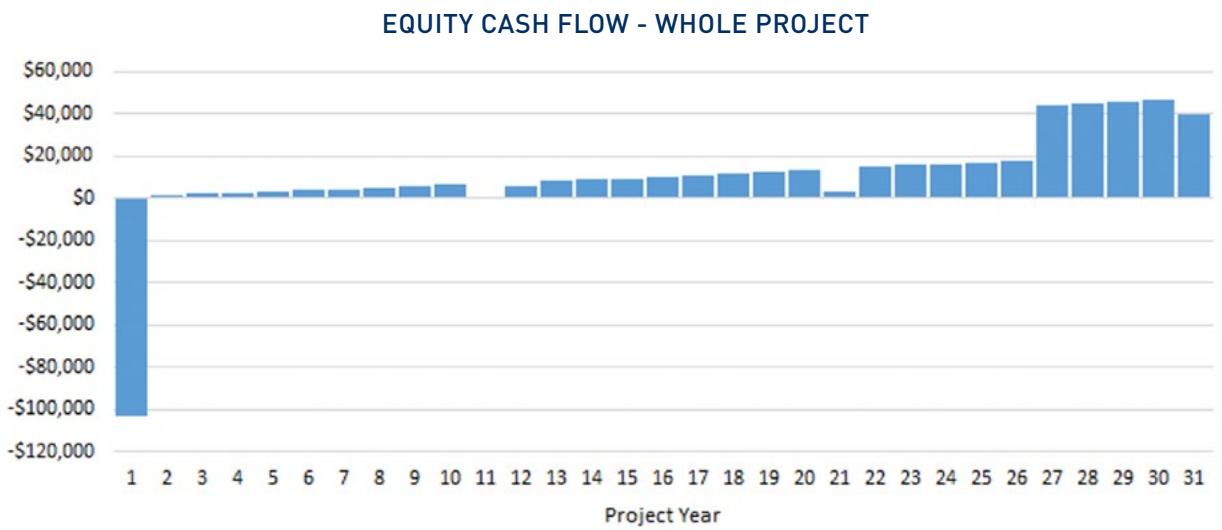


³ Note that to reflect a project finance structure, we have assessed a full 25-year term on the loan and portrayed the mortgage using only the home and revenues as collateral, Personal Mortgages will typically differ in having a maximum term of 5-years and will look at the owner's credit history, personal income and other assets in determining loan value.

This means that one year after investing \$150,000, upon the refinancing / occupancy date, the owner's invested equity becomes \$102,819; the owner then collects the free cash flow through the next 30 years that we have modeled (and beyond). The residual value of the house and property is owned free and clear as of year 25, which may also provide significant value to the owner if they wish to sell. The value of the free cash flow increases dramatically once the mortgage is repaid by the \$25,231 that would have otherwise been paid to the lender.

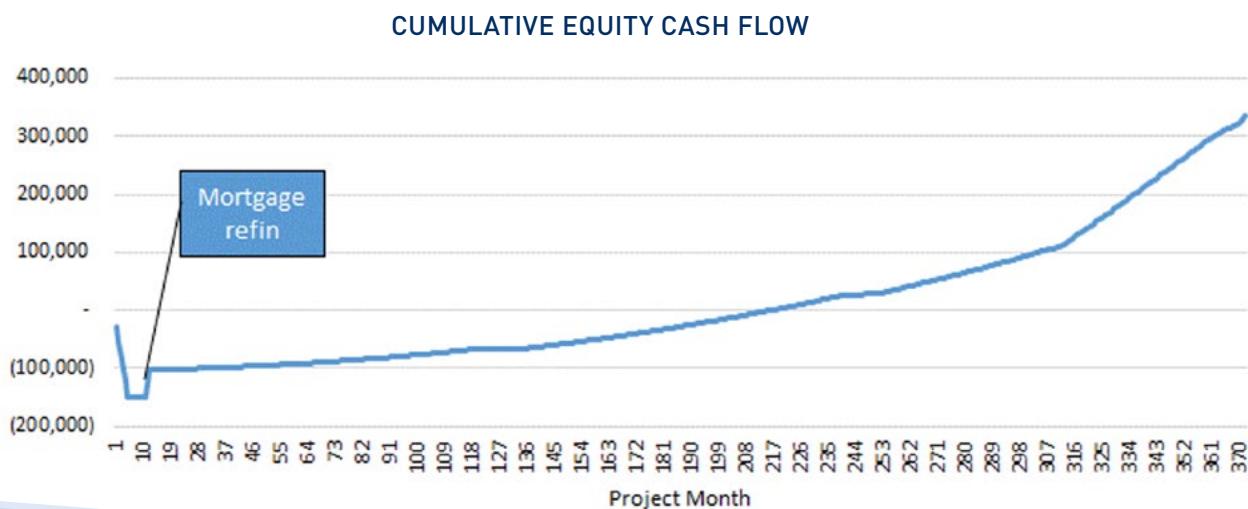
The annual equity cash flow profile is illustrated in the following figure 6:

FIGURE 6 CASH FLOW TO EQUITY



This equity distribution profile provides the owner with net distributions of \$484,487 on their initial investment of \$102,819 for a cumulative return of \$381,668 over the 30-year operations phase (not including the free and clear value of the home). This cumulative return is illustrated in the following graph.

FIGURE 7 CUMULATIVE EQUITY CASH FLOW



Conclusion

This handbook was developed by the First Nations Major Projects Coalition with support from Colliers Project Leaders to support Indigenous Nations with financing their participation in major projects.

This handbook sought to explain the essential building blocks of project financing. To help grasp the fundamental concepts related to project financing, this handbook used a case study to provide a comparative example between constructing a new house and financing the development of a major natural resource or infrastructure project.

In our comparative example, the owner was able to generate long-term stable cash flows from a successful project by conducting thorough research, engaging in robust planning, and securing access to financing. Poor design and insufficient due diligence could have led to significant losses and a poorly structured financing could have doomed the project from the start.

Compared to a rental property project, major projects, such as pipelines and power generation plants, are much more complex but the concepts provided in this handbook have many parallels in the evaluation of major projects. Project finance involves many uncertainties and various parties with sometimes diverging interests and perspectives, including lawyers, engineers, consultants, banks and architects, just to name a few. Large and medium scale projects require contributions from several sources in order to successfully deliver a major project from start to finish.

Building necessary capacity in-house within Indigenous Nations and having knowledgeable and resourceful partners is paramount to successful major project developments and improving outcomes for Indigenous Nations and individuals.

For More Information

The First Nations Major Projects recognizes that we are stronger together. We continuously work to promote our Indigenous Nation members' interests and will continue to develop additional educational modules to help improve their literacy and understanding of financing participation in major natural resource and infrastructure projects. Meanwhile, please feel free to browse our existing resources at <https://fnmpc.ca/resources/>.



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Appendix A

PROJECT FINANCING REVIEW

Construction Phase

Construction Loan

The owner had \$150,000 in cash, and the total construction cost was \$500,000. The owner needed to secure a construction loan from a bank to fund the project. After analyzing the opportunity and assessing fees and interest obligations, the bank was willing to extend a construction loan up to \$367,819 at 5.5% interest rate (this covers the \$350,000 debt, plus financing fees and interest during construction).

Financing Fees

The bank charges a 1% arrangement fee on the credit amount it extended as compensation for its effort on processing and executing the debt funding (e.g., 1% of \$367,819). The arrangement fee is charged at the beginning of a project. The bank also charges commitment fees of 1% on unused-but-committed- credit balance.

Interest During Construction

Interest expenses incurred during the construction phase are not payable by the project owner right away because the project is not generating any revenue yet. Instead, they are added to the cost basis of the project. Figure 1 shows financing fees and interest during construction together with the construction costs.

Equity

The owner in the case study contributed \$150,000 as equity. Equity was drawn down before tapping into the loan to establish skin in the game. Figure 2 demonstrates this dynamic.

Ownership Structure

The owner was the sole equity investor and hence retained 100% ownership of the project. However, if the owner fails to pay the debt, the lender can seize the house and liquidate to recover its loan; any residual value after loan recovery could be returned to the owner as their original equity.

Capitalization (or Debt-to-Equity) Ratios

At the end of construction, \$367,819 of debt and \$150,000 of equity were contributed to the project. Therefore debt-to-equity ratio was 2.45 : 1 (\$368K : \$150K), which can also be expressed as approximately 70% debt and 30% equity. Debt lenders want certainty around repayment and will often dictate the debt-to-equity ratio based on perceived project risk. Projects with low risks can usually take on more debt (~90% debt) because lenders are more confident about repayment.

Operations Phase

Refinancing the Construction Loan

At the beginning of the construction, the bank charged an interest rate of 5.5%. As the construction completed on schedule and the house was leased out immediately, the risk profile of the project improved significantly. The owner was able to refinance the original construction loan with a new mortgage of \$420,000 at 3.5% interest rate.

Revenue

After construction is complete, a renter signed a lease agreement with the owner. In the first year, the lessee will pay \$2,750 each month. Rental rate increases are regulated by Provincial bodies, and we have assumed a 2% annual increase in rental rates. We further assumed the home is rented at all times during the first 30 years of operations. Figure 3 illustrates the stable upward trending revenue streams due to the permitted rental rate escalation over time.

Operating Expenses (Opex)

Opex includes property tax, insurance, utility bills and light day-to-day maintenance obligations, which amount to \$500 a month in the first year of operation (escalated at 2% per year after that for reflect inflation).

Capital Expenditures (major maintenance)

Unlike opex, capital expenditures (capex) are investments to acquire, upgrade or maintain long-term assets. Changing a light bulb would be an operating expense while replacing the furnace and other major maintenance costs would be categorized as capex. We assume capex of \$7,000 (linked to inflation) would occur every 10 years starting in year 10.

Reserve Accounts

The owner set up a reserve account with a target balance of \$5,000, funded at the end of construction. The reserve account would help prepare for major maintenance and could also be used to fund opex and mortgage payments if rental income was compromised at any time.

Figure 4 shows the cashflows related to opex, capex and the reserve account. Opex is recurring and stable, capex occurred every 10 years. The reserve account is built up during normal business operations and released funds in year 10 to help pay for major maintenance.

Refinanced Capitalization Ratios

At occupancy, \$367,819 of debt and \$150,000 of equity were refinanced on a \$600,000 value asset to become \$420,000 debt and \$180,000 equity (the home appreciation drives the increased equity position, so \$102,819 is invested equity and the remaining \$97,181 is ‘unrealized equity’ coming from the home’s increase in valuation). Based on the owner’s initial cash investment, the operations phase debt-to-equity ratio is approximately 83:17, which reflects substantially lower risk profile than the construction term ratio of 70:30.

Cash Available to Equity

Figure 6 illustrates the equity cash flow over the project life from initial investment, through refinancing and on to year 30. Figure 5 zooms in the construction phase to show the impact of refinance at the end of construction.

Equity IRR vs Project IRR

Internal rate of return (IRR) measures the return over the entire investment period. In the case study, interest rate of the mortgage (3.5%) was lower than project IRR of 5.09%; the leverage enhanced equity IRR is 7.11%. Figure 7 shows cumulative equity cash flow, which turns positive in year 18 of operations.



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