

Section

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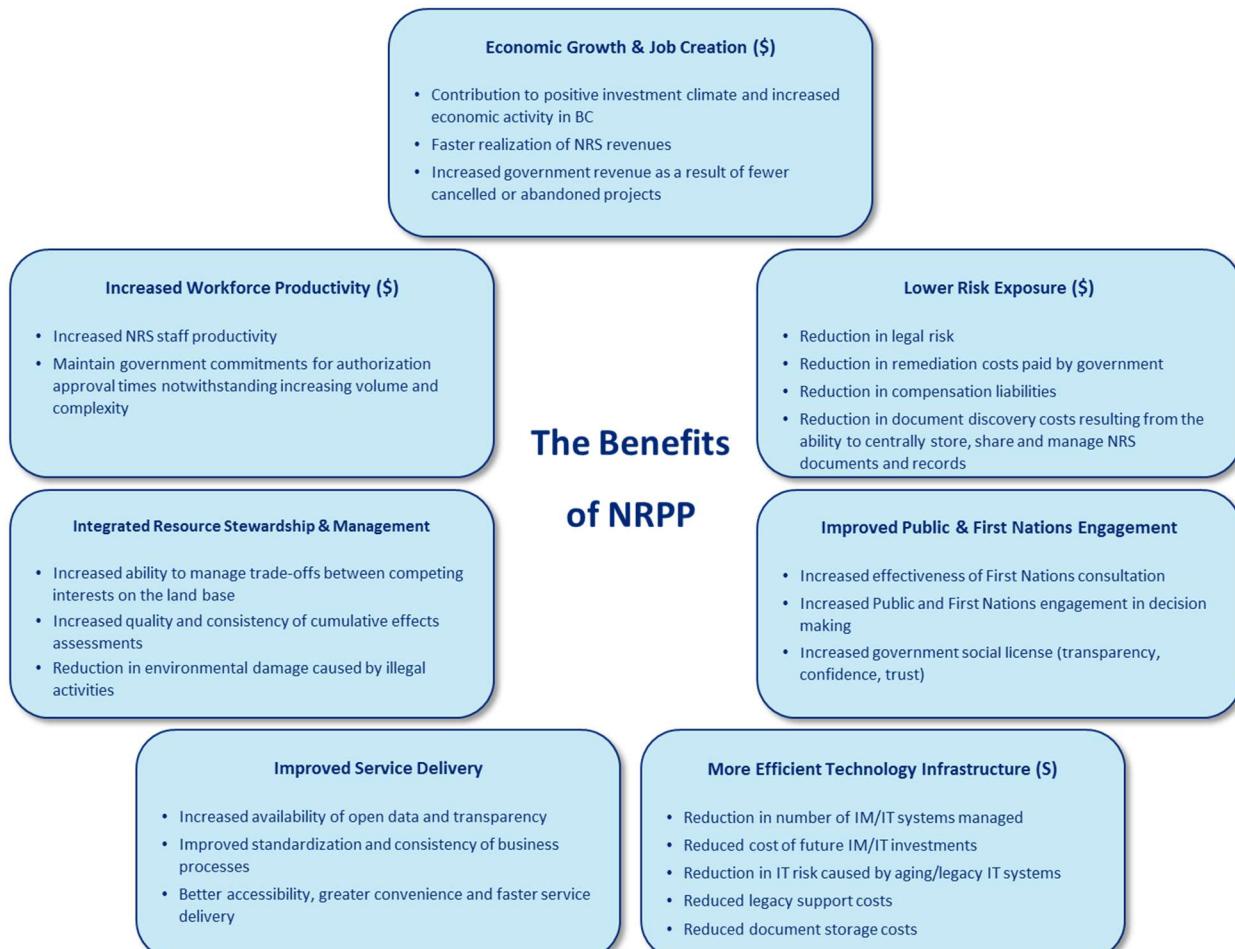
Financial Benefits & Lifecycle Costs

The changes delivered by NRPP will create significant benefits for key target groups including the public, First Nations, clients and proponents, decision makers, and government as a whole. This section presents an analysis of the financial benefits to be realized by government, which will total \$X M by FY 2027/2028. Detailed descriptions are provided for all NRPP benefits, including:

- Economic growth & job creation
- Increased workforce productivity
- Lower risk exposure
- Integrated resource stewardship & management
- Improved public & First Nations engagement
- Improved service delivery
- More efficient technology infrastructure

The core benefits that will result from NRPP have been summarized into seven categories based upon the priorities and guiding principles of NRPP; these categories and benefits are described in Figure 14. Four of these areas of benefit have been quantified in financial terms in this business case, as denoted by (\$) in the figure below. The investment in NRPP is critical to enable the business, service, technology and workforce changes required to achieve these key benefits.

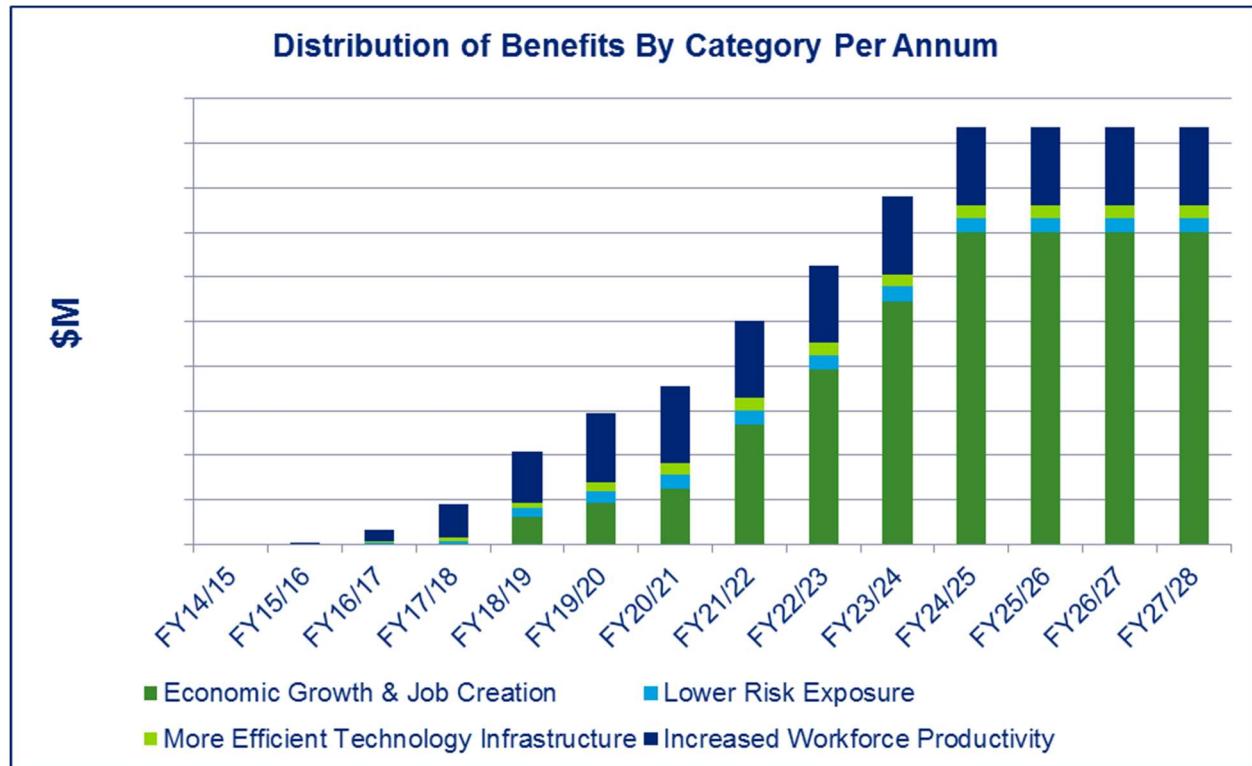
Figure 14 - Key Benefits of NRPP



Summary of Estimated Savings (and Increased Revenue) for the Recommended Approach

The following figure outlines the annual benefit realization delivered by NRPP over the 14 year timeframe (FY 2014/2015 through FY 2027/2028). The 14 year timeframe was selected based on guidance from the OCIO to calculate benefits for seven years following the end of implementation, which is expected to span seven years for NRPP. It is important to note that the annual recurring benefits will continue in perpetuity beyond this 14 year timeframe.

Figure 15 - NRPP Annual Benefits by Type



Key Savings Assumptions

- Benefits will begin to be realized in year two of the transformation (FY 2015/2016), grow over the life of the transformation and reach a maximum in year 11, four years after the end of the implementation (FY 2024/2025)
- A fully-loaded internal resource rate of \$X/hour was used to calculate all benefits related to productivity and staff time, while a fully-loaded rate of \$X/hour was used for senior staff
- Workforce productivity benefits will generate additional capacity that can be reinvested to address anticipated increases in volume and complexity of authorizations and other government priorities
- A conservative approach has been taken to estimating cost savings, in that a lower range of improvement potential and a slower ramp-up of benefit realization were assumed in all calculations

Table 6 below outlines the estimated annual savings opportunities delivered by NRPP.

Table 6 - NRPP Savings Opportunities

Savings Opportunities	Annual Savings (in millions)	Portion available to offset ministry/agency budget pressures ³⁰	Notes

³⁰ Benefits that do not offset NRS operating budgets are zero in this table.

Savings Opportunities	Annual Savings (in millions)	Portion available to offset ministry/agency budget pressures ³⁰	Notes
Maintain government commitments for authorization approval times notwithstanding increasing volume and complexity	\$X	\$X	Benefit realization begins in FY 2016/2017 - \$X M spent by the NRS in FY 2012/13 on related initiatives; approximately \$X M was targeted at reducing backlogs and approval timelines - Estimating 80-100% reduction in the need for this spending under NRPP - Savings represent avoided future costs
Reduction in manual data entry time by FrontCounter BC (FCBC) and other sector staff	\$X	\$X	Benefit realization begins in FY 2016/2017 - 40% of a subset of current FCBC and other NRS admin staff time is spent on manual data entry - Estimating 30%-50% reduction in the time these staff need to spend on data entry activities under NRPP
Improved productivity of compliance and enforcement staff	\$X	\$X	Benefit realization begins in FY 2017/2018 - 30% of current C&E staff is spent performing administrative activities - Estimating 33%-50% reduction in the time C&E staff will spend on administrative activities under NRPP
Reduction in manual effort required by finance staff	\$X	\$X	Benefit realization begins in FY 2015/2016 - 30% of current Finance staff time is spent performing manual activities and data entry - Estimating 16%-33% reduction in the time Finance staff will spend on manual tasks under NRPP
Reduction in current legacy system costs	\$X	\$X	Benefit realization begins in FY 2016/2017 - 352 current NRS systems that cost \$X M in annual system hosting expenses - Estimating 20%-30% of systems will be decommissioned or consolidated
Reduction in time required to resolve deficient applications	\$X	\$X	Benefit realization begins in FY 2016/2017 - 5%-10% of FCBC staff time is spent working with clients to resolve deficiencies - Estimating 75%-95% reduction in deficient applications received under NRPP
Reduction in physical document storage costs	\$X	\$X	Benefit realization begins in FY 2017/2018 - \$X M currently spent on annual document storage costs - Estimating 50%-75% reduction in the amount of document storage required under NRPP
Reduction in time required to provide application and inquiry support	\$X	\$X	Benefit realization begins in FY 2016/2017 - 15,000 support inquiries handled annually - FCBC staff spend 0.5 hours on average per inquiry - Estimating 25%-50% reduction in volume of application inquiries under NRPP
Reduction in settlement and judgment costs	\$X	\$X	Benefit realization begins in FY 2016/2017 - 20% annual reduction of 10-year average settlement & judgment costs
Reduction in remediation costs paid by government	\$X	\$X	Benefit realization begins in FY 2016/2017 - 20% annual reduction of 5-year average remediation costs
Total	\$X	\$X	

Key Revenue Assumptions

- A conservative approach has been taken to estimating increased revenue, in that a lower range of improvement potential and a slower ramp-up of benefit realization were assumed in all calculations
- The approach to calculating opportunities for increased revenue was validated by sector leadership, the sector's subject matter experts, NRS budget managers, an economist from JTST, and an external consultant

Table 7 below outlines the estimated annual revenue opportunities delivered by NRPP.

Table 7 - NRPP Increased Revenue Opportunities

Increased Revenue	Annual Revenue Increase (in millions)	Portion available to offset ministry/agency budget pressures ³¹	Notes
Contribution to positive investment climate and increased economic activity in BC (measured by increase in NRS revenues)	\$X	\$X	<p>Benefit realization begins FY 2018/2019</p> <ul style="list-style-type: none"> - 5% increase in Natural Gas Royalties, Petroleum Royalties, Coal, Water Rental and Licences, Minerals, Metals and Other Revenues - 10% increase in Crown Land Revenues - Conservative estimate which excludes revenue streams less directly impacted by NRPP - Data for calculations was sourced from the Budget and Fiscal Plan - 2013/14 to 2015/16
Faster realization of NRS revenues	\$X	\$X	<p>Benefit realization begins in FY 2021/2022</p> <ul style="list-style-type: none"> - Calculation based on approval of 8 new mines and 3 LNG facilities after NRPP is implemented - 12-month acceleration of decision timelines for major mines and LNG facilities will create a present value benefit from faster revenue realization - Conservative estimate which excludes any impact on other revenue streams - Data for calculations was sourced from the BC Jobs Plan and LNG Strategy - Present value calculations assume a 4.5% discount rate and a 30-year timeframe
Total	\$X	\$X	

In addition to the summary financials presented in Table 6 and Table 7 above, the following section provides further commentary on each individual benefit within the seven major benefit categories.

³¹ Increased NRS revenues accrue to government but are not directly available to offset NRS operating budgets, and are therefore presented as zero in this table. However, these increases are included in NRS revenue projections.

Economic Growth & Job Creation

NRPP will deliver meaningful contributions to economic growth and job creation in BC. There are three main benefits under this category.

Contribution to positive investment climate and increased economic activity in BC

Target Group Beneficiaries: Public, First Nations, Proponents and Clients, Government

In a competitive investment world, the efficiency and robustness of a jurisdiction's permitting and regulatory system is a key indicator for global investors regarding the relative attractiveness of risking capital. Permitting delays caused by insufficient resources or inconsistent application of government policies significantly discourage private sector confidence and investment, job creation and, ultimately, economic growth.³²

The NRS needs to overcome a number of obstacles in order to improve BC's competitive edge and attract global investment:

- Red tape, lengthy authorization timelines and uncertainty, which discourage investment
- Inconsistent approaches to decision making resulting in varying timelines and inconsistent decisions
- Lack of clear expectations and objectives available to proponents prior to submitting an authorization application
- Legislative and technology silos, and inefficient business processes which are causing delays in "getting to yes"

By improving permitting processes and systems, and reducing current permitting delays, the NRS will be positioned to support continued and successful economic growth in the province. While NRS revenues are highly sensitive to market prices, removing barriers to economic development will encourage investment, attract new major projects, and result in an increase in economic activity. NRPP will help position BC as a place where it is easy to do business.

This increase in activity will be observed through increases in NRS revenues over time. NRPP is expected to have an impact on the following NRS revenue streams:

- Natural Gas Royalties
- Petroleum Royalties
- Crown Land Fees and Rentals
- Coal
- Minerals, Metals and Other
- Water Rental and Licenses

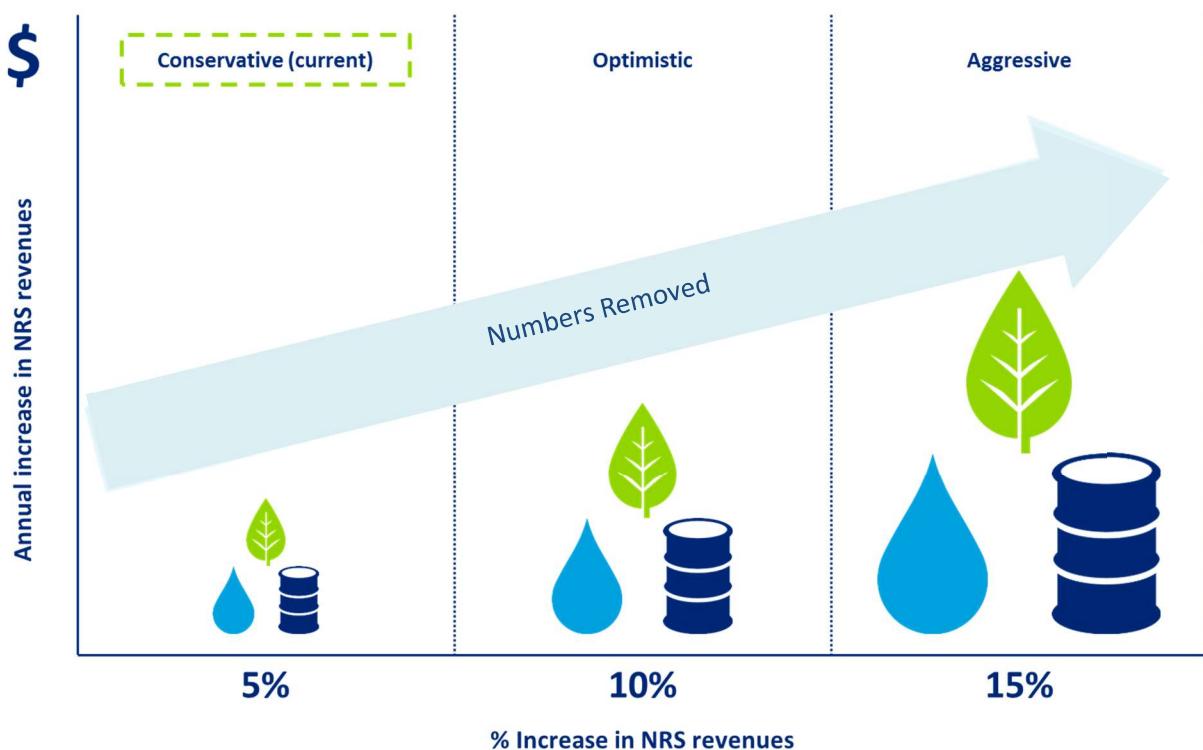
Based on research and discussions with the sector's subject matter experts, it is expected that NRPP could result in a 5% increase in these revenue streams, with the exception of Crown Land Fees and Rentals where a 10% increase is achievable. By averaging the projected revenues for these streams for 2013/14 to 2015/16 and applying these percentage increases, NRPP is estimated to generate an additional \$X M in NRS revenues annually.³³ This benefit would begin to accrue to government beginning in FY 2018/2019 and would ramp up to full realization by FY 2024/2025.

It should be noted that a conservative approach has been taken in that only those revenue types where there is a clear linkage between NRPP and a future impact on revenue were included in calculations. Consultation with NRS experts, budget managers, and government economists has confirmed that this approach is conservative and represents a lower-range estimate of potential increases in NRS revenues. For illustrative purposes, Figure 16 below presents additional estimates of increases in revenues using more optimistic and aggressive assumptions.

³² Association for Mineral Exploration British Columbia, Top Policy Issues and Recommendations, 2013

³³ Data from Budget and Fiscal Plan 2013/14 – 2015/16, February 19 2013

Figure 16 - Conservative, Optimistic and Aggressive Estimates of Increases in NRS Revenues as a Result of NRPP



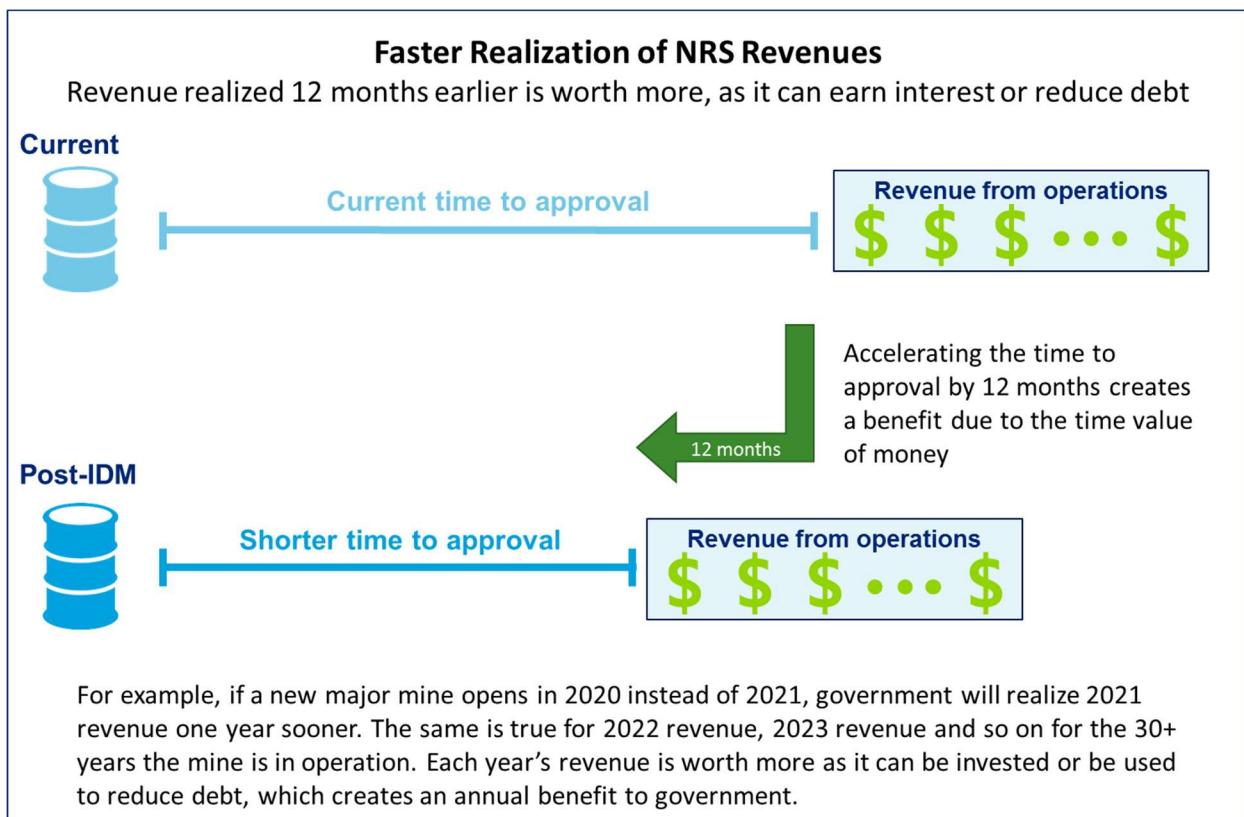
Faster realization of NRS revenues

Target Group Beneficiaries: Clients and Proponents, Government

The decision making process for a major project such as a mine or LNG facility can span several years, and significant delays are often encountered as a result of the need for dozens of separate authorizations, the lack of a consolidated view of existing activity on a given area of land, and duplicative First Nations consultation requirements.

As a result of NRPP, the time needed to approve major projects will be reduced, and government will achieve a significant benefit from realizing revenues sooner. Using a time value of money approach, it is possible to estimate the present value of cash flows from getting a major project operational sooner. This concept is depicted in Figure 17 below.

Figure 17 - Faster Realization of NRS Revenues



Examples of potential revenue realization benefits are presented below:³⁴

- For each new major mine, every 12-month acceleration of time to operation results in a present value benefit of approximately \$X M, or \$X M annually
- For each new LNG facility, every 12-month acceleration of time to operation results in a present value benefit of approximately \$X M, or \$X M annually

The BC Jobs Plan and the BC LNG Strategy state that there are currently 8 new mines and 3 new LNG facilities expected to be operational by 2020. If one assumes that a similar amount of natural resource activity will occur after the end of the NRPP implementation and one assumes that those projects will have their decision timelines accelerated by 12 months, government will realize financial benefit in the form of earlier realization of revenues. The present value of the early realization of the revenues for 8 mines and 3 LNG facilities, over the course of the benefit horizon (years 8 to 14), is \$X M, or an average annual revenue increase of \$X M.

Increased government revenue as a result of fewer cancelled or abandoned projects

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

Proponents expect the authorization process for their natural resource projects to be fair, transparent, consistent and timely with clear expectations and communications throughout. When these conditions are not in place, proponents lose confidence in the system and look to invest their capital in other provinces or other countries. This is particularly true for proponents who are in the process of getting a decision on their authorization applications.

As a result of shifting timelines, poor communications and unclear expectations, proponents in BC have abandoned their applications during the authorizations process.³⁵ As a specific example, four value-added natural gas projects were moved to other jurisdictions in the last 18 months due to a lack of certainty and lack of information about land availability; these opportunities represent a loss of over \$4 billion in capital investment and 1,200 to 2,000 direct jobs in BC.³⁶

When a proponent decides to abandon their application and move their capital to another jurisdiction it has a direct impact on government revenue through reduced fees, royalties and tax revenue. For example, a single mine can represent an average of \$18M in annual government revenue over its life span of 30+ years.³⁷ More importantly, the job opportunities presented by the project are no longer available to British Columbians.

The investment in NRPP will allow the NRS to modernize its approach to authorization decision making by providing a clear, electronic and consistent application process which will result in fewer abandoned applications.

Increased Workforce Productivity

NRPP will deliver significant increases in the productivity of the NRS workforce. There are two main workforce improvement benefits related to lowering demands on, and increasing the efficiency of, the NRS workforce: increased NRS staff productivity, and maintaining government commitments for authorization approval times.

Increased NRS staff productivity

Target Group Beneficiaries: Clients and Proponents, Decision Makers, Government

There are five key ways in which NRPP will increase the productivity of the NRS workforce. Combined, these productivity gains result in additional NRS capacity equivalent to X FTEs. The benefits generated can be realized through normal attrition of NRS employees.³⁸ The realization of this benefit throughout

³⁴ Based on data in the BC Jobs Plan; present value calculations performed assuming cash flows over 30 years and a discount rate of 4.5%

³⁵ Regulatory Harmonization – Proponent Interview Results. Ministry of Forests, Lands and Natural Resource Operations. October 2012.

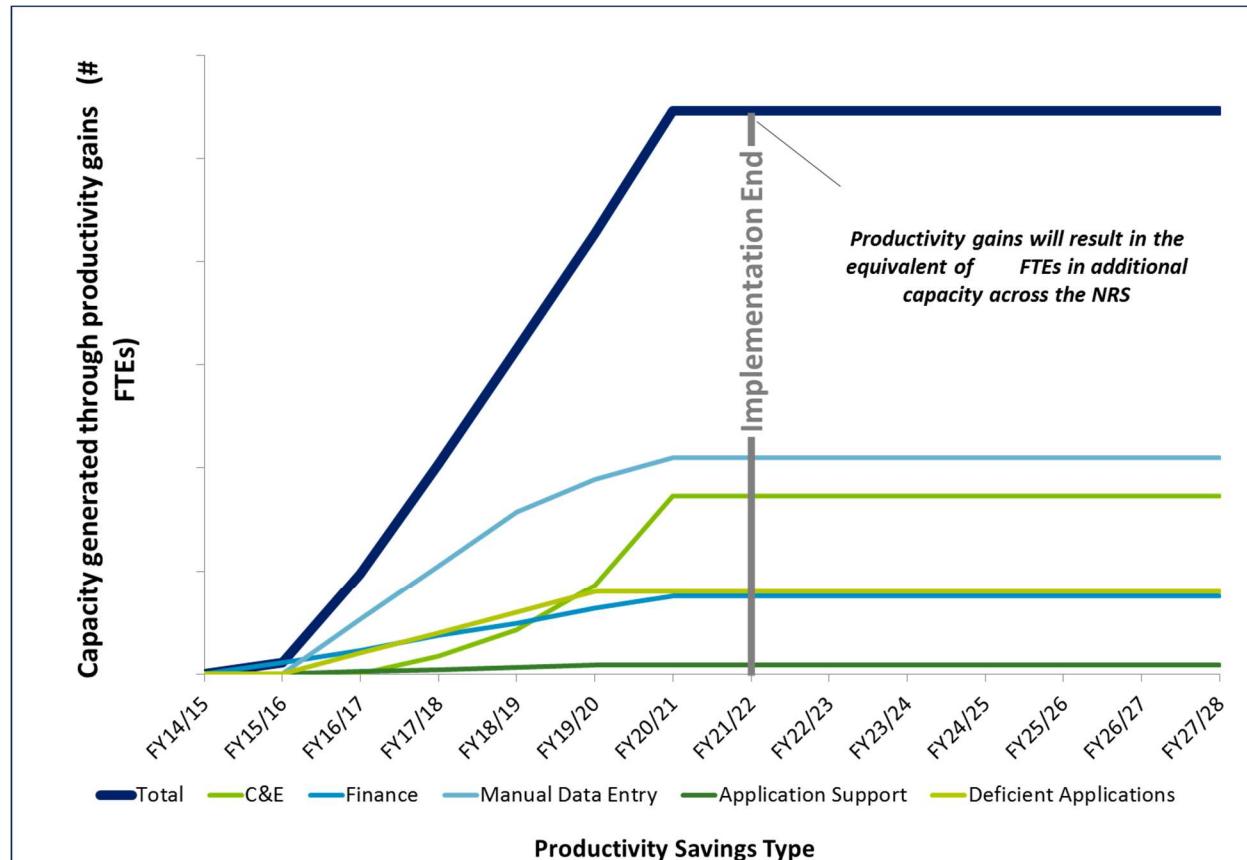
³⁶ Data from Major Investments Office, Ministry of Jobs, Tourism and Skills Development, September 2013

³⁷ BC Jobs Plan, September 2011

³⁸ 2012-2015 Workforce Projections; prepared to support the Natural Resource Sector 2013-2014 Transformation Plan

the implementation of NRPP is presented in Figure 18. Descriptions of the five different productivity savings are provided on the following pages.

Figure 18 - Productivity Gains Resulting From NRPP



Reduction in time required to resolve deficient applications: Approximately 5%-10% of the applications that are currently submitted to the sector are deficient in some way, requiring intervention and resolution before they can progress. It is estimated that 75%-95% of these deficient applications will be avoided through NRPP owing to the application self-assessment tool, smart forms to limit incorrect or incomplete applications, and other supporting aids and guides. This will result in an average annual benefit of \$X M.

Reduction in time required to provide application and inquiry support: Sector staff members currently provide support for authorizations in several ways before the application is ready to be analyzed for decision. Prior to the submission of an application, proponents frequently visit or call FrontCounter BC to receive support or information related to the requirements or process for their submission. Approximately 15,000 application support inquiries are handled annually. It is estimated that a 25%-50% reduction in the volume of these inquiries would be realized due to the information provided to proponents through the spatial database, application self-assessment tool, and the electronic application system, as well as through additional online aids and guides. This will result in an average annual benefit of \$X M.

Reduction in manual data entry time by FrontCounter BC and other sector staff: A subset of current FrontCounter BC and other sector admin staff members spends approximately 40% of their time on manual data entry activities. In many cases, this data must be entered and reconciled in multiple systems. It is estimated that by implementing a common client record system, electronic applications leveraging automatic workflows, and a new authorization system, as well as consolidating legacy systems, that the time spent on manual data entry could decrease to 30-50%. This would result in an average annual benefit of \$X M per year.

Reduction in manual effort required by finance staff: Currently, about 30% of finance staff time is spent performing manual activities and entering data to support billing, refund, and fines functions. Implementing common financial processes and systems, supported by a common client record, will reduce the time spent on manual tasks of this nature to 20-25%, which will result in an average annual benefit of \$X M.

Improved productivity of compliance and enforcement staff: Compliance and enforcement staff currently spend 30% of their time performing administrative activities. Under NRPP, integrated systems and

processes, mobile enablement, and the use of risk-based prioritization of inspections will reduce the amount of time spent on these manual activities to 15-20%, resulting in an average annual benefit of \$X M.

Maintain government commitments for authorization approval times notwithstanding increasing volume and complexity

Target Group Beneficiaries: Clients and Proponents, Government

The NRS has requested nearly \$X M in contingency funding since 2011 to address priority authorization backlogs. The volume and complexity of authorizations in the NRS are growing. NRPP is a long-term solution which addresses the root causes of the backlogs, and the transformation will deliver capabilities to prevent future backlogs from accumulating. Using historical backlog funding as a proxy, the average annual benefit is estimated to be \$X M.

It is important to clarify that NRPP will not address any near-term challenges with authorization approval times faced by the NRS.

Lower Risk Exposure

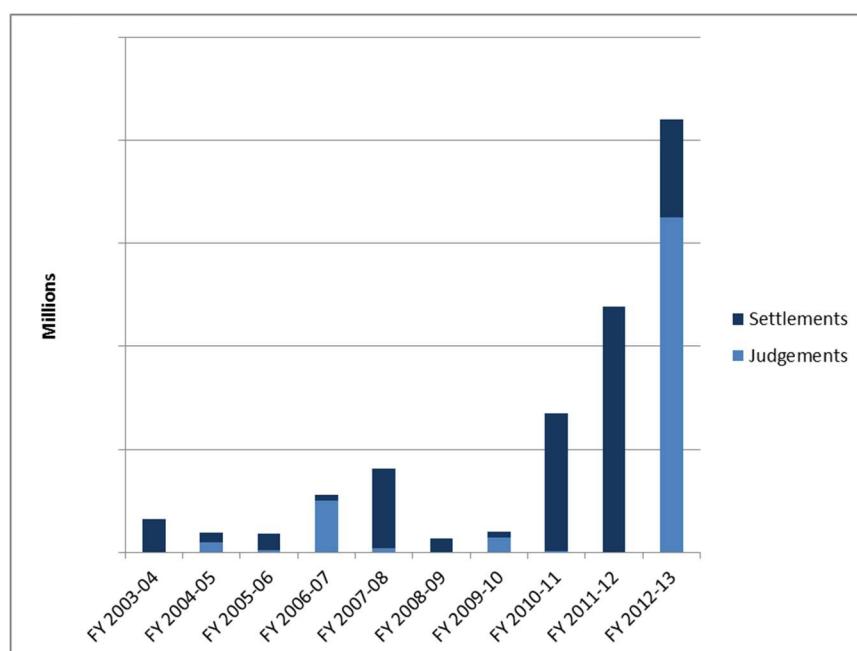
NRPP will contribute to lower NRS risk exposure. There are four main improvement benefits in this category related to legal risk, remediation costs, compensation liabilities, and document discovery costs.

Reduction in legal risk

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

In recent years, the NRS has been faced with escalating levels of litigation and rising settlement and judgement costs due to a number of factors. Many judgment and settlement payments made by government can be attributed to the lack of an integrated view of all activities on the land base, a lack of information sharing across systems and lines of business, and a lack of a risk-based approach to compliance and enforcement. Judgement and settlement payments over the past 10 years have totalled \$X M and are shown in Figure 19. It should be noted that the significant increase in payments in the past three years was due to a small number of cases that resulted in large settlements or judgements (greater than \$X M each).

Figure 19 - 10-year History of NRS Settlements and Judgements³⁹



Specific examples of cases where government paid significant settlements or judgments include:

- A dam collapsed and caused significant property damage after the NRS failed to enforce the need for repairs and maintenance. Contributing factors included a lack of effective record keeping, inaccurate risk/consequence ratings given to the dam, and a lack of action to address

³⁹ Payments under *Crown Proceeding Act* from FY 2003/04 to 2012/13. Data provided by Ministry of Justice, Legal Services Branch, May 2013

decades of warnings that the dam was in poor condition. Settlements paid by government to affected parties totaled more than \$X M

- A District Manager approved a forest development plan and awarded multiple cut blocks in a watershed; however, the decision was inappropriate and not durable because the plan was contrary to regulations and it did not consider impacts to endangered animal populations. The case was settled for \$X M
- An oil and gas company acquired a tenure in northeastern British Columbia only to find out that the NRS had not disclosed that the tenure was in an area that was considered historically and spiritually significant by a local aboriginal group. The matter proceeded through an extensive litigation process and settled for \$X M

Through the implementation of an integrated spatial and operational database, a risk-based framework for compliance and enforcement activities across the province, and through facilitating information sharing across lines of business, NRPP will contribute to a significant reduction in legal risk and potentially a reduction in litigation and settlement costs.

To estimate the potential reduction in settlement and judgement costs once NRPP has been implemented, the historical 10-year average of \$X M (FY 2003/2004 to FY 2012/2013) was used as a proxy for future costs. A 20% reduction was assumed to arrive at an annual benefit of \$X M.

Reduction in remediation costs paid by government

Target Group Beneficiaries: Clients and Proponents, Decision Makers, Government

The NRS faces specific challenges relating to performance securities, which impacts the amount of remediation costs that must be paid by government if a client abandons a site or declares bankruptcy. A summary of issues is presented below:⁴⁰

- Security amounts may be set or waived at the discretion of a statutory decision maker
- Inconsistencies can lead to a perception of unequal treatment within the business community
- The province is exposed to underfunded liabilities when government's ability to collect against the full cost of loss is impaired
- The NRS is not able to apply a risk-based decision model due to lack of data, as there is insufficient historical data, information sharing and capacity to accurately value government's exposure to loss for any size operator
- Administration and record keeping of security is also an area of concern; in addition to not annually reviewing amounts held against the risk over time, there are numerous anecdotal cases where security is:
 - orphaned (not returned, and not traceable to an operator)
 - lost by either the ministry, the bank and/or the proponent
 - returned to proponents despite the need to clean abandoned sites

As a result of these challenges, government has had to pay significant remediation costs totalling at least \$X M over the past 5 years, often to clean up damage left by clients in cases where security amounts were insufficient to cover costs.⁴¹ Major projects and some smaller operations cause considerable environmental damage to the site; government becomes responsible for cleaning up damage if a performance security amount is insufficient or the terms restrict the use of the security for certain purposes.

NRPP will contribute to an increase in government's ability to manage the risk of activities on the land base and to a reduction in the amount of remediation costs paid by government through the delivery of:

- A sector-wide risk management framework
- Tools for decision makers to support a consistent approach to determining security amounts and terms
- Support for project-based securities

⁴⁰ Land Use Performance Security Report, prepared by the Risk Management Branch in April 2013

⁴¹ Data from Crown Contaminated Sites, May 2013

To estimate the potential reduction in remediation costs paid by government once NRPP has been implemented, the historical 5-year average of \$X M (FY 2007/2008 to FY 2012/2013) was used as a proxy for future costs. A 20% reduction was assumed to arrive at an annual benefit of \$X M.

Reduction in compensation liabilities

Target Group Beneficiaries: Decision Makers, Government

Compensation liabilities are created when government makes land use or treaty decisions that impact the rights of tenure holders. An example would include a policy change that results in the removal of land from a tree farm license. Currently, there is a lack of integrated, consolidated information about existing tenures and activities on the land base, and government is not equipped to consider the magnitude of compensation liabilities created when such decisions are made.

By providing statutory decision makers and compensation analysts with the tools and information required to consider implications such as existing tenures and the value of roads going through land areas being distributed, the sector's compensation exposure can be reduced. As a specific example of potential reductions in compensation payments, using information about liabilities related to the *Forestry Revitalization Act*, there is \$X M-\$X M⁴² in current compensation exposure due to a policy decision to redistribute land areas. The sector's compensation analysts estimate that compensation exposure could be reduced by 25-50% once capabilities delivered by NRPP (such as ability to use consolidated, integrated information about all existing activities in a certain geographical area) are in place. By averaging the total current compensation exposure and multiplying by the percentage reduction in compensation exposure as a result of NRPP, there is a one-time savings of \$X M-\$X M. These savings have not been included in the financial analysis and are presented here as an illustrative example only.

Reduction in document discovery costs resulting from the ability to centrally store, share and manage NRS documents and records

Target Group Beneficiaries: Decision Makers, Government

The NRS does not currently have tools or processes to support a sector-wide, consistent approach to records management. An additional challenge is that many processes across the sector remain manual and paper-based, and therefore a significant amount of physical documentation is generated and stored on an ongoing basis. Documents are stored in numerous locations throughout the province, including staff filing cabinets, storage rooms, and external warehouses.

In the event of litigation, NRS staff must exert considerable effort in the document discovery process to locate any records that may be relevant to the case. Document discovery for a single large case may require time from up to 100 staff and the effort may span weeks if not months. In the event that documentation cannot be located, government may be forced to pay a settlement.

By investing in NRPP, the ability to receive authorizations online means that many NRS documents will enter the system in a digital format, resulting in documents that are easier and cheaper to manage. Without NRPP and the implementation of a sector-wide document and records management solution, the NRS will be exposed to escalating document discovery costs and increasing levels of risk.

Integrated Resource Stewardship & Management

NRPP will contribute to more integrated stewardship and management of BC's natural resources. There are three main improvement benefits in this category related to managing competing resource interests, integrating cumulative effects into decision making, and reducing illegal activities.

⁴² Range of liabilities is dependent on whether damages and compound interest are included.

Increased ability to manage trade-offs between competing interests on the land base

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

Making decisions about natural resource projects and setting stewardship objectives involves making and managing trade-offs between access to and use of BC's natural resources. The NRS makes these trade-offs on a daily basis, often without a complete view of the various competing interests on the land base. Without a complete, spatially enabled view of resource values, existing tenures, cumulative effects and planned activity, the NRS is unable to appropriately balance economic activity and long-term environmental sustainability.

During interviews conducted in 2012,⁴³ proponents consistently referenced issues with overlapping tenures, which arise when other project types receive tenure on land that is already supporting a particular activity. Due to a lack of integrated information, these conflicts are challenging to resolve.

A critical NRPP investment is the creation of an integrated spatial database that will bring together sector information and allow it to be viewed on a map. This will provide decision makers with a tool to better understand competing interests on the land base and to resolve issues that do arise as a result of overlapping tenures.

Increased quality and consistency of cumulative effects assessments

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

Cumulative effects are changes to economic, environmental and social values caused by the combined effect of present, past and reasonably foreseeable actions or events. Cumulative effects can create real costs through unintended impacts to economic, environmental and social values, onerous and lengthy permitting processes, conflicts among tenure holders, and requirements for corrective actions.

The Environmental Assessment Office considers cumulative effects in the evaluation of large projects, but most authorizations and permits are for small projects that are not currently assessed for cumulative effects, and can accumulate into unintended impacts. The need to efficiently and consistently assess the impact of all projects, small and large, is becoming more acute because the demand for access to natural resources is growing rapidly and the context for new development is becoming more complex. There is a growing need, supported by recent court decisions, to consider cumulative impacts to aboriginal and treaty rights when making decisions around resource use and allocation.

NRPP will deliver capabilities required to consider cumulative effects in authorizations decisions, including the integrated spatial and operational database, cumulative effects framework and tools for decision makers, which will result in a reduction in unintended impacts to priority values.

Reduction in environmental damage caused by illegal activities

Target Group Beneficiary: Public, First Nations, Government

Each year, damage to BC's environment occurs as a result of illegal and unregulated activities such as:

- Unregulated transportation of hazardous waste
- Illegal application of pesticides
- Illegal harvesting of plants, timber, gravel, and soils
- Trespassing
- Squatting
- Building cabins on Crown land
- Illegal houseboats and docks

NRPP will contribute to a reduction in illegal and unregulated activities by increasing awareness of regulated activities through provision of open data, offering online applications, and simplifying and streamlining the authorizations process. A more efficient compliance and enforcement function, as well as an ability to focus on higher risk activities with a sector-wide approach will also contribute to the realization of this benefit.

⁴³ Regulatory Harmonization – Proponent Interview Results. Ministry of Forests, Lands and Natural Resource Operations. October 2012.

Improved Public & First Nations Engagement

NRPP will improve the quality and consistency of NRS engagement with the public and First Nations. There are three main improvement benefits in this category related to First Nations consultation, public and First Nation engagement in decision making, and government's social license (transparency, confidence, trust).

Increased effectiveness of First Nations consultation

Target Group Beneficiaries: First Nations, Clients and Proponents, Decision Makers, Government

A key aspect of NRPP is to integrate NRS spatial and operational data and make it more easily accessible to decision makers, the public and First Nations. This includes spatial data and information about First Nations consultation, treaty obligations, strategic engagement agreements and strength of claim. Today, this information is not accessible or requires NRS staff to search multiple systems to access partial information. As a result, decisions on natural resource projects can be made without a holistic view of impacts on First Nations interests, and decisions may be made prior to appropriate consultation having taken place. This does not respect First Nations governance and exposes the government to significant legal risk.

By providing integrated spatial and operational data to decision makers, and bringing historical First Nations consultation data together in one system, NRPP will increase the effectiveness of the First Nations consultation process and increase the ability of government to make durable decisions.

Increased Public and First Nations engagement in decision making

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

Current engagement processes lack transparency and effective channels for existing rights holders, impacted parties and the public to find information and comment on projects under consideration. The current process is inefficient as it relies on the proponent notifying the public and rights holders, and communicating feedback or objections back to the sector. This approach results in a lack of social license and inconsistent results for proponents.

Through the implementation of an online Review and Comment service, NRPP will provide the public and First Nations with a convenient channel to engage in the decision making process and to voice their opinions and concerns about activities in their communities. NRPP will help ensure affected parties are appropriately consulted and will contribute to decision makers' ability to make durable decisions. The online service will also be far more efficient and cost-effective for clients, proponents and government.

Increased government social license (transparency, confidence, trust)

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

Social license is critical to the success of natural resource projects in BC and elsewhere. Social license is created through decision making processes that are transparent, fact-based, and consistent and allow for meaningful input and engagement from the public and First Nations. If the public and First Nations trust the processes by which government makes resource management decisions, they will provide proponents with the social license and support they need to build and operate their projects.

NRPP will allow the sector to establish clear expectations, timelines and consistent approaches to decision making which will aid in creating social license for large natural resource projects. In addition, by making the data used in decision making more transparent and available, the public and First Nations have open access to the analysis and information used to make decisions. This will allow for more meaningful engagement in the process and the building of stronger social license.

Improved Service Delivery

NRPP will contribute to improving the service delivery experience for the public, First Nations, clients and proponents when working with the NRS. There are three main improvement benefits in this category related to transparency and open data, business process improvements, and service delivery methods.

Increased availability of open data and transparency

Target Group Beneficiaries: Public, First Nations, Clients and Proponents, Decision Makers, Government

Citizens @ the Centre set the BC Government on a direction to empower citizens to create value from open government data. The NRS is the largest creator of data on behalf of the BC Government and a significant contributor to the open data direction in BC. However, the NRS can do more and NRPP will enable a significant increase in the availability of natural resource data for the public, First Nations, clients and proponents, and other government decision-makers.

Making more data available creates significant value for proponents. It gives them the information they need to plan their natural resource projects and prepare applications that are more likely to get approved. Today, proponents often submit applications in parts of BC not suitable for their projects due to sensitive habitats, overlap with existing rights holders or other factors. Having access to this information prior to submitting an application would allow proponents to avoid these types of conflicts. This will reduce costs associated with application submission and processing for both proponents and government.

Making more data and information available also benefits the public and First Nations. They can see what information the NRS is using to make decisions leading to better understanding of the trade-offs being made. They can also see what values and other interests are resident in various areas of the province.

Through NRPP, the NRS will integrate and make available spatial and operational data through online maps. This is a critical element of NRPP and one that will create tremendous value for the public, First Nations, clients and proponents, and government as a whole.

Increased standardization and consistency of business processes

Target Group Beneficiaries: First Nations, Clients and Proponents, Decision Makers, Government

A critical component of NRPP is using Lean to re-engineer core NRS processes, including those related to making decisions about natural resource projects. In addition to removing waste and creating efficiencies, the business process re-engineering component of NRPP will also create standardized processes where it makes sense to allow them to be applied consistently across the province.

Standardization will lead to efficiencies in a number of ways, including:

- Decreased duplication
- Decreased levels and amount of process
- Increased predictability and transparency of process
- Increased responsiveness (timely & quality)
- Increased cost-effectiveness

Better accessibility, greater convenience and faster service delivery

Target Group Beneficiaries: Public, First Nations, Clients and Proponents

Better accessibility:

- NRPP will allow numerous services to be accessed from a single access point, which means individuals and businesses will spend less time looking for information or being transferred between different parts of the NRS on the phone
- Clients and proponents will have the ability to monitor, access and edit data that the NRS holds on them
- Clients and proponents will be able access a single window for payment of fees using PayBC services

Greater convenience:

- Services will be accessible 24 hours a day from anywhere that has internet access
- Users will have more flexibility to access services when they want

Faster service delivery:

- Faster processing of applications and renewals
- Quicker and easier conduct of business with government through dynamic forms and pre-population of data, with assurance that forms are completed correctly
- Instant confirmation that an application has been received

More Efficient Technology Infrastructure

NRPP will contribute to a more efficient technology infrastructure for current and future use by the NRS. There are five main improvement benefits in this category related to the number of IM/IT systems, future IM/IT investment requirements, IT risk, legacy support costs, and document storage costs.

Reduction in number of IM/IT systems managed

Target Group Beneficiaries: Government

NRPP will result in fewer IM/IT systems managed by NRS. In addition to the cost savings that come from fewer systems in the NRS inventory there are a number of additional benefits that will be achieved. Fewer IM/IT systems will allow for:

- NRS IM/IT expertise to be consolidated and focused on critical applications leading to improved service delivery and reduced risk
- Increased employee satisfaction resulting from having to use fewer systems to complete key tasks
- Shorter new hire orientation and training time
- Increased employee mobility and flexibility
- Improved service delivery as staff will not have to search multiple systems to find information for proponents and the public

Reduced cost of future IM/IT investments

Target Group Beneficiaries: Government

A critical aspect of the technology transformation component of NRPP is the creation of a technology foundation that will deliver the benefits and outcomes of NRPP as well as support future sector business. Key components of NRPP technology such as business rules, workflow and integrated spatial data will deliver business benefits today and into the future. It is expected that future IM/IT capital asks will be lower than they would be otherwise because future system projects will leverage the foundation established as part of NRPP. There is also a benefit of increased flexibility and speed to deploy new capabilities.

Reduction in IT risk caused by aging/legacy IT systems

Target Group Beneficiary: Government

Aging/legacy IT systems expose the NRS to high maintenance costs as well as increasing levels of IT risk.

Based on the 2010 report of the Auditor General of Canada,⁴⁴ these risks and costs are major drivers of the IT systems modernization efforts in the public sector:

- Skills shortage: Fewer staff and contractors have the skills and knowledge to use older programming languages and source code structures
- Vendor support: Vendors may no longer exist or no longer support older products
- Regulatory compliance: Outdated systems may be hard to update to comply with changing laws, regulations, and industry standards
- Access to data: Information becomes increasingly cumbersome to extract and analyze as data structures age
- Meeting client expectations: Older systems cannot be modified to support modern technologies and meet expectations such as 24/7 availability and workflow
- Security: Legacy systems cannot always be modified to conform to changing security requirements (for example, password complexity)
- Green IT initiatives: Older IT systems are generally not energy efficient and are hard to modify to reduce their environmental impact
- Disaster recovery: The older the system, the harder it is to recover data after a disaster

NRPP will contribute to a reduction in these types of IT risk by modernizing and consolidating multiple systems.

⁴⁴ 2010 Spring Report of the Auditor General of Canada, Chapter 1—Aging Information Technology Systems

Reduced legacy support costs

Target Group Beneficiaries: Government

The NRS currently actively runs 352 different systems that cost \$X M to maintain annually. NRPP will consolidate, rewrite, or retire approximately 20%-30% of the systems as part of the transformation. This will result in ongoing annual savings of \$X M each year in legacy support costs.

Reduced document storage costs

Target Group Beneficiaries: Government

The NRS currently has a large amount of paper files physically stored in the province. Part of the transformation's scope is the creation of a cross-sector document and record management system, which will reduce present and future needs to store physical documents. A data digitization project will also be completed to scan and store priority historical hard copy documents that will then be able to be appropriately destroyed. It is estimated that the \$X M in annual costs currently spent on physical storage in the NRS will be reduced over time by 50%-75%, creating an average annual benefit of \$X M.

The many benefits described above will deliver meaningful, ongoing financial and non-financial benefits to BC, including the public, First Nations, proponents and clients, decision makers, and government as a whole. The investment in NRPP outlined in this business case is necessary to achieve these benefits.