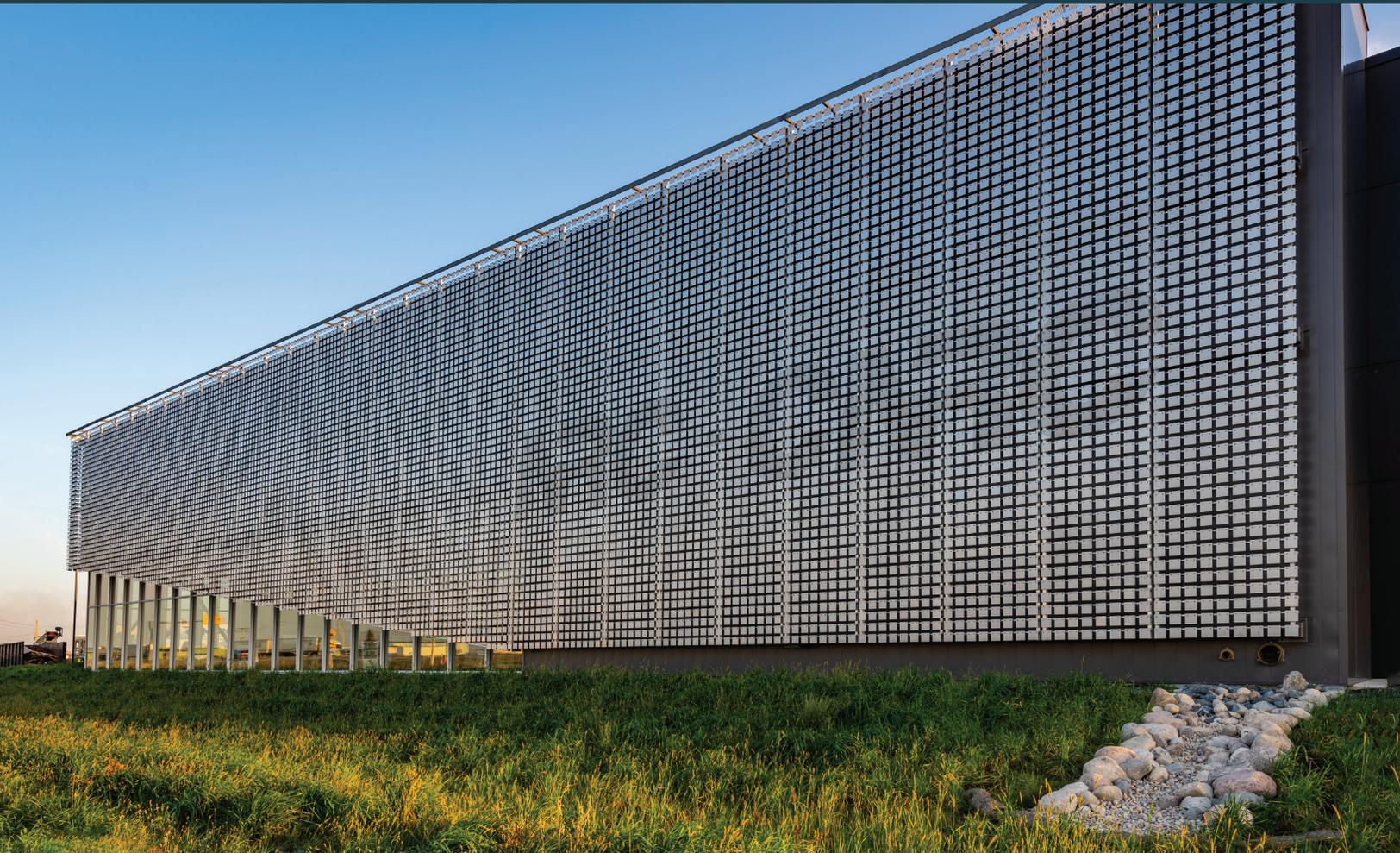


NRC-CMRC

Consolidated Financial Statements



March 31, 2022



National Research
Council Canada

Conseil national de
recherches Canada

Canada 

National Research Council Canada

Statement of Management Responsibility Including Internal Control over Financial Reporting

Responsibility for the integrity and objectivity of the accompanying consolidated financial statements for the year ended March 31, 2022, and all information contained in these consolidated statements rests with the management of the National Research Council Canada (NRC). These consolidated financial statements have been prepared by management using the Government's accounting policies, which are based on Canadian public sector accounting standards.

Management is responsible for the integrity and objectivity of the information in these consolidated financial statements. Some of the information in the consolidated financial statements is based on management's best estimates and judgment, and gives due consideration to materiality. To fulfil its accounting and reporting responsibilities, management maintains a set of accounts that provides a centralized record of NRC's financial transactions. Financial information submitted in the preparation of the Public Accounts of Canada, and included in NRC's *Departmental Results Report*, is consistent with these consolidated financial statements.

Management is also responsible for maintaining an effective system of internal control over financial reporting (ICFR) designed to provide reasonable assurance that financial information is reliable, that assets are safeguarded and that transactions are properly authorized and recorded in accordance with the *Financial Administration Act* and other applicable legislation, regulations, authorities and policies.

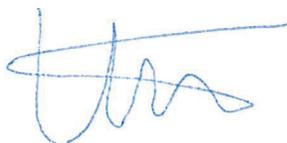
Management seeks to ensure the objectivity and integrity of data in its consolidated financial statements through careful selection, training and development of qualified staff; through organizational arrangements that provide appropriate divisions of responsibility; through communication programs aimed at ensuring that regulations, policies, standards and managerial authorities are understood throughout NRC; and through conducting an annual assessment of the effectiveness of the system of ICFR.

The system of ICFR is designed to mitigate risks to a reasonable level based on an ongoing process to identify key risks, to assess the effectiveness of associated key controls, and to make any necessary adjustments.

A risk-based assessment of the system of ICFR for the year ended March 31, 2022 was completed in accordance with the Treasury Board *Policy on Financial Management* and the results and action plans are summarized in the annex.

The effectiveness and adequacy of NRC's system of internal control is reviewed by the work of Internal Audit and Financial Monitoring staff, who conduct periodic audits of different areas of NRC's operations, and by the NRC Departmental Audit Committee, which oversees management's responsibilities for maintaining adequate control systems and the quality of financial reporting, and which recommends the consolidated financial statements to the President.

Ernst & Young LLP has expressed an opinion on the fair presentation of the consolidated financial statements of NRC for the year ended March 31, 2022, which does not include an audit opinion on the annual assessment of the effectiveness of NRC's ICFR.



Iain Stewart
President



Dale MacMillan, CPA, CGA
Vice-President, Corporate Services
and Chief Financial Officer

Ottawa, Canada
June 28, 2022

Independent auditor's report

To the National Research Council Canada

Opinion

We have audited the consolidated financial statements of the **National Research Council Canada** ["NRC"], which comprise the consolidated statement of financial position as at March 31, 2022, the consolidated statement of operations and departmental net financial position, the consolidated statement of change in departmental net financial assets and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of NRC as at March 31, 2022, and its consolidated results of operations, and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of NRC in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing NRC's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate NRC or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the NRC's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of NRC's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on NRC's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause NRC to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the NRC to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ottawa, Canada
June 28, 2022

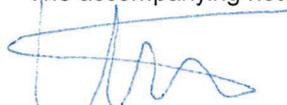
The logo for Ernst & Young LLP, featuring the company name in a stylized, handwritten-style script.

Licensed Public Accountants

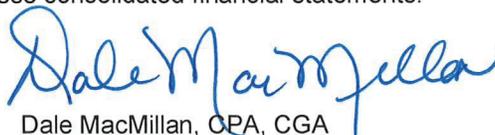
National Research Council Canada
Consolidated Statement of Financial Position
As at March 31

<i>(in thousands of dollars)</i>	2022	2021
Financial assets		
Due from Consolidated Revenue Fund	280,089	270,129
Accounts receivable (Note 4)	30,922	33,896
Inventory for resale	6,898	7,540
Cash and investments (Note 5)	<u>8,629</u>	<u>9,878</u>
Total gross financial assets	326,538	321,443
Financial assets held on behalf of Government		
Accounts receivable (Note 4)	<u>(43)</u>	<u>(34)</u>
Total financial assets held on behalf of Government	(43)	(34)
Total net financial assets	326,495	321,409
Liabilities		
Accounts payable and accrued liabilities (Note 6)	178,229	173,873
Vacation pay and compensatory leave	41,763	42,189
Lease inducements	20,014	22,562
Deferred revenues (Note 7)	14,724	9,164
Employee future benefits (Note 8)	<u>43,250</u>	<u>43,783</u>
Total liabilities	297,980	291,571
Departmental net financial assets	28,515	29,838
Non-financial assets		
Prepaid expenses	13,199	12,059
Endowment fund investments (Note 9)	5,575	5,543
Inventory for consumption	22,889	7,135
Tangible capital assets (Note 10)	<u>833,450</u>	<u>769,789</u>
Total non-financial assets	875,113	794,526
Departmental net financial position	903,628	824,364
Contractual rights (Note 11)		
Contractual obligations (Note 12)		
Environmental liabilities (Note 13)		
Contingent liabilities (Note 14)		

The accompanying notes form an integral part of these consolidated financial statements.



Iain Stewart
President



Dale MacMillan, CPA, CGA
Vice-President, Corporate Services
and Chief Financial Officer

Ottawa, Canada
June 28, 2022

National Research Council Canada
Consolidated Statement of Operations and Departmental Net Financial Position
For the Year Ended March 31

<i>(in thousands of dollars)</i>	2022	2022	2021
	Planned Results		
Expenses			
Science and Innovation	1,211,056	1,245,967	1,473,217
Internal Services	153,696	156,475	154,055
Total expenses	1,364,752	1,402,442	1,627,272
Revenues			
Technical services	97,353	78,558	73,352
Research services	61,930	68,141	55,953
Intellectual property, royalties and fees	7,361	5,668	7,547
Grants and contributions	2,821	2,723	2,522
Rentals	7,496	5,608	5,480
Sales of goods and information products	3,252	3,406	3,371
Lease inducement revenues	2,548	2,548	2,548
Other	5,728	1,805	4,980
Revenues earned on behalf of Government	(66)	(40)	(62)
Total revenues	188,423	168,417	155,691
Net cost of operations before government funding and transfers	1,176,329	1,234,025	1,471,581
Government funding and transfers			
Net cash provided by Government	1,172,701	1,261,728	1,487,207
Change in due from Consolidated Revenue Fund	-	9,960	17,338
Services provided without charge by other government departments and agencies (Note 15a)	41,509	42,486	38,877
Transfers from other government departments (Note 16)	-	(885)	(73)
Net revenues from operations after government funding and transfers	37,881	79,264	71,768
Departmental net financial position – Beginning of year	824,364	824,364	752,596
Departmental net financial position – End of year	862,245	903,628	824,364

Segmented information (Note 17)

The accompanying notes form an integral part of these consolidated financial statements.

National Research Council Canada
Consolidated Statement of Change in Departmental Net Financial Assets
For the Year Ended March 31

<i>(in thousands of dollars)</i>	2022	2022	2021
	Planned Results		
Net revenues from operations after government funding and transfers	37,881	79,264	71,768
Change due to tangible capital assets			
Acquisition of tangible capital assets	(87,605)	(120,189)	(126,130)
Amortization of tangible capital assets	51,825	57,246	53,173
Proceeds from disposal of tangible capital assets	-	234	36
Net loss on disposal of tangible capital assets including adjustments	500	206	273
Transfers from other government departments (Note 16)	-	885	73
Other adjustments	-	(2,043)	4,281
Total change due to tangible capital assets	(35,280)	(63,661)	(68,294)
Change due to inventory for consumption	-	(15,754)	(804)
Change due to endowment fund investments	-	(32)	(76)
Change due to prepaid expenses	-	(1,140)	2,414
Net change in departmental net financial assets	2,601	(1,323)	5,008
Departmental net financial assets – Beginning of year	29,838	29,838	24,830
Departmental net financial assets – End of year	32,439	28,515	29,838

The accompanying notes form an integral part of these consolidated financial statements.

**National Research Council Canada
Consolidated Statement of Cash Flows
For the Year Ended March 31**

<i>(in thousands of dollars)</i>	2022	2021
Operating activities		
Net cost of operations before government funding and transfers	1,234,025	1,471,581
Non-cash items:		
Amortization of tangible capital assets	(57,246)	(53,173)
Net loss on disposal of tangible capital assets	(206)	(273)
Services provided without charge by other government departments and agencies (Note 15a)	(42,486)	(38,877)
Other adjustments to tangible capital assets	2,043	(4,281)
Variations in Consolidated Statement of Financial Position:		
Increase (decrease) in accounts receivable	(2,983)	(1,957)
Increase (decrease) in inventory for resale	(642)	760
Increase (decrease) in prepaid expenses	1,140	(2,414)
Increase (decrease) in inventory for consumption	15,754	804
Decrease (increase) in accounts payable and accrued liabilities	(4,356)	(9,153)
Decrease (increase) in vacation pay and compensatory leave	426	(6,253)
Decrease (increase) in lease inducements	2,548	2,548
Decrease (increase) in deferred revenue	(5,560)	2,148
Decrease (increase) in lease obligation for tangible capital assets	-	43
Decrease (increase) in employee future benefits	533	422
Cash used in operating activities	1,142,990	1,361,925
Capital investing activities		
Acquisitions of tangible capital assets	120,189	126,130
Proceeds from disposal of tangible capital assets	(234)	(36)
Cash used in capital investing activities	119,955	126,094
Investing activities		
Income from endowment fund investments	107	126
Awards granted from endowment fund	(75)	(50)
Increase (decrease) in CFHT and TIO cash and investments	(1,249)	(888)
Cash used in (provided by) investing activities	(1,217)	(812)
Net cash provided by Government of Canada	1,261,728	1,487,207

The accompanying notes form an integral part of these consolidated financial statements.

National Research Council Canada
Notes to Consolidated Financial Statements
For the Year Ended March 31, 2022

1. Authority and Objectives

The National Research Council is the Government of Canada's largest science and research organization and exists under the *National Research Council Act* (NRC Act). The NRC is a departmental corporation named in Schedule II of the *Financial Administration Act*. The mission of NRC is to have an impact by advancing knowledge, applying leading-edge technologies, and working with other innovators to find creative, relevant and sustainable solutions to Canada's current and future economic, social and environmental challenges.

In delivering its mandate, the NRC reports under the Core Responsibility Science and Innovation, which is to grow and enhance the prosperity of Canada through: undertaking, assisting and promoting innovation-driven research and development; advancing fundamental science and Canada's global research excellence; providing government, business and research communities with access to scientific and technological infrastructure, services and information; and supporting Canada's skilled workforce and capabilities in science and innovation.

Internal Services are those groups of related activities and resources that the federal government considers to be services in support of programs and/or required to meet corporate obligations of an organization. Internal Services refers to the activities and resources of the 10 distinct services that support program delivery in the organization, regardless of the Internal Services delivery model in a department. These services are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Material Management Services; and Acquisition Management Services.

2. Summary of Significant Accounting Policies

These consolidated financial statements have been prepared using the Government's accounting policies stated below, which are based on Canadian public sector accounting standards. The presentation and results using the stated accounting policies do not result in any significant differences from Canadian public sector accounting standards.

Significant accounting policies are as follows:

a) Parliamentary authorities

NRC is financed mainly by the Government of Canada through Parliamentary authorities. Financial reporting of authorities provided to NRC does not parallel financial reporting according to generally accepted accounting principles since authorities are primarily based on cash flow requirements. Consequently, items recognized in the Consolidated Statement of Operations and Departmental Net Financial Position and in the Consolidated Statement of Financial Position are not necessarily the same as those provided through authorities from Parliament. Note 3 provides a reconciliation between the bases of reporting. The planned results amounts in the "Expenses" and "Revenues" sections of the Consolidated Statement of Operations and Departmental Net Financial Position are the amounts reported in the Consolidated Future-oriented Statement of Operations included in the 2021-22 Departmental Plan. The planned results amounts in the "Government funding and transfers" section of the Consolidated Statement of Operations and Departmental Net Financial Position and the Consolidated Statement of Change in Departmental Net Financial Assets were prepared for internal management purposes and have not been previously published.

b) Consolidation

These consolidated financial statements include both NRC and its portion of the accounts for organizations for which it has consolidated operations between January 1 and December 31, 2021. These organizations include the Canada-France-Hawaii Telescope Corporation (CFHT) and the TMT International Observatory, LLC (TIO). The NRC relationship with CFHT and TIO meets the definition of a government partnership under Canadian public sector accounting standards, which requires that its results be proportionally consolidated within those of NRC. All inter-organizational balances and transactions are eliminated as part of the consolidation process. CFHT and TIO have audited financial statements as at and for the year ended December 31, 2021 that have been proportionally consolidated with NRC's March 31, 2022 financial statements.

c) Net cash provided by Government

NRC operates within the Consolidated Revenue Fund (CRF), which is administered by the Receiver General for Canada. All cash received by NRC is deposited to the CRF and all cash disbursements made by NRC are paid from the CRF. The net cash provided by Government is the difference between all cash receipts and all cash disbursements including transactions between departments (including agencies) of the Government.

d) Amounts due from the Consolidated Revenue Fund (CRF)

Amounts due from the CRF are the result of timing differences at year-end between when a transaction affects authorities and when it is processed through the CRF. Amounts due from the CRF represent the net amount of cash that NRC is entitled to draw from the CRF without further authorities to discharge its liabilities.

e) Revenues

Revenues are recognized in the year in which the underlying transaction or event occurred that gave rise to revenues as follows:

- Research and technical services: Revenues are recognized as services are provided based on percentage of completion.
- Licences and fees for intellectual property: Revenues are recognized at the point of time when the customer has a right to use NRC's intellectual property and the performance obligation is satisfied.
- Royalties generated from usage or based on customer's sales from licences: Revenues are recognized over the licence period as performance is satisfied and the right to payment is enforceable.
- Sales of goods and information products: Revenues are recognized when goods or information products are delivered to the client.
- Rentals: Revenues are recognized in the period to which the lease or use of property relates.
- Grants and contributions: Revenues are recognized when the transfer payment is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability.

Funds received for which NRC has an obligation to other parties for the provision of goods, services or the use of assets in the future are recorded as deferred revenues.

Receipts are deposited to the CRF. Under the NRC Act, money received by NRC through the conduct of its operations is spendable in the current or in subsequent years.

Revenues that are non-spendable are not available to discharge NRC's liabilities. While the President of NRC is expected to maintain accounting control, he has no authority regarding the disposition of non-spendable revenues. As a result, non-spendable revenues are considered to be earned on behalf of the Government of Canada and are therefore presented as a reduction of NRC's gross revenues.

f) Expenses

- Expenses are recorded on an accrual basis.
- Contributions are recognized in the year in which the recipient has met the eligibility criteria or fulfilled the terms of a contractual transfer agreement, provided that the transfer is authorized and a reasonable estimate can be made.
- Grants are recognized in the year in which the conditions for payment are met. In the case of grants that do not form part of an existing program, the expense is recognized when the Government announces a decision to make a non-recurring transfer, provided the enabling legislation or authorization for payment receives parliamentary approval prior to the completion of the consolidated financial statements.
- Vacation pay and compensatory leave are accrued as the benefits are earned by employees under their respective terms of employment.
- Services provided without charge by other government departments and agencies for accommodation, employer contributions to the health and dental insurance plans and legal services workers' compensation are recorded as operating expenses at their estimated cost, when estimable.

g) Employee future benefits

i) Pension benefits

Eligible employees participate in the Public Service Pension Plan (the Plan), a multi-employer pension plan administered by the Government of Canada. NRC's contributions to the Plan are charged to expenses in the year incurred and represent NRC's total obligation to the Plan. NRC's responsibility with regard to the Plan is limited to its contributions. Actuarial surpluses or deficiencies are recognized in the financial statements of the Government of Canada, as the Plan's sponsor.

ii) Severance benefits

Employees entitled to severance benefits under labour contracts or conditions of employment earn these benefits as services necessary to earn them are rendered. The obligation relating to the benefits earned by employees is derived from an actuarial valuation specific to NRC. A straight-line method is used to amortize actuarial gains and losses over the expected average remaining service life of 12 years for the related employee groups. Amortization commences in the year following the effective date of the related actuarial valuation.

iii) Sick leave benefits

NRC employees are eligible to accumulate sick leave until termination of employment. Unused sick leave is not eligible for payment on retirement or termination, nor can it be used as vacation. All sick leave is an accumulating non-vesting benefit. A liability is recorded for sick leave balances expected to be taken in excess of future allotments. The cost of sick leave as well as the present value of the obligation is determined using an actuarial valuation. A straight-line method is used to amortize actuarial gains and losses over the expected average remaining service life of 13.3 years for the related employee groups. Amortization commences in the year following the effective date of the related actuarial valuation.

h) Lease inducements

Lease inducements represent incentives received by NRC to enter into lease agreements for property at a nominal cost of one dollar. Lease inducements are deferred and amortized on the same basis as the related tangible capital assets.

i) Accounts receivable

Accounts receivable are stated at the lower of cost and net recoverable value. A valuation allowance is recorded for receivables where recovery is considered uncertain.

j) Contingent liabilities

Contingent liabilities are potential liabilities, which may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the loss can be made, an estimated liability is accrued and an expense recorded. If the likelihood is not determinable or an amount cannot be reasonably estimated, the contingency is disclosed in the notes to the consolidated financial statements.

k) Environmental liabilities

Environmental liabilities consist of estimated costs related to the remediation of contaminated sites as well as estimated costs related to obligations associated with the retirement of tangible capital assets and other environmental liabilities.

i) Contaminated sites

A liability for remediation of contaminated sites is recognized when all of the following criteria are satisfied:

- an environmental standard exists;
- contamination exceeds the environmental standard;
- NRC is directly responsible or accepts responsibility;
- NRC expects that future economic benefits will be given up; and
- a reasonable estimate of the amount can be made.

The liability reflects NRC's best estimate of the amount required to remediate the sites to the current minimum standard for their use prior to contamination. When the cash flows required to settle or otherwise extinguish a liability are expected to occur over extended future periods, a present value technique is used. The discount rate applied is taken from the Government's CRF monthly lending rates for periods of one year and over. The discount rates used are based on the term rate associated with the estimated number of years to complete remediation.

ii) Asset retirement obligations

A liability for an asset retirement obligation is recognized when all of the following criteria are satisfied:

- there is an agreement, contract, legislation, or a constructive or equitable obligation that obligates NRC to incur retirement costs in relation to a tangible capital asset;
- the past event or transaction giving rise to the retirement liability has occurred;
- it is expected that future economic benefits will be given up; and
- a reasonable estimate of the amount can be made.

These costs are normally capitalized and amortized over the asset's estimated useful life based on NRC's best estimates of the cost to retire the tangible capital asset. The liability reflects the present value of estimated cash flows required to retire the assets where amounts can be reasonably estimated and is expected to be settled as the related sites, facilities or assets are removed from service.

The recorded environmental liabilities are adjusted each year, as required, for present value adjustments, inflation, new obligations, changes in management estimates, and actual costs incurred.

If the likelihood of NRC's responsibility is not determinable, a contingent liability is disclosed in the notes to the consolidated financial statements. If measurement uncertainty exists, it is also disclosed in the notes to the consolidated financial statements.

l) Inventory

Inventory consists of parts, materials and supplies held for future program delivery as well as inventory for resale. Inventory for resale is recorded at the lower of cost, using the average cost method, or net realizable value. Inventory for consumption is recorded at cost using the average cost method.

m) Equity investments

Equity investments include shares in public and privately held companies. Equity investments are typically obtained as a result of debt settlement negotiations or as a result of non-monetary transactions (where financial assistance at better-than-market conditions was provided to firms through access to intellectual property, equipment and incubation space in laboratories). If the estimates of the non-monetary transactions cannot be determined, the equity investments are initially recorded at a nominal value. Otherwise they are initially recorded at fair value based on market prices. If the fair value of equity investments becomes lower than the book value and this decline in value is considered to be other than temporary, the equity investments are written down to fair value.

n) Endowment fund investments

Endowments consist of donations subject to externally imposed restrictions stipulating that the resources be maintained permanently by NRC. Income from the endowment fund investments may only be used for the purposes established by the donors.

Funds received for endowments are invested in bonds and other low-risk instruments and are carried at amortized cost. Discounts and premiums arising on the purchase of these investments are amortized over the term of the investments.

o) Foreign currency transactions

Transactions involving foreign currencies are translated into Canadian dollar equivalents using rates of exchange in effect at the time of those transactions. Monetary assets and liabilities denominated in a foreign currency and CFHT and TIO assets and liabilities are translated into Canadian dollars using the rate of exchange in effect at year-end. Gains and losses resulting from foreign currency transactions are included in the applicable line on the Consolidated Statement of Operations and Departmental Net Financial Position according to the activities to which they relate. Net gains and losses relating to the sale of goods or services denominated in a foreign currency are included in revenues. Net gains and losses relating to the purchase of goods or services denominated in a foreign currency are included in expenses. Contractual obligations may contain foreign currencies that are translated into Canadian dollar equivalents using the rate of exchange in effect at March 31, 2022. CFHT and TIO revenues and expenses are translated into Canadian dollar equivalents using the average rate during the fiscal year.

p) Tangible capital assets

All tangible capital assets and leasehold improvements having an initial cost of \$10,000 or more are recorded at their acquisition cost. Contributed tangible capital assets are recorded at fair value at the date of contribution. NRC does not capitalize intangibles, works of art and historical treasures that have cultural, aesthetic or historical value. Assets acquired under tangible capital leases are initially recorded at the lower of the present value of the minimum lease payments at the inception of the lease or fair value. Tangible capital assets held for sale are recorded at the lower of their carrying value or fair value less cost to sell and no amortization is recorded once the tangible capital asset is deemed held for sale.

Amortization of tangible capital assets is calculated on a straight-line basis over the estimated useful life of the asset as follows:

Asset Class	Amortization Period
Land	Not applicable
Buildings and facilities	25 years
Works and infrastructure	25 - 40 years
Machinery, equipment and furniture	10 years
Informatics equipment	5 years
Informatics software	5 years
Vehicles	7 years
Aircraft	15 - 30 years
Leasehold improvements	Lesser of the remaining term of the lease or useful life of the improvement
Leased tangible capital assets	In accordance with the asset class

Assets under construction are recorded in the applicable capital asset class in the year that they become available for use and are not amortized until they become available for use.

Where NRC enters into land leases at a nominal value, the transaction is considered as a non-monetary transaction and is recorded at fair value. If the fair value cannot be reasonably determined, the amount of the transaction is recorded at a nominal value.

The tangible capital assets consolidated from CFHT are stated at cost. Amortization is calculated on the straight-line method over the estimated useful lives of the tangible capital assets ranging from 4 to 50 years.

The tangible capital assets consolidated from TIO are stated at cost. Amortization is calculated on the straight-line method over the estimated useful lives of the tangible capital assets ranging from 2 to 10 years.

q) Measurement uncertainty

The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses reported in the consolidated financial statements. At the time of preparation of these consolidated financial statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are percentage of completion on revenues from the provision of services, contingent liabilities, remediation liabilities, asset retirement obligations, the liability for employee severance benefits, sick leave benefits, the allowance for doubtful accounts, the fair value of non-monetary transactions related to leased tangible capital assets and the useful life of tangible capital assets. Actual results could significantly differ from those estimated. Management's estimates are reviewed periodically and, as adjustments become necessary, they are recorded in the consolidated financial statements in the year they become known.

Standards effective for fiscal years beginning on or after April 1, 2022

i) PS 1201 Financial Statement Presentation (PS 1201) was amended to conform to PS 3450 Financial Instruments (PS 3450), and requires a new statement of remeasurement gains and losses separate from the statement of operations. Included in this new statement are the unrealized gains and losses arising from the remeasurement of financial instruments and items denominated in foreign currencies, as well as the government's proportionate share of other comprehensive income that arises when a government includes the results of government business enterprises and partnerships.

ii) PS 3041 Portfolio Investments (PS 3041) has removed the distinction between temporary and portfolio investments. This section was amended to conform to PS 3450, and now includes pooled investments in its scope. Upon adoption of PS 3450 and PS 3041, PS 3030 Temporary Investments (PS 3030) will no longer apply.

iii) PS 2601 Foreign Currency Translation (PS 2601) requires exchange rates to be adjusted to the rate in effect at the financial statement date for monetary assets and liabilities denominated in foreign currency and non-monetary items included in the fair value category. Unrealized gains and losses are to be presented in the statement of remeasurement gains and losses. Gains and losses on long-term monetary assets and liabilities are amortized over the remaining term of the item.

iv) PS 3450 Financial Instruments (PS 3450) establishes recognition, measurement, and disclosure requirements for derivative and non-derivative financial instruments. The standard requires fair value measurement of derivatives and equity instruments that are quoted in an active market; all other financial instruments can be measured at cost/amortized cost or fair value at the election of the government. Unrealized gains and losses are presented in a new statement of remeasurement gains and losses. There is the requirement to disclose the nature and extent of risks arising from financial instruments and clarification is given for the de-recognition of financial liabilities.

v) PS 3280 Asset Retirement Obligations (PS 3280) requires entities to record asset retirement obligations. An asset retirement obligation is a legal obligation associated with the retirement of a tangible capital asset. Asset retirement costs associated with a tangible capital asset controlled by the entity increase the carrying amount of the related tangible capital asset and are expensed in a rational and systematic manner. Asset retirement costs associated with an asset no longer in productive use are expensed. Subsequent measurement of the liability can result in either a change in the carrying amount of the related tangible capital asset, or an expense, depending on the nature of the re-measurement and whether the asset remains in productive use. This new section will be effective for fiscal years beginning on or after April 1, 2022. Earlier adoption is permitted.

Standards effective for fiscal years beginning on or after April 1, 2023

PS 3400 Revenue (PS 3400) was recently issued and proposes a framework that includes two categories of revenue – exchange transactions or unilateral transactions. Revenue from an exchange transaction is recognized when the public sector entity has satisfied the performance obligation(s). If no performance obligation is present, it would be unilateral revenues. Unilateral revenues are recognized when a public sector entity has the authority to claim or retain an inflow of economic resources and a past event gives rise to a claim on economic resources. This new section will be effective for fiscal years beginning on or after April 1, 2023. Earlier adoption is permitted.

NRC continues to assess the impacts of the above standards. While the timing of standards adoption may vary, certain standards must be adopted concurrently. The requirements in PS 1201, PS 3450, PS 2601 and PS 3041 must be implemented at the same time. NRC expects to adopt the above standards as they become effective.

3. Parliamentary Authorities

NRC receives most of its funding through annual parliamentary authorities. Items recognized in the Consolidated Statement of Operations and the Departmental Net Financial Position and the Consolidated Statement of Financial Position in one year may be funded through parliamentary authorities in prior, current or future years. Accordingly, NRC has different net results of operations for the year on a government funding basis than on an accrual accounting basis. The differences are reconciled in the following tables:

a) Reconciliation of net cost of operations to current year authorities used

<i>(in thousands of dollars)</i>	2022	2021
Net cost of operations before government funding and transfers	1,234,025	1,471,581
Adjustments for items affecting net cost of operations but not affecting authorities:		
Revenues	168,417	155,691
Amortization of tangible capital assets	(57,246)	(53,173)
Services provided without charge by other government departments and agencies (Note 15a)	(42,486)	(38,877)
Decrease (increase) in salary accrual	(4,466)	(2,255)
Decrease (increase) in employee future benefits	533	422
Refund of previous years' expenditures	3,680	4,245
Other decrease (increase)	51	(238)
Bad debt expense	(135)	(184)
Gain (loss) on foreign exchange linked to revenues	(247)	(572)
Loss on disposal of tangible capital assets	(206)	(273)
Decrease (increase) in vacation pay and compensatory leave	426	(6,253)
Decrease (increase) in accrued liabilities not charged to authorities	1,637	(783)
Decrease (increase) in remediation liabilities (Note 6)	(1,740)	116
Post capitalization expense reduction	716	144
Portions of accounts of CFHT and TIO (Note 15c and 15d)	1,861	(644)
Total items affecting net cost of operations but not affecting authorities	70,795	57,366
Adjustments for items not affecting net cost of operations but affecting authorities:		
Acquisitions of tangible capital assets and additions to assets under construction	115,237	120,558
Increase (decrease) in prepaid expenses	1,140	(2,414)
Increase (decrease) in inventory	15,112	1,564
Total items not affecting net cost of operations but affecting authorities	131,489	119,708
Current year authorities used	1,436,309	1,648,655

b) Authorities provided and used

<i>(in thousands of dollars)</i>	2022	2021
Authorities provided:		
Vote 1 – Operating expenditures	525,707	520,161
Vote 5 – Capital expenditures	137,123	159,666
Vote 10 – Grants and contributions	754,965	699,980
Statutory amounts:		
Revenues pursuant to paragraph 5(1)(e) of the <i>National Research Council Act</i>	289,261	255,269
Payments for the Industrial Research Assistance Program pursuant to the <i>Public Health Events of National Concern Payments Act</i>	-	255,485
Payments to increase bio-manufacturing capacity pursuant to the <i>Public Health Events of National Concern Payments Act</i>	-	7,207
Payments for medical countermeasures pursuant to the <i>Public Health Events of National Concern Payments Act</i>	-	3,341
Payments to support students and youth impacted by COVID-19 pursuant to the <i>Public Health Events of National Concern Payments Act</i>	-	9,000
Contributions to employee benefit plans	65,845	65,977
Proceeds from the disposal of surplus Crown assets	270	434
Loss on foreign exchange	50	169
Less:		
Revenues available for use in future years	(126,433)	(117,821)
Lapsed authorities:		
Frozen allotments – Operating	(1,280)	(9,756)
Frozen allotments – Grants and contributions	(45,000)	(80,000)
Frozen allotments – Capital	-	(11,497)
Unexpended authorities – Grants and contributions	(119,159)	(16,347)
Unexpended authorities – Operating	(18,186)	(44,834)
Unexpended authorities – Capital	(26,854)	(47,779)
Current year authorities used	1,436,309	1,648,655

4. Accounts Receivable

The following table presents details of NRC's accounts receivable balances:

<i>(in thousands of dollars)</i>	2022	2021
Receivables from external parties	26,668	28,061
Receivables from Canada Revenue Agency GST (Note 15b)	2,664	1,806
Receivables from other government departments and agencies (Note 15b)	1,831	4,116
CFHT – Accounts receivable	85	452
TIO – Accounts receivable	-	1
Receivable and advances from employees	346	41
	31,594	34,477
Less: Allowance for doubtful accounts on receivables from external parties	(672)	(581)
Accounts receivable net of allowances	30,922	33,896
Accounts receivable held on behalf of Government	(43)	(34)
Net accounts receivable	30,879	33,862

5. Cash and Investments

<i>(in thousands of dollars)</i>	2022	2021
Cash and investments held by CFHT	2,941	2,420
Cash held by TIO	5,688	7,458
Equity investments	-	-
Cash and investments	8,629	9,878

Equity investments include shares in two public companies (two in 2021) and one privately held company (one in 2021). These shares were obtained through debt settlement or non-monetary transactions. NRC will consider timely opportunities for divestiture of equity investments by taking into account the interests, market liquidity and expected future growth of the applicable company.

As at March 31, 2022, the book value of the equity investments was three dollars (three dollars in 2021). The fair value of NRC's equity investments in public companies was three dollars (three dollars in 2021). The fair value of the privately held companies is not determinable.

6. Accounts Payable and Accrued Liabilities

The following table presents details of NRC's accounts payable and accrued liabilities:

<i>(in thousands of dollars)</i>	2022	2021
Accounts payable – External parties	129,443	121,283
Accounts payable – Other government departments and agencies (Note 15b)	6,807	18,934
Accrued wages and employee benefits	30,894	24,758
Contractor holdbacks	1,583	1,297
Remediation liabilities (Note 13a)	3,984	2,243
Sales tax payable	393	468
CFHT – Accounts payable	195	191
TIO – Accounts payable	4,930	4,699
Total accounts payable and accrued liabilities	178,229	173,873

7. Deferred Revenues

Deferred revenues represents the balances at year-end of unearned revenues stemming from amounts received from external parties that are restricted in order to fund the expenditures related to specific research projects and stemming from amounts received for fees prior to services being performed. Revenues are recognized in the period in which these expenditures are incurred or in which the service is performed. Details of the transactions related to this account are as follows:

<i>(in thousands of dollars)</i>	2022	2021
Opening balance	8,991	11,144
Funds received	39,421	38,895
Revenues recognized	<u>(33,740)</u>	<u>(41,048)</u>
Closing balance	14,672	8,991
CFHT – Deferred revenues	52	173
Total deferred revenues	14,724	9,164

8. Employee Future Benefits

a) Pension Benefits

Eligible NRC employees participate in the Public Service Pension Plan (the Plan), which is sponsored and administered by the Government of Canada. Pension benefits accrue up to a maximum of 35 years at a rate of 2% per year of pensionable service, times the average of the best five consecutive years of earnings. The benefits are integrated with Canada/Québec Pension Plans benefits and they are indexed to inflation.

Both the employees and NRC contribute to the cost of the Plan. Due to the amendment of the *Public Service Superannuation Act* following the implementation of provisions related to *Canada's Economic Action Plan 2012*, employee contributors have been divided into two groups – Group 1 relates to existing Plan members as of December 31, 2012 and Group 2 relates to members joining the Plan on or after January 1, 2013. Each group has a distinct contribution rate.

The 2021-2022 expense amounts to \$44,484,857 (\$45,077,572 in 2021). For Group 1 members, the expense represents approximately 1.01 times (1.01 times in 2021) the employee contribution and, for Group 2 members, approximately 1.00 times (1.00 times in 2021) the employee contribution.

NRC's responsibility with regard to the Plan is limited to its contributions. Actuarial surpluses or deficiencies are recognized in the financial statements of the Government of Canada, as the Plan's sponsor.

b) Severance Benefits

NRC provides severance benefits to its employees based on eligibility, years of service and salary at termination of employment. However, since 2011, the accumulation of severance benefits for voluntary departures progressively ceased for substantially all employees. Employees subject to these changes were given the option to be paid the full or partial value of benefits earned to date or collect the full or remaining value of benefits upon departure from the public service. Severance benefits are unfunded and, consequently, the outstanding obligation will be paid from future authorities. The changes in the obligations during the year were as follows:

<i>(in thousands of dollars)</i>	2022	2021
Accrued severance benefit obligation, beginning of year	27,323	27,773
Expense for the year:		
Current service cost	805	808
Interest cost	269	545
	<u>28,397</u>	<u>29,126</u>
Benefits paid during the year	<u>(1,996)</u>	<u>(1,803)</u>
Accrued benefit obligation, end of year	26,401	27,323
Actual accrued benefit obligation per actuarial valuation	26,245	27,153
Unamortized actuarial gain (loss)	170	170
Actuarial gain (loss) amortization	(14)	-
Accrued benefit obligation, end of year	26,401	27,323

The latest actuarial valuation of NRC's severance benefits obligation was conducted as at March 31, 2021 using the projected benefit method. The significant actuarial assumptions adopted in measuring the severance benefits obligation are as follows:

	2022	2021
Discount rate	1.04%	1.04%
Rate of compensation economic increase per year:		
2021	2.0%	2.0%
2022	1.5%	1.5%
Average remaining service period of active employees	12.3 years	12.0 years

c) Sick Leave Benefits

NRC provides benefits for sick leave to its eligible employees consisting of one and one-quarter (1 1/4) days of sick leave per calendar month. Sick leave can only be used for paid time off at the employee's normal rate of pay when the employee is unable to perform their duties because of illness or injury. Unused sick leave benefits accumulate during the employee's period of service and no payment is due to employees upon termination of employment for unused days. The changes in the obligation during the year were as follows:

<i>(in thousands of dollars)</i>	2022	2021
Accrued benefit obligation, beginning of year	16,460	16,432
Expense for the year:		
Current service cost	2,499	2,280
Interest cost	174	342
	19,133	19,054
Benefits paid during the year	(2,687)	(2,594)
Accrued benefit obligation, end of year	16,446	16,460
Actual accrued benefit obligation per actuarial valuation	21,798	21,812
Unamortized actuarial gain (loss)	(5,352)	(5,352)
Actuarial gain (loss) amortization	403	-
Accrued benefit obligation, end of year	16,849	16,460

The latest actuarial valuation of NRC's sick leave benefits obligation was conducted as at March 31, 2021 using the projected benefit method prorated on services. The significant actuarial assumptions adopted in measuring the employee sick leave benefit obligation are as follows:

	2022	2021
Discount rate	0.8%	0.8%
Rate of compensation economic increase per year:		
2021	2.0%	2.0%
2022	2.0%	2.0%
Average remaining service period of active employees	13.3 years	13.3 years

9. Endowment Fund Investments

This account was established pursuant to paragraph 5(1)(f) of the NRC Act to record the residue of the estate of the late H.L. Holmes. Up to two thirds of the endowment fund's annual net income (maximum of \$100,000) is used to finance the H.L. Holmes award on an annual basis. The award provides the opportunity to post-doctoral students to study at world famous graduate schools or research institutes under outstanding researchers. The monetary value and number of awards granted is established by the H.L. Holmes selection committee.

<i>(in thousands of dollars)</i>	2022	2021
Endowment fund investments, beginning of year	5,543	5,467
Net income from endowment	107	126
Awards granted	(75)	(50)
Endowment fund investments, end of year	5,575	5,543

The portfolio for endowment fund investments had an average effective return of 1.86% (2.24% in 2021) and an average term to maturity of 2.69 years as at March 31, 2022 (2.32 years as at March 31, 2021). The fair value of the endowment fund investments as at March 31, 2022 was \$5,361,347 (\$5,569,085 in 2021).

10. Tangible Capital Assets

Tangible capital asset class	Cost					Accumulated Amortization					Net Book Value	
	Opening balance	Acquisitions	Adjustments (1)	Disposals and write-offs	Closing balance	Opening balance	Amortization	Adjustments	Disposals and write-offs	Closing balance	2022	2021
Land	13,445	-	407	-	13,852	-	-	-	-	-	13,852	13,445
Buildings and facilities	909,117	32,224	76,625	-	1,017,966	(24,002)	33	-	-	(628,882)	389,084	304,204
Works and infrastructure	67,065	19	149	-	67,233	(1,720)	-	-	-	(26,876)	40,357	41,909
Machinery, equipment and furniture	590,843	17,066	7,977	(4,444)	611,442	(24,153)	(529)	4,459	(482,782)	128,660	128,660	128,284
Informatics	37,261	384	439	(378)	37,706	(1,549)	(12)	378	(32,518)	5,188	5,188	5,926
Informatics software	21,329	583	(37)	(88)	21,787	(1,014)	9	88	(19,741)	2,046	2,046	2,505
Vehicles	4,114	238	-	(293)	4,059	(262)	-	285	(3,033)	1,026	1,026	1,058
Aircraft	20,771	273	222	-	21,266	(514)	-	-	(13,461)	7,805	7,805	7,824
Leasehold improvements	17,346	-	400	-	17,746	(750)	-	-	(11,001)	6,745	6,745	7,095
Assets under construction	170,471	63,690	(84,080)	(447)	149,634	-	-	-	-	149,634	149,634	170,471
Assets under construction – NRC/TIO	27,858	759	-	-	28,617	-	-	-	-	28,617	28,617	27,858
Leased tangible capital assets	63,700	-	-	-	63,700	(2,548)	-	-	(43,686)	20,014	20,014	22,562
CFHT – Tangible capital assets	18,039	124	(120)	(5)	18,038	(640)	97	-	(13,106)	4,932	4,932	5,476
TIO – Tangible capital assets	32,220	4,829	(407)	(760)	35,882	(94)	6	744	(392)	35,490	35,490	31,172
Total	1,993,579	120,189	1,575	(6,415)	2,108,928	(57,246)	(396)	5,954	(1,275,478)	833,450	833,450	769,789

(1) Adjustments include assets under construction of \$84,966,000 that were transferred to the other categories upon completion of the assets. During the year, NRC received three pieces of equipment with a total cost of \$1,181,728 and accumulated amortization of \$296,472 (net book value of \$885,256) from three other government departments (OGD).

Amortization expense for the year ended March 31, 2022 is \$57,246,398 (\$53,173,173 in 2021).

At March 31, 2022, NRC held eight land lease agreements (eight in 2021) for a nominal annual cost with universities. In these instances, NRC owns the building on the leased land. The fair value of the land leases for these non-monetary transactions could not be determined at the inception of the lease; therefore, they are recorded at a nominal value.

On March 21, 1996, NRC entered into a non-monetary transaction consisting of a lease agreement with the University of Western Ontario, whereby leased property was provided to NRC for 25 years (to August 31, 2022) at a nominal cost of one dollar. The property was recorded as a leased tangible capital asset at its fair value of \$10,000,000. The annual amortization of \$400,000 for the leased tangible capital asset is exactly offset by the amortization of the deferred contribution related to the leased property.

On May 23, 2006, NRC took possession of a new facility and entered into a non-monetary transaction with the University of Alberta at a nominal cost of one dollar per year. The lease provides a one-year term with options to renew on 10 sequential occasions, each of the first nine renewals to be for a period of five years and the 10th renewal for a period of four years (to May 22, 2031). The building was recorded as a leased tangible capital asset at its fair value of \$44,400,000. The annual amortization of \$1,776,000 for the leased tangible capital asset is exactly offset by the amortization of the deferred contribution related to the leased building.

On September 1, 2006, NRC took possession of a new facility and entered into a non-monetary transaction with the University of Prince Edward Island at a nominal cost of one dollar per year. The latest lease starting April 1, 2018 provides a three-year term with renewal options for two additional periods of one year. The building was recorded as a leased tangible capital asset at its fair value of \$9,300,000. The annual amortization of \$372,000 for the leased tangible capital asset is exactly offset by the amortization of the deferred contribution related to the leased building.

11. Contractual Rights

The activities of NRC sometimes involve the negotiation of contracts or agreements with outside parties that result in NRC having rights to both assets and revenues in the future. They principally involve research and technical services, and intellectual property, royalties and fees. Major contractual rights that will generate revenues in future years and that can be reasonably estimated are summarized as follows:

<i>(in thousands of dollars)</i>	2023	2024	2025	2026	2027 and thereafter	Total
Revenue contracts	56,436	18,336	10,655	9,697	16,985	112,109

12. Contractual Obligations

The nature of NRC's activities can result in some large multi-year contracts and obligations whereby NRC will be obligated to make future payments in order to carry out its transfer payment programs or when the services/goods are received. Transfer payments and significant operating contractual obligations that can be reasonably estimated are summarized as follows:

<i>(in thousands of dollars)</i>	2023	2024	2025	2026	2027 and thereafter	Total
Transfer payments	312,081	106,101	72,231	10,556	14,973	515,942
Operating contracts	100,908	9,672	3,848	1,623	1,254	117,305
Total	412,989	115,773	76,079	12,179	16,227	633,247

Transfer payments contractual obligations to CFHT and TIO as shown in Notes 15c) and 15d) have been excluded from the contractual obligations.

13. Environmental Liabilities

a) Remediation of contaminated sites

The Government has developed a "Federal Approach to Contaminated Sites", which incorporates a risk-based approach to the management of contaminated sites. Under this approach, the Government has inventoried the contaminated sites on federal lands; each site identified is to be classified, managed and recorded in a consistent manner. The systematic approach aides in the identification of the high-risk sites in order to allocate limited resources to those sites that pose the highest risk to the environment and human health.

NRC has identified two sites (three sites in 2021) where action is possible and for which a liability of \$3,983,800 (\$2,242,853 in 2021) has been recorded. The estimated liability is based on either external scientific/engineering consultants or NRC environmental officers with contaminated site experience reviewing the results of the assessments and underlying assumptions, and estimating the cost of the most likely remediation or risk management scenario. No additional sites were identified during 2021-2022.

The following table presents the total estimated amounts of these liabilities by nature, the associated expected recoveries and the total undiscounted future expenditures as at March 31, 2022 and March 31, 2021. When the liability estimate is based on future cash requirement, the amount is adjusted for inflation using a forecast Consumer Price Index rate of between 2% and 3.9%. Inflation is included in the undiscounted amount. The source of the contamination is associated with the operations and maintenance where activities such as fuel storage/handling, waste sites and use of metal-based paint resulted in former or accidental contamination, e.g. metals, petroleum hydrocarbons, polyaromatic hydrocarbons, etc. Sites often have multiple sources of contamination.

Nature of Liability						
Nature	Number of Sites 2022	Estimated Liability 2022	Estimated Total Undiscounted Expenditures 2022	Number of Sites 2021	Estimated Liability 2021	Estimated Total Undiscounted Expenditures 2021
Office/Commercial/Industrial Operations	2	3,983,800	4,074,064	3	2,242,853	2,242,853
Total	2	3,983,800	4,074,064	3	2,242,853	2,242,853

There were no expected recoveries in 2021 and 2022.

b) Asset retirement obligation

NRC has recognized an asset retirement obligation of \$632,000 (\$678,000 in 2021) in the consolidated financial statements as a result of its legal obligation to retire storage tank systems for petroleum products and allied petroleum products. The undiscounted amount of expected future cash flows required to settle the asset retirement obligation is estimated at \$730,000 (\$696,000 in 2021). The liability for the expected future cash flows, as reflected in the consolidated financial statements, has been discounted at a weighted average of 1.26% (0.48% in 2021) based on the Government of Canada benchmark bonds. This obligation will be settled over the useful lives of the operating assets. The following table summarizes the changes in the future asset retirement obligation:

<i>(in thousands of dollars)</i>	2022	2021
Asset retirement obligation, beginning of year	678	640
Obligations increased (decreased)	8	(3)
Accretion of future asset retirement obligation	(54)	41
Asset retirement obligation, end of year	632	678

Other asset retirement obligations, such as the costs associated with the removal and disposal of asbestos and other designated substances located in NRC buildings, have not been recognized in the consolidated financial statements due to the fact that they are subject to several uncertainties. NRC generally incurs the cost of removing and disposing regulated substances during major building renovations; consequently, the timing and scope of these renovations cannot be reasonably estimated at this time and therefore fair values cannot be reasonably determined. Changes in these assumptions and uncertainties could materially affect NRC's assets and liabilities as well as the resulting amortization and accretion expenses related to the asset retirement obligation.

The NRC's ongoing efforts to assess contaminated sites and asset retirement obligations may result in additional environmental liabilities. Any additional liabilities will be accrued in the year in which they become known and can be reasonably estimated.

14. Contingent Liabilities

Claims have been made against NRC in the normal course of operations. Legal proceedings for one claim were pending at March 31, 2022 (one in 2021). NRC has no claim that it believes will likely result in a liability (none in 2021), no claim that it believes will likely result in a liability where the amount is indeterminable (none in 2021) and one claim that it believes that outcome is indeterminable, as is the liability amount (one in 2021). In 2022, NRC has no claims that it believes the outcome is unlikely (none in 2021).

15. Related Party Transactions

NRC is related as a result of common ownership to all government departments, agencies and Crown corporations. NRC enters into transactions with these entities in the normal course of business and on normal trade terms. During the year, NRC received common services that were obtained without charge from OGDs as disclosed below.

a) Common services provided without charge by OGDs and agencies

During the year, NRC received services without charge from OGDs and agencies. These services have been recognized in NRC's Consolidated Statement of Operations and Departmental Net Financial Position as follows:

<i>(in thousands of dollars)</i>	2022	2021
Employer's contributions to the health and dental insurance plans provided by Treasury Board Secretariat	41,894	38,283
Legal services provided by Justice Canada	205	204
Workers' compensation benefits provided by Employment and Social Development Canada	139	146
Accommodation Services provided by Public Services and Procurement Canada (PSPC)	248	244
Total	42,486	38,877

The Government has centralized some of its administrative activities for efficiency, cost-effectiveness purposes and economic delivery of programs to the public. As a result, the Government uses central agencies and common service organizations so that one department performs services for all other departments and agencies without charge. The costs of these services, such as the payroll and cheque issuance services provided by PSPC, are not included in NRC's Consolidated Statement of Operations and Departmental Net Financial Position.

b) Other transactions with related parties

<i>(in thousands of dollars)</i>	2022	2021
Accounts receivable from OGDs and agencies	4,495	5,922
Accounts payable to OGDs and agencies	6,807	18,934
Expenses – OGDs and agencies	127,664	139,698
Revenues – OGDs and agencies	78,975	76,895

Expenses and revenues disclosed in b) exclude common services provided without charge, which are already disclosed in a).

c) Canada-France-Hawaii Telescope Corporation

NRC has a related party relationship with the following non-federal government entity:

NRC was a founding member of the Canada-France-Hawaii Telescope Corporation (CFHT), a tax-exempt, not-for-profit organization established under Hawaii state law to design, construct and operate a large optical telescope near the summit of Mauna Kea, Hawaii, USA, along with laboratories, equipment and associated installations. CFHT was established in 1974 by a Tripartite Agreement among NRC, the Centre National de la Recherche Scientifique of France and the University of Hawaii. NRC makes annual contributions to fund its 42.5% share of the cost of operations of the telescope and receives no direct benefit in return. However, as a result of NRC's contributions, Canada receives access to telescope observation hours for Canadian astronomers. As a founding member, NRC can appoint four of the 10 members of the Board of Directors. The NRC relationship with CFHT is considered a government partnership for accounting purposes and CFHT results are proportionally consolidated in these statements. In 2022, NRC contributed \$4.4 million to CFHT (\$4.6 million in 2021). These contributions are eliminated upon consolidation. CFHT's condensed financial information for the year ended December 31 is as follows:

<i>(in thousands of dollars)</i>	December 31, 2021	December 31, 2020
Total assets	18,875	19,794
Total liabilities	1,183	1,506
Total unrestricted net assets	<u>17,692</u>	<u>18,288</u>
Total revenues	12,346	14,158
Total expenses	<u>12,836</u>	<u>13,489</u>
Net operating results	(490)	669

NRC's future contractual obligations to CFHT are not included in the transfer payment contractual obligations (Note 12) and are as follows:

<i>(in thousands of dollars)</i>	2023	2024	2025	2026	2027 and thereafter	Total
CFHT	4,485	4,575	4,667	4,760	9,807	28,294

d) TMT International Observatory, LLC

NRC has a related party relationship with the following non-federal government entity:

NRC is a member since April 2015 of the TMT International Observatory, LLC (TIO), a tax-exempt, not-for-profit organization established under the state law of Delaware, USA. TIO was incorporated in May 2014 and formed for the purpose of the execution of the Thirty Meter Telescope Project through the construction, commissioning and operation of an observatory. TIO was established in 2014 by the Regents of the University of California, the California Institute of Technology, the National Institutes of Natural Sciences (Japan) and the National Astronomical Observatories of the Chinese Academy of Sciences. The Department of Sciences of Technology, Government of India and NRC subsequently became members in 2014 and 2015, respectively. The NRC relationship with TIO is considered a government partnership for accounting purposes and TIO results are proportionally consolidated in these statements. The NRC membership participation was 19.5% as of December 31, 2021 based on the aggregate pledged by all current parties. In 2022, NRC contributed \$9.5 million for TIO's assets under construction (\$10.8 million in 2021). TIO's condensed financial information for the year ended December 31 is as follows:

<i>(in thousands of dollars)</i>	December 31, 2021	December 31, 2020
Total assets	212,209	198,966
Total liabilities	27,039	25,776
Total unrestricted net assets	<u>185,170</u>	<u>173,190</u>
Total revenues	32,042	47,235
Total expenses	<u>19,126</u>	<u>22,728</u>
Net operating results	<u>12,916</u>	<u>24,507</u>

NRC's future contractual obligations to TIO are based on Parliamentary authorities granted in 2015. NRC is aware of delays in the project, but no impact to future obligations has been identified at the completion of these consolidated financial statements. These contractual obligations for TIO are not included in the transfer payment contractual obligations (Note 12) and are as follows:

<i>(in thousands of dollars)</i>	2023	2024	2025	2026	2027 and thereafter	Total
TIO	73,790	70,818	-	-	-	144,608

16. Transfers From/To OGDs

Transfers of tangible capital assets between OGDs and NRC have occurred in 2021 and 2022.

The transactions are as follows:

<i>(in thousands of dollars)</i>	2022	2021
Net tangible capital asset transfers	885	73
Total	885	73

17. Segmented Information

Presentation by segment is based on the NRC's core responsibility. The presentation by segment is based on the same accounting policies as described in the Summary of Significant Accounting Policies in Note 2. The following table presents the expenses incurred and revenues generated for the main core responsibilities, by major object of expense and by major type of revenues. The segment results for the year are as follows:

<i>(in thousands of dollars)</i>	Science and Innovation	Internal Services	2022 Total	2021 Total
Transfer payments				
Grants and contributions	576,405	-	576,405	821,305
Total transfer payments	576,405	-	576,405	821,305
Operating expenses				
Salaries and employee benefits	446,446	119,962	566,408	554,197
Utilities, material and supplies	78,299	2,953	81,252	71,285
Amortization of tangible capital assets	54,470	2,776	57,246	53,173
Professional services	47,252	21,935	69,187	72,287
Repair and maintenance	16,293	3,077	19,370	17,343
Payment in lieu of taxes	13,753	1,649	15,402	14,174
Transportation and communication	2,152	495	2,647	2,182
Rentals	8,042	2,781	10,823	10,192
Awards	359	54	413	2,166
Loss (gain) on disposal of tangible capital assets	206	-	206	273
Costs of goods sold	616	-	616	675
Information	617	375	992	1,091
Bad debts	-	135	135	184
Other	1,057	283	1,340	6,745
Total operating expenses	669,562	156,475	826,037	805,967
Total expenses	1,245,967	156,475	1,402,442	1,627,272
Revenues				
Research services	68,141	-	68,141	55,953
Technical services	75,031	3,527	78,558	73,352
Intellectual property, royalties and fees	5,668	-	5,668	7,547
Sales of goods and information products	3,401	5	3,406	3,371
Rentals	15	5,593	5,608	5,480
Grants and contributions	1,363	1,360	2,723	2,522
Lease inducement revenue	-	2,548	2,548	2,548
Other	1,136	669	1,805	4,980
Revenues earned on behalf of Government	-	(40)	(40)	(62)
Total revenues	154,755	13,662	168,417	155,691
Net cost of operations before government funding and transfers	1,091,212	142,813	1,234,025	1,471,581

18. Financial Instruments

NRC's financial instruments consist of due from CRF, accounts receivable, investments and accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that NRC is not exposed to significant interest rate risk, currency risk or credit risk arising from these financial instruments. Unless otherwise disclosed in these consolidated financial statements, management estimates that the carrying values of the financial instruments approximate their fair value due to their impending maturity.

19. Comparative Information

Comparative figures have been reclassified to conform to the current year's presentation.

**Annex to the Statement of Management
Responsibility Including Internal Control over
Financial Reporting (Unaudited)**

For the year ended March 31, 2022

1. Introduction

This document provides summary information on the measures taken by the NRC to maintain an effective system of internal control over financial reporting, including information on internal control management, assessment results and related action plans.

Detailed information on the NRC's authority, mandate and program activities can be found in the [2022-23 Departmental Plan](#) and the [2021-22 Departmental Results Report](#).

2. Departmental system of internal control over financial reporting

2.1 Internal control management

The NRC has a well-established governance and accountability structure to support departmental assessment efforts and oversight of its system of internal control. A departmental financial management framework is in place which includes:

- organizational accountability structures as they relate to internal control management to support sound financial management, including roles and responsibilities of senior departmental managers for control management in their areas of responsibility;
- values and ethics;
- ongoing communication and training on statutory requirements, and policies and procedures for sound financial management and control; and
- monitoring of regular updates to internal control management, as well as the provision of related assessment results and action plans to the deputy head and senior departmental management and, as applicable, the Departmental Audit Committee.

The Departmental Audit Committee provides advice to the deputy head on the adequacy and the functioning of the NRC's risk management, control and governance frameworks and processes.

2.2 Service arrangements relevant to financial statements

The NRC relies on other organizations for processing certain transactions that are recorded in its financial statements, as follows:

Common service arrangements

- Public Services and Procurement Canada (PSPC) which administers the payments of salaries and the procurement of goods and services in accordance with the NRC's Delegation of Authority, and provides some accommodation services on behalf of the NRC;
- Shared Services Canada (SSC), which provides IT infrastructure services;
- The Department of Justice Canada which provides legal services; and

- The Treasury Board of Canada Secretariat, which provides information on public service insurance and centrally administers payment of the employer's share of contributions toward statutory employee benefit plans.

Readers of this annex may refer to the annexes of the above-noted departments for a greater understanding of the system of internal control over financial reporting related to these specific services.

3. Departmental assessment results for the 2021-22 fiscal year

The following table summarizes the status of the ongoing monitoring activities conducted during the fiscal year:

Rotational ongoing monitoring plan for current fiscal year	Status
Costing	Completed as planned, with a minor opportunity for improvement noted.
Procurement and Expenses	Completed as planned, opportunities for improvement noted.
Payroll	Completed as planned, no issues noted.
Financial Close and Reporting	Completed as planned, no issues noted.

In 2021-22, the NRC also followed up on the status of remedial plans from previous years.

The key findings and significant adjustments required from the current fiscal year's assessment activities are summarized in section 3.1.

3.1 New or significantly amended key controls

Changes impacting the NRC's key financial controls during 2021-22 included:

- Process improvements related to project management, acquisition cards and client agreements (revenues) were implemented during the year through an organization-wide initiative while maintaining an appropriate system of internal controls.
- The NRC has reviewed its asset loan and inventory directives with a consultant. Updated processes and controls are expected to be implemented in 2022-23.

3.2 Ongoing monitoring program

The NRC's rotational risk-based monitoring plan had been updated to reflect a refreshed risk assessment for all business processes impacting financial reporting and financial management. The plan covers a five-year period (2020-21 to 2024-25). The NRC completed its annual assessment of controls within costing, procurement and expenses, payroll, and

financial close and reporting. Overall, the key controls tested are working as intended, with opportunities for improvement noted.

Details of the assessment and the results are as follows.

- *Costing*: The assessment determined that overall the controls are working as intended. A minor opportunity for improvement was noted with respect to the maintenance of internal guidance documentation.
- *Procurement and Expenses*: The assessment determined that overall the controls are working as intended. A design control weakness was noted with respect to two users who have conflicting delegated authorities. An historical transaction analysis was performed with no issues noted and periodic monitoring has been formally implemented. Also, an opportunity for improvement was noted with respect to a file that could use additional password protection. However, mitigating controls and testing performed provide support to conclude that the tool is working as intended.
- *Payroll*: The assessment determined that overall the process provides accurate data that can be relied upon.
- *Financial Close and Reporting*: The assessment determined that overall the process provides effective controls.

4. Departmental action plan for the next fiscal year and subsequent years

During fiscal year 2020-21, the NRC reviewed its approach and developed an updated assessment plan covering internal controls over financial reporting and internal controls over financial management for fiscal years 2020-21 to 2024-25.

Process / system	Inherent risk ranking	2020-21	2021-22	2022-23 ¹	2023-24	2024-25
Entity Level Controls						
Entity Level Controls	Low				OE	
IT General Controls						
SAP ECC	High	RA / OP		OP		OP
SONAR	Moderate	RA		OP		OP
Financial Management Business Processes						
Planning and budgeting	Moderate	RA		DE / OER		OE

Process / system	Inherent risk ranking	2020-21	2021-22	2022-23 ¹	2023-24	2024-25
Investment planning	Moderate	RA		DE / OER		OE
Costing	High	RA	DE / OER		OE	
Salary forecasting	Moderate	RA/DE/ OER			OE	
CFO attestation	Low	RA			DE / OER	
Financial Reporting Business Processes						
Procurement, expenses and payments	Moderate	RA	DE/OER		OE	
Transfer payments – IRAP	High	RA / DE / OER		OE		OE
Transfer payments – non-IRAP	Low	RA			DE / OER	
Capital assets	Moderate	RA		DE / OER		OE
Inventory	Low	RA			DE / OER	
Payroll administration	Moderate	RA	DE / OER		OE	
Revenues, receivables and receipts	Moderate	RA		DE / OER		OE
Financial close and reporting	High	RA	DE/OE		OE	

Legend

RA	Risk assessment refresh
DE	Design effectiveness refresh & testing
OER	Operating effectiveness refresh & testing
OE	Operating effectiveness testing
OP	Documenting assessments conducted by other parties

¹In addition to the ongoing monitoring rotational plan, the NRC also plans to review remediation actions completed in all areas in which issues were noted in Section 3.