



ADDITIONAL Presentation



northern health
the northern way of caring

Fraser Fort George Regional Hospital District February 20, 2025

Agenda

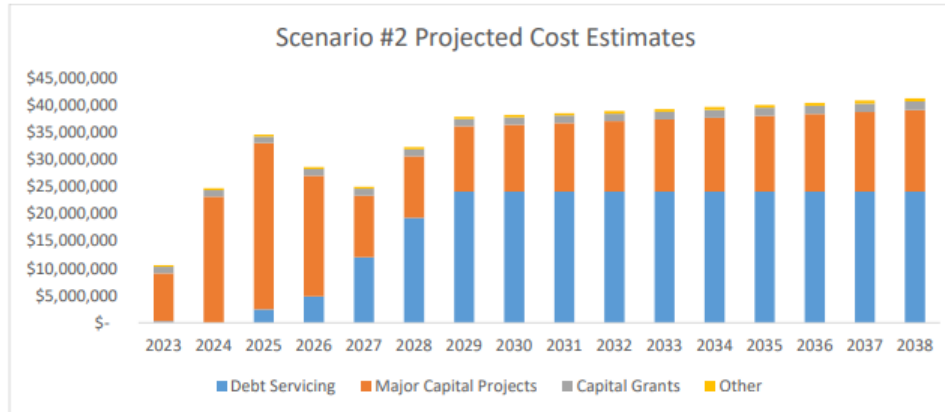
- UHNBC Acute Care Tower Project
- 2025 Funding Bylaw Review
- Individual Project Priorities
- Review of each project

Acute Care Tower Savings

As per the 2024 – 2038 FFGRHD Financial Plan the Debt Servicing costs for 2025 – 2029 were expected to be \$64.7m (5-year total), and \$24.2m thereafter until the debt is settled.

Figure 12(c) outlines that Major capital project funding in years 2024 to 2026 reflect Early Works funding as approved in the preliminary 5-year budget. Debt increases through years 2025 to 2029 until the full \$350 million of funding is borrowed at which time, the debt servicing amount would be \$24.169 million per year.

Figure 12(c) – Scenario #2 Projected Cost Estimates



Acute Care Tower Savings

It is expected that the FFGRHD will save \$54.7m in servicing costs from 2025 – 2029 due to the approval to delay funding cash flows on the Acute Care Tower project until 2029.

The estimated interest that can be earned on the savings due to the cash flow delay over 5 years is \$3.9 million.

<i>(\$millions)</i>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Total</u>
Projected Servicing Costs (Financial Plan)	2.5	5.0	13.0	20.0	24.2	64.7
Projected Servicing Costs (Approved funding)	-	-	-	-	10.0	10.0
Annual Savings	2.5	5.0	13.0	20.0	14.2	54.7
Interest earned on funds not spent on servicing ²	0.1	0.2	0.6	1.2	1.7	3.9

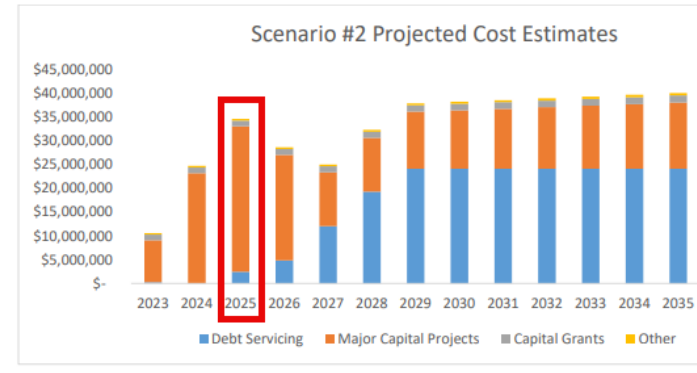
**Estimate 3% per year, with interest reinvested each year*

Planned Major Project Funding Requests

The approved financial plan for the FFGRHD estimated Projected Costs using the draft 3-year budget received from Northern Health in November 2023.

Northern Health's current request for Major Project Funding for 2025 is \$10.5 million, \$33.5 million including Prior Year Commitments and the Early Works project funding. This appears to be within the planned expenditure for 2025.

Capital Funding Request	2025
New Major Projects	10.5
Prior Year Major Project Commitments	2.2
Early Works	20.8
Total	33.5



New Major and IMIT projects 2025/26

Major Projects

UHN Echo-Cardiac Services Department Renovation

UHN Hematology Relocation Renovation Phase 2A

UHN Hematology Relocation Renovation Phase 2B

UHN Phase 2 - Energy Efficient preheat of DHW Storage (CNCP)

UHN Condensate System Upgrades (CNCP)

UHN LAB Histology Ventilation Upgrade

UHN LAB Morgue Racking System Replacement

UHN FM Elevator 3 Upgrade

UHN FM Electrical Rooms 1 and 6 Upgrade

UHN Psychiatry Nurse Call System Replacement

Information Technology Projects

NHR IT Cybersecurity Initiatives including Forescout

AGFA EI PACS Upgrade

Major Equipment

Major Equipment

UHN Network Replacement

UHN DCS Topcon Optical Coherence Tomography

UHN MAT Ultrasound

UHN OR Anesthesia Units x3

UHN OR Urology Laser Replacement

UHN LAB Urinalysis Replacement

UHN X-Ray N0001340 Replacement

UHN CT 64 Replacement

UHN LAB Electrophoresis System Replacement

UHN DI Ultrasound Replacement

UHN OR General Surgical Towers Replacement

UHN Nurse Call Head Equipment

MCK Lab Chemistry Analyzer Replacement

UHN Echo-Cardiac Services Department Renovation

- Part 3 of Cardiac Department Renovations.
- RHD has funding by laws signed for Part 1 and 2.

UHN Hematology Renovation 2A

- Final location of new equipment, post parallel studies
- Equipment purchased and doing parallel studies, meaning space at a premium with old and new hematology equipment both running.

UHN Hematology 2 B

- Complete renovations with new equipment in final location.
- No spare space for new and old equipment to run during parallel studies.

UHN Phase 2 - Energy Efficient Preheat of Domestic Hot Water Storage Carbon Neutral Capital Projects (CNCP)

- Phase 2 of heat recovery to put into hot water preheating using Gas Absorption Heat Pumps.
- Uses Carbon Neutral Capital Funds, by having a business case signed off by government to improve energy efficiency, reduce green house gas emissions and reduce Carbon Footprint.

UHN Condensate System Upgrades (CNCP)

- Natural Gas fired burning creates condensate which must be removed from heating system and returned to drain. Pumps are failing and require replacement and re-engineering to ensure uptime of heating systems.
- CNCP funding use allows improved overall efficiency, linked to other CNCP projects at UHNBC in Mechanical Rooms.

UHN LAB Histology Ventilation Upgrade

- Mandatory ventilation improvements for worker safety in Histology Department with supports Tissue processing, Slide staining, and handling of associated volatile chemicals.
- Existing HVAC at maximum capacity.
- Monitoring and testing (air samples) making this urgent to comply with WorkSafe BC.

UHN LAB Morgue Racking System Replacement

- Increased capacity for decedents in additional capacity Morgue.

UHN FM Elevator 3 Upgrade

- Controls and Elevator Car obsolete, can't get parts or do repairs anymore.
- One of the oldest in facility.
- Having entrapments, with critical patients and specialized clinical staff.

UHN FM Electrical Rooms 1 and 6 Upgrade

- Complete heavy electrical equipment replacement in Electrical Rooms 1 and 6 as required in Switchgear assessments.
- First stage of many sub electrical room updates required following Powerhouse, Generators, Transformers.
- Several incidents finding non-functional gear and panels will require pending from original 1960 hospital construction.
- Also has impacts on vital, essential and non-essential electrical loads.

UHN Psychiatry Nurse Call System Replacement

- Nurse Call on Psychiatry has failed and has not been able to be brought up to running condition as parts are not available, and repairs are not bringing it back to full operation.
- Currently functioning but only partially.
- End of Life, original system with some updates since 1960s original build.

NHR IT Cybersecurity Initiatives including Forescout

Healthcare organizations across the globe are under attack by organized crime groups with 2024 seeing attacks significantly disrupting healthcare delivery. Several high-profile, business-impacting cybersecurity events have occurred in health and in BC. A BC Auditor General report on the state of medical device cybersecurity risk found significant gaps where cybersecurity threats and the potential harm to patients had not been evaluated. Northern Health must increase its cybersecurity capabilities to ensure it is able to continue to protect against increasing threats, and secure patient and business information.

NH saw increased cyber criminal activities in 2024, resulting in compromised credentials and monetary losses. We hired an external party to complete a cybersecurity maturity assessment. The assessment highlighted six key risk areas that need immediate improvement, including: 1) Improved network segmentation and visibility to protect biomedical devices and the information they process; 2) Enhanced staff awareness and training; 3) An expanded vulnerability management program to ensure systems and applications are regularly patched, reported on, and compliance is improved; 4) Improved protection for our endpoints (computers/servers); 5) A security incident & event management system for centralized logging, real-time threat detection and improved incident response; and 6) Expanded capabilities for data discovery, protection, management, and reporting.

AGFA EI PACS Upgrade

Northern Health's Agfa EI PACS (Picture Archiving and Communication System) version 8.1.2 is end-of-service-life (EOSL) since June 30, 2022. If a service and workflow issue is identified that Agfa cannot mitigate, NH is at risk. NH must upgrade Agfa EI PACS to receive full support from Agfa and full functionality of PACS.

Northern Health has been in discussion with Agfa regarding our PACS upgrade path for several years. Progress has been hampered by the delayed renewal of our support maintenance agreement (SMA) with Agfa, which expired in 2020. Efforts to renew the contract were hindered by gaps in Human Resource coverage with PHSA and NH, plus delays from Agfa. Agfa support for NH PACS has continued under a PHSA Notice of Intent (NOI), with a requirement to renew by and up to March 31, 2025, with a maximum value of \$4.2M.

A tentative contract renewal has been reached with Agfa, that includes upgrade language and cost.

1. Renewal of agreed to contract language to March 31, 2025
2. Extension of agreed to contract after March 31, 2025, for 3-5 years

Funding is required to implement the upgrade.

UHN Network Replacement

The IT network and wireless infrastructure at UHNBC are nearing end of life. There will no longer be hardware or software support available. A new modern network infrastructure standard has been adopted that will deliver a better experience for users in our move to digital hospitals.

The IT network and wireless infrastructure at UHNBC is reaching end of life. Replacement of the infrastructure was delayed due to work related to supporting the organization's response to the pandemic. The replacement must be completed as the equipment no longer has support, including security patches, and is at increasing risk of failure due to age. As well, a new modern network infrastructure standard has been adopted that will deliver a better experience for users in our move to digital hospitals.

UHN DCS Topcon Optical Coherence Tomography (OCT)

- Used in Ambulatory Care for Ophthalmology Program, sees emergency cases from ER, and Ambulatory and others related with respect to patients.
- The OCT machine in Ambulatory Care suddenly died. This equipment is required to provide ophthalmology services.
- Able to better penetrate through anterior segment pathology including dense cataracts and cornea scars.
- Higher resolution for detecting more retina pathology and earlier.
- Deeper penetration to help identify choroidal abnormalities.

UHN MAT Ultrasound

- Net new machine specifically for Maternity Services so they don't have to travel for examinations.
- Currently specialty travel to BC Women's Hospital at additional expense and inconvenience to patients.

UHN OR Anesthesia Units x3

- 3 Anesthesia units being replaced after end-of-life expectancy.
- Avoid delay in surgery due to equipment operations, repairs.
- Waitlist issues.
- No renovations but equipment includes patient ventilator, patient monitoring to Operating Room Standards.

UHN OR Urology Laser Replacement

With the Holmium laser at End of Life, this laser offers faster lithotripsy with less power (meaning less time under anesthesia for the patient), virtually no retropulsion to stabilize stones when being lasered, compact size offers better OR efficiency and use of space (crowded OR's can lead to safety issues), plugs into any standard wall outlet so can be used in any O.R. suite (allows for emergency cases to get done in any OR if Cysto OR is in use), and is quiet when in use, so communication has less chance to be interrupted.

UHN LAB Urinalysis Replacement

- Current analyzer no longer supported by vendor. New unit is benchtop module with additional capacity work cell for high volume.

UHN X-Ray N0001340 Replacement

- Only limited support by vendor, end of life approaching, reduced capacity requires replacement.
- Age of equipment is 12 years.
- Increased repeat images or increased use of alternate equipment reduces efficiency of department.
- 100 – 120 exams per day on this device.
- Poor image quality often can require additional studies for diagnosis

UHN CT 64 Replacement

- CT Scanner in CT Room 1, installed in 2008, is 13 years old.
- Ideally, technical lifespan expected is 10 years.
- At End of Life, and End of Service from vendor now. Extremely limited parts availability.
- Up to 10,000 exams per year on this CT, including emergency CTs

UHN LAB Electrophoresis System Replacement

- Current equipment at end of life, system support ends March 2026.
- All tests would have to be sent to Vancouver, if this equipment goes down.
- 12 years old.
- 6500 tests per year.

UHN DI Ultrasound Replacement

- Image quality issues, require repeat exams.
- Purchased in 2016, 10 years old when replaced.
- CPAF not complete.
- Estimated 5000 Diagnostic Ultrasounds per year.

UHN OR General Surgical Towers Replacement

- 4 Surgical Tower Stacks in 4 of 8 OR's.
- Errors in video and technology, impedes appropriate surgical outcomes.
- Standard up to 4K video.
- Improved efficiency of OR, and OR throughput.

UHN Nurse Call Head Equipment

- Head end unit of Nurse Call System, operates facility wide.
- Unit is 20 years old (when 2004 tower was completed).
- Parts for repair are very difficult to obtain.
- Also required for Code White, Code Blue, facility wide.
- Provides patient ability to request help and for staff to request additional assistance in critical cases to the nursing station, or broadly in the facility.

Mackenzie Lab Chemistry Analyzer Replacement

- Current Analyzer 2015 purchase, 10 years old.
- Last of the Roche equipment being replaced across NHA in Chemistry.
- Vendor support, parts no longer available.
- Some renovations required, parallel studies on site will be difficult.
- Has become urgent, currently no RHD request.

2025 FFGRHD Budget Bylaw Request

Priority Investments		20,800,000	18,488,000	8,000,000
Minor Capital		1,220,400	1,242,808	1,265,664
Total Routine Capital Investments:		21,304,221	13,281,224	8,183,316
PY Approved		2,794,000		
Net new ask		10,487,224		
		5,862,970	21.625% of new asks	
		4,624,254	Potential Unfunded	

Questions?

