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Synopsis of Grant Commitments 2025/2026

Thunder Bay Regional Health Sciences Foundation

2025-001 Roaming Education for Staff (REFS) (\$20,000)

Program and Equipment for improved staff learning

Roaming Education for Staff (REFS) launched post-COVID as a way to provide real-time education to Hospital staff, with over 5,000 learners participating to date. REFS improves education opportunities by bringing the training to the professionals. This grant will cover costs associated with equipment including simulation tools, interactive learning devices, content development; program expansion; and staff recognition and engagement.



2025-002 Electromyography (\$66,229)

Equipment to diagnose and assess nerve and muscle damage

Electromyography or EMG is a vital tool to help doctors diagnose and assess nerve and muscle conditions including ICU-acquired weakness due to immobility, neuromuscular disorders, diaphragm weakness (affects breathing), and ALS. Previously, patients had to go to an offsite clinic for treatment (if they were able), delaying care and recovery.

2025-003 Spirometry Equipment (\$8,151)

Equipment for testing and assessing lungs

Spirometry helps test and assess breathing capacity in patients including measuring the volume of air breathed in and determining breathing rate. This information can help diagnose lung conditions such as COPD and asthma. Previously, patients were referred to an offsite clinic for testing, delaying diagnosis and treatment.

2025-004 Ob/Gyn Bed (\$25,473)

Equipment for the Emergency Department for better, more comfortable patient exams

Previously, pregnant patients coming to the Emergency Department with concerns about their pregnancy would be examined on a standard stretcher. This makes the exam more difficult for the doctor and more uncomfortable for the patient. A dedicated Ob/Gyn bed provides necessary positioning, support, and privacy for easier exams and better patient comfort and care.



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2025-005 Trauma Room Renovations (\$50,945)

Renovations to build a negative pressure room in the Emergency Department

COVID-19 underlined the importance of protecting patients and staff in the Emergency Department (ED) from airborne infection. One measure that can be taken is to build a negative pressure room so that air flows into the room but not out. Currently, there are two negative pressure rooms in the ED, but they are not suitable for critically ill patients. These renovations will increase capacity and also improve patient care for patients with severe burns, external trauma, and other traumas by maintaining a clean space. This grant covers costs associated with architectural services.

2025-006 <u>Defibrillator Replacement (x8)</u> (\$195,629)

Equipment to restore heart rhythm during cardiac emergencies

Defibrillators are life-saving devices that shock the heart back into a normal rhythm during cardiac emergencies including heart attack. The Hospital currently has 26 defibrillators throughout the facility, though many are nearing end of life. This grant will replace the 8 oldest units.

2025-007 Hilrom Centrella Patient Beds (x195) (\$3,000,000 over 5 years)

Equipment for patient comfort and patient/staff safety

Today's SMART inpatient beds feature vastly improved technology compared to previous models. The mattresses themselves are made from a specialized material that reduces the risk of pressure (bed) sores. Pressure sores are a major health risk to patients, and treatment of sores and resulting infections cost the Hospital approximately \$11.1 million per year. These new beds will significantly reduce pressure sores for better patient care and lower treatment costs. Other improved features include better mechanical controls to make it safer and easier to move patients in the bed as needed, smart lighting, and a built-in respiration monitor to help staff during rounds.

2025-008 Thunder Bay Breast Cancer Support Group (\$5,000)

Program to support breast cancer survivors

The Thunder Bay Breast Cancer Support Group is a pro-active, peer-led, self-help group for breast cancer survivors, providing a safe and inclusive space for women and men. The group hosts regular meetings except in summer months. Planned activities include yoga, craft nights, other events as identified by members, and a Survivor Tea during Breast Cancer Awareness Month.





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2025-009 Tissue Processors (x2) and Cryostat (\$264,219)

Equipment to increase diagnostic capacity for the Pathology Department

The Pathology Department receives approximately 75 tissue samples per day for testing. Tissue processors are vital for preparing those tissues for lab tests to diagnose diseases such as cancer. A cryostat is used when surgeons need a diagnosis in the operating room, such as to determine if a tumour is malignant or benign. Both types of equipment are crucial for timely diagnosis of disease and subsequent treatment planning.

2025-010 Linac 5 Replacement (\$1,000,000)

Construction and retrofit of existing bunker to accept new upgrade

Cancer Care Ontario (Ontario Health) provides funding for new linear accelerators or linacs used for radiation therapy. However, it does not cover costs associated with installation including retrofitting spaces and upgrading infrastructure such as power and HVAC. This grant will provide that funding during the replacement and upgrade of one of the Cancer Centre's existing linacs.

2025-011 HDRB Brachytherapy Applicator Refresh (\$50,945)

Equipment used for High-Dose Rate brachytherapy

High-dose rate brachytherapy (HDRB) is a type of radiation therapy that places a radioactive source inside or next to the tumour using a series of tubes called applicators. The Cancer Centre uses HDRB primarily for gynaecological and prostate cancers. The applicators wear out over time due to radiation exposure and repeated sterilizations. This grant provides new applicators to ensure patients can continue to receive timely HDRB.

2025-012 Wheelchairs (x33) (\$70,049)

Equipment to transport patients throughout the Hospital

Wheelchairs are essential for patient care at the Hospital to transport patients facing mobility issues. However, they wear out over time, especially given that they are used outside as well, exposing them to rain, snow, and salt. This grant for 33 new wheelchairs will ensure patients will have access to a wheelchair at the Hospital when needed.

2025-013 Mobile HEPA Cart (x2) (\$17,822.36)

Equipment to protect staff safety during certain maintenance procedures

Maintenance staff repair items in the Hospital's physical environment when needed. However, sometimes maintenance is required in quarantine areas and similar locations. Previously, this required a number of safety measures including partitioning entire rooms or areas of the Hospital with physical barriers. These procedures took a lot of time and sometimes delayed patient care as well as repairs to crucial infrastructure. Mobile HEPA carts support the Hospital's infection

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prevention and control (IPAC) program by allowing maintenance workers to complete repairs within their own self-contained and portable environment.

2025-014 2025 Accessibility Upgrades (\$89,765.62)

Equipment to improve accessibility throughout the Hospital

Accessibility standards have changed since the Hospital opened in 2004. The Hospital has a detailed 5-year Accessibility Plan to meet current standards set out in the Accessibility for Ontarians with Disabilities Act (AODA). This grant will be used to provide the cafeteria with accessible furniture, provide Pre-admission with accessible kiosks and furniture, and create barrier-free washrooms with grab bars, barrier-free sinks, automatic door openers, and hands-free faucets.

2025-015 Nurse Call Phase 6 (\$300,000)

Equipment to improve communications and alerts for nurses

The Hospital has updated nurse call systems in specific areas of the Hospital over the last several years. These include inpatient wards, the Cath Lab, and Labour & Delivery. This grant will upgrade and replace aging equipment in Endoscopy, Adult Mental Health, and the Cancer Centre (Levels 2 and 3).

2025-016 Water Filling Stations (x15) (\$105,315.43)

Equipment to provide easy access to drinking water

Water stations promote use of reusable water bottles and provide a convenient option for patients, staff, and visitors. These touchless units reduce the risk of spreading germs compared to traditional water fountains. This grant covers the purchase of the units plus plumbing and electrical contingencies during installation.

2025-017 Cook-to-Serve Carts (\$93,739)

Equipment to improve efficiencies and choice while cooking inpatient meals

The Hospital's Food and Nutrition Department prepares approximately 400,000 meals per year for inpatients. Previously, meals needed to be cooked 2-3 days in advance, frozen, and then reheated when needed. However, this was an inefficient system and forced limited menu choices. New technology allows the department to prepare meals on demand and to offer a wider selection of foods. This will give patients fresher meals and allow them more choice, decrease the number of freezers from 3 to 1, reduce food waste, and reduce the amount of electricity used to prepare and store meals. This grant will cover costs associated with the trays, hot boxes, and dispensers needed to support new inpatient meal procedures.





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2025-018 Cook-to-Serve Tray Line (\$179,326)

Equipment to improve efficiencies and choice while cooking inpatient meals

Related to Grant 2025-017 above, this grant will cover the costs associated with the delivery carts, which feature hot and cold sides that match with the trays. This allows staff to provide hot and cold items on the same tray, giving the patient more variety for a better eating experience.

2025-019 Neuro Drills (\$210,575)

Equipment for brain and spinal surgeries

Every brain surgery performed at the Hospital requires a neuro drill. This provides a "window" through the skull at the appropriate place for the neurosurgeon to access the brain. It is also sometimes used in spinal surgery to help spinal surgeons access certain areas of the spine and to remove bone as needed.

2025-020 <u>Jackson Table</u> (\$178,148)

Equipment for spinal surgeries

A Jackson table is used to position and support the patient during spinal surgery. The table is "radiolucent" which means it can be used with X-ray and related digital imaging techniques for real-time visualization of the spine during surgery. This unit replaces an old and irreparable table, bringing capacity back up to two Jackson tables.

2025-021 MicroFree Sets (x3) (\$99,574)

Equipment for orthopaedic surgeries

MicroFree small bone drills are used for many types of orthopaedic surgeries including foot, ankle, hand, wrist, and shoulder. They are the workhorses of orthopaedic surgeries. The addition of these three drills will ensure that the fleet remains in top shape with high-functioning equipment for better patient care.

2025-022 Cardiovascular Imaging Software Storage (\$152,078.47)

Service used to securely store cardiology images

Cardiovascular specialists use the Cardiology Picture Archiving and Communications System (PACS) to securely store and access cardiology images and video for clinical decision making, among other things. However, the previous systems reached end of life and the vendor no longer provided the kind of system the Hospital needs. Compugen is a Canadian IT vendor that has expertise in healthcare data management, and has the capacity to meet the Hospital's data storage needs.



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2025-023 Replacement of Aging Intra-aortic Balloon Pump (\$72,550)

Equipment used to circulate blood when the patient's heart is unable to

In certain medical situations such as heart attack, the heart may not be able to pump enough blood around the body. An intra-aortic balloon pump can replace heart function for a short amount of time (up to 30 days) to give the heart a chance to recover and/or stabilize. It is also used to stabilize patients waiting for and/or being transported for heart surgery.

2025-024 EEG Server Storage (\$21,490)

Equipment for storing EEG data

Electroencephalogram (EEG) measures electrical activity in the brain to help diagnose and monitor neurological conditions including sleep disorders, brain injuries, and epilepsy. A large volume of data needs to be stored securely and accessed reliably by healthcare providers and researchers. This grant covers the portion of the data storage system dedicated to EEG use.

2025-025 Echocardiogram Expansion (\$340,703)

Equipment to image the heart and nearby structures

Timely echocardiograms and transesophageal echocardiograms (TEEs) are critical for cardiac care. These devices image the heart and surrounding structures using ultrasound through the chest wall and through the esophagus respectively. This ultrasound bundle will increase sets from two to three to increase capacity and meet growing patient need.

2025-026 Intra-operative Neurophysiological Monitoring System (\$242,238.49)

Equipment to monitor the nervous system during certain high-risk surgeries

Certain neurosurgeries and other high-risk surgeries can damage the nervous system leading to a wide range of serious side effects. Intra-operative neurophysiological monitoring (IONM) provides real-time feedback using EEG, EMG, and other tests. This gives surgeons better decision support during surgery to help avoid injury to the nervous system.

2025-027 Cultural Safety & Education (\$28,000)

Programming to improve Indigenous cultural awareness at the Hospital

Indigenous Collaboration, Equity & Inclusion at the Hospital improves health equity and outcomes for Indigenous patients. This grant is for refreshing the Multifaith room and Spiritual Care Offices, Waiting Area, and Spirit Garden; and for a storage shed near the tipi site.



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2025-028 Automated Tablet Packager (\$713,230)

Equipment to package individual medication doses

Medications arrive at the Hospital's pharmacy in bulk bottles and need to be packaged into thousands of individual medication doses for patient safety, helping to ensure the right dose for the right patient. The current repackager is nearing end of life, and more frequent breakdowns mean "all hands on deck" for staff. This grant replaces that aging equipment.

2025-029 <u>Automated Medication Dispensing Cabinets Phase 8</u> (\$82,672)

Equipment for the Cardiac Cath Lab

Automated medication dispensing cabinets are proven to improve medication speed and patient safety. Rather than travel to the pharmacy to manually fill prescriptions, they can be reviewed and approved electronically, then dispensed from the cabinet. Phase 8 provides a cabinet for patients recovering from a Cath Lab procedure.

2025-030 NICU Isolettes (x3) (\$91,701)

Equipment to keep newborns safe and healthy

Mobile isolettes (specialized cribs) help babies stay warm and always close to parents. These new models are ergonomically friendly for family and staff with features such as height adjustment. Three isolettes replace and upgrade aging models.

2025-031 Giraffe Radiant Infant Warmer with Resuscitation Panel (\$46,869)

Equipment to help stabilize baby after birth

Radiant warmers are one of the most important pieces of equipment in NICU. These help ensure newborns do not lose body temperature as they adapt to life outside of mother's body. This is especially crucial when staff need to provide care to the newborn. This unit includes a resuscitation panel, in-bed scale, extra drawers for supplies, and a "Baby Susan" to help rotate the infant as needed. This unit replaces an aging (14+ years) unit.

2025-032 Fetal Monitor with Wireless (x8) (\$409,892.83)

Equipment used to monitor baby during labour

Birth can be a stressful event for babies. A fetal monitor helps the healthcare team identify when the baby is in distress and provide medical intervention as necessary. These eight units – five for Labour & Delivery and three for Maternal Newborn – replace and upgrade older fetal monitors that have reached end of life.

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2025-033 Central Monitor (\$34,180)

Equipment to monitor vital signs of paediatric inpatients

Paediatric patients often require close monitoring of vital signs including oxygen levels. This central monitor provides notifications at the nurses' station for the sickest patients by relaying real-time vital sign readings. This allows nurses to confirm alarms faster while causing fewer disruptions to the patient and parent/caregiver during sleep. Unlike portable bedside monitors, this unit also records the event for future review.

2025-034 Adult Mental Health Psychiatric-specific Beds (x3) (\$22,914)

Equipment to improve safety for patients and staff

Medical-style patient beds can present a number of hazards for Adult Mental Health patients. For example, patients can remove parts and use them as a weapon against themselves, staff, and other patients, which poses a serious safety risk. Psychiatric-specific beds are designed to reduce these risks, keeping everyone on the unit safer.

2025-035 FDG Dispensing Unit and Bubble Point Tester (\$123,105)

Equipment used to dispense radiopharmaceuticals

Producing and delivering radioactive pharmaceuticals such as FDG (F-18) requires specialized equipment to ensure staff and patient safety. The uDDS-A dispensing system and Bubble Point Testing attachment accurately portions doses and tests to ensure the vials remain sterile. However, current equipment is nearing end of life and needs to be replaced before breakdown, which would delay patient care.

2025-036 Mammography Reading Station (\$40,756)

Equipment used to read mammography images

Radiologists at the Linda Buchan Centre rely upon high-resolution monitors. These need to be in top working order to ensure they can see the smallest lesions in the breast and diagnose breast cancer at the earliest possible stage. This new mammography reading station will replace and upgrade one of the three stations.

2025-037 Fluoroscopy Unit (\$1,426,460)

Equipment to replace aging unit and provide real-time moving X-ray images

Fluoroscopy uses X-rays to provide moving images of the body during a wide range of diagnostics such as checking for blockages and medical procedures such as placing stents in blood vessels. The current unit is at end of life and needs replacing before it breaks down for good. No other equipment at the Hospital provides similar functionality, so patients would be forced to travel elsewhere for care. This grant covers the purchase of the new unit as well as associated installation and renovation costs.

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2025-038 Mammography Unit (\$560,395)

Equipment to image breast tissue and identify abnormalities

Mammography uses low-dose X-rays to image breast tissue and identify abnormalities such as lumps that could potentially be tumours. The Linda Buchan Centre has two mammography units, though one is older. Not only is it reaching end of life, the technology can no longer support the level of care expected. This new unit will be able to provide more detailed images as well as support an emerging diagnostic imaging technique: 3D tomographic images or "breast CT" scans. This grant covers the purchase of the unit and costs associated with installation and renovations.

2025-039 3G Plus Medium SimMan Mannequin (\$206,972.86)

Equipment for learning and developing healthcare expertise

Simulation provides a safe, controlled environment for learners and staff to learn new techniques, practice skills, and build confidence. This 3G Plus Medium SimMan mannequin provides an immersive and effective training environment with its ability to breathe, blink, and talk; dynamic physiological responses such as changes in heart rate, oxygen levels, and blood pressure; simulated medical emergencies including cardiac events and allergic reactions; and advanced airway management. This new mannequin replaces and upgrades technology that's over 10 years old which was originally purchased through the support of the Foundation.

2025-040 Renal Package: Dialysis Chairs (x2) and Ultrasound (\$37.101.52)

Equipment to provide quality care for renal patients

Dialysis treatments can last three to four hours per day, three or four times per week. The Renal Department provides specialized hemodialysis chairs that are more comfortable for patients during long treatments. These two new dialysis chairs replace and upgrade aging chairs providing height and recline adjustments, a footrest, and automated CPR positioning. Ultrasound-guided cannulation helps prevent injury during needle insertion and allows the healthcare team to assess fistulas. This ultrasound unit may be available to other areas of the Hospital when not in use.

2025-047 Point-of-Care Ultrasound (POCUS) Machine (\$84,135.19)

Equipment for image-guided procedures

Ultrasound allows real-time visualization of anatomical structures during needle insertions. Not only does this help guide needles to their required location faster and more effectively, it allows the healthcare team to insert deeper needles and reduces the risk of injury to organs and other vital structures. Procedures that benefit from POCUS include central venous catheterization and paracentesis (removing a build-up of fluids from inside the body). This new unit increases capacity to ensure timely access for faster patient care in some situations.





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Regional Grants

2025-043 Chemotherapy IV Infusion Pumps (x2) - Marathon (\$12,200)

Equipment replacement and upgrade for closer-to-home chemotherapy infusion

Regional Cancer Care supports several outpatient chemotherapy programs throughout Northwestern Ontario for closer-to-home care. The program at North of Superior Healthcare Group – Wilson Memorial General in Marathon needs to replace aging chemotherapy IV infusion pumps to ensure ongoing closer-to-home chemotherapy for patients in Marathon and surrounding area.

2025-046 Revitalizing Cancer Care in Terrace Bay (\$32,229.26)

Equipment to provide closer-to-home cancer care in Terrace Bay

North of Superior Healthcare Group – McCausland Hospital in Terrace Bay requires new equipment to revitalize its local Oncology Program. These include a digital scale, a vital signs monitor, two chemotherapy IV infusion pumps, an infrared vein finder, and funding for two murals in the infusion room and assessment office to inspire feelings of wellness and health. The Oncology Program serves patients from Terrace Bay, Schreiber, Pawgwasheeng (Pays Plat First Nation), Rossport, and Jackfish.

Total 2025/2026 Funding Allocations: \$10,386,343

