

# FORT ST. JOHN HOSPITAL



## Managing Building Information to Optimize Lifecycle Performance

### Location

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Fort St. John, British Columbia

### Project Completion

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May 2012

### Project Cost

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\$237 Million

## PROJECT DESCRIPTION

Fort St. John Hospital and Residential Care Facility is the largest regional service centre in Northern BC. Currently servicing residents of the northeastern communities, it boasts of a modernized delivery of health care with state-of-the-art acute care facilities and a residential care capacity for local seniors. The Facility has been designed and built to LEED Gold standard. This creates a truly healthy and healing environment for patients and surrounding local community while preserving natural resources.

Fort St. John was a challenging location in which to deliver a large, fast-tracked P3 hospital due to the restricted geographic access, limited manpower and cold winter climate. The new hospital increased the number of acute care beds from 42 to 55 and included the development of single-room maternity care. The new emergency room was built to be two-and-a-half times the size of the former one and the facility housed an enhanced academic program, state-of-the-art operating rooms, and wireless access throughout.

## INNOVATION AT WORK

Hospital systems commissioning is highly complex & manually intensive process which can lead to error. These challenges were further compounded by ever-changing building conditions, resulting in the building not operating as intended. Consistently this is an industry-wide challenge.

At Fort St. John, fluctuating temperature and low humidity were two of the main challenges identified after occupancy. Bird-Stuart Olson's Centre for Building Performance responded to this challenge by leveraging multi-dimensional, predictive, and real-time analytics capture and analyze building data.

This capability coupled with our extensive knowledge of building systems allow us to turn our expertise into automated actionable insights optimizing the building's systems and providing vastly improved patient care.

## Outcomes

- Client satisfaction has improved due to building operating as design intent.
- Bird-Stuart Olson was able to demonstrate excellence in diagnosing and remedying operational issues.
- Eliminated further expenditure by Bird-Stuart Olson.
- Direct cost to Bird-Stuart Olson was in excess of \$2.9M post-handover due to the building not performing as per the energy model.