Current Project

Restoration and Modernization of Ontario's Legislative Building

A Need for Rehabilitation and Preservation

At over 130 years old, the Legislative Building is in need of some large-scale repairs to allow it to continue functioning properly and to preserve its architectural heritage.

The Legislative Building can be rehabilitated to enhance safety, improve accessibility and introduce more sustainable systems to meet contemporary occupation standards. It will allow the structure to continue serving Ontarians for generations to come while maintaining its cultural significance and restoring its architectural splendor.

What Work Needs to be Done?

*Timestamps correspond to the "Restoration and Modernization" video.

Mechanical Systems

Most of the mechanical systems in the building are at or beyond the end of their operational life.

Heating and Cooling (0:14)

Steam radiator heat is difficult to regulate, areas are too hot or too cold.

- Portable air conditioning units are used in offices only, there is no air conditioning in the halls.
- Air conditioning units have a high energy consumption and are expensive.
- Windows are often opened to regulate temperature leading to mold, condensation, pests, etc.

Drainage and Pipes (1:07)

- Much of the drainage piping in the building is original. Pipe ruptures cause water damage and costly repairs.
- Interconnected storm and sanitary drainage systems do not meet current regulations. Drainage often backs up during rain storms causing internal flooding and damage.
- Lead pipes make drinking water unsafe.

Electrical Systems

The electrical system in the Legislative Building contains different types of systems and equipment from many time periods.

Cable Management (2:40)

- No plan was implemented when electrical cabling was introduced, resulting in severe disorganization.
- The demand for modern services is high, and with the lack of a power and cable management system, any new additions are difficult to administer.
- There is a large amount of redundant and old cabling. It is difficult to discern which ones are in-use versus obsolete.

Power and Lighting (5:10)

- There is limited and insufficient power supply in some areas.
- There are no consistent lighting levels in the building. Some areas are very dark which is a safety concern.
- There is a lack of supply, consistency and organization of emergency power.
- Due to outdated technology, it is currently not possible to monitor and manage all systems remotely.

Key Facts

- Mechanical systems are at or beyond operational life
- Ventilation is poor throughout the building
- Pipe overflow and flooding remains an issue
- Electrical systems and cables must be standardized
- Redundant cabling should be removed
 - Lack of access to emergency exits

Fire and Life Safety

The current fire and life safety systems in place at the Legislative Building do not meet modern day code standards and must be updated.

Emergency Exits (7:24)

- Not enough fire exits, with many being too far from office spaces.
- Enclosed stairwells with no smoke management systems.

Fire Safety (<u>8:36</u>)

- Lack of sprinkler systems, especially in areas featuring original materials such as wood and cast iron.
- Unprotected openings in the ceilings and walls can result in smoke and fire easily spreading between floors.
- Large, empty, interconnected floor spaces would allow fire or smoke to spread more quickly.



Ontario's Parliament A Building Restored for our Future

Previous Projects

Restoration and Modernization of Ontario's Legislative Building

Previous Renovation and Building Projects

Building Layout

The building is arranged in four blocks: east, west, north, and centre. Each of the directional blocks project out from the centre block, which includes the Legislative Chamber. The location of the Chamber is unique in that it is at the front of the building instead of at the rear - a more typical design in other Westminster-style Parliament Buildings. The front-facing location of the Chamber symbolizes accountability, with the room itself facing south towards the people it serves.

Major Building Projects

West Wing

- A fire destroyed the west wing on September 1, 1909.
- It was rebuilt between 1909-1912.
- Toronto architect E.J. Lennox included a new steel structure clad in Italian marble for fireproofing, and concrete flooring overlaid with Italian-style mosaics.
- Lennox changed the interior style to that of Beaux Arts, updating it from the original Romanesque.
- The redesign included a 4th and 5th floor for additional office space.

North Wing

- Toronto architect George Gouinlock designed a new north wing addition.
- It was built between 1909 and 1912 and houses the Legislative Library.
- Emphasis was put on fireproofing and functionality, with four floors of new office space added.

Key Renovation Projects

1940s to 1980s

- Small scale renovations took place between the 1940s and 1970s.
- Fireproofing was added in the east wing in the 1940s: Terrazzo flooring and two fire staircases.
- The 1960s and 1970s saw Chamber renovations and the addition of a cafeteria and dining room in the basement.
- Broadcast services were installed in the Chamber and a broadcast studio on the 3rd floor in the 1980s.

1990s

- Major restorations were planned to coincide with the centennial of the building in 1993. Guidance was provided via a Restoration Masterplan.
- Extensive work on the building's exterior, included: a new roof, and the restoration and repairs of much of the original sandstone.
- Interior work included: enhancements to fire and life safety and accessibility, installation of new HVAC systems in the attic, and restoration of the original floors.
- A 1999 renovation of the Chamber saw wall murals, designed by artist Gustav Hahn (1893), partially uncovered, including stencil work by Mabel Cawthra (1912).

Key Facts

- Reconstruction of west wing in 1909 after fire
- North wing added post-fire
- Renovations throughout the 20th century
- Ongoing restoration of the exterior
- Addition of Visitor Entrance in 2021

Ongoing Projects

Exterior Projects

- The stonework and masonry are continually degraded by environmental conditions. Ongoing maintenance is required.
- As a result of further weathering, masonry restoration took place during the 2010s.
- The foundation was excavated to improve drainage and help prevent water infiltration.

New Construction

• A dedicated Visitor Entrance that acts as a screening facility for all visitors opened in 2021. It is the first addition to the building in over 100 years.



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Historical Facts

Restoration and Modernization of Ontario's Legislative Building

Historical Overview

Ontario's Legislative Building rises above the historic grounds of Queen's Park in downtown Toronto. More than 130 years after it opened, it remains a symbol of the province's democracy and the seat of Ontario's Parliament.

Construction and Materials

Building Opening

- Built between 1886 and 1892 at a cost of \$1.4 million.
- The building was officially opened on April 4, 1893.

Building Materials

- Constructed of sandstone from the Credit Valley in Ontario.
- Additional sandstone from upper New York state and England was used in recent repairs.
- The north wing is made of sandstone from New Brunswick.
- Original materials include: Ontario oak for the flooring and wainscotting, and cast iron forged in Toronto.
- The west wing features Italian marble and an intricate hand-cut marble mosaic floor.
- The roof is covered in slate from Vermont and Quebec, while copper is used on the domes.

Architecture

Architect

- Designed by British-born architect Richard Waite.
- He was working in Buffalo, New York, at the time.

Design

- Built in the Richardsonian Romanesque style, popularized by American architect H.H. Richardson. Also referred to as Romanesque Revival.
- Influenced by medieval Italian architecture, including: stone blocks, detailed carvings, rounded archways, towers, turrets, and balconies.
- Two towers flank the centre block. The west tower features two rose windows, while the east features a covered balcony.
- · Wood carvings and plaster reliefs adorn the Chamber walls.
- A 21-metre frieze with allegorical figures representing aspects of society and government and the great seal of Ontario is carved in the façade.

Key Facts

- The building opened April 4, 1893 after 6 years of construction
- Original sandstone, oak, slate, copper, and marble are still present
- Designed by Richard Waite in the Richardsonian Romanesque style
- Decorated with reliefs, carvings, and allegorical figures
- Very diverse building occupants from MPPs to the Press

Occupancy

Today, the building houses:

- Members of Provincial Parliament
- Lieutenant Governor of Ontario (occupying a suite of rooms on the 1st and 2nd floor of the building's west wing)
- The Speaker, who oversees the Legislature
- The Clerk, head of the Legislature's administration
- The Sergeant-at-Arms
- The Legislative Library
- Broadcast and Recording Service
- Legislative Protective Service
- Parliamentary Protocol and Public Relations
- House Publications and Language Services
- The Media/Press Gallery
- Parliamentary Food Services, including the In Camera Dining Room and Quorum Café
- Committee meeting rooms
- Precinct Properties, operations and maintenance.



Ontario's Parliament A Building Restored for our Future

Media Assets

Restoration and Modernization of Ontario's Legislative Building

Accompanying Photos

*High resolution images can be found here. Heating and Cooling



Current HVAC units in the attic. They are close to the end of their lifecycle and need to be replaced.



Steam pipes in the attic. Steam heat is inefficient and problematic in the summer months. Steam heated radiators overheat the building during the winter months.

Cable Management

Drainage and Pipes

Original pipes located in the basement ceiling. This would cause severe disruption as surrounding infrastructure would be impacted to undertake necessary repairs.



Pipes located in the basement. Leaks and flooding are prevalent with the current pipes.



Power and Lighting

Cables located in a ventilation shaft in the basement. Redundant cables are difficult to find amongst the mass of wiring.



Cabling in the attic. Capacity of existing cable trays and pathways is greatly exceeded.



Exposed wiring in an office. Insufficient power and outlet locations and lack of cable distribution pathways have led to an overabundance of wiring in offices.



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Media Assets

Restoration and Modernization of Ontario's Legislative Building

Accompanying Photos *High resolution images can be found here. Building Projects - West and North Wings



The 1909 fire that destroyed the west wing of the building. E.J. Lennox designed the new west wing after the fire.



Construction of the north wing in 1910. Portions of the north façade of the centre block had to be removed to incorporate the new addition.



Installation of the Broadcast and Recording booth on the 3rd floor in the 1980s. Cameras and lights were also installed in the Chamber.



Floor-to-ceiling scaffolding in the Legislative Chamber during renovations in the 1990s.



Exterior Projects



New Construction

Extensive restoration of the exterior masonry and major modifications to the main entrance in the 1990s. As sandstone is a soft stone, it erodes very quickly.



Copper roof being installed in the 1990s. Over 51 tonnes of copper were used on the building's exterior.



The Visitor Entrance opened in 2021. It is the first new construction project in over 100 years.



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Media Assets

Restoration and Modernization of Ontario's Legislative Building

Accompanying Photos

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Construction on the interior and exterior walls in 1887. The interior walls are made up of over 10 million red bricks.



Ongoing construction in 1891. The building opened to the public on April 4, 1893.



Architecture and Design

Building Materials



Intricate designs adorn the sandstone blocks on the exterior of the building. Faces, floral designs, and mythical creatures are common recurring themes.



Decorative wood carvings and plaster reliefs adorn the walls of the Legislative Chamber. Green and gold, the official colours of the province, are featured prominently.



Ontario oak flooring and wainscotting and Vermont slate stairs are featured within the grand staircase.



Italian marble adorns the west wing. Imported from Lucca, Italy, the marble covers the columns and forms the intricate mosaic floors.



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