

Toronto, Canada

Scotia Plaza

Back to
the future

Modernization of vertical transportation is essential in maintaining building value – and making cities more sustainable. Better performance, optimized functionality, and energy savings brought Scotia Plaza, one of Toronto’s signature high-rises, a new lease of life – for today and tomorrow.

Challenges and client brief

- Urban icon ‘Schindler’ building in need of renewal
- Bring Class-A level modernization with minimal disruption
- Contribute to sustainable building operations

Schindler solutions

- Upgraded existing Schindler system to achieve dramatic performance improvements
- Meticulously planned and phased multi-dimensional modernization
- Deployed energy-efficient equipment and systems

Owner
KingSett Capital

Building Manager
BentallGreenOak

Architect
WZMH Architects

Elevator Modernization Consultant
Solucore Inc.



Project overview

1988

Construction end year

2014 - 2022

Duration of modernization

287 m

Max elevator travel height

22

Schindler 7000
double-deck elevators

297

Schindler PORT
interfaces

0

Net building carbon
emissions

Schindler modernization
Schindler PORT

Innovations employed

Project highlights

Postmodern icon

Scotia Plaza is one of Toronto's most iconic high-rises. At 275-meters tall, with a spectacular 40-meter-high atrium, the slim, red-granite postmodern tower stands out from the crowd in the heart of downtown Toronto. This is especially impressive as Toronto is home to the highest concentration of skyscrapers in the Americas, outside of New York and Chicago.

Scotia Plaza was a future-forward building when it was completed in 1988, featuring some of the earliest double-deck elevators in the Americas. These were Schindler elevators, which we installed and have maintained since the building first opened over three decades ago.

When it came time to modernize the building's vertical transportation, we were proud to upgrade this iconic 20th century building with our latest 21st century technology.



275m
tower height

40m
atrium height

Complex win

Although we are part of the building's history, winning the contract to modernize Scotia Plaza was far from being a given. We still took part in a rigorous multi-year, multi-tender selection process.

Leading the charge to modernize Scotia Plaza was the 30-year industry veteran John Egan, Vice President of Field Quality and Excellence at Schindler Canada. "This was the project of a lifetime for many of us involved," said John. His breadth and depth of experience helped us every step of the way.

Through meticulous planning, long consultations and reviews, our team was able to put together a detailed plan of action for the client. A key feature of our proposal was the integration of Schindler PORT Technology, our industry-defining destination control system, into the project. The promise of reduced waiting times, optimized operations overall, and energy efficiency gains won over our customer, making Scotia Plaza one of the first buildings in Toronto to be kitted out with our Schindler PORT technology. This helped to demonstrate why we were the right choice to bring Scotia Plaza back to the future.

Fitting the new in the old

In the three decades since Scotia Plaza first opened its doors, the world around it has changed. One of these changes is how elevators are powered – with the AC (alternating current) standard having now replaced the outdated DC (direct current) standard. This change in standards has resulted in more powerful and efficient drives housed in significantly smaller machines.

While the machine rooms at Scotia Plaza are small, they were originally built for the larger DC machines. This meant that with the new AC technology we could fit 'more' machine into the same space – though sometimes with only a few centimeters to spare.

The old machines had been set in place at Scotia Plaza using tower cranes, but during

modernization everything had to move through the occupied building. Additionally, the machine room floors were not designed for the movement of heavy loads. To solve the problem, we cut the old machines into pieces and removed the parts using a custom-built wall-mounted suspension rail system to avoid any contact with the floors.

Fortunately, our new AC elevator machines are modular. They are split into 17 main components. We moved them piece by piece into the machine room using the suspension rail system. They were then assembled in place – a considerable feat when the components weigh multiple tons.



more powerful,
efficient, and robust



Double-time

Scotia Plaza lies at the center of a major transport hub in Toronto. Just below the building's street-level entrance, the city's extensive underground walkway network, PATH, meets the subway. Access on two levels by two transit modes make the project perfect for our double-deck elevators. During the modernization, the original double-deck elevators were replaced with Schindler 7000 double-deck elevators. They are now the quickest elevator cars in Toronto, operating at up to eight meters per second. Standard controls were replaced by Schindler PORT Technology. The winning combination of double-deck elevators and Schindler PORT has dramatically improved passenger handling efficiency and ride experience.

Along with the new elevators, several other upgrades were made, including the installation of new roller guides, in order to deliver top-of-the-line passenger comfort. Vibrations during an elevator ride can be measured in milli(g). In new installations, anything under 10 milli(g) is considered superior ride quality. Some readings from our elevators at Scotia Plaza were even in single digit milli(g), an outstanding result in a modernization project.



“ It was an exercise in being invisible.”

John Egan

Vice President of Field Quality and Excellence at Schindler Canada

Shhhhh! People are working

The tenants of Class-A offices expect Class-A working conditions. The elevators at Scotia Plaza therefore had to continue running throughout the modernization without interruption and at a high level of performance. As the new elevator system came online, and the old system was still in operation, so we had to run two systems simultaneously.

We worked consistently behind the scenes, to minimize inconvenience to the tenants. This was made possible thanks to our meticulous operations plan, fine-tuned day by day – as we worked floor by floor. “It was an exercise in being invisible,” said John Egan with a smile.

Sharing sustainability

Scotia Plaza is Canada’s largest zero carbon certified building and is LEED Platinum certified. Buildings account for around 40% of global energy consumption and produce about a third of carbon emissions. Schindler technology helps to optimize power usage at Scotia Plaza, contributing to its certified sustainable operations.

Our current series of Schindler 7000 elevators is 30% more energy efficient than the previous generation before and significantly more efficient than Scotia Plaza’s original 1980s DC machines.

By replacing the old machines and adding Schindler PORT, we made significant upgrades to Scotia Plaza’s operations in terms of sustainability. But it’s not just nuts, bolts, and volts: “Schindler’s strength comes from its people,” said Lisa Konnry, Schindler Canada’s President. “This was an ambitious project, and everyone on our team delivered impressive results.” It was this team effort that saw our modernization of Scotia Plaza win Elevator World’s ‘Project of the Year’ in 2022.

Through a combination of teamwork and technology, Scotia Plaza is now a ‘modern’ postmodern icon, ready for the future.

