

More than one-half mile of elevated expressway was demolished in the heart of downtown Montréal to make way for a new ground-level urban boulevard and over six acres of continuous public space.

For more than 50 years, the elevated Bonaventure Expressway cut across the city centre. This major thoroughfare was the main gateway to downtown Montréal from the Champlain Bridge that crosses the mighty St. Lawrence River. It accommodated more than 27,000 vehicles per day, including 1,900 buses. Rather than extending the service life of this structure, built in 1966, the City opted for a large-scale redevelopment, the first one of its kind in Canada, thereby making it possible to:

- **Create** an elegant, functional and people-oriented gateway to downtown Montréal
- **Mesh** together districts that were isolated by the elevated expressway
- **Support** private mixed-use development in the area

This bold initiative is the core of the Bonaventure Project, the latter spearheaded entirely by the City's administration and completed on time and on budget in September 2017 (CAN\$141.7 million).

THE PROJECT

Accommodating a daily traffic count in the tens of thousands was a complex challenge that required out-of-the-box solutions. Mass transit being at the heart of the project's goals, the implementation of more than 1.5 miles of reserved bus lanes and of a state-of-the-art intelligent transportation system (ITS) was instrumental in replacing the expressway with an urban boulevard designed to promote sustainable mobility for all users. The new lay-out eliminates the daily passage of thousands of buses through a strictly residential neighbourhood adjacent to the expressway without adding to their travel time. A residual capacity of 45%, representing a potential increase of 80 buses an hour, was incorporated into the plans.

The construction of 20-foot-wide landscaped sidewalks and more than one mile of bicycle paths helped drastically improve the active transportation options available to both pedestrians and cyclists.

In addition to reinventing the way the various modes of transportation interact, the project features a striking series of public spaces, covering an area equal to five football fields, in a recently redeveloped part of the downtown comprising former industrial districts that had no parks or squares. Montréal's city centre now boasts a new green promenade that provides a unique user experience and a contrasting vibe to that of neighbouring streets. The intense consultation process with the district's residents and workers was a major contributor to improving the programming. The area now includes a 1,300-foot linear bench spanning six city blocks, 12 lounge chairs, eight picnic tables, two ping-pong tables, a play area for children, an outdoor exercise area and a dog run.

The extensive greening of the district involved planting more than 300 trees and an impressive 30,000 shrubs and perennials, adding considerably to the canopy cover. It should also be mentioned that the initiative is undergoing the SITES certification process, a first in Canada, in sync with the effort put in throughout the project to manage rainwater, reduce water consumption and improve air quality.

Public art also plays a pivotal role in the undertaking. The thresholds to the new boulevard stand out with two monumental sculptures that help create a distinct and symbolic space. At the northern end is *Dendrites* by artist Michel de Broin. Created following a Canada-wide competition, *Dendrites* honours the presence in Montréal of the world headquarters of the United Nation's International Civil Aviation Organization. At the southern end of the boulevard, *Source* by Spanish artist Jaume Plensa greets those entering and leaving downtown. Commissioned by and on loan from art patrons France Chrétien-Desmarais and André Desmarais, this 35-foot-high figurative monumental work consists of a random weaving of letters from eight alphabets.

EXECUTION

Work on the Bonaventure Project spanned from 2011 to 2017. It was completed within the set scope, established timeline and initially announced budget of CAN\$141.7 million. The project was phased as follows:

- **PHASE 1 (2011–2015):**

Replacing all the district's underground structures, including several that were very old, dating in some cases as far back as the 19th century.

- **PHASE 2 (2015–2016):**

Demolishing the superstructure and transforming the expressway into a ground-level urban boulevard.

- **PHASE 3 (2017):**

Decontaminating more than 35,000 tons of soil, landscaping the public spaces and installing the works of art.

Ongoing consultation with stakeholders throughout the project ensured buy-in and contributed to its success. Among the many partners were thousands of residents and workers in the adjacent buildings, utility companies, the provincial and federal entities that respectively own sections of the expressway to the north and south of the project, the metropolitan agency responsible for public transit and the artists who created the sculptures.

OUTCOME

Funds invested in the Bonaventure Project contributed significantly to the vitality underpinning the district's redevelopment. Since 2011, more than CAN\$1.14 billion has gone into various nearby residential, office and retail developments, thus reducing the number of vacant lots in the city centre.

The fact that the public began flocking to these spaces immediately after unveiling speaks volumes about the project's overall appeal. This success confirms Montréal's leadership in the management of urban projects of this scope. It is also illustrative of the opportunities available to city centres beset by obsolete transportation structures ill adapted to 21st-century priorities.