

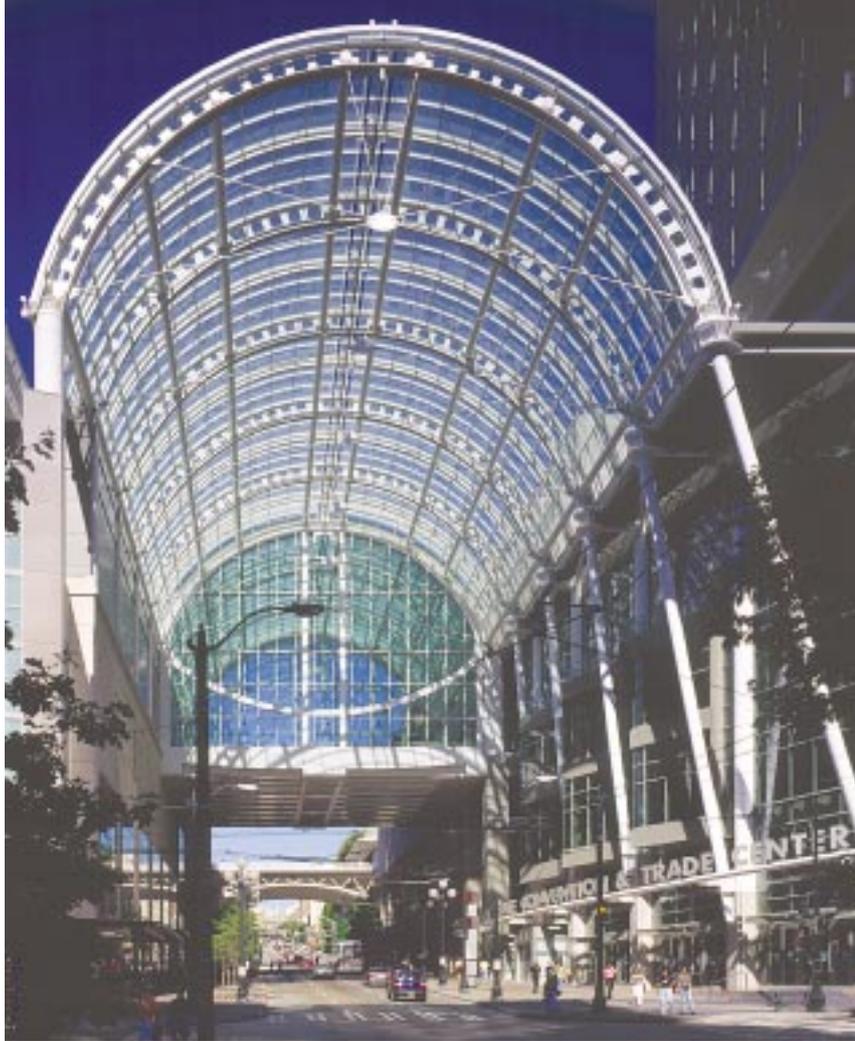
MERIT AWARD

\$100M OR GREATER

Washington State Convention and Trade Center Expansion SEATTLE, WA



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JUROR COMMENT:

The design team developed well-thought-out solutions to the complex challenges in this mixed-use facility.

STRUCTURAL ENGINEER

Skilling Ward Magnusson Barkshire Inc.,
Seattle, WA

ARCHITECTS

Convention Center Expansion and
Canopy: LMN Architects, Seattle, WA

One Convention Place Office Building:
Callison Architecture, Seattle, WA

Museum of History and Industry:
LMN Architects, Seattle, WA

Elliott Grand Hyatt Hotel:
Mulvanny/G2 Architects, Bellevue, WA

STRUCTURAL STEEL FABRICATORS

Canron Construction Corporation,
Portland, OR (majority of project, AISC
member)

STEEL DETAILERS

Steel Systems Engineering, Hollywood,
CA (NISD member)

GENERAL CONTRACTORS

Convention Center Expansion and
Canopy: Kiewit Construction/ECI
Contractors, Seattle, WA

One Convention Place Office Building:
Howard S. Wright Construction,
Seattle, WA

Museum of History and Industry:
Berschauer Phillips Construction

Elliott Grand Hyatt Hotel:
Hedreen, LLC, Seattle, WA

DESIGN SOFTWARE

RAM Structural System, ROBOT Millennium

The Washington State Convention and Trade Center (WSCTC) Expansion project, under consideration for more than seven years, could not have become an economic reality without creative engineering—and the strength of steel—to solve the complex urban puzzle of this \$425 million development.

The original convention center facility was built by innovatively capturing space in air-rights over Interstate 5 through downtown Seattle, using a unique steel mega-truss design to “bridge” the building over 12 lanes of freeway and city streets. The resulting elevation of the exhibition hall floor is 60’ above street level, and the state mandated that the desired expansion space be contiguous and at the same level. To support the cost of building



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the exhibition hall floor at this high elevation, many appropriate uses had to be found, all able to justify their own construction costs to become part of the development. Private parties ultimately bought development rights above, and beneath, the proposed convention center expansion. The solution was to stack, interlock, layer, hang, bridge, and tunnel these development pieces, and steel is what made it all possible.

Joined together is a challenging—and often conflicting—mix of uses:

105,000 sq. ft. of exhibition space, 319,000 sq. ft. of office space, 425 hotel rooms, a new convention center entrance, retail space, restaurants, a museum, back-of-house and storage areas, parking for 1,247 cars, heavy-truck access, and multiple pedestrian connections. The entire complex had to be built while the existing convention center and busy city streets bisecting the site remained operational. Again, the ease and speed of steel construction was critical to the project's success.

The WSCTC expansion bridges Pike Street with a dramatic canopy and exhibit area to connect the new and existing halls to provide 205,700 sq. ft. of contiguous space. A heavy-load truck bridge also spans the street to connect old to new. The new hall was itself designed as a "bridge building," supported by full-story braced-Vierendeel steel truss. The building spans a second city street and is layered over seven parking levels.

The 22-story Class A One Convention Place office tower employs a steel belt-truss system to cantilever 40' over

the existing WSCTC facility. The tower incorporates six stories of the WSCTC expansion area, shares its lobby space with the new WSCTC grand entrance and sits atop shared parking.

The new WSCTC facility contains a portion of space that belongs to the Museum of History and Industry to be used for their new location in three years. In the interim, the main Seattle Public Library is using the space while their new home is built.

The 30-story, Elliott Grand Hyatt Hotel tower connects to and incorporates a layer of WSCTC mechanical and high storage space, then sits atop a layer of shared retail area.

A 15' diameter underground "steel pipe" pedestrian tunnel connects the WSCTC facility with an adjacent historic theater.

The ability to solve this structural "function puzzle" allowed the development to move forward. It has since become the catalyst for hundreds of millions of dollars of development on surrounding blocks—elevating Seattle to a truly vibrant, 24-hour city.