

Edith Green-Wendell Wyatt Federal Building

Portland, Oregon



ADMINISTRATOR'S MESSAGE

The U.S. General Services Administration houses 1.1 million federal civilian employees in 2,100 communities. The American Recovery and Reinvestment Act (ARRA) of 2009 provided GSA with the opportunity to enhance employee workplaces and expand community investment; ARRA funding specifically allowed GSA to construct or modernize 270 federal buildings, courthouses, land ports of entry, laboratories and other facilities. It is a privilege to welcome you to one of those projects: the Edith Green-Wendell Wyatt Federal Building modernization. In many ways, it represents our efforts to best meet the goals of the legislation.

Most of GSA's ARRA funding was dedicated to converting existing properties to high-performing green buildings. The Edith Green-Wendell Wyatt renovation demonstrates the dramatic cost-saving and ecologically beneficial possibilities of such an undertaking. Efficiency techniques such as daylighting, automated lighting controls and even regenerative elevators work to reduce overall energy consumption by 55 percent. Equally impressive, potable water consumption will beat state code by 60 percent. In addition, these revisions improve the productivity of the workplace while also contributing to the vitality of the surrounding neighborhood.

GSA is committed to incorporating the principles of economic and environmental sustainability in all of our projects. Our mission is to deliver the best value in real estate, acquisition and technology services to government and the American people. We accomplish this mission, in part, by ensuring sustainability in all of our projects, and the Edith Green-Wendell Wyatt modernization represents a significant step forward in sustainable building renovation and operation. My congratulations to the host city, project team and, most important, the tenants whose hard work, dedication and service to the American people motivates us to do our best every day.

Dan Tangherlini U

Acting Administrator

U.S. General Services Administration



COMMISSIONER'S MESSAGE

Throughout the history of our nation, cities have been the birthplaces of architectural movements. In Chicago, the World's Columbian Exposition of 1893 secured the Beaux-Arts influence on buildings and public places nationwide. Postwar Los Angeles' Case Study Houses still fuel our imagination of the ideal home or workplace. And thanks to the completion of Michael Graves's Portland Building in 1982, the City of Roses launched postmodernism. With the sustainable renovation of the Edith Green-Wendell Wyatt Federal Building, Portland opens yet another chapter in the history of design.

Like agencies at all levels of government, the U.S. General Services Administration has hundreds of midcentury buildings like Edith Green-Wendell Wyatt in its inventory. Before GSA received American Recovery and Reinvestment Act funds to upgrade the 18-story tower in 2009, it had fallen out of step with our desire and responsibility to minimize resource consumption.

The public employees and private-sector professionals dedicated to Edith Green-Wendell Wyatt's modernization have advanced GSA's mission of investing funds as efficiently as possible. In replacing the precast-concrete exterior with a glass curtain wall, the building envelope was moved outward and its floors expanded. By converting to space-efficient hydroponic HVAC distribution, GSA raised interior ceiling heights and recovered 6,000 square feet previously devoted to mechanical housing. Through these and a host of sustainability strategies that include the radiant heating and cooling, Edith Green-Wendell Wyatt increased its rentable area while dramatically reducing costs and environmental footprint. This suite of mutually beneficial strategies can and should be adapted to similar retrofit efforts.

Just as important as the quantifiable success of Edith Green-Wendell Wyatt's solutions is their legibility to users and visitors—the improvements directly affect the building's appearance. In Portland, GSA has made visible its responsible stewardship of taxpayer money and of the built environment. This project proposes a new aesthetic of performance.

Dorothy Robyn

Commissioner, Public Buildings Service

U.S. General Services Administration



REGIONAL ADMINISTRATOR'S MESSAGE

The Pacific Northwest has long prided itself as a sustainability front-runner. The area features majestic mountain ranges, lush forests and eco-friendly towns, cities and corporations. It is only fitting that the U.S. General Services Administration's Northwest/Arctic Region is home to the newly renovated Edith Green-Wendell Wyatt Federal Building, a cornerstone of the agency's green building portfolio.

Edith Green-Wendell Wyatt's modernization proves that rigorous sustainability goals are within reach. The team of SERA Architects, Howard S. Wright and GSA demonstrated so, by combining strategies that reinforce one another. The roof canopy includes embedded photovoltaics that generate as much as 200 kilowatts of electricity while providing shade or channeling rainwater for storage. In another example, that reclaimed stormwater is being deployed for multiple uses that range from toilet flushing to cooling mechanical systems.

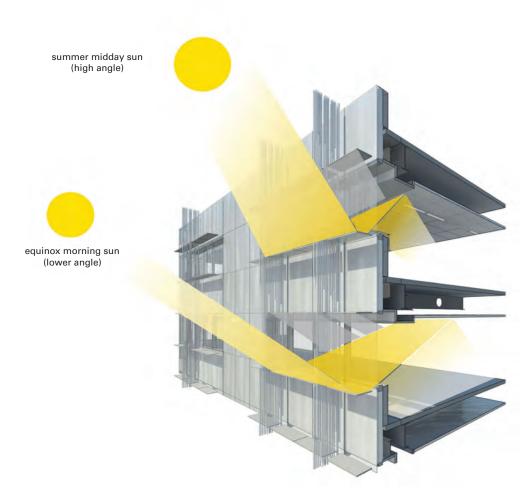
Beyond energy- and water-conservation innovations, the modernization has contributed to the economic sustainability of Portland by employing more than 1,500 residents during the height of construction; its labor agreement ensured work opportunities for all. Moreover, the project awarded more than \$26 million in subcontracts to small businesses and infused the local commercial real estate market during a critical economic downturn, by leasing space for federal agencies that temporarily vacated the Edith Green-Wendell Wyatt for renovation.

It is a privilege to celebrate the completion of this modernization. Thank you to GSA project executive Patrick Brunner and the entire project team for a tireless effort. Your commitment to Edith Green-Wendell Wyatt has cemented progress toward a more sustainable national infrastructure, which serves both the federal community and the American public. With great design and construction talent and dedicated federal employees, the next generation of sustainability—environmental, economic, and social—is coming to life.

George Northcroft

Regional Administrator

GSA Northwest/Arctic Region



The Edith Green-Wendell Wyatt Federal Building is expected to be certified as LEED-Platinum by the U.S. Green Building Council, making it only the second GSA property to earn the distinction. This highest level of the sustainability rating system requires scoring at least 80 of 110 possible total points. The following sustainability strategies contribute significantly to that superior environmental performance.

Photovoltaic Array

A 25,000-square-foot rooftop canopy includes 13,000 square feet of photovoltaic panels. This installation will generate 200,000 kilowatt-hours of electricity annually.

Shading Devices

The roof canopy also shades the uppermost floors of the 18-story tower. Moreover, in response to the building's 43 percent glazing-to-wall ratio, its south, west and east elevations feature steel shading devices that minimize solar heat gain; they are customized to the unique sun conditions of each orientation.

Interior Lighting

Besides shading devices, the south and east facades include light reflectors that enhance daylighting of workspaces (see graphic, facing page). Daylight penetration and energy-efficient electric lighting systems with advanced controls work in tandem to beat Oregon's energy-consumption code for lighting by 40 percent.

IVAC

A dedicated outside air system circulates fresh air through the building; for energy efficiency, a ventilator recovers heat from exhaust air before it is released. Heating and cooling are delivered by a hydronic distribution system using radiant ceiling panels.

Plug Loads

High-efficiency task lighting, appliances and A/V equipment reduce plug loads, which can represent as much as 20 percent of a building's total energy consumption.

Rainwater Collection

Edith Green-Wendell Wyatt's 25,000-square-foot roof canopy funnels rainwater into a former rifle range, which has been converted into a 165,000-gallon cistern. Captured stormwater is reused for toilet flushing, landscape irrigation and mechanical cooling.

Plumbing Fixtures

Low-flow toilets and other plumbing fixtures employ potable water and reused stormwater efficiently.

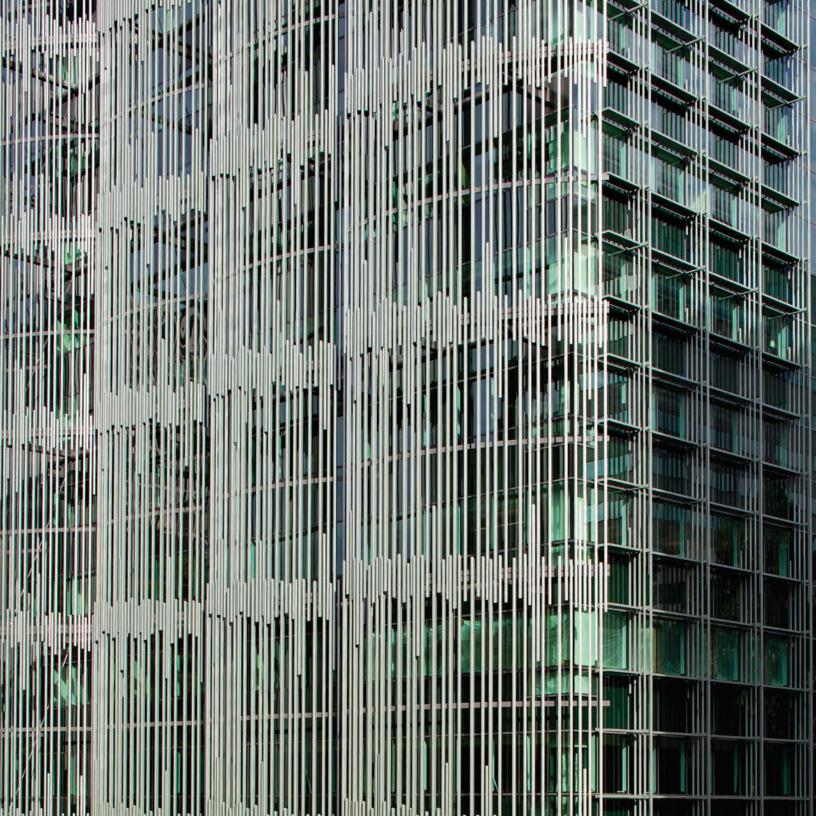
Landscape Irrigation

Stormwater reused for irrigation contributes to overall water savings of 55 percent over Oregon code. Rainwater conservation strategies also mitigate stormwater runoff into the Willamette River.

Mechanical Cooling Tower

Prior to renovation, 16 percent of overall water consumption was dedicated to cooling the building's mechanical systems. That proportion decreases to 9 percent via stormwater reuse.

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Design and Construction Team

SERA Architects, Cutler Anderson Architects, Glumac, Interface Engineering, KPFF Consulting Engineers, PAE Consulting Eningeers, Stantec, Howard S. Wright, NCM Contracting Group, Dynalectric, Benson Industries, McKinstry, Cascade Acoustics, Otis

GSA Regional Project Leads

Patrick Brunner, Frederick Moorehead, James Silk, John Vickers, Paul Witherspoon

Location

The Edith Green-Wendell Wyatt Federal Building occupies a city block in the government district of downtown Portland, Oregon.

Size

The facility comprises 525,421 square feet over 18 stories. Basement and garage levels extend under Third Avenue as well as Terry Schrunk Plaza, a park block owned and maintained by GSA.

Taxpayer Responsibility

- \$26 million small business participation
- 16.9 percent minority participation
- 7.7 percent female participation
- 19.8 percent apprentice participation
- Overall tenant satisfaction rating 5 of 5
- Change orders below 3 percent
- Project duration 48 months

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Artwork by Tim Bavington

Las Vegas-based artist Tim Bavington creates visual representations of sound-wave patterns. For the renovated lobby of Edith Green-Wendell Wyatt, Bavington assigned spectrographic images to the chord progression of "Louie Louie" and translated the rock classic's 80 bars into as many three-dimensional cast-acrylic panels. The Kingsmen and Paul Revere & the Raiders cut separate versions of Richard Berry's song in Portland. *Louie Louie* is a commission of GSA's Art in Architecture Program.

Artwork by Vera Lutter

Vera Lutter's camera obscura representations of cityscapes and industrial sites have achieved international renown. The Art in Architecture commission for the Edith Green-Wendell Wyatt lobby is the New York artist's first-ever depiction of forest. The black-and-white photo was shot in the Pacific Northwest, by converting a shipping container into a pinhole camera. That reverse-image was then developed via traditional darkroom methods and transferred onto four cable-hung acrylic panels.

Art Conservation

River Legend by Dimitre Hadzi (basalt plaza element inspired by the Columbia River); Rumi's Dance by Jack Youngerman (lobby textile produced in collaboration with Gloria F. Ross)

Opening

Ceremony: May 30, 2013

< Detail of the iconic reeds that reach to the top of the 18-story building; south and east elevations include both shading devices and light reflectors



U.S. General Services Administration Public Buildings Service