



Public entity: City of Medford
Project Type: Window retrofit
Stimulus Funds: ... \$443,643
Savings/yr: \$3,108

Stimulus funds help reduce historic building's energy use

Oregon's city governments are operating with less tax revenue and expected to do more. The Oregon Department of Energy provided stimulus funds

(American Recovery and Reinvestment Act) to public entities, including city governments, throughout the state for energy projects. The City of Medford received a stimulus grant for \$443,643



through the State Energy Program from the Oregon Department of Energy to install energy-efficient windows in the historic Carnegie Building.

What was once an ugly duckling historic building is emerging into a beautiful community space in downtown Medford.

"It's not complete yet and we're already getting phone calls about renting the space," said Brian Sjtuhun, Director of the Parks and Recreation Department that oversees the 1911 Carnegie Building renovation. The City will celebrate the completed Carnegie Building and the renovated facility's 100th birthday on April 29.

The downtown Medford building was originally built in 1911 for \$17,298 with funds donated from Andrew Carnegie, the Scottish-American immigrant who earned his fortune in the steel industry and funded 3,000 libraries in cities throughout the US. At the time, Medford was experiencing a population jump (1,791 in 1908 to 8,000 in 1910) and a library was deemed necessary. The City built an addition in 1951 to increase the building space to 16,000 square feet. The American Classical Revival two-story structure was put on the Na-

tional Register of Historic Places in 1981. It hasn't been used as a library since 2004 when Medford built a much larger library to accommodate the city of 77,000 plus residents, but the Carnegie Building is still highly regarded by Medford residents.

Since the library moved, the Carnegie Building has been used by the City of Medford Police Department, Municipal Court and Technology Services, during some remodeling of City Hall and then as storage area for the city. Slowly, it was falling into disrepair.

But the Friends of the Carnegie Building and city officials always envisioned a community use for the venerable old building. With tight city budgets, the groups were hard pressed for funding.

One source appeared to be stimulus funds provided by the 2009 American Recovery and Reinvestment Act. The Oregon Department of Energy awarded the City \$443,643 for replacement of the steel-framed, single-paned and highly inefficient historical windows with energy efficient windows and a new front door. The city awarded an \$802,411

design-build contract to S&B James Construction, based in White City, to replace the building's windows, front door, and overhaul the Carnegie's heating and air conditioning (HVAC) system. The HVAC project was part of a Recovery Act project from a direct Energy Efficient and Conservation Block Grant award to the City of Medford.

"It's been a tremendous transformation," said Greg McKown, the Carnegie Building project manager for the City's Parks and Recreation Department.

But it wasn't easy.

"It's been a tremendous transformation."

- Greg McKown
Project Manager



No average energy-efficient windows would do for the stately Carnegie Building. Because it is on the National Register of Historic Places, all Carnegie Building renovations had to be approved by the State of Oregon's Historic Preservation Office (SHPO) and the Local Historic Preservation Commission. Windows are an integral element of historical buildings. New windows had to retain the historic appearance of the original windows. Most of the Carnegie Building was original, but the City built an addition to the backside in 1951.

The 1911 portion of the building now has period-appropriate windows made from Oregon's official state tree, the Douglas Fir. S&B James designed the windows. JELD-Wen, a major window manufacturer based in Southern Oregon, produced the new windows to the approved design specifications. With SHPO's consent, a sample window was installed on the side for the final SHPO and Local Historic Preservation Commission approval in August of 2010. The US Department of Energy Project Officer for the Carnegie Building's \$443,643 Recovery Act award, two other federal staffers and state Recovery Act staff also visited the facility at the time.

"We had wanted to make the windows consistent throughout the building," said McKown, "But SHPO wanted the windows in the original portion of the building to be appropriate for the age of the original building and windows for the addition to be appropriate for the age of the addition."



The stimulus funds paid for new energy-efficient windows in the Carnegie Building. The City recycled some fairly new lights from a recent remodel of City Hall to make the new space light and airy. From left, Dobey Elliot, Greg McKown and Brian Sjothun, City of Medford.

Both the wood-framed windows on the original building and the steel-framed windows on the

addition were replaced with wood-framed metal clad windows.

"They both came out very nice," McKown said. McKown also noted that the 1911 replica windows are a 0.31 U-factor, which is good energy-wise, but not as good as they had wanted.

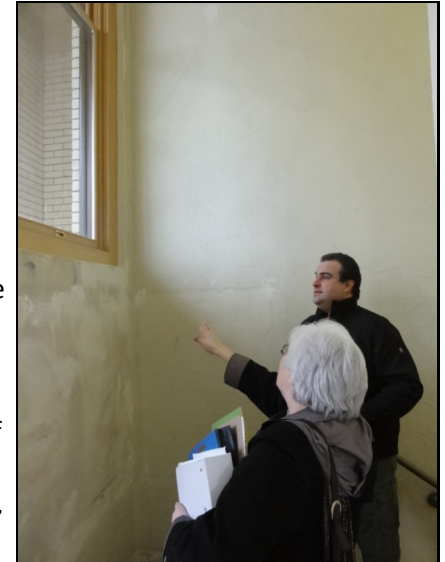
"We had hoped for 0.27 or 0.28 U-factor, but that just wasn't possible to get with the historical window replica." (The rate of heat loss is indicated in terms of the U-value of a window assembly. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating properties.)

In addition to being energy efficient and historically correct, the new JELD-Wen windows came with an added bonus: they keep the traffic noise out.

"It is noticeably quieter in here with the new windows," said McKown.

The windows also insulate the room. When the new HVAC system was being installed, there was no heat in the building. Contractors used space heaters which managed to warm the large room just enough. Before the renovation, the drafty windows made it difficult to keep heat inside the building.

The city will replace the carpet (including asbestos abatement) and paint the interior. The old buzzing fluorescent interior lights were replaced with energy efficient (and quiet) T-8 fluorescent lights. McKown was able to recycle some four-year old light fixtures that were displaced during the City Hall remodel project for use in the Carnegie Building. "It saved us \$15,000," he said.



Carnegie Building Project Manager Greg McKown (right) discusses new JELD-wen windows with Shanda Shribbs, Oregon Department of Energy Project Manager.

One thing leads to another. Now that the windows and HVAC system are installed, the lamp posts rejuvenated, the front door installed, the front steps and railing repainted, and the façade bricks repointed, some interested parties have suggested some landscaping work to trim the trees that overhang the building and spruce up the garden beds.

Medford's Mayor Gary Wheeler, who chairs the Carnegie Committee, would eventually like to see the elevator moved to the south side of the building. It currently is located just steps inside the front door, takes up considerable space and is aesthetically obtrusive. The elevator move, however, will wait until more funds become available.

Anne Gordon, office administrator for the Parks and Recreation Department, assisted McKown with the paperwork for the Oregon Department of Energy stimulus grant. They also had the assistance of Lisa Marston with Rogue Valley Council of Governments (RVCOG). The Oregon Department of Energy contracted with RVCOG to provide on-site assistance, review certified payroll, and to work as a consultant on the project for the City.

"Lisa at RVCOG very helpful with paperwork and entering data into the web-based database for us," said Gordon.

Shanda Shribbs, project manager for the Oregon Department of Energy, appreciated the work done by the staff.

"There is a lot of documentation required on federal grants," she said. "The City of Medford asked



Anne Gordon with the City of Medford, left, confers with Shanda Shribbs, Oregon Dept. of Energy project manager, regarding the Carnegie Building project that received federal stimulus funds for new energy efficient windows.

questions, sent e-mails so it was easy to respond and ensure the project was successful."

The old building with seemingly no useful purpose beyond serving as a storage area, is soon to emerge as a center of activity for the City of Medford. The Carnegie Building will be reopened to the public April 29.

Not bad for a 100-year-old structure which has emerged as a community treasure.

The grand "re-opening" of the Carnegie Building is scheduled for Friday, April 29. For more information, visit the City's website: www.ci.medford.or.us/

The Oregon Department of Energy (ODOE) awarded this energy project with American Recovery and Reinvestment Act (stimulus) funds through the State Energy Program. These funds are designated for energy efficiency and renewable energy projects. The U.S. Department of Energy administers the funds, approves the projects and reviews the state's progress. The Oregon Department of Energy received \$42.1 million in SEP funding. All projects must be completed by February 15, 2012.

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