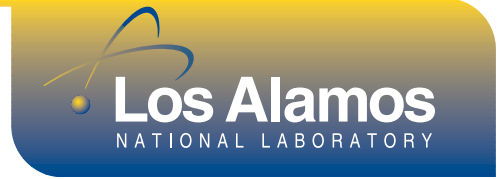


A New Approach to Construction



From the earliest planning meetings to the paving of the final sidewalk, the Nicholas C. Metropolis Center for Modeling and Simulation represented a new team approach to construction and project management for Los Alamos National Laboratory, one that strengthened the focus on safety, cost-effective execution and building close ties with local businesses.

In 1998, after consulting with the Department of Energy, the Laboratory determined to offer a combined design-build contract for the facility, the largest construction project at the Laboratory in the past decade. The design-build method, increasingly popular in the private sector but new for Los Alamos and much of the government, gave the Laboratory more control over all aspects of the contract process.

Encouraging Local Subcontracts

When first seeking proposals, the Laboratory was able to encourage interested prime contractors to initiate discussions with potential subcontractors in the area. As contract documents were developed, bidders were required to submit detailed plans on how they would utilize small, minority- and woman-owned and other local businesses. The final contract spelled out contracting and hiring goals for the eventual prime contractor, Hensel-Phelps Construction of Greeley, Colo.

The goals specified in the contract were met and exceeded. More than 72 percent of the construction dollars spent building the computing center went to New Mexico workers and companies, either directly or through a subcontract.

One-fourth of the total construction cost of \$66,550,528 went to small businesses. Hensel-Phelps and the Laboratory worked in close partnership to meet these goals. Before a single shovelful of dirt was turned, they held business fairs in Los Alamos. They invited every local business that had ever expressed interest in construction work at the Laboratory and explained the scope of the project and the large variety of potential subcontracts. Additional follow-up outreach sought to identify small, woman- and minority-owned businesses in New Mexico that might have missed the business fairs.

Mentoring Leads to Success

More than 1,000 individuals worked on the Metropolis Center construction

The Bottom Line

The final results for New Mexico businesses are impressive:

- Total construction cost — \$66,550,528
- Amount spent in New Mexico — \$48,000,000
- Amount spent in Northern New Mexico — \$10,648,084
- Amount spent with woman-owned businesses — \$5,443,583
- Amount spent with small businesses — \$16,599,490
- Amount spent with minority businesses — \$5,470,141

project. Construction project leaders said they found the work force in Northern New Mexico to be as skilled as those in other areas of the country and that they could not have done the job without the help of small businesses in the region.

Hensel-Phelps, with encouragement from the Laboratory, was able to bring in additional subcontractors that might not otherwise have been qualified for the Metropolis Center work. In several instances, the prime contractor provided mentors who worked directly with a subcontractor to help prepare work or safety plans needed to qualify for specific parts of the construction job. Hensel-Phelps loaned these mentors to the subcontractors without charge, sometimes for as long as a month.

Buy Local

In purchasing, "buy local" was the motto for the Metropolis Center project. Special siding, structural steel and major electrical components were procured from out-of-state vendors only after an exhaustive search for those items in state. Nearly everything else that went into the 303,000-square-foot building was bought in New Mexico. If a construction supply, fixture or item of furniture was made in New Mexico, Hensel-Phelps and the Laboratory made



Construction at Los Alamos National Laboratory means jobs for area workers and sales for New Mexico firms.

every effort to buy it here, including 12,000 cubic yards of concrete and 16,000 sheets of drywall.

Success Story

By the time the windows were washed and the Metropolis Center was ready for dedication, the goals of safety, cost-effective execution and partnership with local business had been more than achieved. After more than 600,000 labor hours, safety was outstanding: only one work day had been lost. The project was completed \$13 million under budget and more than three months ahead of schedule. And the Laboratory had forged strong ties with three dozen New Mexico businesses.

Building the Metropolis Center

New Mexico businesses that took part in construction of the Nicholas C. Metropolis Center for Modeling and Simulation:

Accu Blueprint and Copy
Albuquerque Caisson, Inc.
Bogan Brothers
Bohannon Huston Inc.
Century Plus
Consolidated Service Systems
Creative Concrete of New Mexico
D&D Enterprises
Division 10 Materials
Dupont Flooring Systems
Electro-Test Incorporated
Gardner Zemke
Geo-Test, Inc.
Goodmans
Harrison Contracting
J.C. Baldrige, Inc.
J.D. Inspection, Inc.
Kone Elevators Escalators
Li'l Stinker
Los Alamos Transit Mix Co.



The Metropolis Center atrium awaits drywall installation.

MC&I Cleaning
Mesa Steel, Inc.
OGB, Inc.
Paul Parker Construction
PCI Contractors, Inc.
Queston Construction
Rocky Mountain Consultants, Inc.
Scott's Fencing Co. Inc.
Sealant Specialists, Inc.
The Finishing Touch
The McClain Company, Inc.
Vernon Tile
Western Glass & Panels
Westwind Landscape Construction, Inc.



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