

# Civil Infrastructure™

May 2006

Promoting Planning, Development and Maintenance

www.cimagazine.net



## Bridges Will Receive Innovative Care

### Oregon is Modeling a New Way to Replace or Repair Bridges

By TIM DODSON

The state of Oregon is taking charge of its share of the thousands of bridges nationwide that require attention. Last year, the Oregon Department of Transportation made a historic shift from being an agency that produces engineering designs and construction to one that manages the statewide transportation system. The \$2.46 billion Oregon Transportation Investment Act of 2003, known as OTIA III, provides \$1.3 billion to repair or replace hundreds of aging state highway bridges in Oregon, under the OTIA III State Bridge Delivery Program. To perform this work, ODOT would have had to fill approximately 600 new positions. But the Oregon Legislature directed the work be outsourced, to stimulate the economy by creating and sustaining additional jobs for Oregonians. ODOT hired Oregon Bridge Delivery Partners, a private-sector joint venture of HDR Engineering and Fluor Enterprises. Although ODOT has outsourced work on projects before, this is the first time the agency has turned a program of this magnitude over to the private sector to manage.

An innovative and distinguishing feature of the bridge program is its philosophy: Context Sensitive and Sustainable Solutions, or CS<sup>3</sup>.

This approach recognizes that the bridge program is an opportunity to provide a comprehensive transportation solution that reflects Oregon's values and responds to the issues that are important to Oregonians: economic prosperity, community values and environmental stewardship, as well as the safety and reliability of the state highway system. To achieve this, five interrelated program ob-

jectives are merged under the CS<sup>3</sup> umbrella: Stimulating the economy; operating cost-effectively and efficiently; keeping freight and traffic moving; being sensitive to communities and landscapes; and capitalizing on funding opportunities.

#### STIMULATING THE ECONOMY

The bridge program is expected to sustain approximately 3,100 family-wage jobs per year. Projects are grouped into "bundles" of varied sizes so that Oregon's design and construction firms can successfully bid on them. Bundling the projects also speeds construction time, produces economies of scale and enhances mobility on freight and commerce routes.

By August 2005, more than 90 percent of \$124 million in construction and design payments had gone to Oregon firms. ODOT also launched its statewide Workforce Development Plan to create a larger,



The Oregon bridge program has the work being done faster and more economically than traditional methods. PHOTO COURTESY OF ODOT

more diverse, qualified workforce for the increase in heavy construction jobs. In partnership with other agencies and groups, the plan provides increased training and apprenticeship opportunities for all Oregonians.

#### OPERATING COST-EFFECTIVELY AND EFFICIENTLY

ODOT has worked hard to employ cost-containment and reduction tools and procedures to ensure efficient delivery. With foresight and considerable effort, ODOT collaborated with numerous regulatory agencies to streamline the permitting process. Environmental performance

standards were set for the bridge program as a whole, instead of permitting each bridge individually. This early collaboration is expected to save up to 15 percent of the initial design costs of bridges and shave one to two years off the construction schedule. In addition, many of the replacement bridges will enhance environmental conditions and wildlife habitat.

#### KEEPING FREIGHT AND TRAFFIC MOVING

Statewide traffic-management plans are being developed to minimize disruptions at the program, corridor and project levels. The bridge program will ensure the safety and reliability of the highway system for travelers and freight-haulers.

#### BEING SENSITIVE TO COMMUNITIES AND LANDSCAPES

ODOT involves businesses, special interest groups and community stakeholders in many of the program's decision-making processes. As part of the bridge program's outreach efforts, citizens in the Columbia River Gorge recently helped to develop the first comprehensive design guidelines for the National Scenic Area.

#### CAPITALIZING ON FUNDING OPPORTUNITIES

ODOT is continually looking for new opportunities to leverage OTIA funds. For example, the bridge program has applied for 12 grants and obtained a total of \$2,400,000 in funding from three sources: \$80,000 from the Environmental Protection Agency for clean fuel, \$400,000 from the FHWA Innovative Bridge Research and Construction Program, \$1.8 million from the FHWA Supportive Services Funds and \$120,000 from the EPA to retrofit heavy-duty diesel equipment.

Through CS<sup>3</sup> and its new way of delivering the work, the OTIA III State Bridge Delivery Program will leave a lasting legacy that enhances the quality of life for all Oregonians. ■

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