

# CIVIL, CONSTRUCTION, AND ENVIRONMENTAL ENGINEERING

OREGON STATE UNIVERSITY

College of Engineering

**SILLARS, David N.**

Associate Professor

**BIRTH DATE**

October 18, 1952

## DEGREES

B.S., Civil Engineering, University of Colorado at Boulder, 1976

M.S., Management, Georgia Institute of Technology, 1997

Ph.D., Civil Engineering, Georgia Institute of Technology, 1998

## ACADEMIC POSITIONS

Associate Professor, Department of Civil, Construction, and Environmental Engineering, Oregon State University, 2002-present

Director, R.C. Wilson Graduate Program in Construction Engineering Management, 2002-present

## NON-ACADEMIC POSITIONS

Consulting, 2002-present:

Federal Transit Administration

Walsh Construction Company

Hoffman Hart & Wagner

KJM Associates

Portland Development Commission

ESD 112 Construction Services Group.

Senior Vice President, Hardin Construction Group, Inc., Atlanta, GA, 1989-2002.

Regional Manager of Operations, CRSS Constructors, Inc., Washington, DC, and Atlanta, GA, 1984-1989.

Vice President, Construction Computer Engineering Systems, Denver, CO, 1983-1984.

Division Manager, Schmueser and Associates, Glenwood Springs, CO, 1981-1983.

Design Engineer, Rangely, CO, Branch Manager, Eldorado Engineering, Glenwood Springs, CO, 1978-1981.

Assistant Project Manager and Superintendent, Centric Corporation, Denver, CO, 1977-1978.

## FIELDS OF RESEARCH AND SPECIALIZATION

Construction industry risk

Interorganizational relationships in the construction industry

Project delivery alternatives

Strategic organizational structuring at the project and enterprise level

## PROFESSIONAL ACTIVITIES

### Registration

Professional Engineer, State of Colorado (License No. 17760)

### Professional Societies

American Society of Civil Engineers (ASCE), member

Construction Owners Association of America (COAA)

Oregon Public Contracting Coalition

Associated Schools of Construction  
Associated General Contractors (AGC), Columbia Branch

**Committee Service**

Research Committee, Associated Schools of Construction, Member  
Construction Research Council, Construction Institute, ASCE, Member  
Construction Risk Committee, Construction Institute, ASCE, Chair

**PUBLICATIONS**

**Technical Journals**

- D.N. Sillars, "Developing a Graduate-level Course in Construction Risk," Associated Schools of Construction Annual Conference Proceedings ASC, Submitted 2005.
- D.N. Sillars and R. Kangari, "Predicting Organizational Success with a Project-Based Joint Venture Alliance," *Journal of Construction Engineering and Management*, ASCE, 130(4), 2004.
- Sillars, D. N.. "Joint Ventures in the A/E/C Industry--Use and Success Factors." *Construction Research Congress Proceedings (CD-Rom)*, ASCE, Reston, VA. 2003
- D.N. Sillars and R. Kangari, "Japanese Construction Alliances," *Journal of Construction Engineering and Management*, ASCE 123(2), 1997.
- D.N. Sillars, "Communication, not Litigation," *Civil Engineering News*, 1995.

**Book Chapters**

- Sillars, D.N. and J.P.A. Leray, "Incentive/Disincentive Contracting Practices for Transportation Projects", in *Alternative Project Delivery, Procurement and Contracting Methods for Highways*, K.R. Molenaar, Editor. In press, ASCE Press: Washington, DC.

**Reports and Others**

- D.N. Sillars, Principle Investigator, "Pre-Operational Attributes as Predictors of Organizational Success within a Joint Venture: Modeling Joint Venture Formation in the Architecture/Engineering/Construction Industry", Ph.D. Dissertation, Georgia Institute of Technology, Atlanta, GA, May, 1998.

**RESEARCH**

- D.N. Sillars, Principle Investigator, "Establishing Guidelines for Incentive/Disincentive Contracting at ODOT", Oregon Department of Transportation, Salem, OR \$129,822, July, 2004-June, 2006.
- D.N. Sillars, Principle Investigator, "A/E/C Industry Interorganizational Relationships", Georgia Institute of Technology, Atlanta, GA Self-funded Doctoral Research, 1996-1997.

**PRESENTATIONS**

- "Incentive/Disincentive Operational Procedures", Oregon Department of Transportation Office of Project Delivery, April, 2006.
- "Risk Mitigation on the Hampton Roads Transit System", Federal Transit Administration Project Management Conference, April, 2006.
- "Advanced Project Management Education", AGC Oregon-Columbia Chapter, November, 2005.
- "Project Risk Management" URS Engineers, April, 2004.
- "Joint Ventures in the A/E/C Industry--Use and Success Factors." *Construction Research Congress Conference*, Honolulu, HI, April 2003.
- "The Construction Management Process," Georgia Tech University, Atlanta, GA, February 2000.
- "The Building Process," International Convention Center Congress, Fort Meyers, FL, October 1999.
- "Growth Strategies for Contractors," Polaris Construction Accountants Association, New Orleans, LA, August 1999.
- "Project Scheduling Techniques," Hardin Construction Group Annual Meeting, Tampa, FL, June 1996.
- "Subcontractor Default Control," Hardin Construction Group Annual Meeting, Atlanta, GA, June 1992.

## **TEACHING**

### **Courses Taught**

Georgia Tech University, Atlanta, GA

Construction Estimating, Spring 1997

Anne Arundel Community College, Severna Park, MD

Blueprint Reading, 1978

Oregon State University

CEM 407 Senior Seminar

CEM 442/542 Building Construction

CE 421/521 Managing the Delivery of Constructed Facilities

CEM 550 Contemporary Topics in Construction Engineering Management

CEM 552 Risk Management

CEM 553 Construction Business Management

## **PROFESSIONAL PROJECTS**

### **Civil Engineering Design**

Castle Valley Ranch Subdivision lot planning, roadway and utility design, Schmueser and Associates, Glenwood Springs, CO, 1983.

Garfield County Sanitary Landfill, Schmueser and Associates, Garfield County, CO, 1982.

Silt Bridge and Bypass: Structural and Hydraulic Design, Schmueser and Associates, Silt, CO, 1981.

Rangely Street and Utility Improvement Project, Eldorado Engineering, Rangely, CO, 1978.

Bridge Loading Analyses, Colorado Department of Transportation, Western Colorado, 1979.

### **Construction Engineering and Management**

Electrical Power Cogeneration Turbines, Centric Corporation, Burlington, CO, 1977.

General Motors Assembly Plant, Centric Corporation, Oklahoma City, OK, 1980.

Morgan Bank Operations and Computer Center (\$20M), CRSS Constructors, Inc., Newark, DE, 1985.

Fulton County Government Center (\$50M), CRSS Constructors, Inc., Atlanta, GA, 1987.

Fulton County Courthouse (\$100M), CRSS Constructors, Inc., Atlanta, GA, 1989.

Bowling Green Convention Center (\$6M), Hardin Construction Group, Inc., Bowling Green, KY, 1989.

Georgia World Congress Center Expansion (\$49M), Hardin Construction Group, Inc., Atlanta, GA, 1990.

Mobile Government Plaza and Justice Center (58M), Hardin Construction Group, Inc., Mobile, AL, 1991.

Orange County Convention Center: Phases 3 & 4 (\$341M), Hardin Construction Group, Inc., Orlando, FL, 1992.

Lakeland Convention Center (\$14M), Hardin Construction Group, Inc., Lakeland, FL, 1995.

Georgia Tech Residence Hall (\$6M), Hardin Construction Group, Inc., Atlanta, GA, 1998.

Peachtree Pointe Office Building (\$14M), Hardin Construction Group, Inc., Atlanta, GA, 2000.

Puerto Rico Convention Center (\$250M), Hardin Construction Group, Inc., San Juan, PR, 2001.