

Kevin Coyne, P.E., PSP
Manager

Professional Profile

Mr. Kevin Coyne is a Manager in Exponent's Construction Consulting practice. He has experience in the construction process and project controls, having provided construction management services to clients during the programming, design, and construction phases. A background in civil engineering provides a foundation for his work, while his experience in project controls supports his analysis of design and construction delays and conflicts. He has participated in the preparation of disruption and cost analyses, has prepared and analyzed as-planned and as-built schedules, and has performed delay analyses. He has also been responsible for developing and updating contemporaneous project schedules and performing time impact analyses on numerous projects.

Mr. Coyne also specializes in the integration of facility design and construction through the use of IT systems. Mr. Coyne's graduate research was in 3D and 4D project visualization, with an emphasis on conflict resolution and schedule optimization. His current areas of focus include Virtual Design and Construction (VDC), Building Information Modeling (BIM), automated 3D design conflict analysis, and the use of comparative 4D modeling in alternative dispute resolution and litigation. In addition, he has experience working with software developers on the implementation of new VDC software solutions. Prior to joining Exponent, Mr. Coyne was a research assistant at the Center for Integrated Facility Engineering at Stanford University. He also has experience in ROV (Remotely Operated Vehicle) design and testing, having worked for the Lockheed Martin Corporation – Naval Electronics and Surveillance Systems Unit.

Academic Credentials and Professional Honors

M.S., Civil Engineering, Design/Construction Integration, Stanford University, 2002
B.S., Civil Engineering (with Honors), Minor in Business Administration, University of Florida, 2001

NSPE Nominee for Engineers Week New Faces of Engineering Recognition Program; Stanford University Civil and Environmental Engineering Departmental Fellowship;
Chi Epsilon - Civil Engineering Honor Society; Pi Kappa Phi National Student of the Year

Licenses and Certifications

Registered Professional Engineer, Virginia, #040301
Registered Professional Civil Engineer, District of Columbia, #905449
Registered Professional Civil Engineer, Maryland, #0037786
Registered Professional Engineer, New York, #087574
Registered Professional Civil Engineer, Texas, #104277

Planning and Scheduling Professional (PSP), Association for the Advancement of Cost Engineering (AACE) International, #00210

Occupational Safety and Health Administration 10-Hour Course on Construction Health and Safety

Publications and Presentations

Coyne K. Streamlining projects through the use of virtual design and construction (VDC) tools. Construction Management Association of America New England Chapter Meeting, Boston, MA, March 11, 2008.

Coyne K. Virtual design and construction: the current state of the art. Association for the Advancement of Cost Engineering National Capital Section Meeting, Alexandria, VA, November 15, 2007.

Coyne K. Virtual design and construction: 4D modeling. AES Engineering and Construction Conference, San Francisco, CA, September 18, 2007.

Coyne K. 5D modeling and virtual cost estimating. American Society of Professional Estimators Chapter 21 Meeting, Baltimore, MD, May 17, 2007.

Coyne K. Building information modeling—Fact, fiction, or fantasy? Construction Superconference Panel, San Francisco, CA, December 8, 2006.

Coyne K. The Effects of comparative 4D Models on schedule development and controls. Project Management Institute College of Scheduling 3rd Annual International Conference, Orlando, FL, April 25, 2006.

Coyne K. Construction defect claims in Virginia. Lorman Education Services Seminar, McLean, VA, March 31, 2006.

Coyne K. 4D modeling and design conflict analysis: issues facing users. Advanced Corporate Counsel Construction Forum, Washington, D.C., March 3, 2006.

Coyne K. The effects of comparative 4D Models on schedule development and controls. Research Paper, Project Management Institute College of Scheduling, December 15, 2005.

Coyne K. 4D scheduling applications. Society of American Military Engineers Conference, Seattle, WA, February 15, 2005.

Coyne K. Applying 3D and 4D modeling to construction projects. 13th Coast Guard District, Seattle, WA, February 14, 2005.

Coyne K. Schedule analysis techniques in construction claims. Association for the Advancement of Cost Engineering Midwest Chicago Annual Seminar, Chicago, IL, May 7, 2004.

Coyne K. Construction cost estimating applications in CAD software. Honor's Thesis, University of Florida, Gainesville, FL, 2001.

Speaking Engagements

Guest Lecturer on Construction Systems, Department of Civil, Environmental, and Infrastructure Engineering at George Mason University

Selected Project Experience

Academic and Research Facilities

Buildings 6, 6A & 6C, National Institutes of Health, Bethesda, Maryland
Food Science and Technology Center, Eastern Shore, University of Maryland

Government/Defense Facilities

BEQ 1686, Andrews Air Force Base, Maryland
Command Communications Survivability Program (CCSP), Pentagon, Washington, D.C.
Dining Facility, Fort Meade, Maryland
Federal Bureau of Investigation Helicopter Hangar, Quantico, Virginia
Gatehouse & Security Upgrades, Humphreys Engineering Center, Fort Belvoir, Virginia
Joint Staff / Navy Swing Space Build-out, Pentagon, Washington, D.C.
Renovation 2A1, Pentagon, Washington, D.C.
South Terrace Project, Pentagon, Washington, D.C.
United States Embassy, Paris, France
United States Embassy, Rome, Italy

Health Care Facilities

Assisted Living and Skilled Nursing Facilities, Sibley Memorial Hospital, Washington, D.C.
Health Center Addition and Renovation, University of Maryland
Western Kentucky Veterans Center, Hanson, Kentucky

Industrial and Process Facilities

Muskeg River Mine, Shell Albian Oil Sands, Fort McMurray, Alberta, Canada
Plant 52C-305, Suncor Energy Oil Sands, Fort McMurray, Alberta, Canada
Scotford Upgrader, Shell Albian Oil Sands, Fort Saskatchewan, Alberta, Canada

Office Buildings, Retail and Multi-Use Complexes

Abraham Lincoln Presidential Museum, Springfield, Illinois
Germantown Swim Center, Germantown, Maryland
One Bank One Plaza, Chicago, Illinois
Re/Max International Headquarters, Denver, Colorado
Rockville Library, Rockville, Maryland

Station Place Project, Washington, D.C.

Structural Analysis

610 H Street N.W., Washington, D.C.

BWP Distribution Warehouse, Strasburg, Pennsylvania

Discovery Channel Place, Silver Spring, Maryland

Leesburg Residence, Potomac Station, Virginia

Pre-Stressed Concrete Pipe Failure, Quakertown, Pennsylvania

Veterans Administration Building, Las Vegas, Nevada

Transportation

Bradshaw Interceptor Section 6B, Sacramento, California

I-90/I-93 Central Artery/Tunnel Project, Boston, Massachusetts

Las Vegas Beltway, Las Vegas, Nevada

Palau Compact Road Project, Babeldaob, Republic of Palau

South County Neighborhood Improvement Project, Miami, Florida

West End Line Rehabilitation Project, New York, New York

Professional Affiliations

- American Society of Civil Engineers—ASCE, Construction Institute (member)
- Design-Build Institute of America—DBIA (member)
- Project Management Institute, College of Scheduling—PMICOS (member)
- National Society of Professional Engineers—NSPE (member)
- Washington Building Congress—WBC (member); Regional Development Committee