

Joshua Golomb, PE

Forensic Engineering Expertise

Civil Engineering

Project Management: Responsible for the overall design and bid package development for highway construction projects with estimated construction costs approaching \$400 million+. Extensive coordination with municipal, state, and federal departments of transportation.

Geometric Highway Design: Over 18 years of experience in highway planning and design for a wide range of facility types from local roads and streets to limited access freeway/interstate highways and interchange design. Developed and reviewed horizontal and vertical roadway geometry, roadside traffic barrier designs, traffic control designs, pavement design, erosion and sedimentation control plans, stormwater management plans, signing and pavement marking design, highway lighting and traffic signal designs.

Americans with Disabilities Act (ADA): ADA compliant facility design experience including developing ADA compliant design standards for local agencies. Knowledgeable of the August 2023 Access Board final rule on accessibility guidelines for pedestrian facilities in the public right-of-way (PROWAG). Coordinated extensively with the United States Access Board. Provided ADA compliant review services for state agencies.

Collision Analysis/Highway Construction Incidents

Collision analysis and reconstruction: minor to major collisions, single vehicle, multiple vehicles, commercial vehicles, two-wheeled vehicles, pedestrians, animals, and objects. **Highway construction incidents:** phasing, project controls, contract requirements, maintenance of traffic, applications of the MUTCD and state standards as applied to permanent and temporary traffic control conditions.

Highway Design

Evaluation of Highway/roadway design, roadside safety analysis, grading, slope, drainage, traffic capacity analysis, ADA compliance analysis, analysis of Federal and State standards, standards of practice and industry guidance.

Construction Activity Incidents

Determination of circumstances resulting in an incident. In-depth knowledge of the construction contracting process and the building codes is often the deciding factor in determination of cause and responsibility.

Qualifications & Training

- ATSSA: Traffic Control Technician, November 2023
- ATSSA: Traffic Control Supervisor, November 2023
- Planning for Active Transportation in Southwestern Pennsylvania, Lancaster County Planning Commission, January 2020
- Crash Modification Factor How-tos: Planning, Multiple Treatments and API – Oh My, University of North Carolina Safety Research Center, December 2019
- Understanding Pavement Failures & How to Prevent Them, Tensar Corporation, September 2019

- Stop Signs and Intersection Traffic Control, Pennsylvania State Association of Township Supervisors, October 2018
- Improving Crossings with Pedestrian Hybrid Beacons, Pedestrian and Bicycle Information Center, May 2018
- Bicycling Innovations for Small Towns and Rural Communities, Lancaster County Planning Commission, February 2017
- Road Diet Workshop, Federal Highway Administration, September 2016
- State Transportation Innovation Council (STIC) Consultant Innovation Day, American Council of Engineering Companies of Pennsylvania, August 2016
- Highway Safety Improvement Program (HSIP) and the Safety Performance Management Measures Final Rule, US Department of Transportation, April 2016
- Transportation Managers Training Workshop, Pennsylvania Department of Transportation, March 2016

Education

Master of Science in Civil Engineering/Material Science
The Pennsylvania State University, University Park, PA
May 2005

Bachelor of Science in Civil Engineering
The Pennsylvania State University, University Park, PA
May 2003

Educational Presentations

- Graduate Teaching Assistant in Civil Engineering
- Pennsylvania Bat Species and Bridge Project Assessments – American Society of Highway Engineers Altoona Section 2018 Annual Joint Workshop
- Design Issues Panel – 2023 Pennsylvania Department of Transportation Engineering District 5-0 Winter School Industry Days Conference
- Lehigh Valley Transportation Study (LVTS) Roundabout Study – 2015 Transportation Engineering and Safety Conference
- PennDOT District 5-0 Interstate Panel – 2022 American Society of Highway Engineers Northeast Conference

Licenses & Certifications

PE - Professional Engineer

Licensed by the State of Pennsylvania - Number PE076033

Licensed by the State of Maryland - Number 36040

Licensed by the State of Colorado – Number PE.0094033

Licensed by the State of Illinois – Number 62-076045

Licensed by the State of Michigan – Number 6201313459

Employment History

Forensic Engineer
Nederveld, Grand Rapids, MI
2023 - Present

Duties include forensic engineering analysis relating to motor vehicle collision analysis, Highway design, temporary and permanent traffic control, roadway construction incidents, construction contracts, contractor responsibilities and standards of practice, ADA compliance issues.

Project Delivery Leader
RK&K, Harrisburg, PA
2005 - 2023

Managed engineering design projects with estimated construction costs up to \$400M. Researched and investigated innovative design solutions for complex design situations. Created and progressed design schedules to meet client requirements. Oversaw multiple design teams of engineers and staff on simultaneous projects. Developed improvements for roadways to meet current design standards and guidelines. Responsible for developing and maintaining project budgets. Prepared and proofread technical report deliverables. Presented projects at public meetings and hearings as required by the National Environmental Policy Act (NEPA).

Board Member, Assistant Treasurer/Secretary
Hempfield Water Authority, Landisville, PA
2023

Attended monthly board meetings. Reviewed site development plans. Managed Hempfield Water Authority staff and employees.

Publications

Master's Thesis

Golomb, J.D., "Comparison of Freeze-Thaw Durability, Absorption, and Scaling for High Performance Concrete." Master Thesis Pennsylvania State University College of Engineering, Thesis 2005, Golomb, JD, 2005.

FOR REFERENCE ONLY NOT RETAINED