

Richard C. Moeur, P.E.
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Overview

- Experienced leader at the team, office, group, region, state, and national level
- Nationally-recognized leader in the development of traffic engineering standards and guidelines
- Nationally-recognized expert in traffic engineering and traffic control devices
- Talented facilitator specializing in soliciting diverse viewpoints to achieve common goals
- Recognized for delivering innovative and effective solutions for difficult problems and issues

Education

University of Arizona, Tucson:

- Bachelor of Science in Civil Engineering, May 1988
- Transportation and traffic engineering emphasis
- GPA: 3.28
- Member Tau Beta Pi honor society, Theta Tau engineering fraternity

Specific training courses in:

- Traffic and Transportation Engineering
- Intersection Design and Channelization
- Bicycle Planning and Facilities
- Freeway Traffic Operations
- National Incident Management System and Incident Command System
- Complete Streets and Accommodation of All Transportation Modes

Registrations, Certifications, and Memberships

State of Arizona Registered Professional Engineer (Civil) # 27424

National Committee on Uniform Traffic Control Devices (NCUTCD)

- Voting Member on NCUTCD Council, 1999-2017
- Member, NCUTCD Bicycle Technical Committee, 1997-present
- Chair, Bicycle Technical Committee, 2002-2017

American Association of State Highway and Transportation Officials (AASHTO)

- Member, Subcommittee on Traffic Engineering (SCOTE), 2004-2017
- Chair, AASHTO Task Force on US Numbered Bicycle Routes, 2003-2017

Transportation Research Board (TRB)

- Member, Committee on Bicycle Transportation {ANF20}, 2003-2012
- Member, Committee on Traffic Control Devices {AHB50}, 2014-present
- Chair, NCHRP Panel 15-42 - Use of Bicycle Lanes for Various Roadway Characteristics
- Member of several current & previous NCHRP panels (10-78, 15-37, 15-42, 15-48, 20-7)

Arizona State Board on Geographic and Historic Names

- Member, April 2016 - March 2017

Publications and Presentations

Published works:

- **Transportation Research Record 1705, 2000**
 - "Analysis of Gap Patterns in Longitudinal Rumble Strips to Accommodate Bicycle Travel"
- **ITE Traffic Control Devices Handbook, First and Second Editions**
 - Author / Co-Author of Chapter 14 (Bicycle Facilities)
- **ITE Journal, May 2008**
 - "Rolling into the Future: Emerging Resources and New Initiatives for Bicycle Transportation"
- **Creator, designer, and owner of the Manual of Traffic Signs website**
 - Recognized internationally as the premier website for US traffic sign information
- **Created figures and diagrams for the 1999 AASHTO *Guide for Development of Bicycle Facilities***
- **Manual on Uniform Traffic Control Devices, 2000, 2003, and 2009 editions**
 - Created text, figures, sign designs, and diagrams

Technical presentations and papers:

- **Institute of Transportation Engineers Annual Meeting, 1999**
 - "Bicycle-Specific Traffic Control - Is it Bicycle-Friendly?"
- **Western Association of State Highway and Transportation Officials, 2001**
 - "Rumble Strips - What's All The Rumbling About?"
- **Institute of Transportation Engineers Annual Meeting, 2001**
 - "Now That's a Detour - Problems and Challenges of Multi-State Detours"
- **National Bike Summit, 2003**
 - "The Public Agency Official"
- **AASHTO Traffic Engineering (SCOTE) Meeting, 2003 and National Bike Summit, 2004**
 - "US Numbered Bicycle Routes - Expanding The Vision"
- **ProWalk/ProBike Conference, 2004**
 - "The 2003 MUTCD"
- **AASHTO Traffic Engineering (SCOTE) Meeting, 2006**
 - "Clarifying Clearview"
- **ProWalk/ProBike Conference, 2006**
 - "The MUTCD - What's Next for Bicyclists?"
- **Iowa Bike Summit, 2007**
 - "Bicycle Facility Design Workshop"
- **Bi-State (Iowa/Illinois) Regional Discussion Forum, 2008**
 - "Complete Streets Workshop"
- **ProWalk/ProBike Conference, 2008**
 - "The US Bicycle Route System"
- **TRB Annual Meeting, 2010 and Arizona Roads & Streets Conference, 2010**
 - "The 2009 MUTCD - Practitioners' Perspective"
- **TRB Annual Meeting, 2011**
 - "The 2009 MUTCD - State Perspective"
- **ProWalk/ProBike Conference, 2012**
 - "Developing, Using, and Expanding Design Standards and Guidelines"

Technical Proficiencies

Leader in development of traffic engineering standards and guidelines at the state and national level
Nationally-recognized expert in traffic engineering and traffic control devices

Over 25 years experience in:

- Transportation project management
- Freeway and highway signing design and traveler guidance
- Work zone traffic control design
- Pavement marking design
- Project estimation
- Contract language and special provisions development
- Engineering plans and specifications review
- Bicycle facility and nonmotorized transportation design and operations
- Vehicle lighting and conspicuity

Software:

- MacOS, iOS
- Windows (98, NT, 2000, XP, Vista, 7)
- Computer-aided design {CADD} (Microstation)
- Sign design (SignCAD) - trainer
- Word processing
- Spreadsheets & charting
- Graphic design
- Desktop publishing
- HTML coding and webpage design
- Desktop video and sound editing

Professional Experience

Moeurengineering PLLC, Phoenix, Arizona

Principal and Chief Engineer

October 2017 to present

- Advising clients on engineering and risk management issues involving traffic control devices
- Recognized by SignCAD as software training expert
- Revising and updating nationally-recognized traffic sign websites
- Assisting and advising NCUTCD leadership

Arizona Department of Transportation, Phoenix, Arizona

Transportation Engineer II, Traffic Group (Traffic Standards Engineer)

January 2012 to March 2017

- Directed creation and development of State standards, policies, procedures, and guidelines
- Provided technical guidance on projects, studies, and reports
- Maintained traffic engineering information resources
- Coordinated with internal and external customers to ensure quality of technical guidance

Team products:

- Arizona Supplement to the Manual on Uniform Traffic Control Devices
- Arizona Manual of Approved Signs (MOAS) and other signing guidelines
- Statewide signing and marking standard drawings
- Statewide signal and lighting standards and drawings
- Statewide temporary traffic control guidelines and details
- Statewide technical guidance on school-related traffic control
- ADOT traffic engineering policies, guidelines, and procedures
- ADOT traffic engineering stored specifications and special provisions

*Arizona Department of Transportation, Phoenix, Arizona
Transportation Engineer II, Traffic Group (Traffic Design Manager, Northern Region)
February 2000 to January 2012*

- Managed team of 2 engineers, 3 engineering specialists, 1 plans technician
- Directed technical activities and design efforts
- Directed on-call traffic engineering services and approving billings
- Coordinated with internal and external customers to ensure quality of design
- Coached team to improve communication, performance, and effectiveness
- Mentored engineers and team members on project planning and management
- Developed new and updated standards and guidelines for highway and freeway signing
- Managed ADOT adoption of the 2009 MUTCD
- Directed development of the Arizona Supplement to the 2009 MUTCD

Team products:

- Signing and pavement marking plans
- Work zone traffic control plans
- Project estimates and special provisions
- Signing work orders
- Traffic operational analyses

Project Manager for the following projects:

- **I-10, Dysart Road to 3rd Avenue - Sign Update**
 - Complex project in a challenging urban environment
- **I-40, Sun Valley to New Mexico State Line - Sign Update**
 - Ambitious large-scale project involving partnership with State of New Mexico
- **Loop 101, Glendale Avenue to 75th Avenue - Sign Update**
 - Extremely accelerated schedule with successful results
- **SR 73, FATCO Road and SR 260 - Traffic Signals**
 - Coordinated consultant signal design in scenic corridor
- **B-40, Florida Street - Traffic Signal**
 - Managed accessible design in a historic environment
- **I-15, Mesquite to Black Rock - Sign Update**
 - Challenging project in a remote corridor involving coordination with Nevada and Utah DOTs

*Arizona Department of Transportation, Phoenix, Arizona
Transportation Engineer I, Traffic Group (Western Region Team Engineer)
May 1994 to February 2000*

- Managed team technical activities and directed design efforts
- Directed on-call traffic engineering services and approved billings
- Coordinated with internal and external customers to ensure quality of design
- Coached team to improve communication, performance, and effectiveness

Team products:

- Signing and pavement marking plans
- Work zone traffic control plans
- Project estimates and special provisions
- Signing work orders
- Traffic operational analyses

Project Manager for the following projects:

- **I-10, SR 85 to Dysart Road - Sign Update**
 - Accelerated in-house design, delivered high-quality project
- **I-8, California State Line to Ligurta - Sign Update**
 - Created multi-state partnership with Caltrans to improve traveler guidance
- **I-17, Pinnacle Peak Road to Cherry Road - Sign Update**
 - Directed partnership with consultant on 64 mile, \$1.5 million project
- **I-17, Maricopa TI to Thomas Road - Sign Update**
 - Coordinated consultant, FHWA and AASHTO input on urban signing project
- **Historic US 66 - Historic Route Signing**
 - Signing created a renewed sense of pride in this famous highway

*Arizona Department of Transportation, Phoenix, Arizona
Transportation Engineering Specialist, Traffic Studies Section
October 1992 to May 1994*

- Directed team of analysts, technicians, and field crews
- Developed traffic signal and safety studies and operational evaluations
- Coached team to improve communication, performance, and effectiveness
- Improved safety by designing warning light systems for Traffic Group vehicles
- Participated in statewide team to create new ADOT radio system

*Arizona Department of Transportation, Phoenix, Arizona
Transportation Engineering Specialist, Urban Highway Section
October 1989 to October 1992*

- Managed computerized graphical project information and management system
- Reviewed consultant plans for Phoenix freeway system
- Coordinated updates to Urban Highway Design Manual
- Created presentations, reports, and displays for ADOT leadership and public

*Arizona Department of Transportation, Phoenix, Arizona
Transportation Engineering Associate, Engineer in Training Program
May 1988 to October 1989*

- Gained an enhanced understanding of the mission, functions, and scope of ADOT
- Developed experience in many areas of ADOT Highways Division
- Engaged in construction project management and field engineering

*Arizona Department of Transportation, Phoenix, Arizona
State Service Intern, Student Engineering Program
May 1986 to May 1988*

- Gained experience in asphalt mix design and materials testing
- Engaged in construction project inspection and field testing

Other Activities

- Past President (3 terms), Ride Leader - Arizona Bicycle Club
- Amateur Radio Operator - FCC call sign WC7RCM