

Richard C. Moeur, P.E.
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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

Northwestern University Traffic Institute:

Traffic and Transportation Engineering Seminar

Intersection Design and Channelization

Bicycle Planning and Facilities

Federal Highway Administration - National Highway Institute:

Freeway Traffic Operations

Federal Emergency Management Administration:

National Incident Management System and Incident Command System

(IS-100PW, IS-200, IS-700, IS-800)

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-present

Member, NCUTCD Bicycle Technical Committee, 1997-present

Chair, Bicycle Technical Committee, 2002-present

Board of Directors, 2006-present

American Association of State Highway and Transportation Officials (AASHTO)

Member, Subcommittee on Traffic Engineering (SCOTE), 2004-present

Liaison Member, Technical Committee on Nonmotorized Transportation

Chair, AASHTO Task Force on US Numbered Bicycle Routes, 2003-present

Transportation Research Board (TRB)

Member, Committee on Bicycle Transportation {ANF20}, 2003-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, 20-7(187))

Institute of Transportation Engineers (ITE)

Member, 1987-present

Member, Executive Committee, Pedestrian & Bicycle Council, 2003-present

Member, Traffic Engineering Council

League of American Bicyclists (LAB)

Life Member

Phyllis Harmon National Volunteer of the Year Award, 2003

Rocky Mountain Region Distinguished Service Award, 1996

Certified League Cycling / Effective Cycling Instructor #266, 1993-present

LAB representative on steering committee to develop national bicycle and pedestrian design guidance for Federal Highway Administration, 1998-1999

Professional Activities

Published works:

- Transportation Research Record 1705, 2000
 - "Analysis of Gap Patterns in Longitudinal Rumble Strips to Accommodate Bicycle Travel"
- ITE Traffic Control Devices Handbook , 2001
 - 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 best non-government site for US traffic signing on the Internet
- Created figures and diagrams for the 1999 AASHTO *Guide for Development of Bicycle Facilities*
- Created figures and diagrams for Part 9 of the *Manual on Uniform Traffic Control Devices*, 2000, 2003, and 2009 editions

Technical paper presentations:

- 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 - How To Understand This Odd Creature"
- AASHTO Traffic Engineering (SCOTE) Meeting, 2003 & 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?"
- ProWalk/ProBike Conference, 2008
 - "The US Bicycle Route System"
- TRB ANF20 Annual Meeting, 2010 & Arizona Roads & Streets Conference, 2010
 - "The 2009 MUTCD - Practitioners' Perspective"

Technical Proficiencies

Responsible and accountable for providing leadership to numerous teams and organizations
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 for bicyclists

Over 20 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

Software:

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

Professional Experience

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

Managing team of 2 engineers, 3 engineering specialists, 1 plans technician
Directing technical activities and design efforts
Directing on-call traffic engineering services and approving billings
Coordinating with internal and external customers to ensure quality of design
Coaching team to improve communication, performance, and effectiveness
Mentoring engineers and team members on project planning and management
Developing new and updated standards and guidelines for highway and freeway signing
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 system of radio call numbers for ADOT

*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), Board member - Arizona Bicycle Club

Amateur Radio Operator - FCC call sign WC7RCM

Public Service Communications Volunteer - Arizona Repeater Association

Member, American Radio Relay League (ARRL)

Life Member, Adventure Cycling Association