



Sarah W. O'Brien
Program Manager
North Carolina State University
Centennial Campus, Box 8601
Raleigh, NC 27695-8601
919/515-8703 Fax 919/515-8898
Email: skworth@unity.ncsu.edu

EDUCATION

Master of Environmental Science and Management (June 2003)

Donald Bren School of Environmental Science and Management
University of California, Santa Barbara

- Conservation Planning and Policy Specialization

Bachelor of Arts in Biology (May 1998)

University of North Carolina, Asheville

PROFESSIONAL EXPERIENCE

Bicycle & Pedestrian Program Manager (4/10 – present)

Public Transportation Group

Institute for Transportation Research & Education, NCSU, Raleigh, NC

- Develop and manage projects and activities related to bicycle and pedestrian transportation including research, planning, design, training, and technical assistance
- Write proposals, develop budgets, and administer project contracts
- Participate in strategic planning initiatives to grow the Bicycle and Pedestrian Program at ITRE and expand outreach and client list
- Supervise research associate position and student workers, delegate select tasks, and provide support through a team-oriented approach
- Current projects and interests include planning and design, applications of the Americans with Disabilities Act to pedestrian facility design, intermodal transportation access for pedestrian and bicycle modes, baseline data development, safety and education, and training

Research Associate, Bicycle and Pedestrian Planning (3/04 – 3/10)

Public Transportation Group

Institute for Transportation Research & Education, NCSU, Raleigh, NC

- Prepared NCDOT documents including: "The Economic Impact of Investments in Bicycle Facilities: a Case Study of the Northern Outer Banks – Technical Report;" "NC Bicycle and Pedestrian Laws Guidebook;" "Streetwise Cycling – A Guide to Safe Bicycling in North Carolina."
- Assisted with bicycle transportation maps brochure development for various North Carolina counties, regions, and routes.
- Aided in developing educational materials like the "Role of Law Enforcement" module for Basic Law Enforcement Training curriculum used by the NC Justice Academy

Select Project Work at ITRE

Bicycle and Pedestrian Data Collection, NC Department of Transportation (2013 - present)

- PI on current project to develop a non-motorized traffic monitoring program for the state through this initial pilot program project

Rumble Strip Gaps for High Speed Bicycles, NC Department of Transportation (2013 - present)

- PI on current project to evaluate rumble strip gap lengths in combination with varying shoulder widths on road with steep grades where bicyclists may travel at high speeds.

American Tobacco Trail Behavioral Impact Study, NC Department of Transportation, Helen and William Mazer Foundation, and BlueCross BlueShield Foundation (2013 – present)

- Conducting intercept surveys and counts on the American Tobacco Trail to determine the changes in health, economic, and travel behaviors before and after the installation of a bicycle and pedestrian bridge over Interstate 40 knit together the greenway.

NCHRP 3-78b: Guidelines for the Application of Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities, TRB - The National Academies (2013 - present)

- Assist in developing guidelines for the application of crossing solutions and treatments installations to establish accessibility for pedestrians with low or no vision and conducting field-based research to test treatments.

Guidance for Pedestrian Crosswalk Provisions, NC Department of Transportation (2013 - present)

- Assist in documenting policies and standards for pedestrian crossing accommodations, synthesizing best practices for when to install pedestrian signals and mark crosswalks, and developing practice-ready guidance for NCDOT that implements the best practices.

Bicycle and Pedestrian Geo-Spatial Data – Update and Management, NC Department of Transportation (2012-present)

- Managing the development and maintenance of a geodatabase of all existing and planned bicycle and pedestrian facilities in North Carolina

Pedestrian and Bicycle Accommodations on Superstreets, NC Department of Transportation (2011 - 2013)

- Arranged stakeholder panel group to guide discussion on alternative crossing designs
- Prepared draft outreach materials (brochure and slide presentation) to explain how bicyclists and pedestrians can use the superstreet, based on outcomes from the study
- Ran focus group to test outreach materials and gather feedback

Let's Go NC! A Pedestrian and Bicycle Safety Skills Program for Healthy Active Children (2011 - 2013)

- Served as curriculum director managing media production, graphic design, and content development for a comprehensive curriculum that includes 30 lesson plans, an Instructor's Guide, 10 lesson videos, 5 instructor's videos, and one online Interface package
- Developed script outlines, oversaw scouting for shoot locations, and served as subject matter expert on set
- Lead developer of Instructor's Guide, established review committee, held focus group session, observed abbreviated pilot

Safe Routes to School (SRTS) Program, NC Department of Transportation (2006 – 2013)

- Provided technical and logistical support for program processes, tools, training, and administration.
- Assisted in development of program structure, including funding categories, workshop activities, and promotion.
- Acting Interim SRTS Coordinator, 10/06 – 6/07 and 10/08 – 8/10.
 - Administered a \$19 million statewide program
 - Managed the development of 16 SRTS action plans, 14 non-infrastructure projects (education, encouragement, enforcement based), 6 demonstration projects (comprehensive SRTS programs), and 30+ infrastructure projects (engineering and construction based)
 - Oversaw 4 consulting contracts
 - Reviewed preliminary design plans for construction of bicycle and pedestrian facilities, with a focus on screening for ADA compliance
 - Coordinated SRTS activities with Federal Highway Administration, NCDOT Divisions and other units, local governments, other state coordinators, and the National Center for SRTS
- Managed the SRTS Community Workshop program.

“Watch for Me NC” Triangle-wide Pedestrian Safety Campaign (2011 - 2012)

- Participated as core group member in developing, shaping and guiding this education and enforcement campaign consisting of messages to drivers and pedestrians conveyed through radio PSAs, internal and external bus advertising and other print materials (campaign launch: August 2012)
- Lead manager for enforcement component of campaign, coordinating with more than 10 local law enforcement agencies including municipal and university police to identify locations to conduct active enforcement activities, and organizing a tactical training on how to enforce pedestrian safety

Division of Bicycle and Pedestrian Transportation Web Site, NC Department of Transportation's (2004 - 2012)

- Reorganized arrangement of content and developed new content based on new architecture and navigational functions of web pages.
- Developed, reviewed and maintained content.

Bicycle and Pedestrian Planning Grant Initiative, NC Department of Transportation (2004-2007)

- Reviewed and edited 5 draft plans for quality, content and adherence to NCDOT plan template.
- Developed Planning Grant handbook for grantees.
- Provided technical assistance to awarded municipalities throughout plan development.
- Wrote the standard procedures manual for NCDOT Planning Grant project managers and administrators.
- Conducted general administrative tasks for 5 grant cycles, to include designing and maintaining a database system to track proposals, creating and updating instructions and evaluation materials for the grant reviewer process, and analyzing and reporting the results of the evaluations.

Volunteer (11/03 – 2005)*North Carolina Smart Growth Alliance, Carrboro, NC*

- Researched grant funding opportunities and created a grants database.
- Provided research and editing assistance for “Healthy Rural Communities: A Resource and Action Guide for North Carolina.”

Volunteer (7/02 – 9/02)*North Carolina Public Interest Research Group, Chapel Hill, NC*

- Researched the NC Highway Trust Fund, NC Department of Transportation, and public transit options in NC.

Data Technician (12/99 – 7/01)*Comprehensive Cancer Center**Duke University Medical Center, Durham, NC*

- Interviewed subjects in breast and ovarian cancer research studies and collected medical and family histories.
- Collaborated in survey design and organized recruitment mailings.
- Managed FoxPro databases and trained users on the databases.

WORKSHOP INVOLVEMENT

Bicycle Facility Design, NCDOT sponsor (2011, organized 2, hosted 1)

Designing Streets for Pedestrian Safety, NCDOT/FHWA sponsor (2010 and 2011, organized 8, hosted 4, and co-instructed 1)

Cross-Cutting Environmental Research Needs Workshop, part of the TRB Environment and Energy Research Conference, FHWA/Center for Transportation and the Environment sponsor (2010, co-facilitator)

Safe Routes to School National Course, NCDOT/National Center for SRTS/Pedestrian and Bicycle Information Center sponsor (2005 – 2009, organized 31)

How to Develop a Pedestrian Safety Action Plan, NCDOT/FHWA sponsor (2006 and 2008, organized and hosted 4)

SRTS Regional Informational Workshop, NCDOT sponsor (2007, produced and organized 8, hosted 2)

Designing Pedestrian Facilities for Accessibility, NCDOT/FHWA sponsor (2007, 2010-11 organized 5 and hosted 3)

Pedestrian Planning & Design Workshop, NCDOT sponsor (2004 and 2005, organized and hosted 10)

Bicycle/Pedestrian Planning Strategies: From SAFETEA-LU to Safe Routes to School Teleconference, FHWA/Center for Transportation and the Environment sponsor (2006, produced and organized)

Bicycle Planning & Design Workshop, NCDOT sponsor (2005 and 2006, organized and hosted 7)

PRESENTATIONS & PUBLICATIONS

Presenter, "Behavioral Impact Study on the American Tobacco Trail." East Coast Greenway Alliance's State of the Greenway Summit, Raleigh, NC, October 2013.

Presenter, "NCDOT's Let's Go NC! Curriculum." NC Bike Summit, Carrboro, NC, October 2013.

Jackson, K., A. Spiliotis, **S.W. O'Brien**, and D. Tiska. "Pedestrian and Bicycle Infrastructure Network Data Program Manual." NC Department of Transportation, November 2013.

Expert Reviewer, "North Carolina's Plan to Address Obesity: Healthy Weight and Healthy Communities 2013-2020." Eat Smart, Move More NC, Raleigh, NC, 2013.

O'Brien, S.W. and C.L. Simpson. "The Use of Your Speed Changeable Message Signs in School Zones – Experience from the North Carolina Safe Routes to School Program." Transportation Research Record: Journal of the Transportation Research Board, 2012. Issue 2318:128-136.

Co-Presenter, "One Year After the Statewide Bicycle and Pedestrian Summit: Are We Making Progress?" NC Association of Metropolitan Planning Organizations Annual Conference, Asheville, NC, 2012.

Presenter, "Navigating NCDOT and Affecting Transportation Decisions." Move More Scholars Institute, Pine Knoll Shores, NC, May 2012.

Presenter, "The Use of Your Speed Changeable Message Signs in School Zones – Experience from the North Carolina Safe Routes to School Program," 91st TRB Annual Meeting, Washington, DC, 2012.

O'Brien, S.W. and Kristy Jackson. "Bicycle and Pedestrian Safety Strategies in North Carolina: Statewide Input and Priorities Synthesis Report." NC Department of Transportation, Division of Bicycle and Pedestrian Transportation, May 2011.

Presenter, "NC Bicycle and Pedestrian Safety Summit report," NC Association of Metropolitan Planning Organizations Annual Conference, Fayetteville, NC, 2011.

Co-Presenter and Facilitator, NCDOT Statewide Bicycle and Pedestrian Safety Summit, 2011.

Panel Member, "Our Next Steps to a Healthy, Active Community," Get Guilford Moving Active Transportation Summit, 2010.

Presenter, "Safe Routes to School," Summit to Reverse Childhood Obesity Trends in the Sandhills, 2008.

Presenter, "The Safe Routes to School movement, why it matters, and an introduction to the *SRTS Online Guide*," NCDOT SRTS Regional Informational Workshops, 2007.

Presenter, "North Carolina's Safe Routes to School Program," NC Pupil Transportation Association Annual Conference, 2007.

Presenter, "North Carolina's Safe Routes to School Program," NC Association of Metropolitan Planning Organizations Annual Conference, Concord, NC, 2006.

Co-Presenter, "Safe Routes to School National Course," Olive Chapel Elementary School, Apex, NC, 2005.

Lawrie, J.L., T.P. Norman, M. Meletioui, and **S.W. O'Brien**. "Research Pays Off: Bikeways to Prosperity: Assessing the Economic Impact of Bicycle Facilities." *TR News*, 2006. Issue 242:32-33.

Meletioui, M.P., J.L. Lawrie, T.J. Cook, **S.W. O'Brien**, and J. Guenther. "Economic Impact of Investments in Bicycle Facilities: a Case Study of North Carolina's Northern Outer Banks." *Transportation Research Record: Journal of the Transportation Research Board*, 2005. Issue 1939:15-21.

Co-Presenter, "Santa Barbara County and Los Padres National Forest: Facilitating Community Collaboration in Recreation Management," Bren School Master of Environmental Science and Management Class of 2003 Group Project Final Presentations, 2003.

Fratous, N., J. Komoto, C. Morgan, T. Whitaker, and **S. Worth**. "Collaborator's Handbook: Working Together to Manage Los Padres National Forest," Unpublished master's paper. Donald Bren School of Environmental Science and Management, University of California, Santa Barbara, 2003.

COMMITTEES & ORGANIZATIONS

Transportation Research Board Bicycle Committee (ANF20) – Member (4/12 – present)

Transportation Research Board Pedestrian Committee (ANF10) – Friend (11/10 – present)

Transportation Research Board Health and Transportation Subcommittee (ADD50-01) – Friend (3/12 – present)

Association of Pedestrian and Bicycle Professionals – Member (2/10 – present)

National Cooperative Highway Research Program – "07-17: Pedestrian and Bicycle Transportation along Existing Roads", Panel Member (8/2010 -present)

NCDOT Bicycle and Pedestrian Planning Grant Awards Committee - Regional Leader (2005 – 2007, 2013), Member (2004, 2011, 2012)

NCDOT SRTS Infrastructure Grant Reimbursement Program Awards Committee – Regional Leader (6/09)

NCDOT SRTS Non-Infrastructure Grant Reimbursement Program Awards Committee – Regional Leader (6/09), Member (3/08)

NCDOT SRTS Action Plan Service Awards Committee - Regional Leader (5/08)

Bicycle and Pedestrian Working Group, NC Executive Committee of Highway Safety - Member (10/08-8/10, 10/06-6/07)

DurhamWalks Pedestrian Plan Task Force, City of Durham - Member (6/05 – 6/06)

NC Smart Growth Alliance Summit Planning Committee - Member (2004)

Bren School Sustainability Committee, University of California, Santa Barbara (UCSB) - Co-Chair (9/02 – 6/03)

Colloquium Speaker Search Committee, Bren School, UCSB - Student Representative (5/02 – 2/03)

California National Association of Environmental Professionals, UCSB student chapter - Member (9/01 – 8/03)

OTHER ACTIVITIES

Trained, National Highway Institute, Instructor Development Course (12/2012)

Trained, Move Mores Scholars Institute, Eat Smart, Move More North Carolina (5/2011)

Graduate, Performance Leadership Program, NC State University (Fall 2010)

Trained, Pedestrian Safety Road Audits, Federal Highway Administration (FHWA) sponsor (4/09)

Nominee, NCSU Office of Research and Graduate Studies Award for Excellence (2007)

Trained, Safe Routes to School National Course Instructor, Pedestrian and Bicycle Information Center
(04/05)

Certified, Professional Grant Writing, The Grant Institute (6/06)

SKILLS

Proficient in Microsoft Word, Excel, PowerPoint, and Outlook.
Experience with Adobe Acrobat, Microsoft Access, and ArcView.