

John Mark Teague, P.E., CPM

Owner and Principal Engineer

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Owner and Principal Engineer



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EDUCATION AND PROFESSIONAL CREDENTIALS

Bachelor of Science in Civil Engineering, concentration in transportation - June 1991 – North Carolina State University, NC.

Professional Engineer July 1997 – State of North Carolina – License 022948

Professional Engineer 2012 – State of South Carolina – License 29874

Professional Engineer 2013 – State of Georgia –License PE038196

Professional Engineer 2013 – State of Tennessee – License 116916

Professional Engineer 2015 – State of Alabama – License 35386-E

Professional Engineer 2015 – State of Virginia – License 402055623

Professional Engineer 2019 – State of Kentucky – License 34487

National Council of Examiners for Engineering and Surveying ® (NCEES) – Record 53642

Certified Public Manager January 2001 – State of North Carolina

Certified in Context Sensitive Solutions – State of North Carolina

Certified Small Professional Services Firm – North Carolina Department of Transportation

Certified Complete Streets –North Carolina Department of Transportation

Prequalified as a Private Consulting Firm – North Carolina Department of Transportation

*Capacity Analysis (Freeways & Interchanges) *Interchange Modification / Justification Reports

*Capacity Analysis (Roundabouts) *Pavement Marking Plans

*Guide Sign Design - Conventional Roads *Traffic Impact Studies

WORK EXPERIENCE

OWNER AND PRINCIPAL ENGINEER

J.M. Teague Engineering, PLLC Waynesville, NC - January 2010 to present:

Since founding JMTE in 2010 as the sole principal engineer, Mark continues to lead a team of professionals in providing transportation engineering and planning throughout a multi-state area. JMTE has grown from a single person firm to 25 full time, part time, and contract employees representing professionally licensed engineers and planners, technicians, administrative support, and trainers. JMTE is divided into 4 distinct divisions: forensic engineering, transportation engineering, transportation planning, and training (JMTE Academy). JMTE's clients consist of state agencies, municipalities, attorneys, insurance companies, local governments, school systems, private engineering firms, developers, colleges, and private industry. Services include: intersection safety, traffic flow, traffic impact analyses, expert witness, risk management, forensic traffic engineering, pedestrian planning, bicycle planning, roadway maintenance, sign operation and installation, traffic signal warrant and design, work zone safety, parking lot design and operation, training, traffic calming, traffic control design and operation, sidewalk condition surveys, data collection and pavement marking operation and installation. For non-forensic projects, JMTE's primary service area includes central and western North Carolina, eastern Tennessee, South Carolina, northwest Georgia, and southwest Virginia. JMTE's forensic work stretches nationwide. JMTE averages around 100 projects each year divided among its 4 project managers.

TRANSPORTATION ENGINEERING SUPERVISOR II

North Carolina Department of Transportation, Division Thirteen, Asheville, NC May 2000 to December 2009:

Served as the Division Traffic Engineer responsible for all traffic-engineering matters in a seven-county area of Western North Carolina.

Managed the traffic services department consisting of 33 permanent employees with a five-million-dollar annual operating budget. Managed over three million dollars in annual purchase order contracts and over two million dollars in annual small construction and safety projects.

Managed the Division's Intelligent Transportation System (ITS) and Incident Management programs including: Seven Overhead Dynamic Message Boards, Two Roadway Weather Systems, a Highway Advisory Radio, 30 miles of Incident Management Patrol, Three Queue Detection Systems, a Median Crossover System, and Two Truck Detection Systems.

Conceived and developed various transportation safety projects such as traffic signals, pedestrian enhancements, intersection treatments, turn lanes, and roadway realignment. Responsible for the operation and maintenance of 600 traffic signals, 50,000 traffic signs, and pavement markings on 9,000 miles of public highway in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). Reviewed and approved traffic control, signing, traffic signal, and pavement marking plans. Assisted in roadway maintenance operations and projects such as drainage, pavement condition, crack sealing, pothole repair, and shoulder re-habilitation. Reviewed and approved developer site plans involving traffic engineering issues. Reviewed and approved Traffic Impact Studies and served as the division's Safe Route to Schools Coordinator. Conducted, reviewed, and approved traffic signal warrant studies. Evaluated and interpreted traffic engineering concerns to the media and elected officials. Provided local governments and municipalities with traffic engineering expertise. Investigated, evaluated, and responded to traffic engineering inquiries from the public and private sector. Served on various community and municipal traffic focus groups. Represented NCDOT and the North Carolina Attorney General as an expert witness.

TRANSPORTATION ENGINEER I

North Carolina Department of Transportation, Division Fourteen, Sylva, NC August 1997 to April 2000:

Served as the Assistant Division Traffic Engineer responsible for traffic-engineering matters in a ten-county area of Southwestern North Carolina.

Assisted in the development of the annual budget and planned maintenance program. Managed the traffic signal unit. Administered purchase order contracts, including the installation of traffic signals, pavement markings, and signs. Served as the skill-based pay coordinator. Administered the NCDOT Motorist Service Signing (LOGO) Program. Served as the railroad crossing pre-empt coordinator. Assisted in managing the Division's ITS program including three advisory radios and a fog detection system.

Investigated, evaluated, and responded to traffic related inquiries from public and private sector. Assisted local municipalities and governments with traffic engineering expertise. Supervised the construction, operation, and maintenance of traffic signals including one closed loop system. Assisted in the supervision of sign and pavement marking installation and maintenance. Evaluated and interpreted traffic engineering concerns to the media and elected officials. Reviewed traffic control plans. Enforced work zone and facility safety. Reviewed site plans for driveway permit issues.

TRANSPORTATION TECHNICIAN IV

North Carolina Department of Transportation, Division Eleven, North Wilkesboro, NC. July 1991 to August 1997:

Served as the Transportation Technician responsible for transportation technician and data collection matters in an eight-county area of Northwestern North Carolina.

Investigated, evaluated, and responded to traffic related inquiries from the public and private sector. Developed and administered various purchase order and division contracts including the installation of traffic signals, pavement markings, and signs. Enforced work zone safety. Coordinated project plans with

local officials and utility companies. Prepared designs for division projects. Performed safety investigations. Developed and implemented a traffic incident management plan for thirty-seven miles of interstate highway. Assisted in the design and operation of traffic signals, including two closed loop traffic signal systems. Conducted general traffic engineering studies including volume counts, delay counts, speed analyses, traffic forecasting, and highway capacity analyses. Prepared technical letters and reports.

TRAINING

- **1997** Intermediate Work Zone Training Endorsed and Facilitated by the North Carolina Department of Transportation
- **1997** Advanced Work Zone Training Endorsed and Facilitated by the North Carolina Department of Transportation
- **1999** Communication with the Media and Public Endorsed and Facilitated by the North Carolina Department of Transportation and Institute of Transportation Research and Education
- **1999** Access Management Workshop –Endorsed and Facilitated by the North Carolina Department of Transportation and Institute of Transportation Research and Education
- **1999** Fog Detection System Training –Endorsed and Facilitated by the North Carolina Department of Transportation
- **1999** Traffic Signal Systems Endorsed and Facilitated by the North Carolina Department of Transportation and the University of North Carolina at Charlotte
- 2000 Advanced Traffic Signals Endorsed and Facilitated by the North Carolina Department of Transportation and the University of North Carolina at Charlotte
- **2000** Traffic Impact Analysis Workshop Endorsed and Facilitated by the Institute of Transportation Research and Education
- **2000** Problem Solving Processed Endorsed and Facilitated by the North Carolina Office of State Personnel
- **2000** Traffic Calming Workshop Endorsed and Facilitated by the Institute of Transportation Research and Education
- **2000** Traffic Signal Maintenance Workshop Endorsed and Facilitated by the North Carolina Department of Transportation
- **2001** Highway Incident Management Endorsed and Facilitated by the North Carolina Department of Transportation and the Federal Highway Administration

- J. Mark Teague, P.E., CPM
- **2001** Emergency Response and Procedure Endorsed and Facilitated by the North Carolina Department of Transportation and the Federal Highway Administration
- **2001** Tort Liability Endorsed and Facilitated by the North Carolina Department of Transportation and the North Carolina Office of Attorney General
- **2001** Highway Capacity Manual Graduate Course Endorsed and Facilitated by North Carolina State University
- **2002** North Carolina Section Institute of Transportation Engineers Annual Conference "Guardrail Installation Prioritization"
- **2003** Modern Roundabout Design and Operation Workshop Endorsed and Facilitated by the Institute of Transportation Research and Education
- **2003** AASIDRA (Roundabout Design Software) Workshop Endorsed and Facilitated by the Institute of Transportation Research and Education and by software designers Akcelik and Associates
- **2003** NCDOT Pavement Marking Rodeo Endorsed and Facilitated by the North Carolina Department of Transportation
- 2003 North Carolina Section Institute of Transportation Engineers Annual Conference
- **2004** NCDOT Driveway Manual Workshop Endorsed and Facilitated by the North Carolina Department of Transportation
- **2004** Trip Generation Workshop Endorsed and Facilitated by the Institute of Transportation Engineers and the North Carolina Department of Transportation.
- **2004** Seven-Habits of Highly Effective People Endorsed and Facilitated by the North Carolina Department of Transportation and Franklin Covey International
- **2004** Traffic Engineering Roundtable Endorsed and Facilitated by the North Carolina Department of Transportation
- **2004** North Carolina Department of Transportation Traffic Engineering Annual Conference "School Safety and Transportation"
- **2005** AASHTO Roadside Design Guide Training Course Endorsed and Facilitated by the North Carolina Department of Transportation and the Federal Highway Administration
- **2005** Intersection Safety Workshop Endorsed and Facilitated by the North Carolina Department of Transportation and the Federal Highway Administration

- J. Mark Teague, P.E., CPM
- **2005** NCDOT Signing Rodeo Endorsed and Facilitated by the North Carolina Department of Transportation
- **2005** Pedestrian Planning and Design Workshop Endorsed and Facilitated by the North Carolina Department of Transportation
- **2005** Signalized Intersection Safety Workshop Endorsed and Facilitated by the North Carolina Department of Transportation and the Federal Highway Administration
- **2005 -** Office Politics Endorsed and Facilitated by the North Carolina Department of Transportation and the National Management Association
- **2005** Context Sensitive Solutions Endorsed and Facilitated by the North Carolina Department of Transportation
- **2005** Traffic Engineering Roundtable Endorsed and Facilitated by the North Carolina Department of Transportation
- **2005** Introduction to Negotiation Endorsed and Facilitated by the North Carolina Department of Transportation
- **2006** North Carolina Department of Transportation Traffic Engineering / Intelligent Transportation Systems Annual Conference
- **2007** Traffic Engineering Roundtable Endorsed and Facilitated by the North Carolina Department of Transportation
- **2008** Traffic Engineering Roundtable Endorsed and Facilitated by the North Carolina Department of Transportation
- **2008** Traffic Engineering Conference for Mobility and Safety Endorsed and Facilitated by the North Carolina Department of Transportation
- **2009** American Society of Civil Engineers monthly meeting "General Design and Features of Single Point Urban Interchanges
- **2009** Traffic Engineering Roundtable Endorsed and Facilitated by the North Carolina Department of Transportation
- 2009 Fraud Awareness Training Endorsed and Facilitated by the Office of Inspector General
- **2013** Complete Streets Training Endorsed and Facilitated by the North Carolina Department of Transportation
- 2013 Modern Roundabouts Training Endorsed and Facilitated by American Society of Civil Engineers

- J. Mark Teague, P.E., CPM
- **2013** Traffic Signal Design Training Endorsed and Facilitated by ASCE's Transportation and Development Institute and ASCE Continuing Education
- **2013** OTISS Innovative Methods in Expediting TIA Process Endorsed and Facilitated by Institute of Transportation Engineers Education Foundation
- **2014** Asheville's Infrastructure Improvements, Airport Road Diverging Diamond Interchange Endorsed and Facilitated by NCSITE
- 2014 NCDOT Rail Division Planning Activities; BRT Perspectives, Applications & Modeling Analysis; Radar Vehicle Detection with Four Quadrant Gate Crossing – Endorsed and Facilitated by NCSITE & NCDOT
- 2014 Real Life Challenges of Biking to Work; New NCDOT Crosswalk Marking & Pedestrian signal Guidance; NC's Bicycle & Pedestrian Counting Program - Endorsed and Facilitated by NCSITE & NCDOT
- 2014 Overview of NCDOT Statewide TMC & Operations; Future Trends of the TMC Operations & Connected Vehicles; Georgia DOT TMC Redesign to Incorporate Managed Lanes Endorsed and Facilitated by NCSITE & NCDOT
- 2014 Safety Evaluation of Flashing Yellow Arrows; Innovative 7 Practical Approaches to Analyze Road Safety; Contraflow in the Work Zone: Safety Considerations – Endorsed and Facilitated by NCSITE & NCDOT
- **2014** NTSB Efforts to Enhance Safety: Reducing Distraction & Fatigue in Transportation Endorsed and Facilitated by NCSITE
- 2014 Getting Trails on the Ground Endorsed and Facilitated by Elkin Valley Trails
- **2014** Things to Consider Prior to Land Acquisition Endorsed and Facilitated by Carolina Thread Trail Association
- **2015** Conservancy Planning for Major Appalachian Trail Projects; The Economics of Trail Projects; Engineering on the Fly; Volunteer Crews Endorsed and Facilitated by NCSITE & the Appalachian Trail Volunteer Corporation
- 2015 Traffic Management at Special Events Endorsed and Facilitated by NCSITE
- 2015 Adventure on Two Wheels Endorsed and Facilitated by NCSITE
- 2015 Attracting Business & Visitors Endorsed and Facilitated by NCSITE
- **2015** Workplace Safety Polices, Practices & Training Endorsed and Facilitated by J.M. Teague Engineering & Planning

- **2015** Transportation Planning Performance Measurement using GIS Endorsed and Facilitated by NCAMPO
- **2015** On-Board Surveying & Simulation Modeling for the Downtown Raleigh Bus Facilities Master Plan Endorsed and Facilitated by NCAMPO
- 2015 Design & Implementation of Protected Bike Lanes Endorsed and Facilitated by NCAMPO
- **2015** Use of GIS in Evaluation of Transportation Projects for Title VI/Environmental Justice Endorsed and Facilitated by NCAMPO
- 2015 Land Use Forecasting Models for Small Areas in NC Endorsed and Facilitated by NCAMPO
- 2015 Roundabouts & Dedicated Trucks Slip Lanes Endorsed and Facilitated by NCAMPO
- 2015 Modeling Military Base Travel Endorsed and Facilitated by NCAMPO
- 2015 SPOT and P3.0 Lessons Learned Endorsed and Facilitated by NCAMPO
- 2015 State & Federal Transportation Policy & Legislative Update Endorsed and Facilitated by NCAMPO-
- **2016** Business Entrepreneurs Leadership Certification 10,000 Small Business Babson College, Wellesly, MA 14-week course
- 2016 NCSITE Eliminating unnecessary traffic noise, 2016 NCSITE annual conference presented by NCDOT
- **2016** NCSITE How to Improve unsignalized intersections, 2016 NCSITE annual conference presented by Patriot Engineering
- **2016** NCSITE Autonomous Vehicles, 2016 NCSITE annual conference presented by Princeton University and AECOM
- **2017** A Closer Look at Road Diets presented by ASCE
- **2017** Greenway Plans from Concept to Construction presented by Destination by Design and NC State University NC Growing Greenways Conference
- **2017** WNC Trails and Greenways Past, Present and Future presented by UNC Ashville and Equinox and NC State University NC Growing Greenways Conference
- **2017** Engaging the Public and Corporate Citizens in Greenway Support presented by Mecklenburg County Parks and Recreations and NC State University -NC Growing Greenways Conference
- **2017** The Effects of Demand-Responsive Parking on Transit Usage and Congestion: Evidence from SF Park Webinar Portland State University.

- **2017** Safety Effectiveness of Pedestrian Crossing Treatments Webinar Portland State University.
- **2017** NCSITE A brave New Word of Connected Autonomous Vehicles by Larry Head.. 2017 NCSITE Annual Conference.
- 2017 NCSITE Unique Signal Analysis with Microsimulation by Stuart Samberg, Transit Signal Priority in a Constrained Operating Environment by Bailey Lozner, Automated Traffic Signal Performance Measures: Pilot Testing in NC by Thomas Chase. 2017 NCSITE Annual Conference.
- 2017 NCSITE Vision Zero in North Carolina by Tracy Anderson, Fatal and Serious Injury Trends in NC: Incorporating Safety into the NEPA Planning Process by Chris Oliver, PE and Brian Murphey PE, Resources for Road Safety Professionals: FHWA Safety Textbook, CMF Clearinghouse and what to expect in the HSM2 by Daniel Carter. 2017 NCSITE Annual Conference.
- **2017** Engineering Treatments and Design Development Strategies for Creating Safe Routes to Schools by Joel Crandford and Johnson, Sponsored by ASCE.
- 2018 NCSITE The Great American Eclipse in North Carolina: Planning for the Unplannable by Nick Breedlove, David Uchlyama, Chad Franklin, Bailey Harden and Mike Reese, Contraflow Not Contraflow, Case study of enhanced left turns interchanged design by Craig Scheffler, PE, Innovation and collaboration to keep everyone moving by Craig Schffler, PE, Intersection control evaluation tool for Georgia by Jonathan Reid PE, Vision Zero Greensboro by Lydia McIntyre, EI and Asheville Pedestrian and Bicycle Safety Evaluation by Andrew Topp, PE, Connecting Communities and Modes for a Greener Bull City by Todd Delk, PE, Linking Land Use and Transportation in Asheville by Todd Okolichany, How Drones are disrupting Transportation Data Collection by Quality Counts. Sponsered by NCSITE Mid-Year Meeting.
- **2018** Electric Vehicles: A Primer for Transportation Professionals Sponsored by WTS Western North Carolina Chapter.
- 2018 NCSITE -Transportation Resources for Livable Communities by Leslie Meehan, Using Innovative Signal Timing Techniques for Bikes at Intersection/Implementation a school zone flashing beacon system in a small town, Optimization Speed Advisory System, Bringing Turbo Roundabouts to the US/a regional solution for local corridor by Johnathan Reid, PE, Jeff Weller, Sam Well and Joseph Hummer, PhD, PE, Design issues and lessons learned. Sponsored by NCSITE 2018 Annual Meeting.
- **2018** ASCE Complying with MUTCD Traffic signing for Horizontal Curves by James W. Ellison, PE, Regulatory and Warning Signs, providing Answers to Common Citizen Request by Kevin Chang, PhD, PE. Sponsored by ASCE.
- 2018 ASCE Citizen Traffic Related Request by Bryant Ficek, PE, PTOE. Sponsored by ASCE.
- **2019** ASCE- Getting started with hot lanes by Mark Hallenbeck. Sponsored by ASCE.

- **2019** ASCE Innovative Bicycle Facility Treatments by Charlie Alexander, PE and Rick Plenge, PE, PTOE. Sponsored by ASCE.
- **2019** ASCE Avoiding Round about Design Failures: An interactive approach to Identifying Error and Finding Solutions, Nazir Lalani, PE. Sponsored by ASCE.
- **2019** Building our City with Jeff Speck. Sponsored by Collider non-profit.
- 2019 NCSITE Annual Meeting 2019: A Safe Systems Approach to Roadway Safety; Building the Future, and Overview of Transportation Funding; Looking to the future including "Triad Regional ITS" "Coordinated Adoptive Ramp Metering", and "Downtown Parking"; Pedestrians, including "Pedestrian Countermeasure Evaluations, "Collaborative Approaches to Advance Complete Streets" and "Level of Service Evaluation". Sponsored by NCSITE.
- **2019** ASCE Traffic Studies for Implementing Short Term and Long-Range Roadway Improvements, James W. Ellison, PE. Sponsored by ASCE.
- **2020 –** ASCE Marketing 101, Project Team and People Management Part II of II, Setting and Managing Speed Zones, Complete Streets, Traffic Volume Data Collection, If you haven't planned it; you can't control it. Sponsored by ASCE.
- 2020 Babson Executive Education How to Identify Opportunities in a Crisis, Entrepreneurial Leadership in a Volatile World, How Crises Fuel Creativity and Innovation. Sponsored by Babson College, 10,000 SB
- **2020 –** NCSITE Annual Meeting Advanced Technology in Transportation, Traffic Engineering, NCDOT IPD, Current Events Affecting Transportation. Sponsored by NCSITE.

TECHNICAL PRESENTATIONS

- **2002** Presenter North Carolina Section Institute of Transportation Engineers Annual Conference "Guardrail Installation Prioritization"
- **2004** Presenter North Carolina Department of Transportation Traffic Engineering Annual Conference "School Safety and Transportation"
- **2006** Moderator North Carolina Department of Transportation Traffic Engineering / Intelligent Transportation Systems Annual Conference
- **2009** Presenter American Society of Civil Engineers monthly meeting "General Design and Features of Single Point Urban Interchanges
- 2012 Presenter Rutherford County Tourism Development Authority: Alliance Conference
- 2013 Presenter Rutherford County Tourism Development Authority: Alliance Conference

- 2013 Presenter 6th Annual Carolina Thread Trail Forum, Trail Signs, Signals, and Pavement Markings
- 2014 Presenter 7th Annual Carolina Thread Trail Forum, Courting Your Bicycle and Pedestrian Facilities
- 2014 Presenter NC Main Street Managers, The Basics of Complete Streets
- 2014 Presenter Town of Clyde, NC MUTCD Training
- 2014 Presenter Land of Sky Regional Council, NC Sign Reflectivity Training
- **2015** Presenter NCAMPO Courting Your Bicycle and Pedestrian Facilities from a Forensic Engineering & Planning Perspective
- 2015 Presenter Rotary Club, Waynesville, Roundabouts as a Tool
- **2015**—Presenter NCSITE Annual Meeting, Asheville, NC, Armored Car Movie Making a Movie: A view from the Road
- **2018** Presenter -NCSITE Annual Meeting, Raleigh, NC, Planning for the World to Visit, Traffic and transportation planning challenges for the 2018 World Equestrian Games
- **2018** Presenter IRWA (International Right of Way Association) Chapter 31, Asheville, NC Transportation Issues
- **2021** Presenter WTS WNC Chapter, Signals and Markings and Lawyers Oh No! The MUTCD from a forensic Perspective.

TECHNICAL COMMITTEES

- **2001** Transportation Technician Skill Based Pay Committee North Carolina Department of Transportation. Participated in this committee to develop a new pay scale for technicians based on their abilities and skills.
- 2001 Team Leader "NCDOT Guardrail Prioritization Task Force" Led a task force comprised of elected officials, law enforcement officials, and NCDOT department heads to develop and implement a Guardrail prioritization program. The system is based on a point system where potential guardrail locations are prioritized with respect to crash history, traffic volume, roadway geometrics, school bus use, and roadway hazards. Several NCDOT divisions across the state have implemented this program.
- 2004 Late Night Flash Study Committee North Carolina Department of Transportation. Participated in this committee to develop new and revised statewide practices on the use of late-night flash with traffic signals.

- **2005** Incident Management Detour Signing Study Committee North Carolina Department of Transportation. Participated in this committee to develop standard practices on the use of detour signing for the NCDOT incident management program.
- **2006** Transportation Supervisor Skill Based Pay Committee North Carolina Department of Transportation Participated in this committee to develop a new pay scale for transportation supervisors based on their abilities and skills.
- **2007** Traffic Signal Preventative Maintenance Task Force North Carolina Department of Transportation. Participated in this task force to develop a cost effective and comprehensive traffic signal maintenance program for the NCDOT and local governments.

PROJECT EXPERIENCE - TRAFFIC IMPACT ANALYSES

Various Locations in Western North Carolina, 1997-2009 - Prepared and presented over 100 traffic impact analyses for various subdivisions and developments. (NCDOT)

River Ridge Shopping Center (Super Wal-Mart), 2004 - Asheville, NC - Extensive site plan, traffic signal system, access management, and traffic impact analysis evaluation for 1,000,000 SF mixed use development. (NCDOT)

Biltmore Lake, 2004 - Enka, NC - Extensive site plan, traffic signal system, access management, and traffic impact analysis evaluation for 1500 unit / mixed use upscale subdivision and development. (NCDOT)

The Cliffs at Walnut Cove, 2005 - Asheville, NC - Extensive site plan, traffic signal system, access management, and traffic impact analysis evaluation for 1000-unit upscale subdivision. (NCDOT)

Queen's Gap, 2005 - McDowell County, NC - Extensive site plan and traffic impact analysis evaluation for 1000-unit upscale subdivision. (NCDOT)

South Ridge Shopping Center (Target, Lowes), 2005 - Asheville, NC - Extensive site plan, traffic signal system, and traffic impact analysis evaluation for 500,000 SF mixed use. (NCDOT)

Target Shopping Center, 2005 - Asheville, NC - Extensive site plan, traffic signal system, access management, and traffic impact analysis evaluation for 200,000 SF mixed use development. (NCDOT)

The Ramble, 2007 - Arden, NC - Extensive site plan, traffic signal system, and traffic impact analysis evaluation for 600 unit / mixed use upscale subdivision and development. (NCDOT)

"1780", 2007- Lake James, NC - Extensive site plan and traffic impact analysis evaluation for 1000 Unit Upscale Subdivision. (NCDOT)

Hotel Indigo, 2007 - Asheville, NC - Extensive site plan and traffic impact analysis evaluation for large upscale hotel. (NCDOT)

North Ridge Shopping Center (Lowes, Super Wal-Mart), 2008 - Weaverville, NC - Extensive site plan, traffic signal system, access management, and traffic impact analysis evaluation for 500,000 SF mixed use development. (NCDOT)

Wal-Mart Shopping Center, 2008 - Fletcher, NC - Extensive site plan, traffic signal system, and traffic impact analysis evaluation for 200,000 SF mixed use development. (NCDOT)

The Cliffs at High Carolina, Swannanoa, NC, 2008 - Extensive site plan, traffic signal system, access management, and traffic impact analysis evaluation for 1000-unit upscale subdivision. (NCDOT)

Grand Bohemian Hotel, 2008 - Asheville, NC - Extensive site plan, traffic signal system, and traffic impact analysis evaluation for large upscale hotel. (NCDOT)

Henredon Shopping Center (Home Depot, Super Wal-Mart), 2009 - Morganton, NC - Extensive site plan, traffic signal system, and traffic impact analysis evaluation for 500,000 SF mixed use development. (NCDOT)

Sugar Hill Shopping Center (Super Wal-Mart), 2009 - Marion, NC - Extensive site plan, traffic signal system, and traffic impact analysis evaluation for 300,000 SF mixed use. (NCDOT)

Various Locations in Western North Carolina, 1997-2009 - Evaluated over 200 small scale commercial traffic impact analyses evaluations for various gas stations, restaurants, retail stores, grocery stores, etc. Vary in size up to 100,000 SF. (NCDOT)

Ruth's Chris Steakhouse, 2011 - Asheville, NC - Prepared a traffic impact analysis including level of service, data collection, access management, and queue analysis. (JMTE 0049)

Kenilworth Homeowner Association, 2011 – Asheville, NC – Prepared a traffic impact analysis for the impacted residents and property owners in addressing traffic related matters associated with the proposed Caledonia Apartments. (JMTE 0097)

White Oak Grove Apartment Complex, 2011 - Asheville, NC - Prepared a traffic impact analysis for a 100-unit Apartment Housing project including level of service, access management, data collection, and queue analysis. (JMTE 0114)

Walgreens Drug Store, 2011 - Rutherford College, NC - Prepared a traffic impact analysis including level of service, data collection, and queue analysis. (JMTE 0116)

The Cottages at Boone Apartment Complex, 2011 - Boone, NC - Prepared a traffic impact analysis for an 800-unit University Housing project including level of service, data collection, access management, and queue analysis. (JMTE 0124)

Historic Biltmore School Redevelopment, 2012 - Asheville, NC - Prepared a traffic impact analysis including level of service, access management, data collection, and queue analysis. (JMTE 0137)

Airport Road Development, 2012 - Asheville, NC - Prepared a traffic impact analysis including trip generation, trip distribution, intersection delay, vehicle queue, and intersection capacity. (JMTE 0138)

Hunt Hill Apartment Complex, 2012 - Asheville, NC - Prepared a traffic impact analysis including level of service, data collection, access management, queue analysis and traffic signal warrant study. (JMTE 0139)

Discount Retail Store, 2012 - LaGrange, GA - Prepared a traffic impact analysis for a proposed 9,100 square foot retail space including level of service, data collection, and queue analysis. (JMTE 0168)

Discount Retail Store, 2012 - Mountville, GA - Prepared a traffic impact analysis for a proposed 9,100 square foot retail space including level of service, access management, data collection, and queue analysis. (JMTE 0169)

AB Tech Allied Health Building, 2012 - Asheville, NC - Prepared a traffic impact analysis for a 181,000-square foot mixed use building containing classroom space, office space, student laboratory space, auditorium, public areas, and a children's daycare. TIA included level of service, queue analysis, access management, and data collection. (JMTE 0170)

Westgate Terrace, 2012 - Franklin, NC – Prepared a traffic impact analysis for a 60-unit apartment complex including level of service, data collection, and queue analysis. (JMTE 0172)

Shelby NC Traffic Study, 2012 - Shelby, NC – Prepared traffic impact analysis and simulation model for a lane reduction project in the City of Shelby, North Carolina. The purpose of this study was to determine the impact of the proposed lane modifications on existing traffic patterns. (JMTE 0175)

Town of Summerfield – US 220 Corridor, 2013 – Summerfield, NC - Prepared a traffic impact analysis for the Town of Summerfield that had identified several potential traffic and access related concerns associated with the final roadway geometrics and project build-out. (JMTE 0179)

Middle Fork Falls Resort, 2013 – Boone, NC - Prepared a traffic impact analysis for a mixed-use resort being planned on US 321 between Tweetsie Railroad Amusement Park and the Mystery Hill Attraction, near Blowing Rock. The resort consists of retail space, an indoor water park, lodging facilities, and a restaurant. The anticipated site generated traffic will directly connect and be networked onto existing streets. (JMTE 0193)

University Heights at Western Carolina University, 2013 - Cullowhee, NC- Prepared a traffic impact analysis for a 504-unit student housing complex including level of service, data collection, traffic control plans, and queue analysis. (JMTE 0207)

Retail Store, 2013 - Horseshoe, NC - Prepared a traffic impact analysis for a new retail development including level of service, data collection, and queue analysis. (JMTE 0214)

River Arts District (RAD) Lofts, 2013 – Asheville, NC - Performed a traffic impact analysis for a proposed mixed-use development in downtown Asheville. The study area included heavy pedestrian and bicycle traffic, and access management, along with plans for retail, parking, and residential development. (JMTE 0217)

Hendersonville Community Co-Op, Hendersonville, NC, 2014 - Supervised a traffic impact analysis for the proposed relocation that consists of 11,400 square feet of grocery store, as well as 1,800 square feet of office space. (JMTE 0236)

New Hope Armstrong Peninsula Development, 2014 – Lake Wylie, NC - Supervised a traffic impact analysis for a proposed mixed-use development with 810 units of single-family homes, 100 units of multifamily homes, and 30 acres of neighborhood retail. The site encompasses 356 acres of the Daniel Stowe Botanical, which is part of the proposed site plan. (JMT 0243)

Old Coggins Place, 2014 – Buncombe County, NC - Supervised a traffic impact analysis for a proposed housing development that revised the overall site plans that called for a reallocation of proposed land uses and the addition of a site access point. (JMTE 0248)

Robinson Church Road Charter School, 2014 – Charlotte, NC - Supervised a traffic impact analysis for a proposed educational facility. Preliminary development plans call for a K-8 Charter School with approximately 445 student enrollments. (JMTE 0254)

Discount Retail Store, 2014 – Morristown, NC - Supervised a traffic impact analysis for a new retail development at the intersection of West Andrew Johnson Highway (11E / TN 34) @ Archer Circle in Morristown, TN. (JMTE 0256)

Harrisburg ACE Charter School, 2014 – Harrisburg, NC - Supervised a traffic impact analysis for a proposed educational facility. Preliminary development plans call for a K-8 Charter School with approximately 540 student enrollments. (JMTE 0271)

Brooks Engineering, Boone University Housing, 2014 - Boone, NC - Supervised a traffic impact analysis for a 448-bedroom proposed student housing development. The site consists of 98 2-bedroom units and 84 3-bedroom units. (JMTE 0285)

Brevard Mixed Use Development, 2014 - Supervised a traffic impact analysis for a development with plans that call for a mix of restaurants, retail, service, and student housing land uses on each side of Asheville Highway (US 64/276). (JMTE 0286)

Monarch at WCU, 2014 – Cullowhee, NC - Supervised a traffic impact analysis for a 170 unit / 542-bedroom proposed student housing development. (JMTE 0306)

City of Claremont, Claremont Apartments, 2014 - Supervised the initial evaluation of the operational and roadway safety impact for a proposed 88-unit apartment complex. (JMTE 308)

Lake Wylie Housing Development, York County, 2014 - Supervised a traffic impact analysis for a proposed housing development that consists of 31 buildings / 155-unit single-level apartment. (JMTE 0311)

Barr Road, Kannapolis, NC, 2014 - Supervised a traffic impact analysis for a proposed housing development that consists of a multi-building / 170-unit single-level apartments. (JMTE 0320)

Poplar Tent Road, Concord, NC, 2014 - Supervised a traffic impact analysis for a proposed housing development that consists of a multi-building / 110-unit single-level apartment. (JMTE 0321)

Biltmore Baptist Church, Arden, NC, 2014 - Supervised a traffic impact analysis for a proposed campus expected to serve between 800 and 1000 church goers. (JMTE 0364)

Leonard Avenue, Albemarle, NC, 2014 - Supervised a traffic impact analysis for the City of Albemarle to analysis the current conditions and compare future conditions of Leonard Avenue in order to determine needed roadway operational and safety improvements. This traffic study made recommendations to ensure the overall roadway network continues to operate within an acceptable level of service from both an operational and safety aspect. (IMTE 0365)

City of Jacksonville, NC, 2014 - provides the City of Jacksonville with on-call Transportation Impact Analysis services for proposed developments within the City of Jacksonville planning jurisdiction. (JMTE 0373)

Life Care, Arden, NC, 2014 - Supervised a traffic impact analysis for a proposed development consisting of assisted living housing, skilled nursing facility, and independent living housing. The assessment evaluated possible access points, determine potential auxiliary turn lane requirements, and determine the likelihood of traffic signal warrants being met. (JMTE 0379)

Solid Waste/Recycling Transfer Center, Buncombe County, NC, 2015 - Supervise a traffic impact study for a proposed 52-acre Solid Waste/Recycling Transfer Station to determine the impact of site traffic to the surrounding roadway network. (JMTE 0396)

Cedar Terrace Apartments, Hendersonville, NC, 2015 – Supervised a traffic impact analysis for a proposed 80-unit apartment complex. The purpose of the study was to determine the impact of the anticipated traffic associated with the development. including trip generation, trip distribution, vehicle speeds, traffic volumes, vehicle classification, congestion, and roadway level of service. (JMTE 0402)

Boiling Springs Apartment, Boiling Springs, SC, 2015 - Supervised an initial evaluation of the operational and roadway safety impact of a 64-unit proposed apartment complex. (JMT 0403)

Perkinsville Multi-Family Development, Boone, NC, 2015 - Supervised Prepared a traffic impact analysis for a multi-family housing complex that consists of 9 buildings containing a total of 184 units, 7 garages, and a leasing office. (JMT 0410)

Cemex - Knoxville Cement Plant, Knoxville, TN, 2015 - Supervised a traffic analysis and safety audit to provide the Cemex - Knoxville Cement Plant with the findings related to improving the awareness of interactions between pedestrians and vehicles throughout the facility. (JMT 0425) **Veterans Administration Fisher House**, Charleston, SC, 2015 - Supervised a traffic impact analysis to determine the impact of a single two-story building containing 16 suites with bath facilities. The residents of the proposed Fisher House will be the families of the veterans being treated at the Ralph H. Johnson VA Medical Center. (JMT 0441)

Cemex - Louisville Cement Plant, Louisville, KY, 2015 - Supervised a traffic analysis and safety audit to provide the Cemex - Louisville Cement Plant with the findings related to improving the awareness of interactions between pedestrians and vehicles throughout the facility. (JMT 0448)

Cemex - Fairborn Cement Plant, Fairborn, OH, 2015 - Supervised a traffic analysis and safety audit to provide the Cemex - L Cement Plant with the findings related to improving the awareness of interactions between pedestrians and vehicles throughout the facility. (JMT 0452)

FedEx Ground Offsite Tractor/Auto Parking, Charlotte, NC, 2015 - Supervised a traffic analysis to determine the impact of a proposed offsite tractor/auto parking facility consisting of 247 new tractor parking spaces and 80 new passenger car parking space and will be adjacent to the existing FedEx Ground facility. There will be a two-lane site access point (1 ingress lane / 1 egress lane). Current development plans also proposed an additional separate parking facility adjacent to the tractor / passenger car parking facility that will consist of 60 new trailer parking spaces with a two-lane site access point (1 ingress lane / 1 egress lane) connecting to the proposed tractor / passenger car facility. (JMT 0465)

Brevard Academy, Transylvania County, NC, 2016 - Supervised a traffic analysis to determine the impact of a proposed charter school consisting of 500 students. School officials anticipate 3-5 buses will be in operation for student pick-up / drop-off, with two-lane site ingress for passenger cars and two-lane full access for passenger car egress and school bus ingress / egress. (JMT 0477)

Morristown Dollar General, Morristown, NC, 2016 - Supervised a traffic analysis to determine the impact of a proposed 9,100 SF retail store in Morristown, Tennessee along W. Andrew Johnson Hwy. (JMT 0256)

Long Shoals Village, Asheville, NC, 2016 - Supervised a traffic analysis to determine the impact of a proposed mixed-use development consisting of 8,734 square-feet of shopping center (retail), two 15,000 square-foot office buildings, four restaurants, and a vehicle service station. (JMT 0506)

Commerce Street Assessment, Town of Waynesville, NC. 2016 – Reviewed and performed analysis of crash data, did distance measurement, field observation, speed study, 13 hour turning movement, preliminary survey, traffic calming assessment, conceptual drawings, and engineering report.

TIA for Retail Development, Sapphire Lake, NC. 2016 – Supervised and managed the development of a traffic impact analysis including: intersection modeling, access management, sight distance analysis, trip generation, trip distribution, and data collection. Work included close collaboration between NCDOT, the developer, and the local property owners. Analyzed site for location, size and sight distance. Identified alternative design configurations and presented to NCDOT as options. Prepared and presented a final TIA report to NCDOT and the client.

Long Shoals Village, Asheville, NC. 2018 – JMTE was asked to perform a traffic signal warrants analysis, traffic impact analysis, auxiliary turn lane warrant analysis, a sight distance analysis, and a traffic signal design for a large development along a major corridor. The unique element of this project was the order of analysis as it did not follow the typical method. A traffic signal plan that included the required right turn lane. Because of the needed mitigation along the state right of way, a reimbursable agreement was prepared that allowed the client to perform the necessary work and for the DOT to properly review and inspect the traffic signal design (JMTE 0596)

Various Locations in Western North Carolina, presently – Oversight of all traffic impact analyses for various subdivisions and developments. (JMTE)

PROJECT EXPERIENCE - TRAFFIC SIGNAL

Closed Loop Traffic Signal System - US 421, 1994 - Wilkesboro, NC - Project manager for the implementation of a 7-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. One of the three original closed loop traffic signal systems in North Carolina. (NCDOT)

Time of Day Traffic Signal System - Main Street, 1998 - Sylva, NC - Project manager for a metal pole / mast arm upgrade and modification of a 3-signal time of day signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Closed Loop Traffic Signal System - US 276 (Russ Avenue), 1998 - Waynesville, NC - Project manager for the implementation of a 6-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Time of Day Traffic Signal System - Main Street (US 74 Business), 2002 - Forest City, NC - Project manager for a metal pole / mast arm upgrade and modification of a 4-signal time of day signal system with pedestrian features. Included evaluating system timing, supervising construction, and field modifications. (NCDOT)

Closed Loop Traffic Signal System - Merrimon Avenue (US 25), 2002 - Asheville, NC - Project manager for the implementation of a 7-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Closed Loop Traffic Signal System - Tunnel Road (US 70 / US 74A), 2003 - Asheville, NC - Project manager for the implementation of a 12-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Time of Day Traffic Signal System - Downtown Central Business District (NC 18, US 70, US 64), 2003 - Morganton, NC - Project manager for a metal pole / mast arm upgrade and modification of a 15-signal time of day signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Closed Loop Traffic Signal System - Patton Avenue (US 19 / 23), 2004 - Asheville, NC - Project manager for the implementation of an 8-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Closed Loop Traffic Signal System - Hendersonville Road (US 25), 2005 - Asheville, NC - Project manager for the implementation of a 22-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Closed Loop Traffic Signal System - US 70, 2005 - Valdese, NC - Project manager for the implementation of a 7-signal closed loop signal system with pedestrian features. Included evaluating system timing,

supervising construction, and field design modifications. Used state of the art radio communication – First time use in North Carolina. (NCDOT)

Closed Loop Traffic Signal System - Downtown Central Business District (US 74, US 25), 2006 - Asheville, NC Project manager for a metal pole / mast arm upgrade and modification and the implementation of a 21-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Closed Loop Traffic Signal System - Airport Road (NC 280), 2009 - Asheville, NC - Project manager for the implementation of an 8-signal closed loop signal system with pedestrian features. Included evaluating system timing, supervising construction, and field design modifications. (NCDOT)

Traffic Signal Warrant Studies - Various Locations in Western North Carolina, 1997-2009 - Performed over 500 official traffic signal warrant studies on primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Isolated and System Traffic Signal Review - Various Locations in Western North Carolina, 1997-2009 Performed over 800 official traffic signal design, timing, and operation evaluations on primary and secondary roadways in accordance with MUTCD guidelines. Included actuated traffic signals, pre-timed traffic signals, full-time flashers, and actuated flashers. (NCDOT)

Traffic Signal Design – Upgrade Existing Signal - US 176 (Spartanburg Highway) Hendersonville Co-op, 2014, Revised traffic signal design for intersections following guidelines, revised Geometric plan, modifications such as new loop detectors, new signal heads, signal timing, updated phasing and clearance interval modifications and revised electrical plans.

Traffic Signal Design – Upgrade Existing Signal - Julian Road @ Summit Park Drive, City of Salisbury NC – Summit Park 2014, Revised traffic signal design for intersection, revised geometric plan to incorporate an addition of a U-turn Lane and any modifications such as new loop detectors, new signal heads, signal timing, updated phasing and clearance interval modifications and revised electrical plans.

Traffic Signal Design (Geometric & Electrical) - Buffalo Trail (TN 343) @ N. Liberty Hill Drive City of Morristown, TN 2014. Prepare and submit a number of traffic signal plan packages to the City of Morristown and TDOT for approval. Geometric plan prepared incorporating the addition of a new westbound approach and any additional modifications such as loop detectors, signal heads, signal timing, updated phasing and clearance interval modifications.

Traffic Signal Design, proposed Traffic Signal upgrade (Geometric & Electrical) - NC 280 (Airport Road) @ McKenna Road, Arden, NC 2015. Prepared an updated signal plan to accommodate a westbound approach and movements associated with a proposed development. The addition of a northbound left turn lane to be incorporated into the phasing design.

Traffic Signal Designs - SOF Battalion Operations Facility and SOF Intelligence Training, Fort Bragg, NC 2016. Completion of three traffic signals, traffic counts, signal geometrics, electrical, structural design for the installation design for the intersection of the new roads at Tora Bora Boulevard and Urban Freedom

Way; three-way intersection of African Lion Boulevard and Urban Freedom Way and signal design for the expanded intersections at Ardennes and Zabitosky Roads.

Traffic Signal Design (Geometric and Electrical) - Eastfield Road @ Browne Road, City of Charlotte, NC – Mallard Creek Academy 2016. Update traffic signal design, updated geometric plan to incorporate the addition of surface improvements and any additional modifications such as loop detectors, signal heads, signal timing, phasing and clearance interval modifications.

Traffic Signal Design (Geometric and Electrical) - Natalie Commons Drive @ NC 16 Business, Denver, NC Shinnville Ridge Partners, LLC 2017. Geometric plan to incorporate signal pole location, signal cable, guy wires, loop detectors, signal heads, signal timing, phasing and clearance interval calculations.

Burke County Mountain View School – 2017–2019 Traffic signal installation and roadway improvements, Bouchelle Street and Sanford Drive, Morganton, NC. JMTE was asked to review for accuracy and confirm the recommended recommendation from the governing agency's previously conducted traffic impact analysis for the site. As part of the study, JMTE conducted several turn lane warrant analyses and a traffic signal warrant analysis. The recommended mitigation was 2 auxiliary turning lanes and a traffic signal. JMTE managed and inspected the turn lane construction and performed work on the traffic signal installation to include bid solicitation, construction inspection, and observation and administration of the traffic signal and roadway improvements.

PROJECT EXPERIENCE - INTELLIGENT TRAFFIC SYSTEMS (ITS)

Fog Detection - I-40, 1998 - Canton, NC - Project manager for the installation of a technologically advanced fog detection system including four overhead dynamic message signs and three visibility sensors. Included evaluating system integrity, supervising construction, and field design modifications. First time use in North Carolina. (NCDOT)

Highway Advisory Radio - I-26, 1999 - Polk County, NC - Project manager for the installation of a highway advisory radio at this key interstate location. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Highway Advisory Radio - I-40 / US 74, 1999 - Clyde, NC - Project manager for the installation of a highway advisory radio at this key interstate location. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Median Crossover Detection System - I-26, 2003 - Asheville, NC - Project manager for the installation of a median crossover detection system including special interstate signing. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Fog Detection - I-26, 2003 - Mars Hill, NC - Project manager for the installation of a fog detection system including special interstate signing and eight visibility sensors. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Vehicle Queue Detection System - I-26, 2005 - Asheville, NC - Project manager for the installation of a vehicle queue detection system including special interstate signing and two speed sensors. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Vehicle Queue Detection System - I-240, 2007 - Asheville, NC - Project manager for the installation of a technologically advanced vehicle queue detection system including special interstate signing and eight speed sensors. Evaluated system integrity, supervised construction, and field design modifications. (NCDOT)

Truck Speed Detection - I-40, 2007 - Old Fort, NC - Project manager for the installation of a technologically advanced truck speed detection system including special interstate signing and three speed sensors. Included evaluating system integrity, supervising construction, and field design modifications. First time use in North Carolina. (NCDOT)

Fog Detection - I-40, 2007 - Old Fort, NC - Project manager for the installation of a fog detection system including special interstate signing and six visibility sensors. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Dynamic Message Signs - I-40 / I-240 / I-26, 2007 / 2008 - Asheville, NC - Project manager for the installation of seven overhead dynamic message signs on specified interstate corridors. Included evaluating system integrity, supervising construction, and field design modifications. Two separate projects. (NCDOT)

Video Detection - I-40 / I-240 / I-26, 2007 / 2009— Asheville, NC - Project manager for the installation of four video detectors on specified interstate corridors. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

Highway Advisory Radio - I-40 / I-240 / I-26, 2009 - Asheville, NC - Project manager for the installation of a highway advisory radio at this key interstate junction. Included evaluating system integrity, supervising construction, and field design modifications. (NCDOT)

PROJECT EXPERIENCE - TRAFFIC CONTROL PLAN

I-26, 2008 - Asheville, NC - Designed, developed, and implemented a traffic control plan and detour route plan for an emergency interstate closure – duration one week. (NCDOT)

I-40, 2009 - Asheville, NC - Designed, developed, and implemented a traffic control plan and detour route plan for an emergency interstate closure – duration five months. Included

Tennessee Department of Transportation, Virginia Department of Transportation, and South Carolina Department of Transportation. (NCDOT)

I-240, 2009 - Asheville, NC - Designed, developed, and implemented a traffic control plan and detour route plan for a planned bridge replacement – duration one week. (NCDOT)

SR 1001, 2009 - Rhodhiss, NC - Designed and developed a traffic control plan and detour route plan for a planned bridge replacement – duration six months. (NCDOT)

US 19E, 2009 - Spruce Pine, NC - Designed, developed, and implemented a traffic control plan and detour route plan for a planned bridge replacement – duration two months. (NCDOT)

Various Routes in Western North Carolina, 1997-2009 - Designed, developed, and implemented over 200 small scale traffic control plans and detour route plans for typical small-scale construction projects, maintenance projects, bridge projects, and traffic control device implementation projects. (NCDOT)

Traffic Control and Incident Management Plan - I-26 / I-240 / I-40, 2009 - Western NC - Designed, developed, and implemented a large scale and region wide incident management and traffic control plan for 120 miles of various interstate. (NCDOT)

Porsche Television Commercial, 2012 - Graham County, NC - Designed and implemented the traffic control plan for the filming of a Porsche commercial. Plan included all signs and message boards, flaggers, law enforcement and all permitting / submittals for NCDOT and Forest Service. (JMTE 0156)

Three Moose Village Apartments - University Heights, 2013 - Western Carolina University, NC - Designed and prepared a traffic control plan for a large student housing project. (JMTE 0207)

NC 105, 2014 - Boone, NC - Designed and prepared a traffic control plan for access connection associated with a large student housing project. (JMTE 0285)

Armored Car Productions, 2014, - Different locations in Buncombe County — Developed a Traffic Management Plan for closure of highways for the filming of the movie "Mastermind". Collaborated with NCDOT, the City of Asheville, and local law enforcement for permitting, detouring, and safety of motorist.

Area Wide Protective, 2017 to present – Review each TCP and collaborated with NCDOT regarding the specific details of each work zone. After review and updates each plan is sealed. Traffic Control Plans in North Carolina, South Carolina, Virginia, Kentucky, and Tennessee.

PROJECT EXPERIENCE - TRAFFIC OPERATION AND SAFETY

School Site Review - New Middle School, 2004 - Morganton, NC - Conducted a comprehensive review for three proposed school sites including crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, and capacity analyses. (NCDOT)

School Site Review - New Middle School, 2004 - Weaverville, NC - Conducted a comprehensive review for a proposed school site including crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, and capacity analyses. (NCDOT)

School Site Review - New Elementary School, 2007 - Arden, NC - Conducted a comprehensive review for a proposed school site including crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, and capacity analyses. (NCDOT)

Speed Limit Review - Various Locations in Western North Carolina, 1992–2009 - Conducted over 800 official speed limit reviews on interstate, primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

School Operational Review - Various Locations in Western North Carolina, 1992-2009 - Conducted over 50 small scale school traffic operational reviews including crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, and capacity analyses. (NCDOT)

Stop Sign Review - Various Locations in Western North Carolina, 1997-2009 - Conducted over 600 official stop sign placement and operation reviews on primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Guide and Warning Sign Review - Various Locations in Western North Carolina, 1997-2009 - Conducted over 5,000 warning sign and guide sign placement and operation reviews on interstate, primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Parking Study - Various Locations in Western North Carolina, 1992-2009 - Conducted over 200 official parking studies on primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Sign Operation and Reflectivity Review - Various Locations in Western North Carolina, 1997-2009 - Performed an annual sign operation and reflectivity review on 2000 miles of interstate, primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Pavement Marking Operation and Reflectivity Review - Various Locations in Western North Carolina, 1992-2009 - Conducted an annual pavement marking operation and reflectivity review on 2,000 miles of interstate, primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Passing Zone Study - Various Locations in Western North Carolina, 1992-2009 - Conducted over 200 official passing zone studies on primary and secondary roadways in accordance with the MUTCD. (NCDOT)

Median Crossover Study - Various Locations in Western North Carolina, 1997-2009 - Conducted over 100 official median crossover studies on interstate and primary roadways in accordance with MUTCD guidelines. (NCDOT)

Access Management Study - Various Locations in Western North Carolina, 1992-2009 - Conducted over 1,000 access management studies for official driveway permits on primary and secondary roadways in accordance with MUTCD guidelines. Included crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact, parking studies, and capacity. (NCDOT)

Auxiliary Turn Lane Study - Various Locations in Western North Carolina, 1992-2009 - Conducted over 600 left or right turn lane studies for general safety or official driveway permits on primary and secondary roadways in accordance with MUTCD guidelines. Included crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, and capacity analyses. (NCDOT)

Auxiliary Turn Lane Design - Various Locations in Western North Carolina, 1992-2009 - Conducted over 200 left or right turn lane designs for general safety or official driveway permits on primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Roadway Design - Various Locations in Western North Carolina, 1992-2009 - Conducted over 50 small scale geometric roadway designs for general safety or official driveway permits on primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Roadway Lighting Operational Review - Various Locations in Western North Carolina, 1992-2009 - Conducted over 100 roadway lighting operational reviews for general safety on interstate, primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Roundabout Design and Operation Review - Various Locations in Western North Carolina, 1997-2009 - Conducted seven roundabout design and operation reviews for general safety or official driveway permits on primary and secondary roadways in accordance with MUTCD guidelines. (NCDOT)

Superstreet Design and Operation Review - US 221, 2007 - Rutherford County, NC - Conducted a superstreet operational and design review. Project associated with TIP R-2233. (NCDOT)

Corridor Study - Various Locations in Western North Carolina", 1992-2009 - Conducted over 40 small scale corridor studies for general safety or official driveway permits on primary and secondary roadways in accordance with MUTCD guidelines. Included crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact, parking studies, and capacity analyses. (NCDOT)

Corridor Study - "Haywood Road (US 19/23 Business)", 2004 - Asheville, NC - Conducted a corridor study that included crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, capacity analyses, modified traffic signal timing, and auxiliary turn lanes. (NCDOT)

Corridor Study - "I-40", 2004 - Asheville, NC - Conducted a corridor study that included crash analysis, traffic counts, traffic control device design evaluation, ramp intersection analysis and design, traffic impact analyses, aerial surveillance, capacity analyses, modified signal timing, and auxiliary turn lanes. (NCDOT)

Corridor Study - "US 19-23 Business", 2011 - Waynesville, NC - Conducting a corridor study that includes crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, capacity analyses, modified signal timing, and auxiliary turn lanes. (JMTE)

Rumble Strip Study - "NC 18", 2007 - Burke County, NC - Conducted a rumble strip study that included crash analysis, traffic counts, traffic control device design evaluation, and intersection analysis. (NCDOT)

Rumble Stripe Study - "I-40", 2007 - Buncombe County, NC - Conducted a rumble stripe study that included crash analysis, traffic counts, traffic control device design evaluation, and ramp intersection analysis. (NCDOT)

LED Pavement Marker Study - "I-40", 2007- McDowell County, NC - Conducted a LED pavement marker study that included crash analysis and traffic counts. (NCDOT)

Data Collection - "Various Locations in Western North Carolina, 1992-2009 - Conducted over 1000 data collections for general safety, operation improvement, and driveway permits on interstate, primary and secondary roadways in accordance with MUTCD guidelines. Included turning movement counts, delay studies, gap studies, queue measurements, vehicle classification studies, and travel time studies. (NCDOT)

Regulatory Sign and Pavement Marking Review - Various Streets, 2010 - Rutherford College, NC - Conducted a regulatory sign and pavement marking review on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Regulatory Sign and Pavement Marking Review - Various Streets, 2011 - Valdese, NC - Conducted a regulatory sign and pavement marking review on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Traffic Safety Reviews - Various Streets, 2010-2012 - Rutherfordton, NC - Reviewed and resolved various safety concerns such as: intersection control, high crash locations, truck safety, vehicle speed issues, traffic calming, signing, traffic signal operation. (JMTE)

School Operational Review - Salem Elementary School, 2010 - Morganton, NC - Conducted a comprehensive school traffic operational review including crash analysis, traffic counts, traffic control device design evaluation, intersection analysis and design, traffic impact analyses, parking studies, and capacity analyses. (JMTE)

Pavement Marking Operation Review - Westwood Drive, 2010 - Drexel, NC - Conducted a pavement marking review that included crash history, sight distance evaluation, speed studies, and traffic counts in accordance with MUTCD guidelines. (JMTE)

Regulatory Sign and Pavement Marking Review - Various Streets, 2010 - Bryson City, NC - Conducted a regulatory sign and pavement marking review on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Intersection Operation Review - NC 9 @ Hill Street, 2010 - Black Mountain, NC - Conducted an intersection review that included crash history, sight distance evaluation, speed studies, and traffic counts in accordance with MUTCD guidelines. (JMTE)

Intersection Operation Review - Black Mountain Ave @ Terry Estates, 2010 - Black Mountain, NC - Conducted an intersection review that included crash history, sight distance evaluation, speed studies, and traffic counts in accordance with MUTCD guidelines. (JMTE)

Traffic Control Device Review - Various Streets, 2010 - Rutherfordton, NC - Conducted an annual overall traffic control device placement and operation reviews on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Intersection Operation Review - 2 Locations Within Subdivision, 2010 - Biltmore Lake, NC - Conducted an intersection review that included crash history, sight distance evaluation, speed studies, and traffic counts in accordance with MUTCD guidelines. (JMTE)

Data Collection - Old Haw Creek Road @ Bell Road, 2010 - City of Asheville, NC - Conducted a 12-hour turning movement count in accordance with NCDOT and MUTCD guidelines. (JMTE)

Data Collection - Cleghorn Street @ 2nd Street, 2010 - Rutherfordton, NC - Conducted a 2-hour turning movement count in accordance with NCDOT and MUTCD guidelines. (JMTE)

Regulatory Sign and Pavement Marking Review - Various Streets, 2011 - Claremont, NC - Conducted a regulatory sign and pavement marking review on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Regulatory Sign and Pavement Marking Review - Various Streets, 2011 - Maiden, NC - Conducted a regulatory sign and pavement marking review on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Regulatory Sign and Pavement Marking Review - Various Streets, 2011 - Weaverville, NC - Conducted a regulatory sign and pavement marking review on all Town owned streets in accordance with MUTCD guidelines. (JMTE)

Pedestrian Safety Analysis - US 70 (State Street), 2011 - Black Mountain, NC - Performed a pedestrian study in the downtown area of Black Mountain. The project included crosswalk placement, vehicle travel lane modifications, pedestrian refuge islands, and road diets. (JMTE)

Truck Route Review - Various Streets, 2011 - Rutherfordton, NC - Researched and developed a proposed truck route for presentation to NCDOT. (JMTE)

One Way Street Investigation - Central Street, 2011 - Rutherfordton, NC - Conducted a feasibility study for a downtown one-way traffic pattern. (JMTE)

Data Collection - Patton Avenue @ French Broad Street, 2011 - City of Asheville, NC - Conducted a 12-hour turning movement count in accordance with NCDOT and MUTCD guidelines. (JMTE 0041)

Intersection Safety Review - NC 114 @ Mimosa Drive, 2012 - Drexel, NC - Conducted an intersection review that included crash history, sight distance evaluation, speed studies, and traffic counts in accordance with MUTCD guidelines. Final product included a recommendation and drawing for an intersection re-design. (JMTE 0082)

Parking Study - Various Downtown Streets, 2011 - Rutherfordton, NC - Conducted a surface parking study for downtown lots / on-street locations including the feasibility of a "smart" parking system. (JMTE 0103)

Complete Streets Study - North Main Street and Walnut Street, 2013 - Waynesville, NC - Team Leader for an analysis of intersection and corridors for vehicular, pedestrian and bicycle usage using 'Complete Streets' guidelines. (JMTE 0146)

Traffic Operation Analysis - US 74 Business, 2012 - Shelby, NC - Conducted a traffic operation comparison analysis associated with a downtown lane reduction project. (JMTE 0175)

Pavement Condition Survey - Citywide, 2012 - Town of Rutherfordton, NC - Conducted a citywide pavement condition survey. (JMTE 0176)

Sidewalk Condition Survey - Citywide, 2013 - Town of Rutherfordton, NC - Conducted a citywide sidewalk condition survey. (JMTE 0177)

Road Sign Assessment – Town Wide, 2014 – Town of Laurel Park, NC – Conducted a town wide comprehensive road sign inventory and assessment, approximately 33 miles, to develop a planned sign replacement and maintenance database for the Town. (JMTE 0312)

Pavement Condition Survey – Citywide, 2015 – Town of Maiden, NC – Conducted a citywide pavement condition survey. (JMTE 0370)

Data Collection – Western NC, 2015-2016 – Oversight for 70 data collections for NCDOT. Included turning movement counts, tube counts, vehicle classifications, speed studies, delay studies and crossing compliance.

Operational Plan Design Services for the 2018 FEI World Equestrian Games – Tryon, NC 2017-2019 – Operational Plan services, transportation maps, data collection and geospatial mapping of trails and served as liaison between TIEC and DOT. (JMTE 0696)

Valdese Intersection Treatment Feasibility Study – Valdese, NC – 2018 - intersection treatment feasibility study to determine whether to leave the intersection as a 2-way stop control, change the stop signs to the other approaches, install a traffic signal, or convert to an all-way stop control. The intersection crash history was obtained and analyzed to determine potential impacts for a different intersection treatment. Once the potential intersection treatment alternatives were modeled and analyzed using metrics that included safety, pedestrian interaction, vehicle delay, and sight distance, it was determined that re-locating the stop signs to the other intersection approaches was the best option. An implementation plan was then developed for the town that outlined each step including pre-signing, advance warning signs, new treatment warning, and post signing

FORENSIC ENGINEERING & EXPERT WITNESS Deposition Given

2011 – U. S. 52, Cheraw, SC – Djuana T. Buchanan as Personal Representative of the Estate of Bryant W. Buchanan vs C. R. Jackson, Inc., and SCDOT and Carolina Pavement Markings, Inc., - Hyman Law Firm, LLP - William Hatfield, Esquire. JMTE performed forensic engineering research and analysis. Mark Teague appeared for deposition for the plaintiff in a fatal injury case involving roadway shoulder condition. Plaintiff believed that the road shoulder condition created during a construction project had an influence on the vehicle crash. (JMTE 0073)

2011 — Henry Tecklenberg Drive and Savage Road, Charleston, SC - Shirley Jean Bratcher vs Thomas & Hutton Engineering Co., Peek Service Company, Sanders Brothers Construction Company Inc., et al - The Law Office of Mark C. Tanenbaum, PA - Mark C. Tanenbaum, Esquire. JMTE performed forensic engineering research and analysis Mark Teague appeared for deposition for the plaintiff in a personal injury case involving a motor vehicle crash. Plaintiff believed vegetation and resulting restrictive sight distance had an influence on the vehicle crash. (JMTE 0104)

2011 – Kentyre Road and Old Hamer Road, Dillon, SC – Wandella Miller as Personal Representative of the Estate of Eric Michael Ross vs SCDOT- Hyman Law Firm, LLP - William Hatfield, Esquire. JMTE performed forensic engineering research and analysis. Mark Teague appeared for deposition for the Plaintiff in a quadruple fatal injury case involving a motor vehicle crash. Plaintiff believed crops and resulting restrictive sight distance had an influence on the vehicle crash. (JMTE 0110)

2011 – SC Highway 278, Aiken, SC - James Vaugh vs SCDOT and Satterfield Construction, Inc.- Law Offices of John E. Duncan - John E. Duncan, Esquire. JMTE performed forensic engineering research and analysis. Mark Teague appeared for deposition for the Plaintiff in a case involving roadway shoulder condition. (JMTE 0128)

2011 – North Ocean Boulevard, Myrtle Beach, SC – Lynn Karasik vs City of Myrtle Beach - Hearn & Hearn - Pete Hearn, Esquire. JMTE performed forensic engineering research and analysis. Mark Teague appeared for deposition for the Plaintiff in a personal injury case involving a pedestrian incident. (JMTE 0131)

2014 – Emergency Drive, Little Rock, AR – William Thomas Frazier as Administrator of the Estate of Cynthia Frazier, Deceased and on behalf of the Wrongful Death Beneficiaries of Cynthia Frazier vs Baptist Health Medical Center; Cassandra Johnson; Regions Financial Corporation as Trustee of the Trust Agreement for the Baptist Health Professional and General Liability Self Insurance Program and John Doe Insurance Companies A through Z - Rochelle McCullough, LLP - Gregory H. Bevel, Partner. Mark Teague performed forensic and traffic engineering expertise for the Plaintiff in a case related to a motor vehicle / pedestrian crash. Deposition testimony given. (JMTE 0270)

2015 – Nashville, TN – Lela A. McKee, as Mother and Next of Kin and executor for the Estate of Glenn Thomas Allen, Jr., deceased vs Trevor C. Bradshaw, Erin Brown, Richard Brown, Mary Ann Brown, and Metro Government of Nashville Davidson County, Tennessee. Matt Hardin Law – Performed forensic

engineering research & analysis for the Plaintiff in a case, which included deposition testimony. (JMTE 0360)

2016 – Aynor, SC – Herring vs Southern Asphalt/SCDOT. Lesemann & Associates, LLC, pavement drop off case. Performed forensic engineering and research for the Plaintiff, which included deposition testimony (JMTE0593)

2017 – Sam's Place, N Dirksen Parkway, Springfield, IL, Mikus vs Porter Gwaltney and Wal-Mart Stores, Inc. and McClain vs Porter Gwaltney and Wal-Mart Stores, Inc. Ryan, Ryan & Landa - Performed forensic engineering and research, which included deposition testimony regarding dangers of the subject intersection and what could have been done to alleviate the danger. Two cases with different Plaintiffs. Two Separate cases, both settled prior to trial. (JMTE0293)

2017 – State Route 43, Carroll County, Ohio – Anthony Manack vs Lineal Industries. Law Offices of Kegler, Brown, Hill & Ritter, LPA. Consulting for Defendant regarding a work zone signage requirements and installation practices. Deposition testimony given. (JMTE0643)

2017 – Horry County, SC – Delpriora vs The Pantry Inc and Horry County Solid Waste Authority. Performed forensic engineering and research, prepared a Driveway Access Assessment for The Law Offices of Daniel Hunnicut and gave deposition testimony. Services provided for the Plaintiff. (JMTE 0472)

2018 – Bussell Road, Greenville, SC, Cooksey vs SCDOT. Thomas Creech Law Offices, LLC – Greenville County Guardrail case including guardrail placement standards. Deposition testimony given for the Plaintiff. (JMTE 0686)

2018 – Boaz, AL, Gurtler vs City of Boaz. F & B Law Firm, PC – MUTCD research. Served as an expert Witness for the Defendant. Deposition testimony given. Case settled before trial. (JMTE FORS 1035)

2020 — Dollyhigh vs Strickland, et al, SC 160 Tega Cay, SC. McGowen, Hood & Felder, LLC. This case involves SCDOT right-of-way, bushes, line of sight and contractors hired to maintain the right-of-ways. Services provided to the Plaintiff. (JMTE 0629)

2020 – Strait vs City of Charleston, WV. Shuman, McCuskey & Slicer. This case involved a motor vehicle collision where 2 vehicles collided at the intersection of 2 residential streets. The focal point of the case was the presence and effectiveness of proper traffic control devices, especially as to how the traffic control devices met requirements set forth by the MUTCD and Municipal Ordinances. Provided services for the Defendant. Deposition testimony given. Case settled before trial. (FORS 1049)

2021 — Porter vs E.S. Wagner Company LLC, and Summit Design and Engineering Services and Traffic Control and Safety Services. Columbus County, NC. The case involved a RWA sign that blocked a stop sign causing the driver not to see the stop sign. Services provided for the Plaintiff. (FORS 1016)

No Depositions Given

- 2003 Buncombe County, NC North Carolina Attorney General's Office. Served as expert witness for Plaintiff in a case involving pavement markings and traffic signal operation. (NCDOT)
- 2006 McDowell County, NC North Carolina Attorney General's Office. Served as witness for Defendant in a case involving an informational sign placement. (NCDOT)
- 2007 Burke County, NC North Carolina Attorney General's Office. Served as witness for Defendant in a case involving a stop sign placement. (NCDOT)
- 2008 Buncombe County, NC North Carolina Attorney General's Office. Served as witness for Defendant in a case involving guardrail placement. (NCDOT)
- 2011 Stuyvesant Road, Biltmore Forest, Buncombe County, NC Brad M. Smith, et ux, Carolina A. Smith vs Biltmore Forest Country Club Inc., and Town of Biltmore Forest -The Van Winkle Law Firm Jones Byrd, Esquire. JMTE performed forensic engineering research and analysis for the plaintiff in a personal injury case involving a motor vehicle / bicycle crash. Plaintiff believed restrictive sight distance had an influence on the vehicle crash. Sworn Affidavit (JMTE 0076)
- 2011 Marion, McDowell County, NC Marie Lang, J.D. JMTE performed forensic engineering research for the plaintiff in a potential case involving a motor vehicle / motorcycle crash. Plaintiff believed thick vegetation and resulting restrictive sight distance had an influence on the vehicle crash. Settled prior to Deposition (JMTE 0109)
- 2011 Loris, SC Hearn & Hearn Pete Hearn, Esquire Rogers vs SCDOT. JMTE performed forensic engineering research and analysis for the Plaintiff in a case involving roadway pothole. Settled prior to Deposition (JMTE 0127)
- 2012 Charleston, SC The Law Offices of Gedney M. Howe, III Gedney M. Howe, III, Esquire. JMTE performed forensic engineering research for the Plaintiff in a personal injury case involving a motor vehicle crash and roadside utility placement. Settled prior to Deposition (JMTE 0140)
- 2013 South College Street and E. Stonewall Street, Mecklenburg County, Charlotte, NC Cathy C. Morgan, Administrator of the Estate of Brett Howard Morgan vs The Linda Construction Company, Inc., Demolition Division, Inc., and Ted Phillip Boone, Sr. Clawson & Staubes Ronnie Craig, Esquire. JMTE performed forensic engineering research and analysis. Mark Teague appeared for deposition for the Defendant in a fatal injury case involving a pedestrian / motor vehicle crash. Settled prior to Deposition (JMTE 0200)
- 2013 U. S. 25 Business, Henderson County, NC Ken Cooper. JMTE prepared a technical memorandum for a sweep path analysis in anticipation for litigation. Case Dismissed (JMTE 0203)
- 2013 Bright Hope Road, Laurel Woods Trailer Park, Buncombe County, NC Minick Law Jack Hollingsworth. JMTE performed forensic engineering research and analysis for the Plaintiff in a personal injury case involving a pedestrian incident. Case Dismissed (JMTE 0204)
- 2014 Greenville, SC- Sarah Day Hurley vs Duke Energy Corporation, CAC Mechanical Contractors and Carolina Conduit Systems, Inc. Clarkson, Walsh, Terrell & Coulter, PA Trey Still, Associate. JMTE

Curriculum Vitae

J. Mark Teague, P.E., CPM

performed forensic engineering research and analysis for the Defendant in a personal injury case involving a pedestrian incident. Work Zone Analysis (JMTE 0262)

2014 – SC Highway 707, Socastee, SC – Lisa Yongue vs Bates & Bates, LLC - Hearn & Hearn - Pete Hearn, Esquire. JMTE performed forensic engineering research, analysis, and provided a professional report for the Plaintiff in a personal injury case involving a pedestrian incident. Settled prior to Deposition (JMTE 0280)

2014 - Davidson County, NC – John M. Dolven vs NCDOT - The Van Winkle Law Firm - Craig D. Justus, PA. JMTE performed forensic engineering research, analysis, and provided a professional report in a case for the Plaintiff involving a proposed development at an at-grade, high-speed railroad crossing. Settled prior to Deposition (JMTE 0313)

2015 – Brainerd Road and Panorama Drive, Chattanooga, TN – Law Offices of Joshua Weiss – Performed forensic engineering research & analysis for the plaintiff in a traffic signal operation case involving an intersection incident. Technical Memorandum prepared (JMTE 0489)

2016 – Cato Road, Florence, SC – Daniel E. Hunnsinger vs County of Florence - Hatfield Temple LLP – JMTE provided forensic engineering research, analysis, and MUTCD expertise for the Plaintiff in a "run off the road" case. Technical Memorandum prepared (JMTE 0422)

2017 – Sausalito, California – Matthew J. Whitteman vs City of Sausalito – Law Offices of S. Chandler Visher-MUTCD Compliance and City Ordinance Assessment as it relates to parking signs. Technical Memorandum prepared for Plaintiff. (JMTE0625)

2017 – Highway 93 and Centennial Blvd, Clemson, SC -Siobhan Heiden and Michael Heiden vs Katherine E. Inclan – Clarkson, Walsh & Coulter, PA -Analysis and interpretation of traffic signal phasing. Technical Memorandum prepared for the Defendant. (JMTE0252)

2017 – Sumter County SC, Jones vs SCDOT – Hatfield Temple LLP, Roadway drainage issue, site visit and investigation for the Plaintiff. Case settled prior to deposition. (JMTE 0426)

2017 -Allendale, SC, Manual vs SCDOT and Mutual Insurance – Haynsworth Sinkler Boyd Attorneys – Work zone vehicle collision, driver driving on closed roadway. Consulting and MUTCD research for the Defendant. Settled prior to deposition. (JMTE 0671)

2017 – GA 85 and Idlewood Lane, Fayetteville, GA – Kingsley Iyamu vs Stalwart Films, LLC; Raymond Vicos; TWD Productions VII LLC; Southern Picture Cars, Inc; and New Deal Entertainment, Inc. – Busby & Negin Law Firm – Roadway access to determine sight distance or roadway design deficiency for the Defendant. Settled after site visit (JMTE0691)

2017 – Carolina Forest Boulevard and Stoney Falls Boulevard, Myrtle Beach SC Patricia Clark vs Southern Asphalt, et al – Law Offices of Natasha M. Hanna - Work Zone Sight Distance Evaluation Report for the Plaintiff. (FORS 1001)

2018 – Town of Morrisville, NC, Estate of John Hudson vs Norfolk Southern Railway Company, et al, Davis & Hamrick, LLP- Railroad Crossing case. Technical Memorandum prepared for the Defendant. Case settled (FORS 1005)

2018 - Town of Morrisville, NC, Estate of Dorothy Louis Flint vs Norfolk Southern Railway Company, et al, Railroad Crossing case. Technical Memorandum prepared for the Defendant. Case settled. (FORS 1006)

2018 – Polk County Harmon Field Road, Van Winkle Law Firm. Site visit and right of way research for Plaintiff. Final Report prepared. (FORS 1013)

2018 – W. Main Street at Fleetwood Drive, Bolding vs Waldrop, Signal Plan Review, Clawson & Staubes, PLLC. Analyze and interpretation of traffic signal phasing for the Defendant. Settled prior to Deposition (JMTE0674)

2019 – Davis vs Martin – Robbins Fence and GDOT, Hudson Parrott Walker. Provided services for the Defendant. Case settled before deposition. (FORS 1012)

2020 – Moore vs APAC and STC, MUTCD Conformity Knoxville, TN. Sutter O'Connell. Provided services for the Defendant. Case settled before deposition (FORS 1044)

2020- Lawhorn vs City of Clayton NC. Cranfill & Hartzog, LLP. The case involved an errant vehicle encroaching into a street festival causing injury and property damage. The focal point of the case was the presence and effectiveness of proper traffic control devices, their visibility and impact to approaching drivers, and their compliance with the MUTCD. Provided services for the Defendant. (FORS 1041)

2020- Morton vs Regas Quality Developments, Knoxville, TN. Spricer Rudstrom, PLLC. JMTE was asked to observe and evaluate the presence or absence of pavement markings, signage, sight distance and their determination, if any, in the causation of the vehicle crash. Services provided for the Defendant. (FORS 1042)

2020- Moore vs APAC-Atlantic, Inc – Knoxville, TN. Sutter O'Connell Attorneys. The case involved an interstate rehabilitation project where a series of errant vehicles collided into work equipment that was in operation by the defendant. The focal point of the case was the presence and effectiveness of proper traffic control devices, their visibility and impact to approaching drivers, and their compliance to the MUTCD. Services provided for the Defendant. (FORS 1044)

2020- Gordonsville Road, Albemarle County, VA. Duane, Hauck, Davis, Gravatt & Campbell PC. This case involved a primary route re-surfacing project where a series of errant vehicles collided into work equipment that was in operation by the defendant. The focal point of the case was the presence and effectiveness of proper traffic control devices, their visibility and impact to approaching drivers, and their compliance to the MUTCD. (FORS 1047)

2020 – Swift vs the Town of Kennebunkport ME. Law Offices of Joe Bornstein. JMTE was asked to review, evaluate, and determine potential causation of a motor vehicle / bicycle crash that occurred on June 10, 2018. This case involved an organized bike event. Specifically, JMTE was asked to determine if there was adequate warnings and guidance for event participants and non-event related traffic, commonly referred to as a transportation management plan. Services provided for the defendant. (FORS 1061)

2020 – Green vs Smith, Southport NC. Slaughter Law, PLLC. The case involved an errant vehicle encroaching into a street festival causing injury and property damage. The focal point of the case was the presence and effectiveness of proper traffic control devices, their visibility and impact to approaching drivers, and their compliance with the MUTCD. Services provided for the plaintiff. (JMTE 0692)

2021 – Estate of Kenneth Imm, New Kensington, PA. Pribanic & Pribanic. This case involves a fatality motorcycle accident in the parking lot of a commercial business that hit a protruding concrete peninsula in the parking lot. Services provided to the Plaintiff. (FORS 1036)

2021 – Austin vs GDOT, DeKalb County, GA. Morgan & Morgan. The case involves GDOT's failure to meet the generally accepted engineering standards which created a dangerous condition and posed a dangerous condition to the public. Services provided to the Plaintiff. Case settled prior to Deposition. (FORS 1048)

2022 - The Estate of Pamela Powell, Lexington County, SC. Harrison/White PC. This case involves a fatality on I-20. A large gust of wind came up and a large Pine tree uprooted and fell on the automobile traveling down that road. Services provided to Plaintiff. (FORS 1082)

2022 – Campbell vs Holton, Hancock, NH. O'Shaughnessy, Walker and Buchholz. This case involved a work zone rear-end collision. The key component of this was whether the proper work zone related signage and traffic control devices were installed in accordance with the MUTCD and were visible to the roadway user. Services provided for the defendant. (FORS 1084)

2022 – Reese vs Price, North Charleston, SC. Clawson and Staubes, PLLC. This case involves light sequencing, speed/distance calculations and the width of an intersection. Services provided for the defendant. (FORS 1087)

Testimony Given At Trial

2007 - Burke County, NC - North Carolina Attorney General's Office. Served as witness for defendant and appeared for deposition in a case involving a warning sign with auxiliary flashers. (NCDOT)

2010 – Gladdens Drive at Gladdens Lake, Lincolnton, Lincoln County, NC – Estate of Taylor A. Peyton vs NCDOT – Final Report prepared for Forensic Engineering Inc. (JMTE 0028).

2011 – Hyder Mountain Road - Smathers and Smathers Attorney at Law - Zeb Smathers, Esquire. Mark Teague served as an expert witness and provided court testimony for defendant in a case involving roadway striping. Mark Teague was certified as a Traffic Engineering Expert by District Court Judge. (JMTE 0035)

2013 – U. S. 74 and Faith Church Road, Indian Trail, NC – Elaine B. Templeton vs Sandra Jane Megill and Thomas Megill - Golding, Holden & Pope - Bob Aylward. Mark Teague served as plaintiffs' expert witness involving traffic signal design. Analyze and interpretation of traffic signal phasing. (JMTE 0219)

2020 – NAACP vs The City of Myrtle Beach, Myrtle Beach, SC. Battle Law Firm, LLC. The case involved a traffic management plan that was established and implemented for the annual motorcycle gathering during Memorial Day weekend. Services provided for the defendant. (FORS 1034)

Consulting

2013 - Bladenboro, NC - Capstone ISG - Mark Daniel. Mark Teague served as plaintiffs' expert witness involving traffic signal design. Analyze and interpretation of traffic signal phasing (JMTE 0218)

2013 – Cleveland, TN – Ailene Moffett, as surviving spouse of Billy Joe Moffett, deceased and Bradly Joe Moffett and Reba Faith Morris, surviving children of Billy Joe Moffett, vs Lowe's Home Centers, Inc., Martha Lane, Individually and as personal Representative of the Estate of Jimmy Lane, Spicer Rudstrom, PLLC - Thomas E. LeQuire, Esquire. JMTE performed forensic engineering research, and a site visit for the plaintiff in a case involving injury, death, and property damage. Mark Teague was specifically asked to review the parking lot layout and associated traffic control devices that were in place. (JMTE 0224)

2016 -- Charleston, SC – John Wayne Gaskins vs Randall Marion Igoe, Banks, Construction and SCDOT - Barnwell Whaley Patterson & Helms, LLC., - JMTE provided MUTCD consulting for the defendant regarding a work zone case. (JMTE 0552)

2016 – Conway, SC – Williams vs Paredes, US 501 Design/Construction Consulting for Anastopoulo Law Firm, LLC JMT provided research and opinion in referent to the left-turn phase at the intersection of the accident. (JMTE 0597)

2018 – Highway 45, Horry County, NC Brown vs SCDOT/L. Dean Weaver Company – Law Offices of Natasha M. Hanna. Provided research for the plaintiff. (FORS 1000)

2019 – Heathcoat/Nobili vs Rouse, Clawson and Staubes, LLC, Analysis of Schematics relating to the light sequencing. Provided consulting for the defendant. (FORS 1026)

2020- Griffin vs Howard Properties, Calera, AL. Farris, Riley & Pitt, LLP. This case involved a parking lot trip and fall incident where an airport visitor tripped over a section of uneven curb & gutter. The focal point of

the case was the requirement and need for necessary parking lot maintenance and proper parking lot design. Provided services for the Defendant. Case settled in mediation. (FORS 1046)

2020 – Salisbury, NC, Forensic Consultants of North America. This case involved a motor vehicle collision where a heavy truck crashed and overturned down an embankment causing extensive guardrail, CA fence, and some structural damage. The focal point of the case was to assess the damage claim from the roadway owner to determine its appropriateness for description and fee. Services provided for the defendant. (FORS 1051).

2020 – Wright vs Cemex Construction, Palm Beach, Fl. Adams Coogler, PA. JMTE was asked to review the light sequencing at the intersection where the accident occurred. This case involved a motor vehicle collision where 2 vehicles collided at a traffic signal. The focal point of the case was to review and analyze the traffic signal phasing and timing to determine which vehicle violated their right of way assignment as portrayed by the traffic signal. Services provided for the defendant. (FORS 1064).

Supervision

2014 – Georgia Highway 211 and Georgia Highway 8, Statham, GA - James Gregory McLane vs Lanier Pallet Recycling, Inc., and CSX Transportation, Inc. - Clarkson, Walsh, Terrell & Coulter, PA - Trey Still, Associate. JMTE supervised and managed forensic engineering research and analysis for the defendant in a case involving a railroad crossing. Settled prior to Deposition (JMTE 0269)

2016 — Nesbit Ferry Road and Old Alabama Road, City of John's Creek, Fulton County, GA - Cruz & Associates, P.C. — JMTE performed forensic engineering research & analysis for the plaintiff in a traffic signal operation case involving and intersection incident. (JMTE 0497)

PROJECT EXPERIENCE - OTHER TYPE OF PROJECTS

Roadway Maintenance Operation - Various Roads in Western NC, 2001-2009 - Assisted in programming the annual road maintenance program for crack sealing, pothole patching, and pavement re-habilitation. Designed and implemented associated traffic control and work scheduling. (NCDOT)

Roadway Maintenance Management System - Various Roads in Western NC, 2007-2009 - Assisted in the development and implementation of a planned roadway maintenance program that included pavement structure, pavement condition, traffic control devices, guardrail, and drainage. (NCDOT)

TIP R-2233 Review - Various Streets, 2010 - Rutherfordton, NC - Working as the Town's liaison to ensure their concerns and interests are being addressed with NCDOT. Project R-2233 is planned for construction 2020. (JMTE 0003)

Bike Path Review - Church Street, Cherry Mountain Street, 2010 - Forest City, NC - Worked as the Town's liaison to research previous bike path and ensure proper signs installed. (JMTE 0011)

Curriculum Vitae

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Traffic Signal Review - US 441 @ Emergency Vehicle Center, 2011 - Franklin, NC - Working as the Town's liaison to ensure their concerns and interests are being addressed with a traffic signal upgrade project. (JMTE)

Mapping - Various Streets, 2010 - Hot Springs & Clyde, NC - Prepared 2010 Powell Bill Funding Maps for the town to submit to NCDOT. (JMTE 0007)

TIP R-2237C Review - US 321, 2011 - Blowing Rock, NC - Worked as a liaison for a group of business owners to ensure their concerns and interests are being addressed with NCDOT. Project R-2237 is planned for construction 2012. (JMTE 0091)

Specific Signing and Turning Movement Investigation - US 221 (Main Street) @ East Court Street, 2010 Rutherfordton, NC - Conducted a No Turn on Red turning movement investigation and associated overhead signing in accordance with MUTCD guidelines. (JMTE 0040)

Traffic Signal Upgrade (2 Intersections) - US 221 (Main Street) @ East Court Street and @ 3rd Street, 2010 – Rutherfordton, NC - Working as the Town's liaison to ensure their concerns and interests are being addressed with NCDOT. These signal upgrades are planned for construction 2013. (JMTE 0002)

On-Call Traffic Engineer, 2011-Present - Rutherfordton, NC - Working as the Town's on-call traffic engineer. Services include intersection safety, sidewalk and pavement condition, traffic signal operation, traffic control compliance with the MUTCD, liaison with NCDOT regarding a proposed TIP Bypass project, training, and downtown revitalization. (JMTE 0005)

On-Call Traffic Engineer, 2011-Present - Black Mountain, NC - Working as the Town's on-call traffic engineer. Services include intersection safety, traffic control compliance with the MUTCD, pedestrian safety, parking, and downtown revitalization. (JMTE 0032)

Wayfinding Advisor, 2012 - Rutherford County, NC - Working as the County's Wayfinding advisor. Services include providing expertise and guidance to the TDA as they develop a countywide wayfinding project. This project requires extensive coordination and communication with local governments, stakeholders, and NCDOT. (JMTE 0053)

Wayfinding Advisor, 2012 - City of Statesville, NC - Working as the City's Wayfinding advisor. Services include providing expertise and guidance to city staff as they develop and implement a citywide wayfinding project. This project requires extensive coordination and communication with local governments, stakeholders, and NCDOT. (JMTE 0130)

Parking Lot Expansion, 2012 - Vantage Point Homes - Waynesville, NC - Prepared a feasibility report for parking lot expansion options. Work included conceptual designs, traffic studies, and environmental impact considerations. (JMTE 0118)

Mapping - "Various Streets", 2013, 2014, 2015 – Clyde, NC, Dobson, NC - Oversaw Powell Bill Funding Maps for the town to submit to NCDOT. (JMTE 0162, 0229)

Parking Lot Design, 2013 - Dunkin' Donuts — Sylva, NC - Designed parking lot. Work included conceptual designs, traffic studies, and environmental impact considerations. (JMTE 0151)

Parking Lot Design, 2013 - Asheville ABC - Asheville, NC -Designed parking lot. Work included conceptual designs, traffic studies, and environmental impact considerations. (JMTE 0223)

Sweep Pass Analysis, 2013 - Henderson County, NC - Work included field measurements, calculations, and analysis of a vehicle collision. (JMTE 0203)

Tourism Development Authority, 2013 – Rutherford County – Work included mapping, signage.

Work Zone Flagger Training - 2014 - Town of Black Mountain, NC - Supervised the NCDOT approved training. The participants were able to demonstrate fundamental flagger procedures and develop a basic traffic control plan for a standard two-flagger operation and receive their official NCDOT certificate of completion. (JMTE 0316)

Mapping – "Various Streets", 2014, 2015 – Clyde NC – Prepared 2014/2015 Powell Bill Funding Maps for the town to submit to NCDOT. (JMTE 0229)

Industrial Plant Assessment, 2015 – Performed a site wide traffic operation and assessment for a 16-squire mile phosphorous mining and chemical plant. Included parking lot design, truck ratio, wayfinding, crash analysis, intersection safety and data collection.

Skill Focus

- Intersection Safety
- Roadway Geometrics
- Traffic Law
- Road Signs
- Roadway Maintenance
- Pavement Markings
- Traffic Signal Operation and Design
- MUTCD
- Work Zone Safety
- AASHTO
- Parking Lot Design
- Highway Access Management
- Traffic Calming

PROFESSIONAL AND BUSINESS AFFILIATIONS

Institute of Transportation Engineers, American Society of Civil Engineers, Greater Haywood County Chamber of Commerce, North Carolina Film Commission, Mid-Atlantic Film / Television Productions, Training Partner with MyFleetDept.com in Canandaigua, NY, Strategic Alliance with Stay Alert/work zone supply company, Strategic Alliance with Benny Flint/pavement marking manufacturer and supplier, member of Road Safety Focus Group sponsored by the University of North Carolina Highway Safety Research Center.

SPECIAL INTERESTS

National Eagle Scout Association, Boy Scouts of America District Committee, Assistant Scoutmaster, camping, hiking, whitewater rafting, cartology, home improvement projects, Long's Chapel United Methodist Church Council, Habitat for Humanity, various non-profit community service organizations

REFERENCES

Gregory H. Bevel, Partner 4500 Republic Tower 325 North St. Paul Street Dallas, TX 75201 Phone: 214-580-2508

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