

SUMMARY

Mr. Lane has over 30 years of professional experience in transportation planning, research, and policy as a director for metropolitan planning organizations and as a private consultant for the past 19 years. His work experience includes being principal investigator on NCHRP / NAS projects for MPO best practices and the relationship of land use and transportation effects. Mr. Lane has conducted many different tasks for cities, counties, states, and MPOs including comprehensive plans, long-range transportation plans, corridor/small-area studies, congestion management process (CMP) frameworks/documentation, bicycle/pedestrian and transit studies, public participation plan/Title VI/LEP updates, and best practice / reorganization studies for MPOs in Virginia, North Carolina, and Florida. Mr. Lane's work extends to the national stage, leading as Principal Investigator for several studies through the National Academy of Sciences including engagement best practices, TIP/STIP update procedures, and MPOs and was the founding Chairman of the NC Association of MPOs. His work tasks have involved award-winning community outreach for many different types of projects; social media and visualization tools; and NEPA/secondary and cumulative effects practices and studies. His work has been recognized by the NC Chapter of the American Planning Association four times for work on award-winning plans, and he has also written numerous papers and made many presentations on metropolitan planning, policy, economic impacts, and land use-transportation connections.

QUOTE

The best project is the one that articulates technical information to every segment of the public, who in turn are empowered to inform a plan that integrates economics, mobility, safety, and other aspects of life that the community cares about in a meaningful, rewarding process.

EDUCATION

M.A., Geography (Transportation Policy), University of North Carolina at Charlotte, Charlotte, North Carolina, 1991

B.S., Geography (Market Location), Minor in Economics, University of North Carolina at Charlotte, Charlotte, North Carolina, 1989

REGISTRATIONS

Certified Planner #082533, American Institute of Certified Planners

Sustainability Excellence Associate #101114, International Society of Sustainability Professionals

Certified Master Instructor #3102, League of American Bicyclists

Crime Prevention through Environmental Design (CPTED) Specialist

PROFESSIONAL ASSOCIATIONS

Member, American Planning Association

Member, American Economics Association

Member and Certified Instructor, League of American Bicyclists

Member and National Trainer, National Complete Streets Coalition

Member of Citizens Climate Lobby (NC-Raleigh Chapter)

RELEVANT WORK HISTORY

01-2010-Current: Owner, J. S. Lane Company, LLC. Mr. Lane owns and operates his company to conduct expert policy, public engagement, bicycle/pedestrian, and land usetransportation-environmental studies at the corridor, area and regional scales. 10-50 hours/week

01-2010 to 2013, 06-2015 to 05-2019: Stantec Consulting Services Inc. Senior Transportation Planner. In a part-time capacity, Mr. Lane has secured projects for policy, transportation safety and other technical studies. Also prepared land use-transportation-environmental-economic impact analyses for proposed roadway on new location for an Appalachian Regional Commission project by the NC Dept. of Transportation.

05-2002 to 12-2010: The Louis Berger Group, Inc. Director of Planning. Grew to a staff of six full-time positions in three cities and brought in over \$1million of contract work annually and supervised 6-8 employees. Conducted detailed transportation, land use, policy, and economic studies in several states and for USDOT.

07-1997 to 04-2002: Capital Area Metropolitan Planning Organization. Executive Director. Managed technical and policy boards, conducting or directing technical studies pertaining to systems and corridor-level planning exercises, ensured compliance with federal requirements, and conducted extensive public outreach campaigns. Planning budgets in excess of \$1million annually and managing 3-5 staff were a key part of the duties of this position.

01-1996 to 06-1997: Greensboro Urban Area Metropolitan Planning Organization. Director. Oversaw 6.5 FTEs while managing technical and policy boards, research, policies, and creating long-range transportation planning documents with a budget of over \$500,000 annually.

06-1993 to 12-1995: Wilmington Urban Area Metropolitan Planning Organization. Director. Conducted parking, public transportation, freight, bicycle/pedestrian, and site development studies. Managed a staff of 1-2 people, technical and policy boards, and budgets of \$200,000+ annually.

06-1991 to 05-1993: South Central Region Council of Governments / MPO. Transportation Planner. Updated the regional travel demand model and prepared analyses supporting freight, automobile and emergency response studies for a 15-town region.

Bicycle / Pedestrian Studies

Bicycle and Pedestrian Plan, Shallotte, NC (Task Leader). The coastal town of Shallotte, North Carolina possess a scenic character and abundance of natural resources, attracting many visitors every year. Connecting people to places is important not only for tourism, but for improving the safety and quality of life of residents. Mr. Lane developed the design, plan / policy elements, and conducted key stakeholder small group interviews.

Bike+Walk Implementation Plan, Durham, North Carolina (Project Manager) Mr. Lane authored text, prepared graphics, conducted public engagement, and oversaw junior staff in the preparation of this project- and policy-focused planning effort. The City moved forward quickly with implementing projects from this Plan, which received very favorable support from the City Council during its adoption.

Duke University Campus Active Mode Plan, Durham, North Carolina (Project Manager) Mr. Lane conducted technical analysis, reporting, graphics, and worked closely with various campus representatives for both Duke University and Duke Hospital to create its first-ever active mode transportation plan. The Plan was marked by extensive field data collection and numerous opportunities for engagement on-campus. This work was presented at the PENC Conference in 2017.

Bicycle Safety Clinic, Huntington, West Virginia (Lead Instructor). One of many bicycle safety clinics that Mr. Lane has led was done in conjunction with a corridor study in Huntington. An economically and social diverse population benefited from their children going through the course and raising the visibility of the project and client in a very positive light.

North Carolina Statewide Pedestrian and Bicycle Plan (Task Leader) Mr. Lane was responsible for portions of the *WalkBikeNC Plan*, including focus group development and execution; policy design and development; financing recommendations; draft plan review/edits; and one-on-one interviews with stakeholders.

US 1 Pedestrian Safety Corridor Study (Project Manager) Prepared the scope of work and served as project manager for this study of a two-mile-long stretch of urban arterial. Serious accident concerns related to transit station accessibility created part of the need for the study, which made detailed recommendations for eight intersections as well as

information/program improvements for transit users.

Safe Routes to School Instruction and Training Manual + Video (Project Director) Mr. Lane prepared a SRTS manual for safe cycling for the fourth-grade classes at Wake Forest Elementary School; led both in-class and outdoor bicycle safety seminars; created and led a full-day parent/teacher training class; and prepared a "train-the-trainer" manual, safe routes map, and standard DVD video to help future iterations of parents and teachers conduct the course by themselves.

Greensboro Sidewalk Plan, Greensboro, North Carolina (Project Director) Closely supervised staff and helped create the city's sidewalk plan and priority funding procedures. This effort looked at accident rates and connectivity, as well as relying heavily on public outreach and community support.

Pedestrian/Greenway Inventory, Raleigh, North Carolina Prepared and won a Governor's Highway Safety Grant program award for \$80,000 to conduct 100% inventory of pedestrian facilities in a county of 600,000 population. Managed and was responsible for quality control of a contract that produced a GIS layer of all sidewalks and greenways located to sub-meter accuracy with attributes on condition, handicap accessibility, hazards, and composition. This project won an innovation award from the Consulting Engineer's Council of North Carolina. Subsequently developed a system approved by the MPO to update the inventory every two years.

Bryson City Comprehensive Pedestrian Plan, Bryson City, North Carolina (Project Director) Mr. Lane was the Project Director for this pedestrian planning effort for a small but rapidly growing mountain community. Economic development, tourism, and project integration will be dealt with through multi-party outreach and pedestrian activity mapping.

Cary Comprehensive Pedestrian Plan, Cary, North Carolina (Project Manager) Mr. Lane was the Project Manager for this comprehensive pedestrian plan for Cary (population: 110,000). Cary is one of the more innovative and progressive cities in North Carolina, and will look to expand upon its reputation as a pedestrian-friendly community by integrating a number of existing plans and planning efforts that are underway. The project team conducted corridor and site studies to identify specific sets of improvements and undertake a significant public outreach effort to gather information for the plan.

Durham Comprehensive Pedestrian Plan, Durham, North Carolina (Project Manager) Mr. Lane served as the Project Manager for this comprehensive study that includes a complete inventory of pedestrian facilities as well as creating a new planning document to guide policy and capital investments in the City of Durham. Tasks included numerous public involvement activities; creating a project website; reviewing ordinances and policies affecting the pedestrian environment; and plan generation.

Town of Wake Forest Comprehensive Bicycle Plan, Wake Forest, North Carolina (Project Director) Project Director for the Town of Wake Forest's comprehensive bicycle plan. This plan included discussions of projects, programs, and funding mechanisms as well as specific design recommendations. A number of recommendations in the Plan have already been implemented.

UNC Greensboro Bicycle Master Plan, Greensboro, North Carolina (Project Director) This first-ever comprehensive study of bicycle facilities at the University of North Carolina at Greensboro included a review of campus bicycle policies and programs, and includes a detailed set of recommendations for new and retrofitted bicycle parking facilities with bid documents and cost analysis. Mr. Lane reviewed technical documentation, assisted with technical recommendations, and participated in staff presentations and public outreach efforts that included the development of a project website, display board and kiosk to gather input from students and faculty.

Safe Routes to School Plan Graphics, Colonial Heights, Virginia Mr. Lane developed and refined graphics and recommendations addressing the walking and bicycling conditions at the three elementary schools and one middle school in Colonial Heights.

Dunn Comprehensive Pedestrian Plan, Dunn, North Carolina (Project Director) Mr. Lane produced working papers on goals/objectives; policy recommendations; and design standards that include three-dimensional renderings of railroad crossing treatments and standard two-dimensional graphic images to support recommended treatments.

Town of Garner Bicycle and Pedestrian Plan, Town of Garner, North Carolina (Project Director) Mr. Lane helped prepare data entry / inventory requirements, deficiency analyses, mapping, and project recommendations for both cycling and pedestrian activity in the Town of Garner (population: 25,000). The plans and recommendations were integrated into a complete street system that included roadway and transit

recommendations as well, and financing / partnering options for implementation.

Morehead City Pedestrian Plan, Morehead City, North Carolina (Project Manager) Mr. Lane prepared agendas, conducted steering committee meetings, and prepared major sections of the report including policy, program, education, and project recommendations. Two open houses and a school-based outreach program complimented a strong Internet presence for the planning process.

Health Impact Assessment, Western Region, NC (Task Leader) Under contract to another firm, Mr. Lane conducted policy and gap analyses of statutes pertaining to the built environment and planning in NC to determine connectivity to health impacts and identified how integrating health themes into built environment decisions impacts a regional economy. Expenditures from all sources were considered, as were the results of a survey prepared by Mr. Lane that was completed by 819 residents.

Tom Hunter Road CPTED Assessment, Charlotte, NC (Task Leader) While employed by Stantec Consulting Mr. Lane conducted a 100% walk audit for this complete street project. Tom Hunter Road connects a low-income community to the proposed Blue Line passenger rail station. Part of the conceptual design was to conduct a CPTED-focused audit that identified specific design, maintenance, and lighting improvements in the corridor.

Economic Development Studies

Infrastructure and Financing Study, Bluefield, WV (Task Leader) Under contract to another firm, J. S. Lane Company was in charge of developing funding concepts integrated with conceptual designs for replacing a bridge crossing a Class I railroad in this historic coal town. The bridge was closed due to deficiency concerns to vehicular traffic, dramatically impacting access to economic opportunity for an historic Black community on the north side. Mr. Lane conducted meetings with USDOT's Innovative Financing Group and worked with designers to ensure that design elements slotted with the criteria for various funding opportunities. He was also in charge of developing multimodal access on the approaches to the bridge and the community.

Benefit-Cost Analyses for Federal Grant Programs (Project Manager/Task Leader) Mr. Lane has created the benefit-cost analysis, graphics, and text to support over 20 TIGER/BUILD grants, HUD grants, and some state grant writing as well. His work in this area involves the use of analytic tools like IMPLAN, RIMS, TREDIS, and self-developed analysis tools to create a compelling case for projects ranging from roadways to multiuse trails to rail lines to hospitals and programs. His work has helped win over \$100 million for clients and extends from Alaska to Kentucky (2020 grant) to Florida to Vermont (2021 grant).

Market Assessment in Support of Long-Range Area Plans (Task Leader) Mr. Lane has created an analysis procedure that develops publishable reports inside of linked MS-Excel[™] spreadsheets to support small area, corridor, and comprehensive plans. The analysis includes time series and cross-sectional explorations of employment, population, demographic and residential / nonresidential market demands. The outputs also include an embedded location quotient analysis and a peer comparison. These studies have been completed for municipalities in Louisiana (2018); Garner, NC; Beaufort, NC; Fuquay-Varina, NC; and Aiken, SC.

Transportation Impact Study, Delphi, Ohio (Project Manager) Mr. Lane led the technical analysis and oversaw data collection on 29 peer projects that considered the costs and economic benefits to a small college town just west of Cincinnati, Ohio. The project was a proposed 1.1-mile greenway/sidepath project that would connect a small college, neighborhood, and quaint downtown together. Improved safety, aesthetics, mobility, and property valuation were all factors assessed through the collection and assessment of various data sources, including private party. The project ultimately contributed to the decision of the Town to pursue the project.

Upstate Cost of Services Study, Greenville, South Carolina

(Task Leader) Mr. Lane, under contract to another firm. developed the methodology, collected information, and analyzed existing and forecasted cost information for multiple growth scenarios across a 10-county region in South Carolina. The work accounted for various capacity, operations, and multi-modal considerations to produce a realistic expectation of the cost of planned and laissez faire policies represented by four development scenarios. Both capital and maintenance expenditures were developed for roadway and transit modes based on existing plans and an analysis of capacity deficiencies likely under the scenarios. Additionally, Mr. Lane was responsible for developing similar cost information for utilities (water and sewer) and public service staff such as emergency response personnel and equipment based on prior and current capital expenditures for the counties and a sample of large and small municipalities.

Andrews to Murphy (A2M) Economic Impact Study (Task

Leader) Mr. Lane completed an economic impact study featuring comparative case studies, TREDIS modeling, and detailed stakeholder interviews to ascertain probable, optimistic and pessimistic economic impacts from a proposed reactivation of a 15-mile rail line in the mountains of western North Carolina. Detailed accounts of job creation impacts, fiscal (taxation) impacts, and revenue generation were supported by four case studies of various rail services, including freight, excursion, and passenger rail systems.

Economic Redevelopment Plan, Crossnore, North Carolina (Planner)

Mr. Lane completed an action plan for re-developing the community of Crossnore, North Carolina (population: 250). Tasks included developing cost estimates and scopes of service for context-sensitive roadway design, pedestrian/bicycle facilities, utility assessment, stream restoration, historic preservation, and economic incentives for this rural mountain community. Crossnore subsequently was awarded nearly \$100,000 from the N.C. Rural Center based on this report/grant application that was prepared.

Natchez Trace-Adams County Site Marketing Study, Natchez Trace-Adams County, Mississippi (Co-Project Manager) Mr. Lane was co-managing this study that examined the economic development potential, target markets, and specific development actions for an 825-acre site on the Mississippi River. A Phase I Site Assessment, interviews, public workshop event, engineering design, and economic assessment at regional and national levels was also conducted.

Development of Socioeconomic and Transportation System Data, Raleigh, North Carolina Responsible for reviewing field data for employment, housing, income, transit system, and roadway data for all or portions of five counties. Made numerous changes to traffic analysis zone boundaries related to updates and decennial census. Researched bicycle and pedestrian modeling and route evaluation tools such as the Bicycle Compatibility Index (BCI).

Development of Socioeconomic Data, Greensboro, North Carolina Assembled and reviewed base year and forecasted demographic data (employment by type and population/housing) for the Greensboro MPO during a regional model development exercise.

Asheville Financial Plan, Asheville, North Carolina (Project

Manager) Mr. Lane prepared a comprehensive financial analysis and forecast for the French Broad River Metropolitan Planning Organization (MPO). This will become a major part of the federally-mandated long-range transportation plan update for this community of 250,000 in western North Carolina.

NEPA Documentation, Various Locations, North Carolina

(Transportation Planner) Prepared Draft Environmental Impact Statements and Environmental Assessments for transportation improvement projects. Tasks included field reconnaissance, data collection, noise and emissions analyses, functional designs using AutoCAD software, and report writing. Project areas included US 17 widening in Edenton, North Carolina; Yadkin County; and the Town of Murphy, North Carolina.

Parking Studies

Parking Improvement Plan, Wilmington, North Carolina

Directed field inventories, conducted land use study, and created travel demand model (QRSII) and GIS data layers to assess impacts of various parking improvement stratagems for downtown revitalization effort.

Raleigh Central Business District Parking Inventory, Raleigh, North

Carolina Directly responsible for creating a parking database using field measurements for both on-street and off-street parking. This resulted in a GIS database for parking facilities covering a 10x10 block area of the Central Business District that could be overlaid on existing planimetrics and aerial photography that could thematically display parking types (1-hour, loading zone, metered, etc.) and number of spaces per parking area.

Transit Planning

Regional Transit Feasibility Study, Capital Area and Fayetteville MPOs, North Carolina (Project Manager) Mr. Lane managed this project for Metro Analytics, which examined the ridership / revenue potential and physical feasibility / cost for different service design scenarios. The two primary rail corridors studied involved multiple rail operators as well as challenges in several smaller communities and at each terminus to take full advantage of walk-up and drive-up patrons. The study featured five peer case studies, a technical steering committee, presentations to the two MPOs that sponsored the study, and integration of multiple travel demand models as well as cross-validation of ridership through an alternative demand model.

Transit Scoping Study, Capital Area MPO, North Carolina (Project Manager) Mr. Lane identified 15 peer agencies to the growing Capital Area of Raleigh, North Carolina that have recently conducted major, regional transit studies. He created an interview question listing and conducted interviews of ten of these agencies to identify state-of-the-practice in several areas including public engagement; private freight interactions; land use planning/development; and policy issues. The final product will be used to guide a major regional study of five counties to identify and analyze opportunities for new and expanded transit services.

Coast RTA Site Feasibility Study (Task Manager), Myrtle Beach, North Carolina Mr. Lane was under contract through Stantec Consulting Services Inc. to provide public engagement, website development, and analytic as well as meeting facilitation skills to this site review and location study. The new site will need to accommodate passenger rail, intercity bus, local bus and taxi service to residents and major tourist movements in a state-of-theart facility that is an asset to the community.

Transit-Oriented Design Small Area Study, Town of Morrisville, NC (Project Manager) Working for Stantec Consulting Services Inc.,

Mr. Lane was selected to provide meeting facilitation, transportation/traffic analyses, and report generation talents to this small area study in the middle of Morrisville, North Carolina. Morrisville (population 18,000) lies between the power centers of Research Triangle Park, RDU International Airport, Durham, Cary, and Raleigh and has had an explosive residential growth rate to go with its high number of employees. Stantec, led by Scott Lane as Project Manager, conducted a detailed, four-scenario traffic analysis and internal capture assessment to understand the impacts of proposed rail transit service and mixed-use development on trip generation and distribution on Morrisville's congested roadway network. Mr. Lane and worked closely with other products of the study, particularly the market assessment and workforce housing reports, to gain a better understanding of the holistic impacts of transit-oriented design elements such as high street connectivity, superior design amenities, and walking connections from the multi-parcel site to nearby employment centers, schools, and a future community college campus. Mr. Lane worked closely with staff to generate an implementation plan for achieving the results presented in the recommendations and goals for the project. Mr. Lane and others also facilitated numerous, innovative meetings, including a "whistle stop station" tour of the various project elements, public hearings, and planning/zoning and town council reviews.

Western North Carolina Inland Port Feasibility Study (Project Manager) Mr. Lane managed consultant resources, conducted analyses, and created the report for AdvantageWest Economic Development Group working in the mountains of North Carolina. This extensive study included site and network analyses, concluding that additional connectivity was necessary to elevate the advantages of a western North Carolina intermodal transfer hub leverage regional networks.

Capital Area Transit System (CATS) Fixed Route On/Off Count Data Collection, Raleigh, North Carolina (Project Director) Mr. Lane was the Project Director for conducting an on-board count study of 23 routes for the Capital Area Transit System (CATS) in Raleigh, North Carolina. Survey crews were organized around run schedules to collect data of boarding/alightings; formatted in GIS to be displayed and analyzed for system upgrades; and included in spreadsheets in both run and route formations to facilitate rapid comparisons of performance.

Rail Feasibility, Raleigh, Garner, Knightdale, North Carolina (Project Manager) Developed scope of work (including addressing Federal New Starts Criteria) and coordinated with Atlanta Region Office of FTA and committee for rail connection between Raleigh, Garner, Knightdale and two other towns. The scope integrated local, state, and private consultant work tasks to create an extremely cost-effective product.

Planning and Policy

Organizational Framework Study, Capital Area Metropolitan Planning Organization (Project Technical Lead) Under contract to another firm, J. S. Lane Company and Scott Lane developed and conducted a member survey, staff interviews, staffing workload / salary analyses, recommendations for restructuring the largest and most-complex MPO in the State.

Governance Study, Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (Project Technical Lead) Under contract to another firm, J. S. Lane Company and Scott Lane developed and conducted interviews, peer review studies, and analysis of current policy and practices to develop a set of

recommendations for the dynamic and diverse DCHC MPO, part of the Triangle Region in North Carolina.

Comprehensive Plan, Annapolis, MD (Task Lead) Mr. Lane led the transportation component for this comprehensive plan for the historic capital of Maryland. His work included contributions to focus area designs, public workshops, development of a public survey, and preparation of existing conditions, recommendations, and performance-based planning goals and metrics. Mr. Lane's technical work included analysis, demographic studies, and conveyance of results through mapping, renderings, and infographics.

Comprehensive Plan, Wendell, NC (Project Co-Manager) Mr. Lane co-led this project with Meg Nealon / Nealon Planning. As the local liaison, Mr. Lane was responsible for the majority of the coordination and engagement, as well as preparing documentation and analyses for context, surveys, land use analyses, and transportation projects / policy recommendations. The study highlighted growth in and around the Town, and gaining a good understanding of the infrastructure and financial impacts of alternative growth scenarios to support that growth.

Strategic Master Plan, Troutman, NC (Project Manager) Mr. Lane led this effort and developed graphics, presentation tools, and an on-line social media site for a project that helped lead this small town (population of less than 5,000) at a time when it's residents were feeling the divisive pressures presented by a growing Charlotte, NC region along the Interstate 77 corridor. While other towns along this growing route had accepted contemporary growth styles, patterns, and densities, Troutman desperately wants to maintain its heritage while still accepting quality new development that complements its vision for the future. To do this, an action-oriented plan was needed that both articulated a vision and also translated that vision into real action steps. Twelve topic areas explored with the town, including transportation, housing, and recreation, introduced strategies that were achievable and feasible for the town to take on.

Congestion Management Framework Studies, Tampa Bay, FL and Charlotte, NC (Project Manager) Mr. Lane worked closely with the staffs of two MPOs (Hillsborough, FL and CRTPO, NC) to develop the process and frameworks for these two independent projects. Mr. Lane researched available data sources and aligned the information to the plan development / community goals to ensure a close fit between identification of congested or sub-standard locations across the MPO study areas as well as ensuring federal compliance. The product in each effort was a blueprint for developing and maintaining a useful and informative congestion management process for the two MPOs.

Congestion Management Process, Durham, NC (Project Manager) Mr. Lane, while working with Stantec Consulting, led the effort to create then update the CMP for the Durham-Chapel Hill-Carrboro MPO in the fast-growing and diverse Triangle Region. The focus was to create a federally compliant plan and process, but also to demonstrate how new technologies (e.g., StreetLight Data) could inform the process and provide important information to decisionmakers. The end product was intended to be easily accessible to a lay audience, distilling dozens of sources of information into clear, legible infographics and prioritized recommendations to address multimodal, recurring congestion, and non-recurring congestion issues.

Metropolitan Transportation Plan, Charleston Area Transportation Planning Study, Charleston, SC (Assistant Project Manager) The urbanized area and city of Charleston are steeped both in history and opportunity, with tourism and a resurgent manufacturing sector driving increases in population and demand for transportation services. The context of the area demands a nuanced approach, since the coastal environment is fragile and heavily impacted by new development. Both a city-wide plan for Charleston and a MPO Metropolitan Transportation Plan for all or parts of three counties were created simultaneously, as well as a Congestion Management Process (CMP) and documentation. Mr. Lane led the CMP development, incorporating performance measures that looked ahead to project evaluations in the long-range planning study. He also assisted in the development of materials for and execution of steering committee and public information sessions and developed the project website. The project recommendations included all modes of travel, detailed hot-spot studies, and the incorporation of land use suitability analysis to prioritize projects that addressed resiliency, environmental, downstream cost of service, and emergency response concerns. A detailed policy section addressed several needs for creating sustainable development practices both inside and outside the curbline.

Metropolitan Transportation Plan, Southwest Louisiana (Project Manager) The revitalized port community of Lake Charles and Calcasieu Parish have enjoyed successf in part from a friendly community-oriented lifestyle and natural gas distribution investments. The metropolitan planning organization developed both a MPO plan and a separate section for the surrounding Calcasieu Parish simultaneously. Mr. Lane led the effort, substantially updating the performance / project evaluation process to include sustainability (economics and environmental) metrics that the public engagement effort told the staff was important, thereby integrating land use with transportation to high degree. The resulting user-friendly plan was published on paper and summarized in an on-line platform (Arc Story Map).

Comprehensive Transportation Plan, Town of Lillington, North Carolina (Project Manager) Mr. Lane conducted all of the technical analysis, public participation/input, report writing, GIS analysis/mapping, and graphics for this report that integrated recent updates to the land use plan as well as positioned the Town for local- and state-generated improvements and policy concepts that would preserve and enhance a great community.

Tampa Bay Region MPO Regional Best Practice Study, Florida (Project Manager) This 18-month-long study examined the relationships between three "core" MPOs in the Tampa Bay area as well as surrounding MPOs that share boundaries. A three-volume report addressed technical, data-driven relationships between the core MPOs; an in-depth examination of the structures of the core MPOs and relationships to nine peer MPOs from around the country; and a final phase that makes specific short- and long-term recommendations for strengthening regional operations, partnerships, and opportunities. Two open, collaborative public workshops and a dozen steering committee meetings helped inform and direct the planning process and recommendations.

Northeast Area Study, Capital Area MPO, North Carolina (Project Manager) Supervised and supported five subconsultants for this project study covering nine municipalities and two counties in CAMPO. Mr. Lane developed scoping elements, carried out public engagement opportunities, and conducted or supported technical analyses including multimodal level-of-service assessments and spatial distributions of accidents using geographic information systems.

Western Boulevard Corridor Study, Raleigh, North Carolina (Project Manager). Mr. Lane oversaw this complete streets project, including lighting studies, video capture, interviews, and traffic simulation studies to support access and multimodal recommendations in this one-mile corridor that serves as both gateway to the center city and conduit for NC State University. Public engagement involving many stakeholders including NC State University, multimodal level-of-service analyses, return

on investment (ROI) economic impact analysis for three very different build options, and detailed conceptual designs were direct contributions from Mr. Lane. The resulting short- and longterm recommendations included intersection redesign, cycle track recommendations, and a new, separated-grade crossing of the sixlane arterial that had been studied for more than 20 years by a half-dozen projects in the past. The outcome was a project recommendation that was funded shortly after the study's completion.

Corridor Study for Birmingham Beltway (Task Leader). This project is the southernmost location for the Appalachian Development Highway System (ADHS) and was proposed to include 14 interchanges. Potentially bringing a lot of new growth and development to the area, Mr. Lane was charged with considering and quantifying induced and secondary impacts from the transportation project. This type of analysis requires a strong understanding of economic impacts as well as social, environmental, and traditional / induced traffic analyses. The project quantified water quality, secondary growth, land consumption, and other impacts into the NEPA (National Environmental Policy Act) analysis and documentation.

University Boulevard Complete Street Project, Morgantown, West Virginia (Task Leader) Mr. Lane conducted both the multi-modal planning and policy development for this three-mile-long corridor that traversed downtown Morgantown, West Virginia University campus, and residential and commercial areas. The variety of stakeholders and topography both challenged and informed this study that culminated in a conceptual design, renderings, and ordinance language protecting and enhancing the corridor. A technical steering committee, public workshops, and walk audit greatly enhanced the detail and scope of the recommendations.

Metrolina Transportation Framework Study, Various Locations, North Carolina (Project Manager) Mr. Lane was the Project Manager for this examination of the policy, financial, and functional implications of merging or partially consolidating the functions of three metropolitan planning organizations and two rural planning organizations centered on the largest city in the Carolinas. The study was prompted by changes in federal and state policies, as well as the desire on the part of some local officials to create a more unified voice and planning environment in this complex region. The study considers seven peer MPOs/regions around the country and involved both extensive policy reviews and internal studies conducted through survey instrumentation and eight focus groups.

Mecklenburg-Union MPO Policy Review Study, Metrolina Region, North Carolina (Project Manager) Mr. Lane prepared detailed studies and reviews of the UPWP, voting/quorum/fee allocation structure, and new member support services to this MPO of 1.3 million people spanning four counties and 25 municipalities.

Long-Range Transportation Plan Updates, Raleigh, North Carolina (Project Manager) Research, reporting, and project oversight of the development of two comprehensive long-range transportation plans (LRTP) for a 600,000 population MPO (13 governments) in 1999 and 2002. Developed regional demographic profile; updated and applied revenue and cost forecasting models; reviewed travel demand model operations and output; prepared all documentation.

Smith Creek Parkway, Wilmington, North Carolina (Task Leader) Assisted and conducted studies assessing the impacts of Smith Creek Parkway on various sections of the city. This included impacts to residential streets during different phases of construction as well as cumulative impacts to a low-income and minority neighborhood in the north end of the City.

Independence Boulevard Corridor, Wilmington, North Carolina (Project Manager) Performed analysis and report for environmental mitigation of parkland adjacent to State/Federal road project. Researched and prepared all documentation related to parkland (4F) impacts.

Stanley Road Corridor Study, Greensboro, North Carolina (Project Manager) Conducted community meetings and developed CIP project alternatives for this important connection between two major thoroughfares.

Traffic Calming Program and Studies, Wilmington, North Carolina (Project Manager) Developed a traffic calming program for the City of Wilmington and performed several traffic calming studies which included design and placement of traffic control devices, community outreach, and coordination with local officials and planning/engineering staff.

New Garden Road Traffic Impact Study, Greensboro, North Carolina (Project Manager) Oversaw and assessed traffic impact assessments on numerous properties, reviewed design alternatives and traffic analyses, and met with community members for a major corridor study conducted by private developer.

NC 54/Morrisville Corridor Study, Morrisville, North Carolina (Project Manager) Developed scope of work and managed corridor study focusing on alternative alignments and related traffic impacts assessed by the use of a regional travel demand model. The product was a report containing an assessment of multiple alignments in an urban setting that addressed property and sub-regional traffic concerns.

US 64 Bypass Interchange Study, Knightdale, North Carolina Developed scope of work, assisted with land use development scenarios with local government members, and oversaw project to determine land use/transportation interactions in microsimulation and travel demand modeling environments. Project demonstrated conclusively that effective collector street and walk-friendly transportation systems can support higherdensity, mixed-use development with less congestion impact on nearby freeway interchanges.

Integrated Project Delivery: DOT Organizational Redesign, North Carolina Department of Transportation (Planning Team Leader) The North Carolina Department of Transportation maintains 75% of the road miles in the state and takes a leadership position in providing transit, active mode, and technology products and services to over 10 million people. Beginning in 2018, the State DOT embarked on a process examination and overhaul from systems planning all the way to construction. Mr. Lane initially participated, then took over as leader, the Planning Team, one of four teams that spearheaded the change process. He helped conduct best practice studies in other states; prepared recommendations; and reviewed many others prepared by his team in corridor, systems, multimodal, traffic safety, and feasibility study areas. The process required both insight and attention to details and customers internal and external to the department.

NCHRP 08-122: Metropolitan Planning Organizations: Strategies for Future Success (Co-Principal Investigator) After being around for more than 50 years, this NCHRP study will comprehensively document the challenges in the future of the metropolitan planning organization and the best opportunities for meeting them. Technology, inter-related practices (e.g., land development, engineering, economic development), and communicating effectively with a more transparent and communicative public are part of the shifting foundation of MPO practice, but each MPO fits into peer groups based on resources and state-level policy contexts. The study works with these peer groups and conducts new research to refine these challenges and present solutions.

SHRP 02 C08: A Community Visioning Approach to Support the SHRP 2 Collaborative Decision-Making Framework For Highway Investments, Various Communities (Technical Lead) Mr. Lane provided support in the area of toolbox development for an online support system of outreach techniques tailored to various communities, as well as researching linkages to community impacts and indirect/cumulative effects and their relationship to effective community visioning practices.

NCHRP 08-72: Practical Approaches for Involving Traditionally Underserved Populations in Transportation Decisionmaking, Nationwide (Task Lead) Mr. Lane was responsible for developing an on-line toolbox of case studies and approaches to engage low-

income, minority, aged, mobility handicapped, low English proficiency and other populations poorly served by traditional engagement methods. A complete nationwide case study resulted in a user-friendly and accessible database of techniques that describes approaches, benefits, and resource costs.

FHWA MPO Technical Assistance, Hampton Roads, Virginia (Technical Advisor) Mr. Lane served as a co-author and technical advisor to the Hampton Roads Transportation Planning Organization (MPO) to help them address several corrective actions stemming from the last federal certification review process. Mr. Lane aided the MPO and other staff in developing Title VI, Limited English Proficiency plans and supporting mapping and performance measures guidance. Two other MPOs were also served under this FHWA contract. A separate contract was developed with Mr. Lane as co-Manager to help Hampton Roads address corrective actions from a federal review, focusing on improving public engagement integration into the planning process. HRTPO is now a practice leader in this area.

Gulfport Regional Planning Commission (GRPC) Title VI and Public Participation Plans, Gulfport, Mississippi (Co-Project Manager) Mr. Lane was the principal author of the creation of a new Title VI Plan for this TMA in the Gulf Region of Mississippi. The impact of severe hurricanes implied that traditional census-based location strategies for targeting underserved populations would be ineffective, prompting Mr. Lane to develop a multi-source strategy including local, national, and proprietary data sources. Mr. Lane also created a performance monitoring system and target measures for the MPO, and subsequently prepared sections of an update to the full Public Participation Plan under contract to another consulting firm.

NCHRP TIP <u>Synthesis 419</u>, Nationwide (Principal Investigator) Mr. Lane developed the scope of work for this nationwide policy study that examined how metropolitan planning organizations effectively carry out amendment/modification processes under normal and duress conditions. Mr. Lane developed on-line survey instruments for FHWA/FTA/DOTs to identify strong practice MPOs, then developed a second survey to assess the performance of those MPOs and their TIP change procedures. Case studies with a number of MPOs rounded out the analysis and provided key experiences for other MPOs to draw upon as they consider how to efficiently manage change within their organizations. This study was particularly timely during both major federal grants through economic revitalization as well as a federal rescission that impacted the financing and capacity of many MPOs across the country.

Wilmington Multi-Modal Transportation Center Design and Site Assessment, Wilmington, North Carolina (Project Manager) Mr. Lane was the Project Manager and chief reporter for this project that evaluated areas and specific sites to determine the optimal location for a proposed intermodal center (local and intercity bus, taxi, and future rail services). Mr. Lane conducted extensive field research to determine the suitability of one or more sites in the downtown area of this city of 100,000 people. Natchez Trace-Adams County Site Marketing Study, Natchez Trace-Adams County, Mississippi (Co-Project Manager)

Mr. Lane co-managed this study that examined the economic development potential, target markets, and specific development actions for an 825-acre site on the Mississippi River. A Phase I Site Assessment, interviews, public workshop event, engineering design, and economic assessment at regional and national levels will be conducted. Also responsible for developing enhanced web content.

PM2.5 Source Apportionment Study, Western Piedmont Council of Governments, North Carolina (Project Manager) Mr. Lane was the Project Manager for this assignment that considered the local and sub-regional influences that are contributing to a PM2.5 violation of the National Ambient Air Quality Standards (NAAQS) in Hickory, North Carolina. Data review, comparable site reviews, land use characterizations, air dispersion modeling (AERMOD) were performed as a part of this study, which required close coordination with EPA and N.C. Division of Air Quality. A stakeholder input session and telephone "hotline" were used to help refine and promote mitigation strategies.

Outer-Outer Belt Study, Charlotte, North Carolina (Transportation Planner) Developed analysis framework for Carolina's Transportation Compact (CTC) and I-40 Corridor Study using transportation planning model (TransCAD).

Site Plan Review, Wilmington, North Carolina (Transportation Planner) Assisted in site traffic impact review relating to anticipated traffic volumes and street impacts related to neighboring communities, intersections, Thoroughfare Plans, and roadway performance. Interpreted and reviewed site plans and requirements related to the City of Wilmington's Collector Street Plan. Performed modifications and updates to the City of Wilmington's Collector Street Plan.

US 17 Indirect and Cumulative Impact Study, Jones/Craven Counties, North Carolina (Project Director) Under contract to another firm, Mr. Lane was the Project Director for conducting this multi-county ICI evaluation and assessment of a proposed rural widening project on the North Carolina coast. Demographic and economic profiles, travel patterns and land use trends are being developed to support an analysis of the future effects of the roadway improvements.

Winston-Salem Northern Beltway, Forsyth County, North Carolina (Project Director) Mr. Lane was the Project Director for this comprehensive assessment of the indirect and cumulative impacts of building a 20-mile freeway facility around an urban area with 17 interchanges. The study utilized a growth allocation model, Internet-based survey, detailed aerial reconnaissance, induced travel, and parcel-based growth analysis to assess the potential, magnitude, and remediation efforts of new growth associated with the project.

Transportation Project Prioritization Study, Statewide, New Jersey (Deputy Project Manager) Mr. Lane was the Deputy Project Manager for this effort being conducted by the North Jersey Transportation Planning Authority (NJTPA), the fifthlargest MPO in the country. He was tasked with conducting national research into state-of-the-practice efforts to benchmark and prioritize transportation projects to apply to the NJTPA system. As one of the inputs to this study, Mr. Lane created and analyzed the results from a national on-line survey promoted by AMPO.

Quantifying Emissions and Travel Benefits from Land Use Changes, Nationwide (Project Manager)

Mr. Lane served as the Project Manager for this national research effort looking at how changes to land use patterns affect travel behavior pedestrian, bicycle, and transit modes,

and how these shifts affected mobile source emissions. Current quantitative methods were critically assessed and recommended improvements to practice and theoretical lines of research identified.

Land Use and Transportation Assessment, Statewide, North Carolina (Principal Investigator/Project Manager) Training NCDOT, private consultant, and local staff in the assessment of indirect and cumulative impacts caused by transportation projects. The project team produced draft guidance manuals and has performed this analysis in North Carolina and elsewhere. Mr. Lane was also the Project Manager for researching, coordinating and drafting guidance on indirect and cumulative impact assessment for the N.C. Department of Environment and Natural Resources.

Transfer of Development Rights Feasibility Study, Orange County,

North Carolina (Project Manager) Mr. Lane was the Project Manager for this comprehensive assessment of the economic and political potential of developing a TDR program in Orange County. Tasks include stakeholder interviews, developing decision matrices, project website, brochures, literature reviews, case studies, and interacting with a community Task Force assigned to this project.

Land Use Policy Guidance, Johnston County, North Carolina (Project Manager) Mr. Lane was the Project Manager for this preliminary guidance for this rural but fast-growing county in North Carolina. Mr. Lane researched issues with stakeholders in the various communities, and developed policy recommendations for dealing with aesthetics, infrastructure, schools, and transportation issues in the face of rapid economic expansion.

MPO Planning Support Services, Durham-Chapel Hill-Carrboro, North Carolina (Project Manager) Mr. Lane was the project manager for a Master Agreement Task Order to provide public outreach, technical analyses, and policy services for the development of the long-range transportation plan for the DCHC MPO, an extremely diverse study area of over 250,000 people.

Jacksonville MPO Program Management, Jacksonville, North Carolina (Project Director)

Mr. Lane was the Project Director for a program management contract that will conduct all of the activities of this coastal MPO of 120,000 people. Berger will have staff in place in Jacksonville's offices, and will carry out long-range transportation planning activities; administration to technical and policy boards; and perform supporting engineering and planning services on a variety of in-house assignments as well as managing outside consultants.

Town of Morrisville Planning Support Services, Morrisville, North Carolina (Task Manager) Mr. Lane served as a Task Manager for site review and planning services for this on-call service agreement. The latter included a submittal to the Capital Area MPO for priority projects, including five roadway, three bicyclepedestrian, and one enhancement projects. Mapping, project descriptions, and supporting statements were a part of the packet.

Town of Clayton Strategic Growth Plan Update, Clayton, North Carolina (Project Manager) Mr. Lane was the Project Manager for this study addressing growth-related issues in Johnston County, N.C. The project team used CommunityViz to assess a range of policy issues; developing a survey instrument; and working closely with focus groups and a Steering Committee comprised of staff and Planning Board members.

Update of Somerset County Public Works Capital Improvement Program (CIP) Handbook for Roads, Intersections and Bridges, Somerset County, New Jersey (Technical Lead) Updating county's capital project prioritization process to bring into alignment with current federal/state regulations as well as NJDOT and NJTPA goals and policies. Conducted a survey of New Jersey counties to compare CIP processes; compared Somerset's prioritization criteria to NJDOT and NJTPA to highlight differences and establish basis for determining need for criteria and process changes. He developed approaches to improving process transparency, rationalizing scoring system and streamlining of criteria.

Town of Morrisville Transportation and Land Use Plans, Morrisville, North Carolina (Project Manager) Mr. Lane served as the Project Manager for the extensive preparation, public outreach, technical services, and reporting for these land use and transportation plans conducted for a rapidly-growing town of 18,000 people. Influenced heavily by the adjacent Research Triangle Park as well as nearby universities and the Raleigh-Durham-Chapel Hill metropolitan area, Morrisville sought a complete update of their existing, fragmented planning documents that focused on advancing the state-ofthe-practice in planning and service provision.

Best Practices Study, Hampton Roads Metropolitan Planning Organization, Hampton Roads, Virginia In response to a certification review highlighting a number of corrective actions, Mr. Lane, while under contract to another firm, provided recommendations for public participation, organizational structure, and other areas for this metropolitan planning organization in southeastern Virginia. An important part of this study was the completion of an extensive survey of 39 MPOs across the country to develop a peer group matrix of various practices being undertaken by MPOs in these program areas.

Town of Garner Transportation Plan, Garner, North Carolina (Project Director) Mr. Lane was the Project Director for this comprehensive study that will consider land use development, bus and rail transit, walking, bicycling, and automobile provisions for a growing Town of nearly 30,000 people south of Raleigh, North Carolina. Recommendations on connecting land use to transportation through development practices and green street design standards will also be a part of this study, as was a thorough public engagement plan including focus groups, organized meetings, survey, project website (www.GoGarner.org), and steering committee participation.

Gaston East-West Connector Indirect and Cumulative Effects Study, Gaston and Mecklenburg Counties, North Carolina (Project Manager) Mr. Lane was the Project Manager for this comprehensive study and analysis of a 14-mile, proposed tollway in Gaston and Mecklenburg Counties, North Carolina (west of Charlotte). As part of the Environmental Impact Statement, Mr. Lane coauthored the ICE Report, conducted interviews with 40 local area experts, prepared land use ordinance and policy reviews, and directed a grid-based land use suitability analysis incorporating both physical data and revealed preference survey data. The result was a comprehensive, qualitative and quantitative review of the potential for growth and development in the study corridor.

Crabtree Valley Transportation Study, Raleigh, North Carolina (Assistant Project Manager) Mr. Lane contributed to the public engagement process, including the development of summary videos, Facebook site, online surveys, history component, and descriptions of land use, public comments / surveys, and other aspects of the project. Crabtree Valley is a well-known traffic "hot spot," absorbing traffic from a regional mall, hotels, US Highway, Interstate Highway, and nearby office complexes and apartments. Mr. Lane oversaw the development of land use scenarios, including a detailed assessment of alternative trip generation figures predicted loosely in a backward stepwise regression analysis utilizing both US Census Journeyto-Work and Travel Behavior Survey data supplied by the regional modeling group. Mr. Lane also developed over 40 specific bicycle/pedestrian and transit recommendations to support minor and major roadway improvements.

PUBLICATIONS AND PRESENTATIONS

Transportation Research Board Webinar, "Success Strategies for Metropolitan Planning Organizations," January 23, 2023.

NCHRP 1002: Metropolitan Planning Organizations: Strategies for Future Success. Transportation Research Board, NCHRP, 2002. Principal Investigator for study (NCHRP 08-122) and report.

The Next MPO: Future-Proofing Solutions, Association of MPOs, Minneapolis, MN, October 2020

Multimodal Planning and Travel Demand Management with Big Data, NC Association of MPOs, Charlotte, NC, April, 2019.

Bike+Walk Implementation Plan for Durham, NC. BikeWalkNC Summit, Wilmington, NC, November 2017.

Walk in the Light: Integrating Personal Security into Pedestrian Spaces. Walk21 Conference, Calgary, AB, Canada, September 2017.

Creating Value: Assessing the Return on Investment in Complete Streets. National Webinar (1000+attendance), National Complete Streets Coalition, Smart Growth America, March 2017. (website: https://smartgrowthamerica.org/app/uploads/2017/03/Creating-Value-Assessing-the-Return-on-Investment-in-Complete-Streets.pdf)

Corridor and Regional Planning in a New Age: Integrating Technology with Traditional Scenario Planning, Safety, and Multi-Modal Objectives. Association of Metropolitan Planning Organizations (AMPO), October 2013.

Presentation. MPO Act: Making Active Modes Real for the MPO/RPO. Association of Metropolitan Planning Organizations (AMPO), October 2011.

Presentation. Metrolina Transportation Framework Study. Association of Metropolitan Planning Organizations (AMPO), October 2011.

Presentation. Metrolina Transportation Framework Study. NC Association of Metropolitan Planning Organizations, April 2011.

Presentation. Transportation Decision-Making and Mobile Source Emissions: Does Land Use Matter. *Lecture series for University of North Carolina Charlotte*, May, 2010.

Presentation. Best Practices in Metropolitan Planning Organizations from Around the Country. N.C. Association of Metropolitan Planning Organizations Annual Conference, 2009.

John Tippett, Scott Lane, and Lisa Murphy. Presentation. PM2.5 Source Apportionment – Case Study of Hickory, N.C. Second Transportation, Land Use Planning and Emissions Conference, 2007.

Lewis, Jennifer; Lane, J. Scott. Presentation. Public Outreach in the Durham Pedestrian Plan: Effectiveness in a Diverse Community. *Annual Transportation Research Board Conference*, 2007.

Presentation. Estimating Mobile Source Emissions Benefits from Land Use Change – A Review of the State of the Practice. Second Transportation, Land Use Planning and Emissions Conference, 2007.

Szwarckop, Cindy; and Lane, J. Scott. An Eight-Step Process for Assessing Indirect and Cumulative Impacts. *Transportation Research Board*, 2004.

Utilizing a Travel Demand Model to Assess Community Impacts. *Transportation Research Board*, 2002.

Air Apparent: How the MPO Can Work With Air Quality. *Transportation Research Board*, 1998.

Comparative Performance of State Highway Systems 1984 – 1989. Transportation Research Board, 1992.

Presentation. Transportation Planning Applications in MPOs: Results of a National Survey. *Transportation Planning Applications Conference*, 1991.

Factors Affecting the Diffusion of Computerized Information Systems Among State DOTs. *Transportation Research Board*, 1990.