

ATTACHMENT A.
RESUME OF LYNN FARRINGTON

Lynn Farrington PE, PTOE

TRANSPORTATION ENGINEER

Firm

Louis Berger

Education

BS, Civil Engineering

Registrations/Certifications

Professional Engineer (NH, ME, MA, RI, GA)

Professional Traffic Operations Engineer

Years of Experience 9

Years with Firm 3

Professional Summary

Ms. Farrington has a strong transportation engineering background with nine years of experience. Previous project experiences include intersection and roadway operational analysis using Synchro/Sim Traffic, HCS and VISSIM, roadway design, striping, signing, and safety analysis. Her areas of specialization include traffic signal phasing and timing, traffic impact evaluation, roadway and intersection design and 3D traffic modeling. Ms. Farrington also has experience with specifications, drafting, project and utility coordination, estimates and scheduling.

Selected Louis Berger Experience

Rhode Island Airport Corporation, Adaptive Signal System Design, Warwick, Rhode Island. Traffic engineer. Led a team consisting of representatives from the Airport Corporation, Rhode Island Department of Transportation and Federal Highway. Assisted with the grant application process and received funding for over \$900,000. Worked with the diverse team of professionals to create a request for proposals and choose a qualified vendor. The design phase is now ending with construction expected to begin in September 2015. The schedule for this project has been accelerated to allow the option of using a general contractor already on site. Professional Services: 2014; Construction: 2015; Size: 1 Intersection; Cost: Unknown

MaineDOT, WIN 20205.00, Intersections of Route 35 & Route 5, Dayton, ME. Project Manager. The Maine Department of Transportation (MaineDOT) is proposing to improve the intersection of Route 5 (New County Road) and Route 35 (Clarks Mills Road) in the Town of Dayton, Maine by modifying the intersection from 2-way stop controlled to a roundabout configuration. The current intersection has five legs that intersect at very odd angles. The intersection is listed as a High Crash Location, with a current Crash Rate Factor (CRF) of 5.00 and one fatality in the last 3 years. The design was further complicated by a large number of oversized vehicles using the intersection. The project is currently in preliminary design. Louis Berger has created three different alternatives/layouts in the very tight corridor that were presented to MaineDOT. One alternative has been chosen and presented during a Public Hearing in January 2015. The project includes a complete reconstruction of the entire intersection including realigning four out of the five legs. Other parts of the project include drainage improvements, truck aprons and utility relocation. The project is currently scheduled to be constructed during the 2016 construction season using 80% federal funding.

Cranbury Road Area Bicycle and Pedestrian Mobility Alternatives Study, West Windsor Township, New Jersey. The Township, in response to the public demand, began a study to improve mobility options along a 2 mile stretch of Cranbury Road. The study area consists of two 11-foot travel lanes with limited shoulders. The study explored existing constraints, including utilities, right-of-way, and steep grades, and recommends alternatives to

improve vehicular, pedestrian and bicycle safety, improve mobility, provide more access to local businesses and properties, and better accommodate alternate modes of travel. Specific duties included sidewalk, bicycle lane and trail alignment alternatives, impact analysis, option comparison and review of the final report.

Federated Companies, midtown Development Traffic Impact Study, Portland, ME. Traffic engineer. Served as the primary engineer and project coordinator for the traffic impact study and permit application stage of development planning. The proposed 'midtown' development in the Bayside neighborhood is consists of a multi-use complex consisting of 100,000 square feet of retail space, 775 residential units and 1,040 parking spaces. Traffic forecasting, analysis, mitigation recommendations, scoping meetings and permit application process was completed by Louis Berger. Mitigation recommendations were also proposed to account for the 337 AM trip ends and 503 PM trip ends forecasted to impact the downtown area.

Jamaica North-South Highway Company Ltd. (JNSHC), Treadways Toll Plaza, Jamaica. Traffic engineer. The Treadways toll plaza and a portion of the highway from Linstead to Moneague (19.2 kilometers) was previously designed and constructed by a French developer. More recently, China Harbor Engineering Company Limited (CHEC) has completed this section of highway and plans to open it to the public in August of 2014. Specific duties included a site visit to review the equipment installed, recommend upgrades necessary to operate the plaza, created a tolling specific Operations and Maintenance Manual (OMM) for the August 2014 opening date. The OMM covered tolling operations, tolling equipment and structure maintenance, toll building and systems maintenance, signing and striping.

SMRT Inc, Maine Correctional Center, Windham, ME. Traffic engineer. Served as the primary engineer and project coordinator for the traffic impact study stage of expansion and/or relocation planning. The proposed expansion and relocation options analyzed intended to increase capacity at the site from 654 inmates to 1,531 inmates. Traffic forecasting, analysis, mitigation recommendations, scoping meetings and mitigation recommendations were proposed within the full study.

Jamaica North-South Highway Company Ltd. (JNSHC), Jamaica North-South Highway, Jamaica. Traffic engineer. Served as the primary peer reviewer for the traffic analysis of all proposed interchanges along the corridor. Traffic forecasting, analysis, intersection and interchange layout was reviewed by Louis Berger and suggestions were made to improve the final product for the client. The overall project includes full roadway construction from the City of Kingston to Ocho Rios. Specific duties include review of the layout, signing, striping and traffic flows based on current design standards.

Private Client, Interstate 4 Managed Lanes Design, Orlando, FL. Traffic engineer. As the consultants to the financiers of this design and construction team Louis Berger was routinely called upon to analyze proposed improvements to the original design using the VISSIM software. Based on proposed layouts the benefits to drivers was quantified in relationship to the additional cost of construction. Specific duties included traffic flow analysis, truck traffic analysis and VISSIM simulations.

New Jersey Transit, Pedestrian Pathway Design, Princeton Junction, New Jersey. Traffic engineer. The client envisioned a recreational bicycle and walking path adjacent to a proposed bus way between the towns of West Windsor and Princeton. While the existing right of way and slopes were sufficient for the planned bus way the concept design allowed the client to fully understand the impacts to adjacent lands due to excessive nearby grades. Specific duties included pathway design, drafting and preliminary impacts summary.

Robert Wood Johnson Hospital, Parking Garage, New Brunswick, New Jersey. Traffic engineer. The hospital's primary goal was to create adequate ingress and egress at a proposed parking garage while causing as few disruptions to traffic flow on nearby roadways as possible. Specific duties included Synchro/SimTraffic analysis of nearby signalized intersections prior to the construction of the garage and with anticipated volumes after

construction. The analysis led to a number of signal timing and phasing changes that allowed traffic to flow more efficiently after construction than was previously anticipated.

Department of Conservation and Recreation, Nantasket Beach Traffic Analysis, Hull, Massachusetts. Traffic engineer. The client is currently considering major changes to roadway configurations and traffic flow in the beach front area as part of their Master Plan. Specific duties included interaction with the client, town and public, 3D traffic analysis of peak summer weekend conditions at nine intersections, and analysis of proposed changes including rerouting a major roadway to an adjacent intersection. Other considerations involved in the master plan drafting are the addition of a dedicated bike path, pavilion area, ingress/egress assessment at maintenance facilities, facilities utilization analysis of maintenance and office facilities, possible facility layout options, recommended phasing of construction and preliminary cost estimates.

Massachusetts Department of Transportation, Emergency Access Gates, Lexington, Massachusetts. Traffic engineer. Roadway design along Route 2/Crosby's Corner include creating a limited access roadway with frontage roads along the current Route 2 corridor and significant expansion at Crosby's Corner to increase capacity. Specific duties on this project were the research, design, specifications and cost estimate for two automated cantilever access gates within the limited access corridor. These gates are anticipated for use by emergency responders and were requested by the Lexington Fire Department to decrease response times. A technical memorandum discussing possible limitations of gate operations was created in conjunction with the design documents and cost information.

Massachusetts Department of Transportation, Traffic Signal Regulation Permit Applications, Route 99, Massachusetts. Traffic engineer. Signal design, timings and phasings at five (5) intersections throughout the Route 99 corridor were completed in the towns of Boston and Everett. The City of Everett has a specific preemption system used by emergency vehicles that needed to be adhered to. The City of Boston utilizes specific controllers and does not have a preemption standard. These differences served to be a challenge during construction, installation and final acceptance. Specific duties included resolving the preemption issues during construction acceptance and preparing the traffic signal regulation permit applications for all signals and submitting to the appropriate districts for approval.

MaineDOT, Ogunquit 19106.00, Route 1/Main Street, Ogunquit, Maine. Transportation engineer. Assisting in the design of the 2.3-mile roadway rehabilitation of Route 1 through Ogunquit, Maine. Project includes resurfacing, drainage improvements, utility relocation, sidewalk construction, and project coordination for one of the most popular summer vacation destinations in Maine. The project is currently in final design and has been garnering municipal and state support since the first public hearing in May 2012. Specific duties include a full sign inventory, proposed signing and striping layouts, quantity and estimate preparation, plan set preparation, and guardrail design. Professional Services: 2013; Construction: TBD; Size: 2.3 miles; Cost: TBD

Rhode Island Department of Transportation (RIDOT), I-195 Bridge Construction, Providence, Rhode Island. Traffic engineer. Simultaneous construction of bridges 471 and 472 over the mainline. Developed a feasible detour plan through the city of Providence during all phases of bridge construction. Specific duties were to optimize traffic signal phasing and timing data at intersections nearby and design all detour signing necessary. VISSIM analysis was used to create a preferred ramp alignment and lane closure plan for I-195. Professional Services: 2013; Construction: TBD; Size: 2 Bridges; Cost: TBD

Rhode Island Department of Transportation (RIDOT), I-195 Bridge Construction, Providence, Rhode Island. Traffic engineer. Construction of bridge 465 which accesses the Veteran's Memorial Parkway from I-195. Developed a feasible detour plan through the city of Providence during all phases of bridge construction. Included a full shut-down of Warren Avenue to both vehicles and pedestrians during off-peak hours. Specific duties were to optimize traffic signal phasing and timing data at intersections nearby and design all detour signing necessary.

Analysis was completed using Synchro/Sim Traffic software. Professional Services: 2013; Construction: TBD; Size: 1 Bridge; Cost: TBD

Town of Concord, Cambridge Turnpike Improvement Project, Concord, Massachusetts. Traffic engineer. The Town's primary goal is to alleviate the flooding while ensuring a context sensitive balance is struck amongst cultural, environmental, roadway users, and aesthetic concerns. Specific duties included intersection analysis and proposal of five design alternatives for the intersection of Lexington Road and the Cambridge Turnpike. Pedestrian crossings, striping, traffic calming, intersection sight distance, and signing were a focus throughout the project duration. Professional Services: 2012; Construction: TBD; Size: 1.33 miles; Cost: TBD

City of Newport, Broadway Streetscape Improvements, Washington Square to Bliss Road, Newport, Rhode Island. Traffic engineer. Reconstruction of approximately 2,100 linear feet of roadway and associated pedestrian facilities for the purpose of achieving traffic calming while enhancing the roadway streetscape in downtown Newport. Several hardscape and landscape elements will transform the corridor, and a new decorative streetlighting system will be installed. Low Impact Development (LID) stormwater treatment technologies were incorporated throughout the streetscape area and were praised by the Rhode Island Department of Environmental Management (RIDEM). Primary responsibilities included overall traffic review of plans and addressing specific traffic related comments from RIDOT. Professional Services: 2013; Construction: TBD; Size: 2,100 ft; Cost: TBD

Rhode Island Airport Corporation, Intersection Design, Warwick, Rhode Island. Traffic engineer. Completed as part of the design phase for the Rhode Island Airport Corporation's proposed Winslow Park Sports Complex. Used Synchro/Sim Traffic to analyze possible layout alternatives to determine the effects on level of service during peak hour travel times. Major responsibilities included leading a team of six engineers to complete the signal phasing and timing, intersection layout and design, general plans, and quantity calculations within a severely limited schedule to meet a grant application deadline for the client. A nearby environmental resource required a revised layout. Professional Services: 2014; Construction: 2015; Size: 1 Intersection; Cost: Unknown

Rhode Island Airport Corporation, Traffic Signal Warrant Analysis, Warwick, Rhode Island. Traffic engineer. Completed as part of the planning and permitting phase for the Rhode Island Airport Corporation's proposed Winslow Park Sports Complex. Completed the signal warrant analysis at the intersection of Access Road and Airport Road in Warwick, Rhode Island. As part of this task, a formal report was drafted and presented to the client and RIDOT for review. Professional Services: 2013; Construction: TBD; Size: TBD; Cost: TBD

New Jersey Department of Transportation, Route I-76 and I-676 Bridge Deck Replacements and Roadway Resurfacing, Camden County, New Jersey. Lead Traffic Engineer. Responsible for Concept Development Activities including collecting existing traffic data, development of the VISSIM roadway network model, and analysis of traffic operations during proposed construction staging. The project will extend the service life of nine bridges and rehabilitate two miles of southbound pavement on I-76 and I-676. Louis Berger was initially tasked with the Final Design of three bridge deck replacements and two miles of pavement resurfacing. Field investigations performed as part of the initial project identified six additional bridges in need of rehabilitation. Louis Berger was subsequently tasked with performing three parallel Concept Development studies in order to advance the expanded project through the current NJDOT Capital Delivery Process. Results from the traffic operations analysis and recommendations made for construction staging, detour planning, and project phasing will be incorporated into a comprehensive Traffic Management Plan to be developed and modified over the entire course of the project.

Additional Experience

Maine Turnpike Authority (MTA), Origin and Destination (O&D) Study, Maine Turnpike, Maine. Transportation engineer. Comprehensive analysis of all origins and destinations on the Maine Turnpike. This effort was the largest O&D effort of any toll road in the United States. Responsibilities included planning and organizing the survey

distribution effort, assisting with and supervising others during the distribution of surveys, data collection, data input, and summarizing the collected information. Professional Services: 2010; Construction: N/A; Size: 103 miles; Cost: Unknown

New Hampshire Bureau of Turnpikes, Open Road Tolling (ORT) Analysis, Hampton, New Hampshire. Traffic engineer. Analysis and design of an open road tolling system on the mainline barrier in Hampton, New Hampshire. Responsibilities included organizing data and modeling the existing and proposed tolling systems in VISSIM, a type of traffic simulation software. 3D video clips of the analysis were presented to the client as well as queue lengths and delay times for each scenario. Based on the data presented the ORT proposal moved forward and the plaza has since been constructed. Professional Services: 2009; Construction: N/A; Size: 1 Barrier Toll; Cost: \$1.98 million

Maine Turnpike Authority, Safety and Capacity Study, Maine Turnpike, Maine. Traffic engineer. Identification of existing and future design hour volumes; analysis of existing roadway, toll plaza, and interchange operation; assessment of existing safety conditions; identification of improvement projects based on results of analysis; and report preparation. Responsible for performing traffic analysis for mainline and ramp locations at each interchange, safety analysis, and development of a preliminary report for Maine Turnpike Authority review and comment. Based on the safety analysis developed during the 2006 study two locations were recommended for installation of Roadway Information Systems (RWIS). These meteorological and pavement sensors alert maintenance teams when the friction factor of the roadway decreases so that plowing and de-icing operations can begin. Professional Services: 2010/2012; Construction: N/A; Size: 103 miles; Cost: Unknown

MTA, Headquarters Traffic Movement Permit, Maine. Traffic engineer. Assisted with data collection, analysis, and drafting of the final TMP for the Turnpike headquarters site on Congress Street in Portland, Maine. Professional Services: 2007; Construction: N/A; Size: 1 Permit; Cost: Unknown

New Hampshire Bureau of Turnpikes, Maintenance and Operations Review, New Hampshire. Transportation engineer. Participated in a review of the New Hampshire Bureau of Turnpikes' maintenance and operations program. Responsible for reviewing and summarizing information concerning the department's maintenance tasks and comparing it to industry standards. Recommendations were provided for existing winter, summer, and fleet maintenance operations. Professional Services: 2009; Construction: N/A; Size: 5 Facilities; Cost: Unknown

MTA, Service Plaza Signing, Maine. Traffic engineer. Designed all signs to be placed on the Turnpike mainline to notify patrons of three new service plazas. Responsible for both sign design and placement in all three locations. Professional Services: 2009; Construction: 2009; Size: 3 Service Plazas; Cost: Unknown

MassDOT, I-495/I-290 Interchange Analysis, Marlborough, Massachusetts. Traffic engineer. Used VISSIM traffic analysis software to analyze possible layout alternatives to determine the effects on level of service during peak hour travel times. This interchange is heavily traveled and is currently an area of congestion for commuters. Findings and recommendations were included in the final report. Professional Services: 2009; Construction: TBD; Size: 1 Interchange; Cost: TBD

MTA, Annual Inspection, Maine Turnpike, Maine. Transportation engineer. Key team member of the most recent annual inspection of the Maine Turnpike. Responsibilities included determining adequacy of signing, striping, pavement condition, toll plaza facilities, and drainage systems. Professional Services: 2012; Construction: N/A; Size: 103 miles; Cost: Unknown

MTA, Intelligent Transportation System On-Call Services, Maine. Traffic engineer. Responsibilities included troubleshooting and maintenance of the existing Highway Advisory Radio (HAR) and Closed Circuit Television (CCTV) systems. Also participated in the testing and implementation of a video sensor traffic count system now used on the southern 40 miles of the Maine Turnpike. This system replaced traffic loops buried in the pavement. For the design portion of these services, assisted with design of layout of highway speed E-ZPass readers on the

north end of the Turnpike at three existing interchanges. Also assisted with design and layout of the Maine Turnpike's disaster recovery shelter for file back-up and remote storage of information away from the mainframe computers. Professional Services: 2007-2011; Construction: N/A; Size: N/A; Cost: N/A

MTA, Open Road Tolling Design, New Gloucester, Maine. Transportation engineer. Integral part of the conversion to ORT at the New Gloucester mainline plaza. This conversion required placement of video surveillance, E-ZPass readers, and extensive schematic layout design for the electrical system. Professional Services: 2011; Construction: 2012; Size: 1 Mainline Barrier; Cost: \$4.3 million

MTA, Headquarters Site Design, Maine. Engineer. Assisted with the stormwater runoff design and mitigation for the Maine Turnpike's Headquarters on Skyway Drive. The Department of Environmental Protection's Best Management Practices (BMPs) were strictly adhered to since this site is within the Long Creek Watershed's drainage area. Assisted with hydroCAD modeling, mitigation planning, and plan production. Professional Services: 2007; Construction: 2009; Size: Unknown; Cost: Unknown

MTA, Gorham East-West Corridor Study (Phase I), Gorham, Maine. Traffic engineer. Responsibilities included planning, organizing, and collecting the traffic movement portion of the data. The purpose of the study was to develop viable options to relieve congestion within the study area. Involved in the summary and analysis of both safety data and turning movement counts. Also assisted with developing the existing and optimized traffic models using Synchro/SimTraffic Analysis. Professional Services: 2010; Construction: TBD; Size: TBD; Cost: TBD

City of Lewiston, East Avenue Traffic Study, Lewiston, Maine. Traffic engineer. Completed a requested traffic study of East Avenue which included analysis of eight signalized intersections along East Avenue and Lisbon Street using Synchro/Sim Traffic. The purpose of the traffic study was to develop updated traffic signal phasings, timings, and coordination data based on forecasted traffic volumes. Changes to the coordinated signal network were limited to phasing, timing, and coordination modifications. Involved in the data collection and summary of both safety data and turning movement counts. Also assisted with developing the existing and optimized traffic models. Professional Services: 2008; Construction: 2008; Size: 8 Intersections; Cost: Unknown

MTA, Congress Street Bridge Replacement, Portland, Maine. Traffic engineer. Focused on the development of optimized traffic signal phasing and timing data during bridge construction. Other responsibilities included intersection layout and design, preparing general plans, profiles, and cross sections for the site work on Congress Street as well as quantity calculations. Effort included analyzing existing and bridge closed conditions using Synchro/Sim Traffic for signalized intersections in the project study area. Professional Services: 2008; Construction: 2008; Size: 3 Intersections; Cost: Unknown

MaineDOT, Northbound I-295 Bridge Construction, Portland, Maine. Traffic engineer. Developed a feasible detour plan through the City of Portland during all phases of bridge construction. Specific duties were to optimize traffic signal phasing and timing data at intersections within the study area. Analysis was completed using both Synchro/Sim Traffic and VISSIM software. Final results were presented to the City of Portland using 3D video clips illustrating before and after conditions. Professional Services: 2011; Construction: 2012; Size: 13 Bridges; Cost: Unknown

MaineDOT, Dunstan Corner, Scarborough, Maine. Traffic engineer. Used Synchro/Sim Traffic to analyze possible layout alternatives to determine the effects on level of service during peak hour travel times. While the major responsibility was developing signal phasing and timing data, also assisted in intersection layout and design, preparing general plans, and quantity calculations. Professional Services: 2012; Construction: 2013; Size: 3 Intersections; Cost: \$3.35 million