

Stephen Landry, P.E., State Traffic Engineer
MaineDOT

OBJECTIVE

Use the knowledge and experience I have gathered in previous positions to advance my professional career, apply those skills to promote public/private partnerships and create synergy among stakeholders to facilitate diverse economic development opportunities in Maine. I strive to achieve win/win outcomes in complex situations, apply fairness in my decision-making, effectively communicate the core mission of my employer through my interactions with legislators, municipal officials, state officials, the business community, and members of the general public.

SUMMARY OF QUALIFICATIONS

RELEVANT WORK EXPERIENCE – MAINEDOT

2001- 2004 – Lead a working group to design a closed loop Traffic signal system (14 signals) in the Maine Mall Area in South Portland. The project included advanced dilemma zone protection and transit Priority.

2007 – Lead an effort to design a closed loop traffic signal system ((13 signals) on Western Ave in Augusta, ME. project including fiber interconnect

2011 - Lead an effort to design a closed loop traffic signal system (18 signals) on Kennedy Memorial Drive and Main ST in Waterville, ME. project including fiber and radio interconnect as well as APS.

2018 – Overseeing a group responsible for design of 104 traffic signals over 11 communities as part of a BUILD grant application. Project includes ATC controllers, ATC cabinets, hybrid roadside units (DSRC/cellular/CV2X), new signal detection, communications and 4 corridors of adaptive signal technology. Project is currently under construction

2020 - Overseeing a group responsible for design of 104 traffic signals over 11 communities as part of an ATCMTD grant application. Project includes ATC controllers, hybrid roadside units (DSRC/cellular/CV2X), new signal detection, communications and 4 corridors of adaptive signal technology. Project design is currently being finished

2022 – Leading an effort with a developer to design of 18 traffic signals along two corridors in the town of Scarborough. Project includes ATC controllers, ATC cabinets, hybrid roadside units (DSRC/cellular/CV2X), new signal detection, communications and both corridors will receive adaptive signal technology. Phase 1 of the project is currently under construction.

EDUCATION

UNIVERSITY OF MAINE AT ORONO

BACHELOR OF ARTS GEOLOGICAL SCIENCES

1981 - 1986

CERTIFICATIONS

CERTIFIED PROFESSIONAL ENGINEER, STATE OF MAINE, LICENSE # 7930.

SPRING 1994

ENGINEER IN TRAINING LICENSE, STATE OF MAINE, LICENSE # 3480

SPRING 1990

Luke Anthony Lorrimer P.E.

126 Cobb Rd, Turner, me

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Email: Luke.a.Lorrimer@maine.gov

Education

Lancaster University, England

Master of Engineering (MEng) in Mechantronics 2.1

Professional Engineer

Work Experience

I have spent over 10 years in the ITS group for Maine DoT. In this position I have worked with the majority of ITS equipment currently installed in the state. I have taken over the responsibility for both the weigh in motion (WIM) and changeable message signs (CMS). I have also written Specifications for new ITS equipment and special provisions for items not covered by the standard specification.

I spent 7 years working in an engineering consultancy for the oil and gas industry. During that time I was mostly involved in low pressure gas metering for both industrial and domestic use. I have been involved in the researching and design of new safety devices, the design, building and commissioning of test rigs, compliance testing of new products against purchase requirements, diagnostics of faulty products and the designing of tests to be included in the revision of British Standards.

CEII, ITS, Maine Department of Transportation, 66 Industrial Drive, Augusta, 04333
12/2017 - Current

- Installing, repairing and maintaining ITS equipment
- Writing specifications for new equipment to go out for bid
- Developing new roadside technologies (dynamic wrong way system)
- Short Training presentations for the use of ITS equipment
- Writing contracts for installation work to be performed by third parties
- Reviewing applications for HLB, and Compass upgrades
- CMS Automation using the ATMS for dynamic messaging in changing weather conditions
- HLB plans review and software upgrades for part time shoulder use on I-95
- Change over of Cell network providers for all ITS equipment
- Deployment of new streaming PTZ cameras and management software.
- Review of Smart camera detection software to detect traffic flow changes on the Interstate using streaming cameras
- Review and installation of new RWIS along Interstate corridor
- Involved with equipment spec operation and rollout of the BUILD grant to update Maine signal equipment

Assistant Engineer, ITS, Maine Department of Transportation, 66 Industrial Drive, Augusta, 04333

05/2013 – 12/2017

- Installing, repairing and maintaining ITS equipment
 - Repairing and maintaining CMS boards
 - Calibrating installing and data collection for WIM sites across Maine
 - Upgrading and installing Wrong way detection systems
 - Maintaining communications with remoter sites
 - Monitoring Over height vehicle detectors

- Organised the moving of the ITS office and equipment to the new location at industrial drive
- Short Training presentations for the use of ITS equipment

Technician, Traffic Counts, Maine Department of transportation, Child Street, Augusta, 04333

August 2012 – May 2013

- Updating the processing method to increase efficiency
- Processing the count data returned by the count teams
- Updating the count database with current years count locations
- Monitoring the permeant count sites
- Removing erroneous data from count database

Senior Engineer, GL Noble Denton, Holywell Park, Loughborough, England, LE11 3GR
2009-February 2012

- Supervisor for Lab technician and year in industry students
- The project manager for a suite of testing projects with a combined value of approximately \$500,000 involving:
 - Scoping of the separate project elements with the client,
 - Designing the tests and test regimes required
 - Preparing a quote for overall suite
 - Training junior team members in the testing methods required
 - Assigning resources to ensure all sections of the project could be completed within the appropriate timescale
- Site audits
 - Inspect the current arrangements of the installations on the sites
 - Producing a base report template
 - Report on each site detailing the non-compliances for each installation against the appropriate specifications
 - Detailing any required actions as well as general recommendations and installation upgrades
- Maintenance and repair of the test rigs and equipment used the laboratory area
- Responsible for the safe operation of the lab areas and inducting and training of new staff to work in this areas
- Company representative to the SBGI (Society of British Gas Industries) for metering services

Engineer, GL Noble Denton, Holywell Park, Loughborough, England, LE11 3GR
September 2007 – 2009

- For single projects with values up to \$75,000.
 - Scoping the projects with the client
 - Acting as the liaison for the client concerning the project
 - Overseeing and performing the testing to be undertaken
 - Analysing the results and completing any reports detailed in the scope

Graduate engineer, GL Noble Denton, Holywell Park, Loughborough, England, LE11 3GR
May 2005 – September 2007

- Performing test work assigned and described in the project scopes
- Producing draft reports summarizing the findings
- Attending training courses as part of the company graduate development program

Mechanical tester, GL Noble Denton, Holywell Park, Loughborough, England, LE11 3GR
Jan 2005 – May 2005

- Performance testing of 50,000 low pressure domestic gas regulators

Brooke Glidden, Assistant Transportation Engineer

Maine DOT
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Augusta, ME 04330

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Brooke.Glidden@maine.gov

Detail oriented and thorough Intelligent Transportation System Assistant Transportation Engineer with 3 years of experience at Maine DOT and 9 years of construction inspection experience on Maine DOT highway and bridge projects. Construction projects ranged from highway reconstruction and overlays to bridge rehabilitations and new construction.

Education

University of Maine, Orono, Maine
B.S., Civil and Environmental Engineering, May 2014
Minor in Construction Management
G.P.A. – 3.573

Certifications

- ACI Concrete Field-Testing Technician – Grade 1
- NETTCP Concrete Inspector #2066 (Previous)
- NETTCP Paving Inspector #3001
- NETTCP Nuclear Gauge
- ASBI Grouting Technician (Previous)
- OSHA 10-Hour Construction Safety
- Safety Works Scaffolding and Fall Protection

Project Experience

Maine Department of Transportation. *Assistant Transportation Engineer – November 2019 to Present*

I-95 High Level Bridge Part Time Shoulder Use Project (2021 – Present) – Design Build Project with Maine DOT, New Hampshire DOT, Maine Turnpike Authority, and the Contractor/ their designer. This project runs roughly 4 miles north and southbound on I-95 from New Hampshire to Maine, converting the shoulder to a travel lane during peak traffic times to alleviate congestion, improve safety, and enhance mobility. Traffic will be monitored using sensors and will alert the Transportation Management Center Operators when certain criteria are met to open and close the shoulder for travel. Brooke has been involved with this project from early design phases, reviewing plans and submittals. Construction has now started and expected to be completed May 2023.

Statewide Traffic Signals BUILD Grant Project (2021 – Present) – Traffic Signal Upgrade Project where Maine DOT is upgrading and taking over 104 intersections in several communities throughout Maine. The intersections are receiving new traffic signal controllers, video detection, advanced detection, preemption, connected vehicle technology, along with new signal equipment. The signals are connected and integrated into a system that can be remotely monitored and receive alerts when alarms in the cabinet are set off. Brooke got involved with the project when construction started. She has been included in reviewing submittals and RFI's, along with testing of the signal cabinets prior to installation and operation on the street. Then monitoring alarms for the cabinets post installation.

I-295 Communication Infrastructure Project (2021 – Present) – Worked with a consultant to evaluate current communications practices at Maine DOT. Develop a statewide broadband expansion strategy. Convene expansion partners and to design a broadband buildout around I-295. Brooke has been part of the group meeting with the consultant and reviewing materials put together for guidance on expanding the ITS communication infrastructure along I-295.

Horizontal Curves Project (2021 – Present) – Identifying dangerous curves throughout Maine using a data-driven process and to identify out of compliance signs. Using the results of the process to check out of compliance curves and create plans to install new signage to bring the curves into compliance.

Kleinfelder. *Class 3 Construction Inspector – May 2014 to November 2019*

Sarah Mildred Long Bridge Replacement Project (2015 – 2018) – Construction of a new bridge with an improved alignment for ship traffic on the Piscataqua River. The half mile long bridge includes 4 vertical precast concrete towers and a lift span that services trains, vehicles, and ships. Brooke was involved with the construction of the pre-cast towers and the mechanical/ electrical work within the bridge to operate the lift span. This included the control room which bridge operators monitor vehicle traffic on the bridge and ship traffic 24/7.

Mohammadali (Ali) Shirazi, Ph.D.

Assistant Professor

Department of Civil and Environmental Engineering

University of Maine, Orono, Maine

Email: shirazi@maine.edu | Phone: 207-581-5106

a. Education

Texas A&M University	Civil Engineering	PhD	2013 - 2018
Sharif University of Technology	Civil Engineering	MS	2009 - 2011
Iran University of Science and Technology	Civil Engineering	BS	2004 - 2009

b. Appointments

2019 - Present	Assistant Professor Civil and Environmental Engineering University of Maine, Orono, Maine
2018 - 2019	Research Fellow Civil and Environmental Engineering University of Michigan, Ann Arbor, Michigan

c. Select Publications

1. Shahlaee, A., **Shirazi, M.**, Marshall, E., & Ivan, J. N. (2022). Modeling the impact of the COVID-19 pandemic on speeding at rural roadway facilities in Maine using short-term speed and traffic count data. *Accident Analysis & Prevention*, 177, 106828.
2. Islam, A. M., **Shirazi, M.**, & Lord, D. (2022). Grouped Random Parameters Negative Binomial-Lindley for Accounting Unobserved Heterogeneity in Crash Data with Preponderant Zero Observations. *Analytic Methods in Accident Research* (Accepted for Publication)
3. Sawtelle, A, **Shirazi, M.**, Garder, P., Rubin, J. (2022). Driver, Roadway and Weather Factors on Severity of Lane Departure Crashes in Maine, *Journal of Safety Research* (Accepted for publication).
4. **Shirazi, M.**, S.R. Geedipally, and D. Lord (2021). A Simulation Analysis to Study the Temporal and Spatial Aggregations of Safety Datasets with Excess Zero Observations. *Transportmetrica A: Transport Science* (forthcoming).
5. **Shirazi, M.**, and Lord, D. (2019). Characteristics-based heuristics to select a logical distribution between the Poisson-gamma and the Poisson-lognormal for crash data modelling. *Transportmetrica A: Transport Science*, 15(2), 1791-1803.
6. Wu, L., Dadashova, B., Geedipally, S., Pratt, M. P., & **Shirazi, M.** (2019). Using naturalistic driving study data to explore the association between horizontal curve safety and operation on rural two-lane highways. *Journal of Transportation Safety & Security*, 1-18.
7. **Shirazi, M.**, S.S. Dhavala, D. Lord, S.R. Geedipally (2017). A methodology to design heuristics for model selection based on characteristics of data: Application to investigate when the Negative Binomial Lindley (NB-L) is preferred over the Negative Binomial (NB). *Accident Analysis and Prevention*, 107, pp.186-194.
8. **Shirazi, M.**, Aashtiani, H. Z., & Quadrifoglio, L. (2017). Estimating the minimal revenue tolls in large-scale roadway networks using the dynamic penalty function method. *Computers & Industrial Engineering*, 107, 120-127.
9. Geedipally, S. R., **Shirazi, M.**, & Lord, D. (2017). Exploring the need for region-specific calibration factors. *Transportation Research Record*, 2636(1), 73-79.

10. Shirazi, M., Geedipally, S. R., & Lord, D. (2017). A procedure to determine when safety performance functions should be recalibrated. *Journal of Transportation Safety & Security*, 9(4), 457-469.
11. Shirazi, M., S.R. Geedipally, and D. Lord (2017). A Monte-Carlo simulation analysis for evaluating the severity distribution functions (SDFs) calibration methodology and determining the minimum sample-size requirements. *Accident Analysis and Prevention*, 98, pp.303–311.
12. Shirazi, M, S.R. Geedipally and D. Lord (2017). A procedure to determine when safety performance functions should be recalibrated. *Journal of Transportation Safety and Security*, 9(4), pp.457-469.
13. Shirazi, M, D. Lord, and S.R. Geedipally (2016). Sample-size guidelines for recalibrating crash prediction models: Recommendations for the highway safety manual. *Accident Analysis and Prevention*, 93, pp. 160-168.
14. Shirazi, M, D. Lord, S.S. Dhavala and S.R. Geedipally (2016). A Semiparametric negative binomial generalized linear model for modeling over dispersed count data with a heavy tail: Characteristics and applications to crash data. *Accident Analysis and Prevention*, 91, pp. 10-18.

d. Select Funded Projects

1. **Institution PI.** \$180,000 (direct share). August. 2023 [expected] – Dec. 2025, Maine Advanced Signal Control and Connected Vehicle System for Safe, Efficient and Equitable Rural Transportation (MAST). Agency: FHWA (lead by Maine DOT).
2. **Institution PI.** \$75,000 (July 2022- December 2025). Agency: National Academy of Sciences, National Cooperative Highway Research Program (NCHRP). Evaluating the Impacts of Real-Time Warnings and Variable Speed Limits on Safety and Travel Reliability during Weather Events. [Lead: University of Connecticut, Total \$400,000].
3. **PI.** \$117,863, (Jan 2022-Dec 2023).Maine DOT and Region 1 TIDC UTC. Exploring the Safety Impact of Rumble Strips on Prevention of Lane Departure Crashes in Maine
4. **PI.** \$129,650. (Nov. 2020 - Dec. 2022) Agency: Region 1 TIDC UTC. Safety Assessment of New England Roadways during the COVID-19 Pandemic.
5. **Institution PI.** \$50,000 (direct share), (June 2021 - Dec 2023) Agency: New England Transportation Consortium: NETC. Current Status of Transportation Data Analytics and a Pilot Case Study Using Artificial Intelligence (AI) [Lead by UMass-Lowell, total: \$200,000]
6. **Co-PI.** \$103,637 (20% responsivity) (June 2020 – Dec 2022). Agency: Maine DOT. Road Salt Impact Assessment.

e. Select Synergistic Activities

1. UMaine faculty representative at the “Transportation Research Board”.
2. UMaine representative at Maine’s “State Transportation Innovation Council”.
3. Member of Organizing Committee on “2021 International Symposium on Transportation Data and Modeling” in Ann Arbor, MI.
4. Service as a reviewer for different journals such as:
Accident Analysis and Prevention, Safety Science, Journal of Safety Research, Risk Analysis, Transportation Science, Transportation Research Part C, Transportation Research Part E, European Journal of Operational Research, Transportation Research Record, IATSS Research, Transportation Letters, Traffic Injury Prevention, Journal of Statistical Computation and Simulation, International Journal of Urban Sciences, IEEE Access.

Craig Zurhorst, Community Relations Director
Western Maine Transportation Services, Inc.
76 Merrow Road, Auburn, ME 04210
(207) 330-3315 office czurhorst@westernmainetrans.org

EXPERIENCE

Western Maine Transportation Services Community Relations Director (2007-Present)

- Maintains relationships and open communications with all communities served
- Raises local matching funds through grant writing, municipal and county appeals
- Maintains relationships with social service agencies operating in the WMTS service area
- Represents WMTS on community-based grant-funded projects
- Seeks opportunities to provide new transportation services
- Assists with development of updated and new bus routes and services
- Writes, edits and designs communications, press releases, brochures, schedules and newsletters
- Assists in content creation for Western Maine Transportation Services' websites and social media
- Maintains governmental relations at municipal and county levels
- Assists with legislative relations as needed
- Provides internal technical expertise for data, telecom and technology implementation projects

EXPERTISE (alphabetical)

- Advertising
- Audio / video / audiovisual production, engineering, system design and integration
- Broadcasting / webcasting
- Business and community relationship networking
- Computer use and technology application for PC and Mac
- Corporate / Industrial training
- Event planning and coordination
- Government relations
- Graphic design
- Information Technology project management
- Journalism
- Logistics facilitation and expediting
- Marketing
- Media relations
- Photography
- Public relations / Community relations / Public Affairs
- Public speaking and announcing
- Social media
- Telecommunications / IT project management
- Writing / Business writing / Technical writing

EDUCATION, DEVELOPMENT and CERTIFICATION

- Degree in Agricultural Mechanization: University of Maine
- Extensive coursework in Journalism: University of Maine
- Extensive coursework in Communications: University of Southern Maine
- Executive Seminar for Writing, Public Speaking and Media Relations: The Buckley School
- Media Relations and Public Relations Training Program: Regan Communications
- Leaders Window Leadership Training Certification: Charter Oak Consulting
- Pulp and Paper Technology: Kennebec Valley Community College
- Mead Paper Knowledge Seminar: Mead Corporation
- Current US Passport
- Valid General Class Amateur Radio License
- Valid Driver's License