COMPLETE STREETS PROJECT PRIORITIZATION PLAN

Town of Norwell, Massachusetts

March 18th, 2016

Stantec

Stantec Consulting Services Inc.
5 Burlington Woods Drive Suite 210, Burlington MA 01803-4511

March 18, 2016

Town of Norwell
Attn: Chris Diiorio
Town Hall
345 Main Street
Norwell, MA 02061

Re: Complete Streets Project Prioritization Plan -Technical Proposal

Dear Mr. Diiorio:

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. By adopting a Complete Streets Policy, the Town of Norwell is now eligible to apply to the tier 2 program funding. The Town's RFP and our proposal are the next steps to receive that funding.

Alan Cloutier, P.E., PTOE is assigned as **Project Manager**, and will serve as the main point of contact. Alan has been selected for this role to take advantage of his background and experience working on recent successful transportation projects for New England municipalities. At Stantec, his work on similar projects has afforded him the opportunity to work closely with clients to develop and implement comprehensive and effective projects with unique or challenging budgets and schedules. His well-rounded experience with municipal transportation enhancements make him ideal for assisting the town in prioritizing Complete Street projects.

Alan will be supported by professionals adept in data management and analysis, as well as resources with direct experience training and educating Massachusetts municipal officials in the latest in Complete Streets ideologies and the recent funding made available in January. In addition, for the City of Salem, MA and Town of Groton, MA, our planning documents have informed their Complete Streets Policies for approval from the State to receive tier 2 funding (the latter will go before the Town for approval Thursday March 17, 2016). For both communities our efforts have included comprehensive master planning efforts similar to this prioritization project.

Members of our team are currently working with MassDOT to develop the next round of complete streets training sessions for municipal officials. These sessions will address the latest trends and particularly how to apply for and maximize the funding made available by Governor Baker's administration. Based on our in depth knowledge of the Complete Streets program, we are very confident that our team can successfully meet the goals of the Town. Our team is enthusiastic about the contributions we can make to this project. On behalf of our entire team, we very much look forward to working with the Town of Norwell on this project.

Very truly yours,
Stantec Consulting Services, Inc.

William J. Reed, P.E.
Senior Principal

Complete Streets Project Prioritization Plan

Prepared for:
The Town of Norwell, Massachusetts

Prepared by:

Stantec

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Introduction

Complete Streets are designed and operated to provide safety and accessibility for all the users of our roadways, trails and transit systems, including pedestrians, bicyclists, transit riders, motorists, and commercial and emergency vehicles and for people of all ages and abilities. Furthermore, Complete Streets principles contribute toward the safety, health, economic viability, and quality of life in a community by providing accessible and efficient connections between home, school, work, recreation and retail destinations by improving the pedestrian and vehicular environments throughout communities.

The Baker Administration press release dated February 1, 2016 on the Complete Streets Program states:

"A Complete Street is one that provides safe and accessible options for all travel modes – walking, biking, transit and vehicles – for people of all ages and abilities. The Complete Streets Funding Program includes three primary requirements that deem a municipality eligible for up to $50,000 for technical assistance, and up to $400,000 for construction funding with additional consideration in the qualification process for Community Compact communities."

Traditionally Stantec approaches all roadway projects as potential opportunities to apply Complete Streets design principles. Our goal, working alongside the Town, is to maximize - to the extent practical - design, construction, maintenance, and operation of streets to provide a comprehensive and integrated network of facilities for people of all ages and abilities.

To that end, Stantec has been working with MassDOT and Baystate Roads on an education program for municipalities to understand Complete Streets methodology. This workshop is provided for local leaders, decision makers, and consultants to gain a solid framework for planning and delivering Complete Streets locally. We educate them to understand how the Complete Streets Funding Program can help communities design and fund Complete Streets projects.

Technical Approach

In addition to conducting Complete Streets training courses statewide, Stantec has significant experience with Complete Street policies and design. Our urban designers and engineers have designed and implemented a number of complete street projects – Nonantum Road in Watertown, Mass Ave in Arlington, as well as developing and implementing the Salem Bicycle Circulation Plan. Since we have seen complete streets projects through the project life cycle (planning, design, construction), we know the types of issues that arise with these projects. The prioritization plan will be much more than simply a list of projects, but rather a carefully considered plan of projects that may be reasonably constructed. We are very familiar with both the benefits of a complete street, and the final reward of a successfully implemented plan.

The following is our approach to successfully establish and deliver a Complete Street Prioritization Plan, sufficient for Tier 2 programming. The Complete Street Prioritization Plan will identify projects, and then these projects may be eligible for the $400,000 construction funding offered

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under Tier 3 of the Complete Streets funding program. This proposed work will meet MassDOT requirements for Complete Streets Program Technical Assistance.

The Complete Street Prioritization Plan will be a targeted investment strategy to improve safety, mobility and/or accessibility. It will identify the street, infrastructure, cost estimate and timeline for Norwell's desired Complete Street improvements, and will align with local Master plans the town has been carefully crafting and implementing over the years. Roadway maintenance schedules are included in the recommended projects. The prioritization plan will be compliant with MassDOT requirements for the technical assistance funding. As desired, Stantec will be happy to assist the Town with design work related to future complete streets implementation.

Scope of Services

Activities to be performed in support of the development of a Complete Street Project Prioritization Plan will consist of the following Tasks:

1. Project Existing Data:

Project Kickoff Meeting: Stantec will meet with the Town to gather all available information. In addition, Stantec will discuss key roadways to review within the town.

Stantec will compile existing data / studies from the Town's planning, DPW or engineering departments and/or other sources such as the Regional Planning Authority. The information to be compiled is expected to be made available from the Town and include, but not limited to, the following information:

a. Capital Investment Plans
b. Network Gap Analysis (Bicycle, Pedestrian, & Transit)
c. Roadway Maintenance Plan
d. Pavement Management System
e. Private Development Projects
f. ADA Assessments
g. Bicycle and Pedestrian Assessments

A review of available information indicates that the Town of Norwell does not have any HSIP eligible high crash locations.

Build Database: In addition to the data described above, Stantec will request existing GIS data layers. Stantec's GIS Analyst will use the Town's existing GIS data layers to establish a comprehensive GIS Town network. Existing data and current plans will be entered into the GIS database for subsequent analysis.

For the City of Boston, Stantec created and continues to update and implement a 3-year roadway/sidewalk repair program that includes a city-wide GPS database of ADA ramps, pavement (160 miles) and sidewalk (1,600 miles) conditions to inform a programmed repair strategy.

2. Determine Additional Needs

Alan Cloutier and Gary Hebert worked hand in glove with the City of Salem and community to produce a citywide bicycle plan. The plan identified on- and off-road routes to be integrated into the existing system to offer greater access to a growing and diverse population of users and types of uses. Since the plan's completion, design and construction has been programmed and is near full build-out.

Stantec will identify which additional data needs to be developed or recorded to sufficiently provide an equal basis for prioritization. Stantec will travel all Town roadways identified in the project kickoff meeting. Qualitative operating characteristics will be observed and recorded, such as lane arrangement, availability of sidewalks, shoulders, and bicycle accommodations. Photographs of each roadway segment will be taken.

A Network Gap analysis will be conducted using the GIS database. This Network Gap analysis is important to identify gaps within the pedestrian or bicycle network. These gaps can provide barriers to walking and bicycling between areas. The GIS database can be used to visually identify areas with adequate pedestrian and bicycle accommodation. Gaps in the pedestrian and bicycle network will be identified as potential projects.

Since there are no locations that have been identified as HSIP eligible crash clusters, a Roadway Safety Audit is not required.

3. Evaluation, Project Selection Process and Final Project Prioritization

Stantec will develop a list of potential projects based on the Town's identification of desired projects as well as additional projects identified based on our Network Gap Analysis and the field observations. The listing of projects will then be evaluated to create a prioritized listing.

Order of magnitude cost estimates for each project will be developed. Cost Estimates will either be obtained from previous analysis, or will be developed by Stantec. New cost estimates will be developed based on unit costs.

For the evaluation, we anticipate using the Weighted Evaluation Criteria plus Cost Level method. This method would group projects into cost levels after ranking projects based on weighted evaluation criteria. We expect developing three lists at different funding levels (such as under $50,000, $50,000-$100,000 and over $100,000). The ranges for projects will be decided based on the actual projects and following conversations with the Town.

The process of prioritizing projects will involve evaluation criteria tailored to addressing issues/needs and accomplishing goals desired by the Town of Norwell. Each project will be scored based on the improvement/ impact for each criterion. The criteria that Stantec anticipates using will consist of the following elements.

- Safety Benefits (addresses high crash location),
- Pedestrian Improvements
- Bicycle Mobility

- Transit Operations (School Buses Only)
- Vehicular Operations Improvements
- Freight Operations Improvements
- Compatibility with local or regional goals
- Degree of public stakeholder support
- Plan progress
- Anticipated Project Schedule
- Cost Estimate
- Impacts to Right-of-way
- Impacts to Environmental/ Cultural/ Historical resources.

Stantec has worked with the Town of Groton for years tweaking their transportation master plan. Beyond assisting with traffic, parking and intersection alignments, the plan identifies alternative connections including an equestrian trail (Fitch's Bridge over the Nashua River). The plan identifies short and long term goals similar to a Complete Streets Prioritization Plan.

Prior to starting the evaluation, Stantec will discuss with the town the general importance of each criterion. For instance, freight operations may be less important to the Town of Norwell then it would be to other communities, yet connection to the MBTA Greenbush commuter rail station in Scituate would be a likely consideration.

Once Stantec develops the initial prioritized listing of scored projects, we will review the results with the Town. If desired, the weighting of the evaluation criteria can be adjusted based on the Town's goals.

Project Strategy Meeting: After data inventory, Stantec and Town staff will review sidewalk/ramp inventory and condition findings, discuss Town repair polices, repair costs, and important prioritization criteria to develop a cost-effective maintenance capital improvement strategy.

Deliverables

Report of Findings: Stantec will develop a non-technical report written in layman terms describing town-wide complete street deficiencies, recommendations for improvements and prioritized listing. The report will include graphs, tables, and figures to convey the results of the analysis and prioritization recommendations.

Complete Streets Project Prioritization Plan utilizing MassDOT's template that identifies at a minimum a 5-year prioritization plan with a minimum 15 potential projects that focus on addressing the following needs of Complete Streets:

- Safety: addresses high crash locations, reduces vehicular speeds, etc.
- ADA accessibility: wheelchair ramps added, etc.

- Pedestrian safety or mobility: new/improved crosswalks, sidewalks/paths, pedestrian signals, etc.
- Bicycle safety or mobility: new bike lanes, wider shoulders, signal accommodation,
- Bicycle parking, etc.
- Transit operations and access: enhanced stop amenities, queue jump lanes, stop consolidation, etc.
- Vehicular operations
- Freight operations

Consistent with MassDOT's template, the Complete Street Prioritization Plan will include:

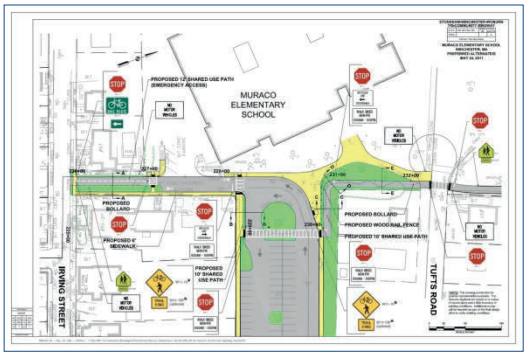
- Preparation or preliminary project estimates to assist with programming construction funds.
- Preparation of estimated construction duration/ schedules to assist with identifying projects that can meet fiscal year deadlines.

Supporting Tasks

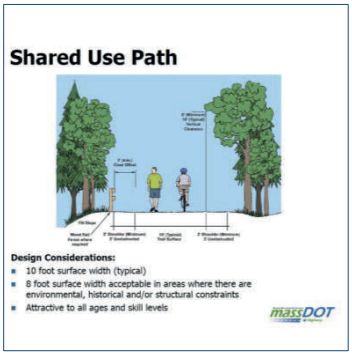
As referenced within the first three tasks, Stantec will utilize GIS in the preparation of the prioritization plan. GIS based Townwide maps will be prepared showing various elements, such as sidewalks, bicycle compatible roadways and network gaps.

A total of three meetings with the Town are included as part of this Scope of Services. The first meeting will be at project kickoff to gather data. An additional meeting is anticipated to review the draft prioritization.

Stantec will also attend a public meeting to present Norwell's complete street prioritization plan. The presentation includes preparation of charts, tables, and graphics to convey findings, and funding recommendations. The Town will be responsible for organizing the meeting.



Complete Streets projects offer great opportunity to build community. Project manager, Alan Cloutier, led a number of community meetings with stakeholders of the Tri-Community Bikeway in Winchester, Woburn and Stoneham. To facilitate opportunities to include these concepts, Alan used engineering plans and cross sections enhanced with more graphical details to generate discussion and guide the decision making process.



Project Staffing and Management

We are better together. We take that core value seriously at Stantec. That's why we have assembled a strong team of our local experts to provide you with the best project experience possible.

Our intention is to deliver a focused process that facilitates the successful completion of the Complete Streets Project Prioritization Plan today and helps you move confidently toward tomorrow. Taking into consideration the goals and objectives, which prioritizes a minimum of fifteen projects implemented over a five year period, the expertise and availability of our professionals has been carefully handpicked so the team is right for you.

Stantec professionals have completed hundreds of assignments for municipal improvements for New England communities. More often now, our approaches fix more than pavement or realign an intersection. They address both of those issues plus provide a space for any user to move through the area. Led by **Alan Cloutier, PE, PTOE, project manager,** he will guide our team and the Town of Norwell through the process resulting in a Complete Streets Project Prioritization Plan. He is a capable project manager with strong technical skills to ensure the success of this project.

TOWN OF NORWELL

Principal in Charge
Bill Reed, PE

William Reed, PE, serving as the **principal** of this project has led our municipal practice for many years. Bill understands the critical resources firms like Stantec provides to staff and budget strapped communities. His goal is to ensure the town of Norwell has the necessary resources from Stantec to make this a successful project. Bill is a long-time South Shore resident and enjoys participating in community-building projects close to home.

Project Manager
Alan Cloutier, PE, PTOE

Data Collection & Analysis
Ramandeep Josen

This project will be supported primarily by **Ramandeep Josen.** Raman is part of Stantec's asset management team, and is proficient in data collection and analysis. Available resources to Alan and Norwell are **Douglas Prentiss, PE, PTOE** and **Gary**

Resources
Doug Prentiss PE, PTOE

Resources
Gary Hebert PE, PTOE

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Hebert, PE, PTOE. Doug and Gary have more than 90 years of experience between them. They have worked primarily with communities to plan and implement traffic and roadway improvements through a meaningful planning process. Doug is currently providing communities with the necessary training, sponsored by Baystate Roads and MassDOT, to enact complete street policies and apply for funding.

This team will be available for the duration of this project. We expect Alan and Raman, with occasional insight from Doug and Gary, to manage the lion share of the work for this project. However, if project needs change, we can add staff as necessary. We've also included brief resumes of our team members so you can get to know a little bit more about them.

Project Staffing

Alan Cloutier, PE, PTOE, Sr. Transportation Engineer is proposed as **Project Manager.** Alan brings a strong background coordinating diverse elements of municipal roadway corridors which have involved complete street-like improvements such as pavement, curbing, traffic, drainage, and signing improvements. Recent work includes leading traffic engineering for the design of roadway and intersection improvements for the Highland Avenue/Needham Street/Winchester Street corridor in Needham and Newton. Key elements of this work have included traffic access and circulation improvements, as well as proposing accommodations for pedestrians and bicyclists. He also served as Traffic Engineer for the Massachusetts DCR's improvements to the Nonantum Road Corridor through Watertown, Newton and Brighton. He is currently serving as the President of the New England Section of the Institute of Transportation Engineers.

For the City of Salem, Alan developed design plans for an on-road bike route linking public parks within the City.

Alan will be the primary contact for the Town of Norwell on this project, and will monitor project progress to ensure that all work is completed within established budgets and schedules.

Data Collection and Analysis

Ramandeep S. Josen has multiple years of experience processing and analyzing data to optimize asset management systems. Working closely with these communities, he has been responsible for data collection, software configuration, producing reports, training staff and presenting findings to decision makers. Raman fully grasps the depths and efficacy of a well-populated database. He has worked with numerous clients with geo-linking and the creation of asset shapefiles based on data collected in the field. Raman will work closely with Alan to assist in the day-to-day data collection, writing a report of findings and recommendations.

In addition to the day-to-day field data collection, Raman will meet with Town staff to report project progress; develop strategies; ensure data output in accordance with Town policy; write a report of findings and recommendations; train staff on field data collection methodology and software analysis; and conduct public presentation(s).

Resources

Doug Prentiss, PE, PTOE will provide support as needed for this project. Doug specializes in municipal transportation planning and traffic engineering, and has been leading training sessions for the MassDOT to municipalities throughout the state to educate officials and consultants in the policy of Complete Streets.

Gary L. Hebert, PE, PTOE has more than 40 years professional experience that includes traffic and land use impact studies, public transportation and environmental impact reports and assessments. The City of Salem retained Gary to review transportation impacts of various developments, and development of appropriate and practical mitigation, including the development of a City-wide Bicycle Plan. He assisted the Town of Groton develop a Master Plan which has helped inform the Town's development of a Complete Streets Policy that will go in front of the Town for adoption later this spring.

Project Management

Your project truly can be exceptional. You envisioned it that way, and with strong project management, that vision can be realized. That's where our project manager and technical professionals bring their expertise to your project. We share your vision. We have well-defined project approaches that keep your project on track and manage any unforeseen events. Our tools can be customized to your project. Some projects rely on strong management, while others need staffing. This project will rely on some of our key tools including:

Scheduling: Stantec typically develops a schedule outlining the project's major activities and related durations. We use MS Project as our primary scheduling software.

Budget Control: We know it's important to come in on budget. Our enterprise software application allows management of project design expenditures through close monitoring and earned value analysis reporting. We draw on our extensive project knowledge base to provide early project scoping costs, updates, and final construction estimates.

Quality Control/Quality Assurance: At Stantec, we like to raise the bar on excellence. With our comprehensive quality program, we deliver services that have been through a detailed review, thereby limiting errors and omissions to provide you with high-quality products.

Value-Added Services: Because we have experts and experience in a diverse range of projects, we bring our knowledge of various construction options to designing a project that will best meet your needs.

Project Plan: The final report is more than a formality. It documents the process of the initial project development phase, informs decision makers, and is the foundation for advancing a project. Our priority is to provide professional documents that include effective maps, graphs, figures and tables that supplement the text. We take steps to make sure the quality and readability of our reports matches the quality of our data and solutions. That means our reports go through a review process before you see a draft, allowing you to focus on content, not corrections.

Related Experience

Introduction to the Firm

Stantec has completed hundreds of street and roadway projects throughout Massachusetts and the Northeast.

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind. The Stantec community unites more than 15,000 employees working in over 250 locations. We collaborate across disciplines and industries to bring buildings, energy and resource, and infrastructure projects to life. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With a long-term commitment to the people and places we serve, Stantec has the ability to connect to projects on a personal level and advance quality of life in communities. Stantec trades on the TSX and the NYSE under the symbol STN.

Traffic and Transportation Engineering

Many of our design projects originate from recommended improvements in master plans that we prepare for our Clients. The plans range from repairs, replacement and rehabilitation to expanding and upgrading facilities to accommodate increased capacity, to recommendations for installing new and advanced facilities. Incorporated into many of these assignments were Environmental Assessments; local, state, and federal permitting; evaluation of needs; investigation and review of alternatives; and evaluation of facilities to handle future uses.

Complete Streets

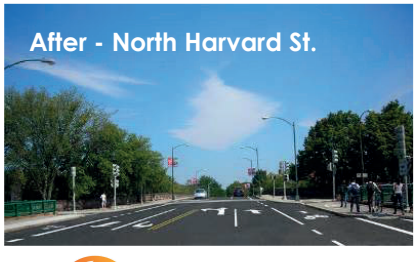
Complete Streets is a nationwide program that has been adopted by State DOT's to ensure that provisions are made to accommodate pedestrians, bicyclists, transit, and all vehicles. Stantec has been involved in Complete Streets projects for years. We are providing Complete Streets training in Massachusetts, New Hampshire and New York. The training is given to a variety of individuals that include statewide DOT personnel; community engineering, planning and administrative staff; state and municipal public health officials; local board members; private consultants; attorneys; architects and various local officials. The key elements include:

- Providing accommodations on a facility for all users, i.e. pedestrians, vehicles, bicycles, transit and disabled individuals, including improved mobility for children, the elderly, and people with disabilities;
- Providing active living areas for all users by promoting more walking, bike riding and enhanced activity; and
- Creating an impact on the number of overweight and obese Americans and thus reducing health-care costs.

The before and after photos and descriptions are a sampling of recent complete streets projects:

North Harvard Street, Cambridge-Boston, MA

- Reduction of one through travel lane
- Addition of bike lanes on-street



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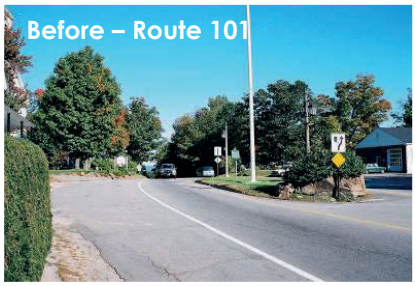

Route 101, Dublin, NH

- Reduction of edge to edge roadway width
- Addition of sidewalks
- Reduction of travel lane width
- Addition of traffic calming features
- ACEC NH EEA winner

Washington Street, Canton, MA

- Reduction of travel lanes
- Provision of sheltered parking
- Addition of landscaped areas
- Provision of improved shoulder areas

Relevant Experience

Complete Streets 101 - Benefits, Eligibility & Funding, Statewide, MA

Since 2011 Stantec has been assisting MassDOT to deliver introductory and advanced complete streets training sessions. We have led nearly 100 sessions to hundreds of municipal officials, consultants, contractors, etc. to as few as four people and as many as 60 at a time. Recently, the Baker Administration has authorized funding for complete streets projects, and in order to respond to the growing demand we are developing, in concert with MassDOT, new training sessions educate municipal officials to take advantage of the new CS Funding Program for local roads. The training sessions will also expand on new techniques, tools and methodologies for implementing CS, and respond to previous workshop evaluations and address implementation issues identified in the field.

Stantec instructors walk you through the Complete Streets 3-tier funding program to show all municipalities - regardless of size or location - can benefit. Attendees review and grade a sample policy and learn about the Policy Development process. Also, the class provides guidance on how to build a municipality-wide Complete Streets Prioritization Plan. **Reference:** Christopher Ahmadjian, Program Manager, Baystate Roads, 413.577.2762

Citywide Bicycle Circulation Master Plan, Salem, MA

Through an on-call contract that began 10 years ago and continues today, Stantec worked with the City of Salem to develop a Citywide Bicycle Circulation Master Plan. The Master Plan identified the extent of the bicycle infrastructure that should be designated as high priority for on and off street bicycle infrastructure. Due to significant roadway dimensional constraints, much of the on-street infrastructure was proposed for shared use lane markings. Where sufficient widths

and separate rights of way were available, bike lanes and exclusive bike paths were identified. "The Master Plan called for creating more than 33 miles of designated bicycle routes including a total of 4.3 miles of bikeways, 6.3 miles of bike lanes, and 22.6 miles of shared bike routes. The study included a detailed evaluation of a high priority 4.5 mile "pilot" route" as well as estimates of construction and annual maintenance costs. It also included a public involvement process and an overview plan illustrating various bicycle infrastructure elements.

Following the study, the City called on Stantec to prepare a bid package and assist with construction period services for the initial pilot route.

Our bicycle master plan is cited as one of the reference tools used for the City's adopted Complete Streets Policy. In addition we have worked on numerous roadway related projects with the City, and generally have incorporated Complete Streets principles in most, if not all, of the transportation projects we've undertaken on the City's behalf.

Reference: David Knowlton, P.E, City Engineer, 978.745.9595

Master Plan Circulation Update, Groton, MA

Since the late 1990s, Stantec has been working with the Town of Groton. During this time, we were requested to assist in updating the circulation element of its Comprehensive Master Plan. Groton is a community very proud of its historical context and was interested in updating and enhancing its multi modal environment that included an extensive and comprehensive trails system, while the roadway system is highly constrained by seasonal flooding issues. The community strongly advocates retention of open spaces and trees in all of its developments. Stantec worked closely with the Town's Transportation Subcommittee to identify and prioritize circulation enhancements for all modes -- motorists, bicyclists, and pedestrians.

We developed a 'tailor made' presentation to complete streets in Groton, which requested a Complete Streets policy as part of its circulation master plan. Stantec reviewed all streets in the Town for sidewalk deficiencies and provided GIS mapping of potential rails to trails conversions. Groton is implementing its Complete Streets policy in short and long term phases. (The Planning Board has a Complete Streets review on its Agenda for their March 17, 2016 meeting.

Stantec designed one of the short term strategies, replacement of the Fitches Bridge as a multi-use trail bridge that is now fully operational.

Reference: Michelle Collette, ADA Administrator, 978.448.1105

Complete Streets Upgrades, Massachusetts Avenue, Arlington, MA

Stantec led a team to design a major streetscape and transportation improvement project along a one-mile length of Massachusetts Avenue. This roadway was notable for its wide expanse of pavement. Stantec completed a comprehensive traffic study and analysis to demonstrate all of this available pavement was not needed for future vehicular use. Consequently, the Stantec team took advantage of this very wide right-of-way to create a "boulevard" feel and provide a unified and welcoming visual experience along the entire corridor.

Improvements in traffic flow and safety for motorists, bicyclists, pedestrians and transit users was accomplished by reallocating available roadway pavement to non-vehicular uses , creating curb extensions at pedestrian crossings, providing median islands at high volume pedestrian crossings, and defining travel lanes, dedicated turn lanes, bicycle lanes and transit bus stops with pavement markings and the installation of contrasting pavement surfaces. Traffic operational improvements along Massachusetts Avenue were achieved through the provision of new and/orupgraded signali equipment at key intersections and the installation of new signage to help ease congestion during peak traffic flow and minimize through traffic on neighborhood streets.

Amenities included landscape plantings and street trees, LED ornamental, pedestrian scale street lighting, decorative sidewalk pavement surfaces, benches, kiosks, trash receptacles and signage, as well as new bus shelters to create a more comfortable atmosphere for transit users.
Reference: Laura Wiener, Senior Planner, 781.316.3091

Nonantum Road. Safety Improvements/Dr. Paul Dudley White Bike Trail, Newton/Watertown/Brighton, MA

Completed in 2013, the overall objective of this project involved improving the safety of the roadway, upgrading and widening the adjacent multi-use path along the Charles River, and returning the character of this roadway to a parkway instead of its growing use as a commuter bypass. The concept for this project was first identified by Stantec in the Charles River Basin Master Plan. Improvements consisted of reconfiguring the roadway to replace four narrow, 10-foot wide through lanes with two 11-foot wide through lanes, one in each direction, new, dedicated left-turn lanes at key intersection approaches to provide separation of turning movements and 3 to 4-foot shoulders. To reduce potential, head-on collisions a 4-foot wide flush median was incorporated to provide separation of traffic, while allowing emergency vehicles to cross over the median, if necessary.

As a result, the pavement for Nonantum Road was narrowed from its previous 40-foot curb-to-curb width to 34 feet which includes accommodation for on-road bicycles, if desired. New guardrail was installed along the corridor between a widened 10-foot multi-use path and Nonantum Road, particularly in areas where the roadway is immediately adjacent to the path to safely separate pedestrians and bicyclists from vehicular traffic, as well as to deflect out-of-control vehicles from the Charles River. Other infrastructure improvements included new LED, ornamental parkway lighting for vehicles and pedestrians, new and/or modified drainage structures, BMPs consisting of grass swales and rain gardens, signs and pavement markings.
Reference: Richard Corsi, Regional Planner, 617.626.1431

As a firm with over 15,000 professionals in more than 250 offices, we are afforded with deep resources in many aspects of community development, including complete streets projects. Firm wide we have participated in numerous master planning, mobility studies, and complete streets programs. Several more applicable ones include:

- Edmonton Complete Streets Guidelines, Edmonton, Alberta.
- Collier County Master Mobility Plan, Collier County, Florida.
- Dahlonega Complete Streets Master Plan, Dahlonega, Georgia.
- Maine Avenue Complete Streets, Baldwin Park, California.
- Downtown Fairburn Complete Streets Plan, Fairburn, Georgia.

Schedule

Stantec will initiate work efforts of this proposal immediately upon receipt of an executed Contract/ Agreement. For this project we have proposed a simple straightforward schedule. Following the executed contract, Stantec will request all relevant data from the Town. We anticipated that it will take three weeks to receive this data, compile the data and build the database (Task 1). An additional three weeks are anticipated to gather the additional data in the field (Task 2). The evaluation, project selection and prioritization are anticipated to take 4 weeks, which accounts for a meeting with the Town to discuss the draft prioritization. The public presentation will occur at a later date, as determined by the Town.

Since the schedule is relatively simple, the only anticipated barrier to keeping the schedule is receipt of the existing data from the Town. Now that the winter is over, weather related delays on the field work are not anticipated.

Task	Expected Completion Schedule
Executed Contract—Notice to Proceed	May 2, 2016
Project Existing Data	May 23, 2016
Determine Additional Needs / Gather Additional Data	June 13, 2016
Evaluation, Project Selection Process and Final Project Prioritization	July 11, 2016
Meetings	As needed

RESUMES

Alan T. Cloutier PE, PTOE

Senior Transportation Engineer

Alan Cloutier has over 17 years of experience on traffic engineering projects specializing in the design and analysis of intersection improvements, and preparation and peer review of traffic impact studies.

EDUCATION

M.S., Civil Engineering, Northeastern University, Boston, Massachusetts, 2003

B.S., Civil Engineering, University of Massachusetts, Dartmouth, Massachusetts, 1998

REGISTRATIONS

Professional Engineer #46053, Commonwealth of Massachusetts

Professional Engineer #11230, State of Rhode Island

Certified Professional Traffic Operations Engineer, Transportation Professional Certification Board Inc.

MEMBERSHIPS

2015 – New England Section Vice President; 2014 – New England Section Secretary; 2012-2013 - New England Section Director; Continuing Education Committee (Vice Chair, 2009; Chair, 2010-2012), Institute of Transportation Engineers

PROJECT EXPERIENCE

Salem Pilot Bike Route, Salem, Massachusetts

Developed design plans for an on-road bike route linking public parks within the City of Salem. The route consisted of a combination of marked bike lanes, shared lanes and a limited amount of existing off-road portions.

Nonantum Road Improvements, Watertown, Newton, Boston, Massachusetts (Traffic Engineer)

Traffic Engineer responsible for the preparation of the Functional Design Report and Design Exception Report for improvements to Nonantum Road. The Nonantum Road corridor forms part of the Charles River Reservation Parkways system and the larger Metropolitan Park System of Greater Boston (Parkways) MPS, both on the National Register of Historic Places.

Tri-Community Bikeway, Winchester, Woburn and Stoneham, Massachusetts

Provided Traffic Engineering support on the design of the proposed Tri-Community Bikeway in Winchester, Woburn and Stoneham, MA. Tasks included evaluating multiple mid-block crossings and on-road segments and determining the recommended treatments at each crossing. In addition, worked with the Winchester School Committee to develop the preferred modifications where the bike path crosses near an Elementary School.

Massachusetts Avenue Corridor Improvements, Arlington, Massachusetts

Provided supplemental multimodal capacity analysis as part of transportation and streetscape improvements for heavily trafficked Massachusetts Avenue Corridor. Assessed likely diversion routes and potential impacts due to roadway improvements. Presented findings in memoranda to FHWA and public hearings.

Route 134 & Upper County Road Safety Improvements, Dennis, Massachusetts (Traffic Engineer)

Traffic Engineer for the design of roadway and intersection improvements on Route 134 and Upper County Road. In addition to capacity improvements, the project involved improved roadway alignment, widened shoulders, added sidewalk and a reconstructed traffic signal.

Highland Avenue/ Needham Street/ Winchester Street Reconstruction, Needham and Newton, Massachusetts (Lead Traffic Engineer)

Lead Traffic Engineer for the design of roadway/intersection improvements for the Highland Avenue/ Needham Street/Winchester Street corridor in Needham and Newton. Project includes multiple signalized intersections and requires coordination with the Route 128 Add-a-lane project. In addition to improving the constrained vehicle operations, significant improvements to the pedestrian and bicycling accommodations are proposed.

** denotes projects completed with other firms*

Alan T. Cloutier PE, PTOE

Senior Transportation Engineer

Transportation Master Plan, Dennis, Massachusetts

Responsible for preparing comprehensive transportation Master Plan for the Route 134 and Main Street corridors within the Town of Dennis. The study included an assessment of existing and future traffic conditions and identified the levels of improvements required to accommodate various levels of future development. Conceptual design plans were developed for intersections and roadways within the study area.

Route 134/Airline Road Roundabout, Dennis, Massachusetts

Analyzed the operations of both a potential traffic signal or a modern roundabout at the intersection of Route 134/Airline Road in Dennis, MA. Developed a 3D simulation of the future operations of both alternatives using VISSIM software. Presented the video simulation to the Board of Selectmen.

Pedestrian and Traffic Study - Portsmouth Naval Shipyard, Kittery, Maine

Project consisted of a substantial Pedestrian and Traffic Study both on-site and off-site aimed at reducing the congestion and extensive delays that are currently experienced by shipyard employees. Analysis and simulations were prepared for both existing conditions and with improvements. The simulations were 3 dimensional video files created using Vissim software and included vehicles, bicycles and pedestrians.

Blackstone River Bikeway Segment 7, Worcester, Massachusetts

Project Engineer for the Design of a 0.8 mile Shared Use Path segment adjacent to city streets. Project includes roadway reconstruction necessary to accommodate the proposed bikeway.

Multi-Use Path Feasibility/Conceptual Design Study, Chelsea, Massachusetts

For the City of Chelsea and the Massachusetts Executive Office of Energy & Environmental Affairs, assisted in developing the feasibility/conceptual design study for a multi-use path located on the former CSX Grand Junction Secondary Track right of way within Chelsea. Tasks include evaluating multiple on-road bicycling options, conducting Bicycling Compatibility analysis and recommending the optimal routes. Intersection improvements to accommodate this increased usage were developed.

Cochituate Rail Trail Conceptual Design Study, Natick, Massachusetts (Traffic Engineer)

Traffic Engineer for the project to develop a conceptual trail design for the rail to trail conversion of a 2.4 mil segment of the Saxonville Branch of the former Boston & Albany Railroad. Tasks included evaluating road crossings and at-grade railroad crossing and determining the recommended treatments at each crossing.

Technical Assistance/Peer Review, Various Communities

Prepared a number of peer reviews in various communities around the Commonwealth including, Salem Watertown, Hopkinton, Reading, Tewksbury, Natick, Danvers, Berlin, Fitchburg, Norfolk, Auburn, Woburn and Wellesley. Provided testimony at Selectmen and Community Planning and Development Commission hearings.

Dudley Square Transportation and Air Quality Study*, Boston, Massachusetts (Transportation Engineer)

As Transportation Engineer, assisted in preparation of the Dudley Square Transportation & Air Quality Study. Study included an analysis of existing public parking facilities, capacity analysis at the study area intersections and an analysis of bus routes within the study area. Recommendations included geometric and signal adjustments at select intersections, parking regulations changes and relocation of MassDOT- Transit Division bus stops that would significantly improve traffic operations and reduce the bus route travel times.

Route 110 Reconstruction, Westford, Massachusetts (Traffic Engineer)

Traffic Engineer responsible for developing traffic signal improvement plans for the Route 110 corridor from Minot's Corner to Nixon Road. Also responsible for the preparation of the Functional Design Report for the proposed project.

I-95 Safety Improvements, North Stonington-Groton, Connecticut

Assisted in study to assess feasibility of a roundabout at Exit 89 southbound off-ramp as an alternative to signalization.

** denotes projects completed with other firms*

Ramandeep Josen EIT

Engineer in Training, Civil

Raman Josen has a broad understanding of civil engineering and has a keen interest in pavement management. For his Master's thesis, he analyzed pavement performance deterioration factors and created a network level pavement management system for Connecticut. Raman has worked extensively in numerous Asset Management projects, assisting with collecting data, GIS integration, and creating reports.

EDUCATION

M.S., Transportation and Urban Engineering, University of Connecticut, Mansfield, Connecticut, 2012

B.S., Civil Engineering, University of Connecticut, Mansfield, Connecticut, 2011

CERTIFICATIONS & TRAINING

OSHA 10 Hour Occupational Safety, Burlington, Massachusetts, 2015

REGISTRATIONS

Engineer-In-Training, Commonwealth of Massachusetts

AWARDS

2012 New England University Transportation Center Fellowship

2012 Most Outstanding Teaching Assistant Award

PROJECT EXPERIENCE

Pavement Management, Boston, Massachusetts (Project Engineer)

Project Engineer for roadway inspectional services, which evaluated the surface type, condition, and surface distress types that were present for over 200+ miles of Boston. Analyzed conditions of pavement by district and created report to show City Officials conditions and impacts of different budget scenarios. Assisted in geo-linking sidewalk and ramp data to pavement segments to allow City the ability to make budget decisions based on pavement segments.

Pavement Management, Somerville, Massachusetts (Project Engineer)

Project Engineer for citywide Pavement Management Study which included detailed pavement, sidewalk, and ramp conditions. Assisted in geo-linking assets to a GIS environment and analyzed priority of asset repair. Created report giving City officials impacts of different budget scenarios over ten years and also provided lists of likely non-compliant MAAB sidewalks and ramps.

Pavement Management, Cambridge, Massachusetts (Project Engineer)

Project Engineer for roadway inspectional services update for the City to collect and update 25% of the City network. Updated City's geodatabase after condition inspection to ensure City's GIS integration is up to date. Created an update report to show progress of City's Pavement Management efforts.

Pavement Management, Nahant, Massachusetts (Project Engineer)

Project Engineer for roadway inspectional services, which evaluated the surface type, condition, and surface distress types that were present. Along with pavement condition, multiple roadside characteristics were collected including rideability, draining, and sidewalk conditions. Provided five year budget analysis with mapped GIS segments for future year treatments.

Pavement Management, Spencer, Massachusetts (Project Engineer)

Project Engineer for town-wide Pavement Management Services. Assisted in creating multi-year budget scenarios, mapping future treatments in GIS environment, and creating a report for Town officials.

** denotes projects completed with other firms*

William Reed PE

Senior Principal

With over 38 years of experience, Bill Reed is a talented project manager for complex highway improvements. Skilled at envisioning viable alternatives, Bill's understanding of the context into which a project must fit coupled with his knowledge of design requirements and standards allows his projects to proceed promptly and smoothly, knowing that business, community, and environmental interests will be considered and met in his work. He has managed hundreds of lane miles of highway programs throughout the region over the last decade, with new and safer interchanges and significant capacity improvements.

EDUCATION

B.S., Civil Engineering, Northeastern University, Boston, Massachusetts, 1978

REGISTRATIONS

Professional Engineer #34219, Commonwealth of Massachusetts

Professional Engineer #5949, State of Maine

Professional Engineer #7201, State of New Hampshire

Professional Engineer #5280, State of Rhode Island

MEMBERSHIPS

Massachusetts Chapter, Director (former), American Council of Engineering Companies

Massachusetts Chapter, TALC Partnering Committee Member with MassDOT, American Council of Engineering Companies

Member, Boston Society of Civil Engineers Section

PROJECT EXPERIENCE

On-Call Engineering Services, City of Salem, Salem, Massachusetts (Principal-in-Charge)
Client: City of Salem
Principal-in-Charge for on-call contract with City of Salem involving diverse peer review and design engineering services for site development and traffic projects.

South Lexington Transportation Study, Lexington, Massachusetts (Principal-in-Charge)
Client: Town of Lexington
Principal-in-Charge on project involving determining mitigation requirements associated several redevelopment sites in town.

Highland Avenue/ Needham Street/ Winchester Street Reconstruction, Needham and Newton, Massachusetts (Principal-in-Charge)
Principal-in-Charge for project involving design of roadway/intersection improvements for the Highland Avenue/ Needham Street/Winchester Street corridor in Needham and Newton.

Inner Belt/Brickbottom Master Plan, Somerville, Massachusetts (Principal-in-Charge)
Client: City of Somerville
Principal-in-Charge for Stantec's subconsultant role conducting traffic/parking analysis in connection with City's master planning of planned transit-oriented development area.

Tri-Community Bikeway/Greenway, Stoneham, Winchester, and Woburn, Massachusetts (Principal-in-Charge), Client: Towns of Stoneham and Winchester, and City of Woburn
Principal-in-Charge for design of trail linking communities of Stoneham, Woburn, and Winchester and offering improved access to open space, schools, and parks as well as commuter rail stations.

Bike to the Sea, Malden, Medford, Everett, Saugus and Lynn, Massachusetts (Principal-in-Charge)
Principal-in-Charge for design of new 9-mile trail through five communities.

William Reed PE

Senior Principal

Cape Cod Rail Trail Re-design, Dennis – Wellfleet, Massachusetts (Principal-in-Charge)
Client: Massachusetts DCR
Principal-in-Charge for fast-track project involving design of improvements to 22-mile recreational trail.

Bridge Replacement Bay Street over Mill River and Dam Replacement, Taunton, Massachusetts (Principal-in-Charge)
Client: MassDOT
Principal-in-Charge for the design of roadway reconstruction. Project includes widening existing bridge to accommodate both roadway and sidewalk; repairing existing dam structure to work efficiently; and improving vehicular and pedestrian safety. Developed a project schedule, which is constantly updated and maintained to track the design progress. Also, assisting in environmental screening, permit preparation, and filings.

On-Call Street Overview Services, Boston, Massachusetts (Principal-in-Charge)
Client: City of Boston Public Works Department
For the BPWD Engineering Division, Principal-in-Charge for on-call services involving civil engineering design of various roadway and sidewalk capital improvement reconstruction projects throughout the City; traffic operational improvements to address pedestrian and vehicular safety; street lighting upgrades; structural/retaining wall evaluations and designs to address integrity; Public Improvement Commission (PIC) filings and presentations; peer review of designs by others; contract administration; coordination with city, state and federal agencies.

Littleton Road (Route 110) Reconstruction, Westford, Massachusetts (Principal-in-Charge)
Principal-in-Charge for preliminary design phase of locally administered MassDOT project along the Route 110 corridor from Minot's Corner to Nixon Road.

Malden Redevelopment Authority, On-Call General Engineering Consulting Services, Malden, Massachusetts (Principal-in-Charge)
Client: Malden Redevelopment Authority
Principal-in-Charge for numerous public infrastructure planning and design services assignments throughout the City of Malden. Assignments include multi-purpose park rehabilitation projects, with synthetic surface to support baseball, soccer, etc. and have included all civil, structural lighting, and landscaping elements of the improvements, in addition to grant administration. Also, parking and traffic operations analysis or proposed improvements.

A.P. Newcomb Road Rehabilitation, Brewster, Massachusetts (Principal-in-Charge)
Client: Town of Brewster
Principal-in-Charge for the reconstruction of A.P. Newcomb Road in Brewster, MA. Work included a replacement of a culvert as well as drainage design. The roadway rehabilitation included milling and resurfacing.

Beach Road Improvements, Orleans, Massachusetts (Principal-in-Charge)
Client: Town of Orleans
Principal-in-Charge to provide the Town with the transportation engineering assistance related to the location of a proposed sidewalk from Main Street to the very-popular Nauset Beach.

Route 134/Airline Road Roundabout, Dennis , Massachusetts (Project Manager)
Project Manager, determine most efficient design for open intersection that carries approximately 17,000 vehicles per day, is congested, has history of crashes exceeding statewide averages. Developed two options, conventional signalized T intersection and modern roundabout. Recommended modern roundabout option as most efficient way to accomplish objectives. Projected traffic conditions over 10-year horizon, presented pros and cons of signalization vs. roundabout. After reviewing t options, Town retained Stantec to design roundabout, incorporating several refinements to improve safety features.

** denotes projects completed with other firms*

Douglas C. Prentiss PE, PTOE

Senior Transportation Engineer

Doug Prentiss assists on a variety of projects in our transportation department including traffic and highway design projects as well as planning studies, traffic signal design projects as well as parking and feasibility studies. He is responsible for senior level management, analysis and assessment of traffic engineering projects including assisting clients through the state and local permitting process.

EDUCATION

M.S., Transportation, University of Connecticut, Mansfield, Connecticut, 2015

B.S., Civil Engineering, Lowell Technological Institute, Lowell, Massachusetts, 2015

REGISTRATIONS

Professional Engineer #33014, Commonwealth of Massachusetts

Professional Engineer #7818, State of New Hampshire

Professional Engineer #3871, State of Vermont

Professional Engineer #6629, State of Maine

Certified Professional Traffic Operations Engineer, Transportation Professional Certification Board Inc.

MEMBERSHIPS

Member, Institute of Transportation Engineers

New England Section Awards Committee (2005 to present), Institute of Transportation Engineers

Member, Vermont Society of Engineers

AWARDS

1983 Technical Paper Award, NEITE

1996 NEITE Distinguished Service Award

PROJECT EXPERIENCE

Complete Streets Program- Statewide, Massachusetts
Client: MassDOT
Workshop Instructor for the Complete Streets training sessions that were administered and sponsored by MassDOT and Bay State Roads from November 2011 through the present. These workshops were presented to various municipal and safety officials, boards, engineers, planners and consultants to educate and promote MassDOT's policy of incorporating Complete Streets into roadway and intersection projects. Doug was the sole Massachusetts instructor for these training sessions.

Massachusetts Ave., East Arlington Traffic Operations Study, Arlington, Massachusetts (Project Manager)
Project Manager for the traffic operations study and conceptual plan development of a road diet project on Mass Ave. in East Arlington. Improvements included a reduction in travel lanes, to add bike lanes, traffic signal modifications and coordination; turn lane modifications and bump outs to improve pedestrian crossings.

Anderson Memorial Bridge, Boston and Cambridge, Massachusetts (Project Manager)
Project Manager for the traffic/transportation permitting and planning elements of a structural rehabilitation project that impacted two adjacent intersections owned by the Department of Conservation and Recreation (DCR) and located in Boston and Cambridge. Meetings with numerous groups and agencies to gain consensus was a key ingredient of project approval.

Route 137 Improvements, Brewster, Massachusetts (Project Manager)
Client: Town of Brewster
Project Manager for the planning and design of geometric improvements and re-alignment alternatives for a two-mile corridor section of Long Pond Road (Route 137) in Brewster. Bike lanes were considered as part of the roadway section.

Douglas C. Prentiss PE, PTOE

Senior Transportation Engineer

Milford Alternate Route Transportation Study, Milford, Massachusetts (Project Manager)
Project Manager responsible for completing a traffic/transportation feasibility study for the planning of an Alternative Route (Veterans Memorial Drive Extension) that will serve as a by-pass to the Route 16 (Main Street) corridor. The corridor runs along a Town-owned right-of-way (ROW) of an abandoned railroad.

Lots Hollow Road - PWED Grant, Orleans, Massachusetts (Project Manager)
Client: MassDOT
Project Manager and grant writer for a Public Works Economic Development (PWED) grant that was administered by the MassDOT. Working with the Town, the $550,000 grant was awarded and allowed the Town to design and relocate a critical intersection that leads to the Town's only transfer station and industrial park.

Beach Road Improvements, Orleans, Massachusetts (Project Manager)
As Project Manager provided the Town with the transportation engineering assistance related to the location and feasibility of a proposed sidewalk from Main Street to the very-popular Nauset Beach. A concept plan was developed showing the cross section and an estimate developed that gave the Town the necessary information for the feasibility planning of the project.

On-Call Traffic Services, Winchester, Massachusetts (Project Manager)
Project Manager for the various traffic/transportation projects throughout the Town of Winchester. Assignments included assessing the traffic and pedestrian safety of all the public schools in Town including school zone analysis, traffic peer review of the re-development of one of the last open-space areas in Town, assessing area intersection operations and developing a corridor study for a commuter corridor that will lead to future planning for the Town.

Route 140 Corridor Transportation Study, Boylston, Massachusetts (Project Manager)
As Project Manager provided the Town with the transportation engineering assistance related to the existing assessment and likely future build out of the corridor from the Shrewsbury Town line to the West Boylston Town line.

Route 28 Chatham Intersections, Chatham, Massachusetts (Project Manager)
Client: Town of Chatham
Project Manager for developing improvement alternatives for Route 28 in the Town of Chatham. Meetings with various boards, committees are on-going to develop consensus building for optimum traffic improvements along the corridor. Improvement alternatives consist of roundabouts, traffic signals while providing accommodations for bicycle and pedestrians.

Gateway Center Environmental Impact Report*, Everett, Massachusetts (Project Manager)
Project Manager for transportation elements of a 714,00 GSF shopping center located on former brownfields site that fronted on a DCR roadway. Review elements included, MassDOT- Transit Division bus lines, bikeway connections, traffic analysis and conceptual design of the obsolete rotary, Santilli Circle.

Orleans Town Center Transportation Study*, Orleans, Massachusetts (Project Manager)
Project Manager for undertaking comprehensive transportation study for downtown area that included an evaluation of excessive vehicles queues, conflicts at pedestrian cross walks, bike conflicts at the Cape Cod Rail Trail, limited public parking facilities and changes to traffic circulation.

Wilbraham Village EIR and Signal Design*, Wilbraham, Massachusetts
Was responsible for the traffic component of the Environmental Impact Report (EIR) of the Wilbraham Village, over-55 housing project on State Route 20. Transportation impacts were assessed and mitigation developed which included a new traffic signal at the site drive, coordinated with the existing signal at Old Boston Road.

West Road Improvements*, Orleans, Massachusetts (Project Manager)
As Project Manager provided the Town with the traffic engineering assistance related to the location of a new cross walk from an assisted living complex, to a regional shopping center on the opposite side of the road. A concept plan was developed that showed how stopping sight distance along West Road could be increased to satisfy safety standards, and an improved alignment developed.

Gary Hebert

Consultant

Gary Hebert's professional experience includes project management; traffic, pedestrian, bike studies; parking, public transportation and shuttle studies; environmental impact reports and assessments. He has managed numerous access, circulation, and parking planning efforts and provided traffic and parking expert witness testimony. He has conducted numerous peer reviews on behalf of municipal Clients throughout New England. He has organized and/or participated in community involvement programs for more than 100 transportation-related projects. Gary has developed handouts, prepared and conducted presentations, and organized constructive agendas for both small and large-scale projects. His community involvement experience draws on a broad sensitivity to the needs of all transportation modes and access requirements of affected land uses.

EDUCATION

B.S., Electrical Engineering, University of Buffalo, Buffalo, New York, 1970

A.A.S., Engineering Science, State University of New York, Buffalo, New York, 1968

REGISTRATIONS

Professional Engineer #36083, Commonwealth of Massachusetts

Professional Engineer #10059, State of Maine

Certified Professional Traffic Operations Engineer, Transportation Professional Certification Board Inc.

MEMBERSHIPS

Life Member, Institute of Transportation Engineers

Member, Essex County Highway Association

AWARDS

2011 Northeastern District Chair, Institute of Transportation Engineers

2002 New England Section President, Institute of Transportation Engineers

2013 Harvey B. Boutwell Northeastern District Distinguished Service Award

2012 Northeastern ITE District Chairman's Award

2007 ITE New England Section Distinguished Service Award

2007 Northeastern District Annual Meeting Co-Chair Award

PROJECT EXPERIENCE

On-Call Engineering Services, Salem, Massachusetts

Project Manager on several assignments completed under on-call services contracts. Assignments have included Citywide Bicycle Circulation Master Plan with an implemented 4.85 mile Pilot Route bid package, a Lafayette Street curve safety improvements study with successfully implemented improvements, assisted in Salem State University Garage peer review, conducted a peer review of traffic impact study prepared in connection with redevelopment of Tri-City Sales/Dunkin Donuts site to include a new CVS Pharmacy on northwest corner of Highland Avenue intersection with Marlborough Road. Led a pedestrian access study to the MBTA Salem Station, components of which were successfully implemented. Led an access study for the opposite corner of Highland Avenue/Marlborough Road, including improvements that have since been implemented.

South Lexington Transportation Study, Lexington, Massachusetts (Project Manager)

Project Manager on assignment involving determination of mitigation requirements associated with 12 redevelopment sites and associated parking facilities.

Fenway-Longwood-Kenmore Transportation and Pedestrian Action Plan, Boston, Massachusetts (Traffic Engineer)

Traffic engineer on project involving traffic modeling and identification of transportation "hot spots" requiring immediate and long-term resolution in urban area positioned for economic development.

Gary Hebert

Consultant

Traffic Calming and Pedestrian Studies
Developed bike and pedestrian enhancements to access Jamaica Pond along the Emerald Necklace at three locations in the City of Boston on behalf of the Massachusetts Department of Conservation and Recreation and the Emerald Necklace Conservancy. Studied and designed a Parker Street crosswalk enhancement on behalf of Wentworth Institute of Technology through the City of Boston's PIC process. Provided traffic calming guidelines and a shared parking ordinance for the Station Avenue Redevelopment area in the Town of Groton, Massachusetts. He developed arterial traffic calming measures within the New Hampshire communities of Dublin and Chocorua Village. He also provided technical advice for the Bennington, NH traffic calming. Each had substantial pedestrian crossing components. For the City of Salem, Gary studied and developed potential traffic calming measures on Mason Street, Jefferson Avenue near St Anne's Church, Raymond Road, and Boston Street at Aborn Street. Assisted the City of Salem in successfully applying for a $1.2 million MassWorks grant for Grove Street pedestrian and traffic calming enhancements, including design presentations and implementation assistance.

Pleasant Street and Route 114 Corridor Study, Marblehead, Massachusetts (Project Manager and Lead Planner)
Project manager and lead planner for a corridor study on Pleasant Street, an urban minor arterial, also state numbered Route 114. The study environment includes four of the Town's schools and serves a wide array of users. He updated the corridor crash history and operations, evaluated near term improvements for seven focus areas, prepared a functional design memorandum, and conducted community coordination and outreach presentations. Assisted the Town in placing this Project on the TIP and assisted in design of measures at the most critical intersection along the corridor.

Route 101 Traffic Calming Planning & Design, Dublin, New Hampshire
Transportation planner for traffic calming features through the village to create a more bicycle and pedestrian friendly environment.

South Street Mini-roundabout, Braintree, Massachusetts
Provided technical advice leading to the construction of a mini-roundabout on South Street in Braintree, Massachusetts implemented to discourage high-speed trucks in residential neighborhood. He provided the Town engineering department with geometry and signage technical advice.

Main Street/Rock Harbor Road Safety Improvements, Orleans, Massachusetts
Prepared bikeway/transportation enhancement study of Main Street, included successful consensus-building effort that addressed bikeway/pedestrian safety and streetscape improvements.

Sustainable Transportation and Pedestrian Study, Portsmouth Naval Shipyard, Kittery, Maine (Project Manager)
Project Manager for study to identify and set priorities for traffic and pedestrian immediate, short- and long-term action plans. Involved assessing and prioritizing multi-modal opportunities to reduce congestion for shipyard commuters, using traffic and pedestrian simulation programs.

Transportation Management Plan, Braintree, Massachusetts (Project Engineer)
Examined traffic patterns, levels of service, plan for improvements in preparation of town wide Transportation Management Plan.

PUBLICATIONS

"Bringing Sustainable Transportation to the North River Canal Corridor, Salem, Masschusetts", New England ITE Chronicle, Summer, 2014.

"Long Term Parking and Trip Generation for a Large Multi-use Development", ITE District 1, May, 2010.

"Lafayette Street Safety Improvements, Salem, MA," ECHA, May, 2010.

"Station Avenue Redevelopment Analysis", May, 2007.

"Road and Intersection Safety Policy and Legislative Initiatives – Comparing the New England States", May, 2004.