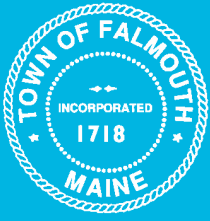


Prepared for  
Town of Falmouth, Maine

AECOM



Qualifications to

Conduct a Public  
Process To Develop a  
**Town Vision and  
Values Statement**

VISION  
VALUES



# Contents

<b>1.</b>	<b>Qualifications of Key Team Members</b>	<b>4</b>
<b>2.</b>	<b>Project Understanding</b>	<b>14</b>
<b>3.</b>	<b>Project Scope of Work</b>	<b>16</b>
<b>4.</b>	<b>Similar Projects Completed</b>	<b>20</b>
<b>5.</b>	<b>Interview Availability</b>	<b>28</b>



Cover photo: Gilsland Farm Audubon Center, Falmouth, Maine



AECOM  
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January 21, 2020

Nathan Poore, Town Manager  
Town of Falmouth  
271 Falmouth Road  
Falmouth, ME 04105

Reference: **Qualifications for Consultant Services To Conduct a Public Process to Develop a Town Vision and Values Statement (Phase 1) for the Town of Falmouth, Maine**

Dear Mr. Poore:

In response to your request for Consultant Services to assist the Town of Falmouth in developing a Vision and Values Statement and updating your Comprehensive Plan, AECOM has prepared the qualifications package included herein. This demonstrates our local knowledge, depth of staffing capabilities, and project understanding, which is supported by our team's thoughtful approach to delivering the scope of services, and our relevant experience on similar projects. We have assembled an engaged, energetic, interdisciplinary team who together bring relevant national experience and deep-rooted local knowledge. We view the development of the vision statement as a natural precursor to updating the comprehensive plan, therefore our package includes our exceptional qualifications for completing both tasks identified in the RFQ.

The Town of Falmouth, like the rest of the greater Portland region, faces extensive development pressures due to its reputable livability. The Town must navigate regional challenges, which include diminishing housing attainability, an aging population, and transportation concerns, all while preserving its local character and identity. Our team understands that managing these challenges requires a cohesive, unifying vision that reflects the character of the community. Key questions must be considered and addressed, such as:

- What do Falmouth residents want their town to look and feel like 20 years from now?
- What characteristics of Falmouth do you value most?
- What is Falmouth's role in the greater Portland region?

The AECOM team has extensive experience engaging with broad cross-sections of stakeholders across Maine. Currently, our team is working with the Greater Portland Council of Governments (GPCOG) to craft a regional vision for *Transit Tomorrow*, a Long-Range Public Transportation Plan for southern Maine. Other public engagement projects our team has delivered include the MBTA's 25-year investment plan *Focus 40*, a bus transit study for Nantucket, and a Transit-Oriented Development Alternatives Assessment for the regional planning agency in southwestern Connecticut. Our Portland-based Project Manager, Thomas Redstone, has gained extensive community engagement experience across the state while working as the Natural Hazards Planner and State Hazard Mitigation Office (pro tem) for the Maine Emergency Management Agency.

We are excited at the opportunities offered by this project. The project will be led from our Portland office, which provides cost-effective and local resources who have a firm understanding of Falmouth and its context within the region. We are committed to working closely with the agency project manager to understand any sensitive topics and assure they are handled diplomatically. We are interested in completing both development of the vision statement and updating the comprehensive plan, which will allow the Town to seamlessly address the complete update to the comprehensive plan.

Thank you for taking the time to review our qualifications package. Please do not hesitate contact either of us via email or phone as shown below if you have any questions.

**Stephen Gazillo, AICP**  
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**AECOM Technical Services, Inc.**  
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**AECOM Technical Services, Inc.**  
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# 1. Qualifications of Key Team Members

The AECOM Team is composed of individuals with outstanding technical abilities, along with recent experience on similar visioning and planning projects for communities throughout the United States. Our team offers all factors critical to success including technical expertise, senior leadership, and experience with the study objectives and issues.

Adhering to schedule and scope will be critical to the project's successful completion. AECOM has an outstanding record of such adherence. Moreover, the team has a commitment to delivering quality products both on-time and within budget. We achieve this mission by maintaining monthly project management forms linked to our financial recordkeeping systems, and by working closely with our clients at all steps in the process.

**Tom Redstone** will serve as *Project Manager* for this project. He has 5 years of experience and is a certified planner with the American Institute of Certified Planners (AICP). He is a native of South Portland, Maine and currently works out of AECOM's Portland office. He has been active in *Transit Tomorrow*, the Long-Range Public Transportation Plan for Southern Maine for the Greater Portland Council of Governments, participating in Project Advisory Committee meetings and organizing pop-up and other events in order to contribute to the development of a vision statement with goals and priorities for the region. Mr. Redstone also has experience in transportation and resiliency planning, and vulnerability evaluation, both vital elements to be considered in any comprehensive planning effort.

**Mr. Redstone will work closely with the Town of Falmouth, using their input to ensure that the results of the plan are inclusive of the study's goals and objectives. In addition, Tom will represent the team on a day-to-day basis to discuss issues as they arise, to address questions, or to solve immediate concerns. It will be Tom's job to hold bi-weekly calls and lead contact between the client and the AECOM Team. These discussions will be documented in monthly progress reports and forwarded to the Town's project manager, with the inclusion of up-to-date schedule information and current action items required and by whom.**

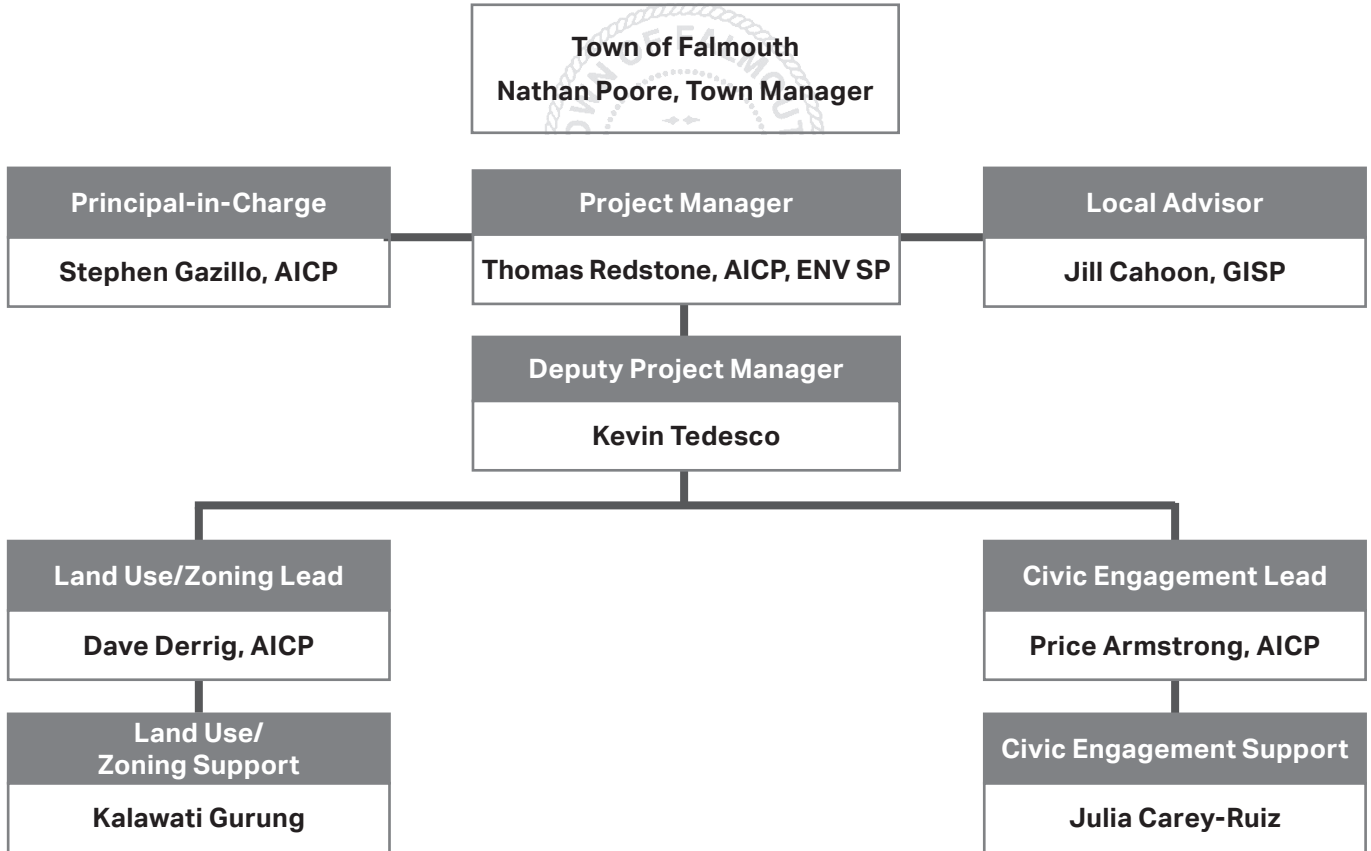
**Stephen Gazillo** will serve as *Principal-in-Charge* on the project. Mr. Gazillo has more than 35 years of experience in multimodal and public transportation system planning and implementation. A certified planner with the American Institute of Certified Planners (AICP), his planning expertise encompasses the development of public involvement programs, alternatives evaluation criteria, purpose and need statements, technology assessments and multi-modal transportation projects. Mr. Gazillo was the project manager on several recent rural and urban transit studies including the Greater Portland Regional Transit Consolidation Study. He oversaw all work on the production of regional transit plans for 10 separate regional transit authorities in Massachusetts.

**Jill Cahoon** will serve as *Local Advisor* for this project. She has 20 years of GIS experience. She is a native of Windham, Maine and currently works out of southern New Hampshire. Ms. Cahoon's related experience includes serving as Project Manager for *Transit Tomorrow*, the Long-Range Public Transportation Plan for Southern Maine for the Greater Portland Council of Governments. In this role, Ms. Cahoon has developed, overseen, and participated in extensive and varied public engagement exercises in order to develop a vision statement for public transit in the region over the next 30 years. Ms. Cahoon is a certified GIS Professional (GISP) and is an expert spatial data analyst with more than 20 years of experience.

**Kevin Tedesco** will serve as *Deputy Project Manager* for this project. He is a certified AECOM Project Manager and is a native of Portland, Maine who currently works out of northern Connecticut. Mr. Tedesco has experience in architecture, multimodal transportation, and long-range planning. He served as Project Manager for the Southeastern Connecticut Council of Governments Bicycle and Pedestrian Plan development, which included robust community engagement and the implementation of a tactical urbanism project to test ideas 'live' within the community.

The proposed project team organization is included on the following page, and full resumes for all staff members follow.







# Stephen Gazillo, AICP

Principal-in-Charge

## Education

MBA / 2004 / Management / University of Massachusetts, Honors - Beta Gamma Sigma

MA / 1979 / Geography / Planning, Laval University; Quebec, Canada

BA/ 1976 / Geography/Clark University

## Years of Experience

29

## Licenses/Registration

2003 / American Institute of Certified Planners (AICP) #018439

## Affiliations

Public Involvement Committee, Transportation Research Board, Washington, D.C.

American Planning Association, Chicago, IL

American Public Transportation Association

Stephen Gazillo has more than 35 years of experience in multimodal and public transportation system planning and implementation. He recently served as project manager for the MA Regional Transit Authorities comprehensive service assessments. As project manager, he oversaw development of transit plans for 10 RTAs across Massachusetts. This study proposed implementation of route service changes in both rural and urban communities, to meet funding shortfalls and provide the most service possible to communities in need. He was also project manager for the Pioneer Valley Transit Authority's Bus Rapid Transit (BRT) alternatives study in Springfield, Massachusetts, which evaluated options for BRT in the 6-mile State Street corridor.

Prior to joining AECOM, Mr. Gazillo worked for both the Pioneer Valley Transit Authority, a 200-bus transit system serving more than 20 cities and towns in western Massachusetts, and for New Jersey Transit Rail Operations.

## Selected Project Experience

**Planning Task Leader, Strategic Planning and Analysis of the Connecticut Rail System; Connecticut Department of Transportation (CTDOT).** Mr. Gazillo is part of the core rail planning team engaged by CTDOT to perform market assessments, service planning and development of a comprehensive speed and capacity study of the New Haven Line including identifying Penn Station Access options, improved service to Grand Central Terminal, and identifying and planning for growth throughout the system. Dates: 2017–ongoing

**Massachusetts Regional Transit Authorities – Regional Transit Plans; Project Manager; Merrimack Valley Regional Transit Authority; Various Locations, MA,** Project Manager responsible for preparation of Regional Transit Plans for ten individual Regional Transit Authorities in the state of Massachusetts. The plans will provide a comprehensive assessment of transit

services through examining ridership trends, analyzing existing services, better aligning bus services with regional employments needs, evaluating environmental and fare policies, researching national best practices and developing alternative scenarios in order to recommended service improvements. Client: MVRTA. Dates: 2014–2015

### **PVTA Bus Rapid Transit Alternatives Analysis Study, Pioneer Valley Transit Authority, Springfield, MA.**

Mr. Gazillo served as project manager for this planning study to evaluate alternatives for implementing a bus rapid transit system along the State Street corridor in Springfield. Tasks included evaluating traffic, land use and environmental impacts related to establishing a bus rapid transit system with dedicated lanes from Union Station to Eastfield Mall, primarily along the State Street corridor. The Team developed an evaluation matrix to determine preferred solutions for BRT in Springfield. Extensive community involvement included presentation and meetings with multiple neighborhood and community organizations in the corridor. Date: 2015

### **Project Manager, Capitol Region Council of Governments (CROCG) Long-Range Transportation Plan.**

Mr. Gazillo was the project manager for the preparation of the Capitol Region Council of Government's Long-Range Transportation Plan, which included extensive community outreach. The plan outlined the transportation improvements across all modes over a 25-year horizon to 2045 and met CROCG's overall vision for its 38-member communities. Work included developing a branding identity for the plan (Connect 2045), conducting focus groups, stakeholder and public meetings to gain community input into the plan, and preparing a final report that includes a review process with Connecticut DOT and the Federal Highway Administration (FHWA). The final approved plan was published in the spring 2019. Dates: 2018–2019



# Jill Cahoon, GISP

Local Advisor

## Key Skills

Transit Planning, GIS, Project Management

## Education

MA, Geography, University of Maryland

BS, Geography and GIS, University of Maryland

## Years of Experience

19

## Licenses/Registration

Geographic Information Systems Professional (GISP)

Ms. Cahoon operates in several capacities including project manager and senior transit planner with experience in a wide variety of geographies and project types with a particular focus on bus operations planning, effective community engagement, and robust technical analyses. Ms. Cahoon is also a certified Geographic Information Systems (GIS) Professional with extensive experience gained through project work and teaching GIS at the university level.

## Professional History

Ms. Cahoon serves as AECOM's Transit Planning Lead for New England as well as the National Coordinator of Rural and Human Services Transportation Planning Studies. In these roles, Ms. Cahoon regularly works with transit planners and engineers across the region and the country identifying best practices and lessons learned, covering a variety of public transit modes, new and emerging technology and service provisions strategies, and seamless connectivity to local, regional and national transportation networks.

## Selected Project Experience

**Long Range Public Transportation Plan for Southern Maine — *Transit Tomorrow*, Greater Portland Council of Governments, Region-wide** (Project Manager). The AECOM team is supporting the Greater Portland Council of Governments in a new strategic planning process – the development of a long range (30 years) public transit plan. The plan focuses on the intersection of multimodal public transportation planning and land use scenario modeling. The process includes a visioning process that will guide future prioritization of projects and investments in Southern Maine. Date: 2019–2020

**Nantucket Regional Transit Authority Year-Round Service Feasibility Study, Massachusetts** (Project Manager). The first phase of this study was a feasibility study of extending transit services to operate year-

round on this small, rural island off the coast of Massachusetts. The first phase of the study included a community survey completed by more than 10% of the year-round population, focus groups and other stakeholder engagement meetings and interviews, pop-up events at the grocery stores, high school, YMCA, and other locations, presentations at Town Council meetings and Chamber of Commerce events, and the development of materials for media outlets such as radio interviews. The second phase of the study was a fare analysis, a review of available fare technologies, and a review of innovative funding strategies to help in implementing year-round service. Year-round service was implemented by NRTA on April 27, 2018. Date: 2017

**Focus40, the 2040 Investment Plan for the MBTA, Massachusetts Department of Transportation Office of Transportation Planning** (Senior Transit Planner/GIS Analyst). For this study of investment ideas for the future of the transit network in Greater Boston, Ms. Cahoon's primary responsibilities included mapping rapid transit and commuter rail investment ideas and using the Conveyal tool to model future impacts of the investment ideas for transportation-land use evaluation criteria and present potential commute time savings to the public. She also helped to develop one-page investment strategy sheets for each of the rapid transit lines. Date: 2017–2019

**Western Maine Transit Corridor Feasibility Study, Western Maine Transportation Services, Auburn, Maine** (Project Manager). The AECOM team conducted a transit service corridor feasibility study to connect rural areas of western Maine to employment and services in regional centers. The study included a comprehensive community survey effort and robust stakeholder engagement. The study team evaluated 16 corridors. Bus service on two corridors was implemented following completion of the project in 2018 and 2019. Date: 2017–2018





# Thomas Redstone, AICP, ENV SP

## Project Manager

### Key Skills

Benefit-Cost Analysis  
Community Outreach  
Demographic Analysis  
Environmental Economics  
Geographic Information Systems  
Hazard Mitigation  
Transportation Economics  
Urban Planning

### Education

MPPM (Policy, Planning, and Management),  
University of Southern Maine, Fall 2018  
BA, Economics & Environmental Studies,  
Connecticut

### Years of Experience

5

Thomas Redstone is a Lead Economic Consultant in AECOM's Transportation business line. He is experienced in community outreach, economic and demographic analysis, and transportation planning. He has undertaken planning projects that include long-range transportation plans and benefit-cost analyses to support transportation improvement projects. Prior to joining AECOM, Thomas was the State Hazard Mitigation Officer (pro tem) and Natural Hazards Planner at Maine Emergency Management Agency (MEMA). He is experienced in community outreach through leading the planning process in support of local hazard mitigation plans.

## Selected Project Experience

**Greater Portland Council of Governments, *Transit Tomorrow* Portland, Maine** (Outreach Coordinator). Coordinating community outreach and civic engagement activities with transit operators in the region. Project initiated to develop a long-range public transportation plan for greater Portland. Date: 2019–ongoing

**Commonwealth of Massachusetts, Resilient Massachusetts Action Team, Boston, Massachusetts** (Resilience Specialist). Developing a metric-based evaluation tool to assess the community resilience benefits of proposed capital investment projects. Date: 2019–ongoing

**Maine Forest Products Council, Forest Products Logistics Best Practices, Augusta, Maine** (Economist). Study examined strategies to increase the efficiency of Maine's forest products industry to allow the industry to remain competitive in the regional and global marketplace. Led outreach efforts with stakeholders across Maine's forest products industry to support the study. Date: 2019

**Lewiston and Auburn Railroad Company, Freight Logistics Transportation Study, Androscoggin County, Maine** (Outreach Coordinator). Study initiated to identify targeted investments or operational changes to increase the competitiveness of the freight-focused industries in central Maine. A central component of the research involved outreach with stakeholders. Date: 2019–ongoing

**Multiple Counties, Local Hazard Mitigation Plans, Augusta, Maine** (Mitigation Program Manager). Initiated and co-led community outreach meetings with stakeholders in support of eleven multi-jurisdictional hazard mitigation plans. Reviewed all plans prior to submitting to FEMA for approval. 2016–2017/MEMA

**MEMA, Public Assistance Briefings, Multiple Locations, Maine** (Mitigation Program Manager), 2018. Traveled to Maine's county emergency management agencies (EMAs) briefing local officials on the State's Public Assistance and Mitigation Programs, including grant opportunities and eligibility requirements following the FEMA-4354-DE-ME disaster declaration. Provided technical assistance to local and county EMAs on the application process for HMGP funding pursuant to FEMA-4354-DE-ME. Date: 2018/MEMA.

**MEMA, State Hazard Mitigation Plan – 2018 Update, Augusta, Maine** (Mitigation Program Manager), 2016–2018. Coordinated with State and Federal officials to lead the update of the State Hazard Mitigation Plan. Risk Assessment of the Plan includes a vulnerability analysis that assesses potential for economic damage from natural hazards across Maine. Strategy section inventories actionable steps taken at the state level to lessen the impacts of natural hazards. Date: 2016–2018/MEMA.



# Kevin Tedesco

Deputy Project Manager

## Education

BS, Architectural Historic Preservation, The Boston Architectural College, 2012  
University of Connecticut Safety Academy Road Safety Assessments (RSA) - Bike & Pedestrian

## Years of Experience

10

Kevin has expertise in transportation planning and architecture, specializing in intermodal planning. He focuses on complete streets, bicycle and pedestrian planning, context-sensitive design solutions, transit-oriented development, and economic development. Kevin is also experienced in ADA regulations in architecture and transportation, long-range bicycle and pedestrian transportation plan development and mapping.

## Selected Project Experience

### **Naugatuck Valley Council of Governments, Rt 8 & Waterbury Branch Line Corridor Transit-Oriented Development & Alternate Modes Assessment Project.**

The intent of the project is to assess and identify transportation options to more efficiently and effectively move commuters through the Region and establish future land use scenarios that promote higher density residential development, economic redevelopment and natural resource management. This project is Task 3 of a combined state and federal planning effort to promote land uses supportive of increase transit services and implement policies and actions that advance livability goals and create sustainable communities. It is an outgrowth of the NVCOG's partnership in the New York and Connecticut Sustainable Communities Consortium, a joint HUD, EPA and US DOT initiative. Dates: 2017—ongoing

### **CTDOT, Community Connectivity Program, Statewide.**

This project involves identifying areas with non-motorized safety challenges across all 169 Connecticut municipalities and conducting Road Safety Audits (RSAs) to develop recommendations for short-term, mid-term, and long-term infrastructure improvements. The RSAs provide a comprehensive assessment of bicycle and pedestrian infrastructure, gaps, and desired connections for all ages and

abilities. Responsibilities while employed at CTDOT include technical assistance preparing the application guidelines to ensure equity between urban, suburban and rural communities; established guidance to rank applications based on audit complexity, past and future planning and construction efforts, connectivity to existing networks, corridor length, and crash data; provided technical assistance during Road Safety Audit field inspections; and provided project status reports for Connecticut Department of Transportation senior management. Dates: 2016–2018

### **Complete Streets Master Plan, Town of New Milford, CT.**

This project is being developed to allow the Town to systematically finance and execute a program for providing pedestrian and bicycle connectivity throughout the major population, social, cultural and commercial centers in Town. Connectivity challenges will be identified and documented with Town staff, officials, and the public, including major stakeholders. Responsibilities for this project include performing oversight of research, analysis, and client coordination. Dates: 2017–2018

### **CTDOT, State Bicycle and Pedestrian Update.**

This project involves the updating of the existing 2009 State Bicycle and Pedestrian Plan. This plan will provide a comprehensive assessment of bicycle and pedestrian current infrastructure, gaps, and desired connections through examination of existing infrastructure, better alignment of bicycle and pedestrian connections to transit, research of national best practices and development of safe and comfortable connections for all ages and abilities. Responsibilities while employed at CTDOT include analyzing the regional demand for bicycles and pedestrians, reviewing best practices, developing alternatives, recommending improvements and GIS mapping. Dates: 2015–2016



# Dave Derrig, AICP

Land Use/Zoning Lead

## Education

BS, Urban Planning, Worcester Polytechnic Institute, 1980

## Years of Experience

35

## Licenses/Registration

AICP/Certified Planner

## Affiliations

American Institute of Certified Planners  
American Planning Association

Mr. Derrig has 35 years of experience in land use and transportation planning throughout New England. His experience includes management of impact analyses for infrastructure, commercial and residential projects, parking and access studies, corridor planning studies, and traffic and planning support services.

## Selected Project Experience

### **Connecticut Department of Transportation, I-84 Hartford Project, Hartford, CT.**

Task manager for draft EIS land use and socioeconomic impact analyses for the replacement of a viaduct structure between Exits 45 and 51 that will result in the creation of 29 acres of air rights and consolidated parcels for development and redevelopment. The technical report includes conversion of broad development plans to corresponding numbers of households, population and employment levels for use in the associated traffic network model, as well as assessment of temporary and permanent impacts associated with the project.

### **Cape Cod Regional Transit Authority, Transit-Oriented Development Master Plan Study, Hyannis Transportation Center, Barnstable, MA.**

Task manager for land use, transportation and environmental analysis for potential TOD plans at the Hyannis Transportation Center. Analysis includes incorporation of multi-modal activity, potential development of CCRTA property and redevelopment of adjacent public properties, all within smart growth/TOD frameworks.

**Marlborough Economic Development Master Plan, Marlborough, MA.** Task Manager responsible for assessing transportation, water/wastewater and other infrastructure needs associated with various targeted development scenarios designed to identify future tax revenue generation and job creation. The project won the 2011 Planning Project Award from the APA Massachusetts Chapter.

**Massachusetts Department of Transportation, Silver Line Gateway, Boston and Chelsea, Massachusetts.** Task manager for land use planning

and environmental permitting for new BRT transit service connecting East Boston and Chelsea with South Station. This project improves access to jobs for underserved neighborhoods, and includes a dedicated busway facility, shared-use path and MBTA commuter rail station relocation. Tasks included identification of land use, environmental, socioeconomic and regulatory resources and constraints, and filing of MEPA documents. The project won the 2014 Planning Project Award from the APA Massachusetts Chapter.

**Massachusetts Department of Transportation, Environmental Services On-Call Contract, Statewide.** Contract manager for two three-year (2014-2016, 2017-2019), \$1 million contracts to provide multi-disciplinary technical assistance to MassDOT for various projects. Tasks have included water quality monitoring, wetlands and habitat studies, hydrologic modeling, environmental monitoring for construction projects, ENF preparation and GIS training.

**Massachusetts Department of Transportation, I-93 Safety Improvements and New Interchange at Lowell Junction, Andover, Methuen, Tewksbury, and Wilmington, MA.** Deputy project manager for EIS/EIR and 25% design for a new interchange and 15-mile add-a-lane segment on I-93 from Wilmington to the MA/NH border. The project purpose was to relieve traffic congestion and provide access for four million square feet of new economic development. Tasks included coordination and outreach to the regulatory boards, staff and citizens of four towns, discussions of form-based code implementation, and analysis of land use, environmental and socioeconomic impacts.

**Gulf of Maine Research Institute, Commercial Street, Portland, Maine.** Task manager for land use and transportation component of federal EA for land transfer and coordination among the US Navy, US Coast Guard and Gulf of Maine Research Institute. The project resulted in the construction of a non-profit marine research facility in Portland Harbor.





# Price Armstrong, AICP

Civic Engagement Lead

## Key Skills

Public Engagement, Data Analysis, Performance Management, Technical Writing, Federal Compliance

## Education

Master of Public Administration, University of Oregon, 2010  
BA, History and Economics, Hampshire College, 2007

## Years of Experience

12

## Licenses/Registration

American Institute of Certified Planners (AICP)

## Affiliations

American Planning Association

Mr. Armstrong has over a decade of experience as a transportation planner working in public transit and active transportation. He specializes in processing complex information into easily understood products that support evidence-based decision making.

## Selected Project Experience

**Transit Tomorrow, Greater Portland Council of Governments** (Civic Engagement Lead). Mr. Armstrong developed the Stakeholder Engagement Plan for the Greater Portland Council of Government's Long Range Public Transportation Plan *Transit Tomorrow*. This included the development of strategies and identification of stakeholders for outreach as a part of the planning process. As a part of that work, he supported public meetings and meetings with key stakeholders such as the transit operators in southern Maine. Date: 2019–2020

**Offshore Wind Energy Project Stakeholder Engagement Plan, Confidential Client** (Stakeholder Engagement Specialist). Mr. Armstrong led the development of a Stakeholder Engagement Plan for the development of an offshore wind area off the American eastern coast. He led a team in researching relevant permitting requirements and outlining required stakeholder engagement activities. Date: 2019–2020

**EmX Bus Rapid Transit Public Outreach, Lane Transit District** (LTD Transit Planner) Mr. Armstrong undertook public outreach related to the West Eugene extension of the region's bus rapid transit system, EmX. Mr. Armstrong focused on engagement with students and staff at the University of Oregon, attending multiple campus meetings and presenting on the project. Date: 2011

**Bike Safety Education Program** (MassBike Programs Director). Mr. Armstrong served as the program manager for the Massachusetts Bicycle Coalition's education program. In that role he developed educational resources and guides, taught courses across all age ranges, and focused on how riders could improve their own safety through simple practices or changes. Date: 2011–2014

**Demand Response Customer Survey** (PVTA Planning Manager). Mr. Armstrong managed the demand response customer survey for PVTA. This survey used a randomized sample of PVTA demand response customers to collect a statistically robust profile of the agency's demand response riders. Mr. Armstrong led development of the survey instrument, survey methodology, data analysis, and final report preparation. The dataset it generated was used for federal compliance and service planning purposes. Date: 2017

**Travel Training Program Manager** (PVTA Planning Manager). Mr. Armstrong managed the travel training program at PVTA, which is a leader in the Commonwealth for teaching people — especially the elderly and people with disabilities — on how to use the fixed route bus. This program enabled customers who would otherwise use comparatively expensive and less convenient demand response service to navigate the extensive PVTA fixed route system. Date: 2018–2019



# Kalawati Gurung

Land Use, Zoning Support

## Education

BS, Architecture, Institute of Engineering (IOE), 2003

MRP, Regional Planning, University of Massachusetts Amherst (UMass Amherst), 2007

## Years of Experience

12

## Licenses/Registration

Certified Planner, 025731

## Affiliations

American Institute of Certified Planners (AICP)

American Planning Association, Massachusetts Chapter

Ms. Gurung has 12 years of experience as a transportation planner and is a member of the American Institute of Certified Planners (AICP). She has varied experience in transportation planning, land use planning and environmental planning, and has supported many transportation projects, which have involved land use and zoning analyses, municipal comprehensive plans, traffic impact analysis, alternatives analysis, regional transit planning, bus rapid transit, and corridor planning. She has also performed environmental constraints analyses and environmental impact assessments for several transportation projects and developed environmental permitting documents, including Massachusetts Environmental Policy Act (MEPA) and National Environmental Policy Act (NEPA) documents, Categorical Exclusions (CE), and Environmental Notification Forms (ENF).

## Selected Project Experience

**Greater Portland Council of Governments (GPCOG), Maine, *Transit Tomorrow, Building the Region's Public Transportation Future.*** Reviewed land use studies and comprehensive plans for several municipalities in Maine to understand existing conditions. Summarized key findings and recommendations related to land use. Date: 2019

**Transportation Master Plans for Milton, Northfield, Southbridge, Holden, Fall River, Massachusetts; Amherst, New Hampshire; and Kittery, Maine.** Updated the transportation section of the master plans by conducting inventory of the existing transportation conditions and infrastructure data, including traffic volume counts, high crash locations, bike and pedestrian information, journey-to-work data, and transit, rail and airport services. Analyzed and identified key issues in transportation system. Various dates: 2007–2016

**Cape Cod Regional Transit Authority, Hyannis Transportation Center Area Transit Oriented Development (TOD) Master Plan Study, Hyannis, Massachusetts.** Developed various sections of the TOD Master Plan and produced the final report. Developed presentation materials for public meetings, working group meetings, open house, and charrettes, and prepared Section 508 compliant accessible electronic documents. Dates: 2012–2014

**Massachusetts Department of Transportation (MassDOT), *Focus40, The 2040 Investment Plan for the MBTA, State of the System Assessment.*** The *Focus40* is the 25-year investment plan to position the MBTA to meet the needs of the Greater Boston region in 2040. Assessed the existing conditions of MBTA commuter rail and rapid transit rail networks and prepared State of the System reports. Prepared presentation materials for public events, and evaluated and scored the various rapid transit ideas received from the events based on the *Focus40* goals, objectives and evaluation criteria. Also prepared Section 508 compliant accessible electronic version of the presentation document. Dates: 2015–2018

**Cape Cod Regional Transit Authority (CCRTA), Hyannis Rail Maintenance Facility Relocation Feasibility Study, Hyannis, MA.** Prepared technical report for Hyannis Rail Maintenance Facility Relocation Feasibility Study in support of the Hyannis TOD Master Plan. Researched Town of Barnstable and Federal Aviation Administration (FAA) regulations regarding height restrictions for proposed developments near airports and researched zoning and land use classifications for each of the potential sites. Dates: 2012–2014



# Julia Carey-Ruiz

Civic Engagement Support

## Education

MUP, Urban Planning, Hunter College, City University of New York, New York, NY, 2016

BA, Urban Studies, Queens College, City University of New York, Flushing, NY, 2014

BS, Studio Art, Skidmore College, Saratoga Springs, NY, 2006

## Years of Experience

3

Julia Carey-Ruiz joined the firm in 2018 as a transportation planner. She has three years of experience in transit planning and operations. Ms. Carey-Ruiz began her planning career in the Bus Planning unit at MTA New York City Transit (NYCT). Her work in transportation planning includes developing activities for public outreach and designing supporting materials, most recently for the Connecticut Department of Transportation's (CTDOT) rail car procurement efforts. Her computer skills include ArcMap and the Adobe Creative Suite (InDesign, Illustrator and Photoshop). Prior to getting her master's degree in Urban Planning, she worked as a graphic designer.

## Selected Project Experience

### Connecticut Department of Transportation (CTDOT)

**Rail Car Procurement Process.** Ms. Carey-Ruiz has assisted in organizing the public engagement process related to CTDOT's ongoing efforts to procure the state's next generation of rail cars. Ms. Carey-Ruiz worked with another project team member to design two online surveys which solicited public feedback to inform the rail car procurement process. She designed and produced multimedia promotional materials to advertise the survey. Following the completion of the survey she analyzed the data collected and developed reports to share with CTDOT project leaders. She has also organized a meeting with members of the public, stakeholders and CTDOT officials. Client: Connecticut Department of Transportation. Date: 2019

### Greater Portland Council of Governments (GPCOG) Long-Range Public Transportation Plan.

Ms. Carey-Ruiz is providing graphics and planning support for the development of this Long Range Public Transportation Plan for the Greater Portland region. Ms. Carey-Ruiz has designed and produced an array of materials for stakeholder meetings. She also assisted in drafting the Plan's Vision and Goals,

identified relevant recommendations in existing regional plans and researched best practices among peer agencies. Client: Greater Portland Council of Governments. Date: 2019

### Capitol Region Council of Governments (CROCG) Metropolitan Transportation Plan.

Ms. Carey-Ruiz served as a Planner in the development of this Long Range Transportation Plan for the Hartford region. Ms. Carey-Ruiz assisted in creating maps illustrating transportation assets in the region, edited report content, managed the production of the document including overseeing the translation of the Plan's Executive Summary into Spanish and Polish, and managed the design of the full Plan and Executive Summaries. Ms. Carey-Ruiz also assisted in organizing several public meetings, produced outreach materials for the meetings, and oversaw maintaining the Plan's website. Client: Capitol Region Council of Governments. Date: 2019

### Southeastern Connecticut Council of Governments (SCCOG) Regional Bicycle and Pedestrian Plan.

Ms. Carey-Ruiz served as a Planner for the development of this regional Plan. Her responsibilities included assisting at public meetings and staffing tactical engagements that were organized to raise regional awareness about the Plan. She also assisted in drafting the report and conducted analysis of demographic information and travel patterns using census data and data from public surveys. Client: Southeastern Connecticut Council of Governments. Date: 2019

### MTA New York City Transit (NYCT) Public Outreach.

Ms. Carey-Ruiz was part of outreach staff during the launch of new bus routes. Her duties included instructing customers how to use new route (including new fare payment machines) and supervising other outreach staff. Client: MTA New York City Transit. Date: 2019



## 2. Project Understanding

The Town of Falmouth covers 36 square miles and is bound by the cities of Portland and Westbrook to the south, and the towns of Windham and Cumberland to the west and north, respectively. Falmouth's neighbors to the south constitute Maine's largest population center, while its neighbor to the north maintains a more rural identity within the context of southern Maine, placing Falmouth in a unique geographic position.

Falmouth is recognized for its school system, its commitment to open space, and identity as a seaside and farming community. Falmouth maintains a robust system of transportation infrastructure, consisting of road, bus, trail, and bicycle networks. The Town's complete transportation network connects residents across Falmouth and to neighboring communities. In doing so, the Town provides all its residents with access to the services offered by Maine's urban core while preserving the rural identity embraced in its northern and western portions.

The greater Portland region is coming off a decade of dynamic and rapid transformation. Due to its livability and geographic proximity to Maine's urban center, Falmouth faces extensive development pressures. To accommodate growth, the Falmouth Town Council approved zoning changes that allowed for greater residential density and the creation of growth areas, which were reversed in 2019 amidst some local opposition. To assuage community concerns, an update to Falmouth's Comprehensive Plan is necessary to ensure the Town grows in a

manner that aligns with the needs and goals of its residents. While growth is inevitable, the update of the Comprehensive Plan will guide it in a way that maintains Falmouth's identity, without upending those who helped build its sense of community.

AECOM will develop a civic engagement strategy to identify and engage with stakeholders, which will result in the vision statement. To achieve buy-in from the community, AECOM will conduct outreach efforts to produce quality and extensive public participation. Input from residents and local business owners will directly support the Town's vision statement, which will tangibly describe the desired community future character. To ensure Falmouth's strategy for growth will be inclusive of the perspective of existing residents, they will be engaged throughout the Comprehensive Plan's update. The civic engagement strategy will be guided by the following principals:

- **Inclusive:** Designed for everyone, regardless of age, profession, race, class, or gender.
- **Accessible:** Designed to allow everyone to participate, independent of availability or mobility constraints.
- **Holistic:** Designed with the understanding that a community's composition consists of an interconnected network of economic, natural, and social capital which cannot be considered in isolation.

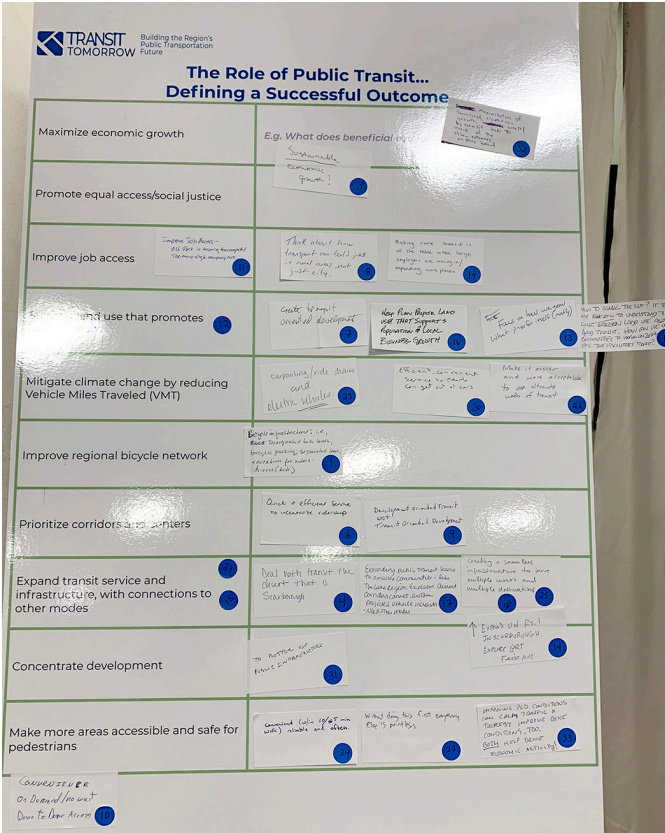
AECOM will conduct a robust public process culminating in a vision statement that will represent





Transit Tomorrow Setting Priorities

a consensus that describes how residents want Falmouth to look and feel 20 years from now. AECOM will work with the Town of Falmouth to develop the vision statement, and the vision statement itself, as the basis for updating Falmouth's Comprehensive Plan.



Transit Tomorrow Desired Outcomes

What do you consider to be the role of public transit in your community?



Transit Tomorrow Public Discussion Exercise



## 3. Project Scope of Work

### Phase 1: Development of Town Vision and Values Statement

Updating the Town of Falmouth's Comprehensive Plan will present significant challenges when balancing regional trends, including a housing shortage, aging population, and transportation demands, with the localized vision of Falmouth residents. Our civic engagement strategy will heavily engage Falmouth residents so that the Town's vision statement strives for a consensus of what Falmouth residents want their community to look and feel like in 20 years. The creation of a shared vision for the town's future will require integrating and balancing across many parameters, identifying public perspectives and placating concerns to secure buy-in from the community. Accomplishing this will require the following:

- Work with a **diverse set of stakeholders** to develop a shared vision
- Develop a strategy for growth while identifying conservation priorities
- Leverage local and regional initiatives

We understand achieving a consensus can be a difficult exercise amongst an entire community. To account for disparate perspectives and to assure that it is representative of the community it guides, a vision statement must be balanced and inclusive. We recognize that an effective vision statement for a community must accomplish the following characteristics:

- Oriented towards the future
- Clear, concise, and easily understandable
- Encompass a broad variety of local view points
- Inspirational and action oriented
- Promote optimism

From our experience leading the development of *Transit Tomorrow* vision statement, we understand that effective input involves using a variety of methods (including but not limited to: focus groups, online survey, pop-up events, pre-existing meetings and events, visual preference surveys, and a diverse

project advisory committee). The civic engagement process will be accessible and inclusive, allowing all participants to engage via a variety of methods. Furthermore, the civic engagement process will be proactive, leveraging community events to meet residents where they are at, to assure the visioning process is both transparent and supports full participation.

Effective communications campaigns start with clearly worded, repeatable messaging to be conveyed to stakeholders using a dynamic variety of tactics. The goal is to create a "surround sound" effect where elected officials, the media, and key influencers are engaging with the public at the same time we are reaching them directly through public involvement efforts, such as public meetings, and social media.

All communications efforts will be tailored to meet the unique needs of all of the Town's elements, with communications preferences in mind. For example, we recommend regular meetings with elected officials, community leaders, and other key influencers, providing them with high-level content, along with easily repeatable information designed to be disseminated to a broad audience.

To assure the civic engagement strategy aligns with the needs of Falmouth, we propose to begin with a kick-off workshop following notice to proceed (NTP). The desired outcome of the workshop is to work with the Town of Falmouth to:

- Clearly define issues
- Establish overarching goals and measurable objectives
- Identify critical stakeholder groups
- Define the most appropriate outreach tools and tactics to engage with stakeholders and involve the public including progress updates, proactive alerts, and incident communication
- Establish the schedule for carrying out communications tactics in a strategic way
- Decide how outreach activities and inquiries will be tracked

Prior to the kick-off workshop, we will prepare a draft civic engagement strategy rooted in the proven four-step process for public involvement — Research,

Planning, Execution, and Evaluation — illustrated to the right.

No more than three (3) weeks following the kick-off meeting, AECOM will present the civic engagement strategy to the Town of Falmouth, which will identify the specific outreach approach our project team intends to take to support the development of the vision statement. We propose an expeditious yet extensive three-month visioning process to be initiated in April 2020 and to be concluded by June 30, 2020.



The four-step process for public involvement — Research, Planning, Execution and Evaluation. All AECOM strategic communications work is rooted in this proven process.

**Visual Preference Survey/Charrette:**

A Visual Preference Survey (VPS) would be used to gauge attitudes of residents and stakeholders about potential new development and character shifts in their city and around improved transportation systems. The VPS exercises provides a fun and informal way for residents and stakeholders to envision the density, type, and character that they would welcome. Residents and stakeholders would select a preferred image among alternative images depicting five different elements of the downtown built environment as seen below. The VSP will help shape the overall language of the Vision Statement and produce a visual understanding of what the Vision Statement means.

**E. Pedestrian Environment**

**D. Architectural Character**

**C. Streets and Streetscapes**

**B. Site Layout**

**A. Density and Scale**

**Things to Consider**

- Height of the buildings
- Attached or Detached
- Varying Heights of the Buildings

Please rate each image according to their appropriateness to your downtown. Make sure to review the list of considerations (right) before beginning. Rate the overall image and ignore minor details




## Phase 2: Assistance with Comprehensive Plan Update

This package includes AECOM’s qualifications to support Phase 2, updating the Town Falmouth’s 2013 Comprehensive Plan. We view Phase 1 as the first step in updating the comprehensive plan, and therefore a natural precursor to Phase 2. Recognizing Falmouth’s tradition of fiscal and management prudence, as identified in the 2013 Comprehensive Plan, we are pleased to include our qualifications to cost-effectively support Phase 1 and Phase 2.

The ability to leverage information, relationships and context provided as part of the Phase 1 work will provide a seamless transition leading to the start of Phase 2 work. Utilizing the same core team to develop the vision statement and update the Comprehensive Plan will increase the efficiency of the process, providing cost-savings and time-savings benefits to the Town. It will also allow AECOM to leverage knowledge gained in Phase 1 to seamlessly transition our team’s efforts to Phase 2 work.

Our resources contain the following expertise:

- GIS and data analysis
- Climate change and resiliency experts
- Economic development specialists
- Natural resource scientists
- Complete streets designers
- Land use planners or other technical staff

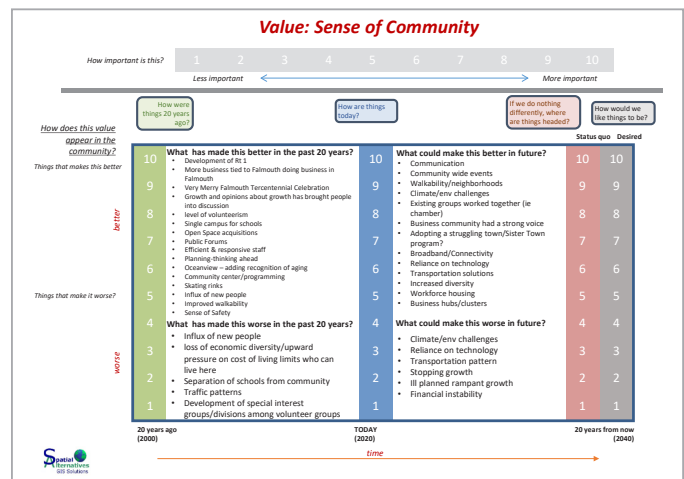
We expect that working with the Town will clearly define our role in relation to the Town Council, appropriate Town departments and associated committees, whether that be as independent consultant, extension of Town staff, or a combination of both. This will allow for the efficient use of Town expenditures without overlap or duplication of effort and responsibilities.

The update of the 2013 Comprehensive Plan must adhere to the technical requirements of the Growth Management Act and subsequent

Comprehensive Plan Review Criteria Rule in order to be deemed complete and consistent with the goals and guidelines of the Act. AECOM will review each element of the 2013 Comprehensive Plan to determine whether it (a) still meets the spirit of the new Visions and Values statement, (b) still sufficiently represents topic area conditions or (c) requires updating in order to be complete and consistent before moving forward with the update.

Since the adoption of the 2013 Comprehensive Plan, Town Council, Town departments, and committees have continued to update and implement elements of the Plan or undertaken associated activities. A Bicycle and Pedestrian Plan (2016), Open Space Plan (2018) and Growth and Density Evaluation (2018-2019) have been completed and certainly contain elements that will serve to update the 2013 Comprehensive Plan. AECOM will work with the Town to ensure that the work performed on these and other efforts are efficiently incorporated into the Phase 2 Comprehensive Plan update.

The result of Phase 2 will be an update to the Comprehensive Plan to help guide Town leaders in making decisions over the next decade(s). Recommendations will include impacts to land use, taxes, growth, infrastructure, and quality of life.



2019 LPAC Falmouth Comprehensive Plan Data Collection exercise example

## Residential Growth and Density in Falmouth

# PUBLIC HEARING


## Zoning Changes May Affect You!

**Monday, May 13**

**7:00 pm**


**Falmouth Elementary School**

**58 Woodville Road**




**Your input is needed on proposed changes to zoning in the RA district, as outlined in this chart.**

	Current RA Zoning	Proposed Option 1	Proposed Option 2
<b>Permitted Uses</b> (P = permitted, C = conditional use)			
Single Family	P	P	P
Two Family	P	C	C
Multi Family	P	C	C
<b>Minimum Lot Size</b>			
Single family	10,000 sf	15,000 sf	20,000 sf
Two Family	10,000 sf	40,000 sf	2 acres
Multi Family	15,000 sf	60,000 sf	2 acres
<b>Minimum Lot Width</b>			
Single family	50 ft	110 ft	125 ft
Two Family	50 ft	150 ft	200 ft
Multi Family	100 ft	200 ft	200 ft
<b>Maximum lot coverage</b>			
	20%	20%	20%
<b>Maximum Residential Density</b> (For Planning Board Projects):			
Single family	10,000 sf	15,000 sf	20,000 sf
Two Family	10,000 sf	10,000 sf	15,000 sf
Multi Family	10,000 sf	10,000 sf	15,000 sf
<b>Minimum Setbacks</b>			
Front Setback - Single Family	10 ft	10 ft	25 ft
Side Setback - Single Family	10 ft	20 ft	20 ft
Rear Setback - Single Family	30 ft	30 ft	40 ft
Front Setback - Two Family	10 ft	20 ft	50 ft
Side Setback - Two Family	10 ft	35 ft	50 ft
Rear Setback - Two Family	30 ft	40 ft	50 ft
Front Setback - Multi Family	10 ft	50 ft	50 ft
Side Setback - Multi Family	10 ft	50 ft	50 ft
Rear Setback - Multi Family	30 ft	50 ft	50 ft
<b>Minimum Net Residential Area per Dwelling Unit per Lot</b>			
	5,000 sf	10,000 sf	15,000 sf



Town of Falmouth 2019 flyer relating to zoning changes



### Recommended Actions

For additional information regarding the actions below, please see the "Notes to Recommended Actions" section that follows this chart.

PRIORITY KEY	S = Short Term (1-5 years), M = Mid Term (6-10 years), L = Long Term (11-20 years)	PRIORITY
<b>General Management</b>		
1	Review: Create informal pedestrian/bicyclist stakeholder group comprised of Falmouth residents and other interested parties that meets 2-4 times per year with Town staff to: Review walking and bicycling improvement progress. Provide "on the ground" walking and bicycling feedback to the Town. Assist with development of promotional, educational, and behavioral strategies for walking and bicycling. Assist with development of prioritization criteria for specific walking and bicycling projects. Recommend new walking and bicycling projects. Help communicate the Town's walking and bicycling efforts to others in the community.	S
2	Maintenance: Coordinate annual pedestrian and bicycling infrastructure maintenance with the Maine Department of Transportation (MaineDOT) and others, as appropriate.	S
<b>Pedestrian Improvements</b>		
3	ADA: Make Americans with Disabilities Act (ADA) improvements to entire sidewalk system, especially at crosswalk locations.	S
4	ADA: Incorporate the latest Americans with Disabilities Act (ADA) compliant crossing technologies, including audio warning devices and countdown signals, whenever a traffic signal is being upgraded.	S
5	Enhanced Accessibility: Install "enhanced accessibility" trails at various locations, such as Suckfish Brook (both units), River Point, and/or Community Park, with the goal to have at least one of these fully ADA compliant.	M
6	Trails: Link trails to sidewalk system, where feasible.	S
7	Trails: Secure or extend trail licenses or acquire permanent easements for trail segments located on private property.	S
8	Trails: Research Town-approved development projects with designated trails that have not been installed and pursue corrective action.	M

Recommendations from the Town of Falmouth 2016 Bicycle and Pedestrian Plan will be considered for the new Comprehensive Plan

# 4. Similar Projects Completed

## Long-Range Public Transportation Plan for Southern Maine (*Transit Tomorrow*)

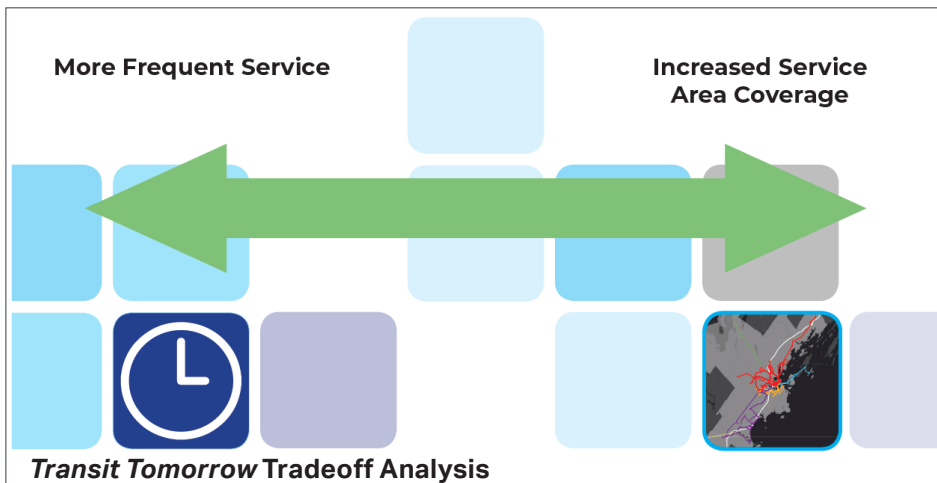
Cumberland and York Counties, Maine

The AECOM team is supporting the Greater Portland Council of Governments in a new strategic planning process — the development of a long range (30 years) public transit plan called *Transit Tomorrow*. The plan focuses on the intersection of multimodal public transportation planning and land use scenario modeling. It includes an analysis of existing plans, visioning process, scenario planning, and recommendations and strategies the will transform the region into that will guide future prioritization of projects and investments in Southern Maine and strategic land use decisions as well as the identification of recommendations and strategies to coordinate transportation modes and guide development along priority corridors and in priority centers. With seven transit providers, hundreds of stakeholders and private operators, and 18 municipalities over two counties in the region, a collaborative approach is key to achieving buy in, and making the vision a reality.

*Transit Tomorrow* will build a shared vision for the region’s public transportation network of buses, trains, vans, carpools, bikes, pedestrians, and ferries and lay out an investment plan for how to improve and expand our network over the next 30 years. AECOM is working with the Greater Portland Council of Governments (GPCOG) to help develop a vision



through a series of stakeholder and public workshops, meetings, and pop up tables in order to identify priority investments and growth areas to boost public transit ridership and efficiency and improve mobility. A key aspect of the scenario planning will be identify how to leverage and prepare for mobility management and to assist with this the team will the Mobilitics™ platform, an innovative tools designed by AECOM, designed specifically to answer questions around the future impacts of emerging trends and technologies on the transportation system.



**Client:**  
 Greater Portland Council of Governments  
 Stephanie Carver  
[scarver@gpcog.org](mailto:scarver@gpcog.org)

**Completion Date:**  
 2020



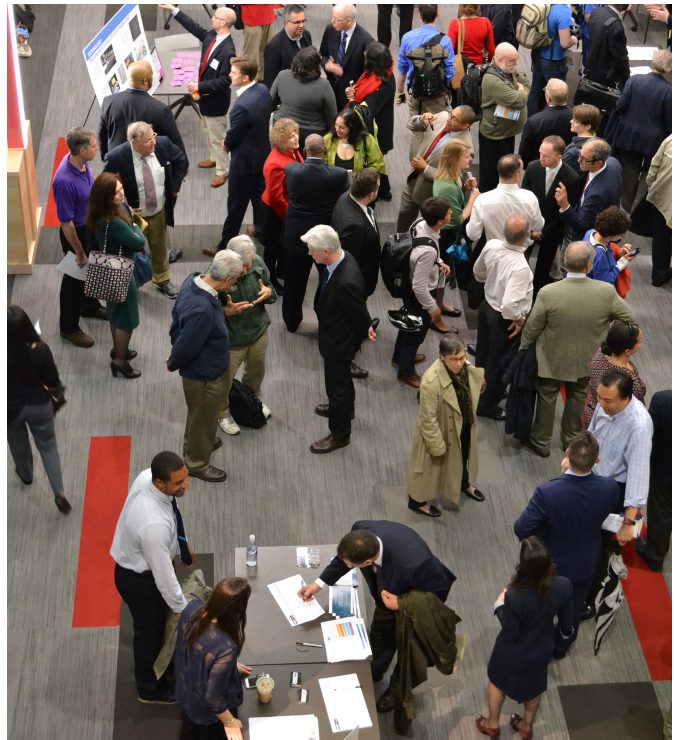
# MassDOT *Focus40*, the 2040 Investment Plan for the MBTA Statewide, MA

*Focus40* is the 25-year investment plan to position the MBTA to meet the needs of the Greater Boston region in 2040. *Focus40* developed a long-term investment strategy that recognizes both today's infrastructure challenges as well as the shifting demographics, changing climate, and evolving technologies that may collectively alter the role the MBTA will play in the Greater Boston of the future.

For the commuter rail and rapid transit modes, AECOM reviewed relevant prior studies and completed a State of the System report, which analyzed existing conditions and trends across the entirety of the MBTA's Commuter Rail system. From this and a series of public meetings we developed an understanding of the system's future needs over the *Focus40* planning horizon. Sources utilized in this work included MBTA's State of Good Repair (SGR) Database and meetings with MBTA and MassDOT management level personnel overseeing all aspects of the commuter rail system and rapid transit systems, and Central Transportation Planning Staff's ongoing work on the MBTA Service Standards and Service Delivery Policy Update.

AECOM developed an "Idea Catalog" for compiling and categorizing hundreds of investment ideas generated through the innovative public process and from internal team and MassDOT/MBTA sources, and worked with MassDOT to pre-screen and evaluate them. The work also included an assessment of where urban rail overlays of the commuter rail system make sense, considering candidate technologies, their operations and maintenance requirements, station siting considerations, and key governance steps.

AECOM coordinated the Commuter Rail, Rapid Transit and Bus elements of the *Focus40* recommendations with program-wide infographics and a unified web-based final report.




**Client:**  
 MassDOT Office of  
 Transportation Planning  
 Caroline Vanasse  
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**Completion Date:**  
 2018



## SILVER LINE 2040

T



**Program Objective**

Add capacity and connectivity with an expanded and cleaner fleet that serves not only the Seaport, but an expanded Silver Line network extending beyond Chelsea.

**We're Doing (Commitments through 2023)**

**Silver Line Fleet Planning and Procurement (Vehicle Type, Fleet Size)**  
A pilot is now underway to test a prototype, extended-range, hybrid bus that can be used in the Transitway Tunnel as well as the potential use of zero-emission vehicles. The current Silver Line vehicles that can operate in the Transitway Tunnel are no longer in production, inhibiting an expansion of the fleet. Both vehicle types will eliminate any delays associated with the current power changeover, present the opportunity to expand fleets, and can address Transitway service overcrowding in the Seaport and to Logan Airport.

**SL2 and SL4 On-Street Improvements**  
The MBTA and the City of Boston will continue to work together to prioritize the enforcement of designated bus lanes and explore improved delineation of bus lanes from general traffic where feasible. The MBTA is pursuing improvements to Transit Signal Priority on the corridor as well.

**Transit Priority Infrastructure in the Seaport**  
Efforts are underway to reduce the severity of the conflict at the D Street intersection using Transit Signal Priority. The use of the emergency access ramp in the Seaport could also save three to five minutes on trips to Boston Logan Airport and Chelsea. In order to do this safely, MassDOT would need to make physical modifications to the geometry of the merge between this ramp, the HOV lane, and the mainline of Interstate 90. The State Police, Boston Fire Department, and Boston Emergency Medical Services would also need to identify and implement procedures that would ensure MBTA use did not conflict with the need to preserve emergency access. Other alternatives for roadway modifications to improve Silver Line Seaport service are also being considered.

**We're Planning (Next Priorities through 2040)**

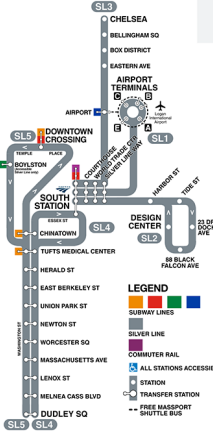
**Silver Line Next Generation Vehicles and Maintenance Facility**  
The MBTA is conducting the necessary vehicle planning work to upgrade and expand the fleet with more modern, fuel efficient vehicles under the *Silver Line Fleet Planning and Procurement* in "We're Doing."  
Fleet expansion would improve service during peak periods, a service period that currently has heavy delays and overcrowding. In addition to identifying a new vehicle type, a larger Southhampton garage or other new storage space will be required to expand the fleet. Once achieved, the MBTA can deliver more service with more efficient vehicles.

**Bus Rapid Transit to Everett**  
A large proportion of residents from Everett (and neighboring cities Malden and Revere) commute to and from Boston daily. Extending the Silver Line beyond Chelsea could lessen crowding on existing bus routes and provide service at near-rapid-transit levels for those living just beyond the reach of the Orange and Blue Lines. An extension of the Silver Line would require additional vehicles and a facility to store them. However, local bus routes could also use the Chelsea Busway to provide similar connections.

**We're Imagining (Big Ideas)**

*Faster service by eliminating the Transitway's at-grade crossing of D Street.*

*Silver Line Tunnel Extension Under D Street in the Seaport*  
If Transit Signal Priority and other improvements prove ineffective, a tunnel under D Street could save several minutes of travel time and improve reliability.



The Silver Line includes five routes: South Station to the Airport via the Seaport (SL1), South Station to the Seaport (SL2), the newly opened South Station to Chelsea via Airport Station (SL4), Dudley to Downtown Crossing via South Station (SL5). Dedicated street space exists on Washington Street in the South End and on Essex Street Downtown as well as in the Transitway Tunnel from South Station to D Street in the Seaport.

The Silver Line accounts for **9.2%** of MBTA bus ridership

Source: www.mbtabacktrack.com 2017 ridership data

SECTION 3 | PLACES & PROGRAMS

Focus40 The 2040 Investment Plan for the MBTA 45

## ORANGE LINE 2040

T



**Program Objective**

Increase peak-hour service to every 4.5 minutes (three minutes if development warrants) to meet the needs of homes and businesses throughout the growing corridor, serving additional riders from the Lower Mystic region.

**We're Doing (Commitments through 2023)**

**Orange Line Systemwide Improvement Program: Fleet Replacement and Maintenance Facility Upgrades**  
The Orange Line trains reached their design life in 2004-2005, and their advanced age has resulted in a 25% reduction in capacity during peak travel times because of a lack of functioning equipment. The 120 replacement cars and 32 new cars will increase capacity on the line with higher capacity vehicles and improve frequencies to every 4.5 minutes during peak periods.  
As part of this program, the Wellington Car House will be expanded in order to house and operate the new fleet. Additional infrastructure improvements include a new maintenance bay and shop improvements to help maintain

the new fleet. The fleet will be introduced into service in stages, beginning in December of 2018 through 2021. The maintenance facility upgrades will be completed by 2020.

**Orange Line Systemwide Improvement Program: Capacity and Reliability Improvement (4.5-Minute Headways)**  
To cost effectively further increase the capacity on the Orange Line, the vehicle procurement included 32 vehicles beyond the existing fleet size to accommodate growth along the corridor and reduce crowding. In order to accommodate the larger fleet and further enhance reliability, several infrastructure improvements are being implemented as part of this

program. The current signal system uses outdated technology from the 1970s, resulting in frequent failures and service delays. Updating the signals to modern digital circuits with contemporary-standard 100Hz equipment will further improve reliability and enable capacity improvements. In addition, upgrades to traction power substations are necessary to provide more power and accommodate increased capacity on the line. This work will be completed in early 2022.

**We're Planning (Next Priorities through 2040)**

**Additional Capacity Improvements (3-Minute Headways)**  
Further operational improvements may help achieve frequencies greater than every 4.5 minutes as currently planned with the new Orange Line cars. If recent development trends in the Lower Mystic region and in Malden continue or accelerate, this significant increase in capacity could prove inadequate by 2040. In a future where development continues to be drawn to the large, underutilized parcels along this rapid transit corridor, investments in additional vehicles, signals, power, and expanded storage and maintenance facilities to enable three-minute frequencies and increase capacity could be warranted.

**We're Imagining (Big Ideas)**

*Extensions to Roslindale and Downtown Everett via a spur from Sullivan Square to serve high travel demand. Buildout of a Sullivan Square Superstation, and Downtown Crossing/Park Street/State Downtown Superstation.*

*Sullivan Square Superstation (Commuter Rail/ Orange Line/ Silver Line)*  
The City of Boston is planning significant redevelopment for Sullivan Square. Depending on the form and intensity of that redevelopment, new connections to the commuter rail system and extension of services like the Silver Line may be warranted.

*Orange Line Extensions (Everett, Roslindale)*  
The Everett Transit Action Plan and the Lower Mystic Regional Working Group effort both explore a concept to create a spur at Sullivan Square to extend the Orange Line into Downtown Everett. GoBoston 2030 recommends an extension of the Orange Line south to Roslindale. These extensions would follow high demand bus corridors, and would allow for the reallocation of some of that bus service. While both of these ideas would bring rapid transit service into areas with the land use

and population density to support it, lower cost speed and reliability improvements to Broadway in Everett and Washington Street in Roslindale should be exhausted before costly rail extensions are considered.

*Downtown Superstation*  
Connecting stations at State and Downtown Crossing (see Downtown Pedestrian Connection between Red and Blue Lines), and thus Park Street, through underground pedestrian walkways could make trips easier and faster by eliminating a transfer while freeing up needed capacity on rapid transit lines passing through Downtown. The proximity of Park Street to Downtown Crossing creates an opportunity to consolidate their functions (Downtown access plus Red Line connections to Green and Orange, respectively) into one station.

Full fleet of new Orange Line cars will arrive by 2022



SECTION 3 | PLACES & PROGRAMS

Focus40 The 2040 Investment Plan for the MBTA 43

Example Program Sheet graphics for **Focus40**

# NRTA Year-Round Bus Service Study

Nantucket, Massachusetts

The purpose of the Nantucket Year-Round Transit Study was to evaluate the feasibility of providing year-round fixed route bus service and to develop recommendations for year-round transit service. At the time of the study, fixed route transit service was provided mid-May through early October. In just four years the year-round island population had grown by 6.7%. AECOM was retained by the Nantucket Regional Transit Authority (NRTA) to complete this feasibility study and develop a year-round transit service plan.

Through an extensive outreach effort, a transit market analysis, and a transit service demand analysis, it was determined that year-round bus service is both needed and wanted on Nantucket. Approximately 10 percent of the year-round population completed a survey and/or participated in the public outreach effort and the overwhelming majority (96 percent) supported the implementation of year-round fixed route bus service.

Based on this demand and support for year-round bus service, the AECOM team developed a menu of transit service options, worked with the local Project Advisory Committee to evaluate the options, and came up with a Preferred Alternative to present to the community and the NRTA Advisory Board.

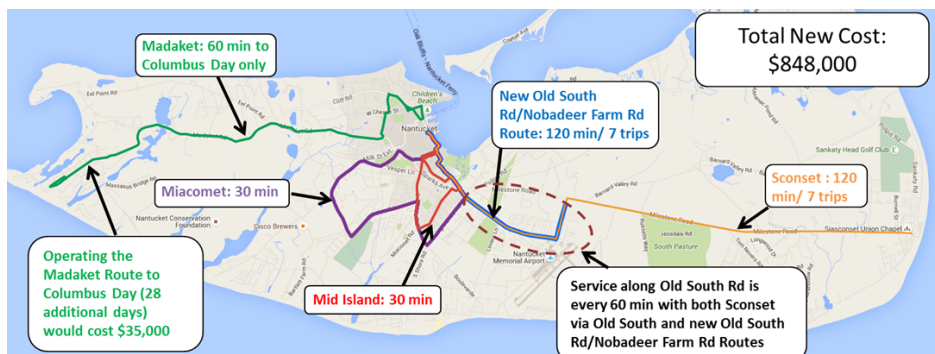
The Preferred Alternative included year-round service on three existing routes and a new route focused on the growing Old South Road/Nobadeer Farm Road area. The Preferred Alternative also included extended service longer into the shoulder season on one existing route. Operating hours and miles, staffing and fleet requirements, performance measures and ridership were projected

for the Preferred Alternative. Possible service enhancements and cost savings options were presented to give the community some flexibility in moving forward with implementation.

The final year-round service plan was presented to community stakeholders and the NRTA Advisory board, along with other community groups in March and April 2016.

Phase II of the study included development of innovative funding options, a fare analysis, and a review of fare collection technology options.

Year-round service was implemented as recommended in April 2018.



**Client:**  
Nantucket Regional Transit Authority (NRTA)

Paula Leary,  
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508-325-9571

**Completion Date:**  
2016



# Route 8 & Waterbury Branch Line Corridor Transit-Oriented Development (TOD) & Alternate Transit Modes Assessment

## Waterbury Station to Bridgeport, Connecticut

AECOM is leading the Naugatuck Valley Council of Governments (NVCOG) multi-task planning study to assess the feasibility of implementing transportation improvements and alternative modes within the Route 8 and Waterbury Branch Line corridor.

The corridor follows the Naugatuck River and a key project goal is to improve connectivity to the rail stations and develop TOD plans for the corridor's multiple riverfront communities through land uses supportive of TOD. The project is also implementing policies and actions that advance livability goals and create sustainable communities. It is an outgrowth of the NVCOG's partnership in the New York and Connecticut Sustainable Communities Consortium, a joint HUD, EPA and US DOT initiative.

A key element of the project is to assess and identify transportation options that more efficiently and effectively move commuters through the Region, and establish future land use scenarios that promote higher density residential development, economic redevelopment and natural resource management. The primary tasks of the project are:

- Identify built environment densities that meet transit supportive standards for land uses and walkability in the seven communities in the corridor.
- Identify new, enhanced and alternate public transit facilities and services, including local bus service, bus rapid transit routes and improved commuter rail services. This will aid in transforming town centers into vibrant, high-density communities that have access to efficient and high quality transit services.
- Identify opportunities to enhance transit connectivity, reliability and attractiveness.

Develop an implementation plan for incentivizing transit oriented and supported developments in the lower Naugatuck Valley Region.

The project study limits generally extend from Shelton to Naugatuck, through Derby, Ansonia Seymour and Beacon Falls. The target areas are focused on the town centers of these communities along the Naugatuck River.



**Client:**

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**Completion Date:**

Ongoing

# CRCOG Long-Range Transportation Plan Update

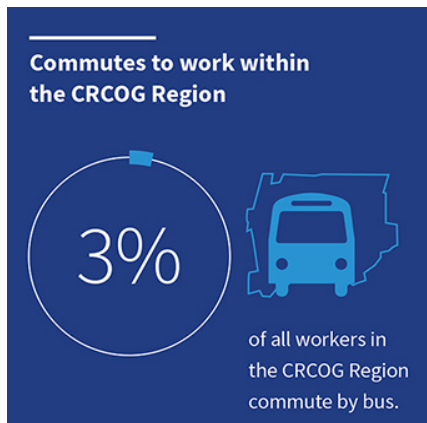
Connecticut Capitol Region

AECOM is helping the Capitol Region Council of Governments (CRCOG) develop its Long-Range Transportation Plan (LRTP), a plan which lays out a vision for the region’s transportation system over the next 25 years. The CRCOG region faces many transportation challenges. As a net importer of employees and the region with largest population growth in the state, congestion is an escalating problem in the region. Additionally, CRCOG is grappling with evolving transportation funding issues, addressing environmental justice concerns when developing mobility solutions, coordination with seven different public transit operators, and harnessing the latest technology to make it work for Capitol region residents. The LRTP Update will facilitate the prioritization of and consensus-building around the transportation investments that CRCOG and its residents, businesses and visitors want and need to maintain a vital economy and good quality of life. AECOM is developing the core of the plan to:

- Identify key transportation goals, policies, and priorities to meet the access and mobility needs of the CRCOG region
- Identify innovative funding mechanisms to help finance the region’s important transportation priorities
- Develop a fiscally-constrained implementation plan for the region’s priority transportation projects
- Meet federally-mandated requirements to incorporate performance measures into the plan
- Be a leader in new and emerging technology



## CONNECT 2045



**Client:**

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**Completion Date:**

2019



# Southeastern Connecticut Regional Bike and Pedestrian Plan

Southeastern Connecticut Council of Governments



In 2018, the Southeastern Connecticut Council of Governments (SCCOG) commissioned a Regional Bike and Pedestrian Plan – and branded this effort BikeWalk SECT. The Plan provides a comprehensive inventory and recommendations for the region’s bicycle and pedestrian programs and infrastructure. It serves as a companion to the Southeastern Connecticut Metropolitan Transportation Plan, which outlines transportation improvements for the region over the next 40 years. The Plan is an effort to ensure that all municipalities in the SCCOG region have a basic level of bike and pedestrian planning and that each town’s contribution to the network is identified and leveraged in the future.

The Plan envisions a region where people of all ages and abilities safely and conveniently walk and bike on a network of streets and trails that connect our communities.

Throughout the development of the plan, there has been strong support for a regional approach to bike and pedestrian planning by local agencies and constituents in the SCCOG region. Continued support and political leadership will be needed in the years to come to keep non-motorized safety and access a key element of all infrastructure investments made. The adoption of a Complete Streets Policy (CSP) is the first step to support safe and complete transportation network for all users. These policies set the stage for how regional and municipal governments prioritize decisions such as funding and land use.

AECOM used innovative techniques to meet the challenges seen in the Southeastern Region when it

comes to walking a bicycling. The team used a steward approach to leveraged various resources, public and private, to compile an asset inventory for the SCCOG. This extensive inventorying provided the basis for the visionary recommendations to revolutionize active transportation in the region. The multi-faceted public engagement plan has yielded a more invigorated constituency. This plan is innovative and unique in that we have taken the overall plan and have broken the recommendations down into individual town toolkits which empowers not only each town to have a clear path forward but also gives residence the power to keep pushing the needle because we have laid out key contacts for every municipality and what their role is for implementation. The plan is data driven, innovative, approachable, and implementable.



**Client:**

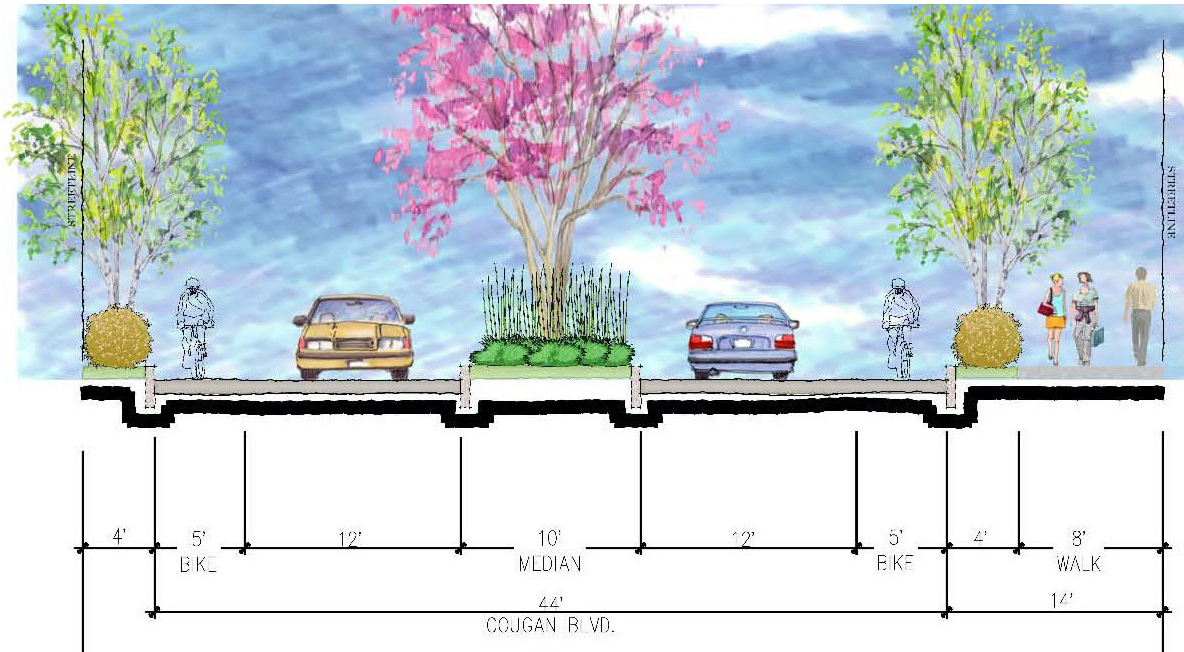
Southeastern Connecticut Council of Governments  
Kate Rattan  
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**Completion Date:**

2019

# Mystic Multimodal Transportation Study

Mystic, Connecticut



AECOM was the prime consultant and overall project manager for the Mystic Multimodal Transportation Study and Implementation Plan conducted for the Town of Stonington, CT in conjunction with Town of Groton and Mystic Seaport. The study evaluated existing and future traffic, parking, transit, bicycle and pedestrian needs in the Mystic Seaport area, including the towns of Stonington and Groton. The workplan focused on identifying viable and implementable options to improve mobility and provide a more sustainable transportation future that supports a high-quality “Mystic” experience for tourists, workers and residents.

Recommended transportation improvement options include implementation of Mystic Trolley Bus circulator system, expansion of the Mystic Seaport Water Shuttle Service, improvements to wayfinding signage throughout the Mystic area, enhancements to pedestrian and non-vehicular transit linkages, and traffic intersection improvements to promote pedestrian safety and improve traffic flow. Improvements include development of complete streets concepts, bicycle path upgrades and streetscape improvements to sidewalks for better maintenance and accessibility.

A critical feature is the incorporation of Mobility Hub concepts at strategic location throughout the area to promote intermodal connections and to provide a cohesive transportation environment for residents and visitors in Mystic.



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**Completion Date:**  
 2011



## 5. Interview Availability

The AECOM Team is available to participate in an interview anytime on February 3, 4, or 5 or during the morning of February 6. The team is not available on February 7.



*Transit Tomorrow* Board Members Meeting

## About AECOM

AECOM is the world's premier infrastructure firm, delivering professional services across the project lifecycle — from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a *Fortune* 500 firm with revenue of approximately \$20.2 billion during fiscal year 2019. See how we deliver what others can only imagine at [aecom.com](http://aecom.com) and [@AECOM](https://www.instagram.com/AECOM).