



Policy Committee Meeting

August 23rd, 2022

1:00 PM

Zoom

Agenda

1) Call to Order

2) Public Comment

Members of the public in attendance of today's meeting have an opportunity to provide public comment on today's agenda items.

3) Approval of July 19th, 2022 BACTS Policy Committee Meeting Minutes (Attachment A)

4) Staff Report (Attachment B)

5) BACTS' Transportation Improvement Program

Staff Report

Discussion of a possible TIP amendment for WINs 023112 and 023114, the Bangor and Brewer Penobscot Corridor Signal Project.

Proposed Action: Approve an amendment for WINs 023112 and 023114 for a 10-day public comment period, add to the BACTS 2022-2025 TIP errata sheet, and send the amendment to MaineDOT.

6) Regional Traffic Signal Phase 2 (Attachment C)

Staff Report

In the Fall of 2021 Sebago Technics was selected to complete a regional signal inventory and assessment. Sebago completed the inventory, and the inventory study team asked Sebago to prepare a scope of work for Phase 2, a BACTS Region Signal Master Plan.

Proposed Action: Authorize BACTS to enter into Phase 2 contract with the Sebago Technics for a total contract price not to exceed \$64,000.00.

7) Metropolitan Transportation Plan Contract (Attachment D)

Staff Report

A Metropolitan Transportation Plan must be updated every 5 years. BACTS is due to complete another plan in Fall 2023. The scoring committee has selected the consultant VHB to assist BACTS staff with the design, execution, and management of this process. Key components include public engagement, data collection, scenario development, and a financial and implementation plan.

Proposed Action: Authorize BACTS to enter into contract with the selected firm for a total contract price not to exceed \$149,969.22.

8) BACTS UPWP Budget (Attachment E)

Staff will provide budgetary information regarding the 2022-2023 UPWP budget.

Proposed Action: *For discussion only.*

9) Transit Updates

Staff and The Community Connector will provide updates on transit studies, operations, or other transit related items.

Proposed Action: *For discussion only.*

10) Project Updates

Members will provide updates on BACTS funded construction projects in the region.

Proposed Action: *For discussion only.*

11) MaineDOT Report

MaineDOT staff will provide an update on any MaineDOT projects, policies, or plans.

Proposed Action: *For discussion only.*

12) Other Business

Discussion of other items not on today's agenda.

13) Upcoming Meetings

Transit Committee - September 22nd, 2022 at 9:30AM - Virtual

Policy Committee - September 20th, 2022 - Bangor City Council Chambers



Attachment A
BACTS Policy Committee Meeting
July 19th, 2022 via ZOOM

Minutes

Committee Members	Affiliation
Aaron Huotari Laurie Linscott Courtney O'Donnell John Theriault	Bangor
Melissa Doane	Bradley
Jeremy Caron Linda Johns	Brewer
Paula Scott Victor Smith	Hampden
Kyle Drexler Belle Ryder Rob Yerxa	Orono
Mark Leonard	Veazie
MaineDOT / FHWA	
John Devin, Jarod Farn-Guillette	
BACTS	
Sara Devlin, Madeline Jensen, Paige Nadeau, Mary O'Flaherty	

1) Call to Order

Meeting was called to order by John Theriault at 9:36AM.

2) Public Comment

There were no public comments.

3) Approval of June 21st, 2022 BACTS Policy Committee Meeting Minutes

Jeremey Caron made a motion to approve the minutes as written, seconded by Aaron Huotari. Roll call was taken, four members abstained from voting, rest unanimously approved.

4) Staff Report

Sara Devlin provided an overview, the bus stop project designation project is ongoing and the public comment period is ending soon. Madeline Jensen provided an update on the public comment period, so far about 40-50 public comments have been received so far and the site has over 700 views.

Jeremey Caron asked if there has been any release for federal projects, Sara is aware of a bridge one MaineDOT is doing and will update the group and will keep them apprised of any NOFO's that come out.

5) BACTS' 2022-2025 Transportation Improvement Program (TIP)
Staff Report

MaineDOT has requested the following amendment to the BACTS 2022-2025 TIP. Add WIN 26718.00 (Orrington, Route 15 (Beginning 0.05 of a mile north of Quarry road and extending north 2.75 miles), Ultra-Thin Bonded Wearing Course) to the BACTS 2022-2025 TIP. Total funding for this project is \$739,608 and is being funded from the Statewide holding WIN for light treatments.

Proposed Action: Approve the amendment as written above to be posted for a 10-day public comment period and added to the BACTS 2022-2025 TIP.

Sara Devlin provided an overview, MaineDOT requested this addition to the BACTS TIP. Belle Ryder made a motion to approve the amendment as written, Aaron Huotari seconded. Roll call taken, unanimously approved.

6) BACTS Projects Supplemental Needs

Staff Report

MaineDOT has provided BACTS with the estimated project needs for all BACTS' currently funded projects. This list does not include the TIP amendment approved by the Policy Committee in June for the Bangor State Street Mill and Fill project. Staff will work with MaineDOT to update all project estimates for 2022-2025 projects, and provide an updated assessment at the September Policy Committee Meeting

Proposed Action: For discussion only.

Sara Devlin provided an overview of the list. Looking at an estimated \$40k shortfall for 2022, expected that the holding WIN will easily be able to cover the difference, as long as bids come in as expected. 2023 program, no needs identified as of yet, but recommends for 2023-2025, would be good practice for members and MaineDOT to look at the estimates, and update accordingly, prior to making decisions for later programming years for any unallocated funding. Would like to update estimates for the September Policy Committee meeting and then assess any potential funding needs at that time. Minimum balance in holding WIN was discussed, should be around 10%, but MaineDOT has been a bit more lenient with MPOs given current economic factors, also IJJA is expected to increase construction funding for MPO's for this time frame.

7) BACTS Service Provider Grant Application

Staff Report

Staff has heard interest from nearby communities about receiving assistance applying for a Community Action Grant. In order to provide assistance BACTS will need to apply for the next round of Service Provider Grants due in August.

Proposed Action: Approve the BACTS Service Provider Grant Application.

Madeline Jensen provided an overview. BACTS is assisting Old Town and Dixmont for this round, and during rural outreach has at least one other community interested in applying and is happy to assist other members for the next round as well.

Belle Ryder made a motion to approve BACTS applying for the Service Provide Grant Application, Kyle Drexler seconded. Roll call was taken, unanimously approved.

8) BACTS UPWP Budget

Staff will provide budgetary information regarding the 2022-2023 UPWP budget.

Proposed Action: For discussion only.

Sara Devlin provided an update, our new full time Planner is starting this coming Monday, so projected surplus is expected to decrease with this addition.

9) Transit Updates

Staff and The Community Connector will provide updates on transit studies, operations, or other transit related items.

Proposed Action: For discussion only.

Laurie Linscott provided an update. The transit center is on track for opening this fall. Community Connector still has a driver shortage and are looking to hire a dispatcher as well. The Community Connector is also looking for volunteers for the bus ambassador roles as well. Ridership is up about 5% from last year, and they are seeing increases on a monthly basis as well. The Community Connector is still on a modified schedule without Saturdays for the time being.

10) Project Updates

Rob Yerxa provided an update on Orono projects

- Route 2 Culvert Project - Starting August 1st, will be using I-95 as a detour
 - Discussion on bus route impact and various options for alternative routes

Jeremy Caron provided an update on Brewer projects

- A few Brewer projects are waiting on contractors, to get going
- Phase 3 of Riverwalk is expected to start in August
- State Street / North Main expected to start in coming weeks

John Theriault provided an update on Bangor projects

- Hancock Street - Mill and fill is ongoing
- Contractors are working on State Street from Broadway to Hancock, milled and shimmed, a lot of curb work and sidewalk work are on going
- State Street from Hancock to Hogan and Hogan Road from State to Mt Hope Ave- Contractor has been selected
- Grandview Avenue - No bids received, will reassess
- Penobscot Corridor - Going out to bid in coming weeks
- Water Street - Ongoing construction, paving soon

11) MaineDOT Report

John Devin provided an update

- I-95 through Bangor - Ramps are completed for the most part
- Hampden - Contract to bid areas between bridges on the interstate. Bid came in high and the contract has not been awarded yet.
- Stillwater Avenue - Putting out highway part of the work out to bid this Fall and start work this Fall as well which includes the intersection of College Avenue. Bridge work is going to be repackaged to get the design and construction done, expected to be put out next Spring.

12) Other Business

John Theriault - Ammo Road near the bridge off of Odlin Road - There is a sinkhole, this is not a Bangor road. Victor Smith from Hampden will go check it out.

BACTS received two proposals for the MTP RFP - The Executive Committee will score and will come to the Policy Committee with the selected firm to award.

13) Upcoming Meetings

Transit Committee - July 20th, 2022

BACTS Summer Outing - August 18th, 2022 at Orono Brewing Company on Margin Street in Orono from 4PM-6PM. Appetizers will be provided.

BACTS will be transitioning to in person meetings starting in September - The first meeting is scheduled to take place at the Bangor City Council Chambers. Going forward the meetings will be the same day and week of the month but the time is changing to 1PM-3PM. A Zoom option will be available, but in person attendance is encouraged.

The meeting was called to adjourn by Linda Johns and seconded by Belle Ryder. Meeting was ended at 10:11AM.



Attachment B

Staff Report

August 2022

BACTS Planner - BACTS has hired a Planner, welcome to the team Evan!

Data Collection for GHG Inventory and Vulnerability Assessment - The consultants have begun working through the data we received from municipalities, state and federal agencies, and local organizations. Staff will be assisting with the collection of a few remaining data needs as well as preparing for the Public Advisory Committee.

Bus Stop Designation Project - The public comment period ended July 20th. Staff have responded to all comments and are working to finalize the proposed stop locations. Staff will be reaching out to municipalities with final placement and details as we wrap up our contract and hand over implementation to the Community Connector and the City of Bangor.

Traffic Incident Management (TIM) - The TIMS website development is underway. Staff is working on content for the website. The website is anticipated to be completed by the end of Summer.

Regional Collector Pavement Inventory and Assessment- Staff composed and advertised an RFP for a regional collector pavement inventory and assessment. RFP was posted August 16th, clarification questions from applicants are due August 22nd, and proposals are due September 7th.

Service Provider RFP - In order to qualify for the Service Provider Grant, BACTS must find at least one additional community interested in receiving assistance.

Inspection Services RFP (Old Town LAP) - Staff have begun drafting a request for proposals for construction inspection services for Old Town's signal restoration LAP project.

Supplement Needs Update - In consultation with MaineDOT personnel, staff have updated cost estimates for 2022-2025 approved projects, in light of significant likely cost changes for certain materials and services.

Meetings and Conferences

- MaineDOT Coordination Meetings
- TIMS - FHWA webinar
- Maine DOT Long Range Plan Meeting
- Statewide Strategic Transit Plan meeting
- MaineDOT - MPO Monthly Check in Meeting
- Orono PIP meeting
- Old Town LAP planning meeting
- Rural Contract meeting with Carmel
- Sign training
- BBOE Committee meeting
- Transit Committee
- Traffic Movement Permit Meeting-Bangor

July 19th, 2022
21387-01

Sara Devlin, Executive Director
BACTS
12 Acme Road, Suite 104
Brewer, ME 04412

Proposal for Professional Traffic Engineering Services – Traffic Signal Master Planning – BACTS Region

Sara:

Sebago Technics, Inc. (Sebago) is pleased to present this Scope of Services and Fee estimate for Traffic Engineering services to expand upon work that was conducted for the BACTS region last year. In summary, this work has been as follows:

- A *Traffic Signal Coordination and Evacuation Plan* was developed for Orono and Old Town in September of 2021. This plan focused on upgrading the traffic signal detection, providing communications, and selecting a traffic management system (TMS) for ten (10) traffic signals to allow for “special event” programming and to support an evacuation plan for the University in the future.
- Field inventories of signal equipment across 104 intersections in the communities of Bangor, Brewer, Hampden, Hermon, Milford, Old Town, Orono, and Veazie. This resulted in a hosted asset management database that was delivered to the Region in December of 2021. This database will serve as the basis for planning future traffic signal improvements for the Region, an effort that this scope of work will look to address.
- A *Traffic Signal Asset Assessment and Management Plan* was developed for BACTS and the member communities in May of 2022 which looked at the overall value of the traffic signal assets for the Region and provided recommendations for budgeting of annual replacements on a defined schedule.

The scope of services contained within this proposal aim to develop a *Traffic Signal Central Management Master Plan* for the BACTS region. It is anticipated that this master plan will combine the findings of the previous efforts with additional research and input from the BACTS communities to develop a “roadmap” to help guide future traffic signal improvement projects while potentially providing support for future discretionary grant opportunities.

Scope of Services

Task 1 – Project Management / Administration / Meetings. Sebago will be assigning **Bradley Lyon, P.E., PTOE, IMSA II** as Project Manager for this Project given his experience and familiarity with the previous efforts, wealth of experience in traffic signal operations and planning as well as being a known contact to the Region as a whole. Brad will primarily be supported by **Curtis Thompson, P.E., PTOE, IMSA II – Senior Traffic Operations Engineer** and **Derek Caldwell, P.E., PTOE, IMSA II – Senior Traffic Engineer**.

Brad will be the primary point of contact and be responsible for all administrative aspects of our work, including providing progress reports as necessary and monthly invoices for work performed.

An integral component to the success of this Project will be to have open and accessible lines of communication to ensure that the concerns and needs of all communities are met with the proposed plan that is developed. As such, we have assumed that quarterly meetings will be scheduled with BACTS and the member communities on a quarterly basis; with a contract that is anticipated to last until December of 2023 we have planned on six (6) of these meetings to occur in a virtual format. In addition to meetings with the larger group, meetings with individual communities have also been assumed to occur for up to two (2) times per community for the duration of the contract, these meetings would allow for additional staff such as public safety and IT to be involved. Given that there are eight (8) separate communities with traffic signals this equates to sixteen (16) virtual meetings. These meetings will help to inform some of the major elements of the master plan to ensure the needs of all communities within BACTS are met.

Task 2 – Work Plan Development. Through meetings held in Task 1, Sebago will develop a work plan for reaction and general discussion which will help to inform the major elements which will be contained within the master plan. Some examples of these discussion points are as follows:

- Should BACTS focus on procuring or expanding an existing TMS for all the Region's 104 total traffic signals or connect to "high priority" corridors only?
- What role should BACTS provide to the communities to support their traffic signal infrastructure?
- Should a traffic signal specification be developed for the Region to standardize signal equipment?
- How should the traffic signal asset management database that was developed last year be maintained (if at all)?
- If a TMS is supported by the BACTS Region what will cost sharing look like to support on-going licensing and maintenance fees?

Some of these questions and additional input would not only be discussed during these meetings but questionnaires would be developed for distribution. This would serve as a "simplified" Systems Engineering process to help with the development of the major elements within the master plan itself.

DELIVERABLE: *A "simplified" Systems Engineering questionnaire will be developed and distributed to the BACTS communities following initial coordination from our meetings. A memorandum and/or PowerPoint presentation will be developed summarizing the findings of this process.*

Task 3 – Assessment of Communication Network. As part of the work conducted in the *Traffic Signal Coordination and Evacuation Plan* a network map was developed for Orono and Old Town, depicting both existing communication media present on the street today and the proposed connections needed to provide communication to the traffic signal system in the future. This effort should be expanded to the remaining communities within BACTS. Although the in-cabinet network equipment was verified as part of our signal inventory work, a comprehensive review of the various communication systems was not conducted. We envision that network diagrams for each community would be developed depicting existing communications that are present. From this, a proposed communication network plan will be developed to provide connectivity to a future TMS.

DELIVERABLE: *Aerial based network maps will be developed for each of the eight communities, showing existing and proposed on-street communications for all traffic signals. An overall network diagram will also be developed showing methods of connections for all communities to a Regional TMS and the equipment required therein.*

Task 4 – Perform Alternatives Analysis and Cost Estimating. A “simplified” alternatives analysis with high level cost estimates will be performed on system architectures outside of Econolite’s Centrac system. These alternatives would likely be as follows:

- Procurement of a new physical or cloud-based server along with “brand-specific” TMS (such as Trafficware’s ATMS.Now) to support the BACTS region, with existing systems providing redundancy.
- Procurement of a “brand-neutral” TMS supporting NTCIP 1202 protocol. This system could support both Econolite and other NTCIP compliant traffic signal controllers.

A more detailed analysis will be conducted on Econolite’s Centrac platform, leveraging the City of Bangor’s system that is being procured. This analysis will look at costs associated with expanding the existing software to support a larger number of traffic signals on both a physical and cloud-based server.

Utilizing information gathered as part of our traffic signal inventories last year, and our assessment of the communication network (Task 3) cost estimates will then be developed for these alternatives. This will likely involve additional coordination with vendors such as Econolite to understand their pricing structure and recurring fees, particularly as it pertains to the expansion of existing systems.

DELIVERABLE: *A memorandum will be developed and distributed to the BACTS communities outlining the alternatives analysis with associative cost estimates. It is expected that an alternative will be agreed upon before proceeding to Task 5.*

Task 5 – Development of BACTS Traffic Signal Management Master Plan. As previously mentioned, the contents of this plan will capture all of the efforts conducted to date on the Region’s traffic signal system in the last 2-3 years. The general outline of the plan is anticipated to be as follows:

- Existing TMS and Signal Infrastructure
- Incorporation of Traffic Signal Maintenance Plan
- Review of Systems Engineering Process
- Alternatives Analysis
- Recommendation / Conclusion

DELIVERABLE: *A Draft Report will be developed and distributed to the BACTS communities for review and comment. Following receipt of comments and any discussion necessary the Report will be finalized and distributed in PDF format.*

Schedule

We can commence this work within four weeks of authorization (meetings not withstanding). Given our experience on these matters we would expect that the *BACTS Traffic Signal Management Plan* would be finalized around the end of 2023. We certainly can accelerate some of our efforts where possible but given the amount of feedback needed from all communities and coordinating schedules, we think it would be best served to allow for this important dialogue to occur. We will certainly continue to update you on our schedule and anticipated deliverables along the way once some of the variables begin to get defined.

Compensation

We have attached a spreadsheet that presents our estimated hours by task, direct hourly rates, overhead, direct expenses and fee.

Closing

In addition to the above information we have attached an A-1 form and DBE form for your use in processing our contract. Should you have any questions please don't hesitate to contact me directly. Thank you again for the opportunity to assist you and the BACTS communities on this Project.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink, appearing to read 'Brad R. Lyon', with a stylized flourish at the end.

Bradley R. Lyon, PE, PTOE
Vice President, Transportation Engineering

Enc.

BRL

APPENDIX A-1

METHOD OF PAYMENT

- ☒ Adjustable Burdened Hourly Rates
☐ Adjustable Burdened Hourly Rates - Fixed Overhead
☐ Fixed Burdened Hourly Rates
☐ Cost Per Unit of Work
☐ Cost Plus Fixed Fee
☐ Lump Sum

Date: 8/16/2022
 Consultant Name: Sebago Technics, Inc.
 Project Location: BACTS
 WIN #: N/A
 CSN# (If known): N/A

Employee Names/Classifications & Rates

Please indicate the Employee Names/Classifications and rates that will be used to fulfill the requirements of this contract.

Employee Name & Classification	Actual Rate Paid *	Allowable Direct Labor Hourly Rate	Overhead % 157.61%	Profit/Fixed Fee% 10.0%	Burdened Hourly Rate
Bradley Lyon, Project Manager	\$65.14	\$62.00	\$97.72	\$15.97	\$175.69
Curtis Thompson, Senior Traffic Operations Engineer	\$43.27	\$43.27	\$68.20	\$11.15	\$122.61
Derek Caldwell, Senior Traffic Engineer	\$42.47	\$42.47	\$66.94	\$10.94	\$120.35
Nicole Conant, Transportation Engineer	\$43.27	\$43.27	\$68.20	\$11.15	\$122.61
Griffin Steinman, Traffic Engineer	\$28.85	\$28.85	\$45.47	\$7.43	\$81.75
Vraj Thakkar, Data Analyst	\$34.08	\$34.08	\$53.71	\$8.78	\$96.57
Vinh Lam, Engineering Intern	\$18.00	\$18.00	\$28.37	\$4.64	\$51.01
Francine Nason, Administrative Support	\$25.71	\$25.71	\$40.52	\$6.62	\$72.85

*I certify that this rate is the actual rate paid to this employee under this firm's payroll.

By: Keith McAlary
 Keith McAlary, CFO

Date: 8/16/2022

I certify that the foregoing signature is true and accurate, and if electronic, I further certify that it (a) is intended to have the same force as a manual signature, (b) is unique to myself, (c) is capable of verification, and (d) is under the sole control of myself.

CONSULTANT'S DETAILED COST PROPOSAL FORM

Consultant Name: Sebago Technics
Vendor/Customer No.:
Project Title/Location: BACTS Traffic Signal Master Planning
MaineDOT WIN:
Service Area or Phase of Work: Traffic Signal Operations & Management

Orig. Date: July 12, 2022
Revised Date: August 16, 2022
Contact Name: Bradley Lyon
Contact e-mail address: blyon@sebagotechnics.com

Consultant Positions =>	Project Manager, Bradley Lyon	Senior Traffic Operations Engineer, Curtis Thompson	Senior Traffic Engineer, Derek Caldwell	Data Analyst, Vraj Thakkar	Administrative Support, Francine Nason					TOTAL (HOURS / SUBTOTAL)
TASK 1: PROJECT MANAGEMENT / ADMINISTRATION / MEETINGS										
HOURS	96.00	40.00	0.00	0.00	24.00					160.00
HOURLY RATE	\$62.00	\$43.27	\$42.47	\$34.08	\$25.71					
DIRECT LABOR TOTAL	\$5,952.00	\$1,730.80	\$0.00	\$0.00	\$617.04					
OVERHEAD % (157.61%)	\$9,380.95	\$2,727.91	\$0.00	\$0.00	\$972.52					
PROFIT / FEE % (10.0%)	\$1,533.29	\$445.87	\$0.00	\$0.00	\$158.96					
TASK TOTAL	\$16,866.24	\$4,904.59	\$0.00	\$0.00	\$1,748.51					\$23,519.34
TASK 2: WORK PLAN										
HOURS	8.00	40.00	0.00	0.00	0.00					48.00
HOURLY RATE	\$62.00	\$43.27	\$42.47	\$34.08	\$25.71					
DIRECT LABOR TOTAL	\$496.00	\$1,730.80	\$0.00	\$0.00	\$0.00					
OVERHEAD % (157.61%)	\$781.75	\$2,727.91	\$0.00	\$0.00	\$0.00					
PROFIT / FEE % (10.0%)	\$127.77	\$445.87	\$0.00	\$0.00	\$0.00					
TASK TOTAL	\$1,405.52	\$4,904.59	\$0.00	\$0.00	\$0.00					\$6,310.11
TASK 3: ASSESSMENT OF COMMUNICATION NETWORK										
HOURS	8.00	40.00	24.00	8.00	0.00					80.00
HOURLY RATE	\$62.00	\$43.27	\$42.47	\$34.08	\$25.71					
DIRECT LABOR TOTAL	\$496.00	\$1,730.80	\$1,019.28	\$272.64	\$0.00					
OVERHEAD % (157.61%)	\$781.75	\$2,727.91	\$1,606.49	\$429.71	\$0.00					
PROFIT / FEE % (10.0%)	\$127.77	\$445.87	\$262.58	\$70.23	\$0.00					
TASK TOTAL	\$1,405.52	\$4,904.59	\$2,888.34	\$772.58	\$0.00					\$9,971.03
TASK 4: PERFORM ALTERNATIVES ANALYSIS AND COST ESTIMATING										
HOURS	12.00	20.00	20.00	0.00	0.00					52.00
HOURLY RATE	\$62.00	\$43.27	\$42.47	\$34.08	\$25.71					
DIRECT LABOR TOTAL	\$744.00	\$865.40	\$849.40	\$0.00	\$0.00					
OVERHEAD % (157.61%)	\$1,172.62	\$1,363.96	\$1,338.74	\$0.00	\$0.00					
PROFIT / FEE % (10.0%)	\$191.66	\$222.94	\$218.81	\$0.00	\$0.00					
TASK TOTAL	\$2,108.28	\$2,452.29	\$2,406.95	\$0.00	\$0.00					\$6,967.53
TASK 5: DEVELOPMENT OF BACTS TRAFFIC SIGNAL MASTER PLAN										
HOURS	32.00	40.00	40.00	0.00	0.00					112.00
HOURLY RATE	\$62.00	\$43.27	\$42.47	\$34.08	\$25.71					
DIRECT LABOR TOTAL	\$1,984.00	\$1,730.80	\$1,698.80	\$0.00	\$0.00					
OVERHEAD % (157.61%)	\$3,126.98	\$2,727.91	\$2,677.48	\$0.00	\$0.00					
PROFIT / FEE % (10.0%)	\$511.10	\$445.87	\$437.63	\$0.00	\$0.00					
TASK TOTAL	\$5,622.08	\$4,904.59	\$4,813.91	\$0.00	\$0.00					\$15,340.57
DIRECT EXPENSES										
Subconsultant	\$0.00	NOTE: This proposal form must be accompanied by: (a) Description of Services (b) Scope of Work (c) DBE form (click to open) (d) Appendix A-1 (click to open) (e) Certified Payroll (f) Insurance Certificates (g) Subconsultant Proposal								
Mileage (currently \$.45 per mile)	\$1,000.00									
Tolls	\$250.00									
Hotel at \$93	\$0.00									
Per Diem at \$59	\$0.00									
Postage	\$0.00									
TOTAL DIRECT EXPENSES =		\$1,250.00								

Subtotal = \$62,108.58

Total Direct Expenses = \$1,250.00

Total Proposed Cost \$63,358.58

☒ Original Contract
☐ Modification

**MaineDOT CONSULTANT'S DBE/SUBCONSULTANT
PROPOSED UTILIZATION FORM**

**Must be provided by the Consultant as an attachment to Technical Proposals for New Contracts
and Contract Modifications**

Consultant Firm (Prime): Sebago Technics, Inc.

Contact Person: Bradley R. Lyon, P.E., PTOE

E-mail: blyon@sebagotechnics.com

Contract/Modification Amount: \$63,358.58

WIN: _____

Prime Consultant is a Maine Certified DBE: Yes ☐ No ☒

Tele: 207-200-2068 Fax: _____

Date of Execution: _____
(For Department Use Only)

Project Location: BACTS

TOTAL ANTICIPATED DBE: 0 % PARTICIPATION FOR THIS CONTRACT/MODIFICATION

W B E •	D B E •	Non DBE	Firm Name	Description of Work	Anticipated \$ Value
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Subconsultant Total					\$0.00
DBE Total >					\$0.00

****Note: this information is used to track and report anticipated dbe participation in all federally funded MaineDOT contracts. The anticipated DBE amount is voluntary and will not become a part of the contractual terms.***

(MAINEDOT INTERNAL USE ONLY)

Form received: ____/____/____ Verified by: _____
Civil Rights Office Representative

☐ FHWA ☐ FTA ☐ FAA ☐ FRA ☐ MARAD

For a complete list of certified firms and company designation (WBE/DBE) go to
<http://www.maine.gov/mdot/civilrights/dbe/>

Metropolitan Transportation Plan Update

**RFP#: BACTS 2202**

Bangor Area Comprehensive Transportation System (BACTS)

500 Southborough Drive
Suite 105B
South Portland, ME 04106

In partnership with:

Zoe Miller Strategies

July 13, 2022

BACTS | Sara Devlin, Executive Director
12 Acme Road, Suite 104
Brewer, Maine 04412



Re: Bangor Area Comprehensive Transportation System Request for Proposals—
2043 Metropolitan Transportation Plan Update - TECHNICAL Proposal
RFP #: BACTS-2202

Dear Ms. Devlin:

Updating the Bangor Area Comprehensive Transportation System (BACTS) Metropolitan Transportation Plan (MTP) is a balancing act—not just where motor vehicles, transit, bicyclists, and pedestrians are concerned—but also when it comes to incorporating public input and environmental considerations including climate change and sustainability. VHB is excited by the challenge and promise of this assignment, and we are eager to support BACTS in helping to plan for economic vitality, safety, accessibility, reliability, and connectivity among and between all modes of transportation. Together with our subconsultant, **Zoe Miller** of Zoe Miller Strategies, our team offers:

- **The right combination of skills.** Members of the VHB Team combine a deep bench of experience in multimodal, regional transportation planning. **Project Manager Jenn Conley**, for example, specializes in helping clients throughout New England improve mobility and safety through the development of transportation plans. Working closely with Jenn, **Transportation Lead, Jason Ready** offers his experience working as a former staff member of Maine's Lewiston-Auburn area MPO. His unique insight will benefit the team when developing a thoughtful, comprehensive MTP that addresses the spectrum of BACTS' goals.
- **A hands-on approach.** We believe that the best consultants are those who show leadership, who are proactive, and who effectively work as an extension of the staff whom they serve. We are eager to grow our relationship with BACTS and its member communities, and we are committed to being focused, energetic, and responsive on this project. Furthermore, led by Zoe through her years of experience leading successful engagement initiatives, we will seek to create a MTP that is engaging and encompasses the interests of a wide array of stakeholder groups.
- **The tools to develop a realistic, implementable MTP.** Our team will seek to create a **hybrid MTP** that is easy to understand, comprehensive, created in a sense of collaboration, and takes into account the unique character of the region. Moreover, it will be an important roadmap for the future: VHB understands the need for a MTP to be implementable; after all, even the most elegant of plans will go unused if unachievable. We believe this is a differentiator for VHB. We routinely take transportation projects from visioning and conceptual planning, through engineering design, permitting, and, finally, construction. This insight, knowledge, and experience will play an important role in cultivating realistic, cost effective, and implementable components for the MTP.

Collaborating closely with BACTS, MaineDOT, and area stakeholders, the VHB Team is confident we can create an actionable plan that not only improves accessibility and public engagement, but outlines a clear strategy that can be used by various municipal departments in the region to execute goals to 2043 and beyond. The VHB team deeply values working with Maine's communities to build a better future, and if chosen for this assignment, we will be committed to exceeding your expectations for a MTP you can be proud of. **As Principal-in-Charge, I certify that all of the information contained in this Technical Proposal to be true and accurate.** Thank you for considering our enclosed proposal; should you have any questions, please free to contact myself at 207.889.3115 or Jenn Conley at 802.345.2321.

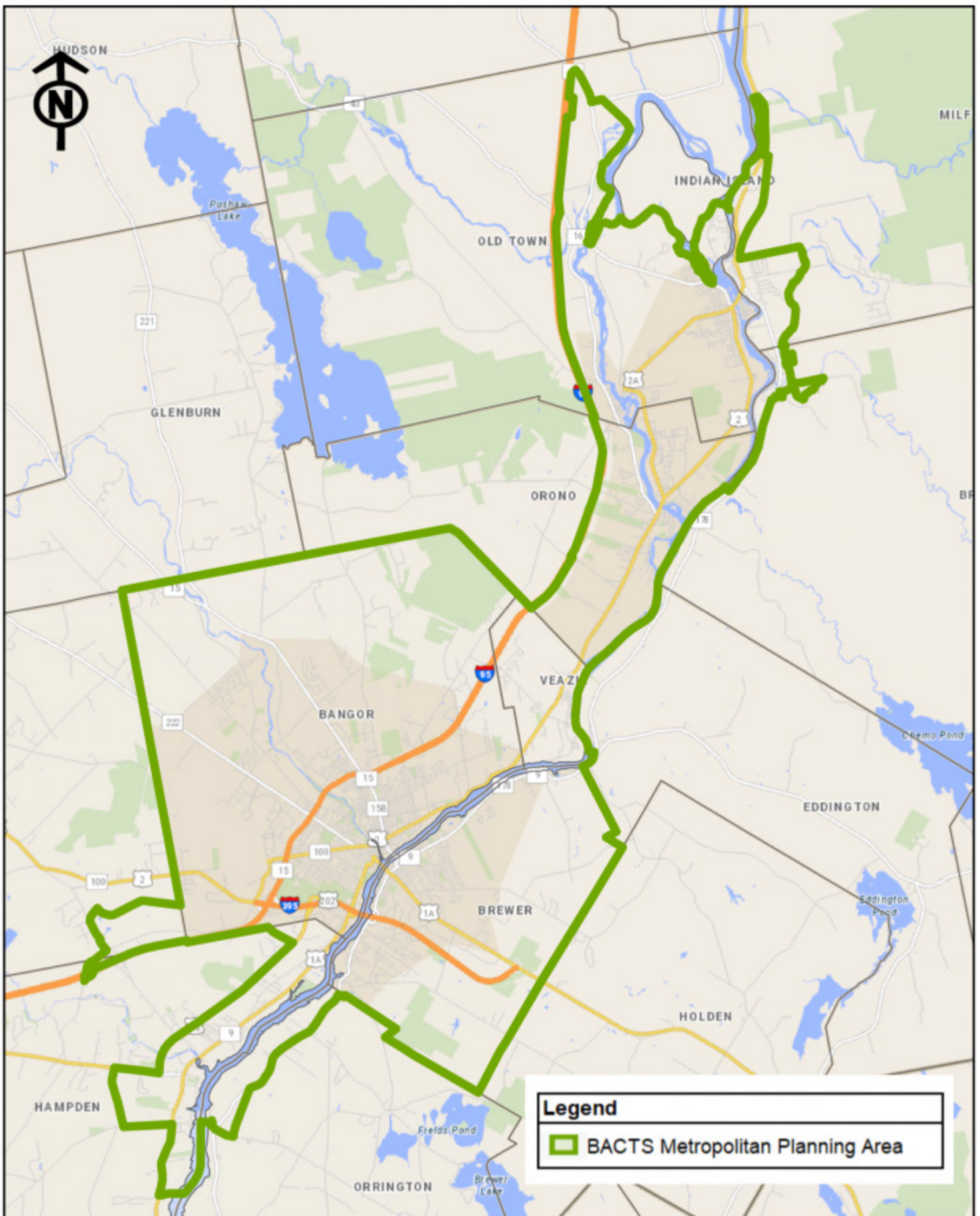
Sincerely,
VHB

A handwritten signature in blue ink that reads "Tony Grande".

Tony Grande, PE, ENV SP
Principal-in-Charge
tgrande@vhb.com

A handwritten signature in blue ink that reads "Jenn Conley".

Jenn Conley, PE, PTOE
Project Manager
jconley@vhb.com



Metropolitan Planning Area



Contents

1. Qualifications and Team.....	1
2. Experience and References.....	14
3. Project Understanding and Schedule.....	26
4. Project Management.....	33

Appendices

A: Additional Requirements



1: Qualifications and Team



South Portland office
opened in **2012**

60+ local professionals

supported by 1,600
engineers, scientists,
planners, and designers
companywide



30 offices throughout the
east coast, including South
Portland, Augusta, and
Westbrook, ME



Firm Overview

Making a positive impact in Maine's cities and towns is a priority for VHB professionals. For more than 40 years, we have worked across the state to improve mobility, enhance communities and economic vitality, and balance development and infrastructure needs with environmental stewardship. Together, our team of engineers, planners, designers, and scientists have helped revitalize downtown areas; construct safer streets for motorists, pedestrians, and bicyclists; restore and protect our natural resources—and more.

These experiences have shown us just how unique every community in Maine is. As locals—people who live and work here, volunteer time to local causes, and participate in municipal boards or commissions—VHB professionals understand the importance of embracing these distinctions when it comes to planning and designing solutions for our municipal clients' projects. We acknowledge that no two communities are the same—and neither, therefore, are their project needs and goals. In every project we undertake, we seek to create solutions that fully meet our clients' goals, anticipate potential challenges, build long-lasting partnerships—and, of course, provide exceptional service. If selected for this project with BACTS, we will continue to bring these same values to our work.

Relevant Services

At VHB, we routinely work across our core service areas to see the whole picture, not just one piece, of a project. Such coordination is important on a project like the BACTS MTP, as it will allow us to provide thoughtful ideas that incorporate the wide range of the Metropolitan Planning Organization's (MPO) goals and needs. Success on the MTP will rely significantly on the strength of VHB's experience providing the services described as follows.

Master Planning

Effective master planning is about combining a vision of what is possible with a practical knowledge of development trends and community needs. VHB has extensive experience in, and is always forward thinking with, master planning and related projects for communities of varying sizes and unique contexts. VHB's planning staff includes award-winning planners, urban designers, landscape architects, and sustainability/resiliency professionals who are supported by the firm's transportation, civil engineering, public outreach, graphic design, permitting, environmental, GIS, and survey capabilities. **In recent years, VHB has prepared more than a dozen master plans, some of which have been recognized as award-winning by the American Planning Association and its affiliated organizations.** VHB prides itself in creating master plans that are well written, easy to understand, and graphically rich.

VHB understands that any comprehensive master planning process begins with a vision that helps both public and other stakeholder interests work together to prepare a long-term plan towards achieving the shared goals of balancing growth with preservation, enhancing economic vitality, and improving quality of life for all. The vision and goals set the framework for future project prioritization within the plan.

Transportation Planning and Engineering

Mobility is essential to maintaining any community's economic prosperity and quality of life. VHB provides transportation planning services for a wide variety of private- and public-sector clients in both urban and suburban/rural areas. Our past projects have included identifying multimodal transportation issues associated with various types of transportation projects, such as alternative modes analyses; multimodal access; congestion analyses; corridor studies; vehicular/pedestrian conflict studies; transportation impact assessments; and downtown/village parking, circulation, and access studies. VHB offers the ability to develop and combine technical modeling procedures with pragmatic transportation planning and

Transit Agencies

VHB staff have experience working with numerous transit agencies along the East Coast, including:

- City of Burlington, VT/Chittenden County Transportation Authority (CCTA)
- Massachusetts Bay Transportation Authority (MBTA)
- City of Springfield, MA/Pioneer Valley Transit Authority (PVTA)
- Rhode Island Passenger Transportation Authority (RIPTA)
- Westchester County (NY) Department of Transportation Bee-Line System
- New York City Transit (NYCT)
- New Jersey Transit (NJT)



Leaders in Bicycle/Pedestrian Planning and Design

Since 1999, VHB has had an in-house, multidisciplinary Bike/Ped Team focused on bringing the most current, creative, and cost-effective solutions to our clients. Over the past 15 years, **VHB professionals have worked on dozens of bike/ped-focused projects throughout Northern New England alone.** VHB is also home to nationally and regionally recognized thought-leaders in the area of bike/ped design. We have professionals who are members of the National Committee on Uniform Traffic Control Devices' (NCUTCD) Bicycle Technical Committee and have contributed to the Manual on Uniform Traffic Control Devices (MUTCD) guidance for bike/ped projects.

traffic operations applications. In every project we undertake, our transportation planning and traffic engineers seek to:

- » Effectively link transportation and land use
- » Safely accommodate all modes of travel via a complete streets approach
- » Make strategic investments in system enhancements
- » Scale solutions to community needs

Design Capabilities for Hybrid Engagement Platforms

VHB possesses top-quality, award-winning in-house graphic design and production service capabilities, which we use to complement and support our technical reports and public outreach efforts. VHB regularly designs both print and electronic documents, including large reports, outreach posters, and other informational material for in person public engagement. In addition, we have experience developing storyboards, as well as interactive and easily updateable project websites for online outreach.

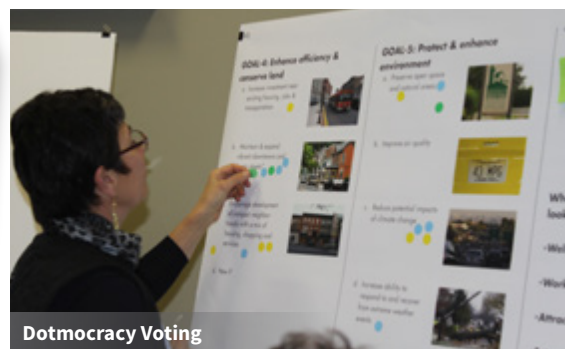
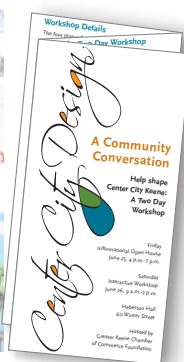
Public Outreach and Engagement

Each interaction with the public is an opportunity to enhance understanding of, engagement in, and support for the project. VHB has built a record of success by working with our clients to develop custom community outreach plans with clear messages that resonate with target audiences. **Logos and branding, interactive project websites, innovative outreach themes, surveys and virtual forums** are just a few of the creative communication strategies we have used to deliver information to stakeholders, educate the community, and get them engaged and excited about the process.

Our approach to public participation and stakeholder engagement will **focus on being open, inclusive, and interactive**—providing multiple opportunities throughout the process to engage with the project and multiple platforms for providing input. We plan to use innovative tools to reach a diverse set of stakeholders, where we plan to leverage what we hear with what we create. Led by Zoe Miller, **we envision a highly collaborative process** with the VHB team, BACTS and the Public Advisory Committee (PAC) that will lead to the development of the final MTP. This dynamic public outreach process will involve a wide variety of stakeholders early in the process and supports a broad and inclusive effort from onset to completion.



Newsletters and Brochures



Dotmocracy Voting



Charrettes



Wish Lists



Community Discussions



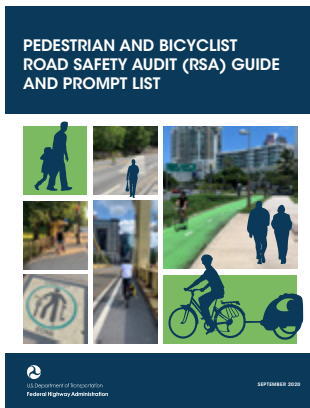
Interactive Exercises



Visioning Boards



Websites and Social Media



VHB is a nationally recognized leader in pedestrian and bicycle safety. We recently published the new FHWA Pedestrian and Bicyclist Road Safety Audit (RSA) Guide and Prompt List.

Safety

At VHB, we incorporate safety into all aspects of our work, starting at the planning level and following through to design. VHB has a dedicated staff of Safety Engineers that have spent their entire careers conducting crash research for clients such as the Federal Highway Administration. We can call upon these Safety Engineers to assist in the development of improvement plans to help ensure that ideas considered during the plan development phase are the most appropriate for the environment and have proven track records of improving safety and mobility for all users—motor vehicles, buses, pedestrians, and bicycles. In the case of this planning study, there will be particular attention paid to the safety of vulnerable users.

Applied Technology/GIS

Technology is evolving at a rapid pace—often making our lives easier in the process. VHB has a rapidly growing Applied Technology team that proactively works to design and implement innovative solutions to improve the way we conduct our projects—and that effectively meet the needs of our clients. These professionals use tools like ArcGIS to obtain real-time access to data collected in the field—or to live-edit data in project meetings, saving time while keeping project participants on the same page. They have created interactive dashboards and databases to help municipalities manage their various assets. This team's creativity and skills are available to us to develop useful tools and provide rich mapping for BACTS on this study.

Funding Assistance

VHB has extensive experience with cost estimates for proposed projects. Our approach provides our clients with estimating they can 'hang their hat on' and in many cases, provide the estimates far enough in advance so as to avoid funding shortfalls and project delays later in the process. For this project, we will leverage our experience working with new funding and grant options that will be critical to helping BACTS fill some gaps and address future financial needs for the MTP.

A Track Record with MaineDOT

Throughout New England, VHB serves as a go-to consultant for state transportation agencies. Over the years, we have been honored to forge a strong relationship with MaineDOT. In addition to having undertaken numerous assignments for the Department, we are prequalified to provide services in a wide range of categories covering over 50 services. Of particular note for this project, is our prequalification in 14 planning categories, including: transit, freight, planning-feasibility studies, and bicycle and pedestrian operations development, among others.

Through our years of working closely with the Department, we have gained an exceptional understanding of MaineDOT design standards. We will use this knowledge to help devise fundable and implementable recommendations for BACTS MTP.



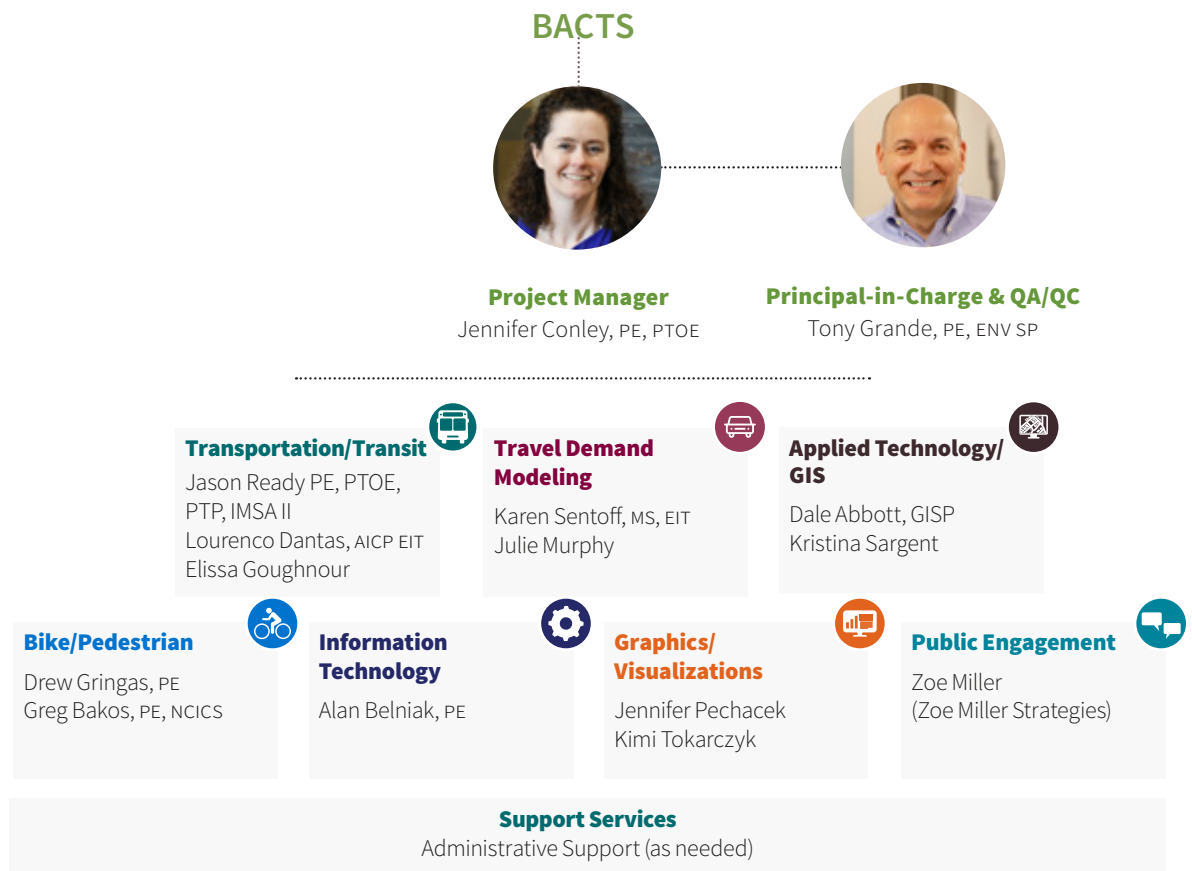
Project Team

Project success depends on more than merely having the technical abilities needed to deliver a viable solution. It also depends on people—their energy, enthusiasm, and commitment to achieving agreed-upon goals. VHB kept this in mind when assembling our proposed team for this project with BACTS. We offer a group of professionals who are not only technically savvy, but who are also communicative, able to respond quickly and effectively, and have experience working on similar types of master planning projects.

Jenn Conley, PE, PTOE brings 30 years of transportation planning experience and will serve as Project Manager. In this role, Jenn’s key responsibilities include serving as the primary point of contact for BACTS on this contract—as well as listening to and understanding BACTS’ project needs and goals, and then communicating such information to the VHB team. Jenn will also proactively monitor the schedule and budget, address any potential concerns and respective resolutions with BACTS along the way, and oversee the quality of all deliverables.

Tony Grande, PE, ENV SP, will serve as Principal-in-Charge and QA/QC for this project. As the leader of VHB’s Transportation Engineering team in Maine, Tony is the first point of contact on many projects for Maine municipalities. His commitment to Maine and improving transportation for all is exemplified by his service to South Portland’s Bicycle Pedestrian Committee, Seniors Implementation Committee, and as a member of the Comprehensive Plan Committee. Tony is also serving as President of the Maine Better Transportation Association. **Jenn and Tony will be joined by the team of professionals shown in the organizational chart below. Short resume bios for each member of the team follow.**

Organizational Chart





Tony Grande, PE, ENV SP

Principal-in-Charge | 35 years of professional experience

The leader of VHB's Transportation Engineering team, Tony has more than three decades of experience in roadway design. He is a Maine-registered Professional Engineer (PE) and plays a critical role in leading our service to Maine's MPOs and communities. Tony has partnered with PACTS on several transportation infrastructure projects. In addition to serving as the leader of VHB's planning bike/ped on-call with PACTS, he is the first point of contact for MaineDOT on our planning, roadway, and bike/ped-related General Consulting Agreements. He serves on the South Portland's Bicycle Pedestrian Committee, Seniors Implementation Committee, and Comprehensive Plan Committee. Tony is also currently serving as President for the Maine Better Transportation Association. Tony understands the greater Bangor area and has successfully worked with local officials and the public in these communities.

Education

BS, Civil Engineering, University of Massachusetts Lowell, 1987

Registrations

PE ME
PE NH
ENV SP

RELEVANT PROJECTS

- Maine Active Transportation Plan, Statewide, ME
- MaineDOT Vulnerable Users Program, Statewide, ME
- Portland Neighborhood Byway, Portland, ME
- Downtown Sanford Planning and Feasibility Study, Sanford, ME
- Eastern Trail PPI Studies, N. Berwick, Wells, Kennebunk, and Biddeford-Saco, ME
- MaineDOT, Hogan Road Diverging Diamond Interchange (DDI), Bangor, ME
- MaineDOT, Stillwater Avenue Transportation Improvements, Old Town, ME



Jennifer Conley, PE, PTOE

Project Manager | 28 years of professional experience

Director of VHB's Transportation Systems practice, Jenn has extensive project management and transportation engineering and planning experience on public- and private-sector projects. She has focused on creating Complete Streets by finding ways to accommodate cyclists and pedestrians while maintaining safe and efficient vehicular accommodation. Jenn understands that success of a project requires proper communication with officials, stakeholders, and the public. Her technical skills are enhanced by her skills in the public forum. She has a reputation for clear, concise presentation of technical materials that are easily understood by a layperson and the facilitation skills to engage stakeholders.

Education

BS, Civil Engineering,
Rensselaer Polytechnic
Institute, 1993

Registrations

PE ME
PE VT
PE MA
PTOE

RELEVANT PROJECTS

- Augusta State Facilities Master Plan, Augusta, ME
- Golden Triangle Planning Study, Framingham and Natick, MA
- Portland Smart Corridor Plan, Portland and South Portland, ME
- Commercial Street Operations and Master Plan, Portland, ME
- T.F. Green Airport Master Plan, Warwick, RI
- Hampton Beach Master Plan, Hampton, NH



Jason Ready, PE, PTOE, PTP, IMSA Level II

Transportation | 16 years of professional experience

Jason is a Senior Transportation Engineer on the Transportation Systems team. His experience includes traffic engineering and transportation planning with a focus on traffic data collection and analysis. Jason's skills include transportation planning studies, transportation modeling, traffic signal management, traffic analysis studies, Synchro/SimTraffic, and traffic design. Jason previously worked in the public sector for over a decade at the Androscoggin Transportation Research Center (ATRC) where he was responsible for the region's surface transportation network of 80+ traffic signals.

Education

BS, Civil Engineering,
University of Maine, 2006

Registrations

PE ME
PTOE
PTP

RELEVANT PROJECTS

- Mackworth Island Redevelopment, Baxter School for the Deaf, Falmouth, ME
- Northern Avenue/Townsend Avenue Intersection Study, Augusta, ME
- *Prior to VHB*—Downtown Berwick Vehicle, Bicycle, and Pedestrian Study, Berwick, ME
- *Prior to VHB*—Metropolitan Transportation Plan, Androscoggin Transportation Research Center, Lewiston/Auburn Maine MPO
- *Prior to VHB*—Public Participation Plan, Androscoggin Transportation Research Center, Lewiston/Auburn Maine MPO
- *Prior to VHB*—Project Priority Methodology, Androscoggin Transportation Research Center, Lewiston/Auburn Maine MPO



Karen Sentoff, MS, EIT

Transportation Planning/Travel Demand Modeling | 10 years of professional experience

Karen joined the VHB team after spending time as a transportation researcher and analyst at the University of Vermont Transportation Research Center. Her studies in civil and environmental engineering and her professional experience in transportation provide a versatile set of skills to the Transportation Systems team. Karen gets most excited about traffic calming and bicycle and pedestrian projects and approaches each site based on its context and stakeholder needs.

Education

MS, Civil & Environmental
Engineering, University of
Vermont, 2012

BS, Civil & Environmental
Engineering, University of
Vermont, 2008

Registrations

EIT VT

RELEVANT PROJECTS

- CCRPC I-89 2050 Study, Travel Demand Modeling, Chittenden County, VT
- CCRPC VT 116 Kimball Tilley Transportation Plan, Chittenden County, VT
- CCRPC Winooski E Allen Street Scoping Study, Chittenden County, VT
- Microstation and Emissions Modeling, Various Locations, VT
- *Prior to VHB*—University of Vermont, Transportation Research Center, Management of Statewide Transportation Model, Burlington, VT



Julie Murphy

Travel Demand Modeling | 29 years of professional experience

Julie is the lead modeler in VHB's travel demand forecasting modeling group, and she offers considerable experience in model development and data analysis. She has worked with a variety of statewide and regional travel demand models using CUBE/Voyager, TransCAD, TRANPLAN, and other software.

Education

MS, Transportation Planning,
Northeastern University, 1999

BA, Economics, University of
Pennsylvania, 1992

MA, Regional Science,
University of Pennsylvania, 1992

RELEVANT PROJECTS

- MaineDOT, Presque Isle Bypass, Travel Demand Modeling, Presque Isle, ME
- Strafford Regional Planning Commission, Regional Travel Demand Modeling, NH
- Southern NH Regional Planning Commission, On-Call Travel Demand Modeling, Manchester, Bow, NH
- NHDOT I-93 Corridor Study, New Hampshire
- Metro Boston TransCAD Travel Demand Modeling, Boston, MA
- RIDOT, Travel Demand Modeling, Various Locations, RI



Dale E. Abbott, GISP

Applied Technology/GIS | 18 years of professional experience

Dale is the Applied Technology Manager for the New England Region at VHB and leads a team of GIS specialists and application developers in the Bedford, New Hampshire, office. He has extensive experience and skills in the application of GIS technology for municipal government, regional planning, natural resources protection, and transportation planning. His areas of specialization include CAD/GIS data integration, data development, data modeling, analysis and cartographic presentation. Dale is also proficient in mobile data collection efforts utilizing Global Positioning Systems (GPS) technology to create custom data collection forms using a variety of software packages.

Education

BS, Environmental
Conservation, University of New
Hampshire, 2003

Registrations

Certified Geographic
Information Systems
Professional

RELEVANT PROJECTS

- Transportation Master Plan, Rochester, NH
- Transportation Master Plan Update, Dover, NH
- Strafford Regional Planning Commission, Transportation Project Database Updates, NH
- NHDOT, I-293 Transportation Exits 6 & 7 Transportation Planning Study, Manchester, NH
- RIDOT, Project Permit Tracking Database, Various Locations, RI
- RIDOT, Safety Project In-take Database, Various Locations, RI



Kristina Sargent

Applied Technology/GIS | 9 years of professional experience

Kristina is a GIS Specialist in VHB's Watertown, Massachusetts, office. She is skilled in the application of GIS technology for municipality and state government, utility mapping and natural resource protection. Her areas of specialization include data development, analysis, and cartographic presentation on both desktop applications and online platforms.

Education

MS, Geographic Information Systems, Northeastern University, 2018

BA, Geography, Keene State College, 2013

RELEVANT PROJECTS

- MaineDOT, Active Transportation Plan, Augusta, ME
- MaineDOT, Portland Passenger Rail Study, Lewiston, ME
- Rochester Transportation Master Plan, Rochester, NH
- Freeman/S. County Hospital, Transportation Master Plan, Wakefield, RI
- Harvard/Allston Parking Master Plan, Allston, MA
- Westborough Master Plan, Westborough, MA



Elissa Goughnour

Transportation (Safety) | 21 years of professional experience

Elissa is a Transportation Safety Project Manager in VHB's Tysons, Virginia, office with experience in transportation and site design projects in the public, private, and institutional sectors. Her responsibilities have included transportation safety evaluations, data collection and analysis, program evaluations, road safety audits and the creation of training and national-level guidance for national, tribal, state, and municipal audiences. She has extensive experience working with non-motorized users and is experienced in numerous design and analysis tools, including AutoCAD, Vissim, Highway Capacity Software, Interactive Highway Safety Design Model (IHSDM), and GIS.

Education

MS, Civil Engineering, George Mason University, 2008

BS, Environmental Sciences, Gettysburg College, 2002

RELEVANT PROJECTS

- MaineDOT, Active Transportation Plan, Augusta, ME
- MaineDOT, Vulnerable Users, Statewide, ME
- Downtown Sanford Planning and Feasibility Study, Sanford, ME
- USF/Sarasota Campus Master Plan Update, Sarasota, FL
- FHWA, Data Case Study Evaluations
- FHWA, Transit Road Safety Audit Case Study Document



Drew Gingras, PE

Bike/Ped | 11 years of professional experience

Drew is a Project Engineer in VHB's South Burlington, VT office. A Professional Engineer, he has experience in transportation projects that includes bike/pedestrian planning and design, planning and scoping studies, traffic operations analysis, traffic calming design, and complete street conceptual design. His experience has involved work on projects predominantly focused on non-motorized transportation infrastructure.

Education

BS, Civil Engineering, University of Vermont, 2011

Registrations

PE VT

PE DC

National Committee for Traffic Control Devices

RELEVANT PROJECTS

- Chittenden County Regional Planning Commission, I-89 2050 Study, Various, VT
- Chittenden County Regional Planning Commission, Winooski East Allen Street Scoping Study, Winooski, VT
- Chittenden County Regional Planning Commission, Colchester Ave Scoping Study, Burlington, VT
- Ohio University Master Plan, Athens, OH



Greg Bakos, PE, NCICS

Bike/Ped | 41 years of professional experience

As leader of VHB Bedford's Community Development Team, Greg specializes in the bicycle and pedestrian components of various transportation projects, including trails and Complete Streets efforts. He has extensive experience managing award-winning municipal projects including downtown streetscapes, main street designs, and pedestrian trail efforts. As an instructor with the League of American Bicyclists who is also active in local biking organizations, he brings his real-world cycling experience to the benefit of his work. His project contributions include planning, coordination, agency liaison, permitting, geometric design, and preparation of contract plans, cost estimates, specifications, and construction engineering services. Additionally, Greg is skilled in engaging with the public and is certified by the National Charrette Institute.

Education

BS, Civil Engineering, Bucknell University, 1979

Registrations

PE NH

PE VT

Certified by the National Charrette Institute

Licensed Cycling Instructor

RELEVANT PROJECTS

- Transportation Master Plan, Rochester, NH
- Transportation Master Plan Update, Dover, NH
- Westbrook-Portland Rail-with-Trail Feasibility Study, Westbrook & Portland, ME
- Bicycle/Pedestrian Trail Connectivity Feasibility Study | Ellsworth, ME
- Southern NH Regional Planning Commission, On-Call Cost Estimating and Roadway Design, Goffstown, Londonderry, Windham, NH
- Strafford Regional Planning Commission, On-Call Engineering Services, NH



Lourenço Dantas, AICP, EIT

Transportation (Transit) | 24 years of professional experience

Lourenço is a member of the Transportation Planning and Operations team in VHB's Boston, Massachusetts, office. He brings extensive multimodal transportation planning experience. Lourenço obtained both BS and MS degrees in civil engineering, with a focus on the disciplines of traffic engineering and urban planning, and is knowledgeable in traffic engineering principles and design, multimodal transportation policy, transit service planning, long-range transportation planning, travel demand modeling, land use development, environmental permitting, data collection, performance measurement, parking policy, pedestrian and bicycle facilities design, survey design, and statistical analysis. He is an experienced public-sector project and program manager, having led multi-department project teams comprised of technical professionals and external consultants. He contributes a data-driven and collaborative approach to decision-making and project planning.

Education

MS, Civil Engineering, University of California at Davis, 1997

BS, Civil Engineering, Worcester Polytechnic Institute, 1994

Registrations

AICP

EIT MA

RELEVANT PROJECTS

- PACTS' Westbrook Development Transit Hub, Westbrook, ME
- Maine Med/Maine/Traffic Parking Plan, Portland, ME
- Portland Square Parking Demand Study and TDM Plan, Portland, ME
- University of Southern Maine-Portland Parking Demand Study and Travel Demand Model Plan, Portland, ME
- RISE/Boston, Sullivan Square Master Plan, Boston, MA
- Partners, Mass General Hospital, Master Planning Support, Boston, MA



Alan S. Belniak, PE

IT | 25 years of professional experience

Passionate, driven, and accomplished marketing professional providing wide skillsets across product marketing, content marketing, community development, and social media. A technology and digital professional with a history of working with B2B technology companies, brought in to problem-solve business challenges. A strategic marketer who builds relationships with key stakeholders across the enterprise. Regarded by others as a champion of emerging digital media technologies and best practices. Ability to work both independently and contribute as part of a wider team. Possesses an endless desire to learn more about modern marketing and technology, and then apply and share it.

Education

MBA, Business Administration, Babson College, 2009

BS, Civil & Environmental Engineering, Worcester Polytechnic Institute, 1997

Registrations

PE MA

RELEVANT PROJECTS

- Downtown Sanford Planning and Feasibility Study, Sanford, ME
- City of South Burlington, East-West Alternative Transportation Crossing Project, South Burlington, VT
- City of Winston-Salem, NC, MPO Master Plan Review, Winston-Salem, NC, Area
- Long Island Regional Planning Board, Virtual Meeting Support
- Vermont Agency of Transportation (VTrans), Lamoille Valley Rail Trail (LVRT) Public Meeting Assistance, Montpelier, VT
- Town of Southborough, Southborough Master Plan, Southborough, MA



Jennifer Pechacek

Graphics/Visualizations | 20 years of professional experience

Jennifer joined VHB in the spring 2022 and is located in our South Portland office. She is a communications designer with 20 years leading visual design, branding, sponsor/investor development collateral, and web design in collaboration with government, non-profit, and corporate entities. Jennifer understands process, client day-to-day needs, detail and what it takes to carry out highly successful communications projects, everything from small one-off projects to large-scale public-facing campaign visual support. She carries out marketing and branding programs from research and planning through collateral development and final rollout. She has contributed her services to many key government, planning and civic agency clients in her previous position for a communications firm based in the San Francisco Bay Area.

Education

MBA, Design Strategy, California
College of the Arts
BFA, Painting, Maine College of
Art and Design

RELEVANT PROJECTS

- Moran Plant Educational Booklet, City of Burlington, VT
- Pedestrian Safety Improvement Project, UMass Amherst, MA
- Plan Bay Area 2040 Public Outreach Campaign, Metropolitan Transportation Commission, San Francisco, CA*
- Keep Contra Costa Moving Digital Engagement, Contra Costa Transportation Authority, Contra Costa, CA*
- [Climate Action Plan](#), San Francisco Department of the Environment, San Francisco, CA*
- ClimateSF Brand Identity, San Francisco Climate Resilience Program, San Francisco, CA*
- [Capital Plan Document](#) and [Website](#), Office of Resilience and Capital Planning, San Francisco, CA*
- [Hazard and Climate Resilience Plan](#), Office of Resilience and Capital Planning, San Francisco, CA*

**Denotes projects completed at another company*



Kimi Tokarczyk

Graphics/Visualizations | 9 years of professional experience

Kimi is a Creative Design Specialist in VHB's Vermont office where she develops visual solutions for a diverse range of projects and clients throughout New England. As a multidisciplinary designer, Kimi's wide skillset and experience include brand identity, marketing design, publication design, illustration/visualization, website management/digital content, experiential design, photography, and video/motion graphics.

Education

BS, Graphic Design, Art Institute
of Pittsburgh, 2013

Registrations

FAA sUAS ACS

RELEVANT PROJECTS

- Chittenden County Regional Planning Commission, [I-89 2050 Study](#), Various, VT
- Chittenden County Regional Planning Commission, Winooski East Allen Street Scoping Study, Winooski, VT
- Chittenden County Regional Planning Commission. Lakeside Ave Feasibility Study, Burlington, VT
- Chittenden County Regional Planning Commission, Colchester Ave Scoping Study, Burlington, VT
- Stowe Mountain Resort Wayfinding Master Plan, Stowe, VT



Zoe Miller

Public Engagement | 20 years of professional experience

Zoe brings more than two decades of experience building initiatives that improve health and advance equity. Prior to venturing on her own as a private consultant, Zoe worked for the Portland Area Comprehensive Transportation System. Through this experience, she brings a unique insight to regional planning and metropolitan transportation plan project process. Zoe is a firm believer in achieving results through compassionate and equity-centered processes. She integrates urban planning community development, and public health on her projects. Her skills include facilitating shared decision-making, and collaborative problem solving; Grant-writing; designing inclusive programs, projects, and processes; and collaborative and strategic assessments and planning approaches.

Education

MS, Public Health, Muskie
School of Public Service,
University of Southern Maine

BS, Woman's Studies,
Bates College

RELEVANT PROJECTS

- Moving Maine: Improving Transportation Access For All
- Communities Addressing Addiction Toolkit 2019
- Building-a-Regional-Management-Network
- Inclusive Transportation Planning Toolkit 2019
- Virtual Engagement White Paper 2020
- Community Transportation Leaders Program Handbook



2: Experience and References

At VHB, we approach transportation planning and design with a focus on creating sustainable, technologically innovative, and appropriately scaled solutions. We work as trusted advisors to our clients to balance cost and schedule while developing creative, functional plans and designs. Our knowledge and experience cover the full spectrum of services required for this project. We know the challenges facing our transportation clients and what it takes to deliver smart solutions that keep people moving. We have experience assisting communities throughout New England on these projects, especially in the Northern states. We are committed to helping BACTS achieve its goals for this important MTP Update. To do so, we will draw on our experiences undertaking the following past projects.

MaineDOT Active Transportation Plan | Statewide, ME

Client Contact: Marty Rooney, MaineDOT Project Manager, 16 Child Street, Augusta, ME 04330; 207-624-3317; martin.rooney@maine.gov

Dates: 2021-Ongoing



VHB is currently developing a Statewide Active Transportation Plan for MaineDOT. The plan aims to prioritize AT policies, programs and infrastructure investments that will **improve safety, quality of life, and economic development**, while helping Maine meet the goals of its Climate Action Plan. As part of the project, the team will assess Maine's existing and proposed AT infrastructure, including rail trails, greenways, bike lanes, and shoulder bikeways. More than 100 miles of state-owned, inactive rail corridors throughout Maine will also be assessed for interim trail use and prioritized based on cost estimates, potential use, as well as the economic, transportation, and environmental benefits of each.

The SATP is part of the state's 2050 Long-Range Transportation Plan (LRTP) Update. The LRTP also includes concurrent development of a statewide Transit Plan, Rail Plan, and Aviation System Plan. This “Family of Plans” uses [a unified website](#) with pages for each so Mainers have an opportunity to learn about the various efforts from a single location.

Working closely with MaineDOT and local subconsultants, the VHB team is **facilitating public outreach**, AT policy analysis, and recommendations for new and enhanced programs that promote pedestrian and bicycle safety. VHB has partnered with similar groups in the past on AT projects in rural, suburban, and urban communities throughout Maine. The planning team has scheduled monthly public outreach meetings that are open to the public. Additional outreach activities include multiple stakeholder meetings, e-mail blasts, social media posts, and web surveys.

The team will assess Maine's existing and proposed AT infrastructure, including rail trails, greenways, bike lanes, and shoulder bikeways. In addition, pedestrian and bicycle crash history will be analyzed, synergies with public transportation will be explored, and roadway shoulder improvements will be determined to enhance accessibility and safety. More than 100 miles of state-owned, inactive rail corridors throughout Maine will also be assessed for interim trail use and prioritized based on cost estimates, potential use, as well as the economic, transportation, and environmental benefits of each.

The final plan will emphasize the role that MaineDOT and its partner state and regional agencies can play to **promote more accessible roadways for pedestrians, bicyclists, and people using other active transportation modes**. This will also include AT programs and the expansion of local, regional, and statewide trail networks using inactive rail corridors. The SATP report will be a valuable resource for use by a variety of stakeholders, including municipal-level staff, MaineDOT policy planners, agency engineers, maintenance personnel, private-sector businesses, and advocacy groups.

As a key member of the Maine Active Transportation Plan project team, **Tony Grande, PE, ENV SP**, provides leadership for both the public outreach and the technical aspects of the plan. Tony applies his extensive experience working with MaineDOT to help facilitate communication with the public as well as with the analysis, policy/program development, and prioritization of pedestrian/bicycle facility improvements.



Figure 1: Southern Maine, HCP 3 and 4 Shoulder Widths
MaineDOT Statewide Active Transportation Plan



Chittenden County I-89 2050 Study

Client Contact: Eleni Churchill, Chittenden County Regional Planning Commission, Transportation Program Manager; echurchill@ccrpcvt.org; 802-846-4490 (ext. 111)

Dates: 2019-Ongoing



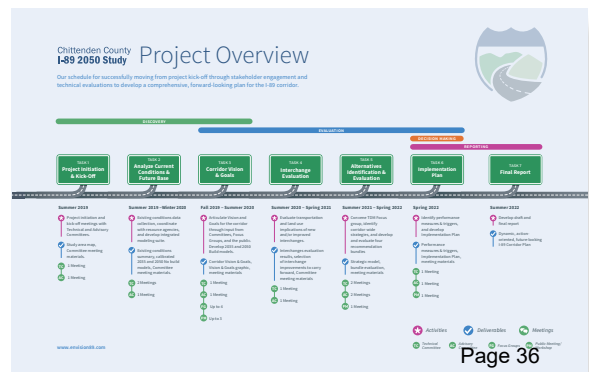
The Chittenden County I-89 2050 Study is a collaborative effort of the Chittenden County Regional Planning Commission (CCRPC) and the Vermont Agency of Transportation (VTrans) to develop a **comprehensive investment program** for the 37 mile I-89 corridor in Chittenden County, Vermont through 2050. The project involves the development of a **vision, goals, and objectives** which will guide the identification and prioritization of enhancements for the I-89 corridor over the next 30 years. The project involves extensive public outreach and stakeholder coordination, developing, refining, and evaluating numerous complex land use and transportation alternatives using the **travel demand model** and, ultimately developing a 30-year roadmap for improvements along the I-89 corridor. As the consultant team lead, VHB is charged with developing the **public engagement plan**, leading the stakeholder outreach process, identifying and evaluating alternatives, and developing an Implementation Plan, while coordinating efforts with the CCRPC, VTrans, as well as the project's Technical and Advisory Committees.

Given the importance of the I-89 corridor to the region, informing the public about the study and soliciting **feedback from a wide range of participants** is critical to the overall success of the project. To provide an open and inclusive public engagement process, VHB identified multiple opportunities and channels for input throughout the process including the development of a **project website** with project information, online surveys and interactive maps, conducting targeted interviews on community television, livestreaming public meetings so participants can watch from their homes, and targeted outreach to underserved populations. In addition, VHB convened several focus group discussions with freight and logistics providers, major employers, environmental regulators, emergency management officials, and various VTrans departments to discuss specific aspects of the corridor planning process.

VHB led a comprehensive, multi-phase alternatives development, refinement, and evaluation process to identify the program of improvements for the I-89 corridor. The first phase of the alternative's evaluation process focused on screening and then evaluating potential interchange improvements at ten interchanges along the corridor. The two-step process included an initial screening process which identified three interchanges for more detailed evaluation. VHB then prepared conceptual plans and cost estimates for five distinct interchange enhancement projects at the three interchanges and then conducted a robust technical evaluation which looked at close to twenty evaluation metrics covering transportation, land use, environmental, and economic development topic areas. Following the interchange evaluation, "bundles" of corridor improvements will be identified and evaluated for inclusion in the study's Implementation Plan.



**Chittenden County
I-89 2050 Study**



Rochester Transportation Master Plan | Rochester, NH

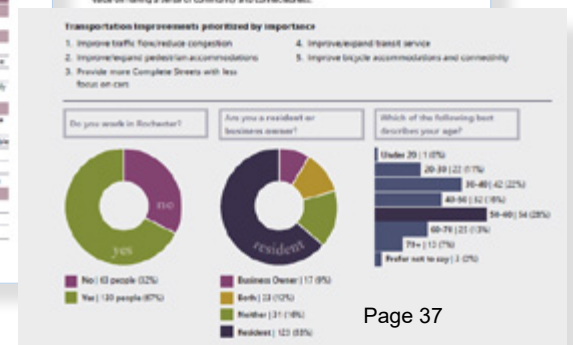
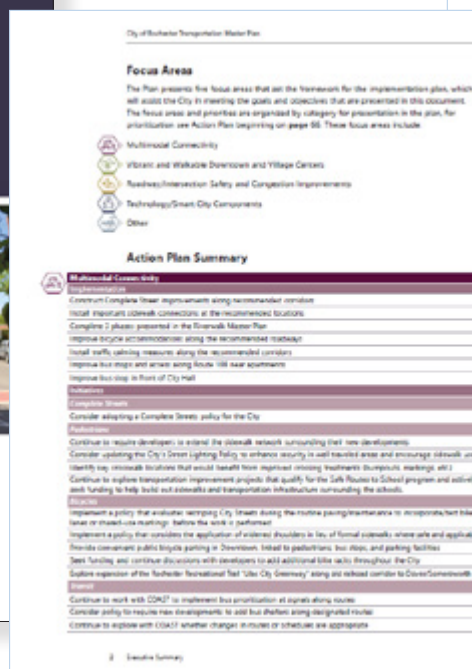
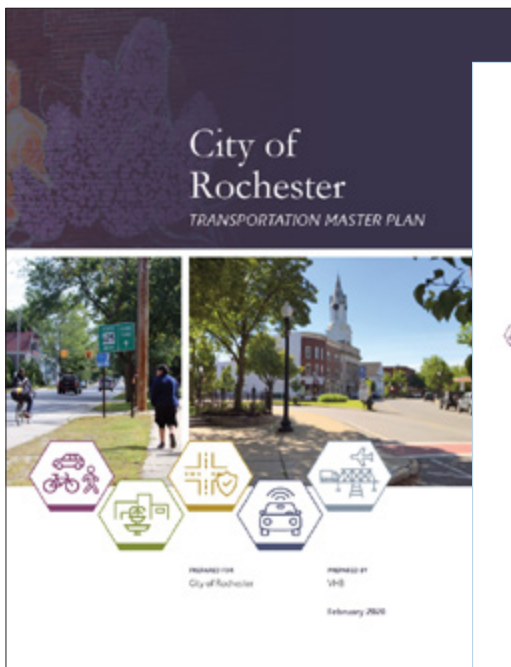
Client Contact: Mr. James B. Campbell, Former Director, Planning & Development

Department, City of Rochester, 31 Wakefield Street, Rochester, NH 03867

Dates: 2019-2020

Working closely with City staff, a volunteer steering committee, and the general public, VHB led a project to develop a **comprehensive Transportation Master Plan**. Feedback was collected through workshops and online surveys to help identify preferences and priorities. The VHB team also gathered data about the existing multimodal transportation system, which included local rail service, buses, a park-and-ride facilities and a multi-use community trails—in addition to expansive roadway and sidewalk networks. This **data collection effort** ranged from gathering information about travel speeds and crashes to compiling locations on sidewalks, crosswalks, and easements from the City GIS. To gather a comprehensive view of the City's transportation system, as well as to **create the most holistic set of recommendations possible**, the VHB team not only analyzed the individual components of Rochester's transportation system individually—but also in relation to one another, to land use, and to demographics.

The end result of Transportation Master Plan was a realistic, achievable, consensus-driven set of recommendations. These included, among others, installing new bus shelters, creating a sidewalk asset management program, and evaluating and implementing bike routes through formal lanes or sharrows. The **final hybrid deliverable was a visually appealing report both printed as well as available electronically**. Developed in partnership with VHB's technical and design team, the final document includes sourced photography, developed icons, and infographics to produce a high-end report that was both reader friendly and easy to navigate. Graphics included tables, charts, and maps to help complement text. The final deliverable resulted in a graphically rich plan outlining existing conditions, public input received, market analysis, and implementation strategies.



Rhode Island Long Range Transportation Plan | Bicycle Mobility Plan | Transit Master Plan | Statewide, Rhode Island

Client Contact: Michael D'Alessandro, AICP, Supervising Planner Dept. of Administration Division of Statewide Planning; 235 Promenade Street, Suite 230 Providence, RI 02908; 401.222.2177 Michael.DAlessandro@doa.ri.gov

Dates: 2017-Ongoing

VHB worked with the Rhode Island Division of Planning to prepare long range plans for the state's transportation infrastructure. The purpose of these plans was to develop a vision for transportation in the state over a 20-year planning horizon. This vision is comprehensive, covering all transportation modes (cars, pedestrians, bicycles, public transit trains and buses, ferries).

Long Range Transportation Plan

Long Range Transportation Plans are informed by a variety of resources including federal and state transportation and land use policy, transportation data sets, funding availability and projections, and public and stakeholder outreach. The plan will be action-orientated, focused on using available resources and strategies to program, prioritize, and complete projects, make necessary legislative and policy changes, and realize the goals and visions adopted by the LRTP. The LRTP will include considerations for the shift to next-generation mobility systems—connected/autonomous vehicles, shared vehicles, microtransit, and last-mile transportation options such as e-bikes and scooters.

The LRTP includes development of a project scoring matrix and GIS-based tool that rates roadway segments statewide to identify those most suitable for investment. This innovative approach supports RIDOA's efforts to develop a data-driven, e-STIP that is GIS map based and easily updated with weighting criteria for TIP evaluation factors.

Bicycle Mobility Plan

The Bicycle Mobility Plan is Rhode Island's first statewide vision plan to strategically expand the bicycle network. The plan seeks to safely and efficiently connect people and places in an equitable manner so that riding a bicycle in Rhode Island is safe and fun for all ages. In order to achieve the expanded network, this plan identifies candidate corridors and the supporting policies and programs to make this initiative a reality. The vision for this plan was developed through collaboration with a geographically and professionally diverse Bicycle Advisory Committee. Extensive outreach with planners from each city and town was completed and feedback was received at numerous public workshops and local outreach events across Rhode Island.

The plan includes an equity analysis to make sure that recommendations are appropriately distributed to traditionally underserved communities. The plan identifies a wide range of bicycle enhanced corridors, programs, and policies recommended to achieve the vision for cycling in the state.

Transit Master Plan

The Transit Master Plan is Rhode Island's first statewide plan to envision how the State's transit network should look and operate in the year 2040. In Rhode Island, the transit network currently includes bus, rail and water services. The plan will integrate data, public input, stakeholder feedback, regional best practices and new innovations to propose both short-term and long-term recommendations, as well as an implementation strategy identifying potential partnerships, policies and needed investments.

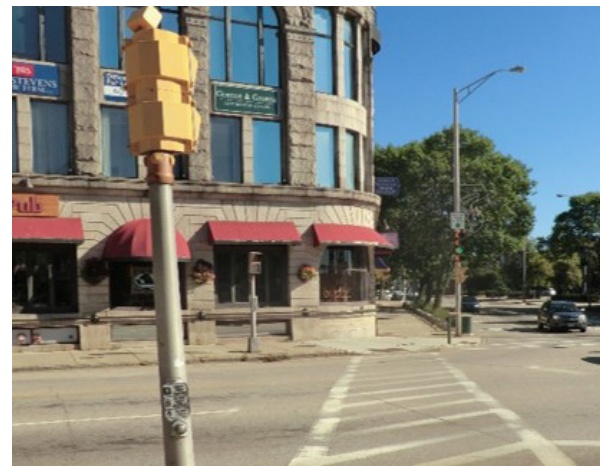


Additional Relevant Experience

Dover Transportation Master Plan Update | Dover, NH

Working closely with City staff, a volunteer steering committee, and the general public, VHB led the 2016 **update to the Transportation Chapter of the Dover Master Plan**. Feedback was collected through workshops and online surveys to help identify preferences and priorities. The VHB team also gathered data about the existing multimodal transportation system, which includes Amtrak Downeaster rail service, buses, a park-and-ride facility at the nearby Spaulding Turnpike, and a multi-use community trail—in addition to expansive roadway and sidewalk networks. This **data collection effort** ranged from gathering information about travel speeds and crashes to compiling locations on sidewalks, crosswalks, and easements from the City GIS. To gather a comprehensive view of the City's transportation system, as well as to **create the most holistic set of recommendations** possible, the VHB team not only analyzed the individual components of Dover's transportation system individually—but also in relation to one another, to land use, and to demographics.

The end result of the 2016 Transportation Chapter update was a realistic, achievable, **consensus-driven set of recommendations**. These included, among others, installing new bus shelters, creating a sidewalk asset management program, and evaluating and implementing bike routes through formal lanes or sharrows.



“[VHB] was extremely professional and highly responsive.... They were flexible and receptive to working through the City’s requests and provided sound guidance for achieving the best possible work product.”

—David Brooks, Director of Planning & Zoning, City of Lebanon, regarding the Downtown Vision Plan and Tunnel Assessment

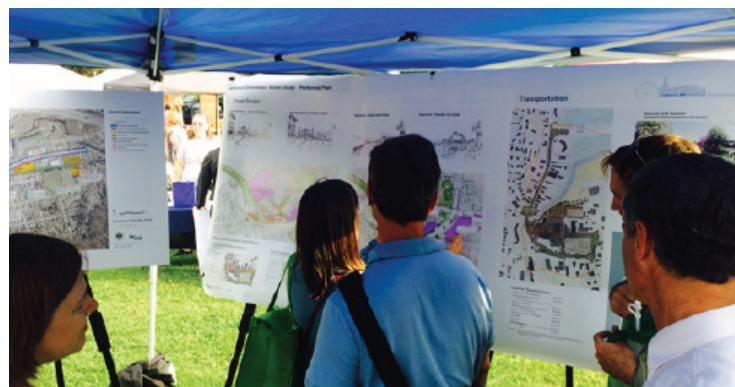
Downtown Lebanon Vision Plan | Lebanon, NH

Since 1964, when a raging fire devastated much of its main street, restoring and reinvesting in Lebanon’s historically vibrant downtown area has been a key objective for the City. VHB was selected to lead the Downtown Vision Plan and Tunnel Assessment, which identifies a long-range, multi-faceted, community-led vision of how to make the area a desirable destination for the region—and includes a series of concrete actions to help achieve this vision. VHB’s specific responsibilities included **public engagement; data collection; and GIS-based analysis** of the study area’s existing conditions, including zoning, utilities, cultural and natural resources, and the **transportation system**.

Throughout the process, **engaging with the public remained a priority**. To this end, the team kept the public involved through outreach surveys, local stakeholder meetings, and online discussion groups. Stakeholders with different backgrounds also participated in a variety of public outreach events such as interviews, public forums, and surveys. The interviews included meetings with local property and business owners, non-profit organizations, institutions that have an interest in and/or history with the downtown study area, and City departments. Additionally, in an effort to publicize the project, as well as to provide a centralized source of information and an open channel of communication with the public, a project webpage was hosted on the City’s official website.



The completed study was named “Plan of the Year” by the NH Planners Association (NHPA) and was recognized with an Honorable Mention from the NH chapter of ACEC as part of its 2017 Engineering Excellence Awards program.



VHB is taking a similar approach to public engagement for its project with the NHDOT to improve Route 202 in downtown Jaffrey. Graphically rich newsletters, meetings, and the collection of input using TurningPoint have proved successful in educating and gathering feedback from the public.

I-293 Exits 6 and 7 Transportation Improvements Study | Manchester, NH

For travelers along Manchester's west side, I-293 provides a vital link connecting businesses, schools, hospitals, and residential areas. A key segment of I-293—the 3.5-mile stretch just north of Exit 5 to 1.5 miles north of Exit 7—has numerous capacity and safety deficiencies, however. To address these issues, the NHDOT retained VHB to conduct a planning study. The **study evaluated potential broad, transportation system changes, and it established a range of practicable alternatives** for further development and evaluation. Alternatives included various interchange improvement options, widening the mainline, and various Transportation System Management (TSM) and Transportation Demand Management (TDM) strategies. VHB is now actively working with the NHDOT to advance plans toward implementation and final design.

Throughout the **project, consensus-building has been critical**. VHB has been supporting a dynamic public outreach and participation process, including working closely with a Technical Advisory Committee (TAC), developing and maintaining a customized project website (www.293planningstudy.com), and creating and **distributing newsletters** to disseminate information about the project to the widest possible audience. These newsletters, written in an easy-to-understand fashion and featuring color graphics, have helped readers visualize each of the conceptual alternatives, and have encouraged participation in the project.





MaineDOT Vulnerable Population Intervention Program | Statewide, ME

VHB was selected for the MaineDOT Vulnerable Population Intervention Program, which is a multi-phase project intended to realize a continuous reduction in the number of statewide pedestrian-related crashes, injuries, incapacitating injuries, and fatalities. The program centers around developing pilot projects for vulnerable users—homeless, immigrants, elderly, and disabled—in targeted communities. These projects aim to successfully mitigate behaviors, address misconceptions, and fill gaps in knowledge, as well as identify and mitigate resource issues to help reduce pedestrian crashes within the identified populations.

VHB's responsibilities include **identifying and documenting the unique needs and challenges of the identified vulnerable groups**; assessing the effectiveness of efforts to improve safety for, and to collaborate and engage with, key stakeholders for these groups; and helping to identify outreach and communication strategies. To do so, VHB professionals work closely with MaineDOT's Interagency Bike/Ped Safety Education Workgroup and vulnerable user stakeholder groups, among others. VHB worked closely with 14 transit agencies across the state to implement a public safety **ad campaign promoting pedestrian safety**, which publicized five different messages used on a variety of transit vehicles statewide.



Westbrook-Portland Rail-with-Trail Feasibility Study | Portland Area, ME

VHB completed a high-level evaluation of the **feasibility of developing a rail-with-trail bicycle/pedestrian trail facility** along the 5.8-mile railroad corridor that extends from Westbrook to Portland. This trail would provide an off-roadway transportation link between downtown Westbrook, the planned Rock Row mixed use development in Westbrook and the Old Port in Portland. The rail-with-trail facility would expand Greater Portland's bike network, providing an alternative to biking on busy roadways and providing recreation opportunities for a wide range of potential users in the area. The project team examined the existing conditions and assessed how a trail could potentially coexist with the railroad. VHB then conducted a segment-by-segment assessment of the feasibility, conceptual construction cost estimates for the alternatives, and a **comprehensive report summarizing the findings** of the study.

Route 128/I-95 Land Use and Transportation Study | Newton and Lexington, MA

The Route 128/I-95 Land Use and Transportation Study will establish the future land use, housing, and economic development assumptions for the segment of Route 128/I-95 between Newton and Lexington. The study will develop and analyze alternatives, present policy and infrastructure recommendations and develop an implementation plan to advance this corridor into the future. Study goals include **improving access, safety, and mobility** for all users; supporting **strategic land use and economic vitality**; advancing social equity throughout; **contributing to environmental and health** benefits; and **developing recommendations** with lasting benefits.





On-Call Transportation Engineering, Travel Demand Modeling, and Database Development | Various Locations, NH

Strafford Regional Planning Commission

The Strafford Regional Planning Commission (SRPC) selected VHB to provide on-call engineering assistance primarily including the development of a transportation project database and providing **on-call TransCAD travel demand modeling support**. The transportation project database is being used to track and manage projects through their progression to meet the long-range transportation plan set by the State.

Southern New Hampshire Planning Commission

VHB's **conceptual design and cost estimating** work for SNHPC in 2020 was for transportation improvement projects in Manchester (2), Deerfield, Londonderry and Derry. These projects included features such as new signalized intersections, roundabouts, a rail trail and adaptive traffic signals. VHB completed the necessary conceptual designs and cost estimating assignments over a compressed 6-week schedule to satisfy SNHPC and the New Hampshire Department of Transportation's needs. As part of the on-call contract, VHB completed an evaluation for the NH 114/Wallace Road roundabout which included identification of planning-level improvement concepts that addressed the existing concerns. VHB also prepared a High Accident Location Study for the NH Route 28 / Roulston Road intersection in Windham. That study included program level project cost estimates and VHB was tasked with evaluating whether the **costs realistically aligned with feasible solutions** based on the recommendations in the study.



First- and Last-Mile Station Access Mobility Study & Toolkit Development | Various Counties, NY

MTA has engaged VHB to help reevaluate and influence how customers will access its commuter rail network (Long Island Rail Road (LIRR), Metro-North Railroad (MNR)) in the future. The overarching goal of this project is to develop the tools and strategies to encourage alternative means of station access and mobility choices while reducing reliance on the use of single occupancy vehicles and associated station parking facilities. This study and the toolkit will serve as a facilitator to local governments, developers, land use planners, and other public and private transportation providers to **improve access to transit**. VHB is delivering tasks that include the analysis of station access data at more than 150 LIRR and MNR stations, research and analysis of existing and emerging first-and last-mile (FMLM) strategies, development of the toolkit, and use of the toolkit to create 10 FMLM pilot projects to be implemented throughout the MTA service area. Strategies include microtransit (scooter share/bike share), pedestrian/bicycle improvements, carpool/vanpool enhancements, on-demand shuttles, and other access modes. VHB proposed and is uniquely **developing the toolkit as a secure, spatially enabled website that will provide users with a robust online, interactive tool** that MTA can easily update (extending the toolkit's usefulness beyond initial delivery). The toolkit will allow users outside of the MTA to have access to analyses and research developed by VHB, to assess a specified service area around a station, and to build out, visualize, and analyze a station specific FMLM plan.

Zoe Miller Strategies



Formerly with the Portland Area Comprehensive Transportation System, Zoe has now ventured on her own as a private consultant. Her passion is harnessing engagement to advance equity in health, mobility and quality of life. As a network weaver and a systems builder, she helps bring public health and mobility initiatives to life. From community engagement and strategic planning to needs assessment and data analysis, Zoe is at the forefront of what it means to bring visions to reality for communities across Maine and beyond. [Learn more about her work here.](#)

Zoe is currently applying for WBE status with the MaineDOT and plans to hold this certification in the near future. Zoe can be reached at 207-838-8382 or zmstrategies@gmail.com.

Moving Maine Network—Project Spotlight

Launched in 2018, the Moving Maine Network is a multi-sector, statewide collaborative working to help ensure all Mainers have access to transportation regardless of background, destination, or geography. Moving Maine strives to connect, empower, and expand the efforts of the hundreds of individuals, groups, and organizations who work on transportation access and equity across Maine. A co-founder of Moving Maine, Zoe oversees all network activities, which include a Learning Community, a transportation equity policy work group, and an annual summit.



Various photos from outreach events where Zoe was a key facilitator

References

Client satisfaction is at the forefront of any contract the VHB team undertakes. We are pleased to have strong relationships with—and a long history of providing quality services to—many Maine communities and several MPOs throughout New England. We encourage BACTS to interview the references below; their comments will reinforce our record of outstanding past performance and validate our ability to excel on similar transportation projects.

Reference Name/Title	Contact Information	Relationship
Marty Rooney Project Manager MaineDOT Bureau of Planning	16 Child Street Augusta, ME 04330 207-624-3317 martin.rooney@maine.gov	Working with VHB and key proposed team members on the Maine Active Transportation Master Plan and several Planning Partnership Initiative (PPI) studies with various municipalities.
Eleni Churchill Transportation Program Manager Chittenden County Regional Planning Commission	110 West Canal Street, Suite 102 Winooski, VT 05404 802-846-4490 (ext. 111) echurchill@ccrpcvt.org	Working with VHB and key proposed team members on the Chittenden County I-89 2050 Study.
Bruce Hyman Transportation Program Manager City of Portland, ME	389 Congress Street Portland, ME 04101 207-874-8717 bhyman@portlandmaine.gov	Working with VHB and key proposed team members on several transportation planning and engineering assignments.

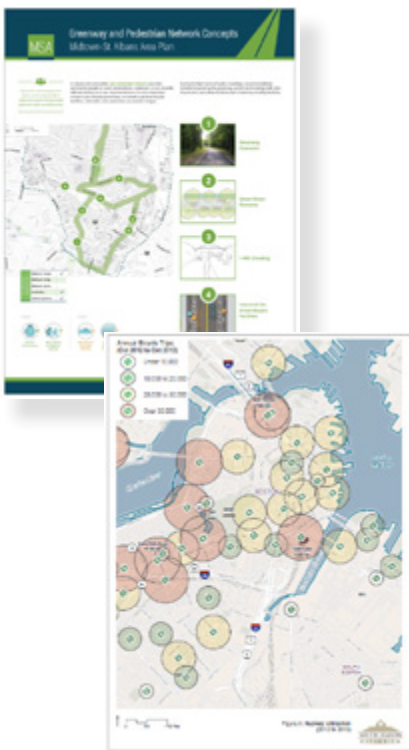


3: Project Understanding and Schedule

Project Understanding

The Metropolitan Transportation Plan (MTP) is an important document which defines the goals and vision for the BACTS region. Formerly known as the Long Range Transportation Plan (LRTP), the **document serves as the conduit between understanding public needs and implementation of infrastructure investments**. The MTP is needed more than just to fulfill a federal mandate, but also to help ensure the long-term success and resiliency to anticipated change in the region. In addition, BACTS is looking for this MTP Update to include climate resiliency and long-term sustainability efforts.

Project and Public Engagement Approach: The MTP has several main areas of focus, including developing goals and a vision of what the region can look like, strategies that the MPO and member communities can utilize to meet those goals, and a methodology for prioritization. VHB, with regional and MPO planning experience, will provide **a hybrid approach to completing the MTP**. While VHB will produce a printable MTP study document, the process will leverage our extensive online project delivery skills to enhance engagement through the process. VHB's experience creating ArcGIS **'StoryMaps'** to promote understanding by leading participants through a data-driven story, will be used to allow increased engagement and depth of understanding with interactive map elements. The online components will include



VHB has extensive experience with using storymaps to visually display data.



an interface for public participation and comments on the future vision and existing conditions of the region, as well as public-facing presentation of the final graphics and maps which will illustrate where BACTS is and where they want to go.

While the public participation process for the study will utilize online components for convenience and optimizing engagement of people who prefer digital access, VHB will also utilize a mix of robust in-person meetings, workshops, and events to garner feedback from those that prefer in-person interaction and those without internet access or unlikely to participate in an online format. An electronic format typically increases the quantity of responses from the public, but seldom does it produce the quality of face-to-face meetings and the context of ideas given and received.

To optimize the public participation process, **Zoe Miller from Zoe Miller Strategies** will serve on the VHB team. Zoe, who has served as the Director of Community Engagement for the Greater Portland Council of Governments (GPCOG), has over 20 years of experience in public outreach for urban planning and community development. Zoe will work with VHB to develop the stakeholder engagement plan for this project, facilitate public meetings and will bring her expert knowledge of creating inclusive and shared decision-making to the process.

The VHB team can leverage the local BACTS staff knowledge and experience and bring an outside perspective for a fresh approach to complete a robust planning document. BACTS staff know better than anyone their own data, plans, and documents. VHB will work closely with BACTS staff throughout the project process with regularly scheduled biweekly meetings with the BACTS Project Manager (PM) and other key staff as appropriate depending on the material being covered in that time period.

Public Advisory Committee: The VHB team will create a list of potential groups to have represented on the **Public Advisory Committee (PAC)** and work with BACTS staff during initial meetings to identify the appropriate representative from each group. Zoe Miller's experience working with diverse stakeholder relationships and her equitable engagement perspective, as well as the more regional experience will inform the suggestions for inclusion on the Public Advisory Committee. VHB would recommend PAC members with a broad range of perspectives, across the region's geography, sectors, and modes – including walking, biking, rolling, transit, freight, and driving personal vehicles. Finally, VHB would anticipate the need for both MaineDOT and FHWA participation for which final acceptance will be required.

Project Launch: To launch the study, VHB would hold a kickoff meeting to outline the scope and approach of completing the MTP. First, the VHB Graphics Team would generate options for a branding logo to represent the study, and provide an informative graphic that symbolizes the MTP planning process. The idea would be to establish an 'at-a-glance' recognition that would quickly associate the viewer with the future regional planning process. The logo will be a part of all planning documents and part of the online components of the study for public input and documentation. **VHB has developed logos and branding for a number of projects including regional plans** such as the [Chittenden County I-89 2050 Study](#) and the Rochester Transportation Master Plan, among others.



Stakeholder Outreach Plan: Electronically, the **Stakeholder Outreach Plan (SOP)** will include development of a project web page hosted by BACTS where all material will reside for online access throughout the project. VHB will work with BACTS to determine the protocol for project updates and who will be identified to receive project input via the website. In addition to the website, materials will be shared with a stakeholder list (VHB has used Constant Contact for outreach on many projects but can also maintain an email list). The materials will be shared via Facebook and to contacts at each BACTS community with the hope of reposting active links to each of their websites and Facebook pages.

In addition to the above items, VHB will work with BACTS and the PAC to understand what underserved populations we will need to meet, where they are, and to invest additional time engaging in order to obtain the most diverse, informed project.

Vision and Goals: With an understanding of the regional data gathered from existing BACTS studies and documents with additional input from the public, PAC, and BACTS Policy Committee, VHB would provide **draft Vision and Goal statements** that summarize the desired outcomes for the region and outline the purpose and need of the overall document. These goals will be created in a **collaborative process**, with a common understanding that all participants are seeking to improve the Bangor Metropolitan area. VHB would look to BACTS staff to assist in this collaboration and help narrow down, and combine where possible, the future goals. VHB anticipates the incorporation of ongoing BACTS climate and resiliency studies. With goals set, VHB will work with BACTS staff to understand current access to existing data, as well as to identify where additional data may need to be collected to give substance to the stated goals. Existing data will then be gathered and provided for the online portions of the study. Public input from public meetings will be critical to determining the regional goals.

Engagement Component: **Vision & Goals Workshop – October:** Planned in partnership with BACTS staff and PAC members, this workshop will invite participants to brainstorm big ideas for the future of transportation in the region. The location, day, and time of the workshop will be selected to optimize attendance by a broad range of stakeholders. For instance, the workshop might be held in conjunction with First Friday in Downtown Bangor. In advance of the workshop, the VHB team will draw content from previous plans and collect initial input from the PAC. Workshop input will be synthesized by the VHB team and provided to BACTS staff for edits before adoption by the PAC in December 2022.

Present Conditions and Projected Needs: With this foundation created, VHB will look to both the existing conditions on where BACTS currently stands, and what the projected needs into the future will be. VHB anticipates significant data collection, but not a substantial effort. VHB would **propose to use existing GIS data** from BACTS and the State of Maine, the transportation data from Streetlight, and the community data of MySidewalk to provide maps, charts, and graphs in clear formats. VHB would show existing and future data conditions as a part of the online experience and project website, as well as in-person through a public meeting. The projected needs of the region can be found by comparing the known existing conditions to the future visioning identified through the public process.



Engagement Components:

- » Potential Stakeholder and Community Survey – Nov 2022-Jan 2023: A survey will invite input from stakeholders and the public about projected needs and desired projects. The survey can include both open-ended narrative questions and the opportunity to click locations on a map and provide input. The survey can be promoted online, through support from PAC members, and in-person, if desired.
- » Public Meeting on Present Conditions and Projected Needs – Dec 2022: This meeting will provide an in-person opportunity to provide input. It will also raise awareness about the plan process. The agenda will include a brief presentation on the plan and BACTS, using layperson-friendly materials (similar to those Zoe helped develop while working for PACTS). Participants will respond to the same questions used in the survey and use maps to identify locations of concern and opportunities.
- » Meetings with Municipalities – Dec 2022: The VHB team will host two meetings where municipal staff from across the region are invited to provide updated information on their present conditions and projected needs, along with desired projects. The meetings will be held by Zoom or in locations convenient to participating communities.

Future Scenarios: The next stage in the planning process is the development of future scenarios. The data found in the previous task would be combined with **VHB's robust travel demand modeling capabilities** to project future changes and decision making. **Julie Murphy**, who has a long history of operating regional travel demand models for MPO's in Maine, would lead this effort. VHB staff would forecast three different scenarios: 'business as usual', 'conservative action', and 'drastic action'. These represent typical forecasting scenarios which provide enough coverage of potential actions without attempting to create the illusion of detail and accuracy from more varied forecasting methods. Maps and graphics will be provided for inclusion in the report and the online portions of the study. VHB would take care to still represent realistic financial constraints among any scenario.

Project Prioritization Criteria: For MPOs, some of the most engaging meetings of the year occur when capital allocations are made for transportation projects. It is generally considered prudent and wise for MPOs to have a clear and consistent technical methodology as a basis for prioritization of submitted projects without resorting to politicking. The project prioritization process should reflect the community priorities gathered in public outreach. As Project Manager and Principal-in-Charge, **Jenn Conley** and **Tony Grande** will leverage the specialized skill of members of the team. For instance, **Jason Ready**, as a former staff member of Maine's Lewiston-Auburn area MPO (ATRC), has experience in two rounds of rewrites and updates to an MPO project prioritization process and will bring experience with the overall process, and an independent eye to this process. VHB would look to the previous public comments, BACTS prioritization methodology, BACTS performance measures (which need to be updated to be consistent with the MTP), and reference the stated goals and vision of the MTP to craft the new project prioritization process. **Community needs will be a part of the prioritization process.** The objective would be the creation of a simple list rubric where a project can be objectively looked at to determine its score.



Financial Assessment: A financial assessment will be undertaken to help ensure that the projected **costs and funding sources would realistically be able to complete the vision.**

Further, the analysis would identify what the projected costs of the goals would be, and where the likely funding sources would come from. The assessment would look at three separate plans: a historical trend, a constrained plan, and an aspirational plan.

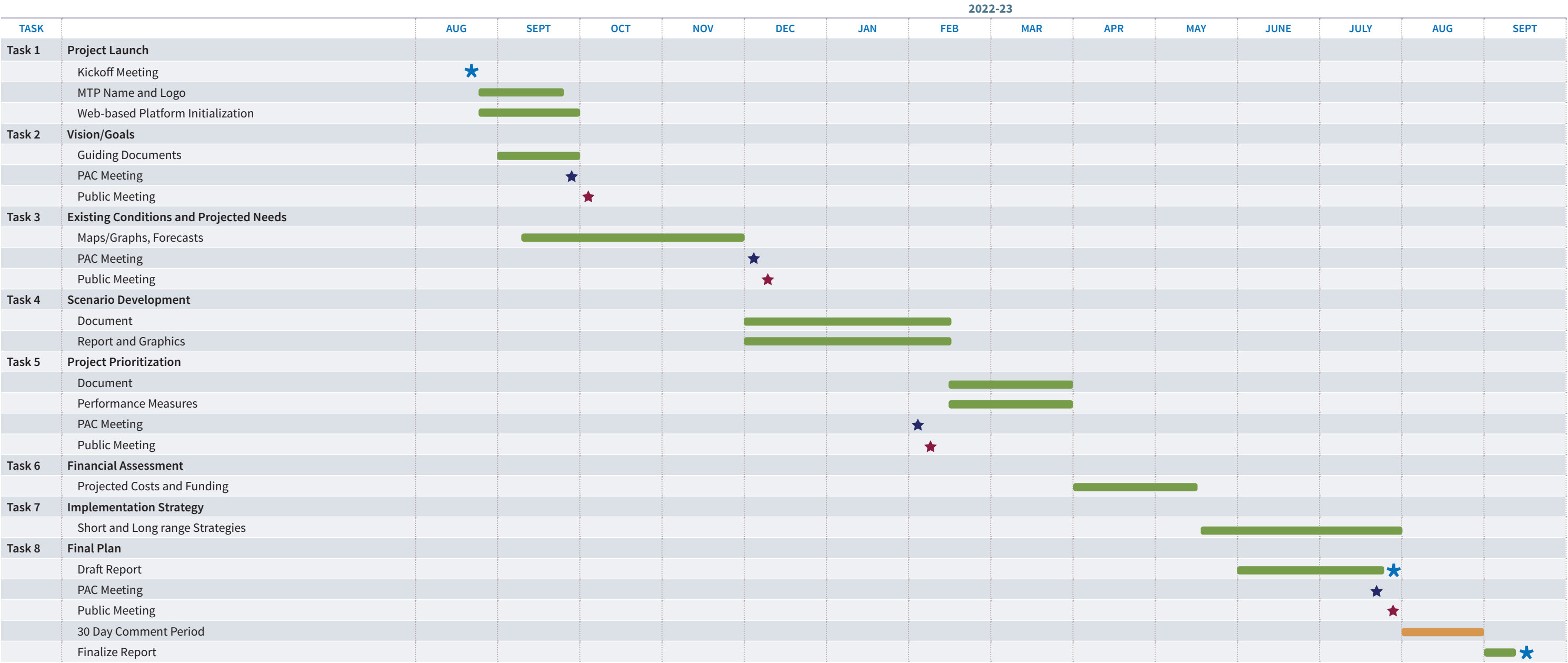
Implementation Strategy: One of the final tasks of the MTP Update will be the formation of an **implementation strategy that describes the short- and long-term strategies needed to realize the vision of the communities.** It is important to stress that the strategies will still be realistic and fiscally constrained. An ‘aspirational’ financial assessment should not be inferred to mean unlimited funding. The implementation strategy will incorporate other plans (such as the Climate Plan) and make recommendations to the communities with a timeline to meet the final forecast year. Upon completion of this component, with feedback from the MPO and PAC, a draft plan of the study will be released to the public for a 30-day comment period to comply with BACTS Public Participation Plan and provide sufficient time for public comment to those who might not have participated in the preceding portions of the study. After incorporating all relevant public comments, the final plan will be completed, including the online components. Our goal will be to work with BACTS to develop final **hybrid documents that are easy to understand, user friendly, and graphically rich** while clearly communicating future goals for BACTS through the new MTP.

Assumptions

- » A kickoff meeting will be held with BACTS staff, followed by four PAC Meetings and four Public Meetings at various phases and milestones of the study. The nine total meetings will be completed in person.
- » Bi-weekly virtual meetings will occur with BACTS staff for study coordination and data exchange. For meetings that may required in person collaboration, VHB has included time for up to four in person meetings with BACTS staff over the life of the project
- » VHB will manage and coordinate public meetings which are introduced and hosted by BACTS staff. VHB will produce meeting announcements and agendas. Although VHB will make notes during the public meetings, it is assumed that BACTS staff will document meeting minutes.
- » VHB will not present findings or recommendations without review and approval from BACTS staff.
- » VHB will provide the final deliverable, including all appendices, as an electronic document.

Schedule

VHB values the opportunity to work with BACTS and is committing to reserving our staff availability and capacity to make sure we can meet your needs. VHB has availability to complete this work within the proposed schedule outlined below. We will begin services on the date of written authorization and we are committed to meeting the schedule. If selected, we look for the opportunity to work with BACTS to discuss any necessary changes or adjustments to best meet your needs.



- ★ Milestone
- ★ PAC Meeting
- ★ Public Meeting
- Study Development
- Public Comment Period

Page intentionally left blank



4: Project Management

Communication

Capacity and Commitment

Each member of the VHB team has been **vetted for availability** to work on BACTS MTP Update. If selected, we are fully committed to working as a partner to BACTS to equip it with the tools needed to realize its transportation goals for the future.

VHB professionals take our commitment to helping our clients achieve their project goals seriously. For every assignment we undertake, VHB project managers keep these basic guidelines in mind:

- » Find the right people for the job
- » Make and follow a work plan
- » Know and follow the budget and schedule
- » Communicate regularly
- » Develop a recovery plan to get back on track, if needed

VHB project managers use our proprietary, Windows-based software to access, maintain, and generate quantitative project information from one easily accessible place. For this project, we will use a real-time project management dashboard that will track costs by tasks based on employee timesheets. Additionally, this dashboard will provide proactive information, such as posting pending labor changes prior to timesheets being officially submitted. If any task is in danger of an overrun, the specific circumstances will be analyzed and discussed with BACTS. We will then work together to develop a corrective action plan.

We will also use regular communication and submit monthly progress reports to BACTS. These progress reports document the status of the ongoing tasks and funds spent to date, as well as help to ensure all processes are running smoothly on time and on budget. These tools arm us to succeed on this assignment with BACTS.



“

"The VHB team brought forth great design experience and knowledge which greatly enhanced delivery of the project... [They are] always responsive and communicate proactively with the Department. They are diligent with response to the Department when needed by email or by phone contact... It was great working with the VHB team (Tony) on the design and delivery for the Mars Hill project. They do great work and allow project designs to flow easily."

—Roger Soucy, Senior Project Manager, MaineDOT

Controlling the Budget and Schedule

Just as work plans form the basis of our approach, the VHB team uses cost and schedule controls, as well as issue resolution, to keep tasks moving forward effectively.

Cost Control

The VHB team has a strong record of effective cost control on projects. This record results from a complete understanding of the project scope, which in turn contributes to the development of accurate budgets. VHB project managers use our proprietary, Windows-based software to access, maintain, and generate quantitative project information from one easily accessible place. If any task is in danger of an overrun, the specific circumstances will be analyzed and discussed with BACTS. We will then work with BACTS to develop a corrective action plan.

Schedule Control

Routinely monitoring schedules and progress against key milestones is another key component of our quality assurance approach. To help with this, our project managers often use web-based task management tools. In the event schedules are not proceeding according to plan, VHB will communicate with BACTS and propose ways to resolve the issue.

Proactively Resolving Issues

Timely identification and resolution of issues are essential to effective schedule management. Problems may be caused by external factors, but regardless of the source of the scheduling issue, VHB will analyze the concern, determine alternatives that will achieve the schedule and/or project objectives, and develop a plan to meet BACT's needs.

Quality Control/Quality Assurance

Successfully managing projects hinges not just on selecting the right people and communicating effectively—it also relies on knowing and adhering to schedule and budget, identifying and reducing risks before they become issues, and providing quality services. For this reason, providing quality assurance and quality control (QA/QC) is mandatory on every project VHB undertakes. In fact, VHB has recently embarked on a new initiative—**Quality 2.0**—to help our work meet the highest standards for technical excellence. Quality 2.0 is a cross-department, cross-company effort that focuses on:

- » An internal audit process, through which technical leaders engage in conversation with project managers about their kick-off process, communication, and other key factors
- » The development of a Quality Guidebook, which outlines how VHB defines quality, quality assurance, control measures, and checklists
- » Business unit- and project-specific quality plans to communicate our approach to quality management



A: Additional Requirements

As requested in the RFP, the additional required documents can be found on the following pages:

» Debarment Statement



July 13, 2022

Debarment Certification

By submitting to this RFP, I certify to the best of my knowledge and belief that the aforementioned organization, its principals, and any subcontractors named in this Proposal:

- a. Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from bidding or working on contracts issued by any governmental agency.
- b. Have not within three (3) years of submitting the Proposal for this contract been convicted of or had a civil judgment rendered against them for:
 - » i. fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government transaction or contract.
 - » ii. violating Federal or State antitrust statutes or committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - » iii. are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
 - » iv. have not within a three (3) year period preceding this Proposal had one or more federal, state or local government transactions terminated for cause or default.

Failure to provide this certification may result in the disqualification of the Firm's Proposal, at the discretion of BACTS.

Sincerely,
VHB

A handwritten signature in blue ink, appearing to read "Robert M. Dubinsky".

Robert M. Dubinsky, PE, LEED AP
Clerk

Metropolitan Transportation Plan Update





July 13, 2022

BACTS | Sara Devlin, Executive Director
12 Acme Road, Suite 104
Brewer, Maine 04412

Re: Bangor Area Comprehensive Transportation System Request for Proposals—
2043 Metropolitan Transportation Plan Update - PRICE Proposal
RFP #: BACTS-2202

Dear Ms. Devlin:

Attached please find VHB's cost proposal using MaineDOT's price proposal sheet. As requested in the RFP, our cost proposal package includes our Direct Labor, Indirect Labor (Overhead), Profit, Direct Expenses, and Subconsultant costs. **As Principal-in-Charge, I certify that all of the information contained in this Price Proposal to be true and accurate.** Thank you for considering our enclosed proposal; should you have any questions, please free to contact myself at 207.889.3115 or Jenn Conley at 802.497.6191.

Sincerely,
VHB

A handwritten signature in blue ink that reads "Tony Grande".

Tony Grande, PE, ENV SP
Principal-in-Charge
tgrande@vhb.com

A handwritten signature in blue ink that reads "Jenn Conley".

Jenn Conley, PE, PTOE
Project Manager
jconley@vhb.com

CONSULTANT PRICE PROPOSAL FORM

Consultant Name: VHB
Project Title/Location: BACTS-2202 2043 Metropolitan Transportation Plan Update
MaineDOT WIN:
Phase of Work:

Original Submittal Date: July 13, 2022
Revised Date:
Consultant Contact Name: Jenn Conley
Contact email address: jconley@vzb.com

Consultant Positions =>		Jenn Conley, Project Manager	Tony Grande, QA/QC	Julie Murphy, Regional Model	Jason Ready, Transportation Lead	Karen Sentoff/ Senior Transportation Planner	Kimi Tokarczyk, Graphics / Website	Drew Gingras, Bike/Ped Planner	Kristina Sargent, GIS	Nyssa Lansford, Administrative Assistant	TOTAL	
#	Task Descriptions	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	
1	Project Administration	24.00	8.00		8.00					24.00	64.00	
2	Product Launch	12.00	8.00		20.00	4.00	40.00			4.00	88.00	
3	Vision/Goals	4.00	4.00		24.00	16.00	8.00	8.00	4.00		68.00	
4	Existing Conditions and Projected Needs	24.00	4.00		24.00	44.00	12.00	20.00	4.00		132.00	
5	Scenario Development	4.00	4.00	60.00	8.00	32.00	6.00	12.00	2.00		128.00	
6	Project Prioritization	4.00	4.00		44.00	30.00	10.00	12.00	2.00		106.00	
7	Financial Assessment	4.00	4.00		16.00	24.00	8.00	20.00	2.00		78.00	
8	Implementation Strategy	8.00	4.00		12.00	24.00	10.00	16.00	4.00		78.00	
9	Final Plan	24.00	12.00		44.00	46.00	42.00	16.00	4.00	16.00	204.00	
											0.00	
											0.00	
											0.00	
											0.00	
											0.00	
											0.00	
											0.00	
											0.00	
TOTAL HOURS		108.00	52.00	60.00	200.00	220.00	136.00	104.00	22.00	44.00	946.00	
HOURLY RATE		\$62.00	\$62.00	\$79.16	\$50.00	\$39.37	\$32.10	\$47.61	\$40.87	\$32.68		
DIRECT LABOR TOTAL		\$6,696.00	\$3,224.00	\$4,749.60	\$10,000.00	\$8,661.40	\$4,365.60	\$4,951.44	\$899.14	\$1,437.92	\$44,985.10	
DIRECT EXPENSES									Overhead %	163.13%	\$73,384.19	
Subconsultant 1–Zoe Miller		\$15,615.00	NOTE: This proposal form must be accompanied by: (a) Description of Services; (b) Scope of Work; (c) DBE form; (d) Appendix A-1; (e) Certified Payroll; (f) Insurance Certificates; and (g) Subconsultant Proposal.							Profit/Fee %	10.00%	\$11,836.93
Subsconsultant 2–List Name		\$0.00								Subtotal =		\$130,206.22
Mileage (currently \$0.45 per mile)		\$2,448.00								Total Direct Expenses =		\$19,763.00
Postage		\$0.00										
Printing		\$1,200.00										
Other		\$500.00										
Other		\$0.00										
TOTAL DIRECT EXPENSES =		\$19,763.00										
								Total Proposed Cost		\$149,969.22		

APPENDIX A-1

METHOD OF PAYMENT

- ☒ Adjustable Burdened Hourly Rates
☐ Adjustable Burdened Hourly Rates - Fixed Overhead
☐ Fixed Burdened Hourly Rates
☐ Cost Per Unit of Work
☐ Cost Plus Fixed Fee
☐ Lump Sum


Consultant Name: VHB
 Date: 7/13/2022

Employee Names/Classifications & Rates

Please indicate the Employee Names/Classifications and rates that will be used to fulfill the requirements of this contract.

Employee Name & Classification	Actual Rate Paid *	Allowable Direct Labor Hourly Rate	Overhead 163.13%	Profit/Fixed Fee 10.00%	Burdened Hourly Rate
Jenn Conley, Project Manager	\$76.09	\$62.00	\$101.14	\$16.31	\$179.45
Tony Grande, QA/QC	\$71.74	\$62.00	\$101.14	\$16.31	\$179.45
Julie Murphy, Regional Model	\$79.16	\$79.16	\$129.13	\$20.83	\$229.12
Jason Ready, Transportation Lead	\$56.95	\$50.00	\$81.57	\$13.16	\$144.72
Karen Sentoff/ Senior Transportation Planner	\$39.37	\$39.37	\$64.22	\$10.36	\$113.95
Kimi Tokarczyk, Graphics / Website	\$32.10	\$32.10	\$52.36	\$8.45	\$92.91
Drew Gingras, Bike/Ped Planner	\$47.61	\$47.61	\$77.67	\$12.53	\$137.80
Kristina Sargent, GIS	\$40.87	\$40.87	\$66.67	\$10.75	\$118.30
Elisabeth Sundberg, Transportation Planner	\$25.97	\$25.97	\$42.36	\$6.83	\$75.17
Julia Mintz, Transportation Planner	\$30.29	\$30.29	\$49.41	\$7.97	\$87.67
Nyssa Lansford, Administrative Assistant	\$32.68	\$32.68	\$53.31	\$8.60	\$94.59

*I certify that this rate is the actual rate paid to this employee under this firm's payroll.

By: 
 _ Louise J. Bussiere, NNE Regional Finance Manager

Date: 7/12/2022

I certify that the foregoing signature is true and accurate, and if electronic, I further certify that it (a) is intended to have the same force as a manual signature, (b) is unique to myself, (c) is capable of verification, and (d) is under the sole control of myself.

- ☐ Original Contract
☐ Modification

**MaineDOT CONSULTANT'S DBE/SUBCONSULTANT
PROPOSED UTILIZATION FORM**

**Must be provided by the Consultant as an attachment to Technical Proposals for New Contracts
and Contract Modifications**

Consultant Firm (Prime): YHB

Prime Consultant is a Maine Certified DBE: Yes ☐ No ☒

Contact Person: Jenn Conley

Tele: 802.497.6191 Fax: _____

E-mail: JConley@vhb.com

Contract/Modification Amount: \$149,969.22

Date of Execution: _____
(For Department Use Only)

WIN: BACTS-2202

Project Location: BACTS

TOTAL ANTICIPATED DBE: 0 % PARTICIPATION FOR THIS CONTRACT/MODIFICATION

W B E •	D B E •	Non DBE	Firm Name	Description of Work	Anticipated \$ Value
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Zoe Miller Strategies	Public Outreach/ Public Meetings	\$15,615
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Subconsultant Total >					\$15,615
DBE Total >					\$0.00

**Note: this information is used to track and report anticipated dbe participation in all federally funded MaineDOT contracts. The anticipated DBE amount is voluntary and will not become a part of the contractual terms.*

(MAINEDOT INTERNAL USE ONLY)

Form received: ____/____/____ Verified by: _____
Civil Rights Office Representative

☐ FHWA ☐ FTA ☐ FAA ☐ FRA ☐ MARAD

For a complete list of certified firms and company designation (WBE/DBE) go to
<http://www.maine.gov/mdot/civilrights/dbe/>



MAINE DEPARTMENT OF TRANSPORTATION

Contract Procurement Office (CPO)

Consultant Wage Rate Waiver Request Form

Consultant Firm: VHB

WIN: TBD

CSN #: VC1000094601

This request is for a waiver of MaineDOT's reimbursement limits under the Policy on Consultant Wage Reimbursement, complete this form **prior to submitting your proposal package** for the project. The limits are as follows:

Limits are as follows:


1. Project Managers (Limit of 1 per contract – for additional project managers the consultant must use the waiver process): \$62.00
2. Engineers performing a Quality Control function (Limit of 1 per contract – for additional quality control engineers the consultant must use the waiver process): \$62.00.
3. Sub-consultants and all other consultant positions: \$50.00.

Describe (below or on an attached document) the unique circumstances surrounding this project that would justify such a waiver. This document must be accompanied by certified payroll documents supporting this request.

Ms. Murphy has a Master of Science degree in Transportation Planning and over 28 years of practical expertise in the field of Travel Demand Forecasting Modeling. Ms. Murphy also offers considerable experience in model development and data analysis while working with a variety of statewide and regional travel demand models in Maine and New Hampshire.

Employee Name and Title/Classification	Check If Sub Consultant	Proposed Unburdened Direct Labor Rate ¹	(MaineDOT Use) *Approved	
			Yes	No
Julie Murphy/Traffic Modeling Subject Matter Expert	<input type="checkbox"/>	\$79.16	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

(Must be signed by Consultant's Representative)

By: <u></u>	Request Date: _____
Consultant Representative	
<u>Louise Bussiere, NNE Regional Finance Manager</u>	
(Printed Name & Title)	

(MaineDOT Internal Use Only)	
Comments: _____	

Program Manager or Designee: _____	_____
	Date
(Printed Name & Title)	
*Program Manager or Designee will indicate approval in the check boxes above.	
Contract Procurement Office: _____	_____
Debora B. Farrell C.P.M., Director	Date

¹ For adjustable rate contracts, a new Wage Rate Waiver Request Form must be submitted if there is a change in any previously approved rate(s) above the hourly unburdened direct labor rate limits.

Julie McClennen Murphy

Travel Demand Modeling



Julie is the lead modeler in VHB's travel demand forecasting modeling group, and she offers considerable experience in model development and data analysis. She has worked with a variety of statewide and regional travel demand models using CUBE/Voyager, TransCAD, and other software.

28 years of professional experience

Education

MS, Transportation Planning,
Northeastern University, 1999

BA, Economics, University of
Pennsylvania, 1992

MA, Regional Science,
University of Pennsylvania, 1992

Southern New Hampshire Planning Commission On-Call Engineering

Julie provided regional Travel Demand Model services. The first task was to review, summarize and document the existing 2015 regional model. Next, Julie developed the 2045 future model files including the model script, future lane use assumptions and roadway assumptions. The model output was documented and used as input to the Regional Transportation Plan. The model output summarized the existing and future vehicle miles traveled, the volumes to available traffic counts, and summarized volume growth rates and level of service on roadways. At the completion of the contract, Julie provided training to the SNHPC's staff on their Travel Demand Model as well as the CUBE/Voyager software.

Dates: 11/2018 – 6/2020, and just re-awarded

Androscoggin Transportation Resource Center (ATRC) Travel Demand Modeling, Lewiston/Auburn, ME

While working on this project, Julie was involved in an extensive review and update of the model. Julie also added a bus mode share component to the model and provided training to the ATRC staff. The addition of transit allows the model to be used to test planning level changes to the bus system. Most recently, Julie used the model to provide model output along a corridor assuming different land use assumptions.

Dates: 12/2016-12/2017 and 12/2019-12/2019

I-293 Exits 6 and 7 - New Hampshire Department of Transportation

Julie worked with the SNHPC's regional model for the I-293 project in New Hampshire. The modeling component of the project involved understanding how the model operated, reviewing input and output files, and identifying the model's strengths and weaknesses. Julie worked with the agency's modeler to develop a methodology to best use the model as a tool to help with the I-293 project. For this project, Julie used the daily model output to create a morning and peak hour model to test roadway alternatives.

Dates: 10/2015 – ongoing

MassDOT, Metro Boston Travel Demand Model, Massachusetts

For the Massachusetts Department of Transportation (MassDOT), Julie developed a Metro Boston travel demand model based on and compatible with the larger Central Transportation Planning Staff (CTPS) regional model. As part of this work, Julie has added detail to both the roadway network and the traffic analysis system in addition to incorporating over 3,800 counts to the roadway network. The model is bound by Route 128 and will facilitate the review and evaluation of multiple construction

scenarios, sequencing alternatives, and proposed traffic management plans to support decisions regarding project sequencing and mitigation by MassDOT.

Dates: 2/2019-ongoing

MassDOT, Kelley Square Improvements, Worcester, MA

Julie used the Central Massachusetts Regional Planning Commission's TransCAD Travel Demand Model to understand existing and future travel patterns and demands through and around Kelley Square. The project included a very aggressive design and public outreach schedule for VHB, the City and MassDOT and navigated the design process in just about one year. The project design began in November 2018 and was advertised by MassDOT in July 2019. The proposed improvements included a Hybrid Roundabout (aka "peanut") as the preferred alternative, which allowed for the neighborhood connectivity to be enhanced. This type of roundabout was the first of its kind for Massachusetts.

Dates: 8/2018-ongoing

Travel Demand Modeling, Maryland

Julie was in charge of running the Maryland Statewide Highway CUBE Travel Demand Model for the Columbia Gateway Planning Study and I-95. As part of this work, the roadway network and transit networks were reviewed and edited so that they represented existing conditions as well as planned improvements. The model was run to test the transportation demand impact of a large multi-use development near Exit 41 on I-95. To test the impact of this development, the statewide model was edited to add more detail to the model network. The traffic analysis zones were disaggregated based on the proposed development plan. The adjusted model was re-calibrated and run to estimate new future year traffic volumes. Adjusted daily as well as morning and evening peak hour volumes were developed provided for further micro-simulation analysis.

Dates: 3/2016-11/2016

Travel Demand Modeling, Virginia and Washington DC

Julie helped develop a Short Term Ridership Model for the Washington, DC area. She worked with Washington Metropolitan Area Transit Authority (WMATA) to identify relevant data available for predicting Metrobus and Metrorail ridership. Some relevant data were within WMATA's control (e.g., fare values or service-levels), while others were not (e.g., 1/2-mile Metrorail station walkshed or 1/4-mile Metrobus corridor buffer demographics, Capital Bikeshare, average gas prices, and historic weather patterns). Julie also extracted relevant data from the Metropolitan Washington Council of Governments (MWCOG) travel demand model.

Dates: 3/2017 – 5/2018

Attachment E
BACTS 2022-2023 UPWP
As of 07/31/2022

Task	Project	Total Alloted	Total Spent	In-Kind	Total Remaining	Contract to Date Trend			Forecasted Trend (Projected Figures)				
						Actual % Usage	Amount Should be as of 07/31	Variance	Total Remaining (Less In Kind)	Salary	Consultant	Direct Expenses	Estimated Remaining
	FHWA						29.2%						
1	Admin and Coordination	\$333,914	\$86,930	\$0	\$246,984	26.0%	\$97,392	\$10,461	\$246,984	\$204,811	\$0	\$16,306	\$25,867
2	Programming	\$64,000	\$5,341	\$0	\$58,659	8.3%	\$18,667	\$13,326	\$58,659	\$12,952	\$10,000	\$519	\$35,188
3	Data and Studies	\$198,500	\$39,919	\$0	\$158,581	20.1%	\$57,896	\$17,977	\$158,581	\$85,353	\$50,000	\$11,592	\$11,636
4	Planning	\$184,000	\$10,019	\$0	\$173,981	5.4%	\$53,667	\$43,648	\$173,981	\$24,282	\$50,000	\$2,549	\$97,149
5*	Unallocated 2020-2021	\$125,000	\$16,176	\$0	\$108,824	12.9%	\$36,458	\$20,282	\$108,824	\$9,695	\$97,816	\$0	\$1,314
Total FHWA		\$905,414	\$158,385	\$0	\$747,029	17.49%	\$264,079	\$105,694	\$747,029	\$337,093	\$207,816	\$30,966	\$171,155
	FTA												
1	Admin and Coordination	\$49,628	\$18,979	\$3,796	\$26,853	38.2%	\$14,475	-\$4,504	\$20,723	\$45,096	\$0	\$996	-\$25,369
2	Programming	\$31,200	\$1,750	\$350	\$29,100	5.6%	\$9,100	\$7,350	\$23,210	\$4,250	\$0	\$0	\$18,960
3	Data and Studies	\$31,200	\$1,095	\$219	\$29,886	3.5%	\$9,100	\$8,005	\$23,865	\$2,658	\$0	\$0	\$21,207
4	Planning	\$93,600	\$9,885	\$1,977	\$81,737	10.6%	\$27,300	\$17,415	\$64,995	\$24,007	\$0	\$0	\$40,987
Total FTA		\$205,628	\$31,709	\$6,342	\$167,577	15.42%	\$59,975	\$28,266	\$132,793	\$76,012	\$0	\$996	\$55,785
Total		\$1,111,042	\$190,094	\$6,342	\$914,606	17.11%	\$324,054	\$133,960	\$879,822	\$413,104	\$207,816	\$31,962	\$226,940

* - Task 5 - Staff are working with MaineDOT and is currently in the process of being added to the 2022-2023 UPWP.