SWRPC | Southwest Region Planning Commission

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REQUEST FOR QUALIFICATIONS: TIMBER FOR TRANSIT ENGINEERING AND PREDEVELOPMENT SERVICES

1. Project Background and Description

Southwest Region Planning Commission (SWRPC) is seeking Statements of Qualifications from engineering firms for services related to its project “Bridging the Gap: Developing the Timber-to-Transit Value Chain in the Monadnock Region and Beyond.” The initiative is funded through the Timber for Transit Program, administered by the Northern Border Regional Commission (NBRC). This project aims to demonstrate how engineered and conventional wood products could help address the transportation infrastructure needs of rural communities in Cheshire County, NH. The full project proposal is available as Attachment 1 to this RFQ.

2. Scope of Services

The professional services sought through this RFQ will primarily support the following activities.

2.1. Engineering and predevelopment assistance to assess the feasibility of incorporating innovative timber products into several high-priority transportation infrastructure projects.

These projects will be selected through an inventory and prioritization project undertaken by SWRPC in coordination with a Project Work Group composed of municipal, transportation sector, and timber industry stakeholders. Engineering services for each selected project will be assigned under individual task orders negotiated on a lump sum basis. Specific engineering activities will depend on the unique characteristics and goals of each project but are anticipated to include tasks such as: inspection of existing assets considered for renovation/replacement; conceptual, preliminary, or final design; permitting assistance; cost estimation; maintenance and life-cycle analysis; other predevelopment work necessary to advance the project. Projects selected for engineering assistance are anticipated to include bridge construction and/or renovation, but other types of transportation infrastructure are eligible. Examples include bus shelters, transit facilities, trail kiosks, parking structures, and more.

2.2. Update and expansion of existing standard bridge superstructure plans.

The U.S. Forest Service (USFS) has published a variety of guidance documents that include template designs for short-span timber bridges. One example is “Standard Plans for Timber

Bridge Superstructures" (FPL-GTR-125), which includes a variety of template designs for short-span timber bridges. These designs, however, were not developed using the Load and Resistance Factor Design (LFRD) methodology, which AASHTO adopted as a requirement in 2007. In 2019, the USFS published "Standard Plans for Glue-Laminated Timber Bridge Superstructures" (FPL-GTR-260), which included LFRD specifications, but not for species native to northern New England. These two examples are referenced for illustrative purposes—the USFS has developed additional design aids on the subject of timber bridge construction.

Developing standard plans that both comply with the LFRD methodology and incorporate specifications for native species would fill a key gap currently preventing the construction of timber bridges with locally produced timber products—in Cheshire County and across the NBRC service area. The adaptation of these existing bridge plans represents a prime opportunity to leverage previous engineering work, expanding the impact of past investment in the topic. Template plans will help municipalities and other prospective clients save on engineering costs and time when considering designs that rely on timber-based products sourced from species native to northern New England.

The superstructure types and systems to be adapted for Northern New England tree species (eastern hemlock, domestic spruce-pine-fir) will be determined collaboratively with input from the participating firm and the project work group.

Each adapted design aids will be expected to include information similar to that included in the USFS standard bridge plans reference above, including dimensioned drawings, details of connections, material specifications (grade of lumber, connector hardware, preservative treatments if any), and any necessary construction notes. Each design should explicitly state applicable span ranges, loading limits, timber species, and wood volume incorporated.

The engaged firm will be expected to participate in a quality assurance process, incorporate feedback through a review process (e.g., review by NHDOT bridge engineers or USFS experts) to finalize the standard plans. Deliver final documents in both printable (PDF) and editable formats (e.g., AutoCAD drawings and Word specs or similar). SWRPC is also interested in proposals that include MathCAD worksheets to assist with load rating calculations for template superstructure designs.

2.3. Project Management and Coordination

Throughout tasks described in sections 2.1 and 2.2, above, the consultant will attend project meetings (kick-off, periodic progress meetings, and a wrap-up or presentation meeting). The consultant will coordinate with the SWRPC project manager to provide updates, seek input, and ensure that the work meets the project objectives. The consultant may also be asked to present interim findings or draft materials to stakeholders, for example, presenting work products to municipal officials or introducing the draft standard plans at a regional workshop.

3. Timeframe

SWRPC aims to engage a qualified firm by the end of January 2026. All project activities performed by the engaged firm must be complete by February 2027. The sequencing of project activities is contingent on individual infrastructure projects selected for engineering/predevelopment assistance an execution of corresponding task orders.

4. Statement of Qualifications (SOQ) Requirements

Interested firms should format their Statement of Qualifications to include the following sections. The SOQ should be concise (recommended 15-20 pages max, excluding resumes or appendices) and sufficiently detailed to illustrate the firm's capabilities.

4.1. Cover Letter

A brief letter of interest, introducing the firm and summarizing the primary qualifications. The letter should be signed by an authorized representative of the firm and include contact information for the person best suited to answer questions about the submission.

4.2. Firm Overview

General information about the firm, including full legal name, office location(s), years in business, and areas of specialization. If multiple firms are teaming, provide an overview for each key team member firm and identify the lead contract firm.

4.3. Project Team & Key Personnel

An organization chart and/or descriptions of the proposed project team. Identify key personnel who will be assigned to this project, including the project manager, lead structural engineer(s), and any specialty sub-consultants (e.g., timber material specialists, cost estimators, etc.). For each key individual, provide a brief summary of relevant experience, role in the project, and credentials (education, P.E. license, other certifications). Full resumes can be attached in an appendix for reference.

4.4. Relevant Experience

Describe the firm's experience with **similar projects or services**. Emphasize projects that involved:

1. **Timber or Mass Timber Engineering:** Examples of bridge designs, structural assessments, or building projects utilizing mass timber, glulam, cross-laminated timber (CLT), or other wood technologies, especially any that demonstrate knowledge of the unique considerations of timber (connections, decay prevention, etc.).
2. **Bridge and Infrastructure Design:** Experience with highway or pedestrian bridge design, particularly short-span bridges and those in rural or municipal settings. Highlight familiarity with AASHTO standards and if possible, mention any projects using AASHTO LRFD code.
3. **Standard Plan Development or Research:** Any instances of developing standard designs or contributing to design guides, whether for bridges or other structures. Work done for

government agencies or initiatives (e.g., FHWA, state DOTs, USFS) in this vein would be relevant.
4. **Feasibility Studies and Life-Cycle Cost Analysis:** Projects involving comparative analysis of design alternatives, cost estimation, or life-cycle evaluations, especially with a focus on innovative materials.

For each example project, provide a brief description including the client, location, date or year, scope of the firm's involvement, and outcomes. Indicate how each project demonstrates the firm's suitability for the scope of work described in section 2.

4.5. Approach and Understanding:

Provide a narrative outlining the firm's understanding of the project and a general approach to fulfilling the tasks. While a detailed work plan is not required at this RFQ stage, this section should convince evaluators that the firm has thoughtful insight into:

1. The challenges and key considerations of using timber in transportation infrastructure (e.g., structural performance, durability, regulatory acceptance).
2. The requirements of updating standard bridge plans to LRFD and integrating local species, including any anticipated technical hurdles and how the firm might address them.
3. Coordination and project management approach, including how the firm will liaise with SWRPC, NBRC (as needed for compliance), and other stakeholders.
4. A high-level timeline or ability to meet schedule demands (if there are specific interim deadlines or sequence, mention understanding of those).
5. Whether the approach would address the project scope of work in its entirety, or only certain elements. (In cases where a candidate firm proposes to address only a portion of the scope of work, they must justify why this is the case, e.g., they are uniquely qualified for certain aspects of the scope.)

This section may also include any initial ideas or innovations the firm would bring to add value to the project, such as use of advanced modeling for life-cycle analysis, strategies for ensuring designs get approved by regulators, or experience in community outreach regarding timber structures.

4.6. Staff Availability and Capacity

Affirm the availability of the key personnel for the expected duration of the project. Note the current workload of the team and how this project will be integrated to ensure on-time completion. If certain tasks will be subcontracted, identify the subcontractor and their qualifications. Clearly state that the firm has the capacity to begin work promptly upon award and to dedicate resources necessary for a project of this scope.

4.7. References

Provide at least three (3) client references for recent projects (ideally within the last 5-7 years) that are relevant to the scope of this RFQ. For each reference, include: client organization, name and title of the reference person, phone number and email, the project name/description, and the services your firm provided. These references should be able to speak to the firm’s technical performance, project management, communication, and adherence to schedule/budget. SWRPC may contact these references as part of the evaluation.

4.8. Additional Information (Optional)

Firms may include any additional information that highlights their qualifications or approach. This could include descriptions of internal quality control processes, awards or recognition for relevant work, involvement in industry groups related to timber engineering, or any unique resources the firm brings (for example, in-house timber testing labs or proprietary design software, etc.). Keep additional content focused and relevant to the project.

5. Evaluation and Selection

SWRPC will evaluate submissions according to a qualifications-based selection process. A selection committee will review each Statement of Qualifications and score them based on the following Evaluation Criteria (with approximate weights):

1. **Experience & Qualifications of Team (20%):** The expertise, experience, and qualifications of the proposed personnel and team. Emphasis on demonstrated structural engineering competence (especially in timber structures and bridge design) and any unique qualifications in timber material science or innovative infrastructure. Familiarity with Northern New England and working with rural communities will be looked upon favorably.
2. **Relevant Project Experience (20%):** The firm’s track record with similar projects. Quality and relevance of past work in timber engineering, bridge design, feasibility studies, and knowledge of applicable standards (AASHTO, LRFD, etc.). Successful completion of projects of comparable complexity will rate highly.
3. **Project Understanding & Approach (20%):** The depth of understanding of the project goals reflected in the SOQ and the soundness of the firm’s proposed approach. This includes recognition of potential challenges and the creativity/practicality of the solutions proposed to meet the project’s objectives.
4. **Capacity & Schedule (20%):** The firm’s ability to staff the project and meet the timeline. This includes evaluation of current workload, availability of key staff, and confidence that the firm can allocate sufficient resources.
5. **Clarity & Quality of SOQ (20%):** The overall quality, professionalism, and completeness of the submission. A well-organized, clearly written, and concise SOQ that includes all requested information will reflect positively on the firm.

Each criterion will be scored and weighted. The committee may assign numeric scores or rankings for each category and then develop an overall ranking of firms. SWRPC intends to select the top-ranked firm to enter negotiations for a contract. If an acceptable agreement cannot be reached with the top-ranked firm, SWRPC reserves the right to negotiate with the next highest-ranked firm, and so on.

6. Submission Details

Interested firms must submit their Statement of Qualifications **by 5:00 PM (EST) on December 19, 2025**. Submissions should be made electronically in PDF format. Email the SOQ to:

Todd Horner, Executive Director
Southwest Region Planning Commission
Email: thorner@swrpc.org
Phone: (603) 357-0557

Please use the subject line **"SOQ – Timber for Transit Engineering Services"** in your email. You should receive a confirmation email upon successful receipt of your submission. If you do not receive confirmation within 2 business days, please contact us to verify receipt.

Optional Hard Copy: In addition to the required electronic submission, firms **may** deliver **one (1) printed copy** or a USB drive with the PDF to the SWRPC office at 37 Ashuelot Street, Keene, NH 03431, by the same deadline. However, an email submission is sufficient and preferred. Late submissions will not be accepted under any circumstances.

Questions and Clarifications: Questions regarding this RFQ must be submitted in writing via email to Todd Horner at thorner@swrpc.org by October 30, 2025. Answers to all questions will be compiled and posted as an addendum on the SWRPC website by November 15, 2025, and sent via email to all firms who have formally requested a copy of this RFQ or registered interest. In order to maintain a fair procurement process, please refrain from direct contact with SWRPC staff or committee members regarding this project, aside from the prescribed communications channels for RFQ questions.

Tentative Procurement Schedule: *(dates subject to change)*

1. RFQ Release: October 8, 2025
2. Deadline for Questions: October 30, 2025
3. Addendum (Q&A) Posted (if needed): November 15, 2025
4. SOQ Submission Deadline: December 19, 2025
5. Evaluation of Submissions: January 9, 2026
6. Selection and Notification of Top-Ranked Firm: January 15, 2026
7. Negotiation of Scope and Contract: January 30, 2026
8. Project Kickoff (anticipated): February 30, 2026

SWRPC aims to have a consultant under contract and beginning work by February 30, 2026. The contract term is expected to run through February 2027 to allow sufficient time for completion of all tasks and deliverables, in line with NBRC project timelines.

7. Contractual Information

The contract awarded will be a Professional Services Agreement (PSA) between SWRPC and the selected firm. The contract will include standard terms and conditions and will incorporate federal requirements associated with the NBRC funding. These requirements include but are not limited to: adherence to 2 CFR 200 procurement standards, civil rights and nondiscrimination clauses, and debarment and suspension verification. A draft contract will be provided during contract negotiations. The consultant will be required to carry adequate insurance (general liability, professional liability, workers comp, etc. as specified by SWRPC) and to indemnify SWRPC and the funding agencies as per standard contract language.

All activities specified by the PSA will be authorized through individual task orders, each on a lump sum basis. The PSA will stipulate a total not-to-exceed contract amount.

All work products developed under the project will become of the property of SWRPC.

8. NBRC Compliance

This procurement and subsequent project work will adhere to NBRC program requirements as outlined in the NBRC Grant Agreement and Compliance Manual. All services must be performed in a manner consistent with federal grant guidelines and 2 CFR 200. The selected consultant will be expected to assist SWRPC in meeting reporting requirements and ensuring compliance throughout the project.

9. Rights Reserved

SWRPC reserves the right to reject any and all submissions, to waive any informalities or irregularities in submissions, and to cancel or modify the RFQ process at any time if it is in the best interest of SWRPC or the NBRC program. This RFQ does not constitute a contract or an offer of employment. The cost of preparing and submitting an SOQ is the sole responsibility of the consultant team; SWRPC will not reimburse any costs incurred. All submissions become the property of SWRPC and will be kept confidential throughout the evaluation process.

10. Equal Opportunity

SWRPC is an Equal Opportunity Employer. We encourage responses from minority-owned, women-owned, and disadvantaged business enterprises (MBE/WBE/DBE). All qualified firms will receive consideration without regard to race, color, religion, creed, age, sex, sexual orientation, gender identity, national origin, or disability status. The selection of a consultant will be made strictly on the basis of qualifications, in accordance with **Title VI of the Civil Rights Act of 1964** and related federal and state nondiscrimination laws.

Thank you for your interest in the **Timber for Transit** Engineering Services RFQ. We look forward to reviewing your qualifications. Please do not hesitate to reach out via the contact information above if you have questions or require any clarifications (before the question deadline).

11. Attachment 1

Project Information

Project Abstract

The proposed project will assess the feasibility of meeting a variety of rural transportation infrastructure needs with innovative timber products sourced from regionally available tree species. The project focuses on overcoming challenges and building on opportunities specific to transportation infrastructure in Cheshire County, NH, but many of the proposed activities and work products would benefit the entire NBRC service area. Recognizing that many if not all communities in Cheshire County struggle with aging transportation infrastructure and transportation infrastructure vulnerable to the effects of climate change, the proposed work scope concentrates on how timber products can be effectively integrated with efforts to rehabilitate, adaptively reuse, upgrade, or replace existing infrastructure. The work scope will entail a multifaceted approach, which can be summarized as follows:

1. <u>Formation of a project work group</u> to guide proposed activities, facilitate cross-sector coordination with both transportation infrastructure and timber product stakeholders, incorporate expertise in innovative technologies, and promote project findings with target audiences, e.g., rural selectboards, municipal road agents, bridge design and construction firms. In forming the work group, SWRPC staff will collaborate closely with forest industry specialists at UNH Extension—a key project partner and anticipated subgrantee. UNH Extension staff will lend the project subject matter expertise that will be critical in identifying which stakeholders to engage. Work group members are also expected to include state agency staff, forest product professionals, builders, engineering professionals, timber framing educators, and others. NBRC staff would also be welcome to participate as a member of the work group. In developing this application, several potential work group members gathered to discuss project goals, scope of work, and outcomes. Entities represented at this meeting included the Town of Alstead, UNH Extension, NH Department of Transportation, Horsley Witten Group, and Hansen Bridge. Other potential work group members, such as the Monadnock Region Rail Trail Collaborative, were also engaged over the course of application development.
2. <u>An inventory of bridges and other transportation infrastructure in the region as candidates for repair or improvement with timber products or suitably replaced with timber-based structures</u>. In assessing suitability, the inventory will consider criteria such as: bridge span, deck width, presence/type of crash rails, and regional capabilities to manufacture particular timber products. Such an inventory would include facilities for motorized transportation as well as those that support alternative modes like walking and bicycling. To the extent possible, the inventory would leverage existing data sources, such as the State of New Hampshire's Municipal Red List, which identifies town-owned bridges requiring annual inspections due to poor condition. The inventory will help demonstrate market demand for timber products in the transportation sector and guide future outreach to municipalities with bridge-related needs well-suited to timber-based designs. It will also include a prioritization process that will guide the selection of specific projects for more in-depth feasibility analysis.
    1. <u>Inspection, engineering, cost estimation, life-cycle analysis, and other predevelopment work necessary to assess the feasibility of incorporating innovative timber products into several high-priority transportation</u>

infrastructure projects, as identified through the inventory and prioritization process. Permitting requirements may also be evaluated and considered. Engineering and other pre-development services would be procured through a competitive process compliant with NBRC requirements. Where applicable, predevelopment activities would conform with both federal and state-level policies and procedures. If ultimately implemented, these projects could serve as highly visible examples showcasing the value of timber-based transportation infrastructure. Projects selected for feasibility analysis are to be confirmed through the inventory and prioritization process. Example projects, identified through previous planning initiatives and coordination with local communities, are listed below as initial candidates.

2. The Fort Hill Trail Railroad Trestle Bridge. This abandoned bridge crosses the Connecticut River, connecting the Fort Hill Rail Trail in Hinsdale, NH with Riverside Drive, south of downtown Brattleboro, VT. Upon preliminary inspection, the steel structure and abutments of the bridge are in good condition, but redecking is necessary and potential exists for cantilevered observation platforms, either of which could showcase local and/or innovative timber products. If adapted to non-motorized use, the bridge would form a vital transportation link and outdoor recreational facility.
3. Hinsdale-Brattleboro Greenway (Hinsdale, NH and Brattleboro, VT). Located north of the Fort Hill Trail Railroad Trestle Bridge, the Hinsdale-Brattleboro Greenway also spans the Connecticut River, connects the same communities, and represents an opportunity for adaptive reuse. Currently in service as a crossing for motorized traffic, the Greenway, which consists of two bridges and an island, will be converted to non-motorized use once construction of a new bridge is complete in 2025. The Greenway has potential to serve as a transportation link between two rural river communities as well as a tourism destination and recreational facility. Wood product applications include: a bathroom facility, amphitheater with seating, docks for recreational boats, and exhibit platforms for art installations.
4. Hill Road Bridge over Darby Brook, (Bridge No. 058/136, Alstead, NH). The original structure failed in 2012 and was since replaced by two single-lane steel logging bridges, a temporary fix in need of a more permanent solution. The crossing experiences a significant amount of commercial logging traffic. Two gravel operations, one of which supplies all of the town's road building and treatment materials, are located within a mile of the crossing.
5. Cresson Bridge (Swanzey, NH). This historic covered bridge serves a link between the Ashuelot Rail Trail and Swanzey Center—a village center in the Town of Swanzey with a range of public facilities, such as Mt. Caesar Elementary School and Town Hall. The Town has extended a sidewalk to the bridge, but, in order to cross, pedestrians must walk through the tunnel where motorized vehicles travel. Potential exists to add a cantilevered sidewalk to the exterior of the bridge in order to facilitate safe pedestrian passage.

3. Updating and expanding existing standard superstructure plans for timber bridges so that they meet American Association of State Highway Transportation Officials (AASHTO) design criteria and incorporate specifications for tree species native to the NBRC service area, e.g., eastern hemlock and domestic spruce fir (SPFs). In 2001, the U.S. Forest Service published "Standard Plans for Timber Bridge Superstructures" (FPL-GTR-125), which includes a variety of template designs for short-span timber bridges. These designs, however, were not developed using the Load and Resistance Factor Design (LFRD) methodology, which AASHTO adopted as a requirement in 2007. In 2019, the U.S. Forest Service published "Standard Plans for Glue-Laminated

Timber Bridge Superstructures" (FPL-GTR-260), which included LFRD specifications, but not for species native to northern New England. Developing standard plans that both comply with the LFRD methodology and incorporate specifications for native species would fill a key gap currently preventing the construction of timber bridges with local species—in Cheshire County and across the NBRC service area. The adaptation of these existing bridge plans represents a prime opportunity to leverage previous engineering work, expanding the impact of past investment in the topic. Template plans will help municipalities and other prospective clients save on engineering costs and time when considering designs that rely on timber-based products sourced from local species. These saved costs will help build the market for local, innovative wood products in the transportation sector.

4. <u>Assess feasibility of expanding regional capabilities to manufacture wood products critical to transportation infrastructure</u>. Incorporation of innovative wood products into transportation infrastructure is currently limited by the lack of manufacturing capabilities in the NBRC service area and surrounding region. There are no known manufacturers of eastern hemlock or SPFs (there may be some SPFs capacity in the Pacific Northwest). There are New England businesses positioning themselves to manufacture glulam from these species should this project be funded. UNH Extension's forest industry specialist will serve as lead on this component of the work scope and will coordinate with the project work group.
5. <u>Development of a guidebook targeting rural municipalities interested in timber bridge construction and innovative use of forest products in transportation infrastructure projects</u>. A guide written for a non-technical audience will be essential for municipalities interested in assessing the feasibility of timber bridge construction and other transportation infrastructure applications. Improved understanding among municipalities regarding the relative benefits of timber construction, top use cases, and steps in the feasibility assessment process will be instrumental in building the market for timber-based transportation infrastructure.
6. <u>Outreach to builders and municipal stakeholders regarding the guidebook and its applicability to local needs</u>. Outreach efforts could include development of a web page with key resources, communication and coordination with town administrators and road agents, as well as presentation to selectboards. Outreach to builders with experience in timber-based construction could help encourage their entrance or expansion into the transportation sector, thereby supporting high-paying jobs in the trades and serving to address workforce shortages that often stall or prevent transportation infrastructure projects from moving forward.
7. <u>Procurement, project management, and grant administration</u>. A key advantage to a regional proposal rather than one that focuses exclusively on local needs is that it addresses the limited capacity that individual rural communities have to pursue and manage federally funded projects. It also creates efficiency with respect to procurement, project management, and grant administration activities.

Project Goals and Outcomes

Project goals might be best summarized under two categories: (1) direct outputs that the project is anticipated to produce in the short term and (2) outcomes that are expected to occur on a longer-term basis as a second-order effect.

Anticipated outputs include:

1. <u>Shovel-ready transportation infrastructure projects in underserved rural communities</u>. Engineering and pre-development activities described in the scope of work will advance critical projects from the early conceptual phase towards a state of implementation readiness. Many of Cheshire County's rural communities, which have

limited staff and volunteer capacity, struggle during project pre-development, reducing their ability to access state/federal resources and address local transportation needs. These small communities are also constrained by their ability to raise sufficient property tax revenue, on which they're heavily reliant to support all municipal operations.

2. Detailed understanding regarding the feasibility of incorporating local and innovative forest products into specific transportation infrastructure projects that meet local needs. Specific projects anticipated in the scope of work as candidates for pre-development activities will serve as useful case studies regarding the potential transportation-related applications of innovative and regionally sourced timber products. These case studies will benefit not only the communities where the projects are located, but also communities elsewhere in the NBRC service area that may have similar transportation infrastructure needs.
3. Stronger market case for both solid sawn and engineered wood products sourced from tree species native to the NBRC service area. The project will highlight several projects that demonstrate the promise of timber as a transportation infrastructure building material. It will also produce resources that bridge gaps in the timber-to-transit value chain of the NBRC service area. Both will serve to build the market case for timber products, encouraging investment by forest industry producers to enhance and/or scale their operations.
4. Increased knowledge and capacity among Cheshire County municipalities and others located in the NBRC service area to rehabilitate, adapt, or replace bridges utilizing timber-based products. This improved knowledge base will also help build the market for local timber products while potentially saving rural communities infrastructure-related costs.

Anticipated outcomes include:

1. An increase in jobs, wages, and revenue for firms that harvest, process, and transport forest products with applications in transportation infrastructure. The project is expected to increase demand for timber products, thereby generating a commensurate increase in economic activity on the supply side of the value chain.
2. A better integrated, more localized "forest-to-bridge" value chain for timber products in the NBRC service area. Currently, virtually all design guidance drives specifiers of significant transportation infrastructure to procure forest products that are not manufactured in the region. The proposed project aims to create opportunities that will allow the forest industry within the northern border region to access these currently unavailable markets and support all sectors of the forest industry, from timber harvesters to end users.
3. Enhanced transportation options for rural communities, leading to reduced transportation costs, improved mobility and accessibility, improved safety, and increased commercial activity.
4. A reduction in embodied greenhouse gas emissions associated with transportation infrastructure. Production of conventional transportation infrastructure building materials such as concrete and steel are typically associated with high levels of greenhouse gas emissions. Timber, meanwhile, is a renewable building material that captures and stores carbon.
5. Expanded opportunities for outdoor recreation and increased potential for tourism in Cheshire County communities. The proposed inventory and pre-development activities will encompass projects that serve both transportation and recreation-related functions, e.g., multimodal bridge facilities. The scope of work will ultimately support replacement, renovation, and other improvements to these infrastructure assets.

Project Beneficiaries and Community Context

The proposed project would benefit stakeholders along the entire value chain—or, more accurately, value chains—necessary for the raw material harvest, manufacture, deployment, and use of local, innovative timber products. Benefitting stakeholders include:

1. Rural workers employed in the forestry economy of the NBRC service area. The northern border region has experienced forest industry contraction over the last number of years. Targeted and thoughtful investment in forest markets, consistent with the proposal outlined here, is a keystone strategy all northern border region states have identified as important (see letter of support, Patrick Hackley; FOR Maine; VT Forest Opportunity Roadmap; NH Forest Action Plan). Markets and sales are the foundation for profitability and resilient businesses. It is difficult to determine exactly how much new volume of wood this project will provide. Based on the most recent economic contribution study of the NH Forest industry (i.e. sales and employment data), it is estimated that a job is associated with every 700 timbers that are manufactured and sold. The long term trend toward higher productivity employees reflects an associated trend of higher wages and skilled positions. By building a market case and demonstrating transportation-related applications of regional timber products, the project will help increase demand for these products and the services needed to deploy them.
2. Small municipalities with critical transportation needs and limited capacity. Cheshire County communities receiving engineering and other pre-development services would benefit directly. These engineering and pre-development services would advance specific transportation projects towards implementation. In addition, all Cheshire County communities—over half of which have a population below 2,000—would benefit from the development of a guide on timber bridge feasibility and related outreach. Benefits would also accrue to municipalities beyond Cheshire County, across the NBRC service area, who could also make use of the guide as well as standard bridge plans adapted to native tree species.
3. Rural residents with limited transportation options. Residents in towns receiving engineering and pre-development assistance will benefit from improved transportation facilities once those projects are ultimately implemented. Specific benefits will vary from project to project, but, in aggregate, are anticipated to include expanded opportunities for active transportation, reduced commuting times, savings in transportation costs, and greater resilience to severe rainfall events which continue to increase as a result of climate change. This latter benefit stems from increased connectivity in the transportation network that's expected to result from repaired or replaced bridges, which are important for maintaining alternative routes for evacuation or response by emergency services.
4. Rural communities aiming to attract tourists, new residents, and workers. Many communities across the NBRC service area struggle with population loss, shrinking workforces, and limited local economic activity. Several aspects of the proposed work scope aim at improving transportation infrastructure for outdoor recreation, a key amenity that many visitors and prospective residents look for in a place to vacation or relocate. These same visitors and prospective residents also typically expect roads and bridges to remain open and safe for motorized traffic.

Statement of Need

The proposed project aims to address several key challenges:

1. Aging transportation infrastructure in need of capital upgrades or replacement. For example, across Cheshire County, there are 43 bridges on the state's "red list," a

roster of structurally deficient bridges maintained by the New Hampshire Department of Transportation. Of these bridges, 31 are under municipal ownership, most of which are owned by towns with populations less than 5,000 people. The list has grown over recent years. In addition, state data indicates 2 closed bridges and 8 that are "bypassed." Many of these bridges can likely be repaired or replaced utilizing timber products sourced from the NBRC service area, either now or once the value chain(s) for innovative timber products such as glue-laminated stock have been further developed—one goal of this project. The ability to repair and replace bridges with local timber products could ultimately lead to cost savings for rural municipalities, which often struggle to raise sufficient revenue for capital improvements.

2. Lack of capacity among rural communities to navigate the pre-development process for transportation infrastructure projects. Most small towns have limited staff or rely entirely on volunteers to usher a project from initial need identification to a fully engineered scope of work ready for funding and implementation. This proposal seeks to resolve that lack of capacity by (1) packaging multiple location-specific projects into a regional proposal that can achieve certain efficiencies through an economy of scale and (2) creating resources and conducting outreach that will help guide municipalities across Cheshire County and the NBRC service area through the feasibility assessment and project pre-development process for timber bridges and other timber-based transportation infrastructure. Through its advisory work group, this project will also assemble a wide range of expertise typically unavailable to individual rural municipalities.
3. Key value chain gaps preventing or limiting the utilization of regionally sourced, innovative timber products in transportation infrastructure projects. One of these gaps is the lack of template timber bridge plans that conform with current standards and incorporate design specifications for regional tree species. This proposal aims to fill that gap directly by facilitating the development of such plans. Another missing link is the lack of glulam manufacturing capabilities in the northeastern U.S., specifically of glulam products utilizing regional tree species like eastern hemlock and domestic spruce fir. The project scope addresses this gap directly, through a proposed feasibility assessment that will build understanding regarding the necessary conditions for expanded manufacturing capabilities in the NBRC service area. It also addresses it indirectly, by demonstrating demand for glulam and other innovative wood products in the transportation sector.

Funding this project now is advantageous for several reasons. Location-specific feasibility assessments would set the stage for implementing high-visibility demonstration projects that could leverage funding from NBRC and/or other sources—an opportunity that is likely limited in duration due to finite timeline of provisions in the Bipartisan Infrastructure Law and other recent legislation. Another reason is the increasing urgency of climate change and the project's potential to reduce embodied carbon in the region's transportation infrastructure and to move the transportation sector toward carbon neutrality.

Program Investment Priorities

The proposed project aligns with many of the Timber for Transit Program investment priorities, including:

- Commitment to utilizing domestically sourced timber. A primary focus of the proposed project is to facilitate the incorporation of domestically sourced timber—including eastern hemlock and domestic spruce fir—into future transportation infrastructure projects. This will be a key consideration throughout the inventory, feasibility assessment, and template bridge design process.

- Demonstrating evidence of planning for climate resiliency, including but not limited to carbon capture, increased frequency and intensity of storm events, and sea level rise. The inventory will consider climate resiliency when identifying potential projects and prioritizing them for more in-depth feasibility analysis. For example, when evaluating potential bridge projects, their vulnerability to severe rainfall events will be considered, as will their function within the wider transportation network as a link to critical community facilities or as an evacuation route during flood events.
- Utilization of projects as a tool for university and industry education and training. The proposed project will enable UNH Extension staff to better engage forest industry stakeholders on evolving market opportunities within the transportation sector. It will also serve to educate UNH Extension staff and others regarding challenges and opportunities related to timber-based construction in the transportation sector.
- Alignment with state and community initiatives. The project is well-aligned with several state and community initiatives. For example, Goal 5 of the state's Economic Recovery and Expansion Strategy is "Recognize the role of infrastructure in driving the economy," also calling out the need to "modernize the transportation infrastructure" (p. 17). The proposed project seeks to meet local transportation infrastructure needs while simultaneously ushering in a new era of sustainable, timber-based construction in the transportation sector of the NBRC service area. At the regional level, the Comprehensive Economic Development Strategy (CEDS) for Southwest NH also notes the importance of supporting "a quality transportation system, both locally and regionally, to provide capacity for desired economic development" (Goal B, Objective 3). The proposed inventory and prioritization process will take into account whether individual projects are aligned with local master plans, capital improvement plans, or other planning documents.
- Inclusion of promotion/publication/marketing as part of project deliverables. A key element of the work scope is the development of educational resources targeting a non-technical audience. These resources will help municipal stakeholders and others better understand various use cases for where timber-based construction may be a cost-effective option for replacing, repairing, or improving transportation infrastructure. The work scope also entails proactive outreach to municipal stakeholders in order to promote these educational resources.
- Support of, benefit to, or engagement with communities that are historically underserved, marginalized, and adversely affected by poverty or inequality (pursuant to Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government). The proposed project benefits persons who live in rural areas, who constitute an underserved population under EO 13985. The small communities of Cheshire County often struggle to pursue and secure federal funding on an individual basis. The proposed project envisions a regional approach that would help to overcome this barrier. In addition, the inventory and prioritization process will consider to what extent individual projects benefit other historically underserved or marginalized populations.

Have you previously received NBRC funds?

If yes, please provide NBRC grant number.
NBRC19GNH14

Does this project serve a rural community with a population of less than 5,000?

Yes

Does this project benefit an underserved community?

The project most directly benefits communities of Cheshire County, which are all rural in nature. Twenty towns within the county have populations smaller than 5,000 people. The county also includes many other underserved communities. For example, areas of Alstead, Keene, and Winchester have proportionally large low-income populations relative to the rest of the nation, ranging from the 83rd to the 95th percentile. Many communities suffer from high unemployment, with areas of Fitzwilliam, Jaffrey, Keene, Richmond, Swanzey, and Winchester all ranking above the 80th percentile nationally. Prioritization of projects for feasibility assessment and pre-development activity will take into account the extent to which they benefit underserved communities.

Proposal

Approach and Methodology

Provide an explanation of the approach and methodology that will be used to meet the project goals and the expected outcomes and outputs. See Program User Manual for additional instructions on completing this section.

The approach and methodology related to each expected output and outcome can be summarized as follows:

- Outputs
    - <u>Shovel-ready transportation infrastructure projects in underserved rural communities</u>. A core component of the proposed work scope is making engineering and other predevelopment services more accessible to Cheshire County municipalities for transportation infrastructure projects that incorporate timber products. Cheshire County and its constituent communities are predominately rural and often lack the capacity to identify, pursue, and administer federal funding opportunities that could help address local transportation and timber economy-related needs. By aggregating local needs into a regional proposal, SWRPC aims to address this barrier. By seeking to benefit rural communities and their residents, the proposed project is in alignment with Executive Order 13985 and Timber for Transit investment priorities.
    - <u>Detailed understanding regarding the feasibility of incorporating local and innovative forest products into specific transportation infrastructure projects that meet local needs</u>. In helping municipalities and especially rural communities understand the potential benefits of less familiar building techniques, such as those that rely on innovative timber-based products, case studies can serve as a powerful educational resource. The proposed project will result in detailed case studies that document potential transportation-related applications of innovative and local timber products. The data and information for these case studies will be generated through the engineering and pre-development technical assistance provided to projects prioritized during the inventory process. This data and information will be packaged in the proposed guidebook for non-technical audiences, along with narrative

describing the transportation-related challenges and goals of the local community, the predevelopment process, the stakeholders involved, and any other information necessary to tell a story that resonates with other rural communities. SWRPC would welcome input and review from NBRC staff over the course of the project to help maximize the benefit of work products to the entire NBRC service area.

- Stronger market case for solid sawn and engineered wood products sourced from tree species native to the NBRC service area. This project seeks to respond to both immediate and long-term opportunities for the local timber industry to expand its activity in the transportation sector. The immediate opportunity involves building the market for solid sawn wood products sourced from local species such as eastern hemlock or domestic spruce fir. Timber producers in the NBRC service area currently supply solid sawn, renewable materials that could offer a price-competitive alternative to steel and concrete in a variety of transportation-related applications. The proposed work scope will support market development for these products by inventorying transportation infrastructure needs in the region, identifying which projects might be suitable candidates for solid sawn materials, and, if possible, estimating the volume and value of the timber products necessary to construct those projects—data that could be utilized by future market analyses.

  The longer-term market opportunity relates to engineered wood products such as glulam and CLT. This is a longer-term opportunity because the northeastern U.S. currently lacks the capability to manufacture glulam and CLT with native species. The nearest facility capable of manufacturing CLT with eastern hemlock and SPFs is located in the Midwest. There are no eastern hemlock glulam manufacturers and no known SPFs glulam producers. Until this gap in the value chain is addressed, any economic benefit of incorporating engineered timber products into transportation infrastructure will accrue to forest owners and timber producers located outside of the NBRC service area. For this reason, the work scope takes a "both and" approach, seeking in the short term to boost demand for solid sawn products while working diligently to build the market for locally sourced, engineered timber products. By taking this approach, the proposal seeks to respond to the NBRC investment priority of "utilizing domestically sourced timber." By considering both solid sawn and engineered wood products, the proposal maximizes the opportunity to support domestic timber production, particularly in the NBRC service area.

  The work scope supports longer term market development of innovative, engineered wood products in several ways. The first is by updating template superstructure designs that incorporate engineered products like glulam. For example, several of the templates in U.S. Forest Service FPL-GTR-125 incorporate glulam—they just need to be adapted to local species like eastern hemlock. A second way that the scope supports market development for engineered wood products is by considering possible use cases of glulam and other innovative timber-based materials through engineering and related predevelopment activity on sites prioritized through the inventory process. A third way is by supporting wood product manufacturers in New Hampshire, assisting them in exploring the equipment, certification, and training necessary to begin manufacturing glulam and other engineered products from local species.

- <u>Increased knowledge and capacity among Cheshire County municipalities and others located in the NBRC service area to rehabilitate, adapt, or replace bridges utilizing timber-based products</u>. In addition to the case studies and guidebook, project deliverables include updated template designs for timber bridge superstructures that build on previous research and publications of the U.S. Forest Service. These template bridge plans will feature both solid sawn and engineered products derived from tree species harvested in the NBRC service area. The plans will be referenced and/or incorporated into the guidebook and will help reduce the time and cost associated with predevelopment of timber-based bridges, both in Cheshire County and beyond. The guidebook may also include commentary regarding when/where template plans are well-aligned with state-level transportation policy and process and how municipalities can best coordinate with the NH Department of Transportation, who is in support of this project.

- Outcomes
  - <u>Job retention/production, wage growth, and revenue increases for firms that harvest, process, and transport forest products with applications in transportation infrastructure</u>. Based on Economic contribution reports of NH's Forest Industry, a position in the sawmill industry represents $290,000 of economic output, and $59,000 in wages. For every 500,000 board feet of lumber demand that is catalyzed and sustained as a result of this project, it is expected that a job will be created and associated direct economic impact will accrue for the state and private businesses. The most recent New Hampshire forest industry economic contribution report, cites 2.3 dollars of indirect and induced impact for each 1 dollar of direct output, i.e. $667,000 of indirect economic impact for each $290,000 of direct economic output, 1 job, and 500,000 board feet of new demand.
  - <u>A better integrated, more localized "forest-to-bridge" value chain for timber products in the NBRC service area</u>. Timber products, like most building materials, embark on a complex journey from the forests where they are sourced to the infrastructure assets they become part of, involving multiple steps and a variety of factors along the way. The proposed project aims to better link these steps and to fill gaps where they exist. The work scope educates potential consumers of timber-based infrastructure—namely, rural municipalities—through case studies, template bridge plans, a non-technical guidebook, and an outreach campaign. These resources and outreach also aim to help education builders and others who might play a key role in constructing timber-based transportation infrastructure. By building a market for local and innovative timber products in the transportation sector, it also seeks to encourage timber product manufacturers to invest in equipment, training, and certification to produce engineered wood products in the NBRC service area. The scope incorporates outreach and technical assistance provided to timber product manufacturers, in an effort to better understand any barriers they may face in expanding their capabilities to include materials such glulam made from local species. The work group that would guide project activities would also bring together stakeholders along the forest-to-bridge value chain in an unprecedented fashion, opening new channels of communication and opportunities for coordination.

    Another important aspect of this project includes UNH Cooperative Extension Forest Industry Specialist's role as the forest products utilization and market contact for the state of New Hampshire. As such, he has counterparts in adjacent states, and regionally, who share market and project information. He will share project deliverables with those counterparts who will provide it to local municipalities and forest products businesses within the Northern Border Region states.

- Enhanced transportation options for rural communities. There are currently 223 bridges on the State of New Hampshire's "Red List," indicating that those bridges require annual inspection due to their deficient condition. Of those bridges, 118 are under state ownership, while 105 are owned by municipalities. Many of these bridges are located in rural communities with limited resources to fund or manage their repair or replacement. In addition, many may be candidates for repair or replacement with timber-based infrastructure. This project aims to better understand where and how local, innovative timber products might help address urgent transportation challenges in rural communities such as red list bridges.
- A reduction in embodied greenhouse gas emissions associated with transportation infrastructure. The construction sector, including the construction of transportation infrastructure, is a leading source of greenhouse gas emissions. These emissions are in large part due to the sourcing, manufacturing, and transporting of materials incorporated into the infrastructure asset. These emissions are sometimes referred to as "embodied" emissions. Recent and ongoing academic research demonstrates that the embodied emissions associated with timber products are significantly lower than steel and concrete. By building the market for timber-based products in the transportation sector, this project lays the groundwork for reducing embodied emissions in future transportation infrastructure, in clear alignment with NBRC investment priorities.
- Expanded opportunities for outdoor recreation and increased potential for tourism in Cheshire County communities. The proposed inventory and predevelopment activities will encompass transportation infrastructure assets that also support outdoor recreation and tourism. A key example is bridges on the extensive rail trail network within Cheshire County. The positive economic impact of the rail trails has been well documented in a number of recent plans and studies, including the *NH Rail Trails Plan* (2022) and *Strengthening Connections: Downtowns and Trails – Keene, NH* (2022). The *NH Rail Trails Plan* estimates the Ashuelot Rail Trail alone, which runs from Keene to Hinsdale, NH, generated about $1.4 million in visitor-related economic activity.

Economic Impacts

Economic Impacts include but are not limited to impacts on: jobs, employment, entrepreneurial activity, and wage growth. Economic impacts should be consistent and, where possible, supported by feasibility studies, and/or local, state, or regional data.

This proposal lays the foundation for significant economic and entrepreneurial activity. Currently, any project that uses glulam excludes lumber supply from northern border region sawmills since there is no glulam manufacturing with local species, Northern Border region landowners, logging contractors and primary forest products manufacturers cannot realize any economic benefit. There are manufacturers certifying their glulam press with local species in hopes that there will be efforts, like this proposal, that support eastern hemlock and SPFs glulam markets; moreover, the demand that this work creates will incentivize further investment so emerging regional glulam manufacturers can better access the $4.2 billion global glulam marketplace outside the northern border region.

This proposal aligns and supports additional NBRC investment in engineered wood. The glulam that is specified is expected to use 2x6 lumber, This is the same dimension stock that is used for CLT providing additional demand for this lamstock. Increased demand will increase lumber prices. It is hard to predict how this proposal will impact pricing. However, the combined effort of promoting local engineered wood products, will certainly increase demand and pricing over time. A modest 2% increase to eastern hemlock and SPFs lumber prices at New Hampshire sawmills would equate to roughly $1,000,000 of annual extra sales revenue for those lumber manufacturers (based on sawmill production and average lumber prices). These impacts would be significantly higher if Maine, New York, and Vermont sawmill production was included in this calculation.

The project's positive economic impacts also include those related to improved transportation infrastructure, enhanced outdoor recreation opportunities, and increased tourism activity. For example, the inventory and predevelopment technical assistance proposed as part of this project will consider bridges and other infrastructure related to the region's rail trail network. As documented in the *Plan for Ashuelot Rail Trail* (2020) and the *Cheshire Rail Trail South Planning Project* (2021), there are many opportunities along rail trails in Cheshire County to improve connectivity through new or replacement bridges and to enhance the user experience through the provision of trailside amenities such as wayfinding kiosks, bathrooms, and other facilities. These improvements—which could showcase local, innovative timer products—hold the potential to boost trail use and associated spending by residents and visitors. Any case studies and template bridge plans relevant to rail trails in Cheshire County would likely be applicable to rail trails in other parts of the state and NBRC service area, extending the project's economic impact. As a reference point, the NH State Rail Trail Plan estimates that economic output associated with just 9 of the 27 state-owned rail trails totaled almost $20 million annually (p. 77). Deliverables from the project could easily support the construction of multiple timber-based bridges along the state's rail trail network, most directly those in Cheshire County but also indirectly in other areas of the state.

Project Readiness

Describe if the project is ready for implementation or will require additional planning tasks to begin. Provide a detailed milestone schedule for completion of the project, along with an explanation of the applicant's ability to complete the proposed work within the 3 year period of performance. See Program User Manual for additional instructions on completing this section.

The proposed project entails planning and predevelopment activities and would be ready to begin upon receiving a Notice to Proceed from NBRC. The project timeline and significant milestones can be summarized as follows:

- Months 1-2:
    - Recruit project work group, hold kick-off meeting. Some potential work group members have been approached over the course of application development, but additional recruitment will likely be warranted. The work group is anticipated to include 10-15 members and will meet 6-12 times per year during the project. Again, the work group will include stakeholders from the transportation sector, local government, higher education, and the timber industry. The work group will both help guide project activities as well as

  - foster the cross-sector collaboration necessary to develop the timber to transit value chain. During this period, SWRPC would also execute a subcontract with UNH Extension to assist with aspects of the project related to engagement of and coordination with timber industry stakeholders.
  - Outreach to wood product manufacturers, to better understand and document any challenges preventing them from producing glulam and other engineered wood products using native species. This activity is anticipated to continue throughout the grant period.
- <u>Months 2-3</u>: Compile existing data sources for incorporation into an inventory of potential timber-based transportation infrastructure projects. Develop preliminary map of potential projects. Conduct outreach to Cheshire County communities to collect local knowledge for incorporation into the inventory and to further assess community interest in engineering and predevelopment technical assistance on timber-based transportation projects. (During application development, interest was confirmed among several Cheshire County communities. Outreach would be expanded to all Cheshire County municipalities.)
- <u>Months 4-5</u>:
  - Develop and release RFQ/RFP for engineering and related predevelopment services. RFQ/RFP development will occur in coordination with the project work group or a subgroup thereof. The solicitation will target firms with experience working with engineered wood products such as glulam and CLT. Considering the range of engineering and related professional services that will be necessary to complete the proposed scope of work, the RFQ/RFP will provide some flexibility regarding whether firms respond in whole or in part. For example, a firm may choose to submit a proposal related to (1) the development of template timber-based bridge designs, (2) site-specific predevelopment services for locations to be prioritized through the inventory process, or (3) both.
  - In developing the RFQ/RFP, consideration will be given to whether opportunity exists to engage institutions of higher education for portions of the work scope. For example, through conversation with potential project partners over the course of application development, it was suggested that graduate students in the UNH Civil Engineering Program could, under the direction of a licensed engineer, assist with the development of updated template bridge plans. Such consideration could help contain project costs and would be alignment with the NBRC investment priority to "utilize projects as a tool for university and industry education and training."
- <u>Months 6-8</u>: Select a preferred firm. Negotiate and execute an agreement.
- <u>Months 8-12:</u>
  - With the assistance of the engaged engineering firm, refine the inventory and prioritize projects for conceptual-level engineering review and feasibility analysis. It is anticipated that 4-6 projects will be selected for conceptual-level review. The selection process will account for criteria to be developed by SWRPC staff and endorsed by the project working group. Criteria will align with Timber for Transit investment priorities and could include factors such as: the potential for the project to showcase innovative, domestically sourced wood products like glulam and CLT; connections with existing planning processes such as the State of NH Ten Year Transportation Improvement Plan; linkages with climate resiliency; and the potential benefit to underserved communities. Proceeding with conceptual-level engineering and feasibility analysis will require the approval and participation of the municipality where

the project is located. This conceptual level review may include considerations such as: the existing condition of the infrastructure asset (if not new construction); potential for repair/adaptive reuse vs. replacement and/or new construction; the suitability of both engineered and solid sawn materials for use in the project; a comparative analysis of timber-based design alternatives vs. those that rely on conventional building materials; a cost estimate for more in-depth engineering and predevelopment-related services.
    - During this period, work may also begin on updating and expanding existing standard bridge superstructure plans, as indicated in the project abstract.
- <u>Months 12-14</u>: With the guidance of the project work group, select a subset of prioritized projects for additional engineering and predevelopment assistance. This second stage of project prioritization, like the first stage, will use objective criteria aligned with NBRC investment priorities. The number of projects selected will depend on the findings from the conceptual-level review, including cost estimates for additional predevelopment services. The number of projects selected will also depend on the continued commitment on the part of the municipalities where the projects are located.
- <u>Months 14-16</u>:
    - Work with the engaged engineering consultant and participating municipalities to develop and authorize task orders related to site-specific engineering and other predevelopment activities.
    - Work on template bridge plans would continue.
- <u>Months 16-28:</u>
    - Oversee and manage site-specific engineering and predevelopment activities, coordinating with the engaged consultant, participating municipalities, other partners (e.g., NHDOT), and NBRC. Over this period, and perhaps beginning earlier, SWRPC staff will draft the proposed non-technical guidebook for use in outreach to municipalities, builders, and other partners regarding findings and work products from the project.
    - Template bridge plans would be finalized, and, if applicable, incorporated into updated editions of previously published guidance documents (e.g., U.S. Forest Service FPL-GTR-260). Alternatively or in addition, template bridge plans developed through the project would be published as a standalone document.
- <u>Months 28-36:</u> SWRPC staff will conduct outreach in promotion of the guidebook and the potential use cases of timber-based transportation infrastructure, especially use cases that incorporate innovative engineered timber products. It's important to note that outreach to Cheshire County municipalities would begin from the beginning of the project, through formation of the project work group and development of the inventory. Outreach conducted during the final phase of the project would build on this previous engagement. Specific outreach methods could include: digital engagement through, for example, email newsletters; official correspondence; presentations to select boards and public works staff; and other meetings/events organized by SWRPC. In addition to outreach targeting Cheshire County communities, SWRPC staff would seek to engage statewide partners, including state agencies, regional planning commissions, builders, and others.

Capacity and Qualifications

Provide an explanation of the capacity of the organization to meet the project objectives, including any partnerships with other entities to support the project. Provide an explanation *of the qualifications of the personnel as they relate to project objectives. See Program User Manual for additional instructions on completing this section.*

SWRPC and its partners have the capacity and qualifications to manage the project successfully.

- SWRPC, as the lead applicant, has successfully managed numerous state and federal grants within budget and on time with agencies as diverse as the Northern Borders Regional Commission (Grant # NBRC19GNH14), Economic Development Administration, Federal Highway Administration and Environmental Protection Agency. We are continually managing multiple grants at any given time and have carefully assessed our multi-year work plan to determine that we have capacity to manage this proposal as well.
    - The proposal will benefit from SWRPC's wide-ranging experience managing grants that require multi-sector involvement and coordination. As a regional planning agency, one of our greatest strengths is multi-sector facilitation and aligning project partners on project objectives based on their strengths and interests. SWRPC regularly conducts its work in a multi-sector environment coordinating with public, private and non-profit sector partners. We have worked on innumerable projects requiring multi-sector participation ranging from transportation to economic development to public health planning projects.
    - SWRPC will capitalize on the strong relationships it maintains with its member municipalities in Cheshire County as well as its strong ongoing relationships with other partners identified in this proposal including but not limited to the New Hampshire Department of Transportation, the Monadnock Region Rail Trail Collaborative and the UNH Cooperative Extension. By having strong relationships already in place, we can ensure most of our time and effort will be spent on implementing project objectives rather than relationship building. SWRPC has conducted a robust proposal development process ensuring multiple partners have interest and capacity to assist with the project.
    - Like this NBRC proposal, many of SWRPC's grants have involved managing consultants to provide technical services for municipalities in the SWRPC planning district. SWRPC's experience managing consultants ranges from conducting competitive solicitations, overseeing and guiding the work of the consultants, record keeping, scheduling and managing consultant deliverables, and ensuring quality projects and customer service between consultants and SWRPC member municipalities. For instance, SWRPC has years of experience engaging transportation engineering consultants to provide preliminary engineering services, cost estimates and other services to inform the development of projects for New Hampshire's Ten Year Transportation Improvement Plan. In another example, SWRPC has managed a brownfields assessment program for over two decades that involves engaging and coordinating with environmental consultants on over 40 different projects involving 15 different communities.
- The project will also benefit from the capacity and expertise of partner organizations, including University of New Hampshire (UNH) Extension, included as a subgrantee of this proposal. The Forest Industry division of UNH Extension has developed strong relationships with stakeholders across the state's timber industry, through activities such as monthly forest product market update webinars, applied research on innovative uses of local timber products, and workforce development initiatives

targeting the forestry economy. UNH Extension staff are in a prime position to help facilitate coordination and communication between transportation sector stakeholders and those in the timber and forestry economy.

- SWRPC has an experienced and talented team uniquely qualified to manage the project. Todd Horner, Executive Director, and J. B. Mack, Assistant Director, both have M.A. degrees in Regional Planning and together have over 26 years of experience as professional planners. Mr. Horner has worked extensively on community and economic development projects, managing SWRPC's Economic Development Administration grant and overseeing the development of SWRPC's Comprehensive Economic Development Strategy as well as providing transportation planning services to SWRPC municipalities. Mr. Mack has spent most of his planning career in transportation planning. He has worked on dozens of bridge projects and has managed more than a dozen transportation planning grants with New Hampshire Department of Transportation. Becky Baldwin, Office Manager, will provide support to the project in the areas of overall administration and financial management. Becky has a B.A. degree with over 40 years of experience in municipal and regional planning fiscal operations and administration.
- Andrew Fast is the Forest Industry State Specials and a Professor at the University of New Hampshire Cooperative Extension, where he's been employed since 2008. He has experience in a range of land management related positions in the northeast and western United States with the U.S. Forest Service, Marin Conservation Corps, and the Society for the Protection of New Hampshire Forests. He has a M.S. in Natural Resource with a concentration in Forestry from the University of New Hampshire. Mr. Fast's primary responsibility for UNH Cooperative Extension is to provide statewide leadership and support to the forest industry through educational programing, business attraction and retention, economic development and research.