

**VTrans Fall 2022 Transportation Alternatives (TA) Grant Application**

Thoroughly read the ***Vermont Transportation Alternatives Fall 2022 Application Guide***

before you begin your application. It includes important program information and step-by-step instructions. Pay particular attention to the application process requirements. **Applications are due in hand or by e-mail by December 14, 2022.** Please e-mail the completed application to:

[Scott.robertson@vermont.gov](mailto:Scott.robertson@vermont.gov)

Strafford Bridge 30 Historic Rehabilitation

(Project Name/Title)

Lisa Bragg

(Municipality contact person responsible

for the management of this project)

Strafford

(Town)

05072

(Zip Code)

Town of Strafford

P.O. Box 27, Strafford, VT 05072

(Mailing Address)

802-765-4411

(Phone)

townclerk@straffordvt.org

(e-mail address)

**$** 300,000

Amount of **Federal Funds requested** (no more than 80% of the project cost estimate).

$ 75,000

Amount of Local Match. Example:

Federal Award = $300,000 (*80% of total*)

Local Match = $75,000 (*20% of total*)

Total Project Cost = $375,000 (*100% of the total*)

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| County: Orange  Town/Village/City: Strafford  Specific location, street, or road: Bridge No. 30, Brook Road, Strafford Village  Regional Planning Commission: Two Rivers-Ottauquechee Regional Commission  If a linear project, what is the length in feet? Seventy-five feet  Is the project on or intersecting to a State maintained highway?  Yes  No   * *Note:* *If yes, be sure to include documentation that you have notified the VTrans District Transportation Administrator of the intent to apply for TA funding and have provided them*   *with a brief (one paragraph) description of the proposed project.*  Project type being applied for:  **Scoping**  **Design/Construction**  The municipality understands that a typical construction project utilizing Transportation Alternatives Program funds will take roughly three years (min.) in the Design and ROW phases prior to going to construction (as pointed out in the TA Program Application Guide)? Yes  No    Does this project have a previously completed scoping or feasibility study? Yes  No  A copy of a 2022 feasibility study prepared by Richard Tetreault, the head of the Transportation Division of Dubois & King, on the Bridge 30 truss rehabilitation project is attached to this application. (Tab A)  **Note:**  Attached are two maps (in different scales) showing the location of Bridge 30 crossing the West Branch of the Ompompanoosuc River in Strafford, Vermont. (Tab B)  Several color photos are attached showing (1) the location of Bridge 30 relative to rest of Strafford Village (2) existing Bridge 30, (3) the truss bridge that formerly stood on the Bridge 30 site, (4) the Ludlow truss bridge, (5) a photoshop image of the Ludlow trusses installed on Bridge 30, and (6, 7, and 8) examples of other repurposed steel trusses on historic Vermont bridges (in Woodstock and Montpelier). (Tab C)  **Fiscal Information:**  Accounting System Automated  Manual  Combination  SAM Unique Identifier HH1GJ7J8MU37  Fiscal Year End Month December | |
| **Property Ownership:**  If the proposed project is on private property that will need to be acquired by the Municipality through purchase, easement, or eminent domain (includes temporary construction rights) in accordance with the “Uniform Act”, then the municipality is committed to exercising its right of ***eminent domain*** to acquire the rights to construct the project if necessary. Yes  No | |
| **Funding:**  Does this project already have existing funding? If so, please describe. Yes  No    Will you accept an award less than you applied for? Yes  No   * If yes, please indicate whether local funds will be used to make up the shortfall, or if the project scope will be reduced. If the project scope is to be reduced, describe what part of the project (please be specific) you would accept partial funding for. | |
| **A support letter from the governing body of the applicant municipality or organization** and an acknowledgement and source of the local match and commitment to future maintenance responsibility for construction projects is required (must be dated within 1 year of the application). Is a letter of support attached?  Yes  No | |
| **Regional Planning Commission Letter of Support:**  In order to apply, the project must have a letter of support from the regional planning commission. Is a letter of support attached?  Yes  No | |
| **Application Scoring Criteria:**     1. **Please give a brief description of the project (be sure to indicate the primary facility type being**   **applied for and be concise). (10 points max.)**  This project involves the re-use of historic steel trusses from Ludlow, Vermont, to rehabilitate a bridge in Strafford, Vermont, and replicate the steel truss bridge that formerly existed at the Strafford bridge site. This project represents a unique opportunity to preserve the key elements from an historic bridge in one community and refurbish a seriously dilapidated bridge in another community, and in the process protect and enhance the historic character of one of Vermont’s most historically significant villages.  The Town of Ludlow has decided to dismantle a steel truss bridge (Bridge No. 57) constructed in the town by the Penn Bridge Company of America in 1929, following the Great Vermont Flood on 1927. Instead of sending the bridge trusses to the scrap heap, the VTrans historic bridge program has proposed, in order to mitigate the loss of historic Bridge No. 57, to preserve the trusses, transport the trusses by truck to Strafford Village, and convey ownership of the trusses to the Town of Strafford. The expense of this work will be included in the VTrans contract for the demolition of Bridge No. 57  The Town of Strafford has an opportunity to put the Ludlow trusses to effective and valuable re-use. Until the middle of the last century a steel truss bridge stood at the site of Bridge 30 on Brook Road in Strafford. Bridge 30 was reconstructed in 1948, following a Works Progress Administration design that includes a railing consisting of a series of concrete posts connected by steel cables. While the current version of Bridge 30 has served the community well for almost 75 years, it is now in need of rehabilitation. Fortunately, the steel beams and concrete abutments supporting the bridge are in good shape and, with proper maintenance, can last for many decades to come. However, the railing posts have badly deteriorated and in some places have completely come apart from the bridge. As a result, the Town of Strafford has been forced to place temporary safety barriers on the bridge and limit traffic to one lane. While the current bridge deck has some remaining useful life, several engineers have advised that it is not worthwhile to invest public funds in refurbishing Bridge 30 without replacing the existing bridge deck with a new one.  The Bridge 30 project using the Ludlow trusses will proceed in two phases. The first phase will consist of removing the trusses from the bridge in Ludlow, transporting them by (large) truck to Strafford, placing the trusses at a staging area near Bridge 30 kindly offered up for the town’s use by private landowner Lucy Hemenway, and cleaning and repainting the trusses. (Because of the likely presence of lead paint, the cleaning of the trusses will have to proceed using the same exacting state safety procedures recently employed in the refurbishment of the Tyson Bridge in South Strafford.) The second phase of the project will consist of demolishing the existing deck and railings on Bridge No. 30, pouring a new reinforced concrete deck, constructing concrete extensions to the existing bridge abutments to support the trusses, hoisting the trusses into position and attaching them to the steel beams and the new deck, and paving the new deck and approaches with asphalt. The trusses will serve as railings protecting the safety of the traveling public using Brook Road. This two-phase plan was recommended to the Town of Strafford by engineer Richard Tetreault, who serves as the head of the Transportation Division of the engineering firm Dubois and King.  A very important aspect of the Bridge 30 truss project is its physical setting. Bridge 30 serves as a gateway to Strafford Village and the town common, a resource used and enjoyed by the residents of the town for many different purposes. In recognition of its historic significance, Strafford Village has been placed on the National Registry of Historic Places and is also a designated village center under Vermont law. Bridge 30 is immediately adjacent to the Strafford Town House, one of the town’s important civic buildings and itself a landmark of great historic significance. Re-creation of a historic truss bridge at the Bridge 30 site will protect and enhance Strafford village as a community gathering place, complement the numerous public and private historic structures in the village, and make Strafford Village more attractive as a destination for visitors to our community. Furthermore, the re-use of the existing Ludlow steel trusses (which would otherwise be melted down for scrap) would represent a climate-friendly resource savings. | |
| 1. **What is the feasibility of this project? Feasibility (or Scoping) study applications will not be scored on this criterion. Also, please describe the extent of project development completed to date.**   **(10 points max.)**  At the recommendation of VTrans, the Bridge 30 Group, acting under the direction of the Strafford selectboard, hired Richard Tetreault, the head of the Transportation Division of the engineering firm DuBois and King, to evaluate the feasibility of reusing the Ludlow trusses in Strafford. Prior to joining Dubois and King, Mr. Tetreault worked for VTrans in several different positions over a 30-year career. Mr. Tetreault performed physical examinations of both Bridge 30 in Strafford and Bridge 57 in Ludlow, developed a preliminary work plan for the refurbishment of the trusses and their re-use on Bridge 30, and made estimates of the cost of the project. In his written report (Tab A), Mr. Tetreault concluded that the proposed re-use of the trusses was feasible. In particular, he concluded that Bridge No 57 trusses were well-sized for re-use in Strafford, the trusses were in generally sound condition, and the planned re-use of the trusses was relatively straightforward from an engineering and construction standpoint.  JB McCarthy, the head of the VTrans historic program, visited Strafford and concluded that the proposed staging area for the project on a parcel of private property owned by Lucy Hemenway is suitable for this project. While it must be assumed that the Ludlow trusses were covered with lead paint, VTrans has developed detailed protocols to address this potential hazard and bridge painting companies have experience addressing this problem. Once the trusses are cleaned, primed and painted with several coats of paint, the bridge, including the trusses, are not expected to require maintenance for at least 20 years. After 20 years, some spot painting may be needed in order to prolong the life span of the trusses. After 30 to 40 years, putting a new coat of paint on the bridge will likely be needed. | |
| 1. **Does this project address a need identified in a local or regional planning document? If so, please describe. (5 points max.)**   The transportation section of the Strafford Town Plan adopted on October 13, 2021, articulates (p. 33) the following overall “goal” for the town: “Transportation in Strafford that is safe, energy efficient, cost effective, integrates all modes of travel (auto, pedestrian, bicycle, and mass transit) and meets the needs of the public in a manner consistent with the other goals, policies and implementation tasks of this Town Plan.” Refurbishing Bridge 30 with a new concrete deck and new truss railings and opening the bridge again to two-way traffic will directly serve the town’s objective of having a safe and serviceable transportation system. The refurbished bridge will secure safe and reliable passage from Strafford (and South Stafford) to the northwestern quadrant of the Town of Strafford and points beyond.  The land use section of the town plan highlights (pp. 62-63) the significance of the natural features and historic structures in the Town of Strafford, and in Strafford Village in particular: “250 years [after its founding], with just over a thousand residents, Strafford stands out as an architectural and aesthetic treasure of New England’s Upper Connecticut River Valley. This distinction, embodied in the viewshed of the valley between the villages and crowned by the Upper Village, which has been characterized as the quintessential Vermont village, makes Strafford visually appealing and in many ways unique. Much of this viewshed and its open spaces are guaranteed to future generations through conservation easements.  The Upper Village was added to the National Register of Historical Places in 1974 and South Strafford Village was added to the Vermont Register of Historical Places in 1989. In 1991, more than 200 acres of the valley between the villages were protected from development through easements with the Upper Valley Land Trust (UVLT) in addition to a 14-acre parcel that provides the backdrop to the Town House just north of the Upper Village. In addition, in the Upper Village, the east side of the valley above the Morrill Memorial & Harris Library and the historic Coburn barn have also been protected by an UVLT conservation easement. In addition, the west side of the valley, within the floodplain of the West Branch of the Ompompanoosuc River, is protected by and held by the Connecticut River Watershed Council.  The Upper Village is a rarity in Vermont: not only is it protected from random and scattered development; it has managed to retain its historical and architectural integrity . . . . The Town House, which is the architectural jewel in the crown of the Upper Village, endures as one of the state's more stunning and frequently photographed historical buildings. The quality of this visual environment is essential to Strafford’s identity, and the landscape with its inse[r]ts of structures all contribute to this aesthetic triumph. Attention must be paid, therefore, to all these facets if preserving what is distinctive about the topography and the character of the Villages is to be achieved.”  In keeping with this understanding of the values of Strafford, and Strafford Village in particular, the land use section of the town plan articulates (p. 60) the following overall “goal;” that “Strafford remains a beautiful place with its distinctive rural, agricultural, cultural, architectural and scenic appeal.”  Replicating the truss bridge that formerly existed at the site of Bridge 30 will help ensure that Strafford remains a beautiful place with its distinctive rural, agricultural, cultural, architectural, and scenic appeal. The refurbished trusses will add a visually striking and historically appropriate element to the collection of natural features and built structures that make Strafford Village so special and valuable.  The Regional Plan adopted by the Two Rivers-Ottauquechee Regional Commission on July 15, 2020, states (p. 69): Our vision for our transportation system is one that efficiently and effectively moves people and commerce, is resilient to natural hazards, and is funded sufficiently to maintain and grow the system throughout the TRO Region.” Refurbishing Bridge 30 with a new concrete deck and new truss railings and opening the bridge again to two-way traffic will directly serve the regional commission’s objective of promoting an efficient and effective transportation system in the Two Rivers region.  The 2020 Regional Plan includes a chapter entitled Historical, Cultural, Archaeological and Scenic Resources.” This chapter includes (p. 156) several pertinent “goals,” including: “The unique characteristics of historic sites or areas, where the public interest is clearly benefited thereby, are enhanced and preserved,” and “Improvements to historical transportation facilities, instead of replacement, are promoted.” The chapter also includes (p. 156) several pertinent “policies,” including: “When new buildings or structures within historic areas are proposed, they should have a design that is compatible with and sensitive to the character of the neighborhood,” and “Public improvements or structures such as bridge rehabilitation or replacement, street widening, roadway reconstruction, signage, utility distribution systems, and lighting must be designed to avoid unnecessary degradation of recognized historic sites or areas.” All of these goals and policies will be furthered by the Bridge 30 truss project because it will keep historic steel trusses in valuable public use, improve an historic bridge structure, and create a functional transportation facility that is compatible with and sensitive to the historic character of the area. | |
| 1. **Does this project benefit a State Designated Center per the link below (i.e., downtowns, villages, or neighborhood growth centers recognized by the Vermont Department of Economic, Housing and Community Development? (10 Points Max.)**   [**http://maps.vermont.gov/ACCD/PlanningAtlas/index.html?viewer=PlanningAtlas**](http://maps.vermont.gov/ACCD/PlanningAtlas/index.html?viewer=PlanningAtlas)  This project will significantly benefit Strafford Village, a Village Town Center designated by the Vermont Department of Economic, Housing and Community Development. An attached map (Tab D) shows that Bridge No. 30 abuts the boundary of the Strafford Village Town Center. In its 2018 announcement of the decision by the State Downtown Development Board to designate Strafford Village (and South Strafford) as Village Centers, the Agency of Commerce and Community Development stated: “The classic Vermont village of our imagination – the church with a steeple, the smell of a freshly mowed town green flanked by mature maples and stone walls; a babbling brook, a nearby historic general store, post office, and an assortment of authentic historic homes – exists today in Strafford, Vermont.” <https://accd.vermont.gov/press-releases/state-designates-strafford-150th-village-center> The re-creation of an historic truss bridge at the Bridge 30 site will protect and enhance the historic and esthetic values ACCD recognized and sought to protect by designating Strafford as a Village Town Center.  The project also will benefit the Strafford Village Historic District added to the National Registry of Historic Places by the U.S. National Park Service in 1974. As explained in the 2020 Two Rivers Regional Plan (p. 152), “To aid in the preservation of the most notable historic resources, Congress in 1966 created the National Register of Historic Places. The Register is a federally maintained list of culturally important districts, sites, buildings, and structures worthy of preservation. Historic districts are geographic locations that contain historically or architecturally significant buildings, properties, or sites.” An attached map (Tab E) shows the boundary of the Strafford Village Historic District and illustrates that Bridge 30 lies within the designated historic district. A traditional steel truss bridge within the historic district will complement the numerous Greek and Gothic Revival buildings included in the historic district. | |
| 1. **Provide a project cost estimate below (project costs below include both federal dollars and local dollars). Projects will be scored based on whether the cost appears realistic for the size and scope of the project. For scoping studies, use PE and Local Project Management lines only.**   **Note:** If you are applying for additional funds for an existing project, show the amount being requested for this grant in the PE, ROW, Construction, Construction Engineering, and Municipal Project Management rows below. Also, be clear regarding total project cost and other funding amounts and sources in the additional funding comments box below. **(10 points max.)** | |
| Preliminary Engineering (PE)  *(Engineering, Surveying, Permitting) $* 52,500 | |
| Right-of-way / Acquisition (ROW)  *(appraisals, land acquisition and legal fees) $*Minimal  (Right of way and acquisition costs will be minimal because completed project will  be entirely within existing legal right-of-way, and town will be granted temporary access by  private landowner free of charge.) | |
| Construction  *(construction costs with reasonable contingency) $* 720, 276 | |
| Construction Engineering  *(cost to provide inspection during construction) $*47,695 | |
| *Municipal Project Management Costs*  *(minimum of 10% of total PE, ROW and Construction*  *Phases). $*$82,000 | |
| ***Total Project Cost $*** $902,471 | |
| **Addition Funding Comments: (ex. Total and additional funding for existing projects)**  A $300,000 Transportation Alternatives Program grant will cover only part of the project costs. The Town anticipates that the balance of the project costs will be covered by all or some combination of the following: a VTrans Structures grant, a grant from the Northern Border Regional Commission, a historic preservation grant from the Agency of Commerce and Community Development, a grant from Preservation Trust of Vermont, Town of Stafford public funds, and gifts from private organizations and individuals. | |
| 1. **Select the eligibility category below (A, B, C or D) that best fits your project and answer the corresponding questions for that category (choose only one category). 10 bonus points will be awarded to projects that are primarily Bicycle or Pedestrian facilities.** | |
| **A. Bicycle and Pedestrian Facilities (includes Safe Routes for Non-Drivers and Conversion of abandoned railroad corridors.**  Will the project contribute to a system of pedestrian and/or bicycle facilities?  **(10 points max.)**  Click here to enter text.  Will the project provide access to likely generators of pedestrian and/or bicyclist activity? **(10 points max.)**  Click here to enter text.  Will the project address a known, documented safety concern? **(10 points max.)**  Click here to enter text. | |
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| **B. Community Improvement Activities:**  Explain how the project improves the economic wellbeing of the community and/or provide a benefit to state tourism? **(10 points max.)**  The Bridge 30 truss project will improve both the economic wellbeing of the community and provide a benefit to state tourism by preserving an important transportation facility while protecting and enhancing the historic character and visual appeal of Strafford Village. Strafford Village is a major attraction for visitors to Strafford and neighboring towns as well as for tourists traveling through the State on nearby I-89. Major tourist attractions in Strafford Village include the Justin Morrill Homestead, the town common, the Strafford Town House, and the assemblage of Gothic and Greek revival structures throughout the historic district. The trusses on Bridge 30 will provide an additional visual attraction in the area, and the traditional design of the trusses will complement the historic design of other nearby structures, in particular the Town House, which sits adjacent to and above Bridge 30. The Bridge 30 truss project will enhance and protect the value of Strafford Village as a tourist attraction and encourage more tourists to visit the village in the future.  Describe the anticipated impact to the public; degree of visibility, public exposure and/or public use. **(10 points max.)**  The Bridge 30 truss project will be highly visible to community residents as well as to visitors to Strafford Village. The Town House and the adjacent common provide the venue for many of the most important civic events in the town, including the annual Town Meeting, voting in national, state and local elections, the annual Fourth of July parade, the annual Newton School graduation, regular weddings and funerals, and regular musical and literary events, Participants in all of these civic proceedings, celebrations, and other events will see the Bridge 30 trusses and their experience of the historic district, the common and the Town House will be enhanced by the visual appeal and historic character of refurbished Bridge 30.  Answer only one of the following based on the type of project:   1. Construction of turnouts, overlooks, and viewing areas as related to scenic or historic sites. *To what extent will the project provide a view of a highly unique and scenic area?* **(10 points max.)**     Click here to enter text.   1. Preservation or rehabilitation of historic transportation facilities. *Describe the historic significance of the historic transportation facility and the importance of the facility to the state.* **(10 points max.)**   The Bridge 30 truss project will preserve and replicate a traditional steel truss bridge at a major gateway to one of the most visually appealing and architecturally intact village centers in Vermont, protecting and enhancing historic resources of state and as well as national significance. The project is important to Vermont because it will result in the preservation of nearly 100-year old steel bridge trusses, which were once common in Vermont but are now sadly disappearing from our landscape. This project is consistent with and advances the goal of the VTrans historic bridge program to secure opportunities to make appropriate reuse of historic steel trusses from dismantled or abandoned bridges. The proposed project reflects the confluence of several fortunate circumstances, including the need for the Town of Ludlow to dispose of the trusses, the need for the Town of Strafford to refurbish its Bridge 30, and the coincidence that the Ludlow trusses are essentially the “perfect fit” for reuse in Strafford at Bridge 30. Refurbished with the Ludlow trusses, Bridge 30 will become a visual landmark of statewide significance in its own right as well as a valuable complement to the historic structures to which it sits adjacent. In the past, on select occasions Vtrans and individual towns have carried out similar truss re-use projects, most notably including the handsome Elm Street bridge in Woodstock, Vermont (between the March-Billings museum and downtown Woodstock) and the Langdon and School Street Bridges in downtown Montpelier. (Pictures of these bridges are included in the compilation of photos included in Tab C.) Each of these examples illustrates the historical, esthetic, social, and economic benefits of the type of adaptive re-use of historic steel trusses proposed in this project.   1. Archeological planning and research related to impacts from a transportation project. *Describe the associated transportation project and benefit of the proposed activities.* **(10 points max.)**   Click here to enter text.   1. Vegetation management in transportation rights of way to improve roadway safety, prevent invasive species, and provide erosion control. *Describe the extent of the current problem and the impact on the site and surrounding area.* **(10 points max.)**   Click here to enter text.    **C. Environmental Mitigation Activity Related to Stormwater and Highways**   * 1. Please describe how this application provides environmental mitigation relating to stormwater and highways. **(10 points max.)**   Click here to enter text.   * 1. What information or data is provided to substantiate the current stormwater problem and associated environmental impacts? **(10 points max.)**   Click here to enter text.   * 1. What substantiating data or information is provided to show that the proposed application is an effective and maintainable solution to the problem? **(10 points max.)**   Click here to enter text.  **D. Environmental Mitigation Activity Related to Wildlife**  i. Please describe how this application will reduce vehicle-caused wildlife mortality or will restore and maintain connectivity among terrestrial or aquatic habitats. **(10 points max.)**  Click here to enter text.   * + 1. What information or data is provided to substantiate the current problem and associated environmental impacts? **(10 points max.)**   Click here to enter text.   * + 1. What substantiating data or information is provided to show that the proposed application is an effective and manageable solution to the problem? **(10 points max.)**   Click here to enter text. | |