



## MINNESOTA HISTORICAL AND CULTURAL HERITAGE PROGRAM

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### Waterford Township

R-MHCG-2107-26357 | \$265,345.25 | MN Historical and Cultural  
*Waterford Bridge Preservation Phase II*

### Status

Request Submitted

The two yellow highlighted fields marked with an \* (Brief Project Summary and Amount Requested) must be completed in order to save your application for the first time. The save button is at the top of the application. Be sure to complete the entire application before submitting. Incomplete applications will not be considered.

*Submissions to the Grants Office may be subject to Minnesota Government Data Practices Act (Statute 13). All user-written material may be modified by the Minnesota Historical Society for clarity and promotional purposes.*

### APPLICANT INFORMATION

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**Program Organization:** Waterford Township

**Project Director:** Elizabeth Wheeler

**Authorized Officer:** Liz Messner

**Additional Project Staff:** Frank Wergin

**Applicant County:** Dakota

**Applicant Organization Type:** Local/Regional Government

**Governance/Board Members:**

Liz Messner - Supervisor, Larry Odegard - Chairperson/Supervisor, Frank Wergin - Supervisor, Elizabeth Wheeler -- Clerk, Steve Wheeler -- Treasurer

Is this a cooperative project?

**Select Yes or No.**

No

▼ Click on arrow to view the contact information we have on file

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## CURRENT ORGANIZATION CONTACT INFORMATION ON FILE

Organization Name:	Waterford Township
Street Address:	P.O. Box 531
Street Address 2:	
City:	Northfield
State:	Minnesota
Postal Code:	55057
Organization Phone:	507-261-3235
Project Director:	Elizabeth Wheeler
Project Director Email:	waterfordtownship@gmail.com
Authorized Officer:	Liz Messner
Authorized Officer Email:	lmessner@northfieldwifi.com

The Organization or Contact  
Information needs to be updated:

## PROJECT INFORMATION

Project Title (Be descriptive and  
succinct):

Waterford Bridge Preservation Phase II

\* Brief Project Summary (REQUIRED TO SAVE):

Work includes hiring qualified professionals to preserve, reconstruct, and perform construction administration to complete Phase II of the restoration of the historical Waterford Bridge.

Project Category (Choose one):

Historic Properties

Geographic Focus of Project:

Dakota

Could any items related to this application be considered "culturally sensitive objects"? These objects could be items used in a spiritual ceremony or other ritual, or funerary objects or human remains. They can be of any cultural origin.

Select Yes or No. (If unsure, select  
Yes.):

No

Is this proposed project based on or a continuation of an already funded project? Select Yes or No

Select Yes or No:

Yes

If so, please briefly describe the previous grant project and its status. :

In 2017, Waterford Township was awarded a grant through the Minnesota Historical and Cultural Heritage Program to create pre-development construction plans and specifications for the rehabilitation of the Waterford Bridge. Plans, specifications, and cost estimates were used to determine a phased scope of work for construction, as described in this grant application. In 2019, Waterford Township was awarded a grant through the Minnesota Historical and Cultural Heritage Program to complete Phase I of the restoration rehabilitation project. Phase I will be completed by the end of the 2021 calendar year.

Does this project involve a structure that is listed in or eligible for listing in the National Register of Historic Places?

Select Yes or No. Yes

#### HISTORIC PROPERTY INFORMATION

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Property Name: Bridge L3275  
 City: Waterford Township  
 Address: Canada Avenue W over Cannon River  
 Zip: 55057  
 Property Location County: Dakota  
 NR Number: 10000580  
 This property is listed in the National Register of Historic Places: Yes  
 This property is eligible for the National Register of Historic Places: No

#### BUDGET INFORMATION

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Small request: \$10,000 and less: No  
 Mid/large request: greater than \$10,000: Yes

### BUDGET REQUEST (Applicant View)

Budget Item	Amount Requested	Match
1. TCLP Test & Mobilization	\$43,000.00	
2. Structural Steel (materials and labor to install)	\$105,000.00	
3. Rivet Replacement (materials and labor to install)	\$15,040.00	
4. Lead Substances Collection & Disposal	\$25,000.00	
5. Organic Zinc - Rich Paint System, Old + Shop (materials and labor)	\$11,500.00	
6. Traffic Control (materials and labor to install)	\$5,000.00	
7. Engineering to prepare bid package	\$2,000.00	\$5,000.00

8. Contingency for Unknowns (25% of Construction Cost)	\$51,135.00	
9. Inflation Increase from 2021 (3% per year)	\$7,670.25	
10. Construction Administration (20% of Construction Cost)		\$52,500.00
11.		
12.		
	<b>Total: \$265,345.25</b>	<b>Total: \$57,500.00</b>

**\* Amount Requested (REQUIRED TO SAVE. USE TOTAL FROM ABOVE):** \$265,345.25

**Match Offered (USE TOTAL FROM ABOVE):** \$57,500.00

#### How were above figures determined?

The estimated budget items are based on professional bridge preservation experience and cost comparison with similar projects for completion of plans, specifications and estimates for historic bridge rehabilitation. The previous phased estimate has been updated from 2019 pricing to 2021 pricing to more closely reflect current construction bid pricing, accounting for rise in costs of both labor and materials. The costs also include a 3% yearly inflation adjustment from the 2021 cost estimate. A contingency budget of 25% for Phase II has been included to account for unknown repairs that may be revealed once construction commences as well as unpredictability of construction bid prices. Construction administration fees are calculated at an hourly rate with hours approximated to the anticipated work to be performed. All construction administration hours are accounted for as an in-kind match with volunteer hours provided by Waterford Township staff, volunteers, or Dakota County staff. Prevailing wage was used to estimate labor costs related to construction.

#### Match Description:

The in-kind match will be a combination of a \$5,000 cash donation provided by Waterford Township and services provided by staff salaries (including fringe benefits) and unpaid volunteers that represent actual work that will occur on the project. These activities will not include general administration of Waterford Township or Dakota County. A total of 350 in-kind hours of work will be used as a project match.

Waterford Township staff include Elizabeth Wheeler, the Project Director, who will be tasked with managing the grant and associated construction administration as it pertains to grant reporting, communication with the Township Board and the broader community, and contract negotiation. Elizabeth will contribute approximately 100 hours towards the project with an hourly rate of \$150.

Steven Wheeler will co-manage the grant with Elizabeth Wheeler, and will provide construction administration as it pertains to construction activities, monitoring construction work coordinating inspections and communication with contractors. Steven was appointed to manage road and bridge improvement projects for Waterford Township by the Township Board in 2019. He will volunteer approximately 40 hours towards the project with a value equivalent to a rate of \$150 per hour.

Lil Leatham, Senior Planner with Dakota County and Todd Howard, Civil Engineer with Dakota County, will provide in-kind volunteer services, serving as technical advisors for the duration of the project. Todd will serve as the Project Engineer and provide direction to Steven Wheeler. Lil will advise on reporting and contract negotiations during the Project Preparation phase. Lil and Todd will contribute approximately 210 combined hours towards the project with an hourly rate of \$150.

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## APPLICATION NARRATIVES

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### Project Description:

The grant will fund Phase II of the Waterford Bridge rehabilitation. This project is based on detailed plans and specifications prepared specifically for the purpose of restoring the bridge to its original beauty and functionality. Phase II is focused on gusset plate strengthening repairs. Strengthening the truss will increase the bridge's load carrying capacity and allow heavier equipment to travel on the truss during later phases of the rehabilitation. As components of the bridge are restored throughout the full project, lead paint will be removed and organic zinc paint will be applied. Subsequent phases (III and IV) will include replacement of the concrete deck, installation of a new railing, and reconstruction of the historic plaque. The goal of the project is to rehabilitate the Waterford Bridge to be structurally sound and functional as a bicycle and pedestrian bridge, while preserving and maintaining the historical character and structure of the original design.

Originally constructed in 1909 as a paved trail, the Waterford Bridge carried horses, buggies, farm implements, and early automobiles, as well as pedestrians and bicyclists across the Cannon River in rural Waterford Township in south-central Dakota County. With the construction of a parallel vehicle bridge in 2014, the Waterford Bridge was converted to serve pedestrians and bicyclists. In 2018, the bridge was closed upon the advice of engineers due to safety concerns related to the structure. The bridge consists of a 140-foot, steel, riveted and bolted, Camelback truss on concrete abutments. The bridge is significant as an example of a Camelback through truss with rigid connections; it is one of the earliest extant bridges with rigid (riveted and bolted) connections in Minnesota and is the only known metal through truss bridge in Minnesota featuring a limited number of bolted connections. With the completion of the full restoration project, this bridge can once again carry pedestrians and bicyclists safely across the Cannon River, while serving as a historic structure and landmark for the Waterford community.

Until the early 1900s in Minnesota, many bridges were designed by private bridge contractors. Thrift in design was commonplace, leading to many bridge failures. In the spring of 1909, the Dakota County Board demanded improved road and bridge construction within the county, and voted to appropriate \$2,500 towards half the cost of construction for "a new bridge [over the Cannon River] in the...Town of Waterford." Waterford Township used those funds to award a construction contract for the project to the Hennepin Bridge Company of Minneapolis. To meet the County Board's higher standards for construction, Dakota County engineer Charles A. Forbes created the Waterford Bridge's rigid-connected bridge design.

The virtues of pinned versus riveted connections for steel through trusses were a subject of debate for American engineers throughout the late 1800s. Pinned trusses were easier to design and erect, but riveted trusses were sturdier and more durable. The advent of economical and portable field-riveting equipment between 1900 and 1910 eventually tipped the scales in favor of riveted trusses, although it took time for field riveting to establish its reliability. Most rigid-connected through truss bridges from this era rely on riveting alone. The Waterford Bridge features a number of bolted connections, most notably the bolts connecting the floor beams to the trusses. This was not a common practice in Minnesota and is viewed as an intermediate evolutionary step between pinned construction and riveted construction.

Today, the Waterford Bridge represents one of the earliest extant rigid-connected bridges in Minnesota. Moreover, it is the only known metal through-truss bridge in Minnesota featuring bolted connections. As

a unique structure of historical engineering significance, the structure was entered in the National Register of Historic Places in 2010.

In recent decades, the crossing has been recognized as an important community landmark and residents have made significant efforts to save the bridge from deterioration. When scour threatened to undermine the bridge's abutments in the early 1980s, Township residents raised funds to stabilize the substructure. A successful community fundraising effort was repeated in 2011 with a social media campaign that resulted in a historic preservation grant awarded to help remove and replace the cracked southeast wing wall. In 2014, a grant from the National Trust was used to replace the deteriorating southeast abutment. Though the abutment has been replaced, the superstructure of the bridge is intact, allowing the bridge to retain integrity of materials, design, and workmanship.

Grant funds were secured in 2017 to hire engineers and historians to perform an on-site review of the structure to determine preservation needs, develop the preservation and reconstruction design and prepare plans and specifications. In 2019, further grant funds were provided to complete Phase I of the rehabilitation project.

Today, funding is requested for Phase II to hire a professional team of contractors to repair and replace structural components of the bridge. Construction documents developed in 2019 specify the techniques to be used by qualified and experienced bridge rehabilitation contractors to ensure that rehabilitation work will meet SOI Standards. The work will be sensitive to the historic materials to ensure the structure's character-defining features and the historic fabric will be retained. The character-defining features include: 1) the design and construction of a camelback through truss, an increasingly rare bridge type, 2) use of rivets and panel point connections, and 3) early use of bolted connections, notably connecting the floor beams to the trusses. The Grant Managers will work closely with the contracted team to ensure the proposed work and specifications meet the SOI and structural standards.

The Waterford Bridge is a vital connection to the history of the community and is loved by people who continue to seek connections to the Cannon River and to the surrounding area. The continuation of full preservation of the bridge will ensure that future generations are able to appreciate the bridge's unique engineering significance, and will once again allow the bridge to serve as an active recreational connection to and over the Cannon River and nearby communities.

*Please select the need and rationale that best fits your project from one of the following:*

**Need and Rationale (select one):** This project addresses strong demand from the public.

#### **Need and Rationale:**

The historic Waterford Bridge is vital to the history of the Waterford community. The bridge is loved by people for whom the bridge represents a connection to the Wild and Scenic Cannon River and to the surrounding area. The continuation of the full rehabilitation of the bridge will ensure future generations are able to appreciate its unique engineering significance, and provide recreational connections between the Cannon River and its surrounding communities, including a destination along the 25-mile future Mill Towns State Trail.

In 2014, a team of professional engineers prepared a management plan for the Waterford Bridge titled Bridge L3275 Local Historic Bridge Report. This plan was requested by MnDOT as part of a comprehensive study performed for historic bridges in Minnesota not owned by MnDOT, and provided valuable information about the bridge's history and current condition to Waterford Township and Dakota County.

During the inspection, the engineers determined that the bridge was in fair condition overall, but significantly compromised in terms of load carrying capacity, with some individual elements determined to be in poor condition. The south abutment was in poor condition due to spalling concrete and a significant vertical crack in the southeast corner; these items were addressed in 2014. The steel truss

members were in fair condition with surface rusting and limited section loss on individual members noted. The concrete deck at the curb/edge has intermittent areas of full depth failure. The deterioration of the deck components eventually led to the closure of the bridge in 2018, as it was deemed unsafe.

In 2019, a team of professional engineers completed a construction plan which detailed full restoration of the bridge. The bridge restoration outlined in the plan addressed the concerns of the 2014 management plan following the Secretary of the Interior's Standards for the Treatment of Historic Properties. The specifications and cost estimates included in this construction plan were used to determine the scope of work for this grant application.

Preservation of the structure includes restoring the load capacity to accommodate pedestrians, bicyclists, and small recreational vehicles, which can be accomplished through the recommended rehabilitation work outlined in the management plan and subsequent construction plan. Phase I focused on rehabilitating the north and south abutments. The focus of Phase II of this project, relevant to this grant application, is to strengthen the truss to increase the load carrying capacity of the bridge.

Without proper repair and rehabilitation, the Waterford Bridge will continue to fall into disrepair and will ultimately need to be removed. As a significant historical and engineering landmark, the bridge's removal would be a loss for Waterford Township, Dakota County and for the state of Minnesota. This unique and historically progressive structure has served the community for over a century, and its preservation will allow the bridge to once again serve generations to come, this time as a recreational connection across the Cannon River for pedestrians, bicyclists, and small recreational vehicles.

#### Work Plan and Timetable:

##### Project Plan

Ideally, Waterford Township would have the means to complete the entire rehabilitation project at once. However, the cost to complete the full project places a significant burden on the small rural community. By phasing the project and leveraging multiple potential funding sources, there is potential for the full rehabilitation project to be completed in phases over a few years, rendering the Waterford Bridge fully operational and rehabilitated in accordance with the Secretary of the Interior's Standards. Request for funding through this grant application is solely intended for construction activities within Phase II - Truss Strengthening

2020-2021: Phase I - Substructures

2022-2023: Phase II - Truss Strengthening

2023-2024: Phase III - Deck Replacement

2024-2025: Phase IV - Truss Painting, Railing & Plaque

See the attached Project Plan for a full description of construction activities to be included in each phase of the project.

The following work plan for Phase II - Truss Strengthening assumes grant funding would be available January 1, 2022. All dates are approximate and subject to change per weather and site conditions. Tasks within the work plan may overlap to accommodate for specific conditions throughout the construction process. Schedules for subsequent phases will be determined as funding becomes available.

##### Phase II - Truss Strengthening Work Plan

1/1/2022 to 1/31/2022: Pre-Letting Activities

- Set up accounting to process grant funds for funding
- Prepare project documents for project letting

2/1/2022 to 4/30/2022: Bid Project and Award Contract to Contractor

- To include advertising of project, review of bids and award of contract

5/1/2022 to 6/30/2022: Pre-Construction Activities

- To include preconstruction meeting, contractor submission of proposed materials and project work plans/submittals (temporary bridge support, etc.), contractor preparation of concrete mockups, and owner selection of materials and finishes to be incorporated into the project

- Upon completion of pre-construction approvals, contractor will be approved to proceed with mobilization and construction work

7/1/2022 to 10/31/2022: Construction Activities -- this task is anticipated to take approximately 2-3 months to complete, within the window of time provided.

- TCLP Test and Mobilization (10% milestone at completion)
- Structural Steel Installation (40% milestone at completion)
- Rivet Replacement (60% milestone at completion)
- Lead Paint Removal, Collection, and Disposal (80% milestone at completion)
- Painting of Structural Components (95% milestone at completion)
- Chain link fence replacement (100% milestone at completion)

11/1/2022 to 1/31/2023: 100% Project Closeout

- To include final project walkthrough, completion of punch list items, contractor final submittals, and final payment to contractor

2/1/2023 to 3/31/2023: Prepare & Submit Final Project Report to MNHS

- Completion of all grant contract requirements

### Project Personnel:

#### Project Engineers

**Required Qualifications:** The project engineers will be Professional Engineers licensed in the state of Minnesota. Project Engineers will have experience with historic bridge rehabilitation. The ideal engineer will have experience with rehabilitation of steel truss structures, including historic truss repair and selection of in-kind materials. The Project Engineers will follow and be well versed in applicable MnDOT guidelines for historic bridge rehabilitation as well as the SOI Standards for Rehabilitation. The project engineer will have primary responsibility for coordinating with contractors performing construction work, ensuring that plans and specifications are followed, as well as verifying that completed work demonstrates high quality craftsmanship and meets the SOI Standards for Rehabilitation. All completed work must meet the safety and load capacity measures in accordance with the current LRFD Bridge Design Specifications. The project engineer will work with the Grant Managers to complete the project.

Todd Howard, a construction engineer with the Dakota County Transportation Department will fulfil a portion of this role as in-kind match from Dakota County.

#### Bridge Construction Contractor

**Required Qualifications:** Demonstrated experience and proper insurance to work with concrete, steel, and historic bridge construction per the project plans and specifications.

#### Applicant Staff/Personnel

Waterford Township appoints the Township Clerk to act as the contact person via either e-mail or phone thus avoiding any potential for open meeting violations. Administrative work will be done by the Township Clerk, and the Township Clerk will serve as the Project Director. The Project Director will also serve as the Co-Grant Manager, alongside another township staff member. Any decisions needed by the Township Supervisors will be placed on the meeting agenda for a motion and or resolution. Township communication and action will be coordinated through the Township Clerk. Dakota County will provide Project Engineering services. Township staff serving as Project Director and Grant Managers will fulfil roles as an in-kind match from Waterford Township.

#### Procurement Process to Acquire Services

Waterford Township, with supporting assistance from Dakota County, will submit a formal request for proposal (RFP) and conduct a bidding and/or consultant selection process to acquire construction services for the preservation work. The formal solicitation process will follow the processes outlined by the Minnesota Historical Society as indicated in the grant application instructions. Engineering services are not anticipated to exceed \$20,000. Construction services are anticipated to exceed \$20,000, therefore a formal notice and bidding process will be conducted. The Project Director will prepare and release a RFP. Notification of the RFP will be posted on the City's website and in local newspapers, after which, a direct-mail solicitation to vendors who may be capable and available to respond will be shared. The Project Director will create a list of criteria to be used to select the winning proposal and facilitate awarding of the bid and contract negotiations. Bid selection will be based on best value, and all requirements for this selection method will be clearly set forth in bid instructions. It is assumed that



prevailing wage rules will apply to contractors awarded construction work under this project. Prevailing wage rules have been accounted for in the project budget. The Project Director will be responsible for record keeping and facilitating support documentation of the procurement process.

Have you already selected the proposed grant-funded vendor, consultant, and/or contractor?

Select Yes or No.

No

Provide estimates for the following. If none, enter "0":

Estimate the number of project hours worked by newly hired staff to be paid for with grant funds

Enter number:

0

Estimate the number of project hours worked by existing part-time staff to be paid for with grant funds.

Enter number:

0

Estimate the number of people (vendors/consultants/contractors) who will work on the project (non staff).

Enter number:

7

#### Enduring Value:

Phase II of the restoration of the Waterford Bridge will represent an impactful step forward in saving and preserving a National Register-listed bridge with local, state, and engineering significance. Rehabilitation of the Waterford Bridge will provide a functional and cultural asset for the community, as well as bring visitors and residents across and to the Cannon River, which has been part of Minnesota's Wild & Scenic Rivers Program since 1980.

For over 100 years, the Waterford Bridge carried a mix of pedestrians, bicycles, horses and buggies, and automobiles across the Cannon River. Due to safety concerns, the Waterford Bridge was closed to all traffic in 2018 and barricaded with large boulders and fencing. While it is unlikely that the Waterford Bridge will carry vehicular traffic again in the future due to the modern construction of a parallel vehicular bridge crossing upriver at Canada Avenue, the restoration will allow the bridge to serve as a destination for people of all ages and abilities to experience the history of the Township and to enjoy the Cannon River and its wildlife. The fully restored Waterford Bridge will be used by pedestrians, bicyclists, and small vehicles such as ATVs and snowmobiles as a year-round attraction for generations to come.

The Waterford Bridge was identified as a key link for the future Mill Towns State Trail, potentially supporting a future trail connection between Northfield and Dakota County's Lake Byllesby Regional Park. The Mill Towns State Trail legislative authorization requires that the State Trail starts at Faribault Junction and the Sakatah Singing Hills State Trail and extends through the towns of Faribault, Dundas, Northfield, Waterford, and Randolph to the Cannon Valley Trail in Cannon Falls. Additionally, the rehabilitation of the Waterford Bridge will complete an enjoyable local 6-mile trail loop around the River between Northfield and Waterford for pedestrians and bicyclists, building a tourist presence in the region and contributing to the future of active living in multiple communities, including the Carleton College campus. Regardless of the final outcome of the development of the Mill Towns State Trail, the Waterford Bridge will continue to serve as a key link to multiple destinations of local and regional significance.

The Waterford Bridge has provided a river-focused amenity with historical integrity for over 100 years, as well as provides a symbolic identity for the Township. This bridge spans one of the most beautiful

areas of the Wild and Scenic Cannon River, offering visitors opportunities to experience a bridge from a bygone era, while connecting communities along the River Corridor. This project will rehabilitate and secure this amenity in perpetuity for generations of residents and visitors to come.

### **Sustainability:**

With this project, the Waterford Bridge will continue to serve future generations as a functional pedestrian and bicycle bridge, as well as a community destination and site of historical significance and integrity.

Through the construction efforts, this project will support and provide craft trade jobs to the local economy. It is estimated that 7 or more construction / trade positions will be created over the course of 6-7 months as part of the construction efforts, which includes the use of general contractors and specialty subcontractors with experience in historic concrete restoration and metal fabrication. Preservation of the Waterford Bridge will improve the structural and functional capacity, retain important historic fabric and integrity, and allow Waterford Township to focus on ongoing bridge maintenance at a much lower expense and lower risk of injury for maintenance workers. Maintenance activities are estimated to range between \$3-4,000 per year; once the bridge is restored, this amount will need to be either budgeted through the Township or fundraised with potential for volunteer opportunities. Regular maintenance includes cleaning the ends of abutments and bearings, cleaning debris from the bottom chord and vines from trusses. After rehabilitation of the deck surface is complete, maintenance of deck sealant joints and cracks will also be an ongoing activity to be included in annual budget programming.

Dakota County will continue to inspect the bridge on a biennial basis. Any recommended repair work identified by inspectors will be addressed immediately through the Township or the County.

To date, the community of Waterford Township and the larger regional community has worked collectively to keep the Waterford Bridge extant. Multiple campaigns over the last few decades have demonstrated the power of stewardship and commitment of a small community to come together for a common cause. Carleton College, the Mill Towns Joint Powers Board, the City of Northfield, the MN Department of Natural Resources, and the Friends of the Mill Town Trail have expressed their support for preservation and repairs to this bridge. When Waterford Township received the National Trust for Historic Preservation grant of \$95,000 (2011), the Township matched \$60,000 plus interest to complete the repair of the southeast abutment, with widespread community support. With the award of \$106,800 in grant funding (2017) to complete the bridge rehabilitation plans and specifications in 2019, the Township matched with \$7,500 and in-kind volunteer hours valued at over \$27,000. The 2019 award of a Minnesota Historical and Cultural Heritage Grant provided \$342,318 in funding for Phase I of the rehabilitation project. This amount was matched by \$52,500 of in-kind professional services. When the rise in market prices for materials and labor in 2021 created a deficit in funding to complete Phase I, a collaborative effort from Dakota County, Friends of the Mill Towns Trail and Waterford Township provided gap funding in the amount of \$131,500 to ensure that the project could be completed.

### **Diversity and Inclusion:**

The Waterford Bridge is located near the southern edge of Dakota County, and will serve a vital connection on the future State Trail for three adjacent counties which are also connected by the Cannon River: Dakota, Rice, and Goodhue counties. Census data from the ACS 5-year Estimates have been compiled from these three counties to provide a regional snapshot of demographics of the area.

The total population of the three counties combined is 553,884 people.

#### **Race and Ethnicity:**

- 6.9% of people identify as Hispanic or Latino (of any race)
- 5.6% (87,820 people) identify as Black or African American (alone)
- 4.1% identify as Asian or Pacific Islander (alone)
- 0.3% (1,715 people) identify as American Indian and Alaskan Native (alone)
- 2.7% identify as two or more races
- 0.3% (1,715 people) identify as American Indian and Alaskan Native (alone)

#### **Other Demographics:**

- 12.3% of the tri-county population speaks a language other than English, and 4.8% speak English less

than very well.

- 10.8% of the tri-county population experience some form of disability.
- 6.7% of the tri-county population has income status below the poverty line. The largest age group of people living with income below the poverty line are people age 18-24, and the next largest group are children 17 years and younger.
- 4.7% (9,620 people) of the tri-county population does not have access to a personal vehicle.
- 14.9% of the population works in the health care and social assistance sector. This represents the largest industry by employees in the tri-county area, followed by educational services (9.4%) and accommodation and food services (7.8%).
- 6.1% of the tri-county population has less than a high school education, and 19.1% have a high-school education or equivalent with no college.

Today, the Waterford Township Board demographics are reflective of the Waterford Township population, which is drawn primarily from a history of generational agricultural practices dating back to European settlement of the area. These long-standing family farms are likely to remain with similar impact to the local demographics in the foreseeable future.

Carleton College in Northfield, is home to a diverse student population that has direct access to the Waterford Bridge and Cannon River, with the main campus within walking or biking distance through the adjacent Cowling Arboretum. The College's diversity has been increasing over the last decade. Nearly 40% of students in 2017 reported as students of color and non-resident aliens. Over 10% of students are from countries outside of the US, and over 50% of students come to the campus from outside of the Midwest. Over 10% of students are first-generation college students.

Potential visitors to the Waterford Bridge, users of the Mill Towns State Trail and people recreating along the Cannon River may come from destinations beyond these three counties. Canoeing and fishing on the Cannon River are both very popular activities, especially for Hmong and Hispanic families, as well as with young people of all backgrounds. Use of trails for biking, walking, and in combination with water recreation are among the fastest growing and most popular activities for recreation in the state and region. E-bikes and pedal-assist bicycles have grown in use over the last few years, and recent state guidance on e-bikes give guidance for allowing use on state and local trails, further opening up opportunities for seniors and people with a broad range of abilities to enjoy trails.

The area surrounding the Waterford Bridge and Mill Towns State Trail is very rural in nature. While open, natural areas are prevalent within the immediate area, there are not as many dedicated outdoor areas for recreation or exercise in the area between Northfield and Cannon Falls. The Mill Towns State Trail and the link provided by the Waterford Bridge will connect recreational sites while providing an opportunity for people of all abilities to experience recreation within a rural setting. Trail use, river access, and visits to the Waterford Bridge are free to the public, and recreational activities are relatively low-in cost for equipment or gear needed. Per MnDNR requirements and the rehabilitation design, both the trail and bridge will be ADA accessible and welcoming for people living with disabilities and older adults.

It is recognized that at this time, without a constructed or completed trail connecting to the Waterford Bridge, and with the bridge closed to public access, it is difficult to account for the potential users and demographics for the future facility. However, Waterford Township, Dakota County, and MnDNR are committed to understanding current user groups, and understanding how to make future facilities accessible and welcoming for all. Once rehabilitated, the Township intends to monitor use of the Bridge through annual counts performed by volunteers, and will serve as a partner with the MnDNR to monitor and evaluate use of the trail and bridge in the future.

## MEASURABLE OUTCOMES AND EVALUATION

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### MEASURABLE IMPACTS AND INDICATORS

Term	Expected Impact	Progress Indicator
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Short Term	Phase II of construction is completed with no adverse effect to the bridge's historic character-defining features, design, and materials.	Final scope of work for Phase II is signed off by the Grant Managers. Final construction work satisfies the Secretary of the Interior's Standards for Rehabilitation and meets criteria of grant. The bridge is ready for construction of subsequent phases of the project.
Intermediate Term	Complete construction (Phases III - IV) of construction is completed with no adverse effect to bridge's historic character-defining features, design, and materials. Bridge is completely opened to the public for recreational use (with the completion of Phase III) by pedestrians, bicyclists and snowmobiles, providing a continuous trail connection and opportunity for people to engage in active living while connecting to the Canon River.	Final scope of work is signed off by the Grant Managers. Final construction work satisfies the Secretary of the Interior's Standards for Rehabilitation. The Bridge is open for use, is structurally sound, and fully rehabilitated. Increased use is measured by inclusion of the bridge in future community events, group bike rides and increase in number of users over time (to be evaluated on an annual basis through trail counting efforts). Visitors and users of the bridge and adjacent trail are reflective of the demographics of the three-county area. The bridge continues to serve as a historic icon for the township and surrounding rural community.
Long Term	Educational, economic, environmental benefits to the community from retention of historic bridge. Continued community use of historic bridge that meets necessary engineering and safety requirements.	Structure remains in place, in good condition and open for bicycles and pedestrians to serve as a visible example of Minnesota's Engineering Heritage. Improvement in bridge's Sufficiency Rating measuring its structural and functional adequacy; extension of bridge's expected lifespan. The bridge continues to serve as a historic landmark and identifying characteristic for the Township of Waterford, as well as a destination along the statewide trail network. Visitors and users of the bridge and adjacent trail continue to be reflective of the demographics of the three-county area.

## PUBLIC INFORMATION

After the Minnesota Historical Society has either approved or denied a grant program application, the application record, which includes attachments, is accessible to the public upon request except for trade secret data as defined and classified in Minnesota Statute Section 13.37.

## APPLICATION ATTACHMENTS AND REQUIRED DOCUMENTATION

REQUEST DOCUMENTS

## REQUEST DOCUMENTS



2019-04-05 Br L3275 Design Exception to Township.pdf

Added by Elizabeth Wheeler at 11:47 AM on July 23, 2021



Waterford Bridge\_Brochure\_6.4.2021\_pages.pdf

Added by Elizabeth Wheeler at 11:47 AM on July 23, 2021



Waterford Bridge Photos and Photo Key\_190725.pdf

Added by Elizabeth Wheeler at 11:46 AM on July 23, 2021



NRHP\_Waterford Bridge\_100806.pdf

Added by Elizabeth Wheeler at 11:44 AM on July 23, 2021



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