



## Environment and Natural Resources Trust Fund

### 2022 Request for Proposal

#### General Information

**Proposal ID:** 2022-093

**Proposal Title:** Statewide Deconstruction Education Program

#### Project Manager Information

**Name:** Natalie Heneghan

**Organization:** Preservation Alliance of Minnesota d.b.a Rethos: Places Reimagined

**Office Telephone:** (262) 302-9397

**Email:** Natalie@rethos.org

#### Project Basic Information

**Project Summary:** Rethos: Places Reimagined and Better Futures MN will conduct statewide training on the practice and environmental benefits of building deconstruction, providing hands-on, accessible education to Minnesota contractors and property owners.

**Funds Requested:** \$186,000

**Proposed Project Completion:** June 30 2024

**LCCMR Funding Category:** Small Projects (H)

**Secondary Category:** Environmental Education (C)

#### Project Location

**What is the best scale for describing where your work will take place?**

Statewide

**What is the best scale to describe the area impacted by your work?**

Statewide

**When will the work impact occur?**

During the Project and In the Future

## Narrative

### **Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

This project will mitigate the excessive environmental impacts of building demolition within Minnesota, while creating a more sustainable circular economy that promotes skilled job creation. There is a growing awareness that continued new construction and demolition is both detrimental to the environment and unsustainable, due to the sheer amount of buildings that would need replacement. In 2018, building construction and demolition created over 600 million tons of non-recycled debris, with demolition accounting for 90% of that total.

This will become particularly prevalent in the housing market, where the average age of a Minnesota home is 43 years. According to the EPA, the carbon footprint cost of demolishing and replacing a home is 80 tons of CO<sub>2</sub>. Additionally, it is estimated that as much as 90% of a home could be reclaimed. Salvaging materials for reuse and recycling offers benefits to the builder, the client, and the environment. Reclaiming wood millwork, windows, flooring, wall studs, copper wiring, lighting, plumbing, and masonry prevents those materials from being sent to landfills, whether they are repurposed for use in another project or sent to industrial recyclers for recycling in the product stream. Lastly, salvaging reduces carbon dioxide production from the manufacture of new materials.

### **What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.**

Rethos and Better Futures are seeking funding to create and facilitate a much needed statewide deconstruction education program that is focused on expanding general awareness for the practice, while providing targeted education for local contractors. Our goal is to increase the demand for more environmentally sustainable alternatives to demolition and construction, while simultaneously increasing the supply of available local contractors qualified to complete deconstruction projects. This will also increase the supply of reusable building materials, which are in demand from architects across the state. This will begin the critical first step towards reducing the environmental and climate impact of Minnesota's building sector, while also placing the state at the forefront of the burgeoning national movement towards deconstruction.

Funding from this grant will support the creation and facilitation of both online and in-person training sessions. The online curriculum will be available to the public, utilizing Rethos' network of community partnerships across Minnesota to reach a broad audience. Online classes will introduce the benefits and applications of deconstruction and material reuse in Minnesota. In-person classes will provide contractors a hands-on training series that will allow them to capably perform deconstruction projects within their areas.

### **What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

Our project will increase the availability of deconstruction-capable contractors within Minnesota. Currently, there are limited deconstruction options. These efforts will reduce our construction industry's overall reliance on demolition, limiting the amount of wasted building material and lightening the burden this industry places on local landfills. It will also minimize the health risks caused by building demolition and any subsequent unsafe removal and management of hazardous materials.

Likewise, the number of materials salvaged through deconstruction can increase the supply of necessary building materials, decreasing the need for raw material extraction and benefiting the broader environmental sustainability of the industry.

## Activities and Milestones

### Activity 1: Public Awareness, Curriculum Creation & Partner Identification

**Activity Budget:** \$45,000

**Activity Description:**

During activity 1, Rethos and Better Futures staff will develop and conduct online deconstruction awareness classes. These classes will focus on building broader public awareness for deconstruction and material reuse, and inform participants about how to find qualified deconstruction contractors for their own projects. This curriculum will be adapted by Rethos and Better Futures staff from existing curriculums across the country that have had success in promoting broad awareness for deconstruction.

Additionally, Rethos will work with Better Futures to identify partners to help facilitate in-person deconstruction training classes across the state. Potential partners include: The Natural Resources Research Institute (NRRI) at UM-Duluth and GreenStep Cities MN. Additional community partners will be sourced from Rethos' connections as the Minnesota Main Street Coordinating program along with Better Futures' landfill diversion projects which operate throughout the state.

**Activity Milestones:**

Description	Completion Date
Online & In-Person Curriculum Created	October 31 2022
Greater MN In-Person Training Locations and Partners Secured	March 31 2023
4 Online Awareness Classes Conducted	June 30 2023

### Activity 2: In-Person Deconstruction Trainings

**Activity Budget:** \$111,000

**Activity Description:**

During activity 2, Better Futures staff will conduct in-person deconstruction training, with support from Rethos to facilitate registration, promotion and location. These classes will be aimed at giving contractors hands-on experience in deconstruction techniques and a general overview of how to plan for and conduct a deconstruction project. This includes outlines of how and where to utilize/sell salvaged materials, what specific skills and knowledge is needed to complete a deconstruction project and how they can more effectively align their work within the reuse economy.

This project will consist of 12 two day in-person classes that will be offered across Minnesota, focusing on training contractors and prospective contractors from organizations based in both the Twin Cities and across Greater Minnesota. They will be conducted over the weekend and include both an online (1st day) and hands-on in-person (2nd day) component. Courses will be taught by deconstruction experts with established experience in deconstruction and will be tailored to include their personal experiences and skills. All participants will also be provided with personal protective equipment (PPE), including steel toe capable footwear, safety gloves, goggles, and N-95 masks.

**Activity Milestones:**

Description	Completion Date
25% of Classes Conducted	June 30 2023
50% of Classes Conducted	December 31 2023
100% of Classes Conducted	June 30 2024

### Activity 3: Evaluation and Future Implementation

**Activity Budget:** \$30,000

**Activity Description:**

Once all online and in-person classes are completed, Rethos and Better Futures will evaluate the success of the program, identifying best practices and correcting challenges that came up during the grant period. All participants, both online and in-person, will receive a survey after they attend a class through this program. This survey will ask participants to rate the class curriculum, educator’s expertise and the quality of the online or hands-on training received. Additionally, they will be allowed to comment on anything they thought was missing from the training or that they would like covered in further detail in future sessions. Similarly, they will be prompted to let us know how they intend to use the skills and experience gained through the classes.

From these surveys Rethos and Better Futures will create a plan for future implementation of the statewide training program, adapting or introducing curriculum to accommodate any gaps revealed in the survey comments. Additionally, our staff will work to create a plan for providing a future suite of classes and potentially establishing a statewide certification, working to continue the effort to promote the positive benefits of deconstruction and material reuse after the end of the grant period.

**Activity Milestones:**

Description	Completion Date
Class Survey Template Complete	December 31 2022
Surveys Evaluated	June 30 2024

## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Alex Baldwin	Better Futures MN	Better Futures MN will be partnering with Rethos: Place Reimagined to realize the statewide deconstruction program. Alex Baldwin will supervise the appointed Better Futures staff that work on the deconstruction training project.	No
Hayden Troy	Rethos: Places Reimagined	Grant coordinator with Rethos. Will ensure grant compliance and reporting during the grant period.	No

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this be funded?**

This project will result in an expanded base of qualified deconstruction contractors, as well as an established virtual and in-person curriculum focused on deconstruction and material reuse awareness and skills-building. Rethos and Better Futures are planning to utilize the curriculum formed through this project to support ongoing classes that promote deconstruction as an alternative to demolition. Online curriculum will be made available through Rethos' website. Rethos will create a registry of contracting companies that send representatives to our in-person courses, promoting it as a tool for clients to see what contractors are qualified to conduct deconstruction projects in their area.

## Project Manager and Organization Qualifications

**Project Manager Name:** Natalie Heneghan

**Job Title:** Education Program Manager

**Provide description of the project manager's qualifications to manage the proposed project.**

Natalie Heneghan is the Education Manager at Rethos: Places Reimagined. She develops workshops that bring together homeowners, craftspeople, DIYers, and community members around building rehab and maintenance. Driven by a commitment to making rehab more accessible and less daunting, Natalie creates learning experiences that help people take care of the buildings they love. Natalie serves as the Rethos representative for ReUSE MN, a statewide consortium of reuse, repair, and recycling industries. She also sits on the board of Build Reuse, a national organization committed to turning construction and demolition waste into local resources. Natalie holds a BA in History from Macalester College and is completing a Master's in Heritage Studies and Public History from the University of Minnesota.

**Organization:** Preservation Alliance of Minnesota d.b.a Rethos: Places Reimagined

**Organization Description:**

Rethos: Places Reimagined, founded in 1981 as the Minnesota Preservation Alliance and renamed in 2019, is a 501(c)(3) organization that serves communities across Minnesota. Rethos is governed by an active 12-member volunteer-board and has staff located in St. Cloud, Winona, Duluth, and the Twin Cities. Rethos employs a 14 member staff comprised of nine program officers, an executive director and four development and administrative staff.

At Rethos: Places Reimagined, we are committed to changing the narrative on Minnesota's aging building infrastructure by promoting the creative reuse of older buildings, homes, and spaces. Our mission is to ensure that communities, businesses, and individuals are supported and informed about the economic, social, and environmental benefits of building rehabilitation. Through a variety of programs that work on the individual, local and state level, Rethos works to educate homeowners on cost-effective rehabilitation, support communities as they work to renew their Main Street business districts and promote statewide policies that incentivize building material reuse.



## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Rethos Education Program Manager		Overall Project Lead			15%	1,040		\$30,000
Rethos Statewide Education Coordinator		Statewide Facilitation and Coordination of Deconstruction Classes/ Creation of Curriculum/ Facilitation of partnerships			0%	2,080		\$30,000
Rethos Education Coordinator - Northern MN		Coordinates Northern MN deconstruction classes and partnerships			0%	2,080		\$20,000
Rethos Education Coordinator - Central MN		Coordinates deconstruction training in central MN			0%	1,040		\$10,000
Better Futures Deconstruction Trainer		Conduct in-person deconstruction trainings and assist in curriculum creation			38%	800		\$38,000
Better Futures Training Assisant		Assist in deconstruction training sessions/coordinate with Rethos staff to manage time, location and registration for the trainings.			38%	800		\$22,000
							<b>Sub Total</b>	<b>\$150,000</b>
<b>Contracts and Services</b>								
							<b>Sub Total</b>	<b>-</b>
<b>Equipment, Tools, and Supplies</b>								
	Tools and Supplies	Personal Protection Equipment (PPE) - Safety goggles, safety gloves, steel-toe capable foot wear or covers, N-95 masks @ \$100 per participant	Equipment to safety conduct deconstruction training					\$23,000

	Tools and Supplies	Multi-class education materials (instructor tools and example materials)	For group demonstrations and hands-on learning					\$4,000
							<b>Sub Total</b>	<b>\$27,000</b>
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	In state travel (calculated at the 2021 IRS Mileage rate of \$0.56/mile	Rethos staff facilitation of classes across Minnesota					\$3,000
	Miles/ Meals/ Lodging	In state mileage and lodging for Better Futures Deconstruction Training Staff	Multi-day deconstruction class lodging and travel expenses					\$6,000
							<b>Sub Total</b>	<b>\$9,000</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
							<b>Sub Total</b>	-
<b>Other Expenses</b>								
							<b>Sub Total</b>	-
							<b>Grand Total</b>	<b>\$186,000</b>



Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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## Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
			Non State Sub Total	-
			Funds Total	-

## Attachments

### Required Attachments

#### *Visual Component*

File: [5afed820-a4e.pdf](#)

#### *Alternate Text for Visual Component*

Better Futures & Ecotone Graphic showing the average carbon offset of a home deconstruction versus a demolition....

#### *Financial Capacity*

File: [e91038e5-f52.pdf](#)

#### *Board Resolution or Letter*

Title	File
Rethos Board Resolution	<a href="#">7c09c707-3ba.pdf</a>

### Optional Attachments

#### *Support Letter or Other*

Title	File
Minnesota Pollution Control Agency Letter of Support	<a href="#">485545c2-744.pdf</a>

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Does your project have potential for royalties, copyrights, patents, or sale of products and assets?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No



