



### Summary Information Cover Letter

- i. **Project Title.** Austin Reuse Warehouse
- ii. **Applicant Name.** City of Austin, P.O. Box 1088, Austin, TX 78767
- iii. **Eligible Entity Type.** Political Subdivision
- iv. **Qualification for Program Track.** Track 1: This program will make furniture available for free to nonprofit organizations and their clients, prioritizing those who need them the most, such as individuals transitioning out of homelessness. This program has the potential to expand to accept building materials and provide employment opportunities to disadvantaged communities.
- v. **UEI Number.** KDFCG1CKD734
- vi. **Project Summary.** Austin has a surplus of valuable goods that due to space constraints and limited reuse outlets are going to the landfill. Austin Resource Recovery hopes to use EPA grant funds to permanently fill the resource gap by opening the Austin Reuse Warehouse, which would accept and redistribute gently used furniture at no cost to nonprofits and their clients with a focus on furnishing the homes of those transitioning out of homelessness. The warehouse would eventually expand to also accept building material. An on-site “Innovation Lab” would provide space and infrastructure for innovative programming, including a workforce program in which individuals with barriers to employment would learn how to upcycle obsolete furniture into “made new” pieces.
- vii. **Contact Information.** Madelyn Morgan, Circular Economy Program Manager | Austin Resource Recovery, City of Austin | Madelyn.Morgan@austintexas.gov | 512-974-7964
- viii. **Project Location.** Austin, Texas
- ix. **Total Project Cost.** \$4,999,076.90
- x. **EPA Funding Requested.** \$4,000,000
- xi. **Project Period.** October 1, 2023 – September 30, 2026
- xii. **Program Objective Elements.** A) Establish, increase, expand, or optimize capacity for materials management. B) Establish, improve, expand, or optimize end-markets for the use of recycled commodities. C) Demonstrate a significant and measurable increase in the diversion, recycling rate, and quality of materials collected for municipal solid waste.
- xiii. **Strategic Plan Elements.** A) Goal 1: Tackle the Climate Crisis, Objective 1.1 Reduce Emissions that Cause Climate Change B) Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights, Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels. C) Goal 6: Safeguard and Revitalize Communities, Objective 6.2: Reduce Waste and Prevent Environmental Contamination.
- xiv. **Cooperative Partners.** None yet.



### Criterion 1: Project Summary and Approach

**NARRATIVE:** A resource gap exists in Austin. Rising costs of living have created an affordability crisis and left many residents unable to find housing or obtain basic household necessities. Yet at the same time, Austin has a surplus of valuable goods that due to space constraints and limited reuse outlets are ending up in the landfill. MoveOutATX, an Austin Resource Recovery (ARR) program that encourages UT Austin's college students to donate unwanted items during off-campus summer move out, partners with multiple reuse organizations to divert donated materials. In 2021, the program began connecting one small slice of this bounty with those who need it by partnering with the City's Housing-focused Encampment Assistance Link (HEAL) initiative. HEAL accepted new and open toiletries and cleaning supplies to redistribute among Austin's homeless population. Additionally, to resolve the donation market gap exposed in 2021, the 2022 MoveOutATX program hosted a Free Furniture Market (FFM) which rehomed 529 furniture pieces in four days to hundreds of community members. Inspired by the success of this program, ARR hopes to use EPA grant funds to fill this resource gap permanently by opening the Austin Reuse Warehouse.

The City of Austin (City) proposes to use \$4 million from this grant to secure warehouse space and equipment to launch this initiative, which has the main goals to: 1) reduce the volume of furniture and building materials sent to area landfills to move closer to Austin's zero waste goal, and 2) innovate to provide meaningful economic and community benefit through reuse. It is estimated the warehouse would begin accepting furniture donations in usable condition in Spring 2025 and space permitting, expand to building materials in Spring 2026. The materials would be available, as-is, to nonprofit organizations and their clients at no cost. This program would keep valuable materials of the landfill and enable clients to choose pieces to make their new homes more comfortable. It could also provide home repair supplies for low-income residents and those recovering from natural disasters, and help furnish offices and facilities of nonprofits. This frees up nonprofit funds for other purposes.

ARR is submitting this application under Track 1 due to the environmental justice concerns that accompany issues of housing and homelessness. The unhoused suffer from unhealthy levels of exposure to air and noise pollution,<sup>1 2</sup> especially in Austin where one in every three days there is an unhealthy level of air pollution.<sup>3</sup> Without adequate shelter, people experiencing homelessness lack protection from extreme weather events, which will become more frequent and dangerous with climate change. The Summit to Address Unsheltered Homelessness in Austin has pledged to house 3,000 people transitioning out of homelessness.<sup>4</sup> The high cost and low supply of housing in Austin makes this a challenging task. Home prices in Austin more than doubled between 2011 and 2021, and the

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<sup>1</sup> DeMarco, A., Hardenbrook, R., Rose, J., & Mendoza, D. (2020). Air Pollution-Related Health Impacts on Individuals Experiencing Homelessness: Environmental Justice and Health Vulnerability in Salt Lake County, Utah. *International Journal of Environmental Research and Public Health*. <https://www.mdpi.com/1660-4601/17/22/8413>

<sup>2</sup> Goodling, E. (2019). *Intersecting Hazards, Intersectional Identities: A Baseline Critical Environmental Justice Analysis of US Homelessness*. *Nature and Space*. <https://journals.sagepub.com/doi/10.1177/2514848619892433>

<sup>3</sup> Park, B. (2021, October 6). Austin Saw 103 Days of Unsafe Levels of Air Pollution in 2020, the Third Worst City in State. *The Austin American Statesman*. <https://www.statesman.com/story/news/2021/10/06/air-pollution-austin-area-third-worst-texas/6009446001/>.

<sup>4</sup> Summit to Address Unsheltered Homelessness in Austin. (2021, April 15). *Summit to Address Unsheltered Homelessness in Austin – Working Document*. <https://www.kxan.com/wp-content/uploads/sites/40/2021/04/Summit-to-Address-Unsheltered-Homelessness-in-Austin-%E2%80%93-Working-Document-as-presented-April-15-2021.pdf>



## 2023 EPA SWIFR Grant Proposal Austin Reuse Warehouse, City of Austin, Texas

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average cost to rent an 864-square-foot apartment was \$1,600 in 2021.<sup>5</sup> Housing this vulnerable population requires funding for the unit itself plus furnishings, the latter which may range between \$3,000 and \$8,500 for a one-bedroom apartment.<sup>6</sup> The HEAL Initiative and nonprofits are leading these efforts. HEAL helps compassionately close the most unsafe encampments in Austin by offering people experiencing homelessness a direct pathway to crisis shelters and opportunities to attain stable housing. ARR's existing relationship with HEAL provides a pathway to connect with agencies providing these services. Agencies ARR has spoken with seem excited about the proposed concept.

The City also has a goal to reach Zero Waste by 2040. In working toward this goal, building materials and furniture have emerged as two problematic material streams. Construction and demolition waste makes up about 20% of landfilled materials in the Capital Area Council of Governments (CAPCOG) region.<sup>7</sup> Many of these items have reuse potential, but with only two retail outlets accepting building material donations and over 6,000 new construction and 1,000 demolition projects in FY22, Austin lacks infrastructure to adequately process and rehome these materials. Furthermore, resale stores have increased donation quality standards for bulky items like furniture, that require more floor space and often don't quickly sell. As such, many unwanted used furniture pieces are landfilled, despite still being usable. This was highlighted during MoveOutATX 2021. Due to staffing shortages and quality standards, one reuse partner landfilled 20,000+ lbs. of donated furniture. The success of the inaugural FFM in 2022 proved that although an item may not have sufficient resale value for it to be processed by a thrift store or other retail outlet, the item still has inherent value and worth, if offered at no cost.

Space permitting, ARR anticipates the warehouse can enable unique pilot programming through an Innovation Lab, estimated launch in Fall 2024. These initiatives may include: providing space to expand the City's Community PC Program, which refurbishes and rehomes retired City electronics to help close Austin's digital divide; hosting a workforce program to train individuals experiencing homelessness how to repair, remanufacture, and upcycle City surplus furniture into "made new" pieces through a standardized process; and piloting technologies to help modernize the reuse sector.

The workforce program would be funded through the City's Civilian Conservation Corps, supported by ARPA and general funds. Individuals employed by this initiative would sort inventory, track data, assist with loading/deliveries, and learn how to upcycle City surplus furniture, which could be placed directly into new homes. The nonprofit partner identified through an RFP, estimated award in late summer 2024, would also provide wraparound services to clients. Funds are available for a two-year pilot. If successful, the program could expand to offer vocational training in furniture repair, reupholstery, and transportation/moving. Although the workforce program would be supported by non-grant funding, without the grant funding for the facility, the workforce program cannot proceed.

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<sup>5</sup> Sandoval, E. (2021, November 27). How Austin Became One of the Least Affordable Cities in America. The New York Times. <https://www.nytimes.com/2021/11/27/us/austin-texas-unaffordable-city.html>.

<sup>6</sup> Furniture Bank. How Much Does Furniture Cost for a New Apartment? <https://www.furniturebank.org/how-much-does-it-cost-to-furnish-an-apartment/>.

<sup>7</sup> Texas Commission on Environmental Quality. (2022, September). Municipal Solid Waste in Texas: A Year in Review, 2021 Data Summary and Analysis. <https://www.tceq.texas.gov/downloads/permitting/waste-permits/publications/as-187-22.pdf>



Staff envisions the Reuse Warehouse as both a diversion mechanism and a tool to provide long-term community resilience so the City can meet the need for furniture and household goods in the face of rising inflation or further supply chain disruptions.

**RFA REQUIREMENTS LINKAGE:** The proposal meets 3 of 6 RFA requirements.

*#1 Establish, increase, expand, or optimize capacity for materials management.* The Reuse Warehouse will expand local capacity for managing post-consumer furniture and building materials by accepting usable materials and rehomeing them at no cost to nonprofits. This will alleviate community challenges from a lack of capacity. Challenges were explained in the summary above but include: *A) Local thrift stores cannot process furniture quickly enough. B) Limited outlets for building materials reuse amidst increased new construction and renovations in Austin.* The 2022 Free Furniture Market demonstrated both the supply and demand for used furniture in the community.

*#2 Establish, improve, expand, or optimize end-markets for the use of recycled commodities.* Austin’s Construction and Demolition (C&D) Recycling Ordinance requires projects over 5,000 sf to divert 50% of their debris or generate less than 2.5 lbs. of debris per square foot. Although reuse is a compliance strategy, most contractors use mixed C&D dumpsters taken to a C&D processor. The single-stream nature of this strategy means less material is in good enough condition to be reused. Projects under 5,000 sq ft are not required to comply, but in FY22, permits were filed for 3,248 remodel, 3,219 small repair, 5,827 new construction, and 896 demolition projects. The Reuse Warehouse could help create an end-market for usable building materials, especially from smaller projects not covered by the C&D Recycling Ordinance.

*#3 Demonstrate a significant and measurable increase in the diversion, recycling rate, and quality of materials collected for municipal solid waste.* By expanding capacity to manage furniture and building materials, the Reuse Warehouse could significantly impact Austin’s diversion rate. According to the EPA, Americans disposed over 12 million tons of furniture in 2018 (about 4% of total MSW generation).<sup>8</sup> The same year, Americans landfilled about 144 million tons of C&D waste (equal to nearly half the total MSW generation).<sup>9</sup> Creating a reuse pathway for these two heavy and bulky streams would go a long way toward increasing landfill diversion in Austin.

**NATIONAL RECYCLING STRATEGY LINKAGE:**

*Increase collection and improve materials management infrastructure.* See RFA Requirements Linkage #1 in the table above.

*Enhance policies and programs to support circularity.* The Warehouse provides space to temporarily house donated materials until they find a second use. Without this space, individuals with unwanted items might landfill them instead of waiting to find a new user. Additionally, a circular economy will require many individuals with repair skills, but the number of people working in these fields is dwindling. The Warehouse’s workforce program could be a steppingstone towards developing a pipeline into repair fields that would be in high demand in a circular economy.

<sup>8</sup> Office of Land and Emergency Management. (2020, December). *Advancing Sustainable Materials Management: 2018 Tables and Figures.* (EPA 530-F-20-009). United States Environmental Protection Agency. [https://www.epa.gov/sites/default/files/2021-01/documents/2018\\_tables\\_and\\_figures\\_dec\\_2020\\_fnl\\_508.pdf](https://www.epa.gov/sites/default/files/2021-01/documents/2018_tables_and_figures_dec_2020_fnl_508.pdf)

<sup>9</sup> Office of Land and Emergency Management. (2020, December). *Advancing Sustainable Materials Management: 2018 Fact Sheet.* (EPA 530-F-20-009). United States Environmental Protection Agency. [https://www.epa.gov/sites/default/files/2021-01/documents/2018\\_ff\\_fact\\_sheet\\_dec\\_2020\\_fnl\\_508.pdf](https://www.epa.gov/sites/default/files/2021-01/documents/2018_ff_fact_sheet_dec_2020_fnl_508.pdf)



**EPA STRATEGIC PLAN LINKAGE:**

*Goal 1: Tackle the Climate Crisis, Objective 1. Reduce Emissions that Cause Climate Change.* The Reuse Warehouse would reduce emissions by advancing Austin’s circular economy. It would help items maintain their highest and best use, reduce waste and pollution caused by illegal dumping, and prevent extracting finite resources that would otherwise be needed to make new furniture.

*Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights, Objective 1. Promote Environmental Justice and Civil Rights at...Local Levels.* Unhoused individuals experience a high level of exposure to environmental hazards (see page 2), yet Austin’s high housing costs are a challenge in alleviating homelessness. By furnishing housing units, the warehouse could free up funds to go toward additional housing units to get more people off the streets.

*Goal 6: Safeguard and Revitalize Communities, Objective 2. Reduce Waste and Prevent Environmental Contamination.* The EPA’s Strategic Plan declares its intention to work with organizations and stakeholders to advance the circular economy, and to make the built environment more circular. The Warehouse achieves that end by providing post-consumer building materials and furniture at no cost to nonprofits and their clients, reducing waste and avoiding virgin material extraction.

**PROJECT GOALS, OBJECTIVES AND MILESTONES**

*Goal 1: Reduce volume of furniture and building materials sent to Austin-area landfills and move closer to Austin’s zero waste goal.*

<b>Objective 1.1: Open a City-run reuse warehouse</b>
Milestone 1.1.1: Secure facility and equipment (if funds remain) using grant funding. (Fall 2024)
Milestone 1.1.2: Secure staffing resources and additional equipment using city funding. (Fall 2024)
Milestone 1.1.3: Develop program details, marketing, and logistics in advance of grand opening.
Milestone 1.1.4: Begin accepting and distributing furniture. (Spring 2025)
Milestone 1.1.5: If space allows, expand to accept building materials. (Spring 2026)
<b>Objective 1.2: Expand MoveOutATX to increase collection frequency of materials.</b>
Milestone 1.2.1: Execute pilot in summer 2025.

*Goal 2: Innovate to provide meaningful economic and community benefit through reuse.*

<b>Objective 2.1: Work with a nonprofit partner to facilitate workforce program.</b>
Milestone 2.1.1: Create a standardized process for upcycling two obsolete furniture types (ex. filing cabinets and television consoles). (Early 2024)
Milestone 2.1.2: Issue RFP for management of workforce program. (April 2024)
Milestone 2.1.3: Award RFP and begin partnership to pilot employment opportunities. (Fall 2024)
<b>Objective 2.2: Create an Innovation Lab to be housed at the reuse warehouse.</b>
Milestone 2.2.1: Identify R&D collaboration opportunities with local institutions (City departments, universities, etc.) to bring modern technology to the reuse sector. (Spring/Summer 2025)

**TIMELINE AND MILESTONES**

Please refer to [Appendix B: Timeline and Milestones](#)

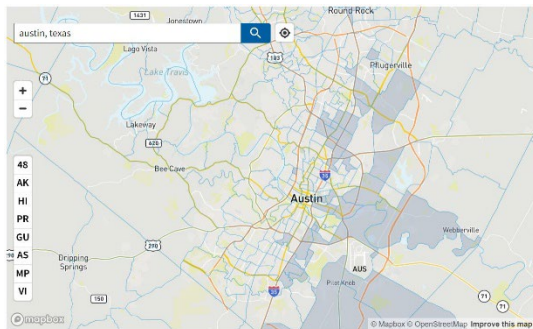




## **Criterion 2: Environmental Justice**

People experiencing homelessness face increased exposure to environmental hazards, as previously mentioned. The unhoused are also more susceptible to adverse effects from said hazards due to overall health and limited access to health care.<sup>10</sup>

Austin has a history of institutional racism that has contributed to today's challenging situation faced by its homeless residents. Thirty-four percent of Black households and 29% of Latino households have zero net worth, and Black and Latinx-owned homes are valued at \$150,000 less than homes owned by White Austinites.<sup>11</sup> Some of this racial wealth divide can be traced back to the City's 1928 Master Plan that effectively relegated Black and Latinx families to East Austin by denying them services anywhere else in the city. Around the same time, the City zoned East Austin for industrial activity, forcing Black and Latinx families to live near increased pollution and environmental hazards that accompany industry. Finally, when the federal government started offering government-backed mortgage loans, many East Austin neighborhoods were redlined, so loans weren't offered to purchase homes in those neighborhoods. These actions prevented Black and Latinx families from accumulating wealth through property ownership.



East Austin remains home to most of Austin's Black, Latinx, and low-income families. However, East Austin is rapidly gentrifying, forcing many long-time residents to move further east, closer to environmental hazards, including area landfills, or even face eviction and homelessness. Partially because of these economic and historical conditions, Black Austinites are approximately six times as likely as their white neighbors to experience homelessness.

The Austin Reuse Warehouse would play a vital role in the City's aim to house 3,000 people experiencing homelessness. Every rehomed person or family also needs furnishings to make their space livable. The warehouse could help provide these items, freeing up City and nonprofit funds to get more individuals into housing and away from the environmental justice issues associated with homelessness. Helping keep bulky items like furniture and building materials from the landfill also helps extend the life of current landfills and delays the need for expansion.

Last summer, ARR held stakeholder meetings with reuse/thrift enterprises, potential employers (repair, reuse, and manufacturing businesses) and social service agencies to solicit feedback and gauge interest/needs on growing the repair/reuse workforce and a high-level vision of participating in the concept of a reuse warehouse. There was a general excitement from enterprises and providers in the concept, and representatives revalidated the challenges of having space and funding to expand into this type of programming.

## **Criterion 3: Performance Measures – Anticipated Outputs and Outcomes**

The RFA asks projects which involve the purchase of infrastructure to discuss the following:

<sup>10</sup> Center for Disease Control and Prevention. (2022, December 1). *Homelessness & Health*. <https://www.cdc.gov/ddid/homelessness/index.html>.

<sup>11</sup> Prosperity Now. (2019, February). *Racial Wealth Divide in Austin*. <https://www.austincf.org/wp-content/uploads/2020/01/RacialWealthDivide-Profile-Austin.pdf>.



**(1) Number of infrastructure investments/enhancements made spanning the spectrum of collection through end market development.** The Reuse Warehouse represents 1 large infrastructure investment to create a new post-consumer materials management system for furniture and building materials. The warehouse is anticipated to begin accepting and distributing furniture in Spring 2025 and if space permits, accepting building materials in Spring 2026. This infrastructure will help keep usable materials out of the landfill to move closer to Austin’s zero waste goal while providing meaningful economic and community benefit to the nonprofit community.

**(2) Tons of MSW/C&D collected, recycled, composted, or managed via other management pathways in the community in which the project serves.** ARR provides curbside collection of MSW for single-family residential customers up to fourplexes. Multifamily residential and commercial properties are serviced by private haulers in an open market. ARR measures the weight of compost, recycling, bulk, landfill, and housewares/textiles collected from its curbside customers, plus the weight of material collected through the household hazardous waste (HHW) and hard-to-recycle center and brush drop-off center. ARR tracks this data monthly. Twice a year, the City requires licensed haulers operating in Austin to report the weight of material they haul to landfills, organics processors, and recycling facilities. C&D material hauled is reported separately. With this data, ARR can provide a rough estimate of total MSW and C&D collected and managed in Austin on a biannual basis. This data does not, however, account for material self-hauled to a landfill, donated, or resold. *Outcome:* Increase in the diversion rate of ARR-managed materials.

**(3) Tons of MSW/C&D generated per material type and source in the community in which the project serves.** The Warehouse would focus on two material streams: furniture and, space permitting, building materials (C&D). At this time, there is not a way to measure the amount of furniture disposed, resold or donated in Austin. The data detailed in Measure #2 can be used to estimate C&D generated in Austin; however, this is only a rough estimate since it misses self-hauled material and C&D miscategorized as MSW (e.g. from small home renovations and other DIY ventures). Given that this data is not currently tracked, staff cannot provide a reliable baseline assessment of what’s happening to these streams. However, based on the success of programs – like the Houston Reuse Warehouse, which has diverted 6,800 tons since 2012, and the 2022 MoveOutATX program, which diverted over 13 tons of furniture in just four days – there is a significant opportunity. In addition, each furniture piece that is rehomed through the warehouse also prevents a new item from being manufactured and purchased. Staff can attempt to work with key resellers to track the amount of furniture landfilled from their operations before the Warehouse opens and after when there’s an alternative outlet for usable furniture they cannot sell. However, there is no guarantee enterprises will be willing to share this data. *Output:* Staff can track the amount diverted through the Warehouse by two categories: furniture and building materials (see Measure #5 for feasible metric).

**(4) Number of temporary or permanent jobs created.** The warehouse will create the following FTE City jobs: 1 Warehouse Program Manager (October 2024) and 2 Warehouse Staff (early 2025). *Outcome:* Increased employment in the reuse sector.

The additional outputs/outcomes listed below will highlight diversion and direct community impacts related to meeting the project’s goals to (1) Reduce volume of furniture and building materials sent to Austin-area landfills to move closer to Austin’s zero waste goal and (2) Innovate to provide meaningful economic and community benefit through reuse.



<p><b>(5) Output: Tons diverted from landfills through the warehouse.</b> Staff will track the weight of furniture and building materials donated to the warehouse and collected by nonprofits and their clients. Staff will develop a process and establish a select number of material/item types for each category (e.g. couches, beds, doors, masonry) and report this metric at least quarterly.</p>
<p><b>(6) Output: Number of donations received monthly.</b> Target: Avg. 35 donations/month in year 1.</p>
<p><b>(7) Output: Number of collections by organizations and clients monthly.</b> Target: Avg. 30 collections/month in year 1.</p>
<p><b>(8) Output: Number of collections intended to help furnish housing for vulnerable populations.</b> Target: Avg. 15 collections/month in year 1.</p>

**Criterion 4: Programmatic Capability and Past Performance**

- a) The City has received 3 EPA Brownfields grants that have been active within the past 3 years:
  - 1. FY17 Community Wide Assessment (CWA) | CA No. BF-01F37601 | Total: \$300,000 | Term: 10/01/17 – 09/30/20 (closed)
  - 2. FY16 Revolving Loan Fund (RLF) | CA No. BF-01F21301-2 | Total: \$1,320,000 | Term: 10/01/16 – 09/30/23 (open)
  - 3. FY21 CWA | CA No. BF-01F96301 | Total: \$600,000 | Term: 10/01/21 – 09/30/24 (open)
  
- b) For these Cooperative Agreements (CAs), the City has maintained compliance with the terms and conditions of the CA (including the work plan/schedule, site eligibility and uses of funding), and provides timely, thorough quarterly reports on progress towards outputs/outcomes and submits detailed EPA ACRES database entries.
  - 1. FY17 CWA Grant (Closed): All phases completed successfully during the three-year grant period. 100% of the budget was expended. Outputs/outcomes exceeded goals established in the Work Plan. Final technical and financial reports were submitted on time and accepted by EPA.
  - 2. FY16 RLF Grant & FY 21 Supplemental Funding (Open): Outputs/outcomes are meeting Work Plan goals. All quarterly and annual grant and reporting requirements have been met.
  - 3. FY21 CWA Grant (Open): Outputs/outcomes to date have exceeded goals established in the Work Plan. All quarterly and annual grant and reporting requirements have been met.
  
- c) The City has substantial resources, including technical and support staff to assist with implementation activities outlined in this proposal, separate from the staff overseeing the Brownfields grants. The City has proactive succession plans if staff changes are required, to ensure staff with appropriate qualifications and experience are reassigned to the project.
  
- d) Additionally, City staff assigned to this proposal have extensive experiencing managing complex projects in the circular economy and solid waste management space:
 

**Jason McCombs, Interim Strategic Initiatives Division Manager, ARR:** With over a decade of experience in solid waste management at the municipal level, Jason has been a leader in developing the City of Austin’s zero waste and circular economy policy and programs from their inception in 2012. He has a proven track record of how to strategically plan, develop municipal policy, and operationally implement programs related to recycling, compost, food recovery, reuse, and C&D recycling. Jason holds a bachelor’s degree in architecture from Texas Tech University. His experience and direction will ensure that EPA funding will further the goals of the project.





**Donald Hardee, Diversion Facilities Division Manager, ARR:** With over 30 years of experience in waste management, including 16 years in the private sector, Donald oversees the City’s Recycle & Reuse Drop-Off Center, which houses programs for HHW and hard-to-recycle material, and collected 2,310 tons in FY21. Donald also manages landfill closure and post-closure operations, Brownfields Revitalization Office, and brush processing operations. He earned a B.S. in Biology & Chemistry from Francis Marion University in Florence, SC.

**Madelyn Morgan, Circular Economy Program Manager, ARR:** Maddie has over 10 years of experience in zero waste initiatives and holds a B.A. from UT Austin and an M.A. in Sustainability from Texas State University. She oversees ARR’s Circular Economy Program, which helps retain and grow businesses advancing the circular economy through a partnership with the Economic Development Department; develops and implements initiatives and programs to shift Austinites’ behavior towards reuse, repair, and other circular actions; and helps the City of Austin lead by example by implementing circular practices within the organization. She spearheaded the creation and implementation of MoveOutATX. and is a Waste360 “40 Under 40” recipient.

**Megan Kaplon, Conservation Program Coordinator, ARR:** Megan has a M.S. in Sustainability Studies from Texas State University where her capstone project produced an evaluation framework for C&D recycling policy in U.S. cities. Since joining ARR in 2021, her work has focused on creating positive behavior change and encouraging reuse and repair among Austin residents.

### **Criterion 5: Budget and Expenditure of Awarded Grants Funds**

Please see [Appendix A: Budget Table and Description](#).

### **Criterion 6: Project Sustainability**

The \$4 million from this grant would facilitate securing a warehouse facility and if funding remains, support purchasing some large equipment pieces necessary for operations, such as a box truck and forklift. Additional up-front equipment costs will be funded by ARR. After this initial investment, ARR estimates annual program costs to the City between \$250,000 and \$500,000.

ARR is committed to the success and growth of the Reuse Warehouse as is evident from the willingness to sustain 3 full-time employee positions from the onset of the program, and the department anticipates being able to continue supporting these positions at \$250,000/year after the assistance period ends. ARR will work collaboratively with other city departments to identify \$250,000/year to continue the workforce programming if the pilot is successful.

ARR proposes that this contract be considered a long-term waste management and social services contract that is not expected to become financially self-sufficient. The barriers to financial self-sufficiency for traditional furniture resale have already been described, and these barriers increase under the higher social impact model that is proposed.

However, if the acquired property has adequate space, the City intends to explore revenue streams to help offset costs, after operations are running smoothly for rehoming furniture and if space permits, building materials. Ideas include: identifying an instructor to host ticketed repair and upcycling workshops open to the public; charging below market value to access a makerspace for upcycling entrepreneurs; charging below market value to an enterprise for storage space to facilitate business-to-



business material exchanges and/or event diversion services (both existing gaps in the Austin market); direct sales to the public or agencies

### **Criterion 7: Innovative Approaches and Solutions**

Furniture banks and building material reuse warehouses already exist in some U.S. cities, but as separate entities. The Austin Reuse Warehouse is innovative and different from these existing examples in several ways. If space permits, it will combine two large, bulky materials streams under one roof as a publicly run operation. The warehouse would create full-time living wage jobs with benefits, instead of relying on volunteers for most of the necessary operational labor. Additionally, the warehouse would provide valuable goods to nonprofits and their clients at no-cost.

The Innovation Lab aspect of the Warehouse is also a unique approach. Although funds are not requested for this portion of the program, securing the space for the warehouse makes this element feasible.

- The contracted workforce program would provide employment opportunities for populations with barriers to employment, such as individuals experiencing homelessness. Clients would gain work experience and learn upcycling and repair, such as how to repurpose obsolete furniture items like filing cabinets and TV consoles, helping to give these items, which are not useful as-is, a second life. Making these items into “good-as-new” furniture while providing income and supporting residents’ dignity and well-being is an innovative concept; similar concepts exist in Europe,<sup>12</sup> but less than a handful of programs have been identified in the U.S.
- In time, existing apprenticeship programs that teach repair-related skills, such as carpentry and welding, may be interested in accessing the warehouse and/or bringing graduates of the Reuse Warehouse cohorts into their programs as a next step. In stakeholder meetings last summer, for-profit and nonprofit repair and reuse enterprises expressed a shared frustration around workforce and hiring challenges. A long-term goal, outside the assistance funded period, is to carve pathways from this program to help prepare individuals and provide them with access to necessary basic resources prior to participating in an intensive apprenticeship program.
- Additionally, staff has had preliminary conversations with local researchers interested in piloting various technologies, such as rapid digitization of warehouses inventory for tracking purposes and real-time online shopping.

Lastly, the warehouse provides the infrastructure and physical space that can, in addition to supporting the main functions outlined in this proposal, enable ARR to create and pilot innovative circular economy programming requiring physical space. If space permits, program possibilities include:

- Expanding to accept, repair, and redistribute additional categories of items like toiletries and cleaning supplies, mattresses, durable medical equipment, bikes, or appliances.
- Expanding operations to capture material generated at City facilities, such as storing and redistributing toiletries confiscated at the Austin Bergstrom International Airport TSA check points (which are currently landfilled).
- Using the Reuse Warehouse as an outlet for ARR’s on-call curbside bulk pick-up service to increase diversion of discarded but usable items.

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<sup>12</sup> OxFam Belgique. (2022). *Impact Furniture: Takeover and Resale of Office Furniture*. <https://oxfambelgique.be/impact-furniture>.



### **Criterion 8: Replicability**

The combination of large numbers of people experiencing homelessness, high housing costs, and usable furniture and building materials ending up in the landfill is not a scenario unique to Austin. Among the 10 U.S. cities with the largest number of people experiencing homelessness,<sup>13</sup> eight have furniture banks in their region.<sup>14</sup> However, none of the banks in these 10 cities are publicly run, most rely on volunteer labor, and none have publicly run building material reuse warehouses.

Austin is home to several universities and research institutions, as well as a major tech hub. At the same time, reuse is still an antiquated field, which makes the economics of resale and upcycling difficult for many item types. This is why the Austin Reuse Warehouse is a good fit to pilot an Innovation Lab arm. As mentioned above, the workforce program that involves teaching upcycling and repair skills, is not commonplace. However, as industry (e.g., furniture makers) slowly shifts to more responsible manufacturing, with end-of-life in mind at the design phase, demand for repair technicians would presumably increase. ARR sees this workforce pilot as the first step towards developing pathways into repair and reuse fields.

### **Criterion 9: Leveraging**

Year 1: Key project staff will lead administrative tasks like working with the City's Real Estate Office to identify a suitable property, working with ARR contract and finance staff to develop necessary SOWs for the social services partner, and securing equipment. Existing staff within ARR's Public Information Office would develop a grand opening campaign. This team would also lead preparation for hiring 3 full-time employees.

Year 2: 1 FTE manager and 2 FTE warehouse staff would be hired and supported by ARR. ARR would continue to fund these positions indefinitely. Funds are already available for the initial workforce programming pilot through the City's Austin Civilian Conservation Corps (ACCC) for at least two years. ACCC is the next generation climate corps that envisions and models a transformed work culture. ACCC prioritizes equity in green workforce development and expand the narrative of green vocations.

There may be additional partnership opportunities through existing formal arrangements, such as the IDA between ARR and the City's Economic Development Department which institutionalizes a cross-departmental effort to support economic development through zero waste and circular economy by focusing on attracting jobs for the hard-to-employ, supporting small business success, growing the manufacturing sector, and creating equitable economic opportunity for all Austin residents. There is also an existing mechanism that allows City staff to initiate research projects easily and quickly with researchers at the University of Texas at Austin.

ARR has not yet had conversations with the county and surrounding municipalities about maintaining an MOU to help support warehouse operations; however, given that nonprofits from the MSA are expected to take advantage of the warehouse, staff hopes to explore these avenues if funding is awarded.

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<sup>13</sup> McCarthy, N. (2021). *The U.S. Cities with the Highest Homeless Populations in 2020 [Infographic]*. Forbes. <https://www.forbes.com/sites/niallmccarthy/2021/04/16/the-us-cities-with-the-highest-homeless-populations-in-2020-infographic/?sh=2d499b3b188c>.

<sup>14</sup> Furniture Bank Network. *Find a Furniture Bank*. <https://furniturebanks.org/furniture-banks/>.



2023 EPA SWIFR Grant Proposal  
 Austin Reuse Warehouse, City of Austin, Texas

**Appendix A: Budget Table and Description**

**Budget Table**

					YEAR 1		YEAR 2		YEAR 3	
					EPA \$	Other \$	EPA \$	Other \$	EPA \$	Other \$
<b>STAFFING (FTE = 2080 hrs)</b>										
Position	Hrly Rate	Yr 1 Hrs	Yr 2 Hrs	Yr 3 Hrs						
FTE Manager	\$41.93/hr	0	FTE	FTE	\$0	\$0	\$0	\$87,214.40	\$0	\$87,214.40
FTE Warehouse Staff #1	\$27.42/hr	0	9 mo	FTE	\$0	\$0	\$0	\$42,775.20	\$0	\$57,033.60
FTE Warehouse Staff #2	\$27.42/hr	0	9 mo	FTE	\$0	\$0	\$0	\$42,775.20	\$0	\$57,033.60
<b>TOTAL SALARY AND WAGES</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$172,764.80</b>	<b>\$0</b>	<b>\$201,281.60</b>
<b>BENEFITS (includes (FICA, Retirement, Medical))</b>										
Position	Estimated annual total									
FTE Manager	\$22,371				\$0	\$0	\$0	\$22,371	\$0	\$22,371
FTE Warehouse Staff #1	\$14,629				\$0	\$0	\$0	\$10,972	\$0	\$14,629
FTE Warehouse Staff #2	\$14,629				\$0	\$0	\$0	\$10,972	\$0	\$14,629
<b>TOTAL BENEFITS</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$44,315</b>	<b>\$0</b>	<b>\$51,629</b>
<b>EQUIPMENT</b>										
See budget justification					\$0	\$0	\$190,000	\$17,400	\$0	\$0
<b>TOTAL EQUIPMENT</b>					<b>\$0</b>	<b>\$0</b>	<b>\$190,000</b>	<b>\$17,400</b>	<b>\$0</b>	<b>\$0</b>
<b>SUPPLIES</b>										
See budget justification					\$0	\$0	\$0	\$4,500	\$0	\$0
<b>TOTAL SUPPLIES</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,500</b>	<b>\$0</b>	<b>\$0</b>
<b>CAPITAL EXPENDITURES</b>										
Warehouse acquisition					\$0	\$0	\$3,810,000	\$0	\$0	\$0
Overhead warehouse costs (e.g. utilities, fuel)					\$0	\$0	\$0	UNKNOWN*	\$0	UNKNOWN*
<b>TOTAL CAPITAL EXPENDITURES</b>					<b>\$0</b>	<b>\$0</b>	<b>\$3,810,000</b>	<b>*</b>	<b>\$0</b>	<b>*</b>
<b>CONTRACTUAL</b>										
Social services partner to provide employment for repair & upcycling furniture					\$0	\$0	\$0	\$250,000	\$0	\$250,000
<b>TOTAL CONTRACTUAL</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$250,000</b>	<b>\$0</b>	<b>\$250,000</b>
<b>OTHER EXPENSES</b>										
See budget justification					\$0	\$0	\$0	\$5,687	\$0	\$1,500
<b>TOTAL OTHER EXPENSES</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,687</b>	<b>\$0</b>	<b>\$1,500</b>
<b>TOTALS</b>										
<b>DIRECT COSTS</b>					<b>\$0</b>	<b>\$0</b>	<b>\$4,000,000</b>	<b>\$494,666</b>	<b>\$0</b>	<b>\$504,411</b>
<b>INDIRECT COSTS</b>					<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL PROGRAM COST</b>					<b>\$0</b>	<b>\$0</b>	<b>\$4,000,000</b>	<b>\$494,666</b>	<b>\$0</b>	<b>\$504,411</b>

**Budget Description:**

**TOTAL PROJECT COST: \$4,999,076.90**

**TOTAL EPA FUNDING REQUESTED: \$4,000,000**

- I. **Staffing: No funds are requested.** The City will cover costs for staffing the warehouse. Current staff in ARR’s Circular Economy Program will oversee project management during Year 1: Working with finance staff to secure equipment, with the Real Estate Office to identify and secure a space, and with HR to hire a full-time Warehouse Program Manager at the beginning of Year 2.



2023 EPA SWIFR Grant Proposal  
 Austin Reuse Warehouse, City of Austin, Texas

The Program Manager will be responsible for hiring and onboarding two warehouse staff. These positions and costs are reasonable for the anticipated scope of work and job duties.

	Personnel	Rate	Hours	Total
Year 2	Program Manager	\$41.93/hr	2,080	\$82,214.40
Year 2	Warehouse Staff #1	\$27.42/hr	1,560	\$42,775.20
Year 2	Warehouse Staff #2	\$27.42/hr	1,560	\$42,775.20
Year 3	Program Manager	\$41.93/hr	2,080	\$82,214.40
Year 3	Warehouse Staff #1	\$27.42/hr	2,080	\$57,033.60
Year 3	Warehouse Staff #2	\$27.42/hr	2,080	\$57,033.60

**II. Fringe benefits: No funds are requested.** The City of Austin does not assess a percentage per position for fringe benefits, but there are amounts established for each position.

	Personnel	Salary (supported by COA)	Fringe Total
Year 2	Program Manager (full year)	\$82,214.40	\$22,371
	2 Warehouse Staff (9 months)	\$42,775.20/pp	\$10,972/pp
Year 3	Program Manager (full year)	\$82,214.40	\$22,371
	2 Warehouse Staff (full year)	\$57,033.60/pp	\$14,629/pp

**III. Equipment.** The equipment requested will be stored at the Reuse Warehouse and will enable staff to move inbound and outbound materials safely and efficiently. If the cost of the real estate allows, \$190,000 will be used to purchase a box truck and forklift, necessary for operations. All other items will be funded by City of Austin. \*Please see Capital Expenditures for more information.

	Item	Purpose	Grant-funded Cost	COA-funded Cost
Year 2	16' box truck	Allow staff to move or collect items	\$125,000*	
Year 2	Forklift (5000 lbs.)	Allow staff to safely move and weigh heavy items.	\$65,000*	
Year 2	Floor scales	Weigh donated items to track diversion		\$5,000
Year 2	Platform truck, utility cart, hand dollies	Safely move heavy items		\$900
Year 2	Pallet jacks	Allow staff to safely move and weigh pallets.		\$1,500
Year 2	Storage racks	Maximize storage space		\$10,000
<b>TOTAL</b>			<b>\$190,000*</b>	<b>\$17,400</b>

**IV. Supplies. No funds are requested.** The laptop and PC are reasonable because they are the standard prices allotted by the City. The furniture price is lower because staff aims to source surplus and secondhand pieces to furnish the receiving, office, and breakroom spaces.

	Item	Purpose	Grant-funded Cost	COA-funded Cost
Year 2	Furniture (secondhand)	Desks, chairs, break room items, etc.		\$1,500





Year 2	Laptop for Manager			\$1,500
Year 2	Shared desktop PC for Warehouse Staff			\$1,500
<b>TOTAL</b>			<b>\$0</b>	<b>\$4,500</b>

**V. Capital Expenditures.** Based on recent 15,000 square foot properties in Austin pulled by the City’s Real Estate Office, staff believe this request is reasonable, estimating the purchase of a warehouse between \$3,500,000 and \$4,000,000. It is possible that the real estate cost could be on the higher end, in which case, the project would request to use the full \$4 million for real estate and secure requested equipment needs from this budget using ARR funds. There is a scenario, in which the real estate market could change between submission of this proposal and notification of award, in which case it’s possible the City would need to lease space instead of buying it outright. The City’s Real Estate Office anticipates acquisition to take between 6 and 12 months. Executing a lease agreement would take about half the time.

	Item	Purpose	Grant-funded Cost	COA-funded Cost
Year 1 or 2	Building acquisition and improvements	Space to operate the Reuse Warehouse	\$3,810,000	
<b>TOTAL</b>			<b>\$3,810,000</b>	<b>\$0</b>

**VI. Contractual. No funds are requested.**

Using outside funding, staff will issue an RFP to a nonprofit workforce partner to provide employment and wraparound services to individuals with employment barriers. These individuals will help manage inventory, track data, assist with loading, and upcycle furniture. The SOW would also include teaching individuals how to repair, remanufacture, and upcycle furniture into “made-new” pieces through a standardized process. Estimated costs for the \$250,000 annual contract would include:

- A trainer/program manager at \$60,000-\$70,000 with basic repair skills/knowledge on woodworking, painting, refinishing, upholstery, and/or welding. They would be responsible for: recruiting clients; developing training curriculum; teaching basic safety tool techniques; guiding and overseeing clients’ work; preparing any pre-cut wood pieces; tracking metrics; and providing reference and direction for wraparound services, as needed.
- A licensed case manager or counselor at \$30,000 to be onsite 16 hours/week
- Two 16-week cohorts with up to 10 clients/cohort at \$20/hour for 20 hours/week (\$138,000)

These costs are reasonable because they meet or exceed the City’s minimum wage to all positions involved.

	Item	Purpose	Grant-funded cost	COA-funded cost
Year 2	Social services workforce contract	Provide employment for repair & upcycling		\$250,000
Year 3	Social services workforce contract	Provide employment for repair & upcycling		\$250,000
<b>TOTAL</b>			<b>\$0</b>	<b>\$500,000</b>



**VII. Other Expenses. No funds are requested.** These expenses include marketing costs to promote the donation outlet to residents and businesses and to promote the resource to the nonprofit community. These are reasonable because they are similar to what ARR has spent on past campaigns, and because based on research into the operation of other similar warehouses, little work is needed for marketing/outreach. The trainings are necessary to ensure staff can operate equipment safely and are reasonable because these are the costs per class the City currently pays.

	<b>Item</b>	<b>Purpose</b>	<b>Grant-funded cost</b>	<b>COA-funded cost</b>
Year 2	Defensive driving training	Training so staff can drive City vehicles		\$351
Year 2	Forklift operator training	Safety training for staff to operate forklift		\$336
Year 2	Marketing/outreach	Grand opening campaign		\$5,000
Year 3	Marketing/outreach	Ongoing promotion and advertising for expansion		\$1,500
<b>TOTAL</b>			<b>\$0</b>	<b>\$7,187</b>

**VIII. Indirect.** There are no known indirect costs associated with this proposal.

	<b>Total Direct Costs</b>	<b>Total Indirect Costs</b>	<b>Total Costs</b>
Year 2	\$4,000,000	\$0	\$4,000,000
Year 3	\$0	\$0	\$0
<b>Total</b>	<b>\$4,000,000</b>	<b>\$0</b>	<b>\$4,000,000</b>



2023 EPA SWIFR Grant Proposal  
Austin Reuse Warehouse, City of Austin, Texas

**Appendix B: Timeline and milestones**

Proposed timeline/workflow	PRE-FUNDING PERIOD								YEAR 1 (FY24)								YEAR 2 (FY25)								YEAR 3 (FY26)																					
	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	
<b>PRE-AWARD</b>																																														
Notification of EPA award																																														
City Council approval																																														
Develop/review IDA - ARR and PARD directors																																														
<b>PHASE 1</b>																																														
Search for property																																														
Develop SOW for equipment purchases																																														
Develop SOW for workforce partner																																														
Funding awarded by EPA																																														
Property acquisition process																																														
Issue RFP for workforce partner																																														
Issue RFP for equipment purchases																																														
Review and award contract for equipment																																														
Review and award contract for workforce partner services																																														
Improvements using City dept. services (electric, paint)																																														
Secure furniture (COA surplus, State Surplus)																																														
Move in																																														
Secure box truck and forklift																																														
Secure addtn'l equipment through existing contracts																																														
<b>PHASE 2</b>																																														
Employ FTE Manager																																														
Develop marketing campaign																																														
Soft opening (Innovation Lab opens)																																														
Community PC Program expansion/intern program																																														
Workforce partner services																																														
Employ 2 FTE Warehouse Staff																																														
Staff safety operational trainings																																														
<b>PHASE 3</b>																																														
Run grand opening campaign																																														
Grand opening (furniture from public accepted)																																														
<b>PHASE 4</b>																																														
Identify partnerships for piloting technologies																																														
MoveOutATX expansion pilot																																														
Ongoing marketing																																														
<b>PHASE 5: If space permits</b>																																														
Anniversary + expansion campaign																																														
Material stream expansion (e.g. building materials)																																														

**LEGEND**

ADMINISTRATIVE
MARKETING
SUPPLIES
EQUIPMENT
STAFFING
OPERATIONS
CAPITAL EXPENDITURES
INNOVATION LAB