

Products & Packaging Focus Areas & Strategies Breakdown

Focus Area: Economic & Market Development: Case Studies

The City of Austin's Resource Recovery and Economic Development departments together operate the Austin Materials Marketplace business-to-business by-product exchange. They also run a bimonthly networking event for the circular economy business community, and the annual Circular Austin Showcase and [RE]verse Pitch competitions, to encourage innovation and reward the reuse of unwanted goods and surplus materials.

Hennepin County, Minnesota - Green Jobs & Small Business Grants supports projects to engage our adult residents in helping the county reach it's zero waste and climate goals by preventing waste, composting organic waste, reducing, reusing, recycling, and repairing and caring for our natural resources by improving water quality, caring for trees, and creating habitat to protect birds, bats, and pollinators.

Boulder County Runs a Circular Economy Innovation
Center that fosters entrepreneurship and small
business innovation around recycling, repair,
remanufacturing, and material recovery. Workforce
programs include green job training and clean tech
internships. Hosts pitch competitions and startup
bootcamps

Economic Benefits when implementing Economic & Market Development

Benefits

- > Hennepin County, Minnesota the county was able to award contracts to 27 Green Partners environmental education projects totaling \$777,900 to community organizations to engage their audiences in learning about and taking action to protect the environment. Together, these projects will engage more than 9,400 people, including more than 8,100 youth, offer green job employment and training to more than 70 youth, and reach more than 116,000 people with environmental messages. As part of the Green Partners program, Hennepin County piloted a dedicated youth green jobs grant opportunity. This initiative invests in green jobs education and training programs for youth, especially those facing racial and other disparities. Organizations can apply for up to \$30,000 for one-year projects that engage young people in activities, training, and paid opportunities to gain experience and support in securing green jobs.
- > Recycling and reuse-related businesses in **Austin, TX** have generated over \$1 billion in local economic activity and approximately 6,300 jobs.
- > For over 27 years, **Boulder County's** Circular Economy Funding Program has provided more than \$1.5 million to local organizations. This investment supports projects that advance resource conservation and foster circularity, contributing to climate change mitigation. The program allocates \$100,000 annually, divided into two categories: \$25,000 for smaller projects, with grants ranging from \$1,000 to \$15,000. \$75,000 for larger projects, with grants between \$30,000 and \$75,000.

Economic & Market Development – Feasibility

- Circular Economy and Climate Innovation program like **Boulder County's** can take 6 to 18 months depending on the program's complexity, funding availability, and existing infrastructure. Having these 3 things Solid waste/environmental fee revenue, A sustainability plan or climate action framework and Strong nonprofit/business partners you could launch a pilot program in as little as 4–6 months, as Boulder did for its Circular Economy and Climate Innovation work.
- Who needs to act? County government (Sustainability department), Community based organizations and non-profits, Reuse/repair shops, clean energy contractors, zero-waste businesses, etc., county budget team"
- **Known Barriers** Upfront costs for staff, grants, outreach, and infrastructure (e.g., reuse centers, tracking systems.) Limited flexibility in existing budgets to fund new programs. Sustainability, workforce, and economic development departments often work in isolation. Local policies may favor linear waste systems (e.g., contracts with landfills over reuse networks)

Focus Area: Co-locate recovery with transfer stations: Case Studies

The Durham Reuse Hub is a City of Durham initiative designed to support a circular economy by promoting the reuse, repair, and redistribution of household goods, textiles, and other materials. The project aims to reduce landfill waste, support local job creation, and provide affordable access to durable goods. Through community engagement and partnerships, the Reuse Hub will serve as a centralized location for collecting and redistributing reusable items, while fostering sustainability and equity across Durham.

Seattle Public Utilities encourages residents to donate items for reuse, providing resources on where to donate clothes, shoes, and linens. They partner with nonprofit organizations to accept these items, promoting reuse and keeping materials out of landfills. They aren't linked to any transfer stations but on their website they have a directory of non-profits who can take the donated textiles. This could be used for other materials also outside textiles and include transfer stations in the promotion on the website. Retrofit transfer stations (or build new ones with capacity) to collect items for reuse, repair, and share systems.

Methow Recycling Programs is a non-profit organization that operates the Methow Valley's recycling center and building materials reuse center, offering free repair services at monthly repair cafes, runs a residential compost program, and manages a Share Library and education programs.

Co-locate recovery with transfer stations: Economic Benefits & Consequences

Benefits

- > Strengthens the local circular economy, keeping value and materials circulating within the city. showing leadership in waste prevention and sustainability, A county who implements a program like this becomes eligible for state and federal funding to expand reuse and repair initiatives—bringing external dollars into the local economy and job creation.
- > **According to the City of Durham** By reducing the volume of waste sent to landfills, the city can achieve significant savings in disposal costs. For example, in Fiscal Year 2024, the City faced approximately \$199,722 in fees due to recycling contamination exceeding 15%. Enhancing reuse and recycling efforts through the Reuse Hub could help mitigate such expenses. The initiative is expected to create employment opportunities in areas such as material collection, processing, and resale. Additionally, it offers prospects for workforce training programs, equipping residents with skills pertinent to the growing green economy.

Consequences

> Not documented at this time

Focus Area: Expand Reuse and Repair Systems: Case Studies

Community Warehouse is a nonprofit furniture bank serving the Portland, Oregon area for over 20 years. They collect donated home goods and, in collaboration with over 200 social service agencies, redistribute them to individuals and families in need. Annually, they assist more than 3,000 families, diverting over 465 tons of reusable goods from landfills into local homes. Their mission is to connect donated household items to neighbors overcoming adversity, creating stronger homes and brighter futures.

Donate NYC - By donating and reusing goods instead of discarding them, New Yorkers can greatly reduce waste, conserve energy and resources, save money, and help provide jobs and human services for New Yorkers in need. DonateNYC promotes reuse and donation efforts across the City. Through easy-to-use online tools and public engagement, donateNYC helps New Yorkers reuse goods instead of sending them to landfill, reducing waste, conserving resources, saving money, and supporting human services.

Expand Reuse and Repair Systems – Economic Benefits and Consequences

Benefits

- > In the fiscal year ending December 2023, **Community Warehouse** reported total revenue of \$5,298,878, with net assets amounting to \$2,636,394. A substantial portion of the revenue, \$3,064,441 (approximately 57.8%), was derived from contributions, while program services accounted for \$1,412,380 (about 26.7%). The organization supports employment within the community, with total salaries and wages reported at \$1,217,812, including executive compensation of \$209,863.
- > Lowers the cost of collection and transport for individual towns or small counties. Allows economies of scale, enabling rural communities to access textiles, furniture, white goods recycling services that would be cost-prohibitive on their own. Businesses can reduce disposal costs, improve sustainability performance, and attract environmentally conscious customers. Job creation.
- > **DonateNYC program** Registered partners receive a sticker or placard for their windows indicating their partnership they are also included on the directory on the website which is marketing for those companies. By facilitating the exchange of goods through platforms like the DonateNYC Exchange and Food Portal, the program supports local businesses and nonprofits. In 2021, these platforms had nearly 3,500 users and diverted over 1,000 tons of material, fostering economic activity within the reuse sector.

Consequences

- > A county must invest in Staff to manage the platform and partnerships, Outreach and education campaigns, Data tracking and performance monitoring
- > Setting up collection infrastructure, transport logistics, and a centralized processing hub requires significant investment— especially in rural areas. Transitioning away from landfill-based systems may reduce revenue for private waste contractors who profit from disposal fees. Counties or nonprofits managing the system may face increased coordination costs

Focus Area: Textiles: Case Studies

Rhode Island House Bill H5293, introduced in February 2025 making Public Education Outreach, Data Collection and reporting and Regulatory framework mandatory across the state. Could be implemented at the county level.

Donate NYC - Partners must annually report the tons of materials they divert or collect. Categories for reporting include furniture, textiles, and other materials. The city uses collected data to calculate its diversion rate. Additional statistics provided include the number of cars taken off the road and water saved, utilizing tools like the WARM calculator.

Expand Reuse and Repair Systems/Textile Data Reporting Mandate - Feasibility

- The timing of implementing a reuse and repair system varies on the resources that are readily available. Staffing, non-profits and for profits ready to partner with the county.
- In order to implement a textile data reporting mandate, you must develop or upgrade data collection and reporting systems that demand technological infrastructure. The state or county needs to ensure compatibility with existing systems and address cybersecurity concerns.
- Who needs to act? Requires allocation of staff time for community creation and development of online reporting systems.
 - > Support from resources like those available in New York City assists in estimating diverted tonnage for the **DonateNYC** program.
 - > Example Circular Cleveland, which is led by the City of Cleveland and neighborhood civil society partners, appointed ten Circular Cleveland Ambassadors representing different neighborhoods, communities and associations. They informed Circular Cleveland: A roadmap towards an inclusive circular city, serve as liaisons between the Circular Cleveland leadership team and their respective communities, and support reuse and repair in their communities including through regular Fix-it CLE repair workshops.
- Known Barriers
 - > A program like DonateNYC can be implemented without new legislation or contracting.
 - > Durham conducted a community survey to understand interest and potential participation if they created a Reuse Hub.
 - > New York City's Department of Sanitation published a NYC Reuse Sector Report in 2019 which built on polling, surveys and assessments that began in 1995. Austin's report on the city's recycling and re-use related economy including repair found that the sector contributes more than US\$1.1 billion in total economic activity. Austin expects its circular economy sector, which is in infancy, to grow to many multiples of that figure in the years to come.

Textile, Furniture, White goods Reuse/Recycling - Human Health Risks

- Donated textiles, may harbor allergens, pests, or chemical contaminants. If not properly inspected and cleaned, these items could pose health risks, especially to individuals with respiratory conditions or allergies.
 - > According to Green America Polyester textiles, used in 55 percent of all clothing production, rely on the use of heavy metals, like antimony, a possible carcinogen, as well as known carcinogens, like cadmium and lead. Research from the National Institutes of Health shows that occupational exposure to antimony can cause respiratory, skin, and gastrointestinal symptoms, and may even cause cancer. Too often, factory workers who may encounter such toxic materials are not notified about safety procedures or given proper equipment to reduce exposure.
- There could be a risk that low-income individuals might disproportionately receive items that haven't been adequately vetted for safety, potentially exposing them to higher health risks.
- Without proper containment and PPE (personal protective equipment), bulky items recycling can expose workers and volunteers to Sharp-object injuries. Bulky items are large in volume but low in weight, meaning fewer items can be hauled per trip. Mattresses, upholstered furniture, or textiles may harbor mold, pests, allergens, or bodily fluids
- Unsellable or contaminated bulky items could be stored or dumped near lower-income or underserved neighborhoods. wealthier areas may have better access to donation or pick-up services, while underserved areas. If a county contracts only with large nonprofits or national reuse players, local fixers, haulers, and repair businesses (often BIPOC- or immigrant-owned) may be excluded from the reuse economy.

Textile, Furniture, White goods Reuse/Recycling – Climate Impact

- Reusing or repairing bulky items (e.g., furniture, mattresses, appliances) keeps them in use longer, reducing the need to manufacture new items. If materials from non-repairable bulky goods are harvested for parts or materials, it can displace the need for virgin resources in new product manufacturing.
- Reusing or repairing items displaces the need for new products, which require energy-intensive manufacturing. Bulky wood and metal items slowly decompose in landfills
- According to European Parliament The textile industry accounts for approximately 20% of global clean water
 pollution due to dyeing and finishing processes. Washing polyester garments can release up to 700,000
 microplastic fibers per laundry load, which may enter waterways and impact marine life. -Source European
 Parliament. Producing a single cotton t-shirt requires about 2,700 liters of fresh water, sufficient to meet one
 person's drinking needs for 2.5 years. -Source European Parliament