

Ulster County Reuse Innovation Center

Conceptual Plan DRAFT

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Consulting**

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Introduction: Feasibility of a Reuse Innovation Center

The waste stream flowing through Ulster County is like the Hudson River: it can't be stopped, but it can be navigated by many different methods. The waste stream is massive compared to the capacity of a Reuse Innovation Center in the foreseeable future, so the RIC must focus on priority materials that are accessible, divertible and worth diverting. The analysis of diversion programs identified key materials for focus in the conceptual planning of the ReUse Innovation Center based upon their contribution toward the County's goals of high diversion volume and climate benefits, as well as functions that would serve the needs of Ulster County communities. High value, potentially popular enterprises would attract customers and publicity to the RIC, which would help ensure its success. These priority materials are:

- Appliances
- Architectural Detail
- Bicycles
- Bricks
- Cabinets
- Clean Wood
- Construction and Demolition Materials
- Doors
- Electronics
- Glass
- Metal
- Textiles/Carpeting

As we have learned, flows of priority materials (in broad categories) are well understood. There are multiple approaches to diversion and collection of reusable and salable materials in enough quantity, and with enough consistency, to make a Reuse Innovation Center initiative feasible in Ulster County.

Based on characterization of waste streams and diversion program opportunities, the conceptual planning for a Reuse Innovation Center can be guided by the following observations:

- There are abundant materials in the waste stream to supply a Reuse Innovation Center, and to support diverse businesses and other programs within it.
- There are viable diversion program opportunities, including profitable businesses, in most if not all of the categories of materials identified by Ulster County as priorities for diversion.
- There are opportunities to focus on products that are easiest to sell, most valuable, or most central to the goal of landfill diversion.

- Establishing a group of enterprises with diverse products, services, and business models, over time, will ensure that the operation is resilient and responsive to changing conditions.
- Collection of the necessary materials will be a multi-dimensional process, involving diversion at Ulster County’s transfer stations and through numerous other means as outlined in Diversion Programs.

Components and Overall Design

The requirements for this conceptual plan include the assumption that “the RIC will be a single facility in a repurposed or new building, potentially on municipally owned property.” This approach is addressed herein, but in order to comprehensively consider the best options, other proven models will also be evaluated in the subsequent siting considerations deliverable. We also expect that “separation of waste into components will occur prior to drop off at the RIC facility and that organics are outside of scope for the RIC facility”.

What are the primary elements of a Reuse Innovation Center that will serve Ulster County well? How should it be designed to maximize benefits and achieve project objectives?

The waste stream is so complex that it will take a complex approach to solve. But the approach can be built on straightforward elements, starting with a deconstruction operation and reuse store as a way to begin diverting high volume, heavy materials to achieve the County’s environmental goals, and to include some high-value items. Such a facility would require a showroom, warehouse, and outdoor display area. Storage is a significant issue as the materials do not always move as quickly as they would in a conventional, just-for-profit retail operation. Based on experience with other RICs,

- The showroom does not need to be large, but it should have a polished look to show off the quality, value and appeal of the materials. There must be good lighting and layout.
- The warehouse is more of a “Home Depot”-like experience with very large storage racks and displays that efficiently store and display the maximum amount of product.
- The outdoor section is also designed for efficient storage and display of large amounts of product. It may include a covered area without walls that provides minimal protection from the weather. This area is less expensive to rent and does not require heat. It also should include outdoor uncovered storage which is the most affordable storage scenario.

The facility should also include:

Production area – spaces for specialty businesses that may include assembly or other processing, making products to be sold in the showroom or online. This may be one integrated space with multiple stations for different tools, equipment and processes; or there may be specialized areas for particular assembly or

remanufacturing enterprises requiring more space or more continuous access to the space. To address priority materials and capture diversion opportunities identified as the most straightforward types of production with the most in-demand products, the production area should be designed to support - at a minimum - one or more businesses in each of the following categories:

- upcycling clothing, fabrics, textiles into craft fashion and home products
- home and office furnishings
- artists' studios or a shared arts / creative space
- wood related businesses (garden frames, sheds, shelves, clocks, etc.)
- welding (repair as well as remanufacturing)

Two larger production opportunities should be considered with further feasibility assessment:

- textile reprocessing and remanufacturing on a small industrial scale (separate from smaller-scale upcycling craft opportunities); and
- internal combustion to EV conversion, an opportunity to attract a production company in 2 - 3 years in this fast-developing subsector.

The facility should include larger scale operations that deal with larger parts of the waste stream, and small operations that may target very specific items or add to a diverse base of services and products available at the RIC. Examples include a wood furniture company that creates a line of furniture that they reproduce hundreds or thousands of times, requiring a large amount of somewhat uniform materials, and small artists and artisans making 1-off pieces that are intentionally all different. It is expected that the businesses may change and hopefully will grow to absorb more of the waste stream, so the RIC must be flexible on this point.

Including flexible work space that is affordably rented can be particularly useful for entrepreneurs who live in apartments or otherwise lack work space for making things.

Warehouse Store - a large and expandable all purpose store to sell building materials and furniture

Classroom/conference room(s) - for workforce development and community education classes (how to build a raised garden bed with reclaimed materials, for example). This is also a great place for members of the RIC and/or members of the greater diversion community to meet and discuss issues and strategies related to the waste stream.

A repair station could serve the public and the members of the RIC. The repair function of the RIC increases the value of items repaired and becomes more proficient with time and experience, adding more value to both materials and the

community. The repair station might be a separate business or a function of a larger business.

A tool library is a storehouse of tools available for the public to borrow. The repair station and the tool library are closely tied together. It also works in tandem with the reuse store, as people can borrow tools to use on the reclaimed materials they purchase.

Staging room: when materials are received (for example, from a deconstruction site), they are raw and need to be processed in a non-customer-facing area. They need to be cleaned and evaluated for routing to repair, sale, etc. When processed, they can also be photographed in this area for the website and/or social media.

Recycling area - an outside area where both RIC members and the public can bring recycling. This can include the usual materials that can be transported to UCRRA, and specialty items that can be sent to the appropriate facility when they have accumulated in sufficient quantities - for example, porcelain.

Office space - Each member business may choose to have an office at the RIC if sufficient room exists. The offices may be in their workspaces or grouped together in another area. The space is rented out, likely below market rate, and may be built-out by the members themselves out of reclaimed materials. This will be a great way to include small non-profits that have no material diversion activities, but perform workforce development or other synergistic work.

Flex-storage to accommodate changes in materials flows - When approaching the waste stream, it is clear that there are ebbs and flows of thousands of different materials; these are often unpredictable. Many times an opportunity, like a high school being demolished, comes up and must be captured in a short timeframe. Temporary storage areas and modular approaches like shipping containers are examples of solutions that the RIC may rely on to absorb these floods of materials.

Loading dock - The RIC could use a loading dock with variable heights. This would allow for the easy unloading of numerous vehicles bringing in product or the loading of vehicles after product is purchased. This is an example of something that would be beneficial, but isn't essential. The reuse industry is used to adapting to conditions and limitations placed upon it, but hopefully the RIC will not have to compromise on items like this due to lack of funding.

Bathroom facilities - These are a given. The bathroom size would be determined by the number of persons using the building and the size of the building. Hopefully, existing buildings would already have enough facilities as adding to them would be expensive.

Parking lot - Many communities have a formula for figuring out how many parking spaces a business will need. In the parking lot design, the RIC must plan for multiple vehicles, including some that will be pulling trailers. **With the increasing**

electrification of fleets and Ulster County's commitment to climate-forward planning, charging capacity should also be planned at the outset.

Where feasible, work, sales, and storage spaces should have multiple uses. The showroom might be used for meetings and special events, for example. Adaptability of the model is part of the design, including both adaptive space and the attitudes of the entrepreneurs.

As mentioned in the Task 3 Diversion Programs analysis, we believe that the waste handling functions that are subject to NYS 360 regulations – such as large-scale waste processing – should not be within the scope of an RIC as they are often large-scale and increase risk, costs, and needs for specialized training and equipment. The RIC will have a supportive role to large-scale waste processing infrastructure that exists, and other enterprises that might be developed including possibly a waste recovery park. Operations like Taylor-Montgomery will continue to take materials like broken/rotten/short pieces of wood for recycling, but the RIC can help supply them with source separated dumpsters of wood that do not need to be sorted at their facility. Our deconstruction operations will have already done that. Ulster County's recycling operations will likely be made more efficient by reducing the waste stream of other reusable items, by constantly reinforcing Ulster County and UCRRA messages about how and what they can recycle, and by other cooperative efforts.

Threshold conditions for success and business development strategy

What are the initial “ingredients” - or threshold conditions – that are essential for the startup Reuse Innovation Center and its component programs to be successful? How should the RIC be designed initially for viability and growth? The answers to these questions are straightforward. But they must be clearly understood, and the success conditions should be very intentionally created. Economic requirements are demand, supply chain, establishment of services, and adequate sales or other forms of revenue to cover expenses for most if not all activities. Equally important are the organizational elements – especially the core team's knowledge and involvement in the development of the RIC. When a stable foundation has been created, and the initial RIC is at least breaking even, it is much easier to expand and build volume and diversity of function, increasing diversion with each step.

To lay groundwork and make sure that the threshold conditions are in place, the administrative organization and a core business should be established first. A deconstruction business, along with a reclaimed building materials store is a strong first business because it focuses on high volume, heavy, priority materials for diversion and materials that are in demand. It can also be a highly visible enterprise. The store could initially be housed in a small flexible location. For manageability of business development, these operations can be followed by others in a logical sequence, with emphasis on the materials established as priorities for diversion by the County. Even if there are initial subsidies, it is beneficial to aim for profitability or at least break-even, as soon as possible, so that the RIC can

continue even if subsidies do not. This phased approach can establish the flow of materials, and the launch of enterprises, so that the additional businesses and other programs are well matched with supply and markets, and the RIC is built on a stable foundation.

Phase 1: This strategy for bringing the Reuse Innovation Center to life relies on a viable building deconstruction industry. A preparatory phase for the project could be designed to get over this hump with an initial training and the marketing of several projects to begin building inventory.

(A deconstruction, salvage and resale operation could begin by partnering with an existing operation such as P & T Surplus or the Habitat ReStore to provide a temporary processing and sales location. The County could be exploring policy development - such as an ordinance requiring deconstruction under certain conditions - and make sure supportive policies and training programs are in place for scaling the industry.)

Phase 2: Create anchor operations and core business. Anchor operations include administration, financial management systems, office space, branding and outreach materials and a web presence. Select and establish the systems at UCRRA that are needed to divert C & D and other materials and deliver to RIC.

Phase 3: Bring in partnering reuse businesses (startups and co-locating established businesses) that make use of the salvaged materials. Build out spaces for them using reclaimed materials from the core business.

Phase 4: Establish a repair business, and a RIC workforce training operation, potentially the latter structured as a nonprofit for better access to funding and easier partnering with government. Tax deductible donation of materials could be designed into the training operation, since the entire operation is one giant learning opportunity.

Ongoing: Businesses and modules can be added to the RIC as they become viable.

To create a viable deconstruction business under this model, critical mass begins with a group of employees or contractors – equipped with tools and covered by insurance – who have the skills or can be trained in deconstruction and salvage work. In Reuse Consulting’s experience, it doesn’t take a long time to set this up, but generating enough activity to break even requires major focus on lining up a stream of work. Marketing of the service is also needed; finding deconstruction projects can be a greater challenge than doing the work. One challenge is that, once a project is found, deconstruction must compete against low-priced demolition companies. To launch the operation in a coherent and coordinated manner, the County should promote the opportunity with contractors, potential entrepreneurs

and the public. If there is initial buzz, materials can be sold very quickly after they are collected. Therefore, it is good to have plenty of inventory so that visitors will find something they like.

After the deconstruction business and an associated building materials store are operating, other businesses that are value-added operations are critical to helping pay the rent / expenses. For economic stability of the RIC as a whole, the sooner these enterprises can be created, the better. These might include craftspeople, artists and others that use the materials in specialty businesses. Repair businesses and training programs might come later, because they benefit from having infrastructure in place, and rely on a steadier flow of customers. Whenever funding can be found to divert specific materials, of course, it helps focus businesses on diverting them.

In the original Reuse Innovation Center, the spectrum of businesses was determined by the interests of local entrepreneurs. This is a robust approach for Ulster County because it takes full advantage of the talent, enthusiasm, and knowledge at hand; the approach can be adapted to ensure that the businesses cover the spectrum of priority materials identified in the Waste Characterization and Analysis of Diversion Programs. That is, as the project matures beyond the initial operations, entrepreneurs should be sought who can create valuable items by repairing and reselling appliances, bicycles, and electronics, and by reusing bricks, cabinets, clean wood, doors, glass, metals and textiles, at a minimum. This can be done by engaging with networks of existing businesses and skilled practitioners, from recreational craftspeople to Repair Cafe volunteers, as well as by networking with owners of existing businesses.

In the strategic context of Ulster County and its green economy goals, a couple of special opportunities should be given priority consideration.

- First is a reuse innovation that is rapidly moving from a niche industry into commercial viability: conversion of internal combustion (ICE) vehicles to electric. Recruiting a company with this specialty supports Ulster County's green innovation goals as well as its commitment to sustainable transportation. A converted ICE-to-EV school bus costs about 25% of the price tag of a new electric school bus. A priority for vehicle conversion should be the heavy trucks that transport freight, often creating noise and odor in lower-income neighborhoods near major roads. Because delivery truck traffic is a consideration for the Reuse Innovation Center itself, every effort should be made to line up a fleet of electric trucks for this purpose, and conversion is the affordable pathway to doing so.
- Secondly, textiles have been affirmed as a priority for multi-county collaboration to increase diversion, by the Materials Management Working Group representing the resource recovery agencies of most mid-Hudson counties and key state regulatory staff. Textile reuse and recycling based industries include large-volume, industrial operations and more craft-oriented, custom approaches working at smaller scale.

A training operation should be set up early, in order to expand the deconstruction and other activities. It has low expenses, minimal staff except the trainer, and minimal equipment (it can even use equipment owned by the members of the RIC). A contract with a trainer is likely to be fundable through workforce development grants. Training funds may also be used to buy equipment that has ongoing value at the RIC, that other businesses can borrow. Trainees can be involved in deconstruction labor and every other type of work that is a part of the RIC; it is important to plan for ongoing roles for trainees, in order to build up their experience and sustain their availability. Longer-term funding may subsidize the trainees wages for the first year or so, and hopefully, they will be hired by members of the RIC.

Assembly, craft or light manufacturing/remanufacturing businesses can be developed as a natural progression, using the materials that are brought in from deconstruction and other sources. For example, a reclaimed furniture operation could use reclaimed wood and/or metal to create furniture, and provide related services such as refinishing. These kinds of businesses could begin with individuals bringing tools and renting space.

In due time, expansion into repair might start with finding, fixing and selling used appliances. In this field, a tried and true business model can get started in a relatively short time because it mainly needs a skilled practitioner with basic tools and equipment in an easily accessible space. The Repair Cafe network can play a substantial role in connecting fixers with the RIC. Eventually, a full-time 'Repair Station' should be developed, providing services to the public for a fee as well as repairing items that come in through any of the RIC partner businesses.

Reinstallation businesses install the reclaimed materials in homes or businesses, completing the cycle of reuse. These are basically contractors who buy from the RIC and are willing to work with used materials. While they are stakeholders who can be drawn in from the start for guidance, their roles generally come into play a little later once volume is a little higher for the RIC.

In terms of recycling, the RIC can have its own bins right away. These bins are often provided by the recycling companies, and there may be a small-scale recycling company that forms once the volumes increase. The operation can grow over time with the addition of recyclable but lower volume or frequency items. This would involve input from stakeholders like UCRRA to help add to their existing efforts, not replace them. Given enough room, we will place specialized dumpsters meant for recyclable materials like porcelain, vinyl, and more. The members will have a convenient place to recycle when they return to the RIC and the public will too. Great for items that you normally would not have enough of to justify a dumpster. The recycling options vary from community to community, so the distance and cost of these bins will have to be taken into consideration to see if it is viable for each material type. The cost of dumping into the dumpster has to be worked out as it will cost the RIC.

Ownership options

A variety of approaches to ownership and management are demonstrated in existing Reuse Innovation Centers and other reuse businesses, and should be considered for Ulster County. For example:

Public/private - government provides land and a building; occupants are mainly private sector businesses but may also include public sector projects that have specific value for the county and realistic funding. Ulster County brings the political motivation to play a valuable role in defining and funding the startup of a Reuse Innovation Center.

Private/private - A Reuse Innovation Center could be started and run entirely by a group of entrepreneurs. For simplicity, one individual or business would take on the main role of starting and running the RIC; others would provide support in the form of rent, referrals, sales activity/consignment revenue etc. Public goals may be achieved, and the business or businesses may collaborate with governmental agencies, but this basic model for organization of the Reuse Innovation Center is a private sector partnership.

Private/non profit - A non-profit may be involved to take advantage of benefits they provide like access to grants and donations, ability to offer tax deductions and perform job training; for-profits could provide services under the wing of the non-profit, create living wage jobs, push for quick growth and high production levels.

Because the Reuse Innovation Center provides a great opportunity to involve disadvantaged communities to start their own circular businesses, a nonprofit partner has added value for its ability to provide wrap-around services such as transportation and child-care, to ensure that nobody is left out of these opportunities.

A win/win approach would be for Ulster County to support access to a facility for a consortium of partners, potentially with zero rent for an initial period, to remove barriers to establishing the businesses; over time, rent could be linked to diversion accomplishments; for example, if the RIC achieves specified diversion goals, its rent could remain zero or low; diversion saves the county money while meeting sustainability goals.

Staffing needs

To begin, the administrative and financial management of a Reuse Innovation Center requires the basic functions of bookkeeping and accounting, contract management, insurance and other basic small business functions. These skills will need to exist in the reuse store itself, along with sales, marketing, management, warehouse and logistics. Therefore, the reuse store management team could initially serve as managers for the entire RIC; the separate, overall business

development function could be added when the RIC is ready to expand. In the Bellingham model, individual businesses are managed and owned independently but in a collaborative spirit; that creates a force of managers helping to hold the overall operations together. This staff may represent 50% of the business' expenses, but the other 45% would have been facility costs and costs of goods sold. By reducing the facility costs by sharing those costs with RIC member businesses, there is more profit throughout the ecosystem.

Location Choices Ahead

County stakeholders have framed this initiative based on the assumption of a single facility for simplicity and cohesiveness. While there are strengths to this approach, it also poses dilemmas which are summarized here. Siting considerations will be addressed in more detail in the subsequent deliverable devoted to this topic, but these points are included here to inform the conceptual plan discussion.

In terms of collecting and initial processing of materials, there is clear value in a collection center near the UCRRA main transfer station. However, this location can only be reached by driving, a minus in terms of retail foot traffic and the opportunity to co-locate with other retail businesses. The goal of accessibility for disadvantaged communities, and individuals without vehicles, is another aspect of the siting challenge. NYS' new [Disadvantaged Communities maps](#) include major areas in Kingston, New Paltz, Ellenville and other parts of the county. Transit to and from these centers is a well known challenge. To address all these factors, several options should be considered:

- A single facility either adjacent or relatively near to UCRRA, designed with a collection/ delivery system to capture materials from UCRRA, with all RIC processing, retail, and services on the same site, as initially envisioned;
- A primary facility near UCRRA for materials collection, RIC processing, and warehousing, with a separate customer-oriented facility in a population center to house production, retail businesses, maker spaces, education and community programming, services such as a tool library, and other directly customer-facing activities;
- Either of these approaches could be supplemented by a mobile retail van or similar, and/or a web based retail system to make items available to people with limited physical access. Retail deliveries, collections and other transport of materials should reflect the reuse ethic, ideally with repurposed internal combustion vehicles that have been electrified. Dedicated collection/redistribution vehicles could also be incorporated into the system either at the beginning or later on.

Revenue sources and funding strategies

A key to the economic potential of the RIC is the collaborative business model. Working together at the RIC, the diversion businesses could see a 25% drop in

operating costs and a 33% drop in startup costs compared to going solo. Examples are more affordable rent due to a larger building; sharing major equipment such as a forklift, and sharing utility costs. This can make them more profitable, and profitable sooner.

Reuse Innovation Centers can be started on a shoestring, but these operations will only slowly grow due to limited capital, and may struggle at times to overcome barriers like capital needs for equipment or expansion. The potential of Ulster County's Reuse Innovation Center initiative will be based on the support that is garnered. The infusion of funding or the creation of a low operating cost environment will encourage rapid growth and achieve much higher impacts in waste diversion.

One key to generating revenue initially is designing the initial business to attract customers with more affordable materials that they use in volume, thus connecting the product selection with a known market. Selecting the right products and services allows businesses to start small, fast and profitably. For example, in a kitchen remodel today, the owner might pay \$750 to remove the old kitchen and \$250 for disposal and hauling – \$1000 to waste the materials. The RIC could do the job for \$750 and sell the cabinets for \$750, for \$1500 in revenue. This process may require a total of 10 hours of labor, but it will generate \$150/labor hour, making it a very viable and sustainable business alternative.

As an additional example, Ulster County residents now spend money at Home Depot buying 2x4s for \$7.00. If the RIC sells those same 2x4s for \$4.00, it will attract customers, generate revenue and quickly build buzz to sell other items that people already buy. In this example, it is important to note that the deconstruction operation would be paid to remove the 2x4s, meaning that the RIC has two revenue streams associated with the one product.

If the RIC is designed to generate revenue and maximize savings for participating businesses, supplemental funding and fundraising can be addressed in a highly targeted manner, when needed for a particular purpose rather than for survival of the enterprise. Funding is likely to be needed for:

- Project design and business development
- Facility acquisition – purchase or rent
- Equipment
- Training
- Startup, equipment and materials costs for the participating businesses.

Well known funding programs are available for most of these needs. Taking these in reverse order:

Startup. The Hudson Valley Venture Fund has established an “innovation hot spot” with grants and technical assistance available for entrepreneurs. This program, housed at SUNY New Paltz, is focusing especially on the green economy. This, along with the County's Small Business Development Center and private nonprofit

social venture developers like the GCSEN Foundation, can provide support for participating business startups. The existing Bellingham RIC provides startup assistance as well.

Programs and collection / diversion activities involving local communities might also be designed to qualify for funding through New York's Climate Smart Communities program as they relate to qualifying actions #5 (Climate smart materials management), #8 (Support a green innovation economy) and #11 (Innovation). Infrastructure funding under the Federal Inflation Reduction Act or Bipartisan Infrastructure Law might be considered as well, if Ulster County decides on new construction for the Reuse Innovation Center, but this is a choice that adds time and complexity to a potentially more straightforward opportunity. Another funding source for education, as well as for research and development on innovative diversion methods, is the [Environmental Research and Education Foundation](#), dedicated to promoting the circular economy in New York.

Training. At present, NYSERDA workforce development funding does not cover deconstruction. Changing this should be a point of strong advocacy by the County, as New York's Climate Law and NYSERDA staff have strong interests in reducing the embodied carbon in the buildings sector. Reuse Consulting has made 2 presentations to NYSERDA in the last 1.5 years on this point, and Sustainable Hudson Valley has had several conversations with staff in the buildings and innovations programs who are interested in reducing embodied carbon through building deconstruction. New York's Department of Labor is able to cover the costs for training sponsored by employers that is associated with growth industries; with the County's commitment to growth of deconstruction and reuse, this is likely to be the most viable initial training strategy. In addition, the Bellingham RIC was designed to be the training center for all RICs that followed. All RIC managers and key staff can come to Bellingham to quickly learn how to run the Center in Ulster County.

Equipment. Empire State Development, NYSERDA and small business lenders regularly finance equipment for small businesses. The Hudson Valley Venture Hub's investor network is also highly accessible for this purpose. The New York State Pollution Prevention Institute's Community Grants Program provides \$10,000 - \$20,000 average funding for educational programming which might include collection strategies that are combined with education, the arts or both. New York's Department of Environmental Conservation offers [grants](#) for waste reduction/prevention, recycling capital projects, and recycling coordination and education projects.

The remaining funds that are needed to begin work on an Ulster County Reuse Innovation Center are for a facility and business development. Siting considerations will be addressed further in the consulting team's subsequent deliverable, but for strategic planning purposes we highlight a nimble, viable path for near term consideration. Ulster County could cost-effectively cover facility expenses through the kind of rent-for-diversion incentive described above. Business development could be budgeted under the umbrella of the County's green economy

programming. Making these decisions and investments in a timely manner could unlock a wide variety of federal and state funding sources, including grants for:

- energy and materials conservation, as research by the Forest Products Lab and Reuse Consulting demonstrates, with a study that showed that reclaimed lumber and flooring require significantly less energy to produce compared to new. This is true for many reclaimed materials;
- reducing embodied carbon in the built environment, as deconstructed materials reduce the demand for new production;
- job creation, as every reuse business demonstrates;
- equity, if the RIC's economic development goals are aligned with New York's disadvantaged community priorities;
- historic preservation as a deconstruction and salvage priority and an aligned field - the deconstruction trade often trains people in skills that are relevant to historic preservation;
- environmental protection as reuse reduces the demand for timber, mining and other raw materials and slows global warming.

Engaging Stakeholders to Refine the Vision

The exploration of a Reuse Innovation Center for Ulster County has engaged a significant number of stakeholders, with over 40 participating in the most recent online briefing session. As the waste and diversion landscape becomes clearer and this conceptual plan goes into circulation, it is important to consider the different roles and interests of stakeholders in order to engage all parties effectively.

Policy and program stakeholders including the Ulster County Resource Recovery Agency, Ulster County Legislature and especially its Zero Waste interest group and Recycling Oversight Committee, Ulster County's Department of the Environment and Office of Economic Development. These stakeholders should be engaged thoroughly and consistently as the final form of the RIC comes into focus.

Collaborating stakeholders are those who might be involved in starting private businesses, research and education programs, or public-private partnerships at the RIC. There is a clear need to expand this project's reach to engage more potential entrepreneurs, through networking with contractors, existing reuse and recycling based businesses, business schools, service agencies that may help individuals get ready to start a business, and other interested parties such as the Repair Cafe network.

Community stakeholders are those who care about the project and have views that should be taken into consideration, including potential customers of the Reuse Innovation Center (who may bring stuff, buy stuff, or use the facility's programs and services). Engaging these stakeholders to understand the market is an important step that helps to build commitments from businesses (e.g. kitchen remodeling).

In the final stages of this initiative, as soon as siting considerations have been reviewed, a stakeholder engagement strategy is recommended that:

- works in depth with the policy and program stakeholders to make sure there is complete understanding and sincere buy-in for the approach that is ultimately selected, including the revenue model and core funding strategy;
- quickly convenes a wider network of collaborating stakeholders to figure out what enterprises can be created early in the process
- brings the concept proposal out to the community for refinement through wider distribution of the project survey, media appearances, social media, and presentations to potential partners during a fixed period within the contract timeframe

With concerted effort, this could be accomplished during the summer of 2023.

Conclusion

The Reuse Innovation Center works best when all of the businesses are working together, but we shouldn't wait for everything to be in place, just the key businesses. Finding willing participants should begin even as the model is being finalized, as the potential business opportunities will inform all stakeholder deliberations. The process of getting started is tied to funding; if funding is secured sooner than later for the specific needs we have identified, the RIC can get started within months. We know how to run a Reuse Innovation Center and avoid mistakes, we just need the right people to be involved in managing it. The process of training a group to run the RIC takes time, but diminishes over time, and we have an existing operation where some training can take place. With the federal and state focus on decarbonization, and fast-growing interest in the circular economy as a key strategy, the time is ripe to move ahead in creating a Reuse Innovation Center as described here.