Reuse Innovation Center
Conceptual Plan
First Discussion Draft

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A Reuse Innovation Center is an ecosystem of enterprises organized around reuse of materials for environmental, economic and social benefit. Ulster County is exploring the creation of a ReUse Innovation Center with assistance from Sustainable Hudson Valley in partnership with ReUse Consulting. Goals include diversion of waste from the landfill, especially heavy and bulky waste; reduction of greenhouse gas emissions connected with waste management; and creation of profitable businesses that provide employment for Ulster County residents. The team has conducted a waste characterization and a review of program models for reuse-based businesses in the most promising waste categories – with extensive interviews with stakeholders and site visits to potential partners. Based on this initial work, we do think that creation of a Reuse Innovation Center is a viable proposition based on diverse streams of recoverable materials that correspond with typical business opportunities found in other Reuse Innovation Centers and similar businesses. We present the following thoughts about a strategic framework for the Ulster County Reuse Innovation Center.

<u>Capturing materials for the RIC</u>

In simplest terms, there are two streams of materials for increasing diversion by the County through this effort: what goes through the two UCRRA transfer stations and what does not. Most materials go through the main UCRRA transfer station in the Town of Ulster. Two systemic leverage points are key for capturing more materials: the tipping floor and the facility entrance.

On the tipping floor, ReUse Consulting spent most of a work shift observing activity, taking approximately 200 photos of items received and the trucks that brought each one. Spreadsheets were prepared with the names of all items that appeared "recoverable in principle," but that could not be recovered safely from fast-paced deliveries in that small location. Resale price estimates were made for each, and the dollars-per-hour value was extrapolated to a full year. This yielded an estimated $900,000.00 per year in resale value for materials that could be diverted but were not. Even if this estimate were only half that amount, and the real value was $450,000.00, this suggests that there is substantial room for cost-effective investment in additional staffing, equipment, facility upgrades and/or system redesign to capture more materials directly from the tipping floor. One strategy is to have one or more dedicated employees whose job is to recover items, and establish a procedure of blocking trucks with safety cones to ensure they stop while materials are being captured.

At the entrance to the facility, Reuse Consulting also observed the flow of deliveries during part of a weekday shift and a Saturday morning shift. We noted that it was common for delivery truck drivers to stop at the entrance to put on or adjust their required tarps; we identified an opportunity for trucks to stop at that point – before driving over the scale – voluntarily unloading divertible materials and saving fees as a result. With preparation and education of

commercial haulers, it should be possible to establish the practice of separating loads into reusable items versus material destined for recycling or disposal. Doing so would reduce the weight of materials taken across the scale and save money for the haulers, while diverting additional material with safety and efficiency.

UCRRA, like every municipal recycling operation, faces the reality that not nearly all potentially recyclable materials are captured by its collection system. Materials may go directly to external markets (e.g. salvaged building materials, privately hauled recyclables). Education and incentive programs should be developed to increase the flow of materials to UCRRA for the RIC, informed by the County's Zero Waste Implementation Plan.

Locating operations for the RIC

The UCRRA-owned property adjacent to the current transfer station has been suggested as a promising location for some or all of the RIC's functions. ReUse Consulting toured the property with the UCRRA Executive Director. Much of this property is forested and sloping, and it has a stream; but the portion near the road is relatively flat. This area is a potential site for delivery and initial processing of materials destined for reuse, and potentially also for collecting and processing hard-to-recycle materials for other UCRRA programs. It is our understanding that this property is owned by UCRRA but, as a separate parcel, is not subject to permitting requirements associated with the existing transfer station. If this is correct, potentially this site could be developed separately by UCRRA or a partner entity in due time.

In principle, this site could serve as the single location for an integrated Reuse Innovation Center. It is on Route 32, near Routes 9W and 199, easily accessible to Kingston, Saugerties, the Town of Ulster and Rondout Valley communities by car/ truck. However, this site is not near any population centers or opportunities for foot traffic, which is typically a primary way that Reuse Innovation Centers attract customers and materials and make participating businesses viable.

As siting options are considered in the next phase of this project, consideration should be given both to creating one centralized facility and to a multiple-facility strategy that may include a collection location at an industrial-style facility like UCRRA's, and a location for crafting and retail that is in a more populated area for easier accessibility. In terms of locations, initial interest has been expressed by Novo Foundation for further discussion regarding its Metropolitan facility in Kingston, a former industrial facility that has been purchased and remediated with the intent to create a combination maker and cultural space.

Reuse Programs and Businesses at the RIC

A ReUse Innovation Center is an ecosystem of diverse businesses and programs. It may include craft, light manufacturing, assembly and other types of business, as well as service programs such as maker spaces, materials exchanges, and Repair Cafe locations. One key driver in defining the business opportunities is materials flows that are consistent enough and high

enough quality. But equally important are the talents and interests of entrepreneurs and other collaborators who are motivated to start and maintain enterprises.

{Summarize most promising diversion programs}

Any program that diverts C&D materials holds the greatest potential for landfill diversion. The Reuse Innovation Center Store is the best way to save this material from the landfill.

As soon as our review of diversion program opportunities and the associated prioritization matrix has been finalized with stakeholder input, this document will be expanded to include recommended specific types of enterprises and activities, programming spaces and overall design features, setting the stage for discussion of siting considerations. We expect it will include spaces for a central, large RIC Store, diverse retail businesses, a showroom that could double as a classroom (or a separate classroom), repair and maker areas, and significant storage.

The RIC should be scoped out to complement, rather than competing with, existing businesses in and around Ulster County. Complementary businesses and potential key collaborators include:

- Habitat ReStore, a moderately successful re-seller of furniture and household items with a sizeable facility on Route 28 that could receive and re-sell significantly more building materials if these were captured either from UCRRA's collection system or from contractors who do not currently take materials to UCRRA;
- Zaborski Emporium, a well-known, one-of-a-kind household and building materials reuse center;
- the Hudson Company in Dutchess County, a high-end reclaimed wood working business.