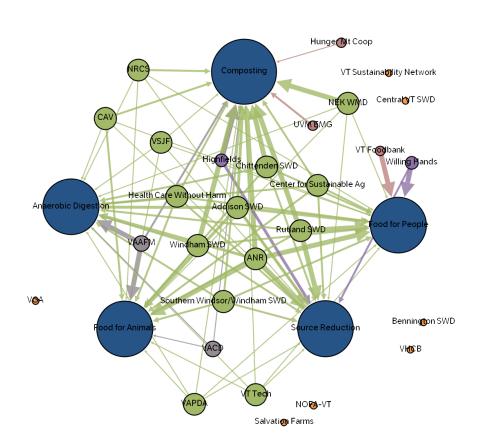


FOOD CYCLE COALITION TASK FORCE

ORGANIZATION ASSET MAPPING TO ADVANCE ORGANICS DIVERSION AND FOOD RESCUE WITHIN THE FOOD SYSTEM



Acknowledgements

Our thanks to all who helped make this project possible and to those who took the time to engage in this statewide dialogue. Together we are finding the common ground. As Vermont communities take up the task of implementing Universal Recycling (Act 148), the dialogue will continue and expand. This dialogue must remain at the core of our planning and action if Vermonters are going to turn the disposal 'problem' into environmental and economic benefit. We value your continued involvement to encourage and promote waste reduction, food rescue, and organics diversion to feed livestock, make compost products, and produce renewable energy in Vermont.

Survey Participants:

- Addison County Solid Waste Management District
- Bennington County Regional Commission
- Central Vermont Solid Waste Management District
- Chittenden Solid Waste District
- Composting Association of Vermont
- Health Care Without Harm
- Highfields Center for Composting
- Hunger Mountain Coop
- Natural Resources Conservation Service
- Northeast Kingdom Waste Management District

- Northeast Organic Farming Association of Vermont
- Rutland County Solid Waste District
- Salvation Farms
- Southern Windsor/Windham Counties Solid Waste Management District
- UVM Center for Sustainable Agriculture
- UVM Extension Master Gardener
- Vermont Agency of Agriculture, Food & Markets
- Vermont Agency of Natural Resources/ DEC Solid Waste Division

- Vermont Association of Conservation Districts
- Vermont Association of Planning and Development Agencies
- Vermont Campus Sustainability
 Network
- Vermont Food Bank
- Vermont Grocers Association
- Vermont Housing and Conservation Board
- Vermont Sustainable Jobs Fund
- Vermont Technical College
- Willing Hands
- Windham Solid Waste Management District

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Special Thanks To:

Cathy Jamieson, Bryn Oakleaf, and Josh Kelly, Agency of Natural Resources Solid Waste Division Vermont Sustainable Jobs Fund Highfields Center for Composting Food Cycle Coalition members

EXECUTIVE SUMMARY

The Asset Mapping Project (AMP) began in the fall of 2013 as a project of the Food Cycle Coalition (FCC), a Task Force of the Farm to Plate Farmland Access and Stewardship Working Group. The project came out of the FCC's desire to ensure strong and significant participation from the food system to reach the goals of Act 148, Vermont's Universal Recycling law. A food system perspective recognizes the 'win win' potential of Universal Recycling to create opportunities for farmers and composters, and at the same time encourage food rescue and the use of food scraps in ways that can quantitatively improve Vermont's soils, waterways, and public health.

While the primary purpose of the project deliverables was to collect information that will help guide Act 148 implementation activities within the food system, each of the four deliverables also has stand alone value:

- Template for organizational asset mapping: suitable for use by organizations in any state/region
- Day-long Strategic Planning Session: process to merge the goals and mandates of organics resource management and local food systems; organizations identify new project partners; assess asset mapping outcomes.
- Data collection at Planning Session: action items, with when (timeline), who (the implementers), and where (the regions where there is capacity for implementation to occur)
- White Paper/Report: reference for other organics diversion and food system projects.

The AMP represents a 'point in time' analysis of assets within the food system that are available for implementing Universal Recycling. This baseline data will allow us to monitor changes (some that have already occurred since conducting the asset mapping survey) in capacity as the phased-in ban on landfilling goes into effect.

Universal Recycling Asset Mapping Project Survey

28 organizations, composed of non-profits, government agencies, colleges and universities, and solid waste districts were surveyed for the AMP. Surveyed organizations were asked to identify assets in 7 areas: Personnel, Expertise, Constituents, Networks & Partners, Space & Facilities, Materials & Equipment, and Additional Leverage Areas). The survey was designed to:

- Ensure identification of the major organizations that can serve as statewide Universal Recycling assets
- Identify key alliances and networks that can support and promote Food Cycle Coalition initiatives
- Assess the strengths and gaps of organizations' assets and the network of organizational assets as a whole
- Develop insights and recommendations for how to improve local/regional conditions that support Universal Recycling goals and implementation
- Catalyze action to meet local and regional needs to ensure comprehensive Universal Recycling implementation
- Estimate the economic value of identified assets

The Asset Mapping survey revealed organizations have considerable capacity to assist with Universal Recycling communications and messaging, and are connected to dozens of networks that could be utilized for Universal Recycling implementation. The survey highlighted the fact that because organizations are still determining

the full implications of the law there is uncertainty surrounding how much personnel will be devoted to direct implementation, either part or full time. Additionally, the survey brought to stakeholders' attention the importance of fostering deeper relationships between solid waste management entities and food system organizations. The two have much to offer one another.

The results of the Asset Mapping, and a detailed list of gaps gleaned from the survey and several previous planning efforts, were then used to jump start a day-long strategic planning session with stakeholders.

Top Ten Strategies

At the end of the strategic planning session it was clear that market and social mission driven priorities are equally important to achieving the goals of Universal Recycling. The 10 strategies listed below were developed from a larger list of 30, and are organized according to the number of votes a particular strategy received from the group. These strategies, informed by decades of stakeholder experience, can take us a long way to 2020 and successful implementation of Universal Recycling.

- **1.** Fund & develop regional strategic planning sessions. Focal areas of (1) investments and communication and (2) regional Universal Recycling implementation networks.
- 2. Develop an awareness and statewide messaging and marketing program. Give developed materials to groups to regionalize and disseminate. Target food system actors for dissemination through their existing networks. Survey the general public and stakeholder constituents to establish a benchmark for Universal Recycling awareness, and periodically resurvey groups to measure success of messaging and marketing.
- 3. Develop a marketplace strategy for composting infrastructure and demand for compost products
- 4. Replicate the Willing Hands model in order to develop greater regional food rescue capacity
- 5. Conduct nutritional & economic analysis for regional diversion pathways
- **6.** Build capacity of local charitable food sites
- **7.** Inform financiers, funders, and policymakers of economic risks and opportunities presented by Universal Recycling
- **8.** Survey composters and towns to identify carbon sources—both the sources that are already being used and those that could function as carbon sources for composting facilities.
- **9.** Develop community-based rescue systems for prepared foods at institutions, restaurants, etc.
- **10.** One-stop shop for how to manage food resources (rescued, compostable foods, etc.) that includes an online exchange/marketplace.

With an expanded understanding of our present capacity, Vermonters can accelerate their food rescue and organics diversion efforts. On a foundation of shared understanding and goals Universal Recycling implementation efforts can have far reaching positive effects on quality of life issues that Vermonters care about:

- Water quality
- Public health
- Agriculture viability
- Soil health and fertility
- Storm water management
- Greenhouse gas emissions reduction

- Water conservation
- Carbon sequestration
- Livable wage, place-based jobs
- Healthy and viable communities
- Food security
- Renewable energy

In this big picture context, regulations and programs responsive to the Universal Recycling goals for managing organics can help Vermonters build a societal ethic that values soil, strengthening the Farm to Plate 'soil to soil' framework.

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Vermont is on the cusp of an enviable policy convergence between the Farm to Plate food system approach to agriculture and the resource management model for edible food and other organics in our Universal Recycling law, Act 148. The Asset Mapping Project is the beginning of an effort by the Food Cycle Coalition to connect previously unconnected state policy goals that, if coordinated, can contribute to food sovereignty, water quality, soil health, climate change adaptation and local economies.

Food rescue and organics diversion link consumers, agriculture, and environmental stewardship. This linkage offers tremendous promise for the future of agriculture, food security, soil health, water quality, greenhouse gas emissions reduction, and climate change adaptation. The Asset Mapping Project is a step to mature these links and outcomes.

This project connects to 11 of the 25 goals in the F2P Strategic Plan, and is most directly aligned with Goal 14:

Goal 14: Organic materials from farms (e.g.. manure) and food scraps will be diverted from landfills and water- ways and used to produce compost, fertilizer, animal feed, feedstock for energy production, and other agricultural products.

Our project goal was to map the assets of statewide organizations and use that information to identify priority strategies that can assist with the transition from waste disposal to resource management for currently landfilled organic materials. 28 organizations in the state, composed of non-profits, government agencies, colleges and universities, and solid waste districts were surveyed for the AMP. Surveyed organizations were asked to identify assets in 7 areas: Personnel, Expertise, Constituents, Networks & Partners, Space & Facilities, Materials & Equipment, and Additional Leverage Areas). The survey was designed to:

- Ensure identification of the major organizations that can serve as statewide Universal Recycling assets
- Identify key alliances and networks that can support and promote Food Cycle Coalition initiatives
- Assess the strengths and gaps of organizations' assets and the network of organizational assets as a whole
- Develop insights and recommendations for how to improve local/regional conditions that support Universal Recycling goals and implementation
- Catalyze action to meet local and regional needs to ensure comprehensive Universal Recycling implementation
- Estimate the economic value of identified assets

The results of the Asset Mapping, and a list of gaps gleaned from the survey and previous planning efforts, were then used to jump start a day-long strategic planning session with stakeholders. The day-long planning session also identified Universal Recycling implementation initiatives that the food system could provide.

The Asset Mapping and the outcomes from the strategic planning session summarized in this report serve three primary purposes:

- Guide and inform future Food Cycle Coalition Task Force projects
- Assist the efforts of the Agency of Natural Resources, Vermont Organics Partnership (VOP) and others to meet Vermont's Universal Recycling goals
- Advance and achieve Farm to Plate goals and outcomes.

ASSET MAPPING SURVEY SUMMARY

The comprehensive reach of the Universal Recycling law was evident from survey responders, revealing how organics diversion connects to a broad spectrum of organizational goals. 100% of surveyed participants concurred that there is a connection between their mission and some aspect of implementing Universal **Recycling.** Reasons cited for the connection between organizational missions and Universal Recycling goals include:

- Education and outreach
- Research
- Conservation
- Farm viability
- Farming practices
- Soil quality
- Water quality

- More sustainable agriculture practices
- More sustainable operations (institutions, businesses, communities)
- Local resource management
- Manage as resource not 'waste'
- Technical assistance
- Farm to Plate Strategic Plan goals

Survey Participants

Organizations/Agencies:

ANR - Agency of Natural Resources/ DEC Solid Waste Division

CSA - UVM Center for Sustainable Agriculture

CAV - Composting Association of Vermont

EXT - UVM Extension Master Gardener

VHCB - Vermont Housing and Conservation Board

HCWH - Health Care Without Harm

HCC - Highfields Center for Composting

HMC - Hunger Mountain Coop

NOFA - NOFA-VT

NRCS - Natural Resources Conservation Service

SF - Salvation Farms

VAAFM - Vermont Agency of Agriculture, Food & Markets

VACD - Vermont Association of Conservation Districts

VAPDA - Vermont Association of Planning and Development

Agencies

VCS - Vermont Campus Sustainability Network

VFB - Vermont Food Bank

VGA- Vermont Grocers Association

VSJF - Vermont Sustainable Jobs Fund

VTC - Vermont Technical College

WH - Willing Hands

Solid Waste Management Entities (SWMEs):

ACSWMD - Addison County Solid Waste Management District

BCRC - Bennington County Regional Commission

CSWD - Chittenden Solid Waste District

CVSWMD - Central Vermont Solid Waste Management District

NEKWMD - Northeast Kingdom Waste Management District

RCSWD - Rutland County Solid Waste District

WSWMD - Windham Solid Waste Management District

SWWC SWMD- Southern Windsor/Windham Counties Solid

Waste Management District

Priorities

Though surveyed organizations see the connections between Universal Recycling and their organization, most revealed that they are only beginning to figure out what their role is in regards to implementing the organics diversion portion of the law. Survey participants noted that it is still relatively early in the process for identifying specifics, and that they would begin to work on a timeline for response during 2014. As a result, many survey participants reported that clearly identifying their role and conducting outreach and education to their constituents and within the organization (including developing marketing materials and presentations) is a priority.

The priorities of the Solid Waste Division of the Agency of Natural Resources align well with other survey participants, and ANR reported that conducting education and outreach to key stakeholders and building strategic working relationships are two specific areas they have prioritized for the next year. Indeed, much of ANR's state priorities for the next year are focused on giving important actors the resources necessary to clarify their roles and assist in Act 148 implementation.

Other early priorities include:

- Consistency of messaging: are we saying what others are saying, and how they are saying it?
- Push the envelope for creative, low tech solutions
- Pilot projects to address policy changes e.g. coops and farm stands as foodscrap drop off locations
- Staying informed as implementation progresses
- Identifying modifications to existing programs e.g., improving connections at local level to increase food rescue; multiple bins for trash/recycling/foodscraps in public places

Participants who had yet to determine priorities outlined steps they would need to take and assistance they would need to receive in order to align their work with Universal Recycling. The steps to determining priorities included:

- How to integrate action into existing programs as part of established review process
- More guidance from regulators regarding timeline to comply
- Learn more about what is expected, options to comply, opportunities for constituents

Education

The latter two responses about guidance from regulators and learning more about what is expected of organizations indicate a need for continued education on the requirements of the law. It is also an opportunity to assist organizations in identifying how Universal Recycling may provide new opportunities to organizations and their constituents. Most organizations reported having taken some action to understand the law through either reading the bill, attending Food Cycle Coalition meetings, or receiving presentations from ANR, Highfields, CAV, or Solid Waste Management Entities (SWMEs).

However, some key stakeholders revealed either limited to no awareness or a need to have more devoted education and outreach for their organization. For example, both NOFA-VT and VAPDA responded that there was none to little organizational action taken to understand the goals of Universal Recycling. NRCS and the Vermont Campus Sustainability Network noted that while they have either read the legislation or devoted some discussion to it, they still would like to have further discussions about Universal Recycling to determine their roles.

Responses from organizations such as Highfields, ANR, CAV, and Solid Waste Districts demonstrated the most regular internal discussions about Universal Recycling combined with the organizational capacity and mission to do education and outreach about the laws implications. ANR in particular has the ability to provide education on Universal Recycling through technical assistance, webinars, or group presentations.

Barriers to Responding to Universal Recycling Mandate

Access to funding and program staffing were the most often cited barriers. Other barriers identified by more than one respondent were:

- Access to outreach/education materials
- Knowledge of infrastructure/how to keep up as it changes
- Maintaining momentum for 7 10 years
- Access to composting facility/farmer

- Overseeing volunteers, use of volunteers, need to create program for volunteers
- Host community agreements to add organics to drop off locations
- Adding new drop off locations e.g., food coops, farmstands, CSA pick up locations
- Managing contamination of source separated foodscraps
- Buy-in from public, especially if more costly overall.

Organizational needs to overcome barriers:

- Legislative changes to ANR fee bill
- Support from food security and food rescue organizations to pull food waste into conversations at the public level
- Predictable access to funding
- Expanded staffing
- Improved communication with generators
- Assistance to identify potential composting facility operators
- Guidance docs from regulators as phased-in implementation proceeds e.g., preventive and punitive action to limit contamination of foodscraps and pay as you throw (PAYT) implementation guidance.

Existing Organizational Services and Capacity to Support Universal Recycling Goals

Despite it being difficult for some organizations to specifically identify implementation priorities and barriers this early in the process, surveyed organizations offer an array of existing services that are congruent with Universal Recycling.

The Agency of Natural Resources, as the state agency responsible for overseeing laws, rules, policies, and planning related to solid waste management in Vermont, offers a number of critical services to support Universal Recycling. ANR certifies and regulates facilities and haulers, provides technical and financial assistance to towns and solid waste districts, and creates and distributes outreach materials.

Beyond ANR, significant services and capacity offered by surveyed organizations that align with Universal Recycling implementation are:

- Technical services to farmers
- Funding for infrastructure on farms
- Pilot collection programs such as Brattleboro's curbside collection, UVM office collection
- Existing infrastructure within SWMEs
- Existing infrastructure for food rescue through Vermont Food Bank, Salvation Farms, Willing Hands, ad hoc local rescue and repurposing
- Existing education and outreach to agriculture community
- Niche/alternative hauling options such as Grow Compost's dual foodscrap and food rescue pick ups
- US-EPA social marketing materials for Food: To Good To Waste campaign
- ANR's Vermont Organics Partnership (VOP) and Communications Working Group, Hauler Communications Working Group
- Farm to Plate Food Cycle Coalition Task Force
- Systems for outreach to constituents

Current Data Collection

There is a range of data that organizations currently collect directly as primary sources that could be helpful to implementation and measuring progress, including:

- Master Gardeners/Master Composters list serve and their projects (UVM)
- Farmers who have received compost or food rescue related technical assistance (Center for Sustainable Ag, Highfields, NRCS, VHCB)
- Number of composting facilities, number of schools composting, tons of foodscraps collected/ diverted (Highfields, Salvation Farms, VTC)
- People trained and certified to compost or who have attended a compost training program (Highfields, UVM, VTC)
- Yards or pounds of compost produced, revenue from sales (Highfields, Salvation Farms, VTC)
- Pounds of rescued food (NRCS, Vermont Foodbank, Willing Hands)
- Pounds of food waste reduced, particularly at Hospitals (Health Care Without Harm)
- Attendees at trainings (CAV, UVM, Highfields, NRCS, VTC)

It's evident from participant responses outside of ANR and amongst the non-SWMEs organizations, that Highfields Center for Composting collects a robust range of Universal Recycling related data and could be looked to by other organizations interested in collecting data or establishing similar data tracking. Along with Highfields, organizations that could play a central role in tracking farm related data are UVM Extension, the UVM Center for Sustainable Agriculture, NRCS, and VHCB.

Organizations such as the Vermont Foodbank and Willing Hands have robust and established data collection systems for food rescue. Health Care Without Harm uses a benchmarking tool, Greenhealth Tracker, to assist hospitals in establishing a baseline for food waste and track progress towards waste reduction.

SWMEs collect a range of data at the regional level, including:

- Hauler & facility collection reports
- Transfer station data
- Compost bin sales
- Business and institutional reports, including schools and colleges
- Business waste audits
- Large generator food waste collected
- Drop-off participation (number of pails distributed)
- Yard scraps and other feedstocks used in composting

SWMEs and ANR are clearly important aggregators of data, SWMEs at the regional level and ANR at the state level (which uses data reported by SWMEs). Other sources are from generators (business, institutions, schools, colleges), and national data. One SWME performs implementation studies every 2 years that track per capita diversion v. disposal that could be replicated. Data collection frequency varies, but in general is conducted on an annual basis. See Appendix A (pg. 20) for detailed list of data collected by organization.

An important data gap identified by the Addison County Solid Waste District (ACSWD) is the lack of data from food system diversion such as rescued food, animal feeding, gleaning, and small on-farm composting. There is no formal reporting system for that data. Additionally, ACSWD reported that backyard composting is based on compost bin sales, but this method is incomplete.



Based on the information provided there is conservatively several million dollars of existing assets to bring to organics diversion. Under Universal Recycling, these assets could be applied or leveraged to redirect edible food and food residuals to the food system. The largest dollar value assets are for Foodbank staffing and transportation infrastructure; SWME staffing, equipment and infrastructure; USDA/NRCS technical assistance and infrastructure development funding; ANR/DEC Solid Waste Division staff and grant making, and Highfield's Center for Composting Close the Loop program, technical assistance, and composter training.

Interpreting Network Maps:

The following network maps graphically depict capacity by asset category: Personnel, Expertise, Constituents, Networks & Partners, Space & Facilities, Materials & Equipment, and Additional Leverage Areas. Network maps are commonly used to show relationships between entities in a network. Here, the network maps provide a useful way to visualize relationships between organizations, assets, and parts of the Universal Recycling hierarchy, and see the relative strengths and weaknesses of the surveyed community as a whole.

For each asset category, the maps provide a snapshot of each organizations' available assets and the part of the hierarchy the asset is available for—indicated by an arrowed line pointing from the organization to the part of the hierarchy. Thicker lines and arrows represent either a greater number of assets available or a relative measure of the quality/magnitude of the available asset. Larger circles indicate an organization is connected to more parts of the hierarchy. The larger a hierarchy element is indicates there are more organizations with assets to offer for that part of the hierarchy, which allows for quick identification of which hierarchy element has the most or least available assets.

Note that the maps do not show relationships between organizations directly, though they can be used to identify clusters of organizations that have assets available for similar parts of the hierarchy. Clustered organizations can view other cluster members as prospective project partners, or, organizations outside of the cluster can view the cluster as a group of partners to connect with when in need of resources for certain elements of the Universal Recycling hierarchy.

Additionally, some organizations have significant assets for particular parts of the hierarchy and not others. As a result, their location on the map may be "pulled" by a particular hierarchy element away from the center. Thus, centrality should not be interpreted as a strict measure of how important an organization is in this work, but rather just an indicator for how many areas of the hierarchy the organization is connected to.

Organizations that did not provide an answer for a particular asset category appear as small unconnected orange circles. Therefore, response rates (non-responses in particular) effect the placement of other organizations on the map, and it is assumed that organizations that did not respond or only partially responded are underrepresented while organizations that responded fully are overrepresented on the network asset map. In other words, the maps are only as good as the information provided, and can be used as a way to assess the overall quality of data as well as to identify data gaps that will be important to fill as work moves forward.

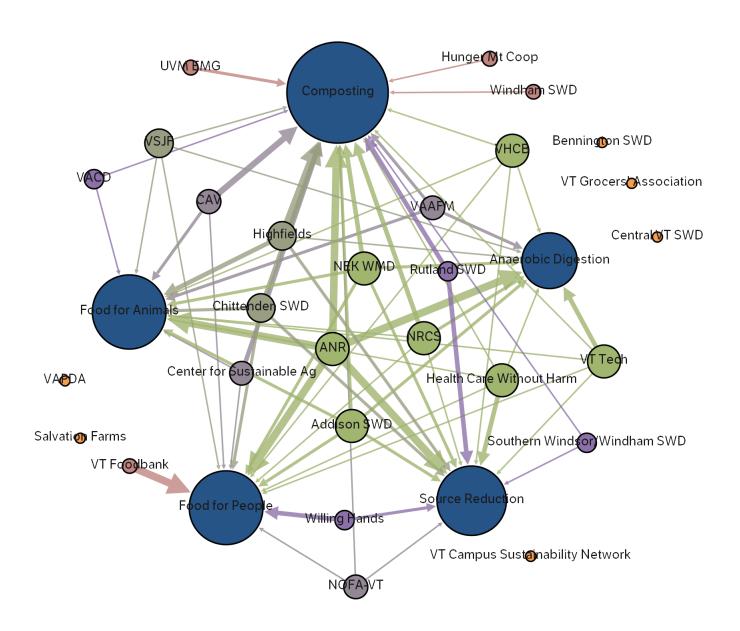
Readers will find a full tabular listing of the graphically depicted assets in Appendix B (pg. 23) if they would like to investigate specific available assets in greater detail.

Personnel Assets

Most organizations have some staffing capacity to put towards organics related Universal Recycling implementation. The range is from a couple hours/month to several full-time staff positions. As anticipated, due to their regulatory responsibilities, ANR has the greatest personnel assets to offer. The areas with the greatest personnel capacity are outreach education, marketing, training, and technical assistance. Importantly, organizations like VAAFM, NOFA-VT, UVM Extension and the Center for Sustainable Agriculture, and NRCS have staff capacity to do outreach, education, and technical assistance to the farming community. There is also substantial volunteer capacity that can be utilized, most significant: Extension Master Gardener's and Master Composters, CAV membership, Willing Hands volunteers, and Foodbank partners at local food shelves and senior meal sites.

The SWMEs capacity varies with the size of the district and the services it offers, from one part time position to several full time staff; though in aggregate, SWMEs have the greatest amount of dedicated personnel assets to offer.

Overall, asset availability is greatest for composting, equivalent for source reduction, food for people, and food for animals, with the least available personnel assets being available for anaerobic digestion.



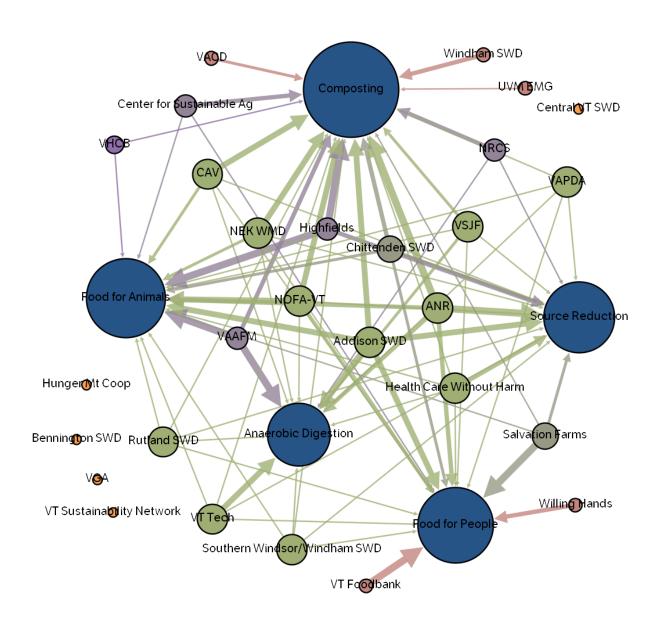
Expertise Assets

There is considerable breadth and depth of expertise within surveyed organizations. Most relevant are:

- Agriculture all aspects
- Grant writing
- Program management
- Media/messaging
- Policy/Regulations
- Training and program development (develop & deliver)
- Compost science, production & marketing

- Hauling
- Business Planning
- Financing
- Research
- Anaerobic Digestion
- Soil Science

As with Personnel, Expertise assets are greatest for composting, with expertise for source reduction, food rescue, and feed for animals close behind. Once again, anaerobic digestion has the least number of available assets.



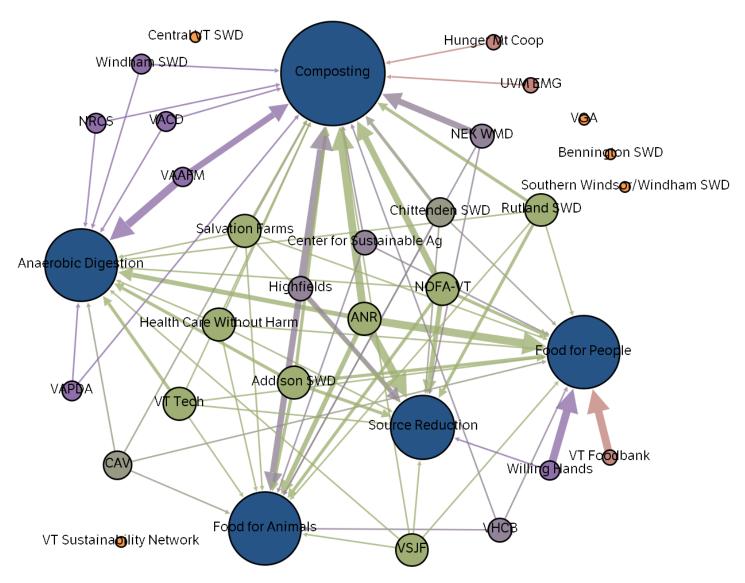
Constituent Assets

The range of constituent assets is consistent with the diversity of the food system. For surveyed organizations, these assets including:

- 100+ master gardener/composter projects
- Educators
- Farmers
- Food coop members
- Food processors/manufacturers
- Grocers
- Haulers
- Hospital management/staff
- Members of organizations
- Participants in SWME pilot programs

- People experiencing food insecurity
- Residents at shelters
- Residents of subsidized housing
- Schools
- **USDA**
- **■** US-EPA
- Users of compost
- Users of foodshelves and meal sites
- Users of State Parks
- Vermonters served by Human Services

For the constituent assets it is important to note that circles for composting and food for animals are on opposite ends, suggesting that these constituent groups are not as closely connected as they could be.



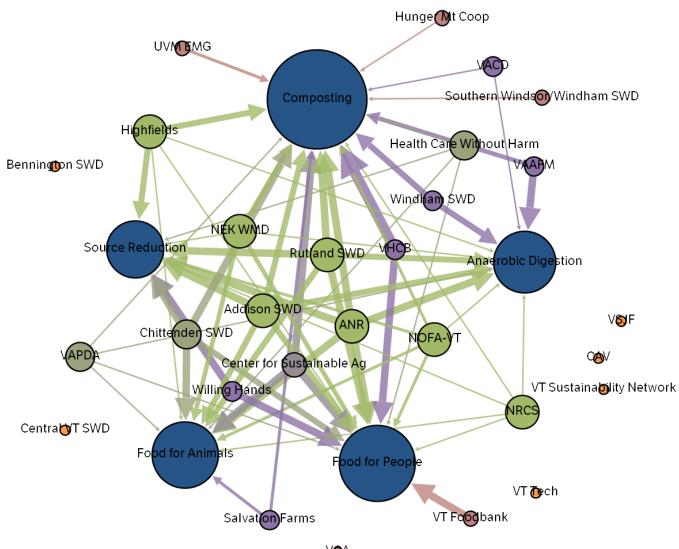
Existing Networks & Partners Assets

Survey Participants are connected to dozens of networks outside of the organizations surveyed that could help roll out Universal Recycling. It's interesting to note that SWMEs have a lot of assets to offer in this area, and that VHCB has networks that strongly connect Composting and Food for People. The Agency of Natural Resources has important connections with other Vermont state agencies such as the Department of Corrections, VTrans, and the Agency of Education. Below is an illustrative list. See Appendix for complete list.

- Agriculture Producer Associations e.g., Vermont Vegetable and Berry Growers Assoc. (250 farms, 700 on regional email list)
- Conservation non-profits
- Farm 2 Plate 250 270 partners
- Food Coops
- Housing non-profits
- Healthier Hospitals Initiative

- Intervale Center
- Local/school sustainability groups
- Northeast Resource Recovery Assoc.
- Town Conservation Commissions (90)
- Vermont Association of Planning and Development Agencies
- VT Farmers' Market Assoc. (64 markets)
- Willing Hands—60 recipient organizations,
 25 donors

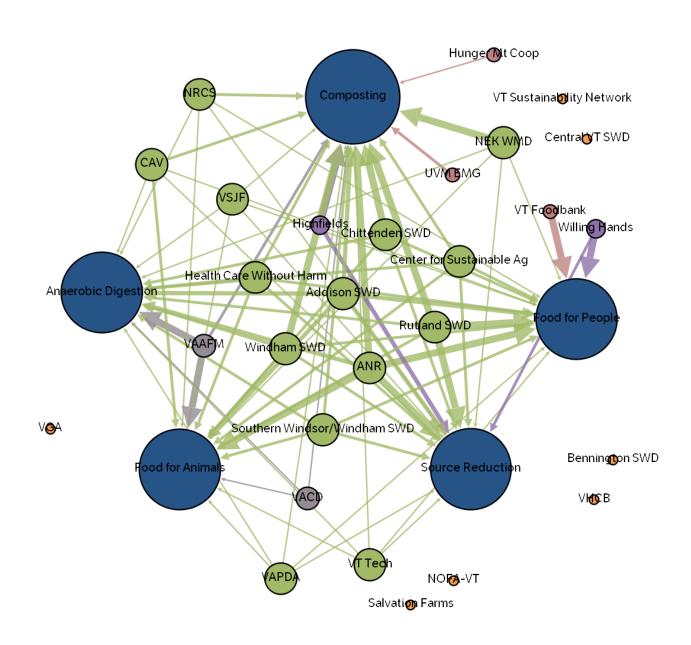
Network/Partner asset availability for source reduction is noticeably lacking in relation to other parts of the hierarchy, while composting is once again strongly represented.



Space & Facilities Assets

By far the facilities asset most commonly cited was the capacity to assist with messaging via newsletters, websites, list-serves, blogs, facebook, Vermont Food System Atlas, etc. The Space & Facilities asset was the most balanced overall amongst the Universal Recycling hierarchy, and this is quickly evident when viewing the asset network map. Several new meeting spaces/locations were identified, some with skype capability. Other significant facilities, materials and equipment assets include:

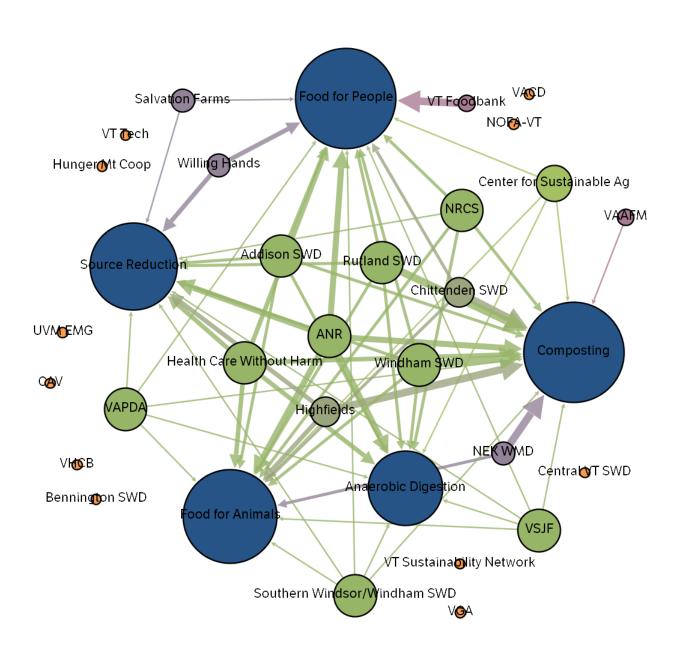
- 4 Foodbank distribution depots Barre, Brattleboro, Wolcott, Rutland (pending)
- Bulking agents carbon material
- Cameras, design software
- 'How to' materials, toolkits, videos
- Loaner containers for special events
- Material handling equipment: loaders, skidsteer, chipper
- Organics diversion collection tubs/back yard composting bins for sale
- Trucks
- Two commercial kitchens Foodbank



Materials & Equipment Assets

For Materials and Equipment Assets, which for many organizations was closely linked with Space and Facilities Assets, ANR, Health Care Without Harm, Highfields Center for Composting, and most of the SWMEs figured prominently in the number of space and facility assets they had to offer. Many SWMEs listed both media related equipment assets such as cameras, and heavy physical equipment like trucks, loaders, and woodchippers.

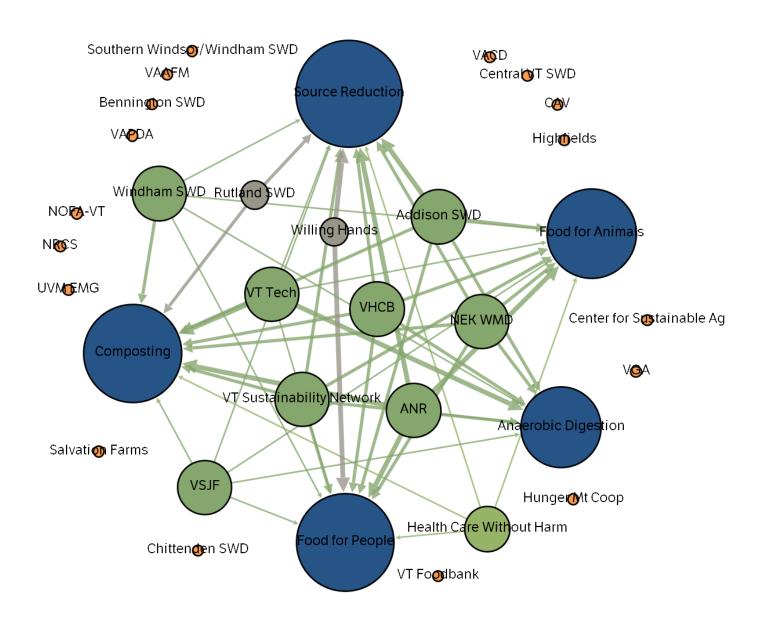
As with space and facilities assets, materials and equipment assets are relatively balanced for each part of the Universal Recycling hierarchy aside from anaerobic digestion.



Additional Leverage Area Assets

Survey participants were asked to list any additional assets they thought were important or that could be leveraged. Amongst those that responded, the following additional assets of significance include:

- ANR administers pass through grants year to year, but grant amounts and focus areas change yearly as well. ANR also can assist with partnership development, and as part of this development, help partners identify funding opportunities.
- Americorps positions at SWMEs
- Food Coops as drop off locations
- Green Guide for Health Care being revised due 2014
- Willing Hands model replicable to increase regional food rescue





On March 10, 2014 asset mapping participants and other Act 148 stakeholders came together for a day to closely examine the asset mapping results and formulate strategic priorities. The sectors represented included agriculture, regional planning, regional economic development/job creation, on farm energy production, farm viability, composting, food rescue, food coops, and solid waste management. The goals of the strategy session were to:

- Identify new regional partners and assets within the food system to meet Act 148 goals
- Use previously identified organics diversion gaps to develop and sequence strategies for food system organizations to implement
- Identify metrics for measuring success.

Additionally, an inherent goal to the day was to create an opportunity for professionals from sectors that don't normally interact with one another to meet, network, and work together. For many, for example, this was the first time a solid waste manager worked on a diversion 'problem' with someone involved in food rescue and redistribution.

Strategic Planning Session Agenda

Overview: Introduction and Asset Mapping Survey Findings

Foodbank Presentation: Food Rescue - How it works

Morning Strategy Session: Breakout groups with a mix of expertise in each group

- Articulate strategies
- ID organizations to help implement strategy
- Prioritize top 3 strategies in group
- Report out top 3 priority strategies

Afternoon Regional/Local Partners Strategy Session:

Breakout groups by geographic region to identify:

- What is going on already
- Local partners/potential partners
- Funding options

Top Ten Strategies

During the morning strategy session five breakout groups generated a list of important strategies critical to Universal Recycling implementation. From these, participants in each breakout group selected their top 3 priority strategies. After consolidation of duplications, a 'top ten' list was ranked by the entire group. Each participant had 3 votes. The 3 votes could be distributed any way the participant wanted i.e., a person could put all their dots on one strategy if they wanted.

The top ten strategies are organized by voting results. (e.g., number 1. got the most votes. See group notes, Appendix for actual vote count.) Each strategy is followed by an estimated timeline for the work, contributors already committed, and capacity to implement. Capacity is determined by a number of factors: the Asset Mapping Survey, prior commitment, statutory authority, and as envisioned in the State's <u>Materials Management Plan</u> (MMP, effective June 18, 2014).

The 'Historic Timeline' was added where applicable to give additional context for work that has already been completed or is in progress for each strategy. In some cases the work to be done is a continuation of significant prior stakeholder development, in others it represents steps that have yet to be taken by anyone. Knowing this can help Food Cycle Coalition and Farm to Plate members determine the maturity of each strategy and allocation of organizational resources needed for strategy implementation.

1. Fund and develop regional strategic planning sessions. Focal areas of (1) investments and communication and (2) regional Universal Recycling networks.

Timeline: Present to 2020

Historic Timeline:

2013: Addison County Regional Community Composting Assessment

2013: ANR funded *Vermont Waste Composition Study* and *Systems Analysis of the Impact of Act 148 on Solid Waste Management* with regional statistics

2014: NEKWMD regional planning in progress

2014: CAV/ANR outreach to RPCs

Contributors: SWMEs, VOP, CAV, CVCAC, ANR

Capacity: None committed beyond current planning efforts.

2. Develop awareness and statewide messaging and marketing program. Give developed materials to regional groups for disseminate. Target food system actors for dissemination through their networks. Survey the general public and stakeholder constituents to establish a benchmark for Universal Recycling awareness, and periodically resurvey groups to measure success of messaging and marketing.

Timeline: Present to 2020

Historic Timeline:

2013 to 2014: • Standardized recycling symbols for organics, recyclables, and trash released

- SWMEs surveyed on messaging needs. Top four priorities include: (1) Creating a Statewide Educational Campaign for Act 148 (2) Using PSAs and CBSM to communicate that message (3) Developing a "How To" Guide for Act 148 implementation (4) Holding collaborative meetings with haulers and other groups
- Tools for Food Scrap Generators (FSGs) that includes signage and the Vermonter's Guide to Composting Kitchen Scraps
- Foodbank developed FAQ handout on food rescue
- VACD led creation of FAQ handout for agriculture sector (yet to be completed)

Contributors: SWMEs, VOP, FCC, CWG, VACD, F2P Network members

Capacity: Some SWMEs already have staff for outreach education/marketing. All SWMEs will need more staff for this work. Significant capacity exists within foodsystem organizations to post or disseminate material electronically and to diverse stakeholder networks. This is evident in the Space and Facility asset map, the category that includes online resources, which shows strong well-distributed assets. The expectation is to create standardized outreach material templates that can be modified for regional differences and priorities.

3. Develop a marketplace strategy for composting infrastructure and demand for compost products.

Timeline: Present - 2020

Historic Timeline:

2002: CAV founded with help of ANR and VSJF 2007 to 2014: Vermont Organics Recycling Summit

2007: Beyond Garbage Study 2008: Legal Compost Project

2008: CAV Market Development Analysis

2009 to 2010: Legislative Compost Study Committee

2010: Act 141, new exemptions for commercial on-farm composting

2012: Close the Loop Strategic Plan drafted • Act 148, Universal Recycling law

2013: Vermont Waste Composition Study and Systems Analysis of the Impact of Act 148 on Solid Waste Management

2013 to 2014: Stormwater Management Manual revised to require use of non structural practices that will increase demand for compost products

2014: Compost Working Group formed

Contributors: CAV, ANR, VAAFM, VSJF, CSWD, HCC, (additional stakeholders participated in the study groups and task forces)

Capacity: Project based, individual composters, ANR funded projects, NRCS cost share, potential new EDA funding, Farm Viability funding for business and technical assistance for farmers managing organics for feed, composting, and nutrient management. The Expertise Asset Map demonstrates a strong and diverse technical assistance community for composting.

4. Replicate the Willing Hands model in order to develop greater regional food rescue capacity.

Timeline: None

Contributors: FCC, Willing Hands , VFB, ANR, SWMEs

Capacity: Windham Solid Waste Management District has agreed to participate in replication project if lead organization can be identified. Need to identify other regions for replication projects.

5. Conduct regional economic analysis of diversion pathways for each level of the hierarchy: source reduction, food rescue, animal feed, composting, and energy production (anaerobic digestion, thermal capture from composting, biodiesel from fats). Conduct nutritional analysis for using foodscraps for livestock feed as part of animal feed economic analysis.

Timeline: None
Historic timeline:

- 2014: Economics of various size laying hen operations with and without the feeding of foodscraps (CAV, UVM, Intervale)
 - Nutritional analysis of various foodscrap rations (Cornell)
 - Pathogenic analysis of foodscraps, eggs, housing
 - Compilation of new data with existing info into 'how-to' manual/toolkit for egg producers (CAV, VHCB, UVM, Intervale)

Contributors: UVM, Intervale Center, Winchester Farm, Cornell University, UConn, CAV

Capacity: Beyond the research noted above, there is no identified capacity (\$) to conduct regional economic analyses. Expertise to conduct these analyses are available in-state. As SWMEs develop regional plans, access to regional economic analyses sooner rather than later can help inform decisions about infrastructure build out options.

6. Build capacity of local charitable food sites.

Timeline: Present to 2020 and beyond

Historic Timeline:

VFB currently coordinates a network of 270 food shelves, meals sites, senior centers, shelters, after-school programs. Food is gathered from Vermont farms, manufacturers, grocery stores, businesses, individuals, schools, regional and national food banks and distributed with VFB trucks. Willing Hands operates a regional replicable model in the White River Junction area, collecting and distributing 3-4 tons of food each week.

Contributors: VFB, Willing Hands, faith-based and civic groups, VHCB.

Capacity: There is capacity statewide, needs coordination/outreach to increase. Most capacity rests with VFB and their hubs (Barre, Brattleboro, Wolcott). With Willing Hands there is also capacity around the White River Junction area.

7. Inform network of financiers and funders (and also State Appropriations) of economic risks and opportunities presented by Universal Recycling.

Timeline: 2014 - 2017 Historic Timeline:

2012: Presentation to Food Funders Network

2013/14: Outreach to NRCS staff

2014: Outreach to VCF

2014: CAV/ANR outreach to RPCs, RDCs

Contributors: FCC, FFN, Farm Viability, traditional agriculture lenders, NRCS, ANR, CAV

Capacity: There is technical assistance and cost share for farmers managing residuals as feed, fuel, compost production for on-farm fertility. Need more outreach to lenders, and lending organizations were relatively absent in the asset map.

8. Identify existing and prospective carbon sources (bulking agents) for composting.

Timeline: None

Contributors: ANR, BGS, Forest & Parks, Municipalities near composters, composters

Capacity: Source locations are not consistent year to year. A notification requirement in state contracts for tree and brush cutting could increase access to material. The Systems Analysis report indicated needing 40,000 yards annually of carbon in addition to municipally generated brush and homeowner leaf and yard material if there is no significant source reduction, diversion to food rescue and livestock feed. There are sources of material within food system and agriculture including horse manure with bedding, spoiled hay and coffee chaff, cardboard from grocers etc.

9. Develop community-based food rescue systems for prepared foods at institutions, restaurants, etc.

Timeline: None

Contributors: VFB, local faith-based and civic groups, SWMEs partner with local volunteer groups

Capacity: None, needs funding. Logistical issues are complex, particularly concerning food safety for prepared

food rescue.

10. One-stop shop for how to manage food resources (rescued, compostable foods, etc.) that includes an online exchange/marketplace.

Timeline: None

Contributors: ANR, SWMEs, VFB, composters

Capacity: None, needs funding to set up, promote, manage

How Will We Know We are Making Progress?

The strategy day included a discussion of how the Food Cycle Coalition can measure the success of their efforts. There are several data sets that are already collected by the SWMEs, ANR, VFB and other food rescue organizations, Farm Viability, NRCS, VACD, and composters. These data sets are a mix of population indicators

and individual program performance measures. They include:

- Pounds of food rescued
- Foodscraps to composters
- Use of Farm Viability technical and business planning assistance
- Use of NRCS cost share
- Use of VACD services

Changes within these data sets will help us measure success of diversion efforts within the food system. However, participants felt that we have more work to do to identify indicators of success and to ensure that what we are measuring conforms to Results Based Accountability (RBA) methodology. Specifically, the FCC itself needs to develop performance measures for the activities it chooses to pursue in the coming year.

A desire to have better data and metrics led to a recommendation that ANR facilitate an ongoing data collection subcommittee of stakeholders to monitor this issue and advance the identification and use of additional metrics, perhaps through VOP. For example one gap identified was 'informal' diversion to animal feed for non-commercial personal use. Currently there is no mechanism to track residuals to on farm digesters or used cooking oil to biodiesel. Except for registered composting facilities, much of our data based knowledge about on-farm food scrap use is limited.



There are several next steps for the FCC to pursue. With the Asset Mapping Project completed the FCC can begin to develop, coordinate, and implement discreet projects responsive to the priority strategies. For that work, the FCC will establish RBA performance measures to evaluate impacts and progress. As an ongoing part of its mission the FCC will continue to identify gaps, new partnerships, projects, and funding opportunities.

There is also a tremendous opportunity to bring outcomes and recommendations from the project to the larger F2P Network, with an eye for doing so at the 2014 F2P Annual Gathering. Additionally, the asset mapping and planning process used by the FCC is not limited to statewide analysis. The organization asset mapping and stakeholder analysis can be scaled down and used to complete local and regional community asset mapping for building Universal Recycling infrastructure. However, regardless of their size, early in the planning process a group or community wants to ensure that how they manage organics aligns with the performance standards for Solid Waste Management Entities (SWMEs) as outlined in Vermont's Materials Management Plan.

We are beginning to see creative, collaborative approaches to increasing Universal Recycling infrastructure. These need to be nurtured to become viable enterprises. One outcome of the AMP was a better understanding by SWMEs and the State's Solid Waste Program of the food system's potential to provide infrastructure. Equally important is for the food system to understand the rules and ordinances that govern how materials such as foodscraps must be managed. Workshops, and outreach education materials developed over the next few years through UVM, SWMEs, ANR Solid Waste Program, Composting Association of Vermont, agriculture technical assistance providers, and farm groups will provide this knowledge to food system entrepreneurs.

An understanding and commitment to food rescue was evident, in that seven of the top ten priorities were connected to food rescue. In the next year members of the FCC will meet with the Farm to Plate Food Access Cross Cutting Team to explore potential shared opportunities to increase food rescue. The shared

opportunities between the two groups encompass three broad areas:

- Identifying how much additional food could be feasibly rescued to feed people
- Identifying how much infrastructure, either new or through expansion, would be needed to rescue additional food
- Identify the timeframe for expanding food rescue

While the issues of how much food and infrastructure are needed and how long it will take are addressed, more immediate priority next steps to capture more edible food in the current waste stream will include:

- Adding food rescue in regional planning for organics diversion
- Projects that duplicate the Willing Hands model (first project funded and underway in Bellows Falls)
- Expansion of Foodbank services (new infrastructure and planning already in progress)



It is rare to have a policy change that creates so many opportunities for high impact, cross-cutting, bipartisan public good (Universal Recycling passed unanimously in Senate and House). It is also true that few policy changes affect all strata of the population where they live, work, and play, as Universal Recycling will.

With Vermont's demographics, we are already seeing there is no 'one size fits all' approach to collect and recycle organics. Successful diversion programs will require participation and collaborative investment at all levels of a community and across sectors.

It was evident from the Strategic Planning Session that building a shared understanding is essential to meld the statutory obligations of ANR and SWMEs with Vermont's food system goals. How do we continue to identify and act on overlapping or mutually supporting interests? How can the food system adapt to the State's new 'Materials Management' plan as it seeks to add value to food system enterprises and support new ones?

The questions will continue – and they should – as traditional 'solid waste' management reinvents itself by advancing environmental stewardship through Universal Recycling. Based on evaluations from participants, this Asset Mapping Project has succeeded in nurturing new relationships and understanding that are essential for Universal Recycling to catalyze the requisite societal change.

Now, two years after Universal Recycling became law, Vermont is well on its way to a paradigm shift – from a society that "disposes" and "wastes" food and organic materials toward a society that takes local control of these materials as a valuable resource. The benefits of food rescue, locally produced fertility and energy, and high quality protein (eggs, meat) will only increase as the cost of currently used farming inputs for fuel, feed and fertilizer increase. With the Universal Recycling timeline (full ban by 2020) there is some urgency to ensure that currently landfilled organics are redirected to their highest use through the collaborative process that is already guiding us.

This Asset Mapping project will help the food system be an active and vital player to ensure 'highest and best use' implementation strategies for Universal Recycling in Vermont and anywhere communities value a thriving local food system.



APPENDIX A: DATA COLLECTED BY SOURCE, FREQUENCY OF COLLECTION, AND GAPS

	Primary	Secondary	Frequency	Gaps
VAAFM	 Tons of food waste diverted to on-farm anaerobic digestion systems Number of on-farm anaerobic digestion systems that are taking food waste Number of on-farm compost heat recovery projects that use Act 148 diverted material Amount of energy captured from above projects 			
VACD	• Local NRCDs	• Ag Census	Ongoing	
ANR				
CSA		• USDA GAPS Audit Program (# of farms GAP certified)	• Annually	
CAV	• VORS attendees, evals, and workshop evals			
EXT	 Number of master composters trained Number of master composter projects across the state 		• Annually	
VHCB	• Could generate a list of farms that have received compost-related and/or food scrap related TA			
HCC	Collect within and through contracted haulers: Number of composting facilities Number of schools composting Tons of food scraps collected on Highfields developed hauling routes People trained & certified to compost and who have attended compost trainings Businesses/organizations/schools/farmers that have received trainings Yards of finished compost generated by Highfields partners Revenue generated by compost sales at Highfields compost facility		Weekly, quarterly and annually depending on the data/program	
HCWH		 Greenhealth Tracker: benchmarks waste and tracks progress towards reduction. Institute for Health Care Improvement online platform: regulated medical waste, recycling, C&D. 	Greanhealth Tracker encourages monthly data collection HHI collects data quarterly	
НМС	• Track food scraps composted (64 tons FY 2012)		• Annually	
NOFA				
NRCS	 • info on farms provide TA and/or FA for a composting facility • Pounds of food rescued from our own facilities • Outreach materials distributed to the public • Numbers of employees receiving training. 		• Quarterly or Annually	

SF	Pounds culled and composted off-site from VCP activities at Southeast State Correctional Facility.		Anytime we clean, grade, and pack product. Mostly in early fall or early spring, though more volume in the fall currently	
VSJF		ANR Diversion and Disposal reports, Waste Composition Study, Vermont Foodbank, Salvation Farms for tracking on the VT Food Atlas: • Pounds of food rescued/gleaned • Number of composting facilities • Number of digesters • Pounds of organics diverted • Pounds of food scraps backyard composted • Pounds of organics being landfilled.	Annually For the Waste Composition Study every 5 years	
VAPDA		Solid Waste Districts		
VCS				
VFB	• Pounds of food rescued.	• Partner agencies keep their own data	• Tracks data daily and reports annually.	
VGA				
VTC	 Pounds of food diverted to different uses from rescue to composting to AD Number of training programs related to Act 148 offered at the campus Number of participants in trainings Total amount of recycling diverted in tons per year Tons of compost produced. 		Data collection will be newly developed for material stream, program, and educational effort	
WH	Recorded on our daily manifest sheets and compiled into weekly statistics: • Pounds of food rescued & pounds of food delivered per each food donor & food recipient organization • As well as p/u's from the WH Farm Garden and gleaning program.		Daily Weekly statistical reports	
		Solid Waste Districts		
ACSWMD	 Hauler & facility collection reports Transfer station data Compost bin sales Business/institution reports School and college reports Business waste audits Lg. gen. food waste collected. 		Per capita diversion v. disposal every 2 years Quarterly reports on transfer station collections	We lack data from agricultural diversion such as rescued food, animal feeding, gleaning, small on-farm composting - there is no formal reporting system for that data. We estimate backyard composting based on compost bin sales, but this method is incomplete. We are missing some businesses that use out-of-state contractors, and out-of-state corporate offices do not usually cooperate. We lack complete data on amount of wood waste burned, either by the generator or in commercial boilers.

BCRC			
CSWD	 Tons of food scraps, yard trimmings, and other feedstocks processed at commercial composting facility Pounds per capita landfilled over time Number of discount compost bins sold Drop-off compost participation Number of drop-off compost and kitchen collector pails distributed Reported participation in backyard composting for food scraps and for yard trimmings via biannual survey Reported access to composting at work via biannual survey We are building a database of businesses, schools, non-profits, and institutions and recording whether they have a compost program in place and what communications/ trainings we provided We could estimate number of brochures distributed to different generator groups, but not sure how helpful that is for tracking progress 	Some monthly, some ongoing. Survey information biannually Do calculations by the calendar year and fiscal year (July 1)	
CVSWMD			
NEKWMD	• Food waste diverted in tons and yard waste diverted in tons	• Weekly	
RCSWD	 Previously had food collection program and tracked material generated and frequency of collection. Currently have one supermarket participating in food waste collection, track pulls, tonnages, cost comparison with MSW disposal. 	• Monthly	
WSWMD	Collects own and reports to ANR: • All tonnage of materials in and out. • Track composting facilities, and haulers for food scraps		
SWWC SWMD	Some data collected this year by intern as part of USDA grant		• We do not have a good handle on data. One Reason is that the transfer stations that we work with belong to individual towns - they are not managed by the District.



APPENDIX B: LIST OF AVAILABLE ASSETS BY ORGANIZATION AND CATEGORY

	Personnel	Expertise	Constituents	Networks	Space & Facilities	Materials & Equipment	Additional Leverage Areas
VAAFM	• 5 hrs/mo	 3 staff in Agency of Ag (vet, energy, and water quality and farm regulations) Field staff over longer-term 	• Farmers • NRCS and similar technical service providers	Public Service Deparment Clean Energy Dev. Fund USDA Rural Development	 2 Conference Rooms (15 and 6 people) Conference Phone Projector Limited web space 	Possible compost testing for persistent herbicides	
VACD	• 5 hrs/mo	Understanding farm operation and organics manage- ment	Provide an overview of inputs and outputs of potential farms/ facilities gearing up for organics management	Provide an overview of inputs and outputs of potential farms/ facilities gearing up for organics management	• VACD and NRCD websites		
ANR	• 1.5 FTE (60 hrs per week) • 1 intern (20hr/ wk for 3 mo) • 1 temp (10 hrs/ wk)	Bryn Oakleaf - policy review; program development & execution; project management; social media skills; public speaking Josh Kelly - formerly worked for HCC on their Close the Loop! project; networking and partnership development; public speaking Danika Frisbie (temp) - database management; web development Intern (summer 2014) - food rescue & food security resource development	Schools & institutions Businesses Haulers Facilities Residents Solid waste management entities Organizations directly related and tangential to each level of the food recovery hierarchy Sister agencies in the State of Vermont Neighboring state agencies USEPA USDA	VT Dept. of Corrections VT Agency of Education VT Dept. of Health Food & Lodging VTrans VT Buildings & General Services Food Connect USDA - NRCS Multiple ANR divisions and programs VT Fair Association VBSR Vermont Campus Sustainability Network VT Facilities Exchange Experience	National Life has numerous conference rooms with video conferencing capabilities and access to NECI catering, parking can be made available with significant pre-planning ANR has a conference call line available VT printshop and VT Dept of Corrections has sign making and printing capabilities BGS has numerous negotiated state contracts which are available to chartered municipalities for use ANR has multiple Twitter accounts Additional meeting space available for use with advanced reservation in state owned spaces	Voice recorders and digital cameras available State vehicles available for state employees BGS surplus has reduced price office furniture, vehicles and IT equipment for sale ANR has multiple event calendars, blogs, and e-newsletters	Pass through grants differ from year to year and from focus of what projects funds will be directed towards. Support from SOV administration and ANR management can assist with partnership development that is well planned out and has clearly defined areas of mutual benefit, as well as identified areas of funding (if needed).

Center for Sustain- able Ag	• 10 hrs/mo	Would depend on funding	• fruit and vegeta- ble and diversified farmers	Vermont Veg and Berry Growers Association NOFA-VT VT Resiliency Research Consortium (Ernesto Mendez project on conservation practices and climate change in agriculture) Farm to Plate Working groups: Soil & Water, Technical Assistance, Farm to Institution	• UVM Extension has meeting rooms available through- out the state - for list go to: http://www. uvm.edu/exten- sion/?Page=offices. html	listserves for farmers and food organizations	
CAV	pd staff - 15 - 20 hrs/wkvolunteers 200 hrs/yr	 group facilitation grant writing project management trainings policy advocacy 	FASWGSoil and WaterTask ForcePlanning TFSWDMA's		CAV website		
EXT	 15 hours/week paid staff time 10 hours/week volunteer time 	Composting training and expertise	Over 100 Extension Master Gardener projects across the state, many of which have a composting component. These are collaborations with schools, prisons, senior facilities, parks, municipalities, etc.	Over 100 Extension Master Gardener projects across the state, many of which have a composting component. These are collaborations with schools, prisons, senior facilities, parks, municipalities, etc.	Extension Master Gardener website Master Gardener blog statewide list- serve		
VHCB	Hard to estimate perhaps up to Hours/month available if needed	funding for TA/ business planning	farmers food insecure	• Too many organizations to list. Network of housing non-profits, food system groups, conservation non-profits etc.			• Americorps positions

HCWH	PGH time for those with PGH membership: ongoing virtual TA and on the ground TA as needed HHI staff time for those engaged in HHI Less Waste Challenge: ongoing virtual TA HCWH Healthy Food in Health Care Coordinators virtual TA, education provision, on the ground TA (1-2 hrs / week?)	PGH & HHI and HCWH Food Coor- dinators expertise in best practice strategies, also peer learning platforms for facilities to learn from other best practices in facilities nationally.	Health Care organizations with particular emphasis on hospitals and affiliated facilities. Farmers benefit when we are able to connect a need for food waste with institution	Practice Greenhealth Healthier Hospitals Initiative EPA WasteWise program Center for Eco-Technology	Conference calling skype meeting rooms available at participaing hospitals as available. http://www.hcwh.org/all_regions/issues/waste/www.practicegreenhealth.org www.healthierhospitals.org I am not up on all our social media outlets but I know e have Twitter, Facebook, Blog on all 3 platforms)	PGH members have access to a plethora of resources; webinar, facility sharing calls, toolkits HHI signers also have access to webinars, sharing calls, toolkits, as well as an online discussion forum. HCWH using the Green Guide for Health Care (see link above)	A revision of the GGHC is currently under develop- ment due out in 2014
Highfields	 8 Staff - 40 hrs/wk 3 Americorp - 40 hrs/wk Board Members - 2 hrs/mo Advisory Board - 8 hrs/yr 	 Community Outreach Source Separation Hauling Route Development Technical Assistance Business Planning CompostCertification Research Heat Recovery Compost Sales 	 Farmers Schools Tours Grocery Stores Hospitals Small Businesses Waste Districts VT State Parks Corporations 	BiocycleSolarfest EventVermont LawSchoolVermiVision	Compost Site Vermicompost Facility Heat Recovery system	Toolkit Materials Informational Materials Loader & Tractor Screener Organic Waste Trailer Website Blog & social media	
Hunger Mt Coop	• a portion of our Facilities Manager and Marketing staff time		• 7200 Mem- ber-Owners and many other customers	• connected to other food co-ops in VT	• email/web site/ facebook/twitter		
NOFA-VT	• paid staff time, 2014 (24 hours)	 policy advocacy farmers market advising farm to school (FEED) programming farm technical advising 	 farmers gardeners consumers children schools farmers markets gardeners consumers 	FEED (Food Education Every Day) VT Farmers Market Assn			
NRCS	• 20 hrs/mo • 40 hrs/mo	• TA and FA	• Farmers	• Natural Resource Conservation Districts and VACD	 Location of Demo site Meeting Room	• Publications	

Salvation Farms		Build on existing SF expertise, infra- structure model for adaptation in other parts of the state Resource man- agement	Work w/ regional organizations to improve gleaning regionally farmers, same local organization partners, plus institutional food users (schools, hospitals, NP org focused on food independence, food literacy, food acess, higher ed, state agencies,	Prisons, expansion of model working with more gleaning initiatives statewide		• facebook page, blog	
VSJF	• 6-8 hrs/mo	Business PlanningFinancingResearchStrategic PlanningNetwork Development	FarmersProcessorsInstitutionsRetailersEducatorsTA providers		Vermont Food System AtlasVSJF conference room	Camera Design software	Strategic Plan- ning
VAPDA	• Potential staff time	Staff and Boards	• Towns	• Individual RPCs	each RPC has a meeting space each has a newslet- ter targeting town officials, email lists, etc.	databases of municipal officials and committees	
VT Sus- tainability Network							• Individual VCSN institutions all have considerable resources to draw on in terms of space of all of these assets.
VT Food- bank	Operations Staff	 Operations Staff (warehouse, truck drivers, donor relations) Development Staff (marketing, policy, social media, fundraising) Program Staff (outreach to part- nering agencies) 	• Food Shelves, Meals Sites, Senior Centers. Food insecure Vermonters Farmers, Grocery Stores, Retailers, Manufactures	270 Partner agencies including food shelves, meals sites, senior centers.	 3 Distribution depots in Barre, Brattleboro and Wolcott. Soon to include Rutland. 2 commercial kitchen/culinary job training programs. Website, social media and blog. 	Fleet of trucks	
VGA	Possibly some member time	larger members that may have individuals within their organization with expertise					

VTC		 solid waste management expertise CSP Director AD expertise of faculty members Soils expertise of faculty in Ag and Horticulture Depts. 	Commercial generators Farmers having AD facilities		multiple meeting rooms and class- room facilities		VT Tech envisions a system of micro-compost sites, each of a specialty purpose (windrow, animal mortality, etc.) that will be built into our infrastructure over the next
Willing Hands	• FTE 2 staff + 75 volunteers	• too much detail to report here!	• 60+ human service organi- zations including foodshelves, shel- ters, community meals, low income housing, rehab programs, etc	the list is to long to compile here 60 food recip orgs plus 25+ food donors	• "cool" room for temp storage refrigerated & insulated truck skype, website, facebook, news- letters	See above plus camera.	• please know that WH has a solid well-funded model that we are keen to spread throughout the state
			Solid Waste N	/Janagement Entiti	es		
ACSWMD	• Staff: 1560 hrs/yr • BOS: 100 hrs/yr	 Data collection & analysis. Public outreach, social media. Policy development. Planning and implementation. Compost technical advice. 	District staff assists any group in community. District transfer station accepts the majority of leaf & yard waste & brush for composting at VNAP.	Northeast Resource Recovery Assoc. (NRRA), Local town officials Local farmer's markets Middlebury College Hannaford Career Center	Addison County Regional Planning Commission Addison County Economic Development Corp. ACSWMD office	Publications, display areas for public informa- tion at District and town offices, ACRPC.	District funding/ research into col- lection systems
BCRC	• We're sorry, but until we've done more planning we can't reasonably fill out this form.						
CSWD	Four Waste Reduction Department staff members = 72 hours/week Two Marketing Department staff members = 15 hours/week Two Green Mountain Compost staff members = 6 hours/week	Technical assistance Marketing & Communications Composting Technical Assistance	All commercial, institutional, and residential generators in Chittenden County Farmers, Gardeners, Landscapers, and Homeowners as compost and soil product customers.	Municipal officials Local emergency food shelves Local farmers markets Intervale Center Lake Champlain Regional Chamber of Commerce Vermont Businesses for Social Responsibility Grocery stores Large food manufacturers Free local food publications	commercial composting facility organics drop-off locations for CSWD members website; blog; Facebook; Twitter meeting room for 12 Edu-Shed at Green Mountain Compost	kitchen compost collectors, discount backyard compost bins, compost container grants for towns and businesses; signage and brochures loaner containers for special events for members "Analysis of Curbside Collection of Residential Organics in Chittenden County" (to be completed within a couple months)	

NEKWMD	 4hrs/week - Director 4hrs/week - Outreach 4hrs/week - Operations 	Technical AssistanceBusiness PlanningInstitutionalsource separation	 Drop-off facilities for food scrap collection (7) School Food Scrap Collection Programs (20) Farmers Homeowners 	Green Mountain Farm-to-School	 Website and Facebook Drop-off points for carbon materials (6) Skidsteer-mounted wood chipper 	• Skidsteer Mount- ed Woodchipper 24-foot box trucks (3	Weekly Radio Call-in Show
RCSWD	paid staffintern (paid)volunteers	 high level of interest memberships 	public entity responsible for solid waste man- agement	 Natural Resource Conservation District high school sustainable groups local sustainable groups town officials, 	 meeting room with conference calling copying website drop-off locations 	cameras info/connections with community possible toter/ lease rental arrangements subsidized back yard compost bin sales bulking agents (leaves,wood-chips) rolling stock (loaders)	wholesale backyard compost bin sales
WSWMD	• 8 hrs./week paid staff time	 Executive Director with 25 years of composting experience, and certified operator. Two other employees are certified by Vermont as compost operators. Two Board members operate municipal transfer stations for the member town. 	Residents who utilize curbside collection of organics, and drop-off locations for organics. Schools, other institutions, buisnesses, and industries who separate organics and have it collected for composting.	Trash haulers Neighboring communities and solid waste districts in NH and MA Landscapers and tree removal companies VTRAN	Conference room for 40 Conference call speaker phone Small kitchen Lots of parking Full office with copier, computers, files, phones, etc.	 digital camera 1/2 ton pickup truck two roll-off trucks Lull telescoping loader backhoe MRF with operating equipment 	• 15,000 sf green- house landfill gas system and two gensets 30-acre closed landfill for solar power project, grow hay
SWWC SWMD	• one staff member - 5 hours/week	Marketing out- reach		Southern Windsor County RPC	We have access to two conference rooms - one holds about 12 people and the other holds about 6 people. SKYPE microwave over and coffee pot in the office "kitchen." Copier www.vtsolid-wastedistrict.org • annual newspaper insert of 12 pages that would lend itself to advertising the goals of Act 148.	The District has the use of an office camera.	