

## TECHNICAL MEMORANDUM

TO:	Gus Olmos, Interim Director of Solid Waste and Resource Recovery Patrick Irby, Waste Collection Manager
FROM:	Chas Jordan, Project Manager
DATE:	April 9, 2020
SUBJ:	Alachua County Zero Waste Plan – Baseline Assessment
PROJ #:	28-08.00

Kessler Consulting, Inc. (KCI) is pleased to submit this technical memorandum to Alachua County's Solid Waste and Resource Recovery Department summarizing our Baseline Assessment of the Alachua County and City of Gainesville's solid waste systems in preparation for developing an official Zero Waste Plan.

### I. Background and Purpose

In 2018, Alachua County (County) and the City of Gainesville (City) initiated an agreement with KCI for professional services to develop a community wide Zero Waste Plan. This plan would provide direction and goal setting for both entities to reduce the amount of waste being disposed. While the concept of absolute Zero Waste is not technically possible, the goals set forth by a Zero Waste Plan can assist in developing the means, methods, and infrastructure necessary to continuously reduce the amount of generated waste.

The County contracted with KCI to manage the research, development, and issuance of a Zero Waste Plan for approval by the County as a long-term benchmarked process to reduce waste going to the landfill. This project included four tasks, the first of which was to review all applicable data to compile a Baseline Assessment of the existing County and City solid waste systems for understanding of how to proceed, what policies are needed, and how to improve the system going forward through the year 2040.

Zero Waste planning requires a consortium of local leaders, businesses, and residents to become viable and achievable. In the Alachua County and Gainesville area, local leaders, businesses, and residents are currently driving the concept of Zero Waste. Their continued support will ensure positive outcomes for the County and City.

#### What is Zero Waste?

The term Zero Waste is defined by the Zero Waste International Alliance (ZWIA) as: "The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products,

packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."<sup>1</sup>

Zero Waste is, in essence, the reprogramming of societal understanding and repositioning of disposal and reuse opportunities. Through this process, less raw materials are consumed for production, more manufactured materials remain in use, and commodities are recycled to continue to maximize the value of material. These are all part of the Zero Waste concept known as a *Circular Economy*, as depicted in Figure 1. This concept allows resources a continuous life cycle through multiple uses and purposes, rather than limiting their life space to simple production that results in waste. The four main stages include:

#### Figure 1: Circular Economy by the US Public Interest Research Group



1. Production – The conversion of raw or recycled materials into usable products.

2. Reduction – Limiting the need for as much raw or recycled material to be used in the waste or economy stream.

3. *Reuse & Repair* – Fostering the repair of commodities or the reuse of materials instead of discarding them.

4. Recycling and Composting – The process by which products are broken back down into the initial raw or recycled materials and re-produced for another use.

#### Figure 2: Backcasting in the Planning Process

Envisioning a Zero Waste future requires a deep understanding of current conditions. This Baseline Assessment is the first step for KCI in quantifying and qualifying the existing resources, infrastructure, and systems in place around Alachua County and the City of Gainesville. Correlating categories for a *Circular Economy* with a common planning tool titled *backcasting* will allow County and City staff, with KCI's support, to envision the ultimate goal of producing little to no waste by the year 2040 and determine the creative solutions and priorities that led to this visualized success as depicted in Figure 2.



Backcasting in the Planning Process -The Natural Step by Energy Futures Lab

<sup>&</sup>lt;sup>1</sup>Zero Waste International Alliance Website: <u>http://zwia.org/zero-waste-definition/</u>

KCI researched a myriad of existing programs from all sectors of the community in formulating the data for this Baseline Assessment. All data was categorized for efficiency into a common Zero Waste methodology that groups known community solutions into three parts as depicted in Figure 3. These crucial categories will also assist in the development and implementation of the final Zero Waste Plan. It is important to note, the Solid Waste Association of North America (SWANA) and the California Resource Recovery Association (CRRA) utilize the planning processes noted Figure 3 in their Zero Waste training to illustrate the stages of Zero Waste.



**Figure 3: Three Categories of Zero Waste Solutions from SWANA and the CRRA** *Three Categories of Zero Waste Solutions (SWANA, CRRA ZW Training Program) Developed by Kessler Consulting, Inc. - 2018* 

Examples of each phase include, but are not limited to the following:

- 1. Upstream Initiatives Producer responsibility covenants, Zero Waste purchasing policies, use of recycled materials and content, packaging changes, and local economic growth incentives.
- Midstream Initiatives Promotion of repairs for household electronics and other commodities, donation bins and systems to reuse clothing and household items, food recovery programs for restaurants and grocery stores to support local feeding programs.
- Downstream Initiatives Resource recovery facilities for recycling and composting, facilities for the break down and recycling of difficult recyclable materials, hazardous and electronic waste recycling facilities, and more.

Additionally, data collected for this Baseline Assessment will be categorized based upon the industry sector, community support/preparedness, and policy status. It will provide the building blocks for which key County and City stakeholders and KCI will build strategies to be included in the Zero Waste Strategic Plan.



GBCI True Zero Waste Program

#### Baseline Assessment Tools

KCI utilized the Environmental Protection Agency (EPA)'s Managing and Transforming Waste Streams Spreadsheet Tool<sup>2</sup> to categorize and determine current baseline status of zero waste options and potential community programs in the area. This tool was developed as a guide to evaluate all sectors of a community and can be continually utilized on a community's journey towards reducing waste and establishing a circular economy.

#### • EPA Zero Waste Evaluation Tool

The EPA's Waste Streams Spreadsheet Tool was revised by KCI to focus on initiatives necessary for the County and City to maximize their waste reduction and achieve their Zero Waste goals. This tool offers a checklist for evaluating current waste streams within a region, as well as known waste reduction strategies. The spreadsheet utilizes a user-friendly format as defined below. The completed spreadsheet may be found in Appendix A.

	Items with this shown as the status are those that are currently in progress or have been implemented as of this assessment.	
×	Items with this shown as the status are those that are not currently in place and have not begun to be implemented as of this assessment.	

## II. Current Conditions

Assessment of the current conditions in Alachua County is critical for an accurate understanding of what strategies are required in planning for a Zero Waste future. The EPA tool was integrated with KCI's research tools to formulate the data below. The final Zero Waste Plan will present these findings with a more concise, compilation method noting target objectives and strategies.

#### Current Resource Recovery Collection Policies and Programs

Based on local solid waste ordinances for Alachua County and the City of Gainesville, the following methods and educational opportunities for solid waste management and recycling are in place.

<sup>&</sup>lt;sup>2</sup>EPA Website: <u>https://www.epa.gov/transforming-waste-tool/managing-and-transforming-waste-streams-tool</u>

#### Residential Collection Service: Alachua County

Waste collection for residents within the County varies based upon location. The County provides curbside dual stream recycling and waste collection to designated unincorporated residential areas. Garbage cart sizing is currently a Pay-As-You-Throw rate structure with annual costs ranging from \$119.30/yr. (Mini-Can), \$137.59/yr. (35gal), \$191.75/yr. (64gal) to \$283.50 (96gal). Certain areas utilize an orange and blue bin to separate recyclables. Educational programs and materials are provided through the County's Solid Waste and Resource Recovery Department. Recycling collection service at apartment complexes is mandatory and is arranged by the manager or owner of the complex.

Municipalities offering single stream curbside collection include the Cities of Alachua, Archer, Hawthorne, La Crosse, Micanopy, and Newberry. Residents of subscription-only areas may subscribe to curbside pickup through private services with Waste Corporation of America (WCA) or utilize the Rural Collection Centers (RCCs) or the Leveda Brown Environmental Park and Transfer Station.

The RCCs positioned throughout the County offer recycling (plastic, metals, glass, mixed paper, cardboard), household hazardous waste disposal, yard waste composting, bulk material disposal, and garbage waste disposal. The Environmental Park accepts recycling (plastic, metals, glass, mixed paper, cardboard), scrap metal, tires, yard waste, and household hazardous wastes, garbage disposal, and provides further educational outreach to the community. Residential composting education and supplies are currently offered through the Alachua County Solid Waste Department.

There is currently no mandate on the recycling of green (yard) waste nor construction and demolition (C&D) materials. Curbside collection of green (yard) waste is currently offered within the County and is accepted at the RCCs. Currently, the RCCs nor Environmental Park are able to accept C&D material (although small amounts of interior C&D debris may be accepted). Private outlets exist for the recovery of both green (yard) waste and C&D materials.

#### Residential Collection Service: The City of Gainesville

Waste collection within the City limits is a part of the provided utilities. Curbside collection includes garbage, dual-stream recycling, bulk items, and yard waste. All waste stream categories are picked up on a weekly basis. Recycling for the City is separated into two streams: 1) Plastics, aluminum and steel cans, glass bottles and jars, milk/juice cartons and boxes, and 2) Mixed papers, corrugated cardboard and paperboard. Clearly defined educational materials that include pictures and descriptions are provided for residents via the City's website.

Garbage cart sizing is currently a rate base structure open to resident need/choice and vary from 20 gallons (\$18.50/month) to 96 gallons (\$37.00/month). Yard waste pickup is encouraged in reusable cans or brown paper bags. Plastic bag use for yard waste pickup requires special pickup request and fees for removal. Large appliance or electronic pickup may be scheduled. Recycling is required for all multi-family units over five and must be coordinated by the building manager through private services.

#### Commercial Collection Service: Alachua County

In 2011, Alachua County updated their existing ordinance mandating commercial recycling. Under this ordinance, businesses in the County are required to recycle the following materials: steel cans, aluminum cans, glass containers, plastic containers, magazines, newspapers, office paper, and corrugated cardboard. A plastic stirrer and straw ban became active on March 10, 2020. Private hauler databases,

educational materials and staff support are available to assist businesses in implementing the mandate which includes wood and yard waste, as well as building and C&D materials. However, there is currently no mandate requiring the diversion of yard waste or C&D materials from the landfill.

#### Commercial Collection Service: The City of Gainesville

Waste collection and recycling within the City limits is mandated per ordinance utilizing collection companies. Support for developing workplace recycling programs is provided to businesses. All commercial generators must separate the following designated recycling materials and hire contract recycling services for any item comprising over 15% of their waste stream: corrugated cardboard and pasteboard, newspaper, magazines, catalogs, manuals, paperback books, office paper, junk mail, metal cans, glass bottles and jars, plastic bottles, jugs, jars and tubs, milk and juice cartons. Several private collection companies service the area and can easily be found on the City website. Additionally, staff are available to provide information and technical support to any business on this recycling mandate. Effective January 1, 2020, the City implemented a ban on plastic straws and stirrers.

#### Community Policies, Programs, and Policy Drivers

#### University Collection Services: University of Florida (UF)

In striving to be a Zero Waste Campus, UF offers numerous waste management alternatives to students, staff, and operational programs of the University. These include a wide array of recycling options and food waste composting.

#### Further Circular Economy Opportunities and Policy Drivers

In addition to the collections described above, the following pertinent resources for waste reduction exist within Alachua County.

- Food Waste Diversion As noted on previous page, the UF food waste and composting program, as well as the County's composting education program are generating awareness about alternatives to food waste from the larger stream. Additionally, several residential and small business private food waste pickup/composting services exist. This includes Beaten Path Compost.
- Construction & Demolition (C&D) Diversion In addition to multiple private C&D hauling and recycling companies, several reuse stores and facilities exist in Alachua County. Additionally, the City's Green Building Ordinance incentivizes the reuse and recycling of construction materials.
- Hazardous Waste Diversion The Alachua County Hazardous Waste Collection Center properly disposes and recycles a number of household hazardous wastes. These include household chemicals, auto fluids and batteries, paints and solvents, pesticides and corrosive chemicals, electronic scrap, and fluorescent and other mercury containing bulbs.
- 2008 Florida Energy Act This State statute developed a goal of 75% waste diversion by 2020.

#### Resource Recovery and Recycling Facilities

#### **Recycling Centers**

While curbside recycling collection is offered in multiple areas throughout the County, rural areas in the unincorporated County are serviced by a number of RCCs. Additionally, the County offers the Leveda Brown Environmental Park and Transfer Station. These collection facilities are listed in Table 1 and accept the following recycled materials: mixed paper, glass, plastic, metal, white goods and other large metals, household hazardous waste, oil filters, fluorescent lamps, rechargeable batteries, vehicle/boat batteries, computer equipment, electronics, up to five gallons of waste oil, and old paint. As shown in Table 1, multiple locations accept gently used items such as toys, pots, pans, furniture, etc.

#### **Table 1: Alachua County Collection Facilities**

Name	Address	Reuse Available
Archer Rural Collection Center	19401 SW Archer Road Archer, FL 32618	Yes
Alachua/High Springs Rural Collection Center	16929 SW Highway 441 High Springs, FL 32643	Yes
Fairbanks Rural Collection Center	9920 NE Waldo Road Gainesville, FL 32609	Yes
North Central Rural Collection Center	10714 N SR 121 Gainesville, FL 32653	Yes
Phifer Rural Collection Center	11700 SE Hawthorne Road Gainesville, FL 32640	Yes
Leveda Brown Environmental Park and Transfer Station	5115 NE 63 <sup>rd</sup> Avenue Gainesville, FL 32609	No

The recycling of debris from construction and demolition (C&D) activities remains vital for areas of significant growth in the County. Currently there are several private facilities accepting these materials as depicted in Table 2.

#### Table 2: Alachua County C&D Recycling and Reuse

Name	Address	Private / Public	Options
Arwood Waste Management Solutions	3003 SE 15 <sup>th</sup> St Gainesville, FL 32641	Private	Curbside collection, small junk removal, junk removal, C&D recycle and disposal
Florence Recycling & Disposal	3222 SE Hawthorne Road Gainesville, FL 32641	Private	Recycling Landfill Transfer Station
Florida Concrete Recycling, Inc.	930 SW 3 <sup>rd</sup> St Gainesville, FL 32601	Private	Glass Recycling Concrete Recycling Asphalt Recycling
Habitat for Humanity ReStore	2317 SW 13 <sup>th</sup> St Gainesville, FL 32608	Private	Material Reuse Appliance Reuse
The Repurpose Project – Reuse Store	1920 NE 23 <sup>rd</sup> Ave Gainesville, FL 32609	Private	Material Reuse Scrap Wood
Watson Greener Landscaping	12890 Northeast State Route 24 Archer, FL 32618	Private	C&D Material Recycling

Note: List is subject to change and may not be all inclusive.

#### Organic Waste Collection

Multiple waste diversion opportunities exist for residents of Alachua County to compost yard debris and food waste. These are comprised of both public and private methods as outlined in Table 3.

Name	Address	Private / Public	Food Waste
Alachua County RCCs	Multiple - See Table 1	Public	No Yard Only
Beaten Path Compost	Multiple Drop Off Locations	Private	Yes
Gaston's Tree Debris Removal	9333 NW 13 <sup>th</sup> St Gainesville, FL 32653	Private	No Yard Only
UF Student Compost Cooperative	Energy Research and Ed Park Gainesville, FL 32608	Private	Yes
Watson C & D	12890 NE SR 24 Archer, FL 32618	Private	No Yard Only

Note: List is subject to change and may not be all inclusive.

#### Additional Community Resources to Support a Circular Economy

When assessing the multiple avenues for creating a circular economy, there are other facilities and businesses that can assist by accepting gently used materials or provide additional community-wide recycling services which are listed in Table 4. Please note, these opportunities link to many midstream and downstream initiatives and are considered an important variable for a Zero Waste community, as defined under the *EPA's Managing and Transforming Waste Streams Spreadsheet Tool*.

Name	Address	Items Accepted
A Rai of Sunshine Thrift Store	125 NW 23 <sup>rd</sup> Ave #5 Gainesville, FL 32609	Clothing Household Goods
Advanced Recycling LLC	13403 Co Rd 1471 Waldo, FL 32694	E- Waste Recycling
Alachua Habitat for Humanity ReStore	2317 SW 13 <sup>th</sup> St Gainesville, FL 32608	Clothing, Household Good, Furniture, Appliances
Best Buy	3520 SW 34 <sup>th</sup> St Gainesville, FL 32608	Electronics, batteries, wires, cords, cables, plastic bags
Bj's Thrift Shop	1847 S Main St Gainesville, FL 32601	Clothing, Household Goods, Electronics
Cartridge World	3501 SW 2 <sup>nd</sup> Ave, Suite N Gainesville, FL 32607	Used Printer Ink Cartridges and Toners
CMC Recycling of Gainesville	1508 NW 55 <sup>th</sup> Pl Gainesville, FL 32653	Aluminum cans and scrap, auto parts, bikes, brass, cookware, copper, ferrous metals, garden tools, hardware, lawnmowers, metal clothes hangers, metal tags, musical instruments – metal, nonferrous metals, pipes, radiators, scrap metal, stainless steel, tools, zinc

Name	Address	Items Accepted
Entenmanns Gainesville Thrift	1124 SE 4 St Gainesville, FL 32601	Clothing, Household Goods
eco ATM	4010 W Newberry Rd Gainesville, FL 32607	Smartphones, Tablets, Cell Phones
Flashbacks Recycled Fashions	220 NW 8 <sup>th</sup> Ave Gainesville, FL 32601	Clothing
Gainesville Junk Removal	4010 W Newberry Rd Gainesville, FL 32607	Furniture, Appliances, Misc. Scrap Metal
Gator Appliance Recycling	3402 NE 2 <sup>nd</sup> St C Gainesville, FL 32609	Appliances
Goodwill – Gainesville North	1223 NW 23 <sup>rd</sup> Ave Gainesville, FL 32609	Clothing Household Goods
Goodwill – Gainesville South	3520 SW 34 <sup>th</sup> St Gainesville, FL 32608	Clothing Household Goods
Haven – Attic Resale	300 NW 8 <sup>th</sup> Ave Gainesville, FL 32601	Clothing Household Goods
Home Depot	5150 NW 13 <sup>th</sup> St Gainesville, FL 32609 7107 NW 4 <sup>th</sup> Blvd Gainesville, FL 32607	Light bulbs Rechargeable Batteries
Humane Society of North Central Florida Thrift Store	4205 NW 6 <sup>th</sup> St Gainesville FL 32609	Clothing, Household Goods
JCPenny	6841 W Newberry Rd Gainesville, FL 32605	Plastic Bags #2 and #4
Kohls	3501 Southwest Archer Rd Gainesville, FL 32608	Plastic Bags #2 and #4
Lowes	15910 NW 144 Terrace Alachua, FL 32615 2564 Northwest 13 <sup>th</sup> St Gainesville, FL 32609 3500 SW Archer Rd Gainesville, FL 32608	Plastic bags #2 and #4, cell phones, CFLs, lead-acid batteries, lithium-ion batteries, nickel-cadmium batteries, nickel-metal hydride batteries, nickel- zinc batteries, plastic plant materials (no single use batteries).
Melody's Memories	5000 NW 34 <sup>th</sup> Blvd Suite 1 & 2 Gainesville, FL 32605	Clothing
Office Depot	1015 NW 13 <sup>th</sup> St Gainesville, FL 32601 6861 W Newberry Rd Gainesville, FL 32605	Ink and Toner Cartridges
Office Max	3642 SW Archer Rd Gainesville, FL 32608	Ink and Toner Cartridges
Outreach Thrift	2430 NW 6 <sup>th</sup> Street Gainesville, FL 32609	Clothing Household Goods
Plato's Closet	3441 W University Ave B Gainesville, FL 32607	Clothing
Publix Super Markets	All Locations	Plastic bags #2 and #4, Plastic egg cartons, paper bags, Plastic film #2 and #4
Recycling Services of America	2874 NE 1 <sup>st</sup> Terrace Gainesville, FL 32609	Office Paper, Cardboard, Bottles, Cans

Name	Address	Items Accepted
Salvation Army	55 NW 23 <sup>rd</sup> Ave Gainesville, FL 32609	Clothing Household Goods
Sam's Club	2801 NW 13 <sup>th</sup> St Gainesville FL 32609	Plastic bags #2 and #4, car batteries, marine batteries
Sandy's Savvy Chic Resale Boutique	4148 NW 13 <sup>th</sup> St Gainesville, FL 32609	Clothing
Sound Ideas	3215 NW 13 <sup>th</sup> St Gainesville, FL 32609	Small electronics
Sprint Store	3600 SW Archer Rd Gainesville, FL 32608	Cell phones
St. Patrick's Thrift Shop	2010 NW 6 <sup>th</sup> St Gainesville, FL 32609	Clothing, Household Goods, Furniture
St. Vincent De Paul Thrift Shop	710 N Main St Gainesville, FL 32601	Clothing, Household Goods, Furniture
Target	3970 SW Archer Rd Gainesville, FL 32608	Plastic bags #2 and #4, cell phones, inject cartridges, MP3 players
T-Cellular	6419 W Newberry Rd Gainesville, FL 32605	Cell phones
The ARC of Alachua County	3781 NW 6 <sup>th</sup> St Gainesville, FL 32609	Clothing, Household Goods
The Heart of Gainesville Thrift Store	125 NW 23 <sup>rd</sup> Ave #5 Gainesville, FL 32609	Clothing, Household Goods, Furniture
The Repurpose Project	1920 NE 23 <sup>rd</sup> Ave Gainesville, FL 32609	Clothing, Household Goods, Furniture, Appliances
Trademark Metals Recycling	817 NE Waldo Rd Gainesville, FL 32641	<ul> <li>Air conditioners, aluminum cans, aluminum foil and scrap, auto bodies, auto parts, bbq grills, bikes, brass, cookware, copper, dehumidifiers, dishwashers, ferrous metals, freezers, garden tools, hardware, heaters, humidifiers,</li> <li>lawnmowers, metal clothes hangers, metal paint cans, metal tags, metal music instruments, nonferrous metals, pipes, radiators, refrigerators, scrap metal, stainless steel, steel cans, steel lids, stoves, tools, vehicles, washer/dryers, zinc</li> </ul>
Uniquities Consignment Shop	526 N Main St Gainesville, FL 32601	Furniture, Home Goods, Clothing
Walmart	All Locations	Plastic bags #2 and #4, car batteries, marine batteries
Watson Greener Landscaping	12890 Northeast State Route 24 Archer, FL 32618	Aluminum scrap, asphalt, brass, brick, carpet, carpet padding, ceiling tiles, ceramic
Whole Foods	3490 SW Archer Rd Gainesville, FL 32608	Batteries, corks, plastic bags, brita filters, yogurt cups and #5 plastics
WeeCycle of Gainesville	1405 NW 23 <sup>rd</sup> Ave Gainesville, FL 32605	Clothing, Furniture, Household Goods

Note: List is subject to change and may not be all inclusive.

#### **Community Support and Outreach**

Recently, Mr. Adrian Hayes-Santos, City Commissioner of Gainesville, presented a proposal with recommendations for the City to be classified as a "Zero Waste City." This proposed statement sets a goal of Gainesville being a Zero Waste City by 2040. This led to Alachua County beginning this strategic planning process.

In addition to policy initiatives designed to reduce waste, both the County and City governments have multiple recycling and solid waste public outreach opportunities. These include dedicated staffing and the public education/outreach tools available through their websites, targeted business solid waste guides, and the proposed Eco-Industrial Park (a 37-acre resource recovery space and innovation hub for waste-related material research and business incubation). This facility is planned to be an innovative long-term collaboration between UF and the County and will offer extensive opportunities for growing a circular economy for the area.

UF's commitment to be a Zero Waste Campus provides additional support, educational opportunities, and general motivation that will bolster successful waste reduction outcomes. Additionally, growing momentum from Zero Waste Gainesville has been monumental in pushing forward the concepts of Zero Waste. This community action group provides advocacy, as well as educational programs to residents and local leaders. Continued support of community initiatives like these, as well as local governmental programs is required for success over time.

### III. Waste Generation and Characterization

Development of a Zero Waste Plan requires not only knowing the resources available to a community for achieving goals of a circular economy, but also the actual solid waste output in tonnages (recycling versus landfilled garbage/combusted garbage), solid waste compositions, and composition trends over time. The Florida Department of Environmental Protection (DEP)'s *Annual Reporting of Materials Collected* indicates the overall solid waste disposal trend for the County has remained fairly steady from 2010 to 2018 with a fluctuation in 2014.<sup>3</sup> It is important to note that over the full period of time, the County still averaged a diversion of 51% of their waste and recycling trends continue to rise as seen in Figure 3.

<sup>&</sup>lt;sup>3</sup> Florida Department of Environmental Protection Annual Reporting of Materials Collected- Alachua County





Further insight into the increase in tonnage over the last five years links to the quantity of C&D being recycled and landfilled. According to DEP data in 2010 C&D accounted for 25% of total collected waste. This has grown with the latest data in 2018 revealing a jump to 52%. This is partially due to a change from DEP on what can be considered recyclable C&D, however it has continued to increase after this change in 2015. Figure 4 reveals the tonnage of C&D annually and the increasing trend. While there is always room for improvement, current policies, programs and community commitment are impacting the large percentage of C&D being recycled.



### Figure 4: Alachua County Tons of C&D (2010-2018)

Research conducted by KCI revealed further trends that will have an impact on the strategies set forth in the final Zero Waste Plan. DEP's data on recycling trends of Municipal Solid Waste (MSW) by sector revealed that the single family, multi-family, and commercial sectors all have a great deal of potential to recycle much more than is currently being diverted, as seen in Figure 5. *Note: Recycling trends in recent years for single-family and multi-family units remained the same*. As mentioned earlier in this Baseline Assessment, commercial recycling is mandatory and likely the reason behind a greater percentage of

waste being recycled. However, even with this ordinance in place, data trends reveal that in 2010 68% was being recycled, as compared with 62% in 2018.



Figure 5: Alachua County Trends for Recycling as a Percentage of MSW (2010-2018)

Another critical piece to examine in this process involves the actual composition of materials. Data from the DEP's *Annual Reporting of Materials Collected* offers insight into the diversion potential for the County. Figure 6 notes recycling rates per commodity. Examination of this data reveals potential strategies the County can incorporate into their Zero Waste Plan that address *downstream* recovery operations.



Figure 6: 2018 Alachua County Recycling Trends by Commodity (2010-2018)

Additional data from DEP annual reports reveal distribution trends of materials being diverted from landfill and combustible disposal. Figure 7 depicts these trends from 2010 to 2018.



Figure 7: Alachua County Distribution of Collected Materials (2010-2018)

# **IV.** Conclusion – Next Steps

Upon review and acceptance of this Baseline Assessment, the Alachua County team will begin to define the programming and principles necessary for developing a strategic Zero Waste Plan. Data collected and presented within this assessment will be integral in developing the recommendations and implementation strategies required for the County to reach its waste reduction and diversion goals.

It is important to note that waste composition data utilized in this assessment was retrieved from DEP annual reports. Obtaining an accurate depiction of the waste and recycling stream compositions from a community-wide Composition Study is recommended. These studies assist communities in understanding the types and weights of materials being disposed and diverted. Additionally, they offer contamination levels in recycling and compost streams, identifying potential disposal cost implications and diversion loss. Developing a plan upon accurate data will ensure the best zero waste recommendations and implementation strategies are utilized.

APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL					
2019/2020 - Kessler Consulting, Inc.					
Policy or Program	Policy or Program Description	Sector with Primary Responsibility	Material or Product Group	Status	County Baseline Status
	UPSTREAM	INITIATIVES			
	Adopt a goal and plan for reaching 90% or more diversion from landfilling and combustion by a specific			$\checkmark$	
Zero Waste Goal/Plan	year through reduce and reuse as well as recycling and composting. Consider renaming the Solid Waste Department to the Zero Waste Department.	Community	Various		In progress, KCI to assist Alachua County and Gainesville in drafting ZW Plan.
		community	Valious	_	
	Adopt an ordinance to limit, then ban organics from refuse collection and from entering local transfer stations, landfills and incinerators; support adoption regionally and statewide after expanding			X	Not implemented. No Organics processing facility available currently and no collection system to
Landfill Ban - Organics	composting and digestion programs as needed.	Community	Organics		implement.
	Adopt an ordinance to ban specific recyclable or toxic materials from entering local transfer stations,		Paper, Plastics, Metals, Glass,		Businesses are already required to participate in Recycling program per ordinance. This program can
Landfill Ban - Recyclables	landfills, and incinerators.	Community	Electronics, HHW, C&D, Various		be expanded.
					Alachua County and City of Gainesville both have a green procurement internal policy. An ordinance
Lead by Example - Green	Encourage green purchasing practices; pursue regional purchasing cooperatives to buy recycled				requiring these practices is recommended in both
Procurement (voluntary)	products; adopt the precautionary principle for purchases and services and support regionally.	Govt	Various		jurisdictions.
				×	
Lead by Example - Green					This needs to be standard contract language for both
Procurement (mandatory)	Require green purchasing practices in contractual agreements.	Govt	Various, Electronics		organizations.
	Incorporate Zero Waste objectives into contractual purchases and services, e.g., avoiding purchase of			X	Future goal for program. This could be incorporated
Lead by Example - Zero Waste Procurement	disposable goods, minimal waste in product and packaging design, product take-back services, and lifecycle analysis.	Govt	Various		into a new Procurement Policy for both Alachua County and the City of Gainesville.
Lead by Example - Road	Incorporate reusable and recycled materials into municipal road construction and maintenance				FDOT Standards already incorporate recycled content
Construction	projects; support adoption regionally.	Govt, C&D Projects	C&D, Industrial Materials		into road mix designs.
					This could be incorporated into a new Procurement
				×	Policy for both Alachua County and the City of
Product & Packaging Bans	Adopt ordinances that limit or ban sales of toxic or hard to recover products and product packaging.	Govt, ICI	HHW, Hard to Recycle, Plastics, Various		Gainesville.
				X	Related: Alachua County and the City of Gainesville has passed an ordinance banning plastic straws and
	Adopt an ordinance that places a fee on the sale of certain disposable items, such as disposable				stirrers. City went in to effect in January 2020.
Fees on Disposable Items	shopping bags, to incentivize customer reuse.	ICI	Plastics, Paper, Various	_	County went in to effect March 2020.
Described Content During	Francisco los luvino en estas en estas en estimated en secolo for estimate entre luvino estas luvino estas de s			X	
Recycled Content Buying Cooperative	Encourage local buying cooperatives or other coordinated approaches for private sector businesses and organizations to procure recycled content products.	ICI	Paper, Plastics, Glass, Metals, Various		
C&D Policy Incentives –	Provide incentives to developers, e.g., streamlined permit review, permit fee reductions, flexibility in			×	
Adaptive Reuse	parking requirements, to support "adaptive reuse" of older or historic buildings to new uses.	C&D projects	C&D		
Demolities Demolities Librari	Require publication in the local newspaper of all building demolition permit applications to solicit		60 D		
Demolition Permit Publication	salvage of reusable items by deconstruction firms.	C&D projects	C&D		
				$\checkmark$	
C&D Diversion Requirements	Adopt requirements for C&D recycling/reuse in a C&D or Green Building ordinance or building permit.	C&D projects	C&D		County has adopted State statutes on C&D Diversion Requiremensts.

	APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL 2019/2020 - Kessler Consulting, Inc.					
Delieu en Dromme	Sector with Primary					
Policy or Program	Policy or Program Description	Responsibility	Material or Product Group	Status	County Baseline Status	
Recycling Market Development	Launch/participate in a regional initiative to encourage businesses to use recycled materials in their manufacturing processes for new products; collaborate with local economic development staff to provide financial, siting, permit, feedstock, and marketing assistance and incentives to businesses.		Paper, Plastics, Metals, Glass, Organics, C&D Various	×		
Product and Packaging	Support evaluation and redesign of products and packaging to prevent waste; conduct or promote outreach campaigns to local businesses to reduce or eliminate non-reuseable packaging, transport containers, and serviceware from their processes and retail stores.	ІСІ	Various	×		

	APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL						
Policy or Program	2019/2020 - Kessler Consulting, Inc.         Sector with Primary       Sector with Primary       County Baseline Status         Policy or Program       Policy or Program Description       Responsibility       Material or Product Group       Status       County Baseline Status						
		INITIATIVES	Material of Product Group	Status			
C & D Diversion Requirements	Adopt a goal and plan for reaching 50% or more diversion from landfilling and combustion by a specific year through reduce and reuse as well as recycling and composting.	Community	Various		In progress, KCI to assist Alachua County and the City of Gainesville in drafting ZW Plan.		
Goal Integration Across Plans	Make linkages between achieving high diversion and how this would serve objectives of other plans for the community, including Climate Action, Sustainability, General and Economic Development Plans.	Community	Various	×	If requested, could be incorporated into the ZW Plan for Alachua County and the City of Gainesville.		
Zero Waste Goals for Organics	Adopt a Zero Food Waste hierarchy; adopt a goal to phase out compostable organics from refuse collection and from entering local transfer stations landfills or incinerators.	Community	Organics		Currently part of Zero Waste Gainesville and Alachua County and encouraged to all citizens.		
Zero Waste Public Venues & Events	Adopt and implement Zero Waste goals and action plans for all public venues and events. Provide training and technical assistance to venue and event coordinators, displays, and signs.	Govt	Paper, Plastics, Metals, Glass, Organics	$\checkmark$	Currently part of Zero Waste Gainesville and Alachua County. Could continue and be enhanced after release of the ZW Plan and increase stakeholder engagement and community-wide use of the plan.		
Universal Provision of Service	Require haulers to provide curbside recycling and/or compostable collection along with trash service for their customers within jurisdictional boundaries.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	$\checkmark$	Alachua County: Curbside collection haulers must provide recycling with garbage services. This includes curbside subscriptions.		
Pay-As-You-Throw (PAYT)	Enact a volume-based fee structure for trash.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	$\checkmark$	County and City have adopted Pay-As-You-Throw (PAYT) system.		
Mandatory Recycling / Source Separation	Require by ordinance compliance of households or businesses with recycling / properly separating recyclables from refuse.	Residential, ICI	Paper, Plastics, Metals, Glass	$\checkmark$			
Mandatory Recycling Percentage	Require by ordinance that owners of businesses, institutions, or multi-family complexes recycle a specific percentage of solid waste generated.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	×			
Mandatory Composting	Require by ordinance compliance of households or businesses with composting and/or properly separating organics from refuse.	Residential, ICI	Organics	×			
Single Stream Recycling	Streamline recyclables collection by enabling customers to place recyclables into a single bin or cart for added convenience.	Residential, ICI	Paper, Plastics, Metals, Glass	$\checkmark$	Related: 6 of 9 Municipalities in County have single stream. Unincorporated County and City of Gainesville have dual stream. UF has bi-sort stream. Rural collection centers require sorting.		
Product Fees	Adopt point-of-sale fees for products that are toxic and/or hard to reuse recycle or compost.	ICI	HHW, Hard to Recycle, Electronics	×			
Trash Disposal Surcharge	Enact taxes or surcharges on the disposal of municipal solid waste to increase the tipping fee relative to recycling or compost.	Residential, ICI	Paper, Plastics, Glass, Metals, Organics	X			
Backyard/ Neighborhood Composting	Encourage and provide incentives for homes, neighborhoods, schools and businesses to set up a bin for composting food and yard waste. (Considered a source reduction activity with upstream impacts.)	Residential, ICI	Organics		Currently encouraged by Alachua County and Gainesville on their websites and other public awareness venues. Incentives could be added to the program. Related: County provides outreach programs promoting backyard composting.		

	APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL						
	2019/2020 - Kessler Consulting, Inc.						
Policy or Program	Policy or Program Description	Sector with Primary Responsibility	Material or Product Group	Status	County Baseline Status		
Reusable or Compostable		Responsibility	Waterial of Froduct Group	X	county basenne status		
Diapers	Promote alternatives to disposable diapers.	Residential	Diapers				
Food Pickup for Donation	Encourage pick-up and delivery of pre-consumer, edible food from food service vendors for donation to food banks or soup kitchens, e.g., by bicycle or electric cart.	ICI	Organics		Currently in place by the Alachua and Gainesville Food Pantries. Perhaps contact them as stakeholders to determine expansion opportunities for ZW Plan.		
Food Gleaning for Donation	Encourage formation of "Gleaner" volunteer groups to harvest surplus crops from local farms or community gardens and distribute to food banks or soup kitchens.	Community	Organics		Florida Certified Organic Growers and Consumers, Inc. (FOG) developed the report: "Community Vision for Food System Development in Gainesville-Alachua County: A Local Food Action Plan 2010." Encourage stakeholders to continue and build stronger networks.		
Food Waste Outreach & Prevention (vendors)	Conduct outreach to grocery stores, restaurants, school cafeterias and other food service vendors on opportunities and practices to prevent food waste, as well as to reduce disposable food ware packaging.	ICI	Organics, Paper, Plastics	×			
Food Waste Outreach & Prevention (consumers)	Conduct outreach on reducing wasted food at home.	Residential	Organics		County and City provide outreach on backyard composting as a way to reduce food waste being landfilled.		
Paper Reduction at Offices	Conduct outreach on Paperless Office strategies.	ICI	Paper	$\checkmark$	Alachua County offers a number of toolkits for businesses to encourage recycling and reduce waste on their website. One directly relates to paper reduction in the business environment.		
Extended Producer Responsibility (legislation)	Advocate for Producer Responsibility legislation and programs, e.g., through participating in Product Stewardship Councils and/or adopting local resolutions.	ICI	HHW, Hard to Handle, Electronics, Various	×			
Extended Producer Responsibility (compliance)	Promote producer compliance in managing the reuse, recycling and/or safe disposal of products covered by EPR legislation.	ICI	HHW, Hard to Handle, Electronics, Various	×			
Materials Exchange	Develop or facilitate an online network to foster business-to-business connections to match unwanted material byproducts or commodities to opportunities for reuse or recycling as feedstock.	ICI	Industrial Materials, C&D, Hard to Recycle, Textiles, Electronics, Various		AlachuaExchange.com currently exists. Needs to be updated. Let Go is a private business currently providing materials exchange for County.		
Reuse Business Network	Develop a network of local businesses to repair, refurbish, market, and sell used products.	ICI	Various				
Healthy Soils - Landscapes	Require or offer incentives for use of compost to restore soil, e.g., through local stormwater ordinances or programs for retrofitting residential and commercial landscapes; support carbon farm projects.	C&D projects, ICI, Re	Organics				
Healthy Soils - Locally Grown Food	Support the establishment of community gardens, urban agriculture, and farmers markets offering organic, locally grown food, e.g., by enacting changes to local zoning ordinances.	Community	Organics		Alachua County: Section 404.13.1 - Community gardens are allowed as a limited use in all zoning districts Gainesville: Nothing noted according to Municode.		
Drop-Off - Reusables	Partner with nonprofit agencies and local retailers to accept and/or establish locations in the community for drop-off of reusable or refurnishable items, including those that are bulky and hard to handle.	Community	Textiles, Hard to Handle, Various	$\checkmark$	Several options currently exist. These include: Gainesville Junk Removal, The Repurpose Project- Reuse Store, Goodwill, Haven, Salvation Army, Habitat for Humanity ReStore		

APPENDIX 1- ALACHOA COUNTY ZERO WASTE DASELINE ASSESSIVIENT - OSING THE EPA WASTE STREAMS TOOL						
2019/2020 - Kessler Consulting, Inc.						
		Sector with Primary				
Policy or Program	Policy or Program Description	Responsibility	Material or Product Group	Status	County Baseline Status	
Swap Shed	Develop or contract for free drop and take areas or sheds at existing centers including transfer stations, recycling centers, landfills and HHW facilities.	Community	HHW, Various		Rural collection centers in Alachua County offer a Reuse Area hosting gently used items for free. These include toys, pots & pans, furniture, etc. Room for expansion to other areas.	
Reuse Center for Sale of Used Goods	Develop or contract for reuse centers for sale of salvaged building materials and used household items.	Community, C&D pro	C&D, Various		Current data shows existing stores and projects in place. These include: The Repurpose Project-Reuse Store, Junior League Thrift Shop, Haven Hospice Attic Resale, Alachua County Humane Society, and Habitat for Humanity ReStore. Room for expansion and public education.	
Reuse Depot/Goods Bank	Develop or contract for Goods Banks of reusable items for donation to social services programs, teachers, artists and/or the public.	Community	Textiles, Various		Tools for Schools provides reused items to school teachers for free. County donates many of their supplies.	

#### APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL

APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL					
	2019/2020 - Kessle	er Consulting,	Inc.		
Dell'es es Deserves	Dellan an December December 1	Sector with Primary		Chathar	County Develop Chattan
Policy or Program	Policy or Program Description DOWNSTREA	Responsibility	Material or Product Group	Status	County Baseline Status
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Universal Access to Service	Require haulers to offer curbside recycling and/or compostable collection along with trash service to their customers within jurisdictional boundaries.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics		Currently in place in Alachua County and City of Gainesville.
Oniversal Access to Service		Residential, ICI	raper, riastics, Metals, Glass, Organics		Gamesvine.
Mandatory Subscription -	Require all households and/or businesses and institutions within jurisdictional boundaries to sign up	Residential ICI	Paper Plastics Metals Class		Currently implemented as a basic utility with trash
Recycling	for recycling collection service.	Residential, ICI	Paper, Plastics, Metals, Glass		service in Alachua County.
				X	
Mandatory Subscription -	Require all households and/or businesses and institutions that dispose organics within jurisdictional				
Organics	boundaries to sign up for organics collection service.	Residential, ICI	Organics		
					County promotes a number of businesses that provide
	Encourage businesses to take back products and associated packaging, especially items that are toxic in			V	these services. These include Bestbuy and Office
Retailer Take-back (voluntary)	their manufacture, use, or disposal that are not currently reusable, recyclable or compostable locally.	ICI	Electronics, HHW, Hard to Recycle		Depot among others.
	Require businesses that sell items that must be collected as HHW or are not currently reusable,			X	
Retailer Take-back (mandatory)	recyclable, or compostable locally to take those items back for proper reuse, recycling, or disposal.	ICI	Electronics, HHW, Hard to Recycle		
				4	
	Require by ordinance that trash collection is contingent on recycling bin set out or that businesses and			×	
Recycling Provisions	institutions have recycling plans and/or space for recycling.	Residential, ICI	Paper, Plastics, Glass, Metals, Organics		
	License all haulers (as an alternative to a franchise agreement or contract). Require haulers to report th	e			
Licensing with Reporting	amount of garbage, recyclables, and compostables collected.	Residential, ICI	Paper, Plastics, Glass, Metals, Organics		Reporting required by Florida DEP.
					Alachua County has PAYT system. Residents exceeding
					the weekly trash allotment in the City of Gainesville
Source Separation Incentives	Enact discounted rates or fees for separating recyclables and/or compostables from trash.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics		will be charged extra based on quantity.
	Establish non-binding recycling targets with service provider; provide technical assistance across				
Lead by Example - Recycling	government operations (e.g., police, fire, facilities, parks and public areas, venues and events) to		Paper, Plastics, Glass, Metals, Organics,		Alachua County and City of Gainesville have targets of
and/or Composting	increase recycling and/or composting rates.	Govt	Various		70% reduction by 2020 to meet FDEP target goals.
					In place for both Alashua County and City of
Zero Waste Private Venues &	Promote setting of zero waste goals to owners/operators of private venues, e.g., sports stadiums, hotel conferences. Provide training and technical assistance to event coordinators for implementation of				In place for both Alachua County and City of Gainesville as well as UF. Ongoing outreach and
Events	zero waste action plans.	ICI	Paper, Plastics, Metals, Glass, Organics		continued efforts needed.
Municipal Recycling Collection					Currently in place in all areas, but rural areas of Alachua County where numerous drop off centers
Services	Establish curb/dockside recycling collection services for readily recyclable materials.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics		exist.
					Related: Clty of Gainesville provides bulky item
				X	curbside pickup, but does not provide hazardous
Expanded Municipal Collection - Recyclables	Expand curb/dockside collection services to include recyclable items that contain toxic materials or are bulky and hard to handle.	Residential, ICI	Electronics, HHW, Hard to Handle, Scrap Metal, Motor Oil, Textiles		waste or electronics curbside. Alachua County offers recyclimg of these items at drop off centers.
Recyclables		Residential, ici	Scrup Metal, Motor OII, Textiles		recycling of these items at drop on centers.
Expanded Municipal Collection - Yard Debris	Expand existing collection services to yard debris/green waste.	Residential, ICI	Organics		Alachua County and the City of Gainesville currently pick up yard waste in their curbside service areas.
	Expand existing conection services to yard debris/green waste.	Residential, ICI	Organics		pick up yard waste in their curbside service areas.

	APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE ASSESSMENT - USING THE EPA WASTE STREAMS TOOL							
	2019/2020 - Kessler Consulting, Inc.							
Policy or Program	Policy or Program Description	Sector with Primary Responsibility	Material or Product Group	Status	County Baseline Status			
Expanded Municipal Collection	Expand existing collection services to food waste (and soiled paper).	Residential, ICI	Organics	X	Private programs currently exist.			
Expanded Municipal Collection - Multi-Family	Expand existing collection services to include multi-family units.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics		In the City of Gainesville, appartment/condo complexes greater than five are considered commercial and are required by ordinance to recycle.			
Multi-Family Technical Assistance	Provide outreach and technical assistance to owners and tenants of multi-family units to address recycling and/or composting logistics and to increase tenant participation.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics		County provides commercial recycling visits, as well as community meetings of apartment residents. Can be expanded.			
Curbside Collection Optimization	Upgrade curbside recycling and/or organics containers and improve collection efficiencies (e.g., move from bins to carts, include additional materials, consider degree of commingling).	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	×				
Expanded Authority for Service	Expand municipal authority to provide or oversee collection services for sectors served by open market private haulers (if applicable).	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	×				
Right Size Service	Provide technical assistance to customers to help them select containers that are the right size for the amount of trash, recyclables, and compostables produced.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics		County conducts walk through visits for commercial recycling and suggests how to reduce bills by ensuring service size and frequency of pickup are proper.			
Every-Other-Week Trash Collection	Modify trash collection schedule to every-other-week pickup and at the same time add or expand weekly organics collection. To reduce contamination from residences address diaper and pet waste disposal through education and/or separate pickup.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	×				
Service Provider Rewards	Take actions to compensate haulers for recycling or composting, e.g., recycling rebates or worker rewards.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	×				
Service Provider Contract and Franchise Agreement Incentives or Requirements	Amend Service Provider contract or agreement to achieve high diversion by providing incentives or setting requirements, e.g., contract extensions, lower franchise frees, bonuses or liquidated damages, limited or no disposal payments, required productive use of organics.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics	×				
Zero Waste Collection Infrastructure Planning	Ask Service Provider to develop strategies to transform the current collection infrastructure.	Residential, ICI	Paper, Plastics, Metals, Glass, Organics, Various	$\checkmark$	Currently underway in the development of a Zero Waste Plan for Alachua County.			
Food Waste Pickup for Composting	Encourage pick-up and delivery of food waste from food service vendors for composting by community gardens or small farms if allowed, e.g., by bicycle or electric cart.	ICI	Organics		Food waste composing is promoted through educational outreach on both the City of Gainesville website and Alachua County. It is also promoted on the campus of UF.			
Food Waste Collection Program with Private Haulers	Initiate a sign-up program for businesses and institutions that discard food waste to obtain compost bins and collection service.	ICI	Organics	×	Beaten Path Compost currently collects food waste from a number of drop-off locations. Additionally they offer residential food waste pick up. Gainesville Compost collects food waste for composting. UF's Student Compost Cooperative composts and vermicomposts food waste			
Best Practices Training	Conduct training, e.g., site visits, walk-through audits, distribution of displays and signs to increase rates of recycling and/or composting at facilities.	ICI	Paper, Plastics, Metals, Glass, Organics		Currently implemented. Could be enhanced.			

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	2019/2020 - Kessler Consulting, Inc.						
Policy or Program	Policy or Program Description	Sector with Primary Responsibility	Material or Product Group	Status	County Baseline Status		
Retail Reuse Promotions	Encourage retail store "bargain basements" for sale of used clothes and other goods at discounted prices.	ICI	Textiles, Hard to Handle, Various		A number of these retail stores currently exist and are promoted on gov. solid waste websites for reuse/recycling. Additionally these are promoted through the Zero Waste Gainesville website and community-led organizaiton.		
Rental Business Promotions	Help promote services that provide short term rentals of reusable goods such as tools, sports equipment, party equipment (tables, chairs, serving utensils), as well as sharing websites.	ICI	Various	×			
Recognition & Certification Programs (local)	To increase the level of participation in recycling and composting programs, provide recognition for successes through a Green Business program or a Zero Waste Businesses or Schools program.	ICI	Various	×			
Recognition & Certification Programs (national)	To encourage businesses and institutions to adopt and implement zero waste or high diversion goals and plans, help connect them to national recognition and/or certification programs.	ICI	Various	×	Related: City of Gainesville passed Green Building Program Ordinance. Annually awards one project demonstrating outstanding commitment to green building with "Green Building Award."		
C&D Mandatory Source Separation	Require contractors to separate recyclable C&D debris from non-recyclable materials and sort the recyclables on site by staff or a service. Alternatively, require the recycled materials be hauled to a facility that sorts C&D materials.	C&D projects	C&D	×			
C&D Policy Incentives – Recycling	Update Green Building Policy to provide incentives attractive to developers, e.g., higher development ratios, lower set-backs, or credits for use of materials made from recycled content or for on-site reuse and recycling.	C&D projects	C&D		Currently in place in Ord. No. 171056 Article II Gainesville Green Building Program.		
C&D Recycling/Reuse Guidance	Prepare and post on the web a how-to deconstruction and services guide.	C&D projects	C&D	×			
C&D Service Rate Incentives	Require C&D processing facility(ies) to provide financial incentives to increase recovery rates, e.g., lower tipping fees, pre-sorting discounts, coupons, and/or expedited service.	C&D projects	C&D	×			
C&D Permit Incentives - Refundable Fee	Charge a deposit for permitted projects, refundable upon permittee demonstrating that a high percentage, e.g., 75%, of C&D debris has been delivered to a recovery facility.	C&D projects	C&D	×	Related: Gainesville Green Building Program Ordinance provides permitting and fee incentives.		
C&D Permit Incentives - Preference & Credits	Give preferential treatment and/or permit credits for projects that meet Green Building/Sustainable Building Product policies.	C&D projects	C&D		Related: Gainesville Green Building Program Ordinance provides permitting and fee incentives.		
Website Content - Recycling/Reuse Directory	Create a searchable local or regional directory specific to sector and/or industry of how and where to recycle or drop off used consumer products.	Community	Various		Both City of Gainesville and Alachua County have detailed directories on their websites.		
Website Content - Green Products & Services Directory	Create a searchable local or regional directory of businesses that offer green products or services, including vendor contact information.	Community	Various	×			
Social Marketing	Develop a social marketing/behavior change marketing program to find the best means to motivate people to reduce, reuse, recycle, and compost.	Community	Various		Currently in existence on Alachua County and City of Gainesville websites. These sites could link to efforts of "Zero Waste Gainesville" and the behavioral change models they are exemplifying on their website.		

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	2019/2020 - Kessler Consulting, Inc.					
Policy or Program	Policy or Program Description	Sector with Primary Responsibility	/ Material or Product Group	Status	County Baseline Status	
Outreach & Education	Promote best practices for source reduction or organize volunteer opportunities for residents to promote waste reduction, reuse, recycling and composting.	Community	Various	$\checkmark$	Currently in existence on Alachua County and City of Gainesville websites. These sites could link to efforts of "Zero Waste Gainesville" and the behavioral change models they are exemplifying on their website.	
Repair/Reuse Workshops	Sponsor or organize product repair workshops or reuse workshops with local service clubs.	Community	Various		Currently led by Zero Waste Gainesville and the Repurpose Project.	
Market Development Opportunities Assessment	Assess the state of existing local and regional markets for materials across the waste stream; study service voids for missed opportunities to recover commodities. Shape strategic action plans around the findings.	Community	Various	$\checkmark$	Currently underway in the development of a Zero Waste Plan for Alachua County.	
Rural Recycling Marketing Cooperative	Collaborate with neighboring small communities to jointly market recyclable materials to attract buyers and receive more competitive pricing from bulk volumes.	Community	Paper, Plastics, Metals, Glass, Various	$\checkmark$	As this is a joint program between Alachua County and the City of Gainesville, this is already a partnership with neighboring communities.	
Drop-Off - Recyclables	Partner with nonprofit agencies, e-Steward recyclers, or B-corporation certified recyclers to accept and/or establish locations in the community for drop-off of recyclable items, including those that contain toxics or are bulky and hard to handle.	Community	Electronics, Textiles, HHW, Scrap Metal, Hard to Handle, Various		Alachua County offers a number of recycling opportunities at their drop off locations. All details are described/promoted on their website.	
Drop-Off - Compostables	Partner with nonprofit agencies and local retailers to accept and/or establish locations in the community for drop-off of compostable items, such as yard debris, non-reusable wood, food waste and pet waste.	Community	Organics		Yard debris and food waste drop-off centers exist through several private businesses (Beaten Path Compost, Gainesville Compost). Both the City of Gainesville and Alachua County offer curbside pickup of yard debris in their service areas. Additionally Gaston's Tree Debris Recycling provides wood fibers and yard waste grinding services.	

	APPENDIX I - ALACHUA COUNTY ZERO WASTE BASELINE	ASSESSMENT	- USING THE EPA WASTE ST	REAMS TO	OOL		
	2019/2020 - Kessler Consulting, Inc.						
Policy or Program	Policy or Program Description	Sector with Primary Responsibility	Material or Product Group	Status	County Baseline Status		
Drop-Off - Miscellaneous	Promote collection hubs in the community for hazardous products, medical waste and hard to recycle items, e.g., oil, antifreeze, paint, tires, batteries, pharmaceuticals, carpet. Encourage management of collected items by manufacturers or retailers.	Community, ICI	Tires, HHW, Hard to Recycle, Motor Oil, Various		Currently in place at the Alachua County Hazardou Waste Collection Center. Currently accepts: household chemicals, auto fluids and batteries, paints and solvents, pesticides and corrossive chemicals, electronic scrap, florescent and mercury containing bulbs.		
Reuse Closet	Encourage storing of unwanted office supplies for re-use by employees or staff and teachers.	Govt, ICI	Various	×	Related: Alachua County offers toolkit for schools with various green practices. This and similar programs are included.		
Flea Markets, Garage Sales, and Reuse Swaps	Promote local flea markets and garage sales for sale of reusable items and swaps for household goods, e.g., clothing, toys, etc.	Community	Textiles, Various	$\checkmark$	Zero Waste Gainesville is promoting.		
Resource Recovery Park or Center	Develop or contract for a central facility at which reuse, recycling, and compost processing is co- located with manufacturing and retail businesses.	Residential, ICI	Paper, Plastics, Glass, Metals, Organics, Various		This is the intended long-term use of the Eco-Park in Alachua County.		
Center for Hard to Recycle Materials	Develop or contract for facilities that accept materials that are hard to recycle for reuse, refurbishing and /or recycling.	Residential, ICI	HHW, Hard to Recycle, Scrap Metal, Motor Oil, Various	×			
Compost Processing	Develop or contract for local or regional compost processing facilities for yard debris and/or food waste.	Residential, ICI	Organics		Yard debris and food waste drop-off centers exist through several private businesses (Beaten Path Compost, Gainesville Compost). Both the City of Gainesville and Alachua County offer curbside pickup of yard debris in their service areas. Additionally Gaston's Tree Debris Recycling provides wood fibers and yard waste grinding services.		
Anaerobic Digestion	Develop or contract for local or regional anaerobic digestion facilities for processing food waste, Fats, Oil and Grease (FOG) and/or sewage sludge.	Residential, ICI	Organics	×			
C&D Recovery Facility - Inerts	Develop or contract for local or regional C&D Recovery facilities to recover inert materials (e.g., rock, asphalt, concrete, bricks).	C&D projects, Govt	C&D	×	Related: Current C&D recycling and disposal through private businesses. These include: Florence Recycling & Disposal (has 13,500sqft transfer station and 70 acre C&D landfill) & and Watson C&D		
C&D Recovery Facility - Organics	Develop or contract for local or regional C&D Recovery facilities to recover organic materials (e.g., wood).	C&D projects	C&D	×	Related: Current C&D recycling and disposal through private businesses. These include: Florence Recycling & Disposal and Watson C&D. Watson C&D handles organic materials for mulching and composting.		
Pre-Disposal Residuals Treatment	Develop or contract for a facility to biologically pre-treat trash residuals before disposal to stabilize organic component.	Residential, ICI	Organics	×			
Pre-Disposal Salvage	Develop or contract for facilities or sorting lines to remove and recover reusable, recyclable, and compostable materials from source-separated trash.	Residential, ICI	Paper, Plastics, Glass, Metals, Organics	×			