Electronic Waste Collection and Recycling in Benton County

Benton County Regional Solid Waste Management District

Presentation to City, County & Local Affairs – House Planning Subcommittee
January 6, 2020

Our Program

- 2014 - all cities and County discontinued their own collection programs
- The District took over responsibility for electronic waste collection in Benton County
- Now provides all collection services for Benton County

Collection

Convenience Center Program

Accepted Items

Convenience Centers	Cost
Household Electronics	**Free**
Household Furniture (including oversized items)	**Free**
Household Appliances	**Free**
Scrap Metal	**Free**
Used Tires (4 tires per resident each month)	**Free**
Household Hazardous Waste (volume limits)	**Free**

Drop Off Service available every Tuesday thru Saturday

3
E-Waste Collection Locations in Benton County

SILOAM SPRINGS SATELLITE

Convenience Center Program

County's Role

- Reimburse District for (1) Attendant (salary & benefits)
- Pay for HHW disposal (in excess of $30,000 pd by Dist)
- Pay for disposal of bulky waste and furniture
- Assign Work Program workers as available
- Advertise program as funds are available

*Resulted in significant savings for County

District's Role

- Operate and manage all locations (provide all other staff needed for Program)
- Pay 1st $30,000 for HHW Disp
- Bulk HHW materials to reduce cost to Program
- **Prepare e-waste for shipment**
- **Utilize available e-waste grant funds to pay for processing of e-waste**
- Provide all supplies and equipment needed for program

Other Collection Options

Business E-Waste

- No charge for up to 6 pallet loads (approximately 180 pieces)
- Fee for excess material equal to District's actual cost

Curbside Pickup

- District offers curbside pickup each Thursday
- $40.00 1st item; $5 for each additional item

Municipal Cleanups

- No charge for municipalities collecting e-waste from their own residents during cleanups
- District provides collection trailers and transport

Processors

Recycling Processors

unicor We're life changing.

- No charge for items they accept
- Discontinued accepting CRTs in 2019
- They provide free transport

- Responsible Recycling (R2) Certification

eSCO

- Charge $0.25 per pound for <u>all</u> materials
- Accept CRTs for processing
- We provide transport to eSCO

- e-Stewards Certification

EPA encourages debris managers to choose certified recyclers which have demonstrated to an accredited, independent third-party auditor that they meet specific standards to safely recycle and manage electronics. Responsible Recycling Practices (R2) and the e-Stewards® standards are the two currently available accredited certification standards.

Processing Fees Paid

	Unicor	eSCO	Totals
Total Tons	577.4	240.1	**817.5**
Fees Pd	$96,918.30	$93,638.50	$190,556.80
% Tons	71%	29%	
% Fees	51%	49%	

Total Grant Funds expended on Processing last 3 years $190,556.80
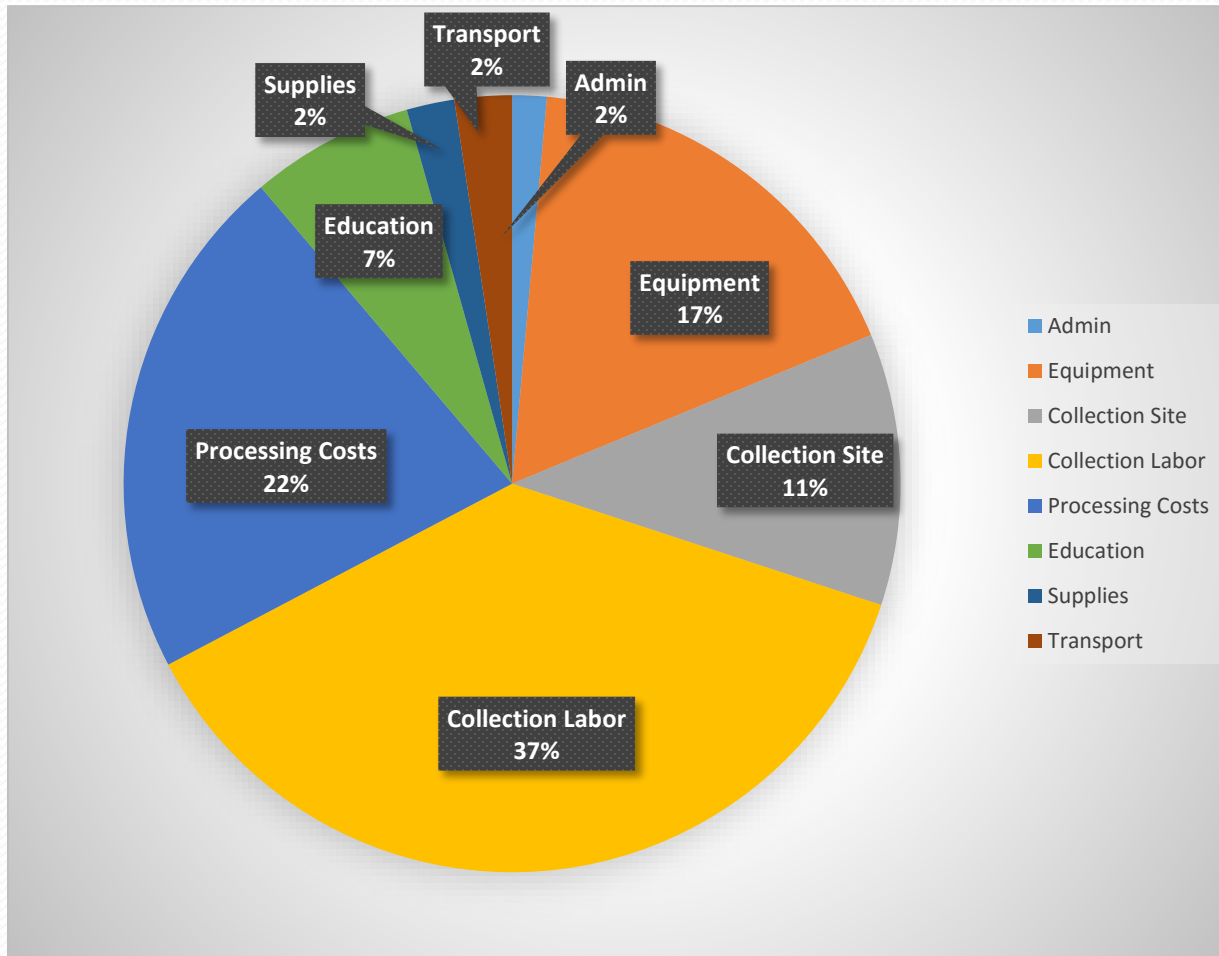
$\approx$

Grant Funds

Electronic Waste Recycling Grants

- 2005 to 2019 Benton County District received various types of E-waste Grant funds totaling **$1,436,670.54**

- Board conducts an annual AR Computer & Electronic Waste Recycling Grant round

- Reviews proposed projects, prioritizing biggest impact on electronic waste recovery and recycling

- Board approves budgets for each proposed project and reviews quarterly financial reports for grant funds

- *NO* **ELECTRONIC GRANT FUNDS** have been expended on projects not related to the District's / grantees' ability to `collect and recycle e-waste`

How Our Grant Funds Were Expended

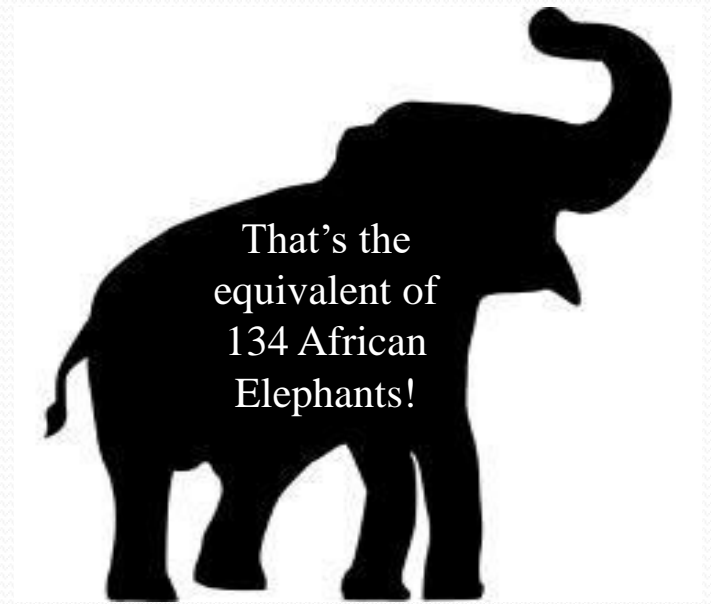| E-Waste Program	Expenditures	
Administration	**$ 14,800.00**	Administration expenses of district wide electronics collection and recycling program
Collection Equipment	**$ 178,990.69**	Purchase collection semi tractor, box truck, trailers, forklifts, skid steer, pallet scale, stretch wrap machine
Collection Site	**$ 116,794.98**	Purchase or expand e-waste collection, and storage buildings
Collection Labor	**$ 384,735.07**	E-Waste collection by all District staff & temp labor to collect ewaste, conduct e-waste drives, transport from 3rd party sites & process all e-
Processing Costs	**$ 222,385.35**	Pay for CRT disposal on ewaste collected by District through Convenience Center programs and municipal cleanup events
Education	**$ 70,416.00**	Education Program: public education campaign using television, radio, billboards and print media
Supplies	**$ 20,566.60**	Purchase supplies for collection & shipment of electronics including pallets, gaylords, stretch wrap, etc.
Transportation	**$ 24,615.33**	Inter-District transport from collection sites & drives; payments to transport vendor for shipping of e-waste
County	**$ 7,200.00**	Conduct e-waste collection at county cleanup; advertise collection
City of Siloam Springs	**$ 115,239.15**	Construct e-waste collection & storage building; supplies for shipping; forklift and stretch wrap machine
Total Expended thru 9/30/19	**$ 1,155,743.17**	$280,927.37 on hand to continue program

Expenditure Breakdown

Collection Results

Pounds collected

Three year period {2017, 2018, 2019} collected and shipped more than:

1,613,190
Pounds of Electronic Waste
= 806.6 Tons

That's the equivalent of 134 African Elephants!

50,961 pieces
with average weight of 31.7 pounds

*According to the World Wildlife Fund, an average African elephant weighs about 12,000 pounds

Environmental Benefits

ENERGY AND RESOURCES

•Recycling one million laptops saves the energy equivalent to the electricity used by more than 3,500 US homes in a year.

•For every million cell phones we recycle, 35 thousand pounds of copper, 772 pounds of silver, 75 pounds of gold and 33 pounds of palladium can be recovered.

POLLUTION PREVENTION

•Improper management of e-waste (such as illegal dumping, burning or landfilling) can pollute:

•**WATER** – **Heavy metals** such as lead, barium, mercury, lithium, etc. can leak into soil and groundwater

•**Soil** – Contamination of crops and food produced in soil contaminated by e-waste heavy metals

•**Air** – burning e-waste releases pollutants including cancer-producing dioxins into the air

For more information:

Wendy Bland, Director
Phone (479) 795-0751
5702 Brookside Rd., Bentonville, AR 72712
Email wendy@bentoncountyrecycles.org
Website: www.bentoncountyrecycles.org