

2021

Annual Report



E-CYCLE
washington

Submitted by:

Peter Thermos
Executive Director, Washington Materials
Management & Financing Authority
4900 9TH Avenue NW, Suite 206
Seattle, WA 98107

Submitted to:

Christine Haun
Environmental Specialist
Department of Ecology, State of Washington
300 Desmond Drive SE
Lacey, WA 98503

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[as required by RCW 70A.500.140]

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Executive Summary

E-Cycle Washington is a recycling program for unwanted computers, monitors and televisions in Washington State. Individuals, small businesses and others can drop off these electronics for free at E-Cycle Washington collection sites across the state. The Washington Materials Management and Financing Authority (WMMFA) is the administrative organization for E-Cycle Washington.

Electronic products contain toxic materials that should be kept out of the landfill, and valuable materials that can be recycled. The Washington State legislature enacted the Electronic Product Recycling Act (70.95N RCW) to establish this convenient recycling program, and to protect human health and the environment. This law requires manufacturers of the products accepted by E-Cycle Washington to finance the collection, transportation, recycling and administration of the program.

HIGHLIGHTS

In 2021, E-Cycle Washington collected over 14.6 million pounds of electronics. E-Cycle Washington has collected more than 440 million pounds of electronics since it began operations on January 1, 2009.

Electronics can be dropped off for free at over 250 collection sites in Washington. This voluntary network of collection sites is comprised of retailers, non-profit organizations, local government facilities and others. Some cities also hold recycling collection events where electronics are accepted for recycling from the public for free.

SIGNATURE

This annual report was prepared as required by WAC 173-900-800 and submitted electronically to the Washington State Department of Ecology on March 1, 2022.



Peter Thermos
Executive Director, WMMFA



2021 COVERED ELECTRONIC PRODUCTS (CEPS) COLLECTED

Including Orphan Products

CEP Pounds Collected by County			CEP Pounds Collected by County by CEP Type			
WA State County	Pounds Collected 2021 Excluding Reuse	Percent of Total Pounds by County	Computers	Monitors	Televisions	Total Pounds by County
Adams	20,206	0.1%	1,226	1,456	17,524	20,206
Asotin	33,981	0.2%	1,063	7,598	25,320	33,981
Benton	316,709	2.1%	41,620	27,956	247,133	316,709
Chelan	107,725	0.7%	11,897	10,141	85,687	107,725
Clallam	84,702	0.6%	6,173	11,658	66,871	84,702
Clark	1,017,584	6.6%	91,988	90,285	835,311	1,017,584
Columbia	5,419	0.0%	429	531	4,459	5,419
Cowlitz	290,748	1.9%	32,268	34,377	224,103	290,748
Douglas	26,553	0.2%	2,865	3,024	20,664	26,553
Ferry	10,692	0.1%	558	652	9,482	10,692
Franklin	96,591	0.6%	8,047	11,827	76,717	96,591
Garfield	6,795	0.0%	2,050	1,867	2,878	6,795
Grant	76,778	0.5%	6,934	8,079	61,765	76,778
Grays Harbor	159,935	1.0%	14,540	16,254	129,141	159,935
Island	280,003	1.8%	29,172	30,487	220,344	280,003
Jefferson	96,315	0.6%	11,431	14,250	70,634	96,315
King	5,309,880	34.6%	496,498	657,984	4,155,398	5,309,880
Kitsap	475,818	3.1%	47,693	53,779	374,346	475,818
Kittitas	50,876	0.3%	4,770	5,025	41,081	50,876
Klickitat	16,296	0.1%	3,626	2,905	9,765	16,296
Lewis	82,424	0.5%	8,025	9,362	65,037	82,424
Lincoln	27,837	0.2%	2,259	2,929	22,649	27,837
Mason	112,040	0.7%	2,259	19,670	90,111	112,040
Okanogan	29,687	0.2%	3,627	3,770	22,290	29,687
Pacific	60,063	0.4%	6,693	4,899	48,471	60,063
Pend Oreille	30,724	0.2%	3,032	2,730	24,962	30,724
Pierce	1,294,705	8.4%	94,491	158,059	1,042,155	1,294,705
San Juan	40,176	0.3%	5,971	5,545	28,660	40,176
Skagit	374,395	2.4%	28,764	39,984	305,647	374,395
Skamania	40,177	0.3%	2,194	4,421	33,562	40,177

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POUNDS COLLECTED BY COUNTY

Including Orphan Products

CEP Pounds Collected by County			CEP Pounds Collected by County by CEP Type			
WA State County	Pounds Collected 2021 Excluding Reuse	Percent of Total Pounds by County	Computers	Monitors	Televisions	Total Pounds by County
Snohomish	2,411,184	15.7%	197,574	261,508	1,952,102	2,411,184
Spokane	837,488	5.5%	73,863	76,952	686,673	837,488
Stevens	56,971	0.4%	6,272	7,911	42,788	56,971
Thurston	293,037	1.9%	23,749	35,119	234,169	293,037
Wahkiakum	0	0.0%	0	0	0	0
Walla Walla	155,448	1.0%	13,285	14,346	127,817	155,448
Whatcom	562,654	3.7%	51,602	59,029	452,023	562,654
Whitman	99,710	0.7%	14,341	11,426	73,943	99,710
Yakima	336,288	2.2%	20,901	47,745	267,642	336,288
	15,328,614	100.0%	1,373,750	1,755,540	12,199,324	15,328,614
Adjustment (change of counting method, see explanation below)						(727,710)
Adjusted 2021 Total CEPs Collected						14,600,904

CHANGE IN COUNTING METHOD FOR VERIFICATION OF ANNUAL POUNDS PROCESSED

Prior to 2021, WMMFA used an accrual-based method for verifying annual pounds processed. Annual pounds processed verification data included pounds processed in the days that followed the end of the calendar year of the annual report. Starting in 2021, WMMFA will only use verification data for pounds processed in the calendar year of the annual report.

This change in counting method will reduce the total pounds verified in 2021 by 727,710 pounds. For this reason, WMMFA will make a one-time reduction in total pounds collected in 2021, resulting in the 2021 total pounds collected being equal to the total pounds processed verification for 2021.

2021 Total Pounds Collected Adjustment

	Pounds
(A) Total Pounds Processed Verification (accrual-based)	15,328,614
(B) Total Pounds Processed Verification (calendar year)	14,600,904
(C) Difference In Counting Methods (A - B)	(727,710)
Total Pounds Collected	15,328,614
Counting Method Adjustment	(727,710)
Adjusted Total Pounds Collected	14,600,904

2021 LARGE QUANTITIES FROM SCHOOL DISTRICTS, SMALL GOVERNMENT AND SMALL BUSINESS

Total Pounds Received in Large Quantities from School Districts, Small Businesses and Small Governments

TELEVISIONS	
School District	21,643
Small Business	34,637
Small Government	25,020
Total Televisions	81,300

MONITORS	
School District	26,584
Small Business	22,139
Small Government	7,568
Total Monitors	56,291

COMPUTERS	
School District	36,331
Small Business	21,818
Small Government	10,436
Total Computers	68,585

TOTAL CEPs 206,176

NON-PROFIT POUNDS BY COLLECTOR

Total weight of Covered Electronic Products (CEPs) received from each non-profit charitable organizations primarily engaged in re-use and re-sale used by the standard plan.

CHARITY NAME	CEP POUNDS
All Shred	8,819
Anacortes Aktion Club	27,945
Deseret Industries Puyallup/Shoreline	86,881
Seattle Goodwill	2,631,578
Goodwill Industries of the Columbia	417,212
Green Okanogan	9,010
Inland Northwest Goodwill	677,592
Goodwill of the Olympics and Rainier Region	1,099,472
Columbia Willamette Goodwill	424,550
Lillie Rice Center, Inc	5,050
InterConnection Computer Reuse	128,359
Methow Recycles	15,057
Northwest Center	14,553
Orcas Recycling Services	19,998
The Salvation Army Seattle DHQ	41,148
St Vincent de Paul Bremerton	5,654
St Vincent de Paul Northsound	33,561
St Vincent de Paul Seattle/King County	35,836
St Vincent de Paul Tacoma	24,780
Stanwood Camano Kiwanis	21,067
Sunnyside Christian Thrift Shop	9,816
Union Gospel Mission Yakima	12,578
YWCA NCW	0
Total Non-profit Pounds:	5,750,516

COLLECTION SITES

These collection sites accepted covered electronics for recycling at no charge in 2021.

Collector Name	Address	City	County
Bruce Transfer Station	504 S. Lucy Rd.	Othello	Adams
Ritzville Transfer Station	1803 E. Danekas Rd.	Ritzville	Adams
CEP Recycle Asotin Co.	2901 6th Avenue	Clarkston	Asotin
Clayton Ward Co	119 East Albany	Kennewick	Benton
Clayton Ward Co	1936 Saint St	Richland	Benton
Goodwill Albertsons Donation Center	140 W. Gage Blvd.	Richland	Benton
Goodwill Columbia Center Mall Donation Center	100 Columbia Center Blvd	Kennewick	Benton
Goodwill East Kennewick Store	810 S. Dayton St	Kennewick	Benton
Goodwill Flower Farm	#11 S Columbia Center Blvd	Kennewick	Benton
Goodwill Fred Meyer	Corner of 10th and Hwy 395	Kennewick	Benton
Goodwill Kennewick Store	2905 W. Kennewick Ave.	Kennewick	Benton
Goodwill KK Donation Center	3250 Kennedy Rd.	West Richland	Benton
Goodwill Richland	201 Wellsian Way	Richland	Benton
Stay Tan West	3680 W Van Giesen	West Richland	Benton
Goodwill Wenatchee Store	830 S. Mission St	Wenatchee	Chelan
Pacific Power Batteries	742 S. Mission	Wenatchee	Chelan
YWCA Thrift Store	231A N Wenatchee Ave	Wenatchee	Chelan
Goodwill Port Angeles Store	603 So. Lincoln St	Port Angeles	Clallam
Goodwill Sequim Store	680 W Washington St, Ste C	Sequim	Clallam
Central Transfer and Recycling Center	11034 NE 117th Ave.	Vancouver	Clark
Goodwill Battleground Store	101 NW 20th Ave	Battleground	Clark
Goodwill Felida County Store Donation Center	1804 NW 119th Street	Vancouver	Clark
Goodwill Fisher's Landing Store	1200 SE 162nd Pl.	Vancouver	Clark
Goodwill Hazel Dell Store	1600 NE 78th St.	Vancouver	Clark
Goodwill Salmon Creek	14300 NE 20th Ave.	Vancouver	Clark
Goodwill Vancouver Outlet	9021 NE 117th Ave	Vancouver	Clark
Goodwill Vancouver Store	6425 NE Fourth Plain	Vancouver	Clark
Goodwill Washougal Donation Center	3307 SE Evergreen Way	Washougal	Clark
Washougal Transfer Station	4020 South Grant Street	Washougal	Clark
West Van Materials Recovery Center	6601 NW Old Lower River Rd	Vancouver	Clark
Columbia County Transfer Station	501 S Cottonwood	Dayton	Columbia
Goodwill Longview Store	1030 15th Avenue	Longview	Cowlitz
Waste Control Recycling Inc	1150 3rd Avenue	Longview	Cowlitz
Goodwill East Wenatchee Store	620 Grant Road	East Wenatchee	Douglas
Inchelium Community Center	14 Community Center Loop Rd	Inchelium	Ferry

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COLLECTION SITES

Collector Name	Address	City	County
Keller Community Center	11669 S. Highway 21	Keller	Ferry
Torboy Transfer Station	584 Torboy Dump Road	Republic	Ferry
Goodwill Pasco Outlet	307 W Columbia St	Pasco	Franklin
Goodwill Pasco Road 68	5115 N Road 68	Pasco	Franklin
Goodwill Pasco Store	3521 W. Court St	Pasco	Franklin
CEP Recycle Garfield Co.	209 S 10th St	Pomeroy	Garfield
CDSI Recycling and Buy Back Center	2370 Basin St SW	Ephrata	Grant
CDSI Transfer & Recycling Center	9524 Rd 7 NE	Moses Lake	Grant
Goodwill Moses Lake Store	789 North Central Drive	Moses Lake	Grant
Goodwill Aberdeen Store	1103 East Wishkah Blvd	Aberdeen	Grays Harbor
Pay More Recycle and Salvage Inc.	1813 Westport Road	Aberdeen	Grays Harbor
Waste Connections Inc dba Aberdeen Sanitation	4201 Olympic Highway	Aberdeen	Grays Harbor
Camano Island Transfer Station & Recycle Park	75 E. Camano Hill Rd.	Camano Island	Island
Island Recycling - Coupeville	20018 SR 20	Coupeville	Island
Island Recycling - Freeland	20014 State Route 525	Freeland	Island
North Whidbey Transfer Station & Recycle Park	3151 N. Oak Harbor Road	Oak Harbor	Island
Goodwill Port Townsend Store	602 Howard St	Port Townsend	Jefferson
Skookum Recycling Services	301 County Landfill Rd	Port Townsend	Jefferson
3R Technology	5511 First Avenue South	Seattle	King
Deseret Industries - Shoreline	17935 Aurora Ave N	Shoreline	King
EcoLights Northwest	1915 S Corgiat Dr	Seattle	King
Enumclaw Recyclers	2551 Cole St., Ste. A	Enumclaw	King
E-Recycle LLC	7835 SE 30th Street	Mercer Island	King
EWC Group, Inc	20413 87th Ave S	Kent	King
Friendly Earth International	1560 1st Ave. South	Seattle	King
Goodwill Auburn Store	1519 Auburn Way S	Auburn	King
Goodwill Ballard Donation Center	2400 NW 85th St	Seattle	King
Goodwill Ballard Store	6400 8th Avenue NW	Seattle	King
Goodwill Burien Store	1031 SW 128th Street	Burien	King
Goodwill Capitol Hill Store	115 Belmont Avenue East	Seattle	King
Goodwill Federal Way Store	32521 Pacific Hwy S	Federal Way	King
Goodwill Greenwood Donation Center	10022 Holman Rd. NW	Seattle	King
Goodwill Interbay Donation Center @ Whole Foods	2001 15th Ave W	Seattle	King
Goodwill Issaquah Donation Site	970 7th Ave. NW	Issaquah	King
Goodwill Juanita Store	9826 NE 132nd Street	Kirkland	King
Goodwill Kent Outlet Store	315 Washington Ave S	Kent	King

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COLLECTION SITES

Collector Name	Address	City	County
Goodwill Kent Store	25814 102nd Place SE	Kent	King
Goodwill Maple Valley Store	27077 Black Diamond Road SE	Maple Valley	King
Goodwill Ravenna Donation Center	4637 Union Bay Pl. NE	Seattle	King
Goodwill Redmond (Bellevue) Store	15301 NE 24th Street	Redmond	King
Goodwill Renton Store	3210 NE Sunset Blvd	Renton	King
Goodwill Sammamish Highlands Donation Center	NE 8th St & 228th Ave NE	Sammamish	King
Goodwill Seattle Store	1400 South Lane Street	Seattle	King
Goodwill Shoreline Store	14500 15th Avenue NE	Shoreline	King
Goodwill South Lake Union Store	411 Westlake Avenue North	Seattle	King
Goodwill Tukwila	1174 Andover Park West	Tukwila	King
Goodwill Totem Lake Donation Center	12221 120th Avenue NE	Kirkland	King
Goodwill University Village Donation Center	4552 University Way NE	Seattle	King
Goodwill West Seattle Donation Center	4746 Fauntleroy Way SW	Seattle	King
Goodwill Woodinville Donation Center	17524 131st Ave NE	Woodinville	King
Goodwill Woodinville P&R Donation Center	17800 140th Avenue NE	Woodinville	King
InterConnection Computer Reuse & Learning Center	3415 Stone Way N	Seattle	King
Living Green Technology	3417 Evanston Ave N, Suite 203	Seattle	King
NW Center Truck at Pine Lake QFC	2902 228th Ave SE	Sammamish	King
Pacific Power Batteries	13205 NE 124th St, Suite A	Kirkland	King
PC Recycle - Bridle Trails Shopping Center	6500 132nd Ave NE	Kirkland	King
PC Recycle - Woodinville	5817 238th St SE	Woodinville	King
Planet USA	21854 76th Ave South	Kent	King
Rain City Recycling, LLC	4150 B Pl NW Suite 103	Auburn	King
RE-PC	1565 6th Avenue S	Seattle	King
RE-PC	600 Andover Park East	Tukwila	King
Seattle Computers Recycling	8051 Lake City Way NE	Seattle	King
St Vincent de Paul 1st Ave S	13445 1st Ave South	Burien	King
St Vincent de Paul 4th Ave S	5950 4th Ave South	Seattle	King
St Vincent de Paul Aurora Ave N	13555 Aurora Ave N	Seattle	King
St Vincent de Paul Bothell Way NE	7304 Bothell Way NE	Kenmore	King
St Vincent de Paul Renton	575 Rainier Ave N	Renton	King
Total Reclaim	7021 S. 220th St.	Kent	King
UpTekk	219 Frontage Rd. N, Suite A	Pacific	King
Value Village Burien	131 SW 157th St	Burien	King
Value Village Issaquah	5530 East Lake Sammamish Parkway SE,	Issaquah	King
Value Village Kent	24034 104th Ave SE	Kent	King
Value Village Kirkland	12515 116th Ave NE	Kirkland	King

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COLLECTION SITES

Collector Name	Address	City	County
Value Village Tukwila	16700 Southcenter Parkway	Tukwila	King
Value Village Woodinville	14160 NE Woodinville Duval Rd	Woodinville	King
VIDEO ONLY - Bellevue	14339 NE 20th St	Bellevue	King
VIDEO ONLY - Federal Way	1643 S 352nd St	Federal Way	King
VIDEO ONLY - TUKWILA	290 Andover Park E	Tukwila	King
All Shred	5800 Werner Rd. STE B	Bremerton	Kitsap
Bainbridge Island Recycling & Garbage Facility	7215 Vincent Road	Bainbridge	Kitsap
Bremerton St. Vincent dePaul	Corner of 13th and Wycoff	Bremerton	Kitsap
Goodwill Bainbridge Island Don. Center	NE High School Road	Bainbridge	Kitsap
Goodwill Bremerton Store	4209 Wheaton Way	Bremerton	Kitsap
Goodwill Port Orchard Store	1720 SE Mile Hill Road	Port Orchard	Kitsap
Goodwill Silverdale Store	10001 Mickelberry Rd NW	Silverdale	Kitsap
Olympic View Transfer Station	9300 SW Barney White Road	Bremerton	Kitsap
Goodwill Ellensburg Store	400 W. Washington Avenue	Ellensburg	Kittitas
Kittitas Valley Recycling - Ellensburg	320 N Railroad	Ellensburg	Kittitas
Regional Disposal Company - Goldendale Transfer	1205 W Broadway	Goldendale	Klickitat
Goodwill Centralia Store	519 Harrison Ave	Centralia	Lewis
Tiger Mountain Technologies	208 2nd St	Morton	Lewis
Lincoln County Transfer Station	34735 SR 2 E	Davenport	Lincoln
Goodwill Shelton Store	301 Wallace Kneeland Blvd Ste. 210	Shelton	Mason
Pay More Recycle and Salvage	2278 E. Brockdale Rd	Shelton	Mason
Green Okanogan Recycling and Thrift	3 Rodeo Road	Tonasket	Okanogan
Methow Recycles	12 Twisp Airport Rd	Twisp	Okanogan
Nespelem Recycling Center	64 Schoolhouse Loop Rd	Nespelem	Okanogan
Omak Community Center	5th Ave E. Benton St.	Omak	Okanogan
Pacific Solid Waste Disposal	4404 E. 67th	Long Beach	Pacific
Royal Heights Transfer Station	876 State Route 105	Raymond	Pacific
Ione Transfer Station	1712 Sullivan Lake Road	Ione	Pend Oreille
Newport Transfer Station	9494 Deer Valley RD	Newport	Pend Oreille
Usk Transfer Station	661 Jared Road	Usk	Pend Oreille
Affordable Computer Service	3901 Center St S	Tacoma	Pierce
Deseret Industries - Puyallup	716 South Hill Park Drive	Puyallup	Pierce
Goodwill 38th Street Store	3121 South 38th St	Tacoma	Pierce
Goodwill 6th Ave Plaza Store	5401 6th Ave, STE 600	Tacoma	Pierce
Goodwill Bonney Lake Store	21153 Hwy 410	Bonney Lake	Pierce
Goodwill Gig Harbor Store	5500 Soundview Drive	Gig Harbor	Pierce
Goodwill Lakewood Store	6002 Mount Tacoma Dr SW	Lakewood	Pierce
Goodwill Puyallup River Rd. Store	1200 4th Street NW	Puyallup	Pierce

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COLLECTION SITES

Collector Name	Address	City	County
Goodwill South Hill Store	12915 Meridian Ave E	Puyallup	Pierce
Goodwill Spanaway Store	14918 Pacific Ave. S	Tacoma	Pierce
Goodwill Tacoma Outlet Store	3120 South Pine St	Tacoma	Pierce
Goodwill Tacoma South Store	8025 S Hosmer St.	Tacoma	Pierce
Green PC	3627 S 54th St	Tacoma	Pierce
Joint Base Lewis-McChord Recycle Center	Bldg 5290	Fort Lewis	Pierce
McChord Recycling Center	516 South Gate Road	McChord AFB	Pierce
Recycling Resources	13018 Canyon Rd E #B	Puyallup	Pierce
St Vincent De Paul S. 56th St	4009 S 56th St	Tacoma	Pierce
UpTekk (King and Pierce)	219 Frontage Rd. N, Suite A	Pacific	Pierce
Value Village Puyallup	1124 River Road	Puyallup	Pierce
Value Village University Place	6802 19th St W	University Place	Pierce
VIDEO ONLY - Tacoma	2218 South 41st St	Tacoma	Pierce
Lopez Solid Waste Disposal District	2419 Fisherman Bay Rd	Lopez Island	San Juan
Orcas Island Recycling and Transfer Station	3398 Orcas Road	Eastsound	San Juan
San Juan Transfer Station	212 Sutton Road	Friday Harbor	San Juan
Anacortes Kiwanis Aktion Club	Seafarers Way and Q Ave	Anacortes	Skagit
City Recycling Facility	315 Sterling Street	Sedro Woolley	Skagit
Goodwill Mount Vernon Store	242 East College Way	Mount Vernon	Skagit
Pacific Power Batteries	107 E. Cedar St	Mount Vernon	Skagit
Mt. Pleasant Transfer Station	1111 Mt. Pleasant Road	Stevenson	Skamania
Stevenson Transfer Station	1332 Ryan Allen Road	Stevenson	Skamania
Underwood Transfer Station	1402 Little Buck Creek Road	Underwood	Skamania
Ace Metal Company and Mukilteo Recycling Center	11110 Mukilteo Speedway #202	Mukilteo	Snohomish
Appliance Recycling Outlet	10105 Airport Way	Snohomish	Snohomish
Eman Computer Care - Monroe	119 WEST MAIN ST	Monroe	Snohomish
Eman Computer Care - Snohomish	402 MAPLE AVENUE	Snohomish	Snohomish
E-Waste LLC	12424 Beverly Park Road, Suite A-4	Lynnwood	Snohomish
Goodwill Edmonds Store	10117 Edmonds Way	Edmonds	Snohomish
Goodwill Everett Downtown Store	3002 Hoyt Ave	Everett	Snohomish
Goodwill Lynnwood Store	4027 198th Street SW	Lynnwood	Snohomish
Goodwill Martha Lake Donation Center	710 164th Street	Lynnwood	Snohomish
Goodwill Marysville Store	9315 State Avenue	Marysville	Snohomish
Goodwill Monroe Store	14751 Chain Lake Road SE	Monroe	Snohomish
Goodwill Snohomish Donation Center	823 Avenue D	Snohomish	Snohomish
Goodwill South Everett Store	228 SW Everett Mall Way	Everett	Snohomish
Northwest Center Mukilteo	12108 Mukilteo Speedway	Mukilteo	Snohomish
Pacific Power Batteries	3729 Broadway	Everett	Snohomish

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COLLECTION SITES

Collector Name	Address	City	County
Pacific Power Batteries	720 Cedar Avenue	Marysville	Snohomish
Pacific Power Batteries Mountlake Terrace	6702 220th St SW	Mountlake Terrace	Snohomish
St. Vincent de Paul Everett	6424 Broadway	Everett	Snohomish
St. Vincent dePaul Monroe	17150 W. Main St	Monroe	Snohomish
Truck On Call	19600 63rd Ave NE		Snohomish
Value Village Everett	6220 Evergreen Way	Everett	Snohomish
Value Village Lynnwood	17216 Hwy 99	Lynnwood	Snohomish
Value Village Marysville	1334 State Ave.	Marysville	Snohomish
Video Only - Lynnwood	19220 Alderwood Mall Parkway	Lynnwood	Snohomish
APB Auto Parts	W 15910 HWY 2	Medical Lake	Spokane
DeVries Business Services	601 E Pacific	Spokane	Spokane
DeVries Business Services - pick up service	601 E Pacific	Spokane	Spokane
Goodwill Cheney Donation Center	6 South Cheney Spokane Rd. at Ben Franklin store	Cheney	Spokane
Goodwill Downtown Spokane Plant/Dock Donation Cent	130 E Third Avenue	Spokane	Spokane
Goodwill Francis Donor Service Center	116 W. Francis Ave	Spokane	Spokane
Goodwill Mt. Spokane Donor Service Center	4015 E. Mt. Spokane Park Dr.	Mead	Spokane
Goodwill North Division Y Donation Center	9414 N Division St	Spokane	Spokane
Goodwill North Nevada Store	9832 North Nevada Street	Spokane	Spokane
Goodwill NW Blvd Store	1617 W. NW Blvd	Spokane	Spokane
Goodwill South Hill 57th Donor Service Center	57th & Mt. Vernon	Spokane	Spokane
Goodwill South Hill Store Donor Service Center	2929 E. 27th Ave	Spokane	Spokane
Goodwill South Pines Donor Service Center	1010 S. Pines	Spokane Valley	Spokane
Goodwill Spokane Valley Store	13721 East Sprague	Spokane Valley	Spokane
Goodwill Spokane Warehouse/Outlet	1406 E. Front Ave	Spokane	Spokane
Goodwill Wandermere Donor Service Center	11804 N. Division St.	Spokane	Spokane
Inland ReTech	7203 East Nora Ave Suite 100	Spokane	Spokane
Recycle Techs	6810 E. Appleway Blvd.	Spokane	Spokane
Recycle Techs North	3601 N. Nevada St.	Spokane	Spokane
Recycle Techs North - pick up service	3601 N. Nevada St.	Spokane	Spokane
Refine Computers	12604 N Nine Mile Rd.	Nine Mile Falls	Spokane
Salvation Army Spokane	2020 N Division	Spokane	Spokane
Salvation Army Spokane Valley	11211 E Sprague	Spokane Valley	Spokane
Value Village Spokane E Sprague	13112 E Sprague	Spokane	Spokane
Value Village Spokane W Boone	W 708 Boone	Spokane	Spokane
Video Only - Spokane	7755 N. Division St.	Spokane	Spokane

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COLLECTION SITES

Collector Name	Address	City	County
Goodwill Colville Store	168 North Main Street	Colville	Stevens
4th Dimension Computers	3929 Pacific Ave SE	Olympia	Thurston
Goodwill Hawks Prairie Landfill/ Recycle Station	2420 Hogum Bay Rd NE	Lacey	Thurston
Goodwill Lacey Store	1145 Galaxy Dr. NE	Lacey	Thurston
Goodwill Olympia Outlet	4014 Martin Way E	Olympia	Thurston
Goodwill Olympia Store	400 Cooper Point Rd SW	Olympia	Thurston
Goodwill South Lacey Store	4800 Yelm Highway SE	Lacey	Thurston
Goodwill Yelm Store	906 E Yelm Ave	Yelm	Thurston
MARS LLC	7827 Arab Dr SE	Olympia	Thurston
MARS LLC - pick up service	7827 Arab Dr SE	Olympia	Thurston
MIDWAY RECYCLING	7834 Old Hwy 99 SE	Tumwater	Thurston
Value Village Lacey	604 Sleater-Kinney Rd SE	Lacey	Thurston
CEP Recycle Walla Walla	1090 W Rose St	Walla Walla	Walla Walla
Goodwill Walla Walla Store	217 E. Alder St.	Walla Walla	Walla Walla
Lillie Rice Center, Inc	2616 E. Isaacs Avenue	Walla Walla	Walla Walla
Walla Walla Recycling	827 N. 12th	Walla Walla	Walla Walla
1PC LLC	805 W. Orchard Drive, Suite 6	Bellingham	Whatcom
Goodwill Bellingham Store	1115 East Sunset Drive	Bellingham	Whatcom
Recycling & Disposal Services	4916 LaBounty Dr	Ferndale	Whatcom
Salvation Army Bellingham	1515 Birchwood	Bellingham	Whatcom
Value Village Bellingham	150 East Bellis Fair Parkway	Bellingham	Whatcom
Goodwill Pullman Donor Service Center	1901 S. Grand Ave	Pullman	Whitman
Pullman Disposal Shop	135 NW Harold Dr	Pullman	Whitman
Goodwill Selah Store	503 So First St.	Selah	Yakima
Goodwill Sunnyside Store	2840 E. Lincoln Ave.	Sunnyside	Yakima
Goodwill Union Gap Store	1907 1st Ave S	Yakima	Yakima
Goodwill Yakima Store	3710 Tieton Drive	Yakima	Yakima
Salvation Army Yakima	9 S 6th Ave	Yakima	Yakima
Sunnyside Christian Thrift Shop	305 North Ave	Sunnyside	Yakima
Union Gospel Mission Yakima	1300 N 1st	Yakima	Yakima
Yakima Waste Systems Granger	340 SR 223	Granger	Yakima
Yakima Waste Systems Yakima	2812 1/2 Terrace Heights Drive	Yakima	Yakima

COLLECTION EVENTS

E-Cycle Washington Covered Electronic Products were collected from the public at these events in 2021.

EVENT HOLDER	DATE	LOCATION
BECU Everett	4/10/2021	BECU Everett 3900 Broadway Everett, WA 98201
BECU Everett	10/16/2021	BECU Everett 3900 Broadway Everett, WA 98201
BECU Federal Way	4/10/2021	BECU Federal Way 411 Pacific Hwy S Federal Way, WA 98003
BECU Federal Way	10/16/2021	BECU Federal Way 411 Pacific Hwy S Federal Way, WA 98003
BECU Tukwila	4/10/2021	BECU Tukwila 12770 Gateway Dr S Tukwila, WA 98168
BECU Tukwila	10/16/2021	BECU Tukwila 12770 Gateway Dr S Tukwila, WA 98168
City of Algona	4/10/2021	Algona City Hall Parking Lot 200 Washington Blvd Algona, WA 98011
City of Carnation	6/12/2021	Carnation Church of LDS 32751 NE 45th St. (Entwistle) Carnation, WA 98104
City of Covington	4/24/2021	Kentwood High School 25800 164th Ave SE Covington, WA 98042
City of Covington	9/11/2021	Kentwood High School 25800 164th Ave SE Covington, WA 98042
City of Des Moines	3/27/2021	Moines Marina 22307 Dock Avenue South Des Moines, WA 98198
City of Des Moines	11/6/2021	Moines Marina 22307 Dock Avenue South Des Moines, WA 98198
City of Duvall	7/17/2021	Innocents Church 26526 NE Cherry Valley Rd Duvall, WA 98019
City of Kenmore	10/23/2021	Kenmore Lutheran Church 6620 NE 185th St Kenmore, WA 98028
City of New Castle	9/25/2021	Hazelwood Elementary 7100 116th Ave SE Newcastle, WA 98056

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COLLECTION EVENTS

EVENT HOLDER	DATE	LOCATION
City of Normandy Park	4/24/2021	WA State Criminal Justice Training Center 19010 1st Ave South Burien, WA 98148
City of Normandy Park	10/2/2021	WA State Criminal Justice Training Center 19010 1st Ave South Burien, WA 98148
City of North Bend	4/24/2021	Snoqualmie Middle School 9200 Railroad Ave SE Snoqualmie, WA 9806
City of Pacific	10/23/2021	Pacific City Hall Parking Lot 100 3rd Avenue SE Pacific, WA 98047
City of Sammamish	4/10/2021	Eastside Catholic High School 232 228th Ave SE, Sammamish, WA 9807
City of Sammamish	9/18/2021	Eastside Catholic High School 232 228th Ave SE, Sammamish, WA 9807
City of SeaTac	10/23/2021	Tyee High School 4424 South 188th St. SeaTac, WA 98188
Quincy Valley Lions Club	4/10/2021	Quincy Recycling Division St E Quincy, WA 98848



OTHER COLLECTION SERVICES

Collection services for covered electronic products are required in all Washington State counties and cities with a population greater than 10,000 (RCW 70A.500.090).

City, Town or County	City or Town Population*	CEP Collection Service (2021)
Airway Heights	10,760	Collection sites are located in Spokane approximately 10 miles away.
Arlington	20,690	Collection sites are available in the adjacent city of Marysville.
Bothell	48,330	Collection sites and events are available in the adjacent city of Kenmore.
Camas	26,870	A collection site is available in the adjacent city of Washougal.
Covington	20,890	A collection site is available in the adjacent city of Maple Valley.
Des Moines	33,100	Collection event completed.
DuPont	10,180	A collection site is available approximately 10 miles away in Lakewood.
Edgewood	13,110	Collection sites are available in the adjacent city of Puyallup.
Fife	11,150	Collection sites are available in the adjacent cities of Tacoma and Puyallup.
Grandview	10,960	Collection sites are available approximately 8 miles away in Sunnyside.
Kelso	12,720	A collection site is available in the adjacent city of Longview.
Lake Forest Park	13,630	Collection sites are available in the adjacent city of Shoreline.
Lake Stevens	37,000	A collection site is available in the adjacent city of Marysville.
Liberty Lake	12,480	Collection sites are available approximately 7 miles away in Spokane Valley.
Lynden	15,930	Collection sites are available approximately 13 miles away in Ferndale and 15 miles away in Bellingham.
Mill Creek	20,930	Collection sites are available approximately 8 miles away in Lynnwood.
Newcastle	13,310	Collection event completed.
Poulsbo	12,000	A collection site is available approximately 9 miles away in Silverdale. A local collection event was proposed by Kitsap County but was not scheduled due in part to the pandemic.
Ridgefield	11,910	A collection site is available approximately 10 miles away in Battle Ground.
Sammamish	67,940	Collection event completed.
SeaTac	32,000	Collection event completed.
Snoqualmie	14,490	Collection events are held in the adjacent city of North Bend.
Sumner	10,700	Collection sites are available in the adjacent city of Puyallup.
Wahkiakum County	N/A	Collection events are held annually in Cathlamet, but were suspended in 2021 due to the pandemic.

* State of Washington Office of Financial Management, 2021

RECYCLED POUNDS BY PROCESSOR

Including Un-recycled Residuals and Reuse

	ACE METAL COMPANY	E-WASTE	EWC GROUP	METRO METALS TACOMA	METRO METALS VANCOUVER	URT	ERI	TOTAL	
POUNDS									%
CEP pounds recycled by each processor and on hand awaiting processing	3,378,049	2,189,418	2,034,095	2,959,904	2,764,225	714,421	222,916	14,263,028	93.05%
CEP pounds processor sent to reuse through refurbishment or re-sale	0	0	0	0	0	0	0	0	0.00%
Un-recycled residuals such as wood, un-recyclable plastic and floor sweep	455,188	85,000	44,427	183,121	193,102	80,572	24,176	1,065,586	6.95%
2021 TOTAL	3,833,237	2,274,418	2,078,522	3,143,025	2,957,327	794,993	247,092	15,328,614	100.0%



PROCESSOR PROCESSES AND METHODS

Processing methods and locations of all registered, participating electronic waste processors that were utilized in 2021

ACE METAL COMPANY, 11110 MUKILTEO SPEEDWAY #202, MUKILTEO, WA 98275 (425) 493-6802			
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing- Destnation Country
CRT Glass	Removed from CEP by hand dismantling. Panel and funnel separated and all metal removed	Materials reused in concrete products, Separated, smelted and used for glass tiles and other products	Canada, Korea
Circuit Boards	Removed from CEP by hand dismantling	Precious metals recovery	Japan
Batteries	Hand removed from CEP, and sorted by type and packaged	Make new batteries	USA
Mercury Devices	Hand removed from CEP, managed as universal waste	Retort, Mercury Recovery	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Hand removed from CEP and sorted	Metal Recovery	USA
Plastics	Hand removed from CEP and sorted	Plastic Recovery	Malaysia, China
Insulated Wire	Hand removed from CEP and sorted	Metal Recovery	USA
Aluminum	Hand removed from CEP and sorted	Metal Recovery	USA
Wood	Hand removed from CEP and sorted	Wood Recovery	USA

E-WASTE LLC, 12424 BEVERLY PARK RD SUITE A-4, LYNNWOOD, WA 98036 (425) 239-4118			
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing- Destnation Country
CRT Glass	It is removed from CRT TV's and monitors during disassembly process	Product manufacturing for production of ceramic tiles	Korea, Canada
Circuit Boards	Removed from CEP by hand-dismantling	Precious metals recovery	Belgium, Korea, Japan
Batteries	Removed manually and sorted by type.	Metal Recovery	USA, Canada
Mercury Containing Lamps	Hand-removed from CEP by hand dismantling, managed as universal waste.	Mercury Recovery	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Removed from CEP by hand-dismantling.	Metal Recovery	USA
Plastics	Removed from CEP by hand-dismantling.	Plastic Recovery	Malaysia
Insulated wire	Removed from CEP by hand-dismantling.	Metal Recovery	Japan
Aluminum	Removed from CEP by hand-dismantling.	Metal Recovery	Japan

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PROCESSOR PROCESSES AND METHODS

**ERI INC., 2302 WEST VALLEY HIGHWAY, STE 300, AUBURN, WA 98001
(206) 577-1490**

Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing- Destnation Country
CRT Glass	It is removed from CEP and screen and metal gun removed.	Glass to tile manufacturing or glass to glass.	Mexico, Spain, India
Circuit Boards	Boards are removed from CEP by manual separation. They are then sent to our Fresno facility for shredding.	Precious Metals Recovery	USA, Japan, Belgium, South Korea
Batteries	Removed manually and sorted by type	Metal Recovery	USA
Mercury Devices	Removed manually and managed as universal waste.	Mercury Recovery	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Removed Manually and sent to Fresno to be shredded	Metal Recovery	USA
Plastics	Removed manually from CEP and baled	Plastics Recovery	USA
Insulated Wire	Removed manually	Metal Recovery	USA
Aluminum	Removed manually	Metal Recovery	USA

**EWC GROUP, 410 ANDOVER PARK E., TUKWILA, WA 98188
(206) 767-9950**

Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing- Destnation Country
CRT Glass	Manually removed from CEP; separate panels, metals, and all other residuals	Glass to glass; all materials reused in new glass products or tiles	Mexico, South Korea
Circuit Boards	Manually removed from CEP	Primary smelter for precious metal recovery	USA, Japan
Batteries	Manually removed from CEP and sorted by type	Metal Recovery	USA
Mercury Devices	Manually removed from CEP and managed as Universal Waste	Mercury recovery	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Manually removed from CEP	Metal recovery	USA, Hong Kong
Plastics	Manually removed from CEP	Plastic Recovery	Canada, USA, China, Malaysia, Thailand
Insulated Wire	Manually removed from CEP	Metal recovery	Japan, USA
Aluminum	Manually removed from CEP	Metal recovery	USA

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PROCESSOR PROCESSES AND METHODS

METRO METALS, 2202 EAST RIVER ROAD, TACOMA, WA 98421
METRO METALS, 2401 ST. FRANCIS LANE, VANCOUVER, WA 98660
(253) 272-2364

Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing- Destnation Country
CRT Glass	Hand dismantle and remove intact whole tube from CEP, package to prevent release	Smelter. Byproducts used as cement or tile additive	Mexico, Canada
Circuit Boards	Removal of batteries, sort, and/or shred	Primary smelter for recovery of metals	USA , Korea, Japan, Belgium, Canada
Batteries	Hand sort by type and package for shipment	Metal recovery via recycling (lithium, nickel)	USA
Mercury Devices	Hand removed from CEP, package to prevent release	Mercury retort, elemental mercury recovery, crush to extract phosphor	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Removed from CEP by shredding or hand dismantling	Metal Recovery	USA
Plastics	Shredded and included with the circuit boards	Primary smelter	Japan
Insulated Wire	Removed by hand or shredding process	Metal Recovery	USA, Japan
Aluminum	Removed by shredding or by hand from the CEP	Metal Recovery	Japan, USA

URT, LLC, 10151 SE JENNIFER ST., CLACKAMAS, OR 97015
(503) 722-2236

Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing- Destnation Country
CRT Glass	Glass is crushed and inserted into the tile making process	Tile and lead recovered	Canada and USA
Circuit Boards	Removed from CEP by automated separation and shred process	Smelted/refined for precious metal recovery	USA, Japan
Batteries	Hand removed from CEP or received in as batteries separately. Hand sorted by type	Metal Recovery	USA
Mercury Devices	Received in as mercury devices separately. Hand sorted by type and shipped	Mercury recovery/retort	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Ferrous Metals	Removed from CEP by automated separation process	Metal recovery	USA, Japan
Plastics	Manual Sorting, Washing/Drying, Shredding/ Granulation, Blending, Compounding of plastic materials	Plastics recovery	USA, Malaysia
Non-Ferrous Metals	Removed from CEP by automated separation and sorting process	Metal recovery	USA, Japan

Note: Environmental compliance audit reports for direct processors of covered electronics are on file with Washington Ecology and available by request.

PROCESSOR MASS BALANCE OF MATERIALS

INBOUND: TOTAL POUNDS 2021	Computers	Laptops	E-Readers	E-Tablets	Monitors	Televisions	OTHER (non-covered)	TOTAL
Pounds collected and processed:	1,393,781	73,309	negligible	negligible	1,731,492	12,130,032	0	15,328,614
OUTBOUND: AT DECEMBER 31, 2021 FOR CALENDAR YEAR 2021								
RECOVERED / RECYCLED / IN PROCESS								
CRT GLASS	4,706,777							
CIRCUIT BOARDS	1,334,470							
BATTERIES	9,667							
MERCURY LAMPS	3,719							
PLASTIC	2,198,345							
METALS	5,521,302							
WOOD	26,376							
CEPs in storage awaiting processing	409,872							
CEPs in transit awaiting downstream processing	52,500							
TOTAL RECOVERED / RECYCLED / IN PROCESS:	14,263,028							
RECOVERED / RECYCLED / IN PROCESS								
COMPUTERS - (Desktop or integrated units)	0							
LAPTOPS	0							
TELEVISIONS	0							
MONITORS	0							
PARTS - SWAPPED OUT TO WORKING UNIT	0							
OTHER:	0							
TOTAL REUSED:	0							
UNRECYCLED RESIDUAL (TO LANDFILL)								
WOOD	682,558							
NON-RECYCLABLE PLASTIC	201,911							
OTHER: Trash, etc	181,117							
TOTAL RESIDUAL:	1,065,586							
TOTAL RECOVERED, RECYCLED, REUSED, RESIDUAL:	15,328,614							

SUMMARY OF PROCESSOR CLOSURE PLANS

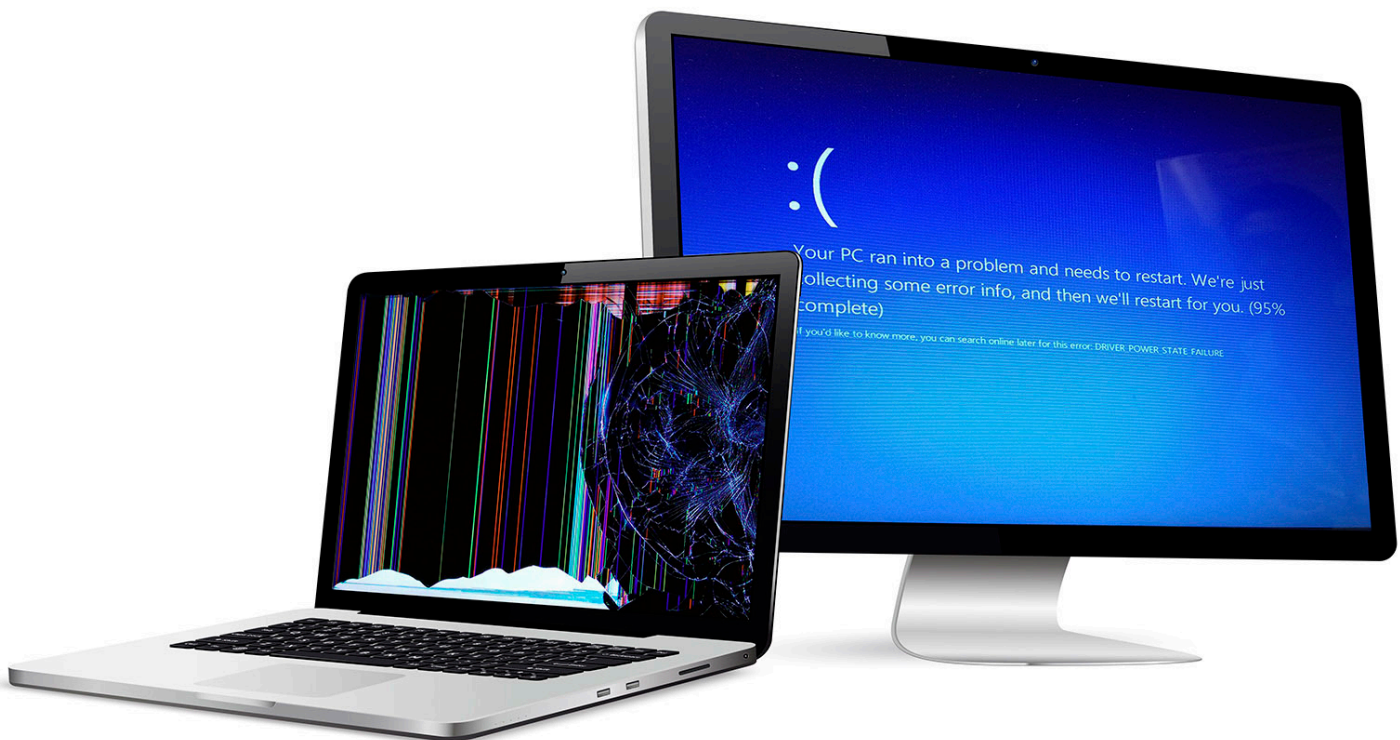
The Preferred Processing Standard requires registered processors to have adequate closure plans and a sufficient financial instrument to prevent the abandonment of CEPs and related materials.

CLOSURE PLAN ITEMS	ACE METAL	E-WASTE LLC	EWC GROUP	ERI	METRO METALS (TACOMA AND VANCOUVER)	URT
Clean up and engineering labor included	x		x	x	x	x
Maximum CRT inventory on hand identified		x	x	x	x	x
Wood, batteries, lamps pounds estimated	x	x	x		x	x
Transportation	x	x	x			x
Hazardous Materials handling and disposition		x	x	x	x	x
Downstream contingency plan				x	x	x
Closure schedule				x	x	
Clean up standards identified and outlined				x	x	
CLOSURE COST ESTIMATES:						
Material removal	x	x	x	x	x	x
Transport	x	x	x	Haz Mat only	Haz Mat Only	x
CRT glass disposal	x	x	x	x	x	x
Disposal of other materials	x	x	x	N/A	N/A	x
FINANCIAL MECHANISM:	Assignment of Account / Time Deposit	Standby Trust	Non assigned bank account reserve	Irrevocable Standby Letter of Credit	Line of Credit	Assurance Bond

MATERIALS OF CONCERN EXPORT INFORMATION

The preferred environmental standards, that all processors contracted with the WMMFA must subscribe to, require that any materials of concern (materials that present potential risk to human health or the environment) exported to a Non-OECD (Organization for Economic Co-operation and Development) member country have approval from the destination country and confirmation from the US Environmental Protection Agency.

The total weight of all materials of concern, including unwanted electronic products, electronic components, and electronics scrap collected by the WMMFA that have been exported from Washington state for plan year 2021, from processors used by the WMMFA, to countries that are not members of the Organization for Economic Co-operation and Development or the European Union = 0. This information is provided to WMMFA by each processor.



PROCESSOR VOLUME ALLOCATION FACTORS

The information below is excerpted from the WMMFA Standard Plan and describes some of the factors used in determining collected CEP volume allocation to participating processors.

COMPETITIVE RATES

- Rates by commodity make sense in comparison to freely bid rates by others, or suggested rates based on market conditions?
- Does processor transport in their proximity that would allow lower overall rate or better value?
- Has processor justified rates via quality of downstream vendors destinations?

ENVIRONMENTAL

- Are there any red flags in audit - how important are they?
- What is current inventory of materials requiring processing, and is it low or high in comparison to others?
- Does processor have reasonable assurance from downstream vendors as to ultimate disposition? Audits?
- What is the perceived RISK to the WMMFA of using processor? Are they in good standing in their communities?
- Considerations: Insurance, Litigation, Capital, Capacity, Expertise, Experience

CREATIVITY

- Does the processor use truck, ocean vessel, or train for lower environmental impact and expense?
- Does the processor use local vendors to save cost / environmental impact?
- Does the processor have multiple options in order to sustain plan compliance?
- Does the processor seem knowledgeable and have expertise in their field?
- Are their quality differences, perceived or real, of processors - by collectors that result in collector "requests" to use a certain processor?
- Does the Processor have a "re-use" component to their business?
- How much of the total weight of materials provided the processor is landfilled?
- Does the processor engage in public collection events coordinated by them?

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PROCESSOR VOLUME ALLOCATION FACTORS

CAPACITY: TRANSPORTER & PROCESSOR

- Does the processor require volume corrections (plus or minus) from the authority due to their own operational or staffing issues?
- Can the processor adjust to downturns and upturns given unpredictable collection volumes by region?
- Is the processor easy to work with?
- Does the processor have enough dock doors and staff to accept multiple deliveries at the same time?
- Does the processor ever turn away transporters for its own operational convenience?
- Do collectors or other transporter vendors complain about processors service when receiving?
- Will transports deliver to the processor for a reasonable rate? Do we incur detention charges?

PROXIMITY TO COLLECTOR

- The higher density of collection sites without self transport = great transport opportunity for processors
- Location of processor extremely important for both cost (length of transport) and environmental considerations
- Does proximity of processor trump actual commodity prices via lower transport cost?
- What is the weighted average processing cost by collector, by processor, and are other constraints (capacity, etc.) hit before this consideration?

AUXILIARY SERVICES: TRANSPORTATION

- Can the processor make small and large collector pick ups timely using the correct equipment (liftgate, box truck, semi)?
- How far, in miles, will a self transporting collector transport his materials, and, at what cost, before the WMMFA moves to use a processor in closer proximity for their (collector)
- Can the processor handle mistakes by collectors, transporters, the WMMFA or the public with a reasonable approach?
- Is the transporter getting sufficient volume from the WMMFA to remain interested in hauling favorable, and unfavorable, transport lanes?

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PROCESSOR VOLUME ALLOCATION FACTORS

BILLING ACCURACY TIMELINESS

- Does the Processor communicate effectively if there are questions or problems?
- Is the processor timely and accurate with invoices?
- Is the processor “high maintenance” in terms of WMMFA staff time?
- Does the processor provide feedback to the Authority when it encounters problems?
- Does the processor provide enough detail on invoices to identify all relevant recyclable downstreams by commodity type?
- Do processors invoiced weights match collectors estimated or actual weights where applicable?
- Is the processor responsive with informational requests?

EXISTING INFRASTRUCTURE

- Is the processor establishing operational plans that take business from an existing vendor with no value added?
- Are there competing services to what the processor offers that are a better value given any duplication of effort?

FAIRNESS PER RCW & WAC

- Is re-use or recycling the first option prior to disposal or incineration? (70.95N.030 (3) RCW)
- Is the business located in the State? (70.95N.060 (5)I, ii, iii RCW)
- Are all registered processors being utilized? (70.95N.280 RCW)
- Is the processor innovative? (70.95N.280 (7) RCW)
- Does the authority avoid the creation of new infrastructure by using processor/transporter/collector? (70.95N.310 (2) RCW)
- Is the authority following policy per it’s own Standard and Operating Plans? (70.95N.320 (4) RCW)
- Is the processor listed as in compliance with the “preferred” standards by Ecology? (173-900-300 (4)bii WAC)
- Is the processor in compliance with WMMFA contractual terms? (173-900-300 (4)bii WAC)

DESIGN FOR RECYCLING

WMMFA is required to document “...work done with processors used by the plan to promote and encourage the design of electronic products that are less toxic and contain components that are more recyclable;” (WAC 173-900-900). This category of this work is often termed “design for recycling”.

In 2021, activities with processors that were intended to encourage design for recycling included in-person meetings owners and senior managers of six, e-waste processing facilities. In these meetings, design for recycling was among the topics discussed. Processors reported no observed, design changes that could be specifically attributed to their input. They did confirm that the trend towards lighter weight devices has continued. Overall weight of processed electronics is a primary driver of program cost and the amount of electronic waste entering landfills. The reduction in weight of individual electronic products is a design change that makes them less toxic and more recyclable. While the population of Washington State has grown, the total weight of collected Covered Electronic Products (CEPs) has consistently decreased over the last nine years. In 2013, collected CEPs in Washington State was approximately 45 million pounds. In 2021, the weight of collected CEPs was approximately 15 million pounds.

Drivers of the reduced weight and toxicity of electronics include:

- The decreased use of cathode ray tube (CRT) monitors and televisions. This technology is being almost completely replaced with lighter LCD, LED and plasma technology.
- The growing preference for laptop computers over desktop computers.
- The preference and availability of multi-function products such as:
 - Smart phones with cameras
 - All-in-one printers that print, scan and copy
- The decrease in the number of circuit boards in televisions is being achieved through expanded software on individual boards.
- The reduction of toxic, mercury-containing lamps in LCD monitors.

As in years past, processors were invited to attend WMMFA board meetings to discuss design for recycling and other topics, although processors declined to attend board meetings in 2021.

Although it is unclear how much these trends are driven by manufacturers responding to consumer preference vs. environmental benefit, the resulting designs have led to reduced e-waste recycling volume, and less e-waste in landfills.

EDUCATION AND OUTREACH

The WMMFA conducted outreach activities in 2021 that were designed to raise program awareness in both urban and rural areas of the state.

In fall of 2021, outreach campaigns consisted of streaming audio spots and billboards.

E-Cycle posters and brochures are not considered to be program outreach materials because they are required to be used at collection sites by program rules. All new collection sites are provided with laminated posters with the E-Cycle Washington logo and messages about the recycling program. A tri-fold brochure is also provided at no-charge to municipalities, collection sites and others, on request. Replacement posters and brochures are provided at no charge.

2021 AUDIO SPOTS

Audio spots were aired over streaming devices in programming that included Internet radio stations and podcasts.

CAMPAIGN DATES	IMPRESSIONS
August 15 - September 15	242,923
September 16 - October 16	241,929
October 17 - November 14	267,598
Total	752,450

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EDUCATION AND OUTREACH

2021 BILLBOARDS

Billboards were placed in 4 Washington cities.

CAMPAIGN DATES	BILLBOARDS	LOCATION
August 30 - October 24	1	Longview
September 6 - October 31	3	Yakima
August 2 - October 24	2	Spokane
August 9 - October 24	1	Spokane
October 4 - November 28	1	Wenatchee

BILLBOARD EXAMPLE



RE-USE OF COLLECTED CEPs

Based on phone interviews and informal surveys of collectors that typically refurbish or re-sell used electronics the ratio of reused to recycled products varies considerably by type of collector, and type of product. An estimated 20-25% of the computer and flat screen products are given a cursory review for candidacy for either repair or re-sale. A subset, those that are thought to be the most valuable as used products, are considered for repair or re-sale. If they power on and appear to work, they go directly to re-sale. Some collectors that specialize in computer refurbishment may have higher repair rates than other collectors.

Non-profit collectors are performing less testing and repair than they had been in the initial years of the E-Cycle Washington program. Testing is normally reserved for high value products and/or products in pristine condition.

The E-Cycle Washington program was designed primarily as an end-of-life program for unwanted electronics and most of our collectors primarily focus on getting CEPs to the program for responsible recycling. None of the E-Cycle Washington registered processors were engaged in re-use or refurbishment of end of life products 2021. Therefore, 100% of reuse and refurbishment for resale was done at the collector level.

The WMMFA does not have the authority to require collectors to provide re-use statistics on collected CEPs. Our estimates are based on reported collection and processing data, and informal conversations with collectors with collectors and processors

MANUFACTURERS PARTICIPATING IN THE STANDARD PLAN IN 2021

Manufacturers are invoiced a portion of program expenses based on market share information that is provided to WMMFA by Washington Ecology.

3M Touch Systems
3MD Inc.
4th Dimension Computer
Acer America Corp
ADT LLC dba ADT Security Services
Afunta LLC
Amazon Fulfillment Services, Inc.
AMDOE, LLC
Amelia World Corp d/b/a LINSAY
American Future Tech Corp dba iBuypower
Angel Computer Systems Inc
APEMAN
Apple
ASA Electronics
Associated Computer Specialists
Asus Computer International
Atyme Corporation, Inc.
AWA Technology Inc.
Axess Products
Azpen Innovation, Inc.
Azulle
Bang & Olufsen
Barco, Inc.
Barnes&Noble.com LLC
BenQ America Corp
Bereson USA
Best Buy
BLU
Bosch Security Systems, Inc.
Cabeli Team America Limited
Caytan Enterprise (Vilros)
Cellco Partnership dba Verizon Wireless
China America Electronics Corp. Ltd.
CHUWI Innovation and Technology Co. Ltd.
Coastline Micro Inc.
Computer Connections
Computer Nut Hut
Computer Technology Link
Computer Works of Yakima Inc
Corsair
Craig Electronics, Inc
Crosley Corp.
Curtis International Ltd

Custom Computer Sales & Svc
Cutting Edge Computer Solutions
CWD limited
CyberPower
Cybertron International, Inc
Cycrest Systems Inc.
Dat-a-Way Computer Solutions
DeerBrook Electronics, LLC
Deli Stationery, Inc.
Dell Computer Corp
Diaotec
DigiLand Products
Digimaxis LLC
DPI Inc
Durabook Americas Inc.
Dynabook Americas, Inc.
EIZO Inc.
Element TV Company, LP
Elite Lux Technologies Inc.
Elitegroup Computer Systems
Elo Touch Solutions, Inc
Eluktronics, Inc.
Ematic
Emerson Radio Corp
Envision Peripherals Inc
Epik Learning, LLC
Equus Compute Solutions
EverFocus Electronics Corporation
F5CS LTD LLC
Facebook Technologies LLC
Falcon Northwest
Friendly Computers / Computer Renaissance
Fujitsu America, Inc.
Funai Corporation, Inc.
GAEMS, Inc.
General Digital
Google LLC
Grays Harbor Computer Svc
Greentech Energy Solutions Inc.
GVISION USA, Inc.
Haier America
Harman International, Industries, Inc.
HH Elements, Inc

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MANUFACTURERS PARTICIPATING IN THE STANDARD PLAN IN 2021

Manufacturers are invoiced a portion of program expenses based on market share information that is provided to WMMFA by Washington Ecology.

Himalaya Trading Inc
Hisense USA Corp
Hitachi America, LTD. Digital Media Division
HK Contrum Electronic Limited
HP Inc
HTC America, Inc.
Huawei Device USA, Inc.
ICI Touch Technology Inc.
ICON Health & Fitness, Inc.
IGEL America Sales Corporation
Ikegami Tsushinki Ltd.
InFocus Corp
Innovative Technology
Inspira Technologies LLC
Integrity Computers and Networking
Intel
International Business Machines Corp.
J & N Computer Service
Johnson Health Tech Co., Ltd
JVC KENWOOD USA Corp
Kaser Corp.
KD Group
Kobo Inc
L&S Enterprise Group Corp.
Last Stop Computers
Lenovo
Lexibook America
LG Electronics USA Inc
Lilliput Electronics Co, Ltd
Lorex Technology Inc.
Macari Baby, Inc.
Main Business Systems
Majestic Global USA
Marvel Entertainment, LLC
Mattel, Inc.
Microsoft Corporation
Mimo Inc
Minno LLC
Mitsubishi Electric US, Inc.
Modbook, Inc.
Modern Office Equipment
Motorola Mobility LLC
MSI Computer

MTM Trading LLC
Naxa Electronics, Inc.
NCS Technologies, Inc
NEC Display Solutions
Nixeus Technology, Inc.
NVIDIA Corp
Optoma Technology Inc
Oracle America Inc
OREI
Osram Sylvania
Pacific IT Services LLC
Panasonic Corporation of North America
Parsec Computer
PC Recycle
PDi Communication Systems, Inc.
Peerless-AV
Pelco
Peloton
Perfection PC Inc.
Philips Electronics
Planar Systems Inc
Plantronics
Plexon, Inc.
PLR IP Holdings, LLC
Precor Incorporated
Premio, Inc
Proexpress Distributor, LLC
Prostar Computer, Inc
Puget Sound Systems Inc.
Purism, Inc
Pyle Audio
Pyramid Distributing
Quality Computers & Svc
QuantumFX
QubicaAMF
Razer USA, Ltd.
Re-Pc Recycled Computers
RJ Technology, Inc
Sager Midern Computer Inc.
Samsung Electronics Co
Sceptre, Inc.
School Zone Publishing Company, Inc.
Sears Roebuck & Co.

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MANUFACTURERS PARTICIPATING IN THE STANDARD PLAN IN 2021

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Sensomatic Electronics LLC
Seura, Inc.
Shenzhen Avis Electronics Technology Co.
Shenzhen Haina Tianyuan Ecommerce Co., Ltd.
Shenzhen Siwei Shikong Technology Co. Ltd.
Shenzhen Valuelink E-Commerce Co.,Ltd.
Shenzhen Wave Multimedia Co., Ltd
Shuttle Computer Group
Simbans Limited
Singreen International Corporation, Ltd.
SkyVue
Skyworth USA Corporation
SMART Technologies ULC
Sony Electronics Inc
Source Code Corporation
Southern Telecom Inc
STOP
SunBriteTV LLC
Sungale Electronics
Supercircuits, Inc
Supersonic, Inc.
TCT Mobile, Inc
TekVisions, Inc
Tongfang Global
Toshiba America Information Systems, Inc.
ToteVision
Trans Cosmos America
TTE Technology Inc
Tyco Integrated Security
Unisys Direct
Up Time Technology
US Micro PC Inc

VAR Corporation
Venturer Electronics Inc
VGH Computer Services
ViewSonic Corp World HQ
VIZIO Incorporated
VOXX International Corp.
VTech Electronics North America, LLC
Wacom Technology
Walmart Inc.
Worldwide V7 Private Label
Worryfree Gadgets LLC
Xplore Technologies Corp
Yakima Networking
Zalmen Reiss & Associates, Inc.
Zebra Computers
ZOTAC USA, Inc.
ZTE USA



2021 REVENUE AND EXPENSES

TOTAL REVENUE (Q1-Q4 2021 invoices to participating manufacturers)	\$6,517,585	
OPERATIONAL EXPENSES		
Collection - registered collectors and covered events	1,371,108	25.55%
Transportation - registered transporters and collector transport	782,454	14.58%
Processing - to registered CEP processors	2,835,595	52.84%
Outreach - including advertising and promotional materials	35,004	0.65%
TOTAL OPERATIONAL EXPENSES	\$5,024,161	93.62%
ADMINISTRATIVE EXPENSES		
Salaries and wages	269,107	5.01%
Professional services - legal, accounting and consulting	14,580	0.27%
Audit and CPA review	11,632	0.22%
Rent	10,225	0.19%
Travel - hotels, meals and related expenses	9,269	0.17%
Office supplies	5,444	0.10%
Insurance	4,615	0.09%
Telephone and internet	5,589	0.10%
Meetings and seminars	619	0.01%
Postage and delivery	1,182	0.02%
Office hardware, software and equipment	5,823	0.11%
Utilities	230	0.00%
Bank service charges	1,199	0.02%
Miscellaneous	3,045	0.06%
TOTAL ADMINISTRATIVE EXPENSES	\$342,559	6.38%
TOTAL OPERATIONAL AND ADMINISTRATIVE EXPENSES	\$5,366,720	100.00%

ADDITIONAL FINANCIAL INFORMATION		
1. Total pounds collected and cost per pound for FY 2021		
CEP pounds collected and processed in 2021	15,328,614	
Total program cost per pound in 2021	\$0.350	
Change of Counting Method Adjustment	(727,710)	
Adjusted CEP pounds collected in 2021	14,600,904	
Adjusted total program cost per pound in 2021	\$0.368	
2. Other program financial details		
Financial reserve carry forward from 2020	(\$97,062)	
Financial reserves December 31, 2021	\$914,789	
Settlement funds carry forward from 2020	\$123,754	
3. Use of settlement funds		
CEP Tracking service	\$15,718	

APPENDIX:

Additional information available

POUNDS PROCESSED VERIFICATION

This document is over 200 pages long and includes processor invoice data for 2021. To request this document, send email to either of these addresses:

christine.haun@ecy.wa.gov (Washington Ecology)

info@wmmfa.net (WMMFA)

PROCESSOR ENVIRONMENTAL COMPLIANCE AUDITS

All registered electronic waste processors that participate in the E-Cycle Washington program are required to provide environmental audits annually. The audits are posted on the Washington Ecology website page titled “E-Cycle WA information for processors” here:

<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Electronics-Ecycle-guidance-and-reports/Processors>