

# 2023

# Annual Report



**E-CYCLE**  
**washington**

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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 2023, E-Cycle Washington collected nearly 12.9 million pounds of electronics. E-Cycle Washington has collected more than 466 million pounds of electronics since it began operations on January 1, 2009.

Electronics can be dropped off for free at over 220 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, 2024.



Peter Thermos  
Executive Director, WMMFA



# 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 2023 Excluding Reuse	Percent of Total Pounds by County	Computers	Monitors	Televisions	Total
Adams	17,460	0.1%	1,433	-	16,027	17,460
Asotin	36,971	0.3%	3,727	7,201	26,043	36,971
Benton	201,184	1.6%	31,827	26,306	143,051	201,184
Chelan	93,297	0.7%	12,645	12,752	67,900	93,297
Clallam	62,030	0.5%	6,112	7,100	48,818	62,030
Clark	940,591	7.3%	88,400	89,197	762,994	940,591
Columbia	-	0.0%	-	-	-	-
Cowlitz	213,653	1.7%	21,576	13,411	178,666	213,653
Douglas	16,627	0.1%	1,978	2,921	11,728	16,627
Ferry	9,317	0.1%	2,900	2,385	4,032	9,317
Franklin	81,403	0.6%	9,249	12,226	59,928	81,403
Garfield	5,894	0.0%	746	960	4,188	5,894
Grant	44,805	0.3%	7,290	5,884	31,631	44,805
Grays Harbor	125,660	1.0%	15,066	4,982	105,612	125,660
Island	231,746	1.8%	23,981	14,920	192,845	231,746
Jefferson	85,799	0.7%	17,436	10,547	57,816	85,799
King	4,691,186	36.4%	552,458	784,190	3,354,538	4,691,186
Kitsap	334,352	2.6%	19,268	31,587	283,497	334,352
Kittitas	31,510	0.2%	3,065	3,623	24,822	31,510
Klickitat	5,419	0.0%	3,511	-	1,908	5,419
Lewis	93,372	0.7%	11,045	8,043	74,284	93,372
Lincoln	22,552	0.2%	2,190	2,226	18,136	22,552
Mason	103,856	0.8%	9,878	11,713	82,265	103,856

# 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 2022 Excluding Reuse	Percent of Total Pounds by County	Computers	Monitors	Televisions	Total
Okanogan	25,312	0.2%	6,969	5,931	12,412	25,312
Pacific	30,675	0.2%	4,305	1,169	25,201	30,675
Pend Oreille	20,922	0.2%	2,827	443	17,652	20,922
Pierce	1,185,517	9.2%	100,401	218,662	866,454	1,185,517
San Juan	44,846	0.3%	5,209	5,823	33,814	44,846
Skagit	304,850	2.4%	26,654	29,699	248,497	304,850
Skamania	38,483	0.3%	602	2,126	35,755	38,483
Snohomish	1,945,496	15.1%	179,288	221,757	1,544,451	1,945,496
Spokane	656,608	5.1%	92,390	149,655	414,563	656,608
Stevens	16,627	0.1%	1,978	2,921	11,728	16,627
Thurston	242,228	1.9%	16,384	25,098	200,746	242,228
Wahkiakum	-	0.0%	-	-	-	-
Walla Walla	129,934	1.0%	13,910	19,980	96,044	129,934
Whatcom	440,124	3.4%	49,737	70,390	319,997	440,124
Whitman	72,297	0.6%	6,553	5,958	59,786	72,297
Yakima	271,435	2.1%	33,857	31,539	206,039	271,435
Total	12,874,038	100.0%	1,386,845	1,843,325	9,643,868	12,874,038

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

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

<b>TELEVISIONS</b>	
School District TV	15,516
Small Business TV	24,829
Small Government TV	6,174
<b>Total Televisions</b>	<b>46,519</b>

<b>MONITORS</b>	
School District Monitors	59,188
Small Business Monitors	31,214
Small Government Monitors	5,788
<b>Total Monitors</b>	<b>96,190</b>

<b>COMPUTERS</b>	
School District Computers	46,594
Small Business Computers	23,995
Small Government Computers	5,526
<b>Total Computers</b>	<b>76,115</b>

**TOTAL CEPs 218,824**

## NON-PROFIT POUNDS BY COLLECTOR

Total weight of Covered Electronic Products (CEPs) received from non-profit charitable organizations.

NON-PROFIT NAME	CEP POUNDS
All Shred	7,259
Anacortes Aktion Club	22,272
Deseret Industries - Puyallup	28,668
Deseret Industries - Shoreline	80,067
Goodwill Everett	1,313,330
Goodwill Pasco	241,500
Goodwill Seattle	1,121,865
Goodwill Spokane	452,427
Goodwill Tacoma	1,155,575
Goodwill Vancouver	424,319
Goodwill Wenatchee	70,400
Green Okanogan	16,780
Interconnection.org	185,763
Methow Recycles	12,293
Orcas Recycling Services	17,685
Salvation Army - Spokane Valley	13,290
Salvation Army - Yakima	11,222
St. Vincent De Paul - Bremerton	5,609
St. Vincent De Paul - Monroe	23,037
St. Vincent De Paul - Seattle	30,648
St. Vincent De Paul - Tacoma	17,578
Stanwood-Camano Kiwanis	14,707
Sunnyside Christian Thrift Store	8,243
Union Gospel Mission - Yakima	12,874
<b>TOTAL NON-PROFIT POUNDS:</b>	<b>5,287,441</b>



# COLLECTION SITES

These collection sites accepted covered electronics for recycling at no charge in 2023.

Collector Name	Address	City	County
Bruce Transfer Station	504 S Lucy Rd	Othello	Adams
Gigamedics	213 W Main	Ritzville	Adams
Ritzville Transfer Station	1803 E Danekas Rd	Ritzville	Adams
Asotin County Regional Landfill	2901 6th Avenue	Clarkston	Asotin
DTG Kennewick	119 E Albany Ave	Kennewick	Benton
DTG Richland	1936 Saint St	Richland	Benton
Goodwill Albertsons Donation Center	690 Gage Blvd.	Richland	Benton
Goodwill Columbia Center Mall Donation Center	100 Columbia Center Blvd	Kennewick	Benton
Goodwill Kave	2618 W Kennewick Ave	Kennewick	Benton
Goodwill Kennewick Store	345 S Columbia Center Blvd	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 Wenatchee	742 S. Mission St.	Wenatchee	Chelan
Goodwill Port Angeles Store	603 S Lincoln St	Port Angeles	Clallam
Goodwill Sequim Store	680 W Washington St, Ste C	Sequim	Clallam
Central Transfer and Recycling Center	11034 NE 117th Avenue	Vancouver	Clark
Goodwill Battleground Store	101 NW 20th Ave	Battleground	Clark
Goodwill Fishers Landing Store	1200 SE 162nd Pl.	Vancouver	Clark
Goodwill Hazel Dell Store	1600 NE 78th St.	Vancouver	Clark
Goodwill Orchards Store	14201 NE Fourth Plain Blvd	Vancouver	Clark
Goodwill Salmon Creek Store	14300 NE 20th Ave.	Vancouver	Clark
Goodwill Vancouver Outlet	9021 NE 117th Ave	Vancouver	Clark
Goodwill Vancouver Store	6425 NE Fourth Plain	Vancouver	Clark
Washougal Transfer Station	4020 S. Grant Street	Washougal	Clark
West Vancouver Materials Recovery Center	6601 NW Old Lower River Road	Vancouver	Clark
Columbia County Transfer Station	501 S Cottonwood	Dayton	Columbia
Goodwill Longview Store	1030 15th Avenue	Longview	Cowlitz
Waste Control Recycling	1150 3rd Ave	Longview	Cowlitz
Goodwill East Wenatchee Store	620 Grant Road	East Wenatchee	Douglas

# COLLECTION SITES

Collector Name	Address	City	County
Torboy Transfer Station	105 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 Street	Pasco	Franklin
CEP Recycle Garfield County	209 S 10th St	Pomeroy	Garfield
CDSI Transfer & Recycle	9524 Rd 7 NE	Moses Lake	Grant
Consolidated Disposal Service	2370 Basin St SW	Ephrata	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. Aberdeen	1813 Westport Road	Aberdeen	Grays Harbor
Waste Connections Inc dba Aberdeen Sanitation	29 Gavett Lane	Montesano	Grays Harbor
Camano Island Transfer Station & Recycle Park	75 E. Camano Hill Road	Camano Island	Island
DTG Coupeville	20018 SR 20	Coupeville	Island
DTG Freeland	20014 SR 525	Freeland	Island
North Whidbey Drop Box Station	3151 N. Oak Harbor Road	Oak Harbor	Island
Goodwill Port Townsend Store	602 Howard St	Port Townsend	Jefferson
Skookum Recycle	301 County Landfill Rd	Port Townsend	Jefferson
Busby Junk Removal	11821 124th Ave NE	Kirkland	King
Deseret Industries - Shoreline	17935 Aurora Ave N	Shoreline	King
EcoLights Northwest	1915 South Corgiat Drive	Seattle	King
Enumclaw Recyclers	2032 Garrett St., Ste. A	Enumclaw	King
E-Recycle Mercer Island Site	7835 SE 30th Street	Mercer Island	King
EWC Group, Inc	Kent 228 Building B, 22633 83rd Ave S	Kent	King
Friendly Earth International Inc.	1560 1st Avenue South	Seattle	King
Goodwill Auburn Store	1519 Auburn Way S	Auburn	King
Goodwill Ballard Store	6400 8th Avenue NW	Seattle	King
Goodwill Burien Store	1031 SW 128th Street	Burien	King
Goodwill Capitol Hill	115 Belmont Avenue East	Seattle	King
Goodwill Federal Way Store	32521 Pacific Hwy S	Federal Way	King
Goodwill Juanita Store	9826 NE 132nd Street	Kirkland	King
Goodwill Kent 360	315 Washington Ave S	Kent	King

# COLLECTION SITES

Collector Name	Address	City	County
Goodwill Maple Valley Store	27077 Maple Valley/Black Diamond Hwy	Maple Valley	King
Goodwill North Transfer Station	1350 N. 34th Street	Seattle	King
Goodwill Ravenna Donation Center	4637 Union Bay Place NE	Seattle	King
Goodwill Redmond (Bellevue) Store	15301 NE 24th Street	Redmond	King
Goodwill Renton Store	3210 NE Sunset Blvd	Renton	King
Goodwill Sammamish Donation Center	228th NE and NE 8th (Behind Safeway)	Sammamish	King
Goodwill Seattle Store	1400 South Lane St	Seattle	King
Goodwill Shoreline Store	14500 15th Avenue NE	Shoreline	King
Goodwill South Lake Union	411 Westlake Avenue North	Seattle	King
Goodwill Totem Lake Donation Center	12221 120th Avenue NE	Kirkland	King
Goodwill Tukwila Store	1174 Andover Park West	Tukwila	King
Goodwill University District Store	4552 University Way NE	Seattle	King
Goodwill Woodinville Donation Center	17524 131st Ave NE	Woodinville	King
Goodwill Woodinville P&R Donation Center	17800 140th Avenue NE	Woodinville	King
Green Label Recycling	927 Thomas Ave SW	Renton	King
InterConnection Charitable Reuse & Recycling	1121 N 35th St.	Seattle	King
Living Green Technology	1720 Pike Street NW, Suite 4	Auburn	King
North Sound Hauling and Reload Facility	6211 234th St SE	Woodinville	King
Pacific Power Batteries of Kirkland	13205 NE 124th St #A	Kirkland	King
PC Recycle - Woodinville	5817 238th St SE	Woodinville	King
Rain City Recycling, LLC	4150 B PI NW Suite 103	Auburn	King
RE-PC Seattle	1565 Sixth Avenue South	Seattle	King
RE-PC Tukwila	600 Andover Park East	Tukwila	King
St Vincent de Paul 1st Ave S	13445 1st Ave South	Burien	King
St Vincent de Paul 4th Ave S	5950 4th Ave. S	Seattle	King
St Vincent de Paul Bothell Way NE	7304 Bothell Way NE	Kenmore	King
St Vincent de Paul Kent	310 Central Ave N	Kent	King
St Vincent de Paul Renton	575 Rainier Ave N	Renton	King
The Salvation Army Thrift Store, Shoreline	15403 Westminster Wy N	Shoreline	King
The Salvation Army Thrift Store, Tukwila	16705 Southcenter Pkwy	Tukwila	King

# COLLECTION SITES

Collector Name	Address	City	County
Total Reclaim	7021 South 220th St	Kent	King
UpTeKK	101 Lund Rd	Auburn	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 Tukwila	16700 Southcenter Parkway	Tukwila	King
Value Village Woodinville	14160 NE Woodinville Duval Road	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	Tuwila	King
Bainbridge Island Recycling & Garbage Facility	7215 Vincent Rd	Bainbridge	Kitsap
Bremerton St. Vincent dePaul	3449 Wheaton Way	Bremerton	Kitsap
Goodwill Bainbridge Island Donation Center	645 High School Road NE	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	9380 SW Barney White Rd	Bremerton	Kitsap
Peninsula All Shred	5800 W. Werner Rd. STE B	Bremerton	Kitsap
Upgrade Stations	9644 Bujacich Rd, Suite H	Gig Harbor	Kitsap
Goodwill Ellensburg Store	400 W. Washington Avenue	Ellensburg	Kittitas
Republic Services Div 4178 - 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 Plaza Blvd Ste. 210	Shelton	Mason
Pay More Recycle and Salvage Inc Shelton	2278 East Brockdale Road	Shelton	Mason
Delano Regional Transfer Station	22152 Alcan Dr NE	Grand Coulee	Okanogan
Green Okanogan	3 Rodeo Rd.	Tonasket	Okanogan
Methow Recycles	12 Twisp Airport Rd	Twisp	Okanogan
Sunrise Main	330 Ferry St	Omak	Okanogan
Pacific Solid Waste Disposal	4404 67th Pl.	Long Beach	Pacific
Royal Heights Transfer Station	876 State Route 105	Raymond	Pacific

# COLLECTION SITES

Collector Name	Address	City	County
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	Usk	Pend Oreille
Deseret Industries - Puyallup	716 South Hill Park Dr	Puyallup	Pierce
Goodwill 38th Street Store	3121 South 38th St	Tacoma	Pierce
Goodwill Bonney Lake Store	21153 Hwy 410 E	Bonney Lake	Pierce
Goodwill Gig Harbor Store	5500 Olympic Dr NW, Bldg E	Gig Harbor	Pierce
Goodwill Lakewood Store	6002 Mount Tacoma Dr SW	Lakewood	Pierce
Goodwill North Tacoma Store	5401 6th Ave, Ste 600	Tacoma	Pierce
Goodwill Puyallup Store	1200 4th Street NW	Puyallup	Pierce
Goodwill South Hill Store	12915 Meridian Ave E	Puyallup	Pierce
Goodwill South Tacoma Store	8025 S Hosmer St	Tacoma	Pierce
Goodwill Spanaway Store	14918 Pacific Ave. S	Spanaway	Pierce
Goodwill Tacoma Outlet Store	3120 S Pine St	Tacoma	Pierce
Green PC	3627 S 54th St	Tacoma	Pierce
Joint Base Lewis-McChord Recycle Center	Bldg 5290	Ft Lewis	Pierce
McChord Recycling Center	Bldg 516 South Gate Road	McChord AFB	Pierce
Oakland Affordable Computers	3901 Center St	Tacoma	Pierce
Recycling Resources	5317 131st Street Ct E	Tacoma	Pierce
St. Vincent de Paul S. 56th St.	4009 S. 56th st.	Tacoma	Pierce
Value Village Puyallup	1124 River Road	Puyallup	Pierce
Value Village University Place	6802 19th St W	University Place	Pierce
Video Only - Tacoma	2218 S. 41ST St	Tacoma	Pierce
Lopez Solid Waste Disposal District	2419 Fisherman Bay Road	Lopez Island	San Juan
Orcas Recycling Services	3398 Orcas Road	Eastsound	San Juan
San Juan Transfer Station	212 Sutton Road	Friday Harbor	San Juan
Anacortes Aktion Club	1911 Commercial Ave	Anacortes	Skagit
Goodwill Mount Vernon Store	242 East College Way	Mount Vernon	Skagit
Goodwill Sedro-Wooley Donation Center	506 Crossroads Square	Sedro-Wooley	Skagit
Pacific Power Batteries Mount Vernon	107 E Cedar St	Mount Vernon	Skagit
Sedro-Woolley City Recycling Facility	1675 third Street	Sedro-Woolley	Skagit
Mt. Pleasant Transfer Facility	1111 Mt. Pleasant Rd.	Washougal	Skamania
Stevenson Transfer Facility	1332 Ryan Allen Rd.	Stevenson	Skamania
Underwood Transfer Facility	1402 Little Buck Creek Rd.	Underwood	Skamania

# COLLECTION SITES

Collector Name	Address	City	County
Ace Metal Company and Mukilteo Recycling Center	11110 Mukilteo Speedway #202	Mukilteo	Snohomish
Appliance Recycling Outlet	10105 Airport Way	Snohomish	Snohomish
Eman computer Care	119 West Main St	Monroe	Snohomish
Eman Computer Care	402 Maple Avenue	Snohomish	Snohomish
E-Waste, LLC - Mountlake Terrace	22313 70th Ave W Ste L4	Mountlake Terrace	Snohomish
Goodwill Edmonds Store	10117 Edmonds Way	Edmonds	Snohomish
Goodwill Everett Store	3002 Hoyt Avenue	Everett	Snohomish
Goodwill Lynnwood Store	4027 198th Street Southwest	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
Kiwanis Recycle	27001 94th Dr NW, D1	Stanwood	Snohomish
Pacific Power Batteries Everett	3729 Broadway	Everett	Snohomish
Pacific Power Batteries Marysville	720 Cedar Ave	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 de Paul Monroe	17150 West Main Street	Monroe	Snohomish
The Junkluggers of North Puget Sound	3410 64th Ave NE	Marysville	Snohomish
Truck On Call	6933 114th Ave NE	Lake Stevens	Snohomish
Value Village Everett	6220 Evergreen Way	Everett	Snohomish
Value Village Lynwood	17216 Hwy 99	Lynnwood	Snohomish
Value Village Marysville	1334 State Ave	Marysville	Snohomish
Video Only - Lynnwood	19220 Alderwood Mall Parkway	Lynnwood	Snohomish
DeVries Business Services	601 E. Pacific	Spokane	Spokane
Goodwill Airway Heights Donor Service Center	9837 W. Flight Drive	Spokane	Spokane
Goodwill Downtown Spokane Donation Center	130 E Third Avenue	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 Store Donor Service Center	2929 E. 27th Ave	Spokane	Spokane
Goodwill Spokane Valley Store	13721 East Sprague	Spokane Valley	Spokane

# COLLECTION SITES

Collector Name	Address	City	County
Inland ReTech	7203 E. Nora Ave., Ste. 100	Spokane Valley	Spokane
Recycle Techs	6810 E. Appleway Blvd	Spokane Valley	Spokane
The Salvation Army Thrift Store, Spokane	2020 N Division	Spokane	Spokane
The Salvation Army Thrift Store, Spokane Valley	11211 E Sprague	Spokane Valley	Spokane
Value Village Spokane E Sprague	12205 East Sprague Ave	Spokane Valley	Spokane
Value Village Spokane W Boone	W 708 Boone	Spokane	Spokane
Video Only - Spokane	7755 N. Division St.	Spokane	Spokane
Goodwill Colville Store	168 North Main Street	Colville	Stevens
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
Regency Technologies	7827 Arab Dr SE	Olympia	Thurston
State Surplus Tumwater Site	7511 New Market St SW	Tumwater	Thurston
Value Village Lacey	604 Sleater-Kinney Rd SE	Lacey	Thurston
CEP Recycle Walla Walla	871 West Rose	Walla Walla	Walla Walla
Goodwill College Place	1017 NE C St	College Place	Walla Walla
Walla Walla Recycling	827 North 12th Ave	Walla Walla	Walla Walla
1PC LLC	3550 Meridian St, Ste 2	Bellingham	Whatcom
Goodwill Bellingham Store	1115 East Sunset Drive	Bellingham	Whatcom
Recycling & Disposal Services, Inc.	4916 LaBounty Dr.	Ferndale	Whatcom
Value Village Bellingham	150 East Bellis Fair Parkway	Bellingham	Whatcom
Goodwill Pullman Donor Service Center	815 S Grand Ave	Pullman	Whitman
Pullman Disposal Shop	135 NW Harold Dr	Pullman	Whitman
Goodwill Selah Store	503 S First St	Selah	Yakima
Goodwill Sunnyside Store	2840 E. Lincoln Ave.	Sunnyside	Yakima
Goodwill Union Gap Store	1907 1st Ave S	Union Gap	Yakima
Goodwill Yakima Store	3710 Tieton Drive	Yakima	Yakima
Sunnyside Christian Thrift Shop	305 North Ave	Sunnyside	Yakima
The Salvation Army Thrift Store, Yakima	9 S 6th Ave	Yakima	Yakima
Union Gospel Mission Yakima	1300 N 1st St	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 2023.

EVENT HOLDER	DATE	LOCATION
BECU Everett	4/16/2023	BECU Everett 3900 Broadway Everett, WA 98201
BECU Everett	10/21/2023	BECU Everett Mall 1510 SE Everett Mall Way Everett, WA 98208
BECU Federal Way	2/25/2023	411 Pacific Hwy S Federal Way, WA 98003
BECU Federal Way	10/14/2023	411 Pacific Hwy S Federal Way, WA 98003
BECU Tukwila	5/20/2023	BECU Tukwila 12770 Gateway Dr S Tukwila, WA 98168
BECU Tukwila	10/21/2023	BECU Tukwila 12770 Gateway Dr S Tukwila, WA 98168
City of Algona	4/22/2023	Algona City Hall Parking Lot 200 Washington Blvd Algona, WA 98011
City of Arlington	6/10/2023	City of Arlington 18204 59th Ave NE Arlington, WA 98223
City of Carnation	6/10/2023	Carnation Church of LDS 32751 NE 45th St. (Entwistle) Carnation, WA 98104
City of Covington	5/20/2023	Kentwood High School 25800 164th Ave SE Covington, WA 98042
City of Covington	9/9/2023	Kentwood High School 25800 164th Ave SE Covington, WA 98042
City of Covington/ Maple Valley	8/18/2023	Tahoma High School 23499 SE Tahoma Way Maple Valley, WA 98038



# COLLECTION EVENTS

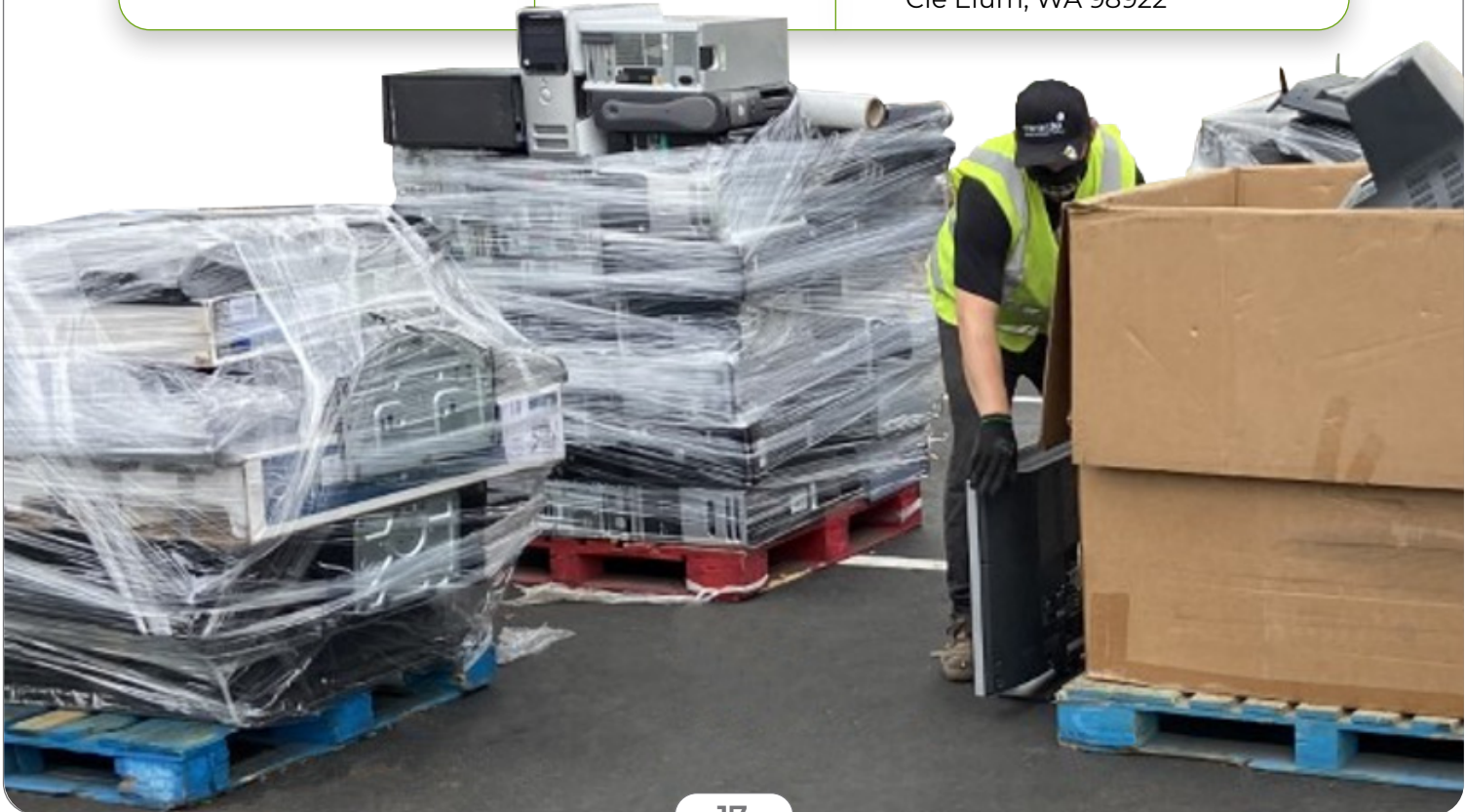
EVENT HOLDER	DATE	LOCATION
City of Des Moines	3/25/2023	Moines Marina 22307 Dock Avenue South Des Moines, WA 98198
City of Des Moines	11/4/2023	Moines Marina 22307 Dock Avenue South Des Moines, WA 98198
City of Duvall	7/15/2023	Holy Innocents Church 26526 NE Cherry Valley Rd Duvall, WA 98019
City of Enumclaw	8/4/2023	Enumclaw Library 1859 Railroad St. Enumclaw, WA 98022
City of Kenmore	5/13/2023	Kenmore Lutheran Church 6620 NE 185th St Kenmore, WA 98028
City of Kenmore	6/16/2023	Kenmore Lutheran Church 6620 NE 185th St Kenmore, WA 98028
City of Kenmore	9/30/2023	Kenmore Lutheran Church 6620 NE 185th St Kenmore, WA 98028
City of Kent	7/14/2023	Glenn Nelson Park 3216 South 268TH St. Kent, WA 98032
City of Kent	8/18/2023	Hogan Park 24400 Russell Road, Kent, WA 98032
City of Mercer Island	6/9/2023	Mercer Island City Hall 9611 SE 36th St Mercer Island, WA 98040
City of Mercer Island	11/4/2023	Mercer Island City Hall 9611 SE 36th St Mercer Island, WA 98040
City of New Castle	4/8/2023	Hazelwood Elementary 7100 116th Ave SE Newcastle, WA 98056

# COLLECTION EVENTS

EVENT HOLDER	DATE	LOCATION
City of New Castle	10/21/2023	Hazelwood Elementary 7100 116th Ave SE Newcastle, WA 98056
City of Normandy Park	5/6/2023	WA State Criminal Justice Training Center 19010 1st Ave South Burien, WA 98148
City of Normandy Park	9/30/2023	WA State Criminal Justice Training Center 19010 1st Ave South Burien, WA 98148
City of North Bend	4/29/2023	Snoqualmie Middle School 9200 Railroad Ave SE Snoqualmie, WA 98065
City of Pacific	10/7/2023	Pacific City Hall Parking Lot 100 3rd Avenue SE Pacific, WA 98047
City of Sammamish	4/8/2023	Eastside Catholic High School 232 228th Ave SE, Sammamish, WA 9807
City of Sammamish	9/23/2023	Eastside Catholic High School 232 228th Ave SE, Sammamish, WA 9807
City of SeaTac	11/18/2023	Tyee High School 4424 South 188th St. SeaTac, WA 98188
Edmonds College	3/18/2023	Edmonds College 20000 68th Ave. W Lynnwood, WA 98036
Lewis County Public Works	4/22/2023	Packwood Community Hall 12935 US-12 Packwood, WA 98361
Lewis County Public Works	10/13/2023	Packwood Community Hall 12935 US-12 Packwood, WA 98361
Lewis County Public Works	6/10/2023	Pe Ell Town Hall 111 Main St Pe Ell, WA 98572

# COLLECTION EVENTS

EVENT HOLDER	DATE	LOCATION
Lewis County Public Works	9/23/2023	Pe Ell Town Hall 111 Main St Pe Ell, WA 98572
Lewis County Public Works	4/29/2023	South County Regional Park 212 Ray Rd. Toledo, WA 98591
Lewis County Public Works	10/28/2023	South County Regional Park 212 Ray Rd. Toledo, WA 98591
Lewis County Public Works	4/8/2023	Winlock Drop Box 1105 Winlock-Vader Road Winlock, WA 98596
Lewis County Public Works	9/9/2023	Winlock Drop Box 1105 Winlock-Vader Road Winlock, WA 98596
Quincy Valley Lions Club	4/22/2023	City of Quincy at Central Bean 815 E St SW Quincy, WA 98848
Suncadia Nelson Farm	4/22/2023	Suncadia Nelson Farm 2121 Swiftwater Drive Cle Elum, WA 98922



## 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 (2023)
Airway Heights	11,280	Collection sites are located in Spokane approximately 10 miles away.
Arlington	21,740	Collection event completed.
Bothell	49,550	Collection sites and events are available in the adjacent city of Kenmore.
Camas	27,420	A collection site is available in the adjacent city of Washougal.
Cheney	13,160	Collection sites are available approximately 14 miles away in Spokane.
Covington	21,600	Collection events completed.
Des Moines	33,260	Collection events completed.
Dupont	10,180	Collection sites are available approximately 8 miles away in Lakewood.
Edgewood	13,590	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	11,250	Collection sites are available approximately 8 miles away in Sunnyside.
Kelso	12,750	A collection site is available in the adjacent city of Longview.
Kenmore	24,230	Collection events completed.
Lake Forest Park	13,660	Collection sites are available in the adjacent city of Shoreline.
Lake Stevens Snohomish.	41,260	Collection sites are available in the adjacent cities of Marysville and
Liberty Lake Valley.	13,150	Collection sites are available approximately 7 miles away in Spokane
Lynden	16,520	Collection sites are available approximately 13 miles away in Ferndale and 15 miles away in Bellingham.
Mill Creek	21,630	A collection sites are available approximately 3 miles away in Everett.
Newcastle	13,610	Collection event completed.

\* State of Washington Office of Financial Management, 2023

# 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 (2023)
Poulsbo	12,400	A collection site is available approximately 8 miles away in Silverdale.
Ridgefield	15,180	Collection sites are available approximately 7 miles away in Vancouver and Battleground.
Sammamish	68,280	Collection events completed.
SeaTac	31,740	Collection event completed.
Snoqualmie	14,500	Collection event completed.
Sumner	10,800	Collection sites are available in the adjacent city of Puyallup.
Tumwater	27,100	Collection sites are available approximately 3 miles away in Olympia.
Wahkiakum County	N/A	A collection site is available in Long Beach approximately 30 miles outside of the county.

\* State of Washington Office of Financial Management, 2023

# RECYCLED POUNDS BY PROCESSOR

Including Un-recycled Residuals and Reuse

	ACE METAL COMPANY	E-WASTE	ERI	EWC GROUP	METRO METALS TACOMA	METRO METALS VANCOUVER	URT	2023 TOTAL	
	POUNDS								%
CEP pounds recycled by each processor and on hand awaiting processing	2,789,980	2,047,363	0	1,725,008	2,993,151	2,095,452	450,107	12,101,061	94%
CEP pounds processor sent to reuse through refurbishment or re-sale	0	0	0	0	0	0	0	0	0%
Un-recycled residuals such as wood, un-recyclable plastic and floor sweep	407,908	97,000	0	69,703	107,310	72,501	18,555	772,977	6%
<b>TOTAL</b>	<b>3,197,888</b>	<b>2,144,363</b>	<b>0</b>	<b>1,794,711</b>	<b>3,100,461</b>	<b>2,167,953</b>	<b>468,662</b>	<b>12,874,038</b>	<b>100%</b>



# PROCESSOR PROCESSES AND METHODS

Processing methods and locations of all registered, participating electronic waste processors that were utilized in 2023

<b>ACE METAL COMPANY, 11110 MUKILTEO SPEEDWAY #202, MUKILTEO, WA 98275 (425) 493-6802</b>			
<b>Material Of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>End of life processing- Destnation Country</b>
CRT Glass	Removed from CEP by hand dismantling. Panel and funnel separated and all metal removed	The glass is processed by shredding. Then they treat the leaded glass and make an end product of glass frit.	USA
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
<b>Non-Materials of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>Destination</b>
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

<b>E-WASTE LLC, 12424 BEVERLY PARK RD SUITE A-4, LYNNWOOD, WA 98036 (425 ) 239-4118</b>			
<b>Material Of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>End of life processing- Destnation Country</b>
CRT Glass	It is removed from CRT TV's and monitors during disassembly process	Product manufacturing for production of ceramic tiles	USA
Circuit Boards	Removed from CEP by hand-dismantling	Precious metals recovery	Belgium, South Korea
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
<b>Non-Materials of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>Destination</b>
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	Belgium, Japan
Aluminum	Removed from CEP by hand-dismantling.	Metal Recovery	Belgium, Japan

# PROCESSOR PROCESSES AND METHODS

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

<b>Material Of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>End of life processing- Destnation Country</b>
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	USA
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
<b>Non-Materials of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>Destination</b>
Steel	Manually removed from CEP	Metal recovery	USA
Plastics	Manually removed from CEP	Plastic recovery	Canada, Malaysia
Insulated Wire	Manually removed from CEP	Metal recovery	Japan, USA
Aluminum	Manually removed from CEP	Metal recovery	USA

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

<b>Material Of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>End of life processing- Destnation Country</b>
CRT Glass	Hand dismantle and remove intact whole tube from CEP, package to prevent release	Smelter. Byproducts used as cement or tile additive	USA
Circuit Boards	Removal of batteries, sort, and/or shred	Primary smelter for recovery of metals	USA, Japan
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
<b>Non-Materials of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>Destination</b>
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



# PROCESSOR PROCESSES AND METHODS

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

<b>Material Of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>End of life processing- Destination Country</b>
CRT Glass	Glass is crushed and inserted into the tile making process	Tile and lead recovered	USA
Circuit Boards	Removed from CEP by automated separation and shred process	Smelted/refined for precious metal recovery	USA, Japan, Belgium, France, Korea
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
<b>Non-Materials of Concern</b>	<b>Recycling Process</b>	<b>Fate of Recycling Process</b>	<b>Destination</b>
Ferrous Metals	Removed from CEP by automated separation process	Metal recovery	USA
Plastics	Manual Sorting, Washing/Drying, Shredding/ Granulation, Blending, Compounding of plastic materials	Plastics recovery	USA, Malaysia
Insulated Wire	Manually removed	Metal Recovery	USA, Japan
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.

# DIRECT PROCESSOR SUBCONTRACTORS

Proprietary information regarding subcontractors is on file with the Department of Ecology but is not included on the public annual report for E-Cycle Washington.

# PROCESSORS CEP MASS BALANCE REPORT

<b>INBOUND: Total Pounds 2023</b>	Computers	Laptops	E-Readers	E-Tablets	Monitors	Televisions	OTHER (non-covered)	TOTAL
Pounds collected and processed:	1,229,270	168,436	0	13,936	1,832,995	9,614,012	15,388	12,874,038
<b>OUTBOUND: CALENDAR YEAR 2023</b>								
<b>RECOVERED / RECYCLED / IN PROCESS</b>								
CRT GLASS						2,243,007		
CIRCUIT BOARDS						1,439,134		
BATTERIES						14,197		
MERCURY LAMPS						3,523		
PLASTIC						1,542,459		
METALS						5,853,182		
WOOD						8,576		
CEP's in storage awaiting processing						359,075		
CEP's in transit awaiting downstream processing						648,793		
<b>TOTAL RECOVERED / RECYCLED / IN PROCESS:</b>						<b>12,111,945</b>		
<b>REUSED</b>								
COMPUTERS (Desktop or integrated units)						0		
LAPTOPS						0		
TELEVISIONS						0		
MONITORS						0		
PARTS (Swapped out to working unit)						0		
OTHER						0		
<b>TOTAL REUSED:</b>						<b>0</b>		
<b>UNRECYCLED RESIDUAL (TO LANDFILL)</b>								
WOOD						539,836		
NON-RECYCLABLE PLASTIC						84,313		
OTHER: Trash, etc						137,944		
<b>TOTAL RESIDUAL:</b>						<b>762,093</b>		
<b>TOTAL RECOVERED, RECYCLED, REUSED, RESIDUAL:</b>						<b>12,874,038</b>		

# SUMMARY OF PROCESSOR CLOSURE PLANS

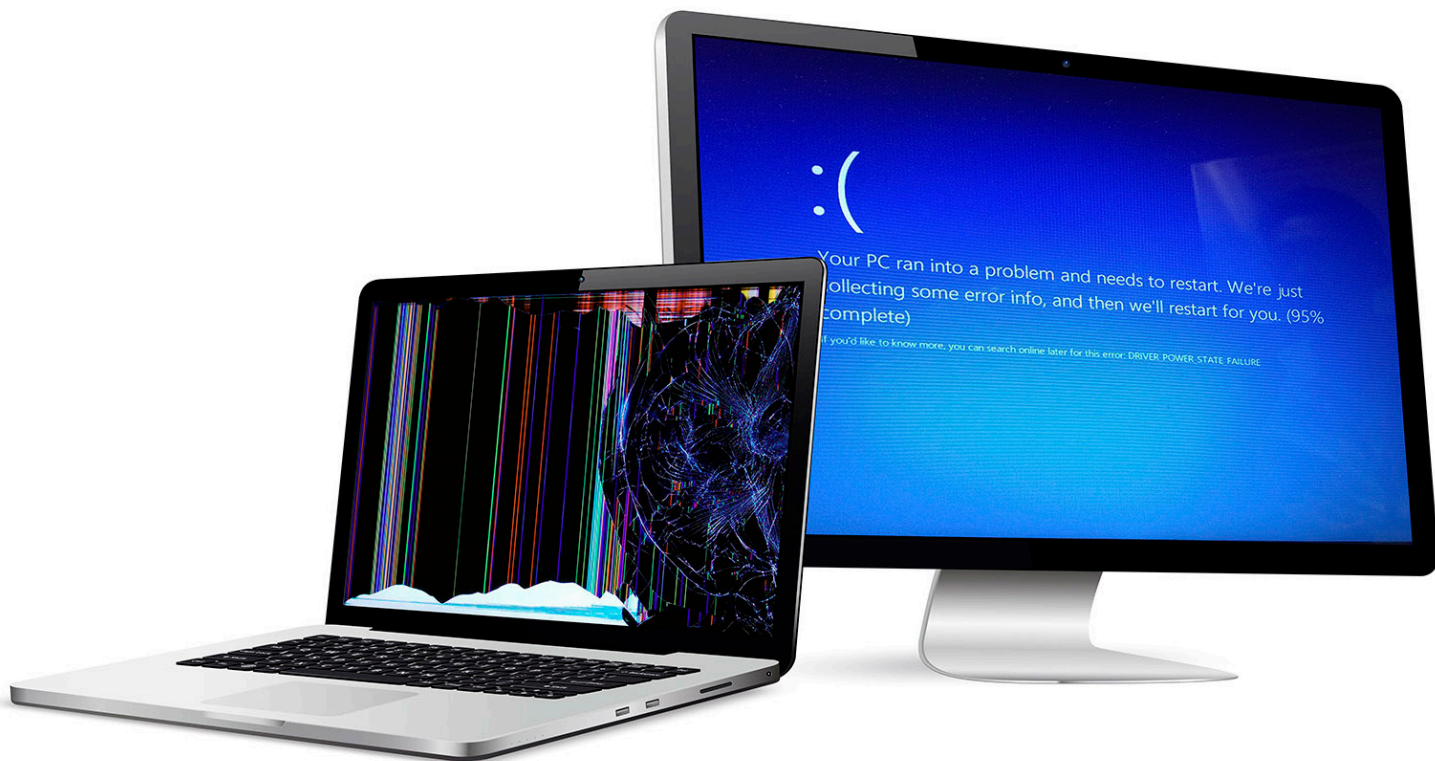
The Preferred Processing Standard requires registered processors to have adequate closure plans and a sufficient financial instrument to prevent the abandonment of CEPs and related materials.

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	Financial Assurance Letter of Guarantee	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 2023, 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?

# 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 transporters 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?

# 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? (RCW 70A.500.250)
- Is the business located in the State? (RCW 70A.500.060 (5))
- Are all registered processors being utilized? (RCW 70A.500.270 (7))
- Is the processor continuously improving its practices and processes? (RCA 70A.500.250)
- Does the authority avoid the creation of new infrastructure by using processor/transporter/collector? (RCW 70A.500.300 (2))
- Is the authority following policy per its own Standard and Operating Plans? (RCW 70A.500.310)
- Is the processor listed as in compliance with the “preferred” standards by Ecology? (WAC 173-900-650)
- Is the processor in compliance with WMMFA contractual terms? (WAC 173-900-600 (3))



# 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 173-900-800). This category of this work is often termed “design for recycling”.

In 2023, electronic waste processors that are registered in the E-Cycle Washington program, presented relevant information on this topic to the WMMFA Board of Directors in a board meeting. Processors were asked to provide their perspectives on this topic generally, and these specific questions

## PROCESSOR QUESTIONS

*What trends do you see in the volumes of different technologies of TVs, computers and monitors that you receive for recycling?*

*What are the most difficult products to recycle (among E-Cycle WA covered products)?*

*What changes would make it faster, less expensive or less toxic to recycle CEPs?*

*What positive design changes to electronics have helped your recycling processes over the last 5 years or so?*

*What other related information or concerns do you have about recycling CEPs?*

## SUMMARY OF RESPONSES

CRT products have continued to decline. Processors are generally seeing fewer laptops than they had in previous years.

Products containing lithium batteries have become more prevalent. They pose a fire hazard during the recycling process and require more time to locate and remove.

Make lithium batteries easier to find and remove during processing.

LCD products can be broken down efficiently using industrial shredders. Lighter products are easier to handle but also contain less valuable materials such as circuit boards and wiring.

The costs of fuel, labor and insurance have risen sharply in recent years, causing processing prices to rise.

The 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 ten years. In 2013, collected CEPs in Washington State was approximately 45 million pounds. In 2023, the weight of collected CEPs was approximately 12.9 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 has been almost completely replaced with lighter LCD and LED technologies.
- The growing preference for laptop computers over desktop computers.
- 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 products.

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 2023 that were designed to raise program awareness in both urban and rural areas of the state.

Internet display ad campaigns were run in Winter and Summer/Fall of 2023. Billboard and streaming TV ad campaigns were run in Summer/Fall of 2023.

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 posters with the E-Cycle Washington logo and messages about the recycling program. A 5" x 8" info card is also provided at no-charge to municipalities, collection sites and others, on request. Replacement posters and info cards are provided at no charge.

## 2023 INTERNET DISPLAY ADS

Internet display ads, sized for phones, tablets and computers, were run in every county of Washington State. The landing page for internet display was the collection site locator at [ecyclewa.org](http://ecyclewa.org).

SPECIFIC WEBSITES THAT DISPLAYED E-CYCLE WASHINGTON ADS INCLUDED:

- [cnn.com](http://cnn.com)
- [huffpost.com](http://huffpost.com)
- [tumblr.com](http://tumblr.com)
- [cosmopolitan.com](http://cosmopolitan.com)
- [kiro7.com](http://kiro7.com)
- [usatoday.com](http://usatoday.com)
- [easybrain.com](http://easybrain.com)
- [people.com](http://people.com)
- [weather.com](http://weather.com)
- [espn.com](http://espn.com)
- [seattletimes.com](http://seattletimes.com)
- [yaktrinews.com](http://yaktrinews.com)
- [foxnews.com](http://foxnews.com)
- [spotify.com](http://spotify.com)

CAMPAIGN DATES	IMPRESSIONS
January 20 – February 19	565,796
August 25 – October 24	3,482,878

## DISPLAY AD EXAMPLES



# EDUCATION AND OUTREACH

## 2023 STREAMING TV ADS

Ads were run in Eastern Washington on ad-supported streaming services including Pluto TV, Tubi, Sling TV and others. The ads were 15 and 30 seconds in length, and were similar to regular television commercials but did not run on broadcast television.

THE ADS APPEARED ON A WIDE VARIETY OF CHANNELS, INCLUDING:

- AMC
- Bravo
- CBS
- Court TV
- ESPN
- Fox Business Network
- Fox News
- MTV
- NBC
- OAN Live
- The Weather Channel

CAMPAIGN DATES	IMPRESSIONS
August 15 – October 25	314,866

## 2023 BILLBOARDS

Billboards were placed in five Washington cities.

CAMPAIGN DATES	BILLBOARDS	LOCATION
August 7 – October 1	1	Kennewick
August 7 – October 1	2	Yakima
August 28 – October 15	1	Longview
August 21 – October 8	1	Bellingham
August 21 – November 12	2	Spokane
August 28 – November 12	1	Spokane

**BILLBOARD  
EXAMPLE**



## RE-USE OF COLLECTED CEPs

Based on 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 re-use 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 in 2023. 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 and processors.

## MANUFACTURERS PARTICIPATING IN THE STANDARD PLAN IN 2023

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

3MD Inc.  
4th Dimension Computer  
Acer America Corp  
ADT LLC dba ADT Security Services  
Afunta LLC  
AG Neovo Technology Corp  
Amazon.com Services LLC  
AMDOE, LLC  
Amelia World Corp d/b/a LINSAY  
American Future Tech Corp dba iBuypower  
Angel Computer Systems Inc  
Apple  
ASA Electronics  
Asus Computer International  
Atyme Corporation, Inc.  
Aura Home, Inc.  
AWA Technology Inc.  
Azpen Innovation, Inc.  
Azulle  
Barco, Inc.  
Barnes&Noble.com LLC  
BenQ America Corp  
Bereson USA  
Best Buy  
Better Workspaces, LLC.  
BLU  
Bosch Security Systems, Inc.  
Cabeli Team America Limited  
Caytan Enterprise (Vilros)  
Coastline Micro Inc.  
Computer Nut Hut  
Computer Technology Link  
Computer Works of Yakima Inc  
Contixo Inc.  
Corsair  
Creedon Technologies USA, LLC  
Curiouser Products Inc  
Curtis International Ltd  
Custom Computer Sales & Svc  
Cutting Edge Computer Solutions  
CyberPower  
Cybertron International, Inc

Cycrest Systems Inc.  
Deli Stationery, Inc.  
Dell Computer Corp  
Diaotec  
Digimaxis LLC  
DP Audio  
DPI Inc  
Durabook Americas Inc.  
Dynabook Americas, Inc.  
ECTACO, Inc.  
EIZO Inc.  
Element TV Company, LP  
Elite Lux Technologies Inc  
Elitegroup Computer Systems  
Elo Touch Solutions, Inc  
Eluktronics, Inc.  
Empowerment Technologies  
Envision Peripherals Inc  
Equus Compute Solutions  
EverFocus Electronics Corporation  
Evervue USA  
F5CS LTD LLC  
Falcon Northwest  
Friendly Computers / Computer Renaissance  
Fujitsu North America, Inc.  
Funai Corporation, Inc.  
General Digital  
Gigabyte  
Glimpse LLC  
Google LLC  
Grays Harbor Computer Svc  
Guangzhou Wenshi Xinxi Keji Youxian Gongsi  
GVISION USA, Inc.  
Himalaya Trading Inc  
Hisense USA Corp  
Hitachi America, LTD  
HK Contrum Electronic Limited  
HMD America, Inc.  
HP Inc  
HTC America, Inc.  
ICI Touch Technology Inc.  
iFIT Inc.

## MANUFACTURERS PARTICIPATING IN THE STANDARD PLAN IN 2023

IGEL America Sales Corporation  
Ikegami Tsushinki Ltd.  
Inspira Technologies LLC  
Integrity Computers and Networking  
Intel  
International Business Machines Corp.  
J & N Computer Service  
Johnson Controls  
Johnson Health Tech Co., Ltd  
JVC KENWOOD USA Corp  
K S Choi Corp.  
Kaser Corp.  
KD Group  
Kyocera International Inc.  
Last Stop Computers  
Lenovo  
Lexibook America  
LG Electronics USA Inc  
Lilliput Electronics Co, Ltd  
Lippert Components  
Lorex Technology Inc.  
Macari Baby, Inc.  
Main Business Systems  
Majestic Global USA  
Mambate USA, Inc.  
Marvel Entertainment, LLC  
Maxnerva Technology Services  
Meta  
Microsoft Corporation  
Mimo Inc  
Minno LLC  
Mitsubishi Electric US, Inc.  
Modern Office Equipment  
MSI Computer  
Naxa Electronics, Inc.  
NCS Technologies, Inc  
NEC Display Solutions  
Netgear Inc.  
Nixeus Technology, Inc.  
NVIDIA Corp  
Optoma Technology Inc  
Oracle America Inc  
OREI  
Osram Sylvania  
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  
Pogo Linux, Inc.  
Precor Incorporated  
Premio, Inc  
Prostar Computer, Inc  
Puget Sound Systems Inc.  
Purism, Inc  
Pyramid Distributing  
Quality Computers & Svc  
QuantumFX  
QubicaAMF  
Rakuten Kobo Inc  
Razer USA, Ltd.  
reMarkable  
Re-Pc Recycled Computers  
RJ Technology, Inc  
Roku Inc.  
Russell Distribution Company, LLC  
Sager Midern Computer Inc.  
Samsung Electronics Co  
Sceptre Inc.  
Sensormatic Electronics LLC  
Sharp Electronics Corporation  
Shenzhen AlldoCube Technology And Science  
Shenzhen Avis Electronics Technology Co.  
Shenzhen Diyigouxiang Technology Co  
Shenzhen Globalebuy Co  
Shenzhen Siwei Shikong Technology Co. Ltd.  
Shenzhen Sunpin Industrial Co.,Ltd.  
Shenzhen Valuelink E-Commerce Co.,Ltd.  
Shenzhen Wannianxin E-Commerce Co.  
Shenzhen Xinshengshang Technology Co Ltd  
Shenzhenshi Huguangchengxiangkeji  
Shuttle Computer Group

## MANUFACTURERS PARTICIPATING IN THE STANDARD PLAN IN 2023

Simbans Limited  
SkyVue  
SMART Technologies ULC  
Sony Electronics Inc  
Source Code Corporation  
Southern Telecom Inc  
SunBriteTV LLC  
Sungale Electronics  
Supercircuits, Inc  
Supernote  
Supersonic, Inc.  
Targus  
TCT Mobile (US) Inc  
TekVisions, Inc  
Tonal Systems, Inc  
ToteVision  
Trans Cosmos America  
TTE Technology Inc  
Unionman Technology Co., Ltd  
Up Time Technology  
US Micro PC Inc

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



# REVENUE AND EXPENSES

<b>TOTAL REVENUE</b> (Payments received from participating manufacturers, FY 2023)	<b>\$5,197,684</b>	
<b>OPERATIONAL EXPENSES</b>		
Collection - registered collectors and covered events	1,218,079	23.80%
Transportation - registered transporters and collector transport	772,271	15.09%
Processing - to registered CEP processors	2,717,388	53.11%
Outreach <sup>4</sup> - including advertising and promotional materials	73,908	1.44%
<b>TOTAL OPERATIONAL EXPENSES</b>	<b>\$4,781,646</b>	<b>93.45%</b>
<b>ADMINISTRATIVE EXPENSES</b>		
Salaries and wages	272,241	5.32%
Professional services - legal, accounting and consulting	3,153	0.06%
Audit and CPA review	13,866	0.27%
Rent	10,740	0.21%
Travel - hotels, meals and related expenses	8,337	0.16%
Office supplies	4,262	0.08%
Insurance	5,008	0.10%
Telephone and internet	5,278	0.10%
Meetings and seminars	5,044	0.10%
Postage and delivery	1,745	0.03%
Office hardware, software and equipment	4,211	0.08%
Utilities	0	0.00%
Bank service charges	1,067	0.02%
Miscellaneous	396	0.01%
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<b>\$335,347</b>	<b>6.55%</b>
<b>TOTAL OPERATIONAL AND ADMINISTRATIVE EXPENSES</b>	<b>\$5,116,993</b>	<b>100.00%</b>

<b>ADDITIONAL FINANCIAL INFORMATION</b>		
1 Total pounds collected and cost per pound for FY 2023		
CEP pounds collected in 2023	12,874,038	
Total program cost per pound in 2023	\$0.397	
2 Other program financial details		
Financial reserves December 31, 2022	\$222,142	
Financial reserves December 31, 2023	\$71,429	
Settlement funds balance December 31, 2023	\$67,969	
3 Use of settlement funds		
Internet Display Ads	\$27,613	
Billboard Advertising	\$7,388	
4 Outreach activities in 2022 that were paid for in 2023		
Audio Spot	\$3,925	



## **APPENDIX A:**

Additional information available

### **POUNDS PROCESSED VERIFICATION**

This document is over 140 pages long and contains processor invoice data for 2023.

### **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.

To receive a copy of these documents, please send a request to the WMMFA or Washington Ecology:

[info@wmmfa.net](mailto:info@wmmfa.net) (WMMFA)

[clac461@ECY.WA.GOV](mailto:clac461@ECY.WA.GOV) (Washington Ecology)

