### E-Cycle Washington Standard Plan 2016 Annual Report - workbook format\*



The Washington Materials Management & Financing Authority is required to file an annual report with the Washington State Department of Ecology. This workbook contains data and information requested in order to meet compliance with WAC 173-900-800 and additional information required via passage of SHB 1498 in April of 2013. The workbook is designed to provide data and information in the format listed in the index outlined below, as specified in WAC 173-900-800 and as amended with the passage of SHB 1498.

\*NOTE: All figures and data in this report are estimates based on actual source documents including processor invoices with actual weights and charges, collector bills of lading showing estimated weights - converted to actual weights after verification through processor and transporter receipts, and other information received from collectors and processors including "collector logs" which include source and volume estimates by entity type.

### Workbook Index



- Total weight (in pounds) of covered electronic products (CEPs), including orphans, for the 2016 program year including documentation verifying collection and processing for:
  - a. CEP pounds collected, by type, by county
  - b. CEP recycled pounds, un-recycled residuals, and reused by ALL program Direct Processors
  - c. Standard Plan CEP materials disposition mass balance report
  - d. Pounds collected and processed verification based on paid processor invoices for covered materials
  - e. Final destination(s) for the processing of CEPs and components and final destination(s) for disposal of residuals
- 2. Total weight of CEPs received from each nonprofit charitable organization primarily engaged in the business of reuse and resale used by the Standard Plan.
- 3. Total weight of CEPs received in large quantities from small businesses, small governments, charities and school districts.
- 4. A list of collection services provided in each county and each city with a population of greater than 10,000 and the parties who operated them.
- Processor information:
  - a. A list of all direct processors used; (see section 1b.).
  - b. The weight of CEPs processed by each direct processor; (see section 1b.).
  - c. A description of the processes and methods used by each direct processor to recycle the CEPs including a description of the processing and facility locations.
  - d. A compliance audit report meeting the requirements in WAC 173-900-365 for each direct processor listed in the Standard Plan. (Note: Links to these audit reports posted on the Ecology web site are used to meet this requirement)

### Workbook Index



- A list of subcontractors (downstream vendors) used by each direct processor including the facility addresses. (see section 1.e.)
- A brief description of the educational and promotional efforts that were undertaken to inform covered entities about where and how to reuse and recycle their CEPs.
- 8. The results of sampling as required in WAC 173-900-900. (sampling discontinued beginning with 2015)
- 9. Total weight of unwanted electronic products, electronic components, and electronics scrap that have been exported from Washington state to countries that are not members of the Organization for Economic Cooperation and Development or the European Union.
- 10. A list of manufacturers that are participating in the Standard Plan.
- 11. Documentation of work done with direct processors used by the Standard Plan to promote and encourage the design of electronic products that are less toxic and contain components that are more recyclable.
- 12. Any information available regarding the reuse of CEPs through the E-Cycle Washington program.
- 13. Program revenue and cost.
- 14. Signature of the Authority.

## Washington Materials Management & Financing Authority CEP\* pounds collected by type and by county E-Cycle Washington annual 2016



	CEP Pounds co	llected by type	CEP Pound	ls collected	by County	CEP Pou	nds collecte	d by County by	y CEP Type
Covered Electronic Products (CEP's) collected, including orphan products. All 2016 WMMFA transactions	2016 NET pounds by CEP type collected excluding pounds sent to reuse by collectors	Percent of total pounds by CEP type 2016	WA State County	Pounds collected 2016 excluding reuse at the collector level	Percent of total pounds by county 2016	Computers	Monitors	Televisions	TOTAL NET pounds by county - all CEP types
			Adams	20,886	0.1%	6,620	7,104	7,162	20,886
TELEVISIONS			Asotin	86,964	0.2%	3,492	12,255	71,217	86,964
Household TV	30,551,166		Benton	784,249	2.1%	124,255	127,860	532,134	784,249
School District TV	26,425		Chelan	432,821	1.2%	29,844	34,560	368,417	432,821
Small Business TV	18,614		Clallam	389,919	1.1%	26,500	51,000	312,419	389,919
Total TELEVISIONS	14,393	83.1%	Clark	2,625,516	7.1%	224,129	265,802	2,135,585	2,625,516
	30,610,598	63.1%	Columbia	18,113	0.2%	2,689	3,100	12,324	18,113
			Cowlitz Douglas	676,707 83,519	1.7% 0.2%	40,233 1,721	46,255 5.002	590,219 76,796	676,707 83,519
			Ferry	15,284	0.2%	3,200	1,956	10,128	15,284
MONITORS			Franklin	321,656	0.1%	26,210	28,943	266,503	321,656
Household Monitors	3,411,368		Garfield	17,393	0.1%	1,622	1,226	14,545	17,393
School District Monitors	59,165		Grant	147,512	0.1%	9,000	6,422	132,090	147,512
Small Business Monitors	13,732		Grays Harbor	362,464	1.0%	18,500	35,889	308,075	362,464
Small Government Monitors	7.838		Island	595,658	1.5%	47.009	52,111	496,538	595,658
Total MONITORS	3,492,103	9.5%	Jefferson	255,238	3.2%	13,221	11,287	230,730	255,238
	,,,,,,,,,,		King	11,289,913	28.4%	826,002	713,411	9,750,500	11,289,913
			Kitsap	1,069,037	2.7%	71,330	128,000	869,707	1,069,037
			Kittitas	256,122	0.7%	4,236	11,151	240,735	256,122
COMPUTERS (includes laptops)			Klickitat	25,372	0.1%	2,687	3,521	19,164	25,372
Household Computers	2,641,320		Lewis	554,096	1.5%	29,112	14,112	510,872	554,096
School District Computers	66,360		Lincoln	39,159	0.1%	6,917	4,802	27,440	39,159
Small Business Computers	16,840		Mason	107,240	0.3%	6,455	7,421	93,364	107,240
Small Government Computers	6,886		Okanogan	63,287	0.2%	5,650	3,506	54,131	63,287
Total COMPUTERS	2,731,406	7.4%	Pacific	131,229	0.4%	9,000	6,422	115,807	131,229
			Pend Oreille	59,166	0.2%	6,335	3,941	48,890	59,166
			Pierce	4,174,395	11.3%	284,448	611,088	3,278,859	4,174,395
			San Juan	131,133	0.4%	13,220	6,180	111,733	131,133
			Skagit	429,079	1.2%	8,522	5,400	415,157	429,079
			Skamania	61,123	0.2%	4,112	2,995	54,016	61,123
			Snohomish	4,381,300	11.9%	318,558	449,338	3,613,404	4,381,300
			Spokane	2,320,015	6.3%	245,771	494,000	1,580,244	2,320,015
			Stevens	105,330	0.3%	3,650	3,825	97,855	105,330
			Thurston	1,889,171	5.1%	132,942	169,448	1,586,781	1,889,171
			Wahkiakum	3,600	0.0%	0	0	3,600	3,600
			Walla Walla	407,374	1.1%	32,589	24,212	350,573	407,374
			Whatcom	1,140,147	3.1%	52,112	56,086	1,031,949	1,140,147
			Whitman	223,725	0.6%	33,421	16,220	174,084	223,725
			Yakima	1,139,195	3.1%	56,092	66,252	1,016,851	1,139,195
Total pounds CEPs by type before reuse:	36,834,107	100%	JJ	36,834,107	100.0%	2,731,406	3,492,103	30,610,598	36,834,107

Covered electronic products (CEP's) collected and sent to each approved processor. All 2016 WMMFA transactions by all processors.	ACE META.	E-WAS-	ECSBE	EWC	ELECTRONIC	IMS ELECT.	TOTAL	SIMON META.	SIMON METAL	TOTAL POUNDS	- ALL PROCESSORS
All quantities in net pounds- based on accruals of collectons in 2016	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Percent
CEP program pounds sent to, and COLLECTED by, each processor	6,007,433	3,233,183	5,724,759	4,559,569	171,369	3,699,109	13,002,184	349,815	86,686	36,834,107	i ercent
CEP pounds RECYCLED by each processor and on hand awaiting processing	5,930,648	3,232,933	5,724,759	4,559,569	155,669	3,549,258	12,910,111	349,815	86,686	36,499,448	99.09%
*CEP pounds processor sent to REUSE through refurbishment or re-sale	0	0	0	0	0	0	92,073	0	0	92,073	0.25%
NON-RECYCLED residuals including wood, etc. (details in sec. 1.c.)	76,785	250	0	0	15,700	149,851	0	0	0	242,586	0.66%
TOTAL pounds recycled, reused, and in process	6,007,433	3,233,183	5,724,759	4,559,569	171,369	3,699,109	13,002,184	349,815	86,686	36,834,107	100.0%

<sup>\*</sup>NOTE: Approximately 50% of pounds sent to reuse and refurbishment is handled at the collector level - never reaching processors. (See section 12. Re-use)

	INBOUND: Total plan pounds 2016 (all CEP's collected and sent in for processing)	Computers	Laptops (est)	E-Readers	E-Tablets	Portable DVD	Monitors	Televisions	Other - in transit from collectors	TOTAL	
		Α	В	С	D	E	F	G	Н	sum A-H	
	<u>PLAN</u> pounds collected by the WMMFA tendered to all processors 2016	2,583,886	147,520	0	0	0	3,492,103	30,610,598	0	36,834,107	
	PROCESSOR DISPOSITION: as of Dec. 31 2016 - revised 6-8-17										
	RECOVERED / RECYCLED / IN PROCESS										
	CRT GLASS				14,157,21						
	CIRCUIT BOARDS				3,899,658	8					
<b>Z</b>	BATTERIES *MERCURY CONTAINING DEVICES (lamps within devices)				39,261 3,068						
MASS	PLASTIC				5,779,38	1			-		
S B/	METALS		7,538,003						1		
BALANCE	WOOD				1,752,18	4					
CE	CEP's staged / short term stored awaiting processing				1,698,35						
RE	CEP's in transit awaiting downstream processing				1,527,31						
REPORTING	TOTAL RECOVERED / RECYCLED/ IN PROCESS:				36,394,44	10					
ZT I	REUSED								•		
	COMPUTERS - (Desktop or integrated units)				25,662						
	LAPTOPS TELEVISIONS				77,259						
	TELEVISIONS MONITORS				88,998 5,162						
	PARTS - SWAPPED OUT TO WORKING UNIT				3,102						
	TOTAL REUSED:	197,081									
	UNRECYCLED RESIDUAL (to landfill)								•		
	WOOD - (mainly cabinets from CRT and Rear Projection TV)				165,551				]		
	NON-RECYCLABLE PLASTIC	12,784									
	MISCELLANEOUS PACKAGING (soiled cardboard, paper, and particle board)	64,251									
	TOTAL RESIDUAL:	242,586									
	TOTAL RECOVERED, RECYCLED, REUSED, RESIDUAL:				36,834,1	07					

<sup>\*</sup>MERCURY CONTAINING DEVICES listed on prior year reports were a combination of whole units of LCD monitors and TV which contained mercury lamps. Beginning 2016 the definition is clarified to include the weight of mercury lamps only - estimated.

# Covered Electronic Products (CEP's) collected for recycling by the WMMFA in 2016 from non-profit charitable organizations primarily engaged in re-use through re-sale.

All net pounds collected and paid for in 2016 - total - weights verified at processing

Does NOT include pounds of working or refurbished devices a charity collected as part of the program and sent to reuse (see section 12 for reuse estimates at collector level)

Charity Name	<b>CEP Pounds</b>
ADAMS COUNTY DEVELOP DISABILITIES	20,886
ANACORTES AKTION CLUB	67,788
ARC OF SW WASHINGTON	7,622
DESERET INDUSTRIES-SHORELINE	128,503
DESERET INDUSTRIES - FEDERAL WAY	194,365
GOODWILL EVERETT (Seattle Goodwill)	3,731,773
GOODWILL HAWKS PRAIRIE TACOMA HOGUM BAY ROAD (Tacoma Goodwill)	697,746
GOODWILL MULLEN LANDFILL TACOMA (Tacoma Goodwill)	113,388
GOODWILL PASCO	1,001,959
GOODWILL SEATTLE (Seattle Goodwill)	2,694,411
GOODWILL SPOKANE	2,087,800
GOODWILL TACOMA (Tacoma Goodwill)	7,090,930
GOODWILL VANCOUVER	1,701,036
GOODWILL WENATCHEE	116,899
HABITAT FOR HUMANITY - ELLENSBURG	21,096
INTERCONNECTION.ORG	362,666
NEW LIFE THRIFT STORE #1	52,689
NORTHWEST CENTER INDUSTRY	166,989
SALVATION ARMY ABERDEEN	34,718
SALVATION ARMY ARC SEATTLE	301,080
SALVATION ARMY BELLINGHAM	25,784
SALVATION ARMY SPOKANE VALLEY	77,301
SALVATION ARMY WENATCHEE	154,934
SALVATION ARMY YAKIMA	69,455
ST.VINCENT DE PAUL-BREMERTON	99,393
ST.VINCENT DE PAUL-LYNNWOOD	117,359
ST.VINCENT DE PAUL-SEATTLE	162,845
ST.VINCENT DE PAUL-TACOMA	203,696
ST.VINCENT DE PAUL - MONROE	56,371
STANWOOD CAMANO KIWANIS - STANWOOD	32,587
SUNNYSIDE CHRISTIAN THRIFT STORE	26,021
UNION GOSPEL MISSION - YAKIMA	69,519
VISITING NURSES THRIFT - CENTRALIA	30,101

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All net pounds collected and paid for in 2016 - total - weights verified at processing

Does NOT include pounds of working or refurbished devices a charity collected as part of the program and sent to reuse (see section 12 for reuse estimates at collector level)

Charity Name	CEP Pounds
VISITING NURSES THRIFT - CHEHALIS	80,098
YWCA SECOND BEGINNING TREASURES - YWCA	10,924

Total Pounds collected for recycling after deducting reuse pounds: 21,810,732

СЕР ТҮРЕ	Qty in Lbs. 2016 Total		istricts generating large intities	Small governments, char	ities (other than charities reg	istered as collectors) , small	business, and events	
		SCHOOL	DISTRICTS	EVENTS	MISCEL	LANEOUS COVERED E	NTITIES	
TELEVISIONS		Anacortes	Ocasta	E-Redeemers Luthern Church	Aboda	Everett Silvertips	Pace Staffing	
		Arlington	Orcas	E-City of Bingen	3D Systems	Everett Steel	Pacific Building	
School District	26,425	Auburn	Orcas Island	E-City of North Bend	5th Avenue Theater	Evergreen Pet Supply	Pacific Surrey	
Small Business	18,614	Bainbridge	Overlake	E-City of Puyallup	7 Hills Camp	Every Day Fitness	Pacific Underwriters	
Small Government	14,393	Bellevue	Pasco	E-BECU Everett	A&G	Express Furniture	Packay Inc.	
Total TELEVISIONS	59,432	Bellingham	Pe Ell	E-BECU Federal Way	AA - Its	F That Junk	Paradise Lakes	
		Bellinham Christian	Peninsula	E-BECU Tukwila	AAA	Faith Christian Fellowship	Parkway	
		Bethel	Port Angles	E-Bingen Community Pride	AAA Auto Wrecking	FCI	Parkway Apts	
	_	Blain	Pullman	E-Landon-Susan Ins Agency	Aarons	Federal Way Public Schools	Pavi Davis Restoration	
MONITORS		Burlington	Puyallup	E-1st Security Bank - Bothell	Accepting LLC	Ferndale Redi-Mix	PC Management	
		Burlington - Edison	Quincy	E-1st Security Bank - Capitol Hill	Accuduct	FFF Inc	Peckay	
School Dist	59,165	Camas	Renton	E-1st Security Bank - Edmonds	Accurate Insights	Fisher's Creek Neighborhood A	As Perey Law	
Small Business	13,732	Cascade	Richland	E-1st Security Bank - Lynnwood	Accurate Mfg.	Fleet Pride	Performance PT	
Small Government	7,838	Castle Rock	Ridgefield	E-1st Security Bank - Poulsbo	Achtunina	Flying Food	Perk Shore	
Total MONITORS	80,735	Central Kitsa[	Rochester	E-1st Security Bank - Puyallup	Adam & Dinkin	Focus North America	Pete's Auto Repair	
		Chewelah	Sedro Woolley	E-1st Security Bank - Redmond	Adesa Seattle	Focus the Nation	Petrocon	
		Christian	Selah	E-Mercer Island SBK Event	Adopt A Road	Forest Concepts	PHG	
		Colfax	Sequim	E-Woodland Park Zoo	Advanced Labels NW	Formost Fuji	Philips Laurel Health Care	
		Colton	Snohomish	E-Active Voice Bldg	Aecopetla Apts	Foss Care	Philips Ultrasound	
COMPUTERS		Concrete	South Widbey	E-Adobe	Agrimax Intl	Foundation Bank	Pier Systems	
	•	Dayton	Stanwood Camano	E-Alexis Hotel	AHHS	Fred Hutchinson Research Cen	t Pinnacle Electric	
School District	66,360	Eastmone	Stevenson Carson	E-Ballard Church	AHHS Housing	Friendly Village	PLC Multipoint	
Small Business	16,840	Edmonds	Tacoma	E-BECU Everett	Aircraft Cabin Sys	FSGS Service	Plymouth Housing	
Small Government	6,886	Epihany	Tahoma	E-BECU Federal Way	Alaska Maritime	Furhaven	Plywood Supply	
Total COMPUTERS	90,086	Everett	Toppenish	E-BECU Tukwila	Alderwood Safe Storage	Future of Flight Foundation	PNCC	
		Evergreen	Toutle	E-Bellevue Church of Christ	Alderwood Water & Wastewate	r FWUMC	PNL	
TOTAL	230,253	Ferndale	Vashon	E-Bentall Kennedy - Summit REIT	All New Glass	G3 Develop	PNTA	
(NOT including pounds sen	t to re-use)	Fife	Vashon Island	E-Bingen Community Pride	All Tech	GBA	Port of Everett	

СЕР ТҮРЕ	Qty in Lbs. 2016 Total		istricts generating large antities	Small governments, chari	ities (other than charities re	egistered as collectors), sma	ll business, and events		
		SCHOOL	DISTRICTS	EVENTS	MISCELLANEOUS COVERED ENTITIES				
•	•	Franklin Pierce	Waitsburg	E-Boeing Airport Way	Alpha Tech	Gesanko Chocolate	Powell Development		
		Granite Falls	Wapata	E-Boeing - Auburn	Alrite	Gesney Auto	Precision Engines		
		Granger	Woodland	E-Boeing DC - EWC Event	Altran	Giffin Tech	Precision Graphics		
SMALL GOV	VERNMENT	Highline	Yelm Community	E-Boeing Developmental Center	Always Affordable	Git R Dumped	Precision Iron Works		
ITIES		Hoquim	University Place	E-Boeing Duamish	AMACS	Gless LLC	Premier Storage		
gona		Icolph	Kelso	E-Boeing Fredrickson	American Building	Global Tech Plastics	Prestige Care of Tacoma		
lington		Issaquah	Kent	E-Boeing Georgetown	Ames International	GMS Architect Group	Print & Copy Factory		
othell		Kelso	LA Conner	E-Boeing Safety Day - EWC Event	Angels	Gold Finch	Printing Plus		
ırien		Kent	Lake Stevens	E-Bothell United Methodist	Architextures	Golden Dolphin	Pro Realty		
arnation		La Conner	Lakota	E-Boy Scouts of America #221	Argosy Cruises	Goldsmith & Assoc	Protingent		
ıvall		Lake Stevens	Lake Washington	E-Bridal Show - Tacoma Dome	Arlington Adventist Church	Got Junk	Providence		
lmonds		Lakota	Lake Wood	E-Broadview United Church-Sea	Arlington Dry Kilns	GT Fed Wan	PRS Group		
numclaw		Lake Washington	Longview	E-CAC Real Estate Mgmt	Aseptico Inc	Habitat For Humanity	PSBC		
verett		Lake Wood	Lopez Island	E-CAC Real Estate Mgmt-Plaza	Asphalt Patch Systems	Halmark Appraisel	PSF Mechanical		
verson		Longview	Yelm Community	E-CAC Real Estate Mgmt-Plaza East	Assistance League	Hampton Inn & Suites	PSM LLC		
ederal Way		Lopez Island	University Place	E-CAC Real Estate Mgmt-US Bank	Auburn Oxford	Happy Hauler	PYI Inc		
ranite Falls		Lynden	Steilacoom	E-Capital Mall Olympia	Auburn Valley Group	Harbor Pointe Gold	Quality Moving		
ent		SCI	HOOLS	E-CB Richard Ellis-One Bellevue	Auburn Work Crew	Harris Electric, Inc.	Radiant Technology		
ınden		Arlington High School	Mt Baker High	E-CB Richard Ellis - Atrium Bldg	Audio Control	Harsch	Radio Frame Network		
nnwood		Bellingham Tech	Nooksack Middle	E-CB Richard Ellis - Symetra Fin.	B of A	Heart & Home	Rama Foundation		
ukilteo		Burlington School	NW Indian College	E-CB Richard Ellis - Symetra Fin.	Bainbridge Rotary Club	Helping Hands	Rane Corp.		
orth Bend		Cascadia Montessori Sch	nc NW University	E-Christ the King Luthern Church	Ballard Tech	Hewitt Secondhand	RC Enterprises		
andle		Charter College	Penny Creek Elem	E-Christan Ministries-Shoreline	BAN	HH Housing	Red Point Structure		
oqualmie		Canyon Creek Elem	Pioneer High	E-City of Arlington	Bargain Town	Hillside Church	Redmond Ridge Golf		
ımmamish		Carl Samburg Elem	Seattle Pacific University	E-City of Bothell -Seattle Times	BDAP	Hirt's Truck, Scrap & Rec.	Reliable Man Cleaning		
ea - Tac		Carriage Crest Elem	Seattle Prep School	E-City of Duvall	Beach Dr Shores	HKP Architechs	Restore of WA		
ıkwila		Cathcart Elem	Seattle University	E-City of Enumclaw	Beacon Pub	Hoet	Ride Motorsports		
saguah		Cavalero Middle	Silver First Elem	E-City of Federal Way	Bellegrove	Holiday Group	Rife Care		

СЕР ТҮРЕ	Qty in Lbs. 2016 Total		stricts generating large ntities	Small governments, char	ities (other than charities re	egistered as collectors), smal	business, and events	
		SCHOOL	DISTRICTS	EVENTS	MISCE	MISCELLANEOUS COVERED ENTITIES		
•	•	Cedar Heights Middle	Skagit Valley College	E-City of Randle	Berry Enterprises	Holland Transfer	River of Life	
		Discovery Elem	Snohom. Dutch Hill Elem	E-City of Sammamish	Berry Plastics	Home RX	River of Life Fellowship	
OUNTIES		Edmonds Comm College	Spokane Public School	E-City of SeaTac	Bham Yacht Club	Honey Cap Mortgage	Rodda Paint	
helan		Federal Way Co-Op Pre	St Francis School	E-City of Snoqualmie	Big Brother Big Sister	Honeycutt Manufacturing	Rolls Royce - N. Amer.	
lallam		Federal Way Public	St George School	E-City of Tukwila	Big Change	Hopelink	Ronald McDonald House	
olumbia		Glazier Park Elem	St Louise School	E-City of Winlock	BIP	<b>Hubers Custom Building</b>	Ross Display	
ouglas		Glen Ridge Elem	St Luis School	E-City Recycling	Birdson AFH	Husky Truck	RPNN	
ittitas		Granite Falls High	St Martin University	E-Clise Properties - Active Voice	Blackpoint IT	Hydraulic Industries	Rural Metro	
ewis		Holy Rosary School	St Mary Magdelan School	E-Clise Properties - Denny Bldg	Blucap Fit	Icicle	S View Metro Parks	
akima		Inglemore High	Starlake Elem	E-Clise Properties - Securities Bldg	BNG Properties	IDL	S&R Unlimited	
		Kenmore Jr High	Sunrise Elem	E-Clise Properties - Sixth & Lenora	Boeing employees day	IDL Precision	Sadis Filmworks	
		Liberty High	Tekoa Grade School	E-CMC Icos Biologics	Boilermaster	IMI - Precision	SAK	
		Lindberg High	Tillicum Middle	E-Columbia Center	Borgard Consulting	Industrial Coating & Sealants	Samish Tribe	
		Lynden Christian	University of Avionics	E-Crista Ministries	Bowles Manuf	Intava	Sand Point Country Club	
		Lynden Middle	University of WA - Bothell	E-Denny Building	Boys & Girls Club	Interfaith Church	SANG	
		Meadow Glade Elem	University of WA - Seattle	E-Earth Day - Green Depot TR	Bralco Metals	IS Tech LLC	Sasco Electric	
		Monroe High	WA School for the Blind	E-Edmonds Lutheran Church	Broadmoor Golf Club	ISO Media	Seattle Cancer Care Allian	
		Monte Cristo Elem	Woodmoor Elem	E-Emulex	Brownlie Evans	Itek Energy	Seattle Children's Museum	
		Mountain Way Elem	Zion Academy	E-Everett Financial Center	Browns Electronic	Jane Way Apts	Seattle Gameworks	
		Sumner H.S.	St. Alphinsus School	E-Evergreen Christian Fellowship	BRP Seattle	JC Enterprises Construction	Seattle Housing Authority	
				E-Ewaste LLC Sand Point Metro	Brunswick Lanes	JIT Mfg Inc	Seattle Paint Supply	
				E-Fauntleroy United Church	Building Blocks	JMC Cabinets	Seattle Rubbish	
				E-FCA Soccer - Snapdoodle Toys	Building Changes	John Buchan Homes	Second Hand Hewitt	
				E-Federal Way - Pavillions	CAD-Based Solution	John L. Scott	Selway Machine	
				E-Federal Way - City Recycling	Campbell, Dille & Smith	Johnson & Shute	Senior Serv of Snohomish	
				E-Fire District 27	Camwood Counseling Serv	JSI	Service Alternatives	
				E-Fruit Valley Neighborhood Assoc	Canyon Lumber Co.	Jubilee Reach	Shaq	
				E-Gettney Island	CAPS	Junk Boys	Silvermark Insurance	

CEP TYPE	Qty in Lbs. 2016 Total	Schools and School Districts generating large quantities	Small governments, chari	ties (other than charities reg	istered as collectors) , small	business, and events
		SCHOOL DISTRICTS	EVENTS	MISCEL	LANEOUS COVERED E	NTITIES
•	•		E-City of Granite Falls	Car Toys	Junk King	Silvertips
			E-Grocery Outlet - Lynnwood	Carpinito Brothers	Just Junk It	Silverty IT
			E-GVA Kidder Mathews	Cascade Computer	K.I.C.R.	Single Source
			E-Highland Gated Community	Cascade Yarns	Kaman Eng	Site Specific Services
			E-Intel Farmers Market	Cascadia Dentristy	KCAS	Skagit PUD #1
			E-Jackson Federal Bldg - Seattle	Cast Cutter	KDH	SLC
			E-JSH Properties - 1000 Denny	CD Services	Keep It Clean Rec	Smart Run Sys Inc
			E-JSH Properties - 1st & Stewart	CDL Recycling	Kelly Insurance	Smith Cooper NW
			E-JSH Properties - Market Place	Cedarstrand Rentals	Kent Nazarene	Smith Gardens
			E-JSH Properties - Waterfront	Centers Collision	Kern's Funeral Home	Snap Fitness
			E-Kelly PTSA	Central Area Youth	Key Maintenance	Snohomish County PUD
			E-Key Bank - Auburn	Ceva	King Co E-911 Program	Snohomish County Red Cross
			E-Kirkland Congregational Church	Charles Right Academy	King Co Parks	Snohomish Fire Distric 1st
			E-Kirkland United Church of Christ	Chelan Café	King County Flood Relief	Snohomish Health District
			E-Klahanie Homeowners Comm-Iss	Childrens Home Society	King County Housing Auth-Sea	Snyder Law Firm
			E-Lake Stevens Round-up	Childrens School of Excellence	King County Library	Soccer West
			E-Lewis County Solid Waste	Childrens Therapy Center	King Machine LLC	Soltech
			E-Lynnwood Top Foods	Chimney Techniques	Kirkland Cinemas LLC	Sonoma Villero Condos
			E-Magnolia Church	Christian Faith Center	Kirkland RV	Sound Christian Fellowship
			E-Magnolia United Church-Seattle	CHS Cenex	KLB Construction	Sound Light
			E-McClain Insurance	CHS Inc.	Koomo Con	Sound Mental Health
			E-McDonald McGarry Insurance	City of Seattle ILL DUMP P	Kvlshan Vet Hospital	Sound Prescriptions LLC
			E-Mercer Island Church of Christ	Clark Co Skill Center	Lake Stevens - Spring Cleaning	[ South Coast In Homes
			E-Mercer Island Olympic TR	Clearwater Spa	LCR	South County Hauling
			E-Mercer Island Wandermer	Closet Factory	LCS Network Consultants	SPD
			E-Metropolitan Market	CMC Biologics	LDC	Specialty Coin
			E-Metropolitan Market - Kirkland	CMC ICOS Biologics	Lente RV Repair	Speet Rum Sign
			E-Metropolitan Market - Queen A	CMIT of Everett	LFS Inc	Spruce Hotel

СЕР ТҮРЕ	Qty in Lbs. 2016 Total	Schools and School Districts generating large quantities	Small governments, chari	ties (other than charities reg	gistered as collectors) , small	business, and events
		SCHOOL DISTRICTS	EVENTS	MISCEL	LANEOUS COVERED E	NTITIES
•	•		E-Metropolitan Market - Sand Pt	CMIT Solutions	Lighthouse Mission	Stafford Press
			E-Metropolitan Market West Sea	CMMS	Living Hope Church	Staiger Roofing
			E-Mukilteo YMCA	Cogdill Nichols Law	LRA	Star of the Sea
			E-Neighborhood Rec-Klahanie	Columbia City	Luminterra	State Roofing
			E-Neighborhood Rec-Shoreline	Community Food Co-Op	LWS	Steamworks
			E-New & Again Thrift Shop	Community Psychiatric Clinic	Lynden Door Inc	Stevenson Advertising
			E-Newcastle Earth Day	Community Transit	M&M Solutions	STG Presents
			E-North Bend	Compass Health	Mag Hifi	Sudden Valley
			E-North Help Line - Food Bank	Computer For Kids	Magic Carpet Auto Transport	SUMC
			E-Olympic Environmental	Computer Referrals	Maverick Label	Summit @ Snoqualmie
			E-Pacific Power Batteries	Computer Rentals	Max Tech	Summit Rett
			E-Pacific Power Batteries-Safeway	Computer Tooter	May Valley Council	Sundview
			E-Packwood collection event	Computer's For Kids	MBPP	Sunrise Services
			E-Parkside Neighborhood Assoc	Consolidated	MBS Property	Supply Tech
			E-Philips Healthcare - Bothell	Continental Village Apts	McKinley	Supply Technologies
			E-Philips Oral Healthcare	Core Furniture	MCR	Swinerton Bldr
			E-Precor	Corliss Resources	MEA	Synsor Corporation
			E-Prince Of Peach Luthern Church	Coyote Guns	Meda List	Tacoma Nursing & Rehab
			E-Puget Sound Energry - Tacoma	CR Janitorial	Megapath Inc.	Team Tahoma
			E-Puget Sound Energy - Bothell	CREAM Computer Don.	Mehrer Drywall	Tech 1
			E-Puget Sound Energy - Summit	Creative Workspace	Memorial Community Church	Tech Help
			E-Quandrant Park I-5 Corp	Creed Technology	Men's Health Housing	Tech Screen
			E-Quincy Valley Lions Club	Creekside Church	MFD	Technical Advantage Inc.
			E-Ranier Community Center	Crista Ministries	MGM Solutions	Tedesco
			E-Regence Blue Shield	Crown Film	Micro R12	Teen Challenge
			E-Samammish Young Life/Discov	CSMI	Microloans NW	Tel Data Systems
			E-Sandpoint Metropolitan Market	Ctk Bellingham	Midway Plywood	Terra Dynamic
			E-Schnitzer West	Cully Inc	Miller Laine Properties	Tex Green

CEP TYPE	Qty in Lbs. 2016 Total	Schools and School Districts generating large quantities	Small governments, char	ities (other than charities re	gistered as collectors) , sma	ll business, and events	
		SCHOOL DISTRICTS	EVENTS	MISCEL	MISCELLANEOUS COVERED EN		
•	•		E-Securities Bank of Washington	Cutting Edge D.	Minuteman Press	The Bank of Washington	
			E-Securities Bldg	CVA Apartments	Modern Digital	The Truss Co.	
			E-Shoreline CC	D Square Energy	Moe Made Inc	Thryers Refrigeration	
			E-SnoCo Together	D&G Insulation	Moldrite	Timberland Bank	
			E-Snoqualmie Ridge Homeowners	Day & Nite	Moore Hotel	Tippro Inc	
			E-Snoqualmie Tribe	Deau's Photography	Moose Steel	Torah Day School of Seatt	
			E-SolarFest	DeCacro & Roberts	Mountain Coin	Totem Lake Motel	
			E-St Johns Episcopal Ch-Kirkland	Deeny Construction	Mountain Pacific Bank	Town Place Suites	
			E-St Johns Medical Center	Dialup USA Inc	Mr Fix - it	TPS Service	
			E-St Stephen the Martyr-Renton	Dr Hutton	MTR	TRAXX	
			E-St. George Parish	Dump It	Mukilteo Water	Trilogy International	
			E-St. Gobain Containers	Dynamic Language	Murray Kahn	Trinity Lutheran Church	
			E-St. Mark's Cathedral	E3RA	N.W. Kidney	Triumph Structures	
			E-Stock Pot	Eagle Storage	NCGTKC Churh	Truck Shop	
			E-Stoel Rives Law Firm	Eastside Carstar	North Bham Group Church	TURBRO	
			E-Tacoma Mall Office	Eastside Foursquare Church	North Shore Senior Center	TWH Enterprises	
			E-Tukwila Financial Center	Eastside Prep	North Wastrom Fire & R	Tyco IS	
			E-United Church of Christ	ECA	Northshore Christian	UGM	
			E-US Postal Service - Everett	ECAC	Northshore Endo	UHI	
			E-Valley View Silver Crest	ECAMP.LLC.	Northshore Sheet Metal	Uniback	
			E-Value Village	Eco Movers	Northwest Regional Council	UR Stenson	
			E-Vashon Island collection event	Ecova	NPC	US Transmission	
			E-Watson Furniture	ECS	NSA Church	USPS	
			E-Whole Foods	EDASC	NSWW	Valley Buick GME	
			E-Windermere - West Sound	Edmonds Community College	NW CENTER	Valley Place	
			E-Windermere Bellevue	EFR	NW Control Sys	Valmont / WCE	
			E-Windermere Everett	Elcon	NW Grating	Vanderly & Co	
			E-Windermere Madison Park	Elliott Bay Book Co	NW Home Improvements	Vashon Tech Support	

CEP TYPE	Qty in Lbs. 2016 Total	Schools and School Districts generating large quantities	Small governments, charities (other than charities registered as collectors), small business, and events						
		SCHOOL DISTRICTS	EVENTS	MISCEL	LANEOUS COVERED E	NTITIES			
•	•		E-Windermere Mercer Island	Emerald City Pizza	NW Kidney Ctr	Vector Ind			
			E-Windermere Redmond	Emerald City Tech	NW Tax Specialists	Vesta Properties			
			E-Windermere Woodinville	EMP	NW Territorial Mint	Visno Vipro			
			E-Woodinville Alliance Church	Empower Up	NW Vision	Vuetura			
			E-Work Force Dev Center-Mukilteo	Engineering Development	Oakwood World Wide	W.C.R.			
			E-Wright Runstad	Engineering Solutions	OHL	W/B Housing			
			E-Yacolt Clean-up Event	ER Enterprize	Orkin Pest Control	Washington Cathedral			
			E-YMCA	ETI	Our Lady of the Lake	Waste Management			
			E-Young Life	Everett DT Storage	Outlet Collections	Watertown Hotel			
			E-24 Hour Fitness	Everett Golf and Country Club	P.A.W.S.	WBS			
			E-ABAM Building - Federal Way	Everett Housing Authority	P.S. Removal	WCDC			
		•		Whatcom Counseling	World Affairs	Werner O-Meara & Co			
				Whatcom Hire	World Vision	Wesco			
				Whatcom Humane Society	Worldmark - Camlin	Wesiot Tech			
				White Glove Junk Removal	WRC	Wesley Homes			
				Willow Technology	Wrecking Ball	West Wind Motel			
				Windermere	WSGA	Westek			
				Windermere Real Estate	WSWW	Western Engineering			
				YMCA	XKL LLC	YWCA Seattle			
				Youth Care	Xpertise Computer Solutions				

## WMMFA Ecycle registered WA Collection sites throughout 2016

Collector Site Name	Operating Organization	EPR Number	County
Experience Merchandise Thrift Store	Adams County Developmental Disabilities	EPR00547	Adams
CEP Recycle Asotin Co.	ННН	EPR00471	Asotin
Clayton-Ward Company Kennewick	Clayton-Ward Company	EPR00526	Benton
Clayton-Ward Company Richland	Clayton-Ward Company	EPR00526	Benton
Goodwill 7-11 Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Albertsons Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Columbia Center Mall Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill East Kennewick	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Fred Meyer Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Kennewick Store	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Kennewick Walmart Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Plaza Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Richland	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Richland Walmart Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Goodwill Westgate Shopping Center Donation Center	Goodwill Industries of the Columbia	EPR00871	Benton
Horn Rapids Sanitary Landfill	City of Richland - Landfill	EPR00490	Benton
City of Chelan Recycle Center	City of Chelan	EPR00514	Chelan
Goodwill Valley College Donation Center	Goodwill Industries of the Columbia	EPR00871	Chelan
Goodwill Wenatchee Store	Goodwill Industries of the Columbia	EPR00871	Chelan
Pacific Power Batteries Wenatchee	Pacific Power Batteries	EPR00967	Chelan
Salvation Army Wenatchee	The Salvation Army Seattle DHQ	EPR00470	Chelan
Goodwill Port Angeles Store	Tacoma Goodwill	EPR00290	Clallam
Goodwill Sequim Store	Tacoma Goodwill	EPR00290	Clallam
Born Alliance	Born Alliance	EPR01210	Clark
Central Transfer and Recycling Center	Columbia Resource Company	EPR00754	Clark
Goodwill - 205 and Mill Plain Donation Center	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill - Big Al's Donation Center	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill 162nd Donations Express	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill 38th and Main	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Andresen Marketplace Express	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Battleground Store	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Cascade Park Donation Center	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Felida Country Store Donation Center	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Fishers Landing Store	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Hazel Dell Store	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Northgate Shopping Center	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Orchards Donation Center	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Salmon Creek Store	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill The Glen	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Vancouver Outlet	Columbia Willamette Goodwill	EPR00343	Clark
Goodwill Vancouver Store	Columbia Willamette Goodwill	EPR00343	Clark

Collector Site Name	Operating Organization	EPR Number	County
Goodwill Washougal Donation Center	Columbia Willamette Goodwill	EPR00343	Clark
The Arc of Southwest Washington	Arc of Southwest Washington	EPR01138	Clark
Washougal Transfer Station	Columbia Resource Company	EPR00754	Clark
West Vancouver Materials Recovery Center	Columbia Resource Company	EPR00754	Clark
Columbia County Transfer Station	Columbia County Public Works	EPR01028	Columbia
Goodwill Longview Store	Tacoma Goodwill	EPR00290	Cowlitz
Waste Control Recycling	Waste Control Recycling	EPR00443	Cowlitz
Goodwill East Wenatchee Store	Inland Northwest Goodwill	EPR00334	Douglas
Inchelium Community Center	Colville Confederated Tribes	EPR00578	Ferry
Keller Community Center	Colville Confederated Tribes	EPR00578	Ferry
Torboy Transfer Station	Ferry County Waste Management	EPR00487	Ferry
Goodwill Pasco Outlet	Goodwill Industries of the Columbia	EPR00871	Franklin
Goodwill Pasco Store	Goodwill Industries of the Columbia	EPR00871	Franklin
Goodwill Pasco Walmart Donation Center	Goodwill Industries of the Columbia	EPR00871	Franklin
Tommy's Steel & Salvage	Tommy's Steel & Salvage	EPR00519	Franklin
CEP Recycle Garfield County	ННН	EPR00471	Garfield
CDSI Transfer & Recycle	Consolidated Disposal Service, Inc.	EPR00279	Grant
Consolidated Disposal Service	Consolidated Disposal Service, Inc.	EPR00279	Grant
Goodwill Moses Lake Store	Inland Northwest Goodwill	EPR00334	Grant
Goodwill Aberdeen Store	Tacoma Goodwill	EPR00290	Grays Harbor
Pay More Recycle and Salvage Inc. Aberdeen	Pay More Recycle and Salvage	EPR01202	Grays Harbor
Salvation Army Aberdeen	The Salvation Army Seattle DHQ	EPR00470	Grays Harbor
Waste Connections Inc dba Aberdeen Sanitation	Waste Connections Inc dba Aberdeen Sanit	EPR00522	Grays Harbor
Camano Island Transfer Station & Recycle Park	Island County Public Works SW Division	EPR00530	Island
Coupeville Island Recycling	Island Recycling	EPR00517	Island
Freeland Island Recycling	Island Recycling	EPR00517	Island
North Whidbey Drop Box Station	Island County Public Works SW Division	EPR00530	Island
Goodwill Port Townsend Store	Tacoma Goodwill	EPR00290	Jefferson
3R Technology	3R Technology	EPR00370	King
Busby Junk Removal	Busby Junk Removal, LLC	EPR00466	King
COMMAND.COMputers E-Cycle	COMMAND.COMputers	EPR00865	King
EcoLights Northwest	Total Reclaim, Inc.	EPR00544	King
Enumclaw Recyclers	Enumclaw Recyclers	EPR00834	King
E-Recycle Mercer Island Site	E-Recycle	EPR00774	King
EWC Group, Inc	EWC Group, Inc	EPR00472	King
Friendly Earth International Inc.	Friendly Earth International	EPR00824	King
Goodwill Auburn Store	Tacoma Goodwill	EPR00290	King
Goodwill Ballard Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Ballard Store	Seattle Goodwill	EPR00310	King
Goodwill Bellevue Store	Seattle Goodwill	EPR00310	King
Goodwill Bothell Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Burien Store	Seattle Goodwill	EPR00310	King
Goodwill Capitol Hill	Seattle Goodwill	EPR00310	King
Goodwill Covington Donation Station	Tacoma Goodwill	EPR00290	King

Collector Site Name	Operating Organization	EPR Number	County
Goodwill Des Moines Store	Tacoma Goodwill	EPR00290	King
Goodwill Enumclaw Donation Station	Tacoma Goodwill	EPR00290	King
Goodwill Federal Way Store	Tacoma Goodwill	EPR00290	King
Goodwill Greenwood Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Interbay Donation Center @ Whole Foods	Seattle Goodwill	EPR00310	King
Goodwill Issaquah Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Juanita Store	Seattle Goodwill	EPR00310	King
Goodwill Kent Outlet Store	Tacoma Goodwill	EPR00290	King
Goodwill Kent Store	Tacoma Goodwill	EPR00290	King
Goodwill Maple Valley Store	Tacoma Goodwill	EPR00290	King
Goodwill Newport Hills Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Northgate Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Poulsbo Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Ravenna Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Redmond Ridge Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Renton Store	Seattle Goodwill	EPR00310	King
Goodwill Sammamish Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Seattle Store	Seattle Goodwill	EPR00310	King
Goodwill Shoreline Store	Seattle Goodwill	EPR00310	King
Goodwill Snoqualmie Ridge	Seattle Goodwill	EPR00310	King
Goodwill South Lake Union	Seattle Goodwill	EPR00310	King
Goodwill Southcenter Store	Seattle Goodwill	EPR00310	King
Goodwill Totem Lake Donation Center	Seattle Goodwill	EPR00310	King
Goodwill University District Store Donation Center	Seattle Goodwill	EPR00310	King
Goodwill West Seattle Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Woodinville Donation Center	Seattle Goodwill	EPR00310	King
Goodwill Woodinville P&R Donation Center	Seattle Goodwill	EPR00310	King
InterConnection Computer Reuse	InterConnection Computer Reuse	EPR00369	King
Northwest Center Truck at Albertsons	Northwest Center	EPR00411	King
Northwest Center Truck at Albertson's Bellevue	Northwest Center	EPR00411	King
Northwest Center Truck at Carnation IGA Grocery	Northwest Center	EPR00411	King
Northwest Center Truck at Cottage Lake Safeway	Northwest Center	EPR00411	King
Northwest Center Truck at Pine Lake QFC	Northwest Center	EPR00411	King
Northwest Center Truck at QFC North Bend	Northwest Center	EPR00411	King
Northwest Center Truck at Redmond QFC	Northwest Center	EPR00411	King
Northwest Truck at Madrona Grocery Outlet	Northwest Center	EPR00411	King
NW Center Truck at Queen Anne Diamond Parking	Northwest Center	EPR00411	King
NW Center Truck at Walmart Overflow Parking South	Northwest Center	EPR00411	King
NW Center Truck at West Seattle Key Bank Parking	Northwest Center	EPR00411	King
NW Center Truck at Wilderness Village QFC	Northwest Center	EPR00411	King
NW Center Truck in Wedgwood	Northwest Center	EPR00411	King
NWC Truck at Interbay Whole Foods Market	Northwest Center	EPR00411	King
Pacific Power Batteries of Kirkland	Pacific Power Batteries of Kirkland	EPR01224	King
PC Recycle - Bellevue	PC Recycle	EPR00220	King

Collector Site Name	Operating Organization	EPR Number	County
PC Recycle - Bothell	PC Recycle	EPR00220	King
PC Recycle - Bridle Trails Shopping Center	PC Recycle	EPR00220	King
PC Recycle - Woodinville	PC Recycle	EPR00220	King
Planet USA, LLC	Planet USA, LLC	EPR00975	King
Recology CleanScapes - Highline	InterConnection Computer Reuse	EPR00369	King
RE-PC Seattle	RE-PC	EPR00426	King
RE-PC Tukwila	RE-PC	EPR00426	King
Salvation Army Auburn Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Ballard Fred Meyer Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Bellevue Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Burien Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Federal Way Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Kent Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Redmond Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Renton Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Renton Fred Meyer Donation Center	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Seattle ARC	The Salvation Army Seattle ARC	EPR00543	King
Salvation Army Shoreline Donation Site	The Salvation Army Seattle ARC	EPR00543	King
Slavation Army Family Store	The Salvation Army Seattle ARC	EPR00543	King
St Vincent de Paul 1st Ave S	St Vincent de Paul Seattle/King County	EPR00525	King
St Vincent de Paul 4th Ave S	St Vincent de Paul Seattle/King County	EPR00525	King
St Vincent de Paul Aurora Ave N	St Vincent de Paul Seattle/King County	EPR00525	King
St Vincent de Paul Bothell Way NE	St Vincent de Paul Seattle/King County	EPR00525	King
St Vincent de Paul Kent	St Vincent de Paul Seattle/King County	EPR00525	King
St Vincent de Paul Renton	St Vincent de Paul Seattle/King County	EPR00525	King
Total Reclaim 6th Ave Site	Total Reclaim, Inc.	EPR00544	King
UpTeKK	UpTekk	EPR00491	King
Value Village Burien	Savers Recycling, Inc.	EPR00484	King
Value Village Issaquah	Savers Recycling, Inc.	EPR00484	King
Value Village Kent	Savers Recycling, Inc.	EPR00484	King
Value Village Kirkland	Savers Recycling, Inc.	EPR00484	King
Value Village Redmond	Savers Recycling, Inc.	EPR00484	King
Value Village Seattle 15th Ave NW	Savers Recycling, Inc.	EPR00484	King
Value Village Seattle Lake City Way	Savers Recycling, Inc.	EPR00484	King
Value Village Tukwila	Savers Recycling, Inc.	EPR00484	King
Value Village Woodinville	Savers Recycling, Inc.	EPR00484	King
VIDEO ONLY - Bellevue	Video Only, Inc.	EPR00855	King
VIDEO ONLY - Federal Way	Video Only, Inc.	EPR00855	King
VIDEO ONLY - TUKWILA	Video Only, Inc.	EPR00855	King
Waste Management South King County	Waste Management of Washington	EPR00264	King
Bremerton St. Vincent dePaul	St Vincent de Paul Bremerton	EPR00494	Kitsap
Goodwill Bainbridge Island Don. Center	Seattle Goodwill	EPR00310	Kitsap
Goodwill Bremerton Store	Seattle Goodwill	EPR00310	Kitsap
Goodwill Port Orchard Store	Seattle Goodwill	EPR00310	Kitsap

Collector Site Name	Operating Organization	EPR Number	County
Goodwill Silverdale Store	Seattle Goodwill	EPR00310	Kitsap
Olympic View Transfer Station	Waste Management of Washington	EPR00264	Kitsap
Goodwill Ellensburg Store	Tacoma Goodwill	EPR00290	Kittitas
Kittitas County Habitat Store	Kittitas County Habitat for Humanity	EPR00757	Kittitas
Kittitas Valley Recycling - Ellensburg	Kittitas Valley Recycling	EPR00515	Kittitas
Republic Services Div 4178 - Goldendale Transfer	Republic Services Div 4178	EPR00482	Klickitat
Goodwill Centralia Store	Tacoma Goodwill	EPR00290	Lewis
New Life Thrift Store & Building Supplies	New Life Thrift Stores	EPR01113	Lewis
Tiger Mountain Technologies	Tiger Mountain Technologies	EPR00707	Lewis
Visiting Nurses Thrift Store	Visiting Nurses Foundation	EPR00937	Lewis
Visiting Nurses Thrift Store	Visiting Nurses Foundation	EPR00937	Lewis
Lincoln County Transfer Station	Lincoln County Transfer Station	EPR00367	Lincoln
Goodwill Shelton Store	Tacoma Goodwill	EPR00290	Mason
Pay More Recycle and Salvage Inc Shelton	Pay More Recycle and Salvage	EPR01202	Mason
Green Okanagon	Green Okanogan Recycle	EPR00572	Okanogan
Methow Recycles	Methow Recycles	EPR00298	Okanogan
Nespelem Recycling Center	Colville Confederated Tribes	EPR00578	Okanogan
Omak Community Center	Colville Confederated Tribes	EPR00578	Okanogan
Pacific Solid Waste Disposal	Pacific Solid Waste Disposal Inc	EPR00371	Pacific
Royal Heights Transfer Station	Royal Heights Transfer Station	EPR00488	Pacific
Ione Transfer Station	Pend Oreille Co Public Works	EPR00404	Pend Oreille
Newport Transfer Station	Pend Oreille Co Public Works	EPR00404	Pend Oreille
Usk Transfer Station	Pend Oreille Co Public Works	EPR00404	Pend Oreille
Affordable Computer Service	Affordable Computer Service	EPR00418	Pierce
American Computer Sales	American Computer Sales and Service	EPR01099	Pierce
Goodwill 38th Street Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill 6th Ave Plaza Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill 72nd Street Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Bonney Lake Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Gig Harbor Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill Gig Harbor Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Graham Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill Lakewood Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Lucky Foods Lakewood Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill NE Tacoma Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill Purdy Transfer Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill Puyallup River Road Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Roses IGA Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill South Hill Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Spanaway Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Tacoma Landfill Recycle Donation Station	Tacoma Goodwill	EPR00290	Pierce
Goodwill Tacoma Outlet Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill Tacoma South Store	Tacoma Goodwill	EPR00290	Pierce
Goodwill University Place Refuse/Recycle Station	Tacoma Goodwill	EPR00290	Pierce

Collector Site Name	Operating Organization	EPR Number	County
Goodwill Wauna - Key Peninsula Donation Station	Tacoma Goodwill	EPR00290	Pierce
Green PC	Green PC	EPR00520	Pierce
Joint Base Lewis-McChord Recycle Center	LeMay Inc	EPR00529	Pierce
McChord Recycling Center	LeMay Inc	EPR00529	Pierce
Recycling Resources	Recycling Resources	EPR00877	Pierce
Salvation Army Bonney Lake Donation Site	The Salvation Army Seattle ARC	EPR00543	Pierce
Salvation Army Puyallup Donation Site	The Salvation Army Seattle ARC	EPR00543	Pierce
St. Vincent de Paul S. 56th St.	St Vincent de Paul Tacoma	EPR00561	Pierce
St. Vincent de Paul South Hill	St Vincent de Paul Tacoma	EPR00561	Pierce
Value Village Puyallup	Savers Recycling, Inc.	EPR00484	Pierce
Value Village University Place	Savers Recycling, Inc.	EPR00484	Pierce
VIDEO ONLY - Tacoma	Video Only, Inc.	EPR00855	Pierce
Community Treasures	Community Treasures	EPR00489	San Juan
Lopez Solid Waste Disposal District	Lopez Solid Waste Disposal District	EPR01022	San Juan
Orcas Recycling Services	Orcas Recycling Services	EPR00512	San Juan
Appliance Connection	Appliance Recycling Outlet	EPR00486	Skagit
E-Waste, LLC - Mount Vernon	E-Waste LLC	EPR00445	Skagit
Goodwill Anacortes Donation Center	Seattle Goodwill	EPR00310	Skagit
Goodwill Mount Vernon Store	Seattle Goodwill	EPR00310	Skagit
Pacific Power Batteries Mount Vernon	Pacific Power Batteries	EPR00967	Skagit
Sedro-Woolley City Recycling Facility	City of Sedro-Woolley	EPR00324	Skagit
Value Village Mt Vernon	Savers Recycling, Inc.	EPR00484	Skagit
Mt. Pleasant Transfer Facilty	Skamania County Solid Waste Division	EPR00358	Skamania
Stevenson Transfer Facility	Skamania County Solid Waste Division	EPR00358	Skamania
Underwood Transfer Facility	Skamania County Solid Waste Division	EPR00358	Skamania
Ace Metal Company and Mukilteo Recycling Center	Ace Metal Company	EPR00557	Snohomish
Appliance Recycling Outlet	Appliance Recycling Outlet	EPR00486	Snohomish
E-Waste, LLC - Everett	E-Waste LLC	EPR00445	Snohomish
E-Waste, LLC - Lynnwood	E-Waste LLC	EPR00445	Snohomish
Goodwill Edmonds Store	Seattle Goodwill	EPR00310	Snohomish
Goodwill Everett Store	Seattle Goodwill	EPR00310	Snohomish
Goodwill Lynnwood Store	Seattle Goodwill	EPR00310	Snohomish
Goodwill Martha Lake Donation Center	Seattle Goodwill	EPR00310	Snohomish
Goodwill Marysville Store	Seattle Goodwill	EPR00310	Snohomish
Goodwill Monroe Store	Seattle Goodwill	EPR00310	Snohomish
Goodwill Snohomish Donation Center	Seattle Goodwill	EPR00310	Snohomish
Goodwill South Everett Store	Seattle Goodwill	EPR00310	Snohomish
Kiwanis Recycle	Stanwood Camano Kiwanis	EPR01059	Snohomish
Northwest Center Mukilteo	Northwest Center	EPR00411	Snohomish
Northwest Center Truck at Lake Stevens Albertsons	Northwest Center	EPR00411	Snohomish
NW Center Truck at Thrasher's Corner Shopping Cnt.	Northwest Center	EPR00411	Snohomish
Pacific Power Batteries Everett	Pacific Power Batteries	EPR00967	Snohomish
Pacific Power Batteries Marysville	Pacific Power Batteries	EPR00967	Snohomish
Pacific Power Batteries Mountlake Terrace	Pacific Power Batteries	EPR00967	Snohomish

Collector Site Name	Operating Organization	EPR Number	County
Salvation Army Lynnwood Donation Center	The Salvation Army Seattle ARC	EPR00543	Snohomish
Salvation Army Marysville Donation Site	The Salvation Army Seattle ARC	EPR00543	Snohomish
Salvation Army Mill Creek Donation Site	The Salvation Army Seattle ARC	EPR00543	Snohomish
St Vincent dePaul Lynnwood	St Vincent de Paul Northsound	EPR00560	Snohomish
St. Vincent dePaul Everett	St Vincent de Paul Northsound	EPR00560	Snohomish
St. Vincent dePaul Monroe	St Vincent de Paul Northsound	EPR00560	Snohomish
Truck On Call	Truck On Call	EPR00528	Snohomish
Value Village Edmonds	Savers Recycling, Inc.	EPR00484	Snohomish
Value Village Everett	Savers Recycling, Inc.	EPR00484	Snohomish
Value Village Lynwood	Savers Recycling, Inc.	EPR00484	Snohomish
Value Village Marysville	Savers Recycling, Inc.	EPR00484	Snohomish
VIDEO ONLY - Lynnwood	Video Only, Inc.	EPR00855	Snohomish
APB AUTO PARTS	Auto Parts Barn, Inc.	EPR00904	Spokane
DeVries Business Services	DeVries Business Services	EPR00914	Spokane
Goodwill Airway Heights Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Cheney Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Dishman-Appleway Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Downtown Spokane Plant/Dock Donation Cent	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Francis Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Mt. Spokane Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill North Division Y Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill North Nevada Store	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill NW Spokane Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill South Hill 57th Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill South Hill Store Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill South Pines Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Spokane Valley Store	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Spokane Warehouse	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Trent Avenue Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Veradale Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Goodwill Wandermere Donor Service Center	Inland Northwest Goodwill	EPR00334	Spokane
Inland ReTech	Electronic Recycling, LLC dba Inland ReT	EPR00335	Spokane
Recycle Techs	Recycle Techs	EPR00478	Spokane
Recycle Techs North	Recycle Techs	EPR00478	Spokane
Salvation Army Spokane	The Salvation Army Seattle DHQ	EPR00470	Spokane
Salvation Army Spokane Valley	The Salvation Army Seattle DHQ	EPR00470	Spokane
Value Village Spokane E Sprague	Savers Recycling, Inc.	EPR00484	Spokane
Value Village Spokane W Boone	Savers Recycling, Inc.	EPR00484	Spokane
VIDEO ONLY - Spokane	Video Only, Inc.	EPR00855	Spokane
Goodwill Colville Store	Inland Northwest Goodwill	EPR00334	Stevens
4th Dimension Computers	4th Dimension Computer	EPR00002	Thurston
4th Dimension Computers	4th Dimension Computer	EPR00002	Thurston
Goodwill Hawks Prairie Landfill/Recycle Station	Tacoma Goodwill	EPR00290	Thurston

Collector Site Name	Operating Organization	EPR Number	County
Goodwill Lacey Store	Tacoma Goodwill	EPR00290	Thurston
Goodwill Olympia Outlet	Tacoma Goodwill	EPR00290	Thurston
Goodwill Olympia Store	Tacoma Goodwill	EPR00290	Thurston
Goodwill South Lacey Store	Tacoma Goodwill	EPR00290	Thurston
Goodwill Walmart Tumwater ADS	Tacoma Goodwill	EPR00290	Thurston
Goodwill Yelm Store	Tacoma Goodwill	EPR00290	Thurston
MARS LLC	Mars, LLC	EPR01013	Thurston
State Surplus Tumwater Site	Department of Enterprise Services / State Surplus	EPR00480	Thurston
Value Village Lacey	Savers Recycling, Inc.	EPR00484	Thurston
Stanley's Sanitary Service	Stanley's Sanitary Service LLC	EPR00493	Wahkiakum
CEP Recycle Walla Walla	ННН	EPR00471	Walla Walla
Goodwill College Place Walmart Donation Center	Goodwill Industries of the Columbia	EPR00871	Walla Walla
Goodwill Walla Walla Store	Goodwill Industries of the Columbia	EPR00871	Walla Walla
Lillie Rice Center, Inc	Lillie Rice Center, Inc	EPR01223	Walla Walla
Walla Walla Recycling	Walla Walla Recycling Inc	EPR00496	Walla Walla
Goodwill Bellingham Store	Seattle Goodwill	EPR00310	Whatcom
Recycling & Disposal Services, Inc.	Recycling & Disposal Services, Inc.	EPR00510	Whatcom
Salvation Army Bellingham	The Salvation Army Seattle DHQ	EPR00470	Whatcom
Value Village Bellingham	Savers Recycling, Inc.	EPR00484	Whatcom
Goodwill Pullman Donor Service Center	Inland Northwest Goodwill	EPR00334	Whitman
Pullman Disposal Shop	Pullman Disposal Service, Inc.	EPR00299	Whitman
Goodwill Burger King Donation Station	Tacoma Goodwill	EPR00290	Yakima
Goodwill Selah Store	Tacoma Goodwill	EPR00290	Yakima
Goodwill Sunnyside Store	Goodwill Industries of the Columbia	EPR00871	Yakima
Goodwill Union Gap Store	Tacoma Goodwill	EPR00290	Yakima
Goodwill Yakima K Mart Donation Station	Tacoma Goodwill	EPR00290	Yakima
Goodwill Yakima Store	Tacoma Goodwill	EPR00290	Yakima
Salvation Army Union Gap	The Salvation Army Seattle DHQ	EPR00470	Yakima
Salvation Army Yakima	The Salvation Army Seattle DHQ	EPR00470	Yakima
Sunnyside Christian Thrift Shop	Sunnyside Christian Thrift Shop	EPR00566	Yakima
Union Gospel Mission Yakima	Union Gospel Mission Yakima	EPR00568	Yakima
Value Village Union Gap	Savers Recycling, Inc.	EPR00484	Yakima
Yakima Waste Systems - Granger	Yakima Waste Systems, Inc.	EPR00463	Yakima
Yakima Waste Systems - Yakima	Yakima Waste Systems, Inc.	EPR00463	Yakima

## Processors participating in WMMFA Standard Plan - Description of processes and methods Reference to compliance audits

The information listed below represents a summary of processor locations and processing methods of each of the approved processors participating in the Standard Plan Processes listed include any and all processors utilized for any quantity of materials in 2015 with data based on most recent audits

For the most current compliance audit report please refer to the WMMFA Standard Plan's Registered Processors section at this link to the E-Cycle Washington web page:

### http://www.ecy.wa.gov/programs/swfa/eproductrecycle/processorComplianceAuditor.html

Ace Metal Company, 11110 Mukilteo Speedway #202, Mukilteo, WA 98275		Jay Lee	(425)493-6802
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country
CRT Glass	Removed from CEP by	Glass to glass, all	India/Spain/Netherlands
	hand dismantling	materials are reused in	
	separated panel and funnel,	new glass product	
	all metal removed		
Circuit Boards	Removed from CEP by	Precious metals	Japan
	hand dismantling	recovery	
Batteries	Hand removed from CEP	Metal Recovery	USA
	and sorted by type		
Mercury Devices	Hand removed from CEP	Retort	USA
	managed as universal waste	Mercury Recovery	
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	China
Insulated Wire	Hand removed from CEP and sorted	Metal Recovery	USA
Aluminum	Hand removed from CEP and sorted	Metal Recovery	USA

EWC Group, 410 Andover Park E., Tukwila, WA 98188		James Piek	(206)767-9950
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country
CRT Glass	Manually removed from CEP; separate panels, metals, and all other residuals	Glass to glass; all materials reused in new glass products	U.S./Mexico /India
Circuit Boards	Manually removed from CEP	Primary smelter for precious metal recovery	Korea / Japan / Belgium
Batteries	Manually removed from CEP and sorted by type	Metal Recovery	U.S.
Mercury Devices	Manually removed from CEP and managed as Universal Waste	Mercury recovery	U.S. / Canada
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Manually removed from CEP	Metal recovery	U.S.
Plastics	Manually removed from CEP	Plastic Recovery	China / Canada / U.S.
Insulated Wire	Manually removed from CEP	Metal recovery	China / Korea / U.S.

IMS Electronic Recycling, 2401 Saint Francis Lane, Vancouver, WA 98660		Bill Peterson	(360)750-8883
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country
CRT Glass	Removed from CEP with vacuum release or removed from CEP and separated panel and funnel, all metal removed	Glass to Glass or Glass to commodity recycling	USA
Circuit Boards	Removed from CEP by hand dismantling or automated shred/sort	Primary smelter recovering metals	USA / Japan
Batteries	Hand removed from CEP sorted by type	Metals Recovery	USA / Canada
Mercury devices	Hand removed from CEP packed in lined sealed containers	Mercury recovery	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Removed from CEP by hand dismantling or Automated shred/sort	Metal Recovery	USA
Plastics	Removed from CEP by hand dismantling or automated shred/sort	Plastic Recovery	U.S. Brokers
Insulated Wire	Removed from CEP by hand dismantling or automated shred/sort	Metal Recovery	USA
Aluminum	Removed from CEP by hand dismantling or automated shred/sort	Metal Recovery	USA

E-WASTE LLC, 12424 Beverly Park Rd Suite A-4, Lynnwood, WA 98036		Sam or Paul Kim	(425)239-4118
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country
CRT Glass	Removed from monitors and TVs	Glass to glass recycling. All materials are used in new CRTs.	USA and Mexico
Circuit Boards	Removed from CEP by hand-dismantling	Precious metal recovery	USA and Europe
Batteries	Hand-removed from CEP, sorted by type.	Metal Recovery	USA
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
Insulated Wire	Removed from CEP by hand-dismantling.	Metal Recovery	USA
Aluminum	Removed from CEP by hand-dismantling.	Metal Recovery	USA
Scrap Wood	Removed from CEP by hand-dismantling.	Recycled into reusable products	USA

ECS Refining, 705 Reed Street, Santa Clara, CA 95050		Ken Taggart or Curt Spivey	(408)200-7021
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country
CPU's and selected Electronic Devices	Most electronic devices are dismantled, however, some are evaluated for reuse and/or refurbishment	Downstream recyclers of post dismantled and post shredded commodities are discussed below.	See Below USA
CRTs	Most CRT's are dismantled and the glass is crushed on site	Downstream recyclers are discussed in Lead Containing Glass, below.	See Below USA
		ECS prefers to ship lead- containing glass to a CRT Tube manufacturer, which uses the glass to make new CRT Tubes (glass to glass recycling).	Mexico, USA, Canada, India
CRT Glass	CRTs that are not refurbished for resale are dismantled and the glass is crushed on site.	Lead-containing CRT Glass not shipped for glass-to-glass recycling is shipped to a Lead (Pb) Smelter which recovers the lead as a commodity and sells it on the world market.	
Circuit Boards (Whole)	Circuit Boards are shredded to a minus 2" particles size. The iron & aluminum are removed by magnetic & eddy current separation.	Shredded circuit boards are shipped to a primary copper smelter which recovers copper, gold, silver and palladium as well as other minor elements. The metals are sold as commodities on the world market.	Canada
		Lead/Acid batteries are shipped to a battery manufacturer which recycles the batteries by melting the lead and using it in the manufacture of new batteries.	USA

Batteries	Batteries are manually removed from electronic devices. The batteries are sorted by type (Alkaline, Lithium, etc.).	Silver oxide batteries are smelted at ECS Refining Santa Clara and their silver content is captured by ECS. Post smelted materials are sent for further precious metals processing.	USA
		All other batteries are shipped to a high temperature alloy producer which melts the batteries by their specific type to recover the respective metals.	USA
Mercury Devices	example) or mercury devices may be manually	All mercury-containing devices are shipped to an EPA approved mercury recycler which removes the mercury from the device and produces mercury as a commodity for sale.	USA
Polychlorinated Biphenyls PCBs	PCBs are not "accepted" for storage or processing at ECS. However, ECS may transfer PCB's to an approved TSDF	ECS provides transportation services to an authorized TSDF or recycler.	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	particle size and then the steel is magnetically removed	The steel is shipped to a steel mill where the steel is melted to produce new steel products (steel rod, plate or bars)	Brokers
Steel	particle size and then the steel is magnetically removed.  Plastics are manually removed from the electronic scrap and baled by type of plastic (ABS, HIPS, PC, etc.)	where the steel is melted to produce new steel products (steel rod, plate or bars)	Brokers Brokers

Aluminum	Electronic scrap is shredded to a minus 2" particle size and then the aluminum is removed by eddy current separation.	The aluminum is shipped to aluminum alloyers which melt the aluminum and produce aluminum alloys for sale.	Brokers
CRT Yokes	Yokes are compacted and baled on site.	The yokes are shipped to copper alloyers, which melt the yokes and produce copper alloys for sale.	Brokers
Copper	Copper scrap is shredded to a minus 2" particle size and then copper is removed by magnetic separation	The copper is shipped to copper alloyers, which melt the copper and produce copper alloys for sale.	Brokers

ERI Inc., 2302 West Valley Highway, Ste 300., Auburn, WA 98001		Aaron Blum	(206)577-1490	
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country	
CRT Glass	It is removed from CEP and screen and metal gun removed.	Glass to Glass recycling to be reused in new CRT products.	For processing: Mexicali, BC, Mexico For final furnace: Gujarat, 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, Belgium or South Korea	
Batteries	Removed manually and sorted by type	Metal Recovery	All Types: 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 bailed	Plastics Recovery	ASIA	
Insulated Wire	Removed manually from CEP and sent to Fresno for Shredding	Metal Recovery	Belgium or Korea	
Aluminum	Removed manually from CEP and sorted.	Metal Recovery	USA	

Simon Metals LLC, 2202 East River Road, Tacoma, WA 98421 2401 St. Francis Lane, Vancouver, WA 98660 Paul Olson (253)272-2364				
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country	
CRT Glass	Hand sort and package for transportation in US	Shredding via Farwest Recycling Beaverton	Mexico or Canada	
Circuit Boards	Shred in Tacoma and package for the refiner	Primary smelter for recovery of metals	Japan	
Batteries	Hand sort and package for shipment	Metal recovery and proper disposal	U.S.	
Mercury Devices	Hand removed or shredded, managed as waste	Mercury recovery or disposal	U.S.	
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination	
Steel	Removed from CEP by shredding or hand dismantling	Metal Recovery	U.S.	
Plastics	Shredded and included with the circuit boards	Primary smelter	Japan	
Insulated Wire	Removed by hand or shredding process	Metal Recovery	U.S. or Japan	

Aluminum	Removed by shredding or by hand from the CEP	Metal Recovery	Japan, U.S.

TOTAL RECLAIM, 2200 6th Ave S., Seattle, WA 98134		Craig Lorch (206)343-7443	
Material Of Concern	Recycling Process	Fate of Recycling Process	End of life processing-Destination Country
CRT Leaded Glass	Removed from monitors; screen and metal gun removed	Glass to glass, all materials are reused in new CRT	Mexico (glass washing) India (CRT manufacture)
CRT Leaded Glass	Removed from monitors; screen and metal gun removed	Glass to lead recovery	Canada
CRT Leaded Glass	Removed from monitors; screen and metal gun removed	Glass to ceramic tile	Spain
Circuit Boards	Removed from electronic equipment by hand dismantling or automated shred/sort process	Precious metals recovery	South Korea, Japan or Sweden
Batteries	Hand removed from electronic equipment, hand sorted by type.	Metal recovery	USA
Mercury devices	Hand removed from CEP, managed as universal waste	Mercury recovery	USA
Non-Materials of Concern	Recycling Process	Fate of Recycling Process	Destination
Steel	Removed from electronic equipment by hand dismantling or automated shred/sort process	Metal recovery	USA
Plastics	Removed from electronic equipment by hand dismantling or automated shred/sort process	Plastics recovery	USA or China
Insulated Wire	Removed from electronic equipment by hand dismantling or automated shred/sort process	Metal recovery	USA
Aluminum	Removed from electronic equipment by hand dismantling or automated shred/sort process	Metal recovery	USA

### WMMFA Educational and Promotional efforts cumulative and 2016 - summary

In 2013, collaborating with the outreach workgroup, the WMMFA implemented a 5th year anniversary outreach strategy designed to engage mainstream media in Eastern and Western Washington. This plan dedicated resources to reaching Spanish speaking communities through pre-packaged media/content and community outreach. The plan targeted mainly rural communities based upon their lower CEP collections per capita in comparison to counties with above average pounds per capita contributions. Documentation and samples of media production / results is provided below along with summary documentation outlining specific outreach strategies. A table with estimated impact of this outreach is provided at the bottom of this section.

In 2014 the WMMFA continued outreach efforts to ensure that information about where, how, and why to recycle CEP's was available to all state residents. Methods and strategies for the months of April through August 2014:

- Utilization of news talk radio KIRO-FM for reaching those most likely to regularly update their technologies
- Internet audio streaming of 15 and 30 second spots (same spots as used on radio) through MyNorthwest.com
- Display advertisements on MyNorthwest.com with links directly to E-Cycle Washington website
- KIRO Radio spots 10 per week morning drive time, 10 per week prime time, 10 per week random time with matching audio stream 30 times per week
- 100,000 impressions per week at MyNorthwest.com

For 2015 outreach efforts continued in a similar manner as 2014 to ensure that information about where, how, and why to recycle CEP's was available to all state residents. Specifically:

- Utilization of news talk radio KIRO-FM for reaching those most likely to regularly update their technologies
- Internet audio streaming of 15 and 30 second spots (same spots as used on radio) through MyNorthwest.com, Monday Friday 2x per day March, April, May, June, September
- Display advertisements on MyNorthwest.com with links directly to E-Cycle Washington website
- KIRO Radio spots 10 per week morning drive time, 10 per week prime time, 10 per week random time with matching audio stream 30 times per week March, April, May, June, September 2015
- 60,000 impressions per week at MyNorthwest.com Monday through Sunday two weeks per month
- The WMMFA participated in cooperative print advertising with Pend Oreille County Public Works throughout 2015
- Approximately 260 laminated (indoor and outdoor) Posters were distributed to our collection Network for "branding" of physical collection sites
- Approximately 4000 brochures (brochure copy below) were distributed to collectors and any interested parties throughout 2015

#### THE MATERIALS PRESENTED BELOW OFFER A HISTORICAL PERSPECTIVE ON E-CYCLE WASHINGTON OUTREACH EFFORTS OF THE WMMFA

The WMMFA also provides posters, banners, and brochures to collectors and any interested parties requesting them. In summary the WMMFA has created and sponsored placement of TV spots, web banners, click to call, video display, and mobile advertising opportunities statewide since inception.





E-Cycle Washington is a collaboration of electronics manufacturers, collectors, recyclers, retailers, local and state governments and non-profit groups that work together to provide environmentally safe and convenient recycling for TVs, computers, and monitors across the state of Washington - at no cost to consumers. Since launching in January 2009, the E-Cycle Washington program has kept more than 200 million pounds of electronics out of underdeveloped nations and landfills. Pretty impressive for a five-year old.

### 200,000,000 lbs

of electronics (computers, TVs, monitors) recycled





Only 2% sent to landfill - the rest recycled or reused



68% of collections have been TVs. 23% monitors and 9% computers



Approximately 29% of computers are reused through refurbishment or resale



of lead and reduced pollution



Manufacturers have provided \$47 million dollars in electronics recycling services at no cost to

local governments or consumers

(from January 2009 - July 2013)

of residents have a ecycling location within 10 miles of their home



No

toxic materials

exported to

developing nations



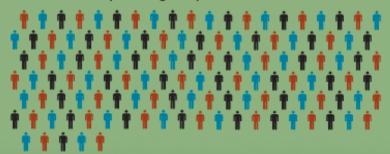


E-Cycle Washington has expanded since 2009

and now includes tablet



Created over 125 jobs for independent collection, transportation and processing enterprises across the state



### Brief description of some of the E-Cycle coverage

### **E-Cycle Coverage (2011-2013)**

KNDU Yakima ran a TV story featuring E-Cycle and a local collector on 10/23

- KPQ radio in Wenatchee ran a story featuring E-Cycle and Goodwill on 10/23
- KOMO radio in Seattle ran a story on E-Cycle on 10/24 and recorded a follow-up interview on 11/8 I will get this clip when available
- KOMO online ran a story on 10/24
- The Columbian published a news brief on October 25
- KIT radio in Yakima ran a story on E-Cycle on 10/24 based on KNDU's coverage
- KING ran a story on 11/12

### Hispanic Coverage

- A Spanish story from our event ran on KUNS at 6:00 and 11:00 PM newscasts on 10/23
- Hispanic Business ran a story 10/26
- Tu Decides ran a story on 11/1
- A total of 115 Spanish spots ran on radio stations KDYK, KMMG, KZML, KZTA and KZTB

#### WEB and mobile network outreach:

The WMMFA financed and produced a 15 second and a 30 second video advertising spot via agreement with KIRO TV in early 2012.

The WMMFA had 100,000 monthly mobile banner ad impressions rotating on Network Mobile with click to call feature and geo-targeted to: Skagit, Chelan, Yakima, Spokane, Whitman, Pend Oreille, and Benton counties March through November 2013

30,000 monthly video pre-roll impressions running on Google Display Network geo-targeted to Skagit, Chelan, Yakima, Spokane, Whitman, Pend Oreille, and Benton counties March through November 2013

100,000 monthly leaderboard and display ad impressions on kirotv.com across multiple counties

20,000 monthly in-video display ad impressions (:15 second E-Cycle ads) ran ROS (run of site) on KIRO-TV.com



### Top 50 Ad Groups - Ecycle - Based on Clicks (All campaigns)

Date range: Last 60 Days (9/15/2013 - 11/13/2013)

Ad Group	Impressions	Clicks	CTR
Video ad	64,072	547	0.85 %
Display Ads	384,164	127	0.03 %
Keywords	375	0	0.00 %

### Ecycle

Date range: 4/1/2013 - Yesterday (11/13/2013)



Total Impressions: 1,170,940

In February through April of 2013 the WMMFA had multiple billboards placed along selected highway thoroughfares of medium sized counties within the state. Camera shots of the billboards are provided below. Placement was in the Tri- Cities (Benton, Franklin, Walla Walla counties) area and Yakima County for approximately 2 months per board.









Photo taken on: 3/15/2013 

Photo taken on: 3/14/2013 6TH AVE E

Photo taken on: 3/14/2013

Photo taken on: 3/13/2013 006521A-2 - S/L E COLUMBIA DR 200 FT W/O BEECHSTE









Photo taken on: 3/14/2013 00A1985-2 - W/L N 1ST ST 120 FT N/O E G ST N

Photo taken on: 3/13/2013 00A5515-1 - N/L W 1ST AVE 90 FT W/O S BENTON ST W

Photo taken on: 3/14/2013

Photo taken on: 3/13/2013 N UNDERWOOD ST W

- > The WMMFA owns the 15 and 30 second video productions and has made them freely available to our collectors, transporters, processors and interested parties for posting and /or advertising of the E-cycle plan along with their independent collection or processing web sites.
- > The WMMFA has always offered to participate with collectors that request cooperative advertising funds to produce local materials such as flyers, direct mail inserts, newspaper or event programs and other local published media. Participation amount varies based on total cost, pre-planned budget, and perceived effectiveness of the outreach.
- > The WMMFA maintains a website and toll free phone number that gives information about the WMMFA and the E-cycle WA plan in sufficient detail to all covered entities, potential service providers and other stakeholders. It is estimated that the WMMFA directed over 1,900 covered entities (mainly households, small governments and school districts) via phone contact in 2013.

- > Promotional materials are available by direct re-print from exportable files at our web site and as provided to Ecology for their website.
- > The WMMFA produces hundreds of laminated (outdoor) posters, banners (2013), and informative brochures annually available free of charge to collectors and interested parties for the asking. Samples of the posters, banners, and brochures reproduced below.











# FREE RECYCLING



ecyclewashington.org

#### WHAT IS E-CYCLE WASHINGTON?

E-Cycle Washington is a program that provides responsible recycling of computers, monitors and TVs in our state. Starting January 2009, electronics manufacturers in Washington are taking responsibility for the cost of recycling these products. For consumers, small businesses, school districts, small governments, special purpose districts and charities, recycling is provided free of charge at authorized collection points.

E-Cycle Washington thanks electronics manufacturers for sponsoring this innovative program to responsibly and safely recycle electronics in our state.

The Washington Materials Management & Financing Authority (WMMFA) is the manufacturer-funded group leading this effort. WMMFA has contracted with collectors around the state, making e-cycling convenient and easy. You can also be assured that items taken to authorized collectors are handled safely and responsibly according to preferred management standards set by WMMFA and the State Department of Ecology.







E-Cycle Washington is a program that provides free recycling of computers, monitors, laptops and TVs.



#### WHAT'S COVERED AND WHAT'S NOT?

RECYCLING OF THESE PRODUCTS IS FREE UNDER THE LAW:

- □ Computers
- ☐ CPUs (Towers)
- □ Laptops
- ☐ Computer Monitors
- ☐ Televisions

For larger quantities, call 1-866-779-6632.

Peripherals and accessories are NOT covered under the law:

- Mice
- Printers
- ☐ Copiers
- Scanners
- All other electrical devices, including appliances and cell phones

For recycling locations, please call

1-800-RECYCLE

or visit

www.ecyclewashington.org

#### WHY E-CYCLE?

Recycle: It is estimated that millions of pounds of unwanted electronics are thrown in the trash in Washington each year. Electronics can contain toxic materials such as lead, cadmium, mercury and hazardous chemicals that can harm human health and the environment. E-cycling keeps these and other materials out of our landfills and incinerators and conserves natural resources and energy required to make products from scratch.

Re-Use: Many materials in these products can be re-used in new products if handled properly, conserving the resources and energy needed to recycle and reprocess existing units as well as reducing the need to manufacture virgin parts. Some unwanted electronics still work, and can be made available secondhand to people and organizations who may not be able to afford to buy new equipment.

E-cycling helps us all take responsibility for the products we make, buy and use from the beginning to the end of their useful lives.

#### WHAT HAPPENS TO MY STUFF?

E-Cycle Washington processors are held to high standards and must comply with the State's "Preferred Processing Standards."
For details, go to www.ecyclewashington.org. If the product you drop off still works, it may be reused through resale or donation.

#### DATA SECURITY

WMMFA is not responsible for the release of confidential data contained within collected electronic devices. Software programs are available to permanently destruct data. Simply formatting your drive or deleting files does NOT provide secure and complete data destruction. For more information on data security, go to www.ecyclewashington.org and click on Frequently Asked Questions.

#### FOR MORE INFORMATION

To find out more about E-Cycle Washington, data destruction, drop-off locations and how to dispose of items not covered by the program, please visit:

www.ecyclewashington.org

### Suggested impact of cumulative E-Cycle outreach and promotion to date:

(target counties as referenced = counties traditionally at or below the state "average" per capita collection level)

2009 2011 2012 **2013** to date 2010

Increase public school awareness

26,000 brochures and 500+ retail display posters issued

(through July 2013)

Co-op print advertising bilingual Spanish and co-op as requested by collectors

Multi-county press releases NPR(radio) WSJ (print) interviews released 2,400 30 second radio announcements free electronics recycling

> Major retailers, including all Wal-marts identify E-cycle on sales receipts and apply E-cycle branding to new product packaging 4000+ additional radio announcements - selected counties

> > Major Billboard placement - Tacoma area

100+ TV ads - Seattle area

100+ TV ad placements Eastern WA area (Spokane area)

Mobile device streaming and banner ads

Major multiple billboard placements Tri Cities and Yakima

	Mobile device streaming, banner ads, video pre-roll Google display								
County	Population (2010 est.)	lbs. / cap 2009	lbs. / cap 2010	lbs. / cap 2011	lbs. / cap 2012				
Asotin	21,700	4.87	6.38	5.06	4.22				
Benton	172,900	3.07	3.39	3.81	4.25				
Chelan	73,300	3.78	3.23	2.97	3.76				
Clallam	70,100	5.96	5.50	6.68	5.70				
Cowlitz	100,000	4.60	5.05	6.27	6.43				
Douglas	38,500	0.79	1.62	1.85	2.00				
Ferry	7,850	2.42	1.16	2.69	1.54				
Grant	87,700	2.56	2.74	2.82	2.22				
Grays Harbor	71,600	3.55	5.19	5.28	5.61				
King	1,933,400	7.71	6.99	8.15	8.41				
Kitsap	248,300	7.00	6.01	5.91	5.29				
Kittitas	40,500	9.28	12.36	14.97	15.06				
Lewis	75,600	3.81	3.76	4.65	4.47				
Mason	57,100	4.83	3.15	2.05	2.13				
Skagit	119,300	4.20	4.00	4.33	4.76				
Snohomish	711,100	7.73	9.01	7.32	7.13				
Spokane	470,300	3.62	4.12	4.71	5.10				
Stevens	44,300	1.58	1.99	1.82	2.41				
Thurston	252,400	5.97	6.31	7.24	7.66				
Walla Walla	59,600	4.45	5.60	5.19	6.12				
Whatcom	195,500	5.68	5.99	6.87	6.84				
Whitman	43,600	4.11	4.63	4.91	5.42				
Yakima	239,100	3.37	3.60	4.06	4.23				
Target WA Counties lbs. cap avg>	5,133,750	6.14	6.15	6.41	6.72				
All WA counties lbs. per cap avg>	6,733,250	5.73	5.86	6.27	6.46				
Target counties percentage increase over a	ll state	7.3%	5.0%	2.2%	4.1%				

**For 2016** outreach efforts continued in a similar manner as 2014 - 2015 to ensure that information about where, how, and why to recycle CEP's was available to all state residents - especially smaller counties identified as having lower collection per capita than the state wide average. Specifically:

#### Billboards placed

- •Shelton, WA Hwy 101 North of Air view way 12 weeks
- •Wenatchee, WA N. Miller St and N Wenatchee Ave. S 12 weeks
- •Wenatchee, WA various rotating metro locations- 16 weeks
- •Quincy, WA Hwy 281 and Hwy 28N 12 weeks
- •Yakima, WA 6 locations various metro 6 each at 16 weeks each
- •Tri Cities, WA 6 locations various metro 5 each at 5 weeks each
- •Shelton, WA Hwy 101 North of Air view way 4 weeks

The WMMFA also contracted for Mobile ads generated via proximity to the billboard campaign ads. The mobile campaign in the Tri Cities area generated a click thru rate of .55% Secondary Action rate of 12.22% by utilization of the billboards and landing page as illustrated below (over a one month period). The mobile campaigns in the Quincy, Yakima, Shelton, and Quincy areas had a similar click thru rate and secondary action rate of 5.52%



Consumer sees OOH advertisement



Consumer sees complementing ad on phone allowing for immediate action.

Ad delivers critical information, such as distance to business location and opportunities for more information.

Clicking the ad leads to a customized landing page, leading to trackable actions such as:

- · Driving directions
- · Contact info
- Special offers
- Form fill

Other outreach utilized in 2016 (as in previous years) include a 50% or more co-operative advertising expenditure sharing with some of our collectors. Pend Oreille County Public Works (Newport, WA and E-Cycle Northwest - Sequim, WA) have been among participants in 2016 and others in the past. The outreach efforts as described here and as undertaken in 2016 are a cumulative ongoing effort. Posters, brochures, and co-op venues are a mainstay used throughout every year.

### **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 humans 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.

Total weight of all <u>materials of concern</u>, including unwanted electronic products, electronic components, and electronics scrap collected by the WMMFA that have been exported from Washington state for plan year 2016, 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 the WMMFA by each processor. Destination countries for "materials of concern" and non-materials of concern (commodities) can be found in section 5.c.d. of this report

NOTE: The WMMFA annual report submitted in 2015 indicated that zero pounds of materials of concern (MOC) were exported to NON-OECD countries. In early 2016 we learned that one of our processors, Total Reclaim, had been exporting flat screen devices to Hong Kong, which is not a member of the OECD. The amount of devices shipped to Hong Kong was estimated at approximately 1.5 million pounds for 2015, or, 3.5% of all pounds collected in 2015. It was also determined that a quantity equating to approximately 1.9% of all devices collected since start up were likely exported to Hong Kong by this processor.

### st of CEP Manufacturers (brand names) participating in the Standard Plan 2016\*

ote: Not all manufacturers listed listed actually receive an invoice for sharing of IFA expenses. Actual invoices (plan share of expenses) were based on the total rket" shares (by weight), for all of the covered products covered by the E-Cycle Washington program of each listed manufacturer.

Washington program of each listed manufacturer.
4th Dimension Computer
3M Touch Systems
3MD Inc.
Abacus Office Machines
ACC Tech
Acer America Corp
Afunta LLC
Amazon Fulfillment Services, Inc.
American Future Tech Corp dba iBuypower
American Sunrex Corporation
Andteck
Angel Computer Systems Inc
Apple
Asus Computer International
Axess Products Corporation
Azpen Innovation, Inc.
Bang & Olufsen
Barnes&Noble.com LLC
BenQ America Corp
Best Buy
BLU
Bosch Security Systems, Inc.
Caytan Enterprise (Vilros)
CBC (America) Corp
Cellco Partnership dba Verizon Wireless
Changhong Trading Corp. USA
Chromo Inc.
Click N' Kids
Coastline Micro Inc.
Complete Computer Services
Computer Connections
Computer Nut Hut
Craig Electronics, Inc
Crosley Corp.
Curtis International Ltd
Custom Computer Sales & Svc

## st of CEP Manufacturers (brand names) participating in the Standard Plan 2016\*

CWD limited
CyberPower
Cycrest Systems Inc.
Dat-a-Way Computer Solutions
DeerBrook Electronics, LLC
Deli Stationery, Inc.
Dell Computer Corp
Diaotec
Digimaxis LLC
DistriRead B.V.
Dongguan Sainstore E-commerce Limited Co
DoubleSight Displays
DPI Inc
EKEN
Elitegroup Computer Systems
Elo Touch Solutions, Inc
Eluktronics, Inc.
Eman Computer Care and Data Recovery
Ematic
Emerson Radio Corp
Envision Peripherals Inc
Equus Computer Systems Inc.
EverFocus Electronics Corporation
Evervue USA
F5CS LTD LLC
Falcon Northwest
Foneso LLC
Fry's Electronics, Inc.
Fujitsu America, Inc.
Funai Corporation, Inc.
FY International LLC
GAEMS, Inc.
GammaTech Computer Corp.
Google Inc
Grand Electronics, Inc.
Grays Harbor Computer Svc
G-STYLE Ltd.
GVISION USA, Inc.
Haier America
Hisense USA Corp

## st of CEP Manufacturers (brand names) participating in the Standard Plan 2016\*

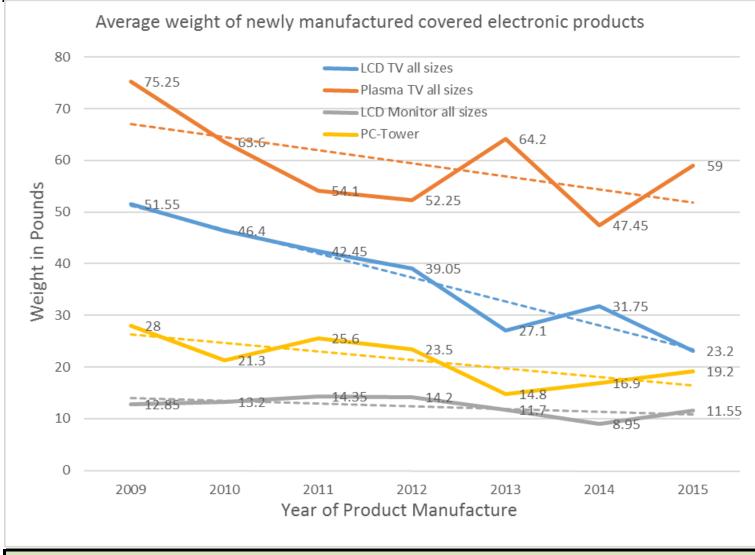
Hitachi America, LTD. Digital Media Division
HK Contrum Electronic Limited
HP Inc
HTC America, Inc.
Huawei Device USA, Inc.
iGaming
Ikegami Tsushinki Ltd.
InFocus Corp
Innovative Technology
Inspira Technologies LLC
Integrity Computers and Networking
International Business Machines Corp.
I-O Corporation
Johnson Health Tech Co., Ltd
JVC KENWOOD USA Corp
Kobo Inc
Last Stop Computers
Lenovo
LG Electronics USA Inc
Lorex Technology Inc.
Main Business Systems
Majestic Global USA
Marvel Entertainment, LLC

Documentation of work done with direct processors used by the Standard Plan to promote and encourage the design for recycling of new products (CEP's) destined for end of life recycling under this program

In the 2009 Annual Report to Ecology the WMMFA outlined a plan describing collaboration with the NCER (National Center for Electronics Recycling) and the Green Electronics Council to pursue grant funding for a "Close the Loop" registry with the goal being creation of a one stop clearinghouse that would contain a database accessible by manufacturers and processors that would contain specific de-manufacturing hints covering components and contents of the electronic products they receive. This effort was not successful and no grant funds were received. However, based on sampling results of CEP weights for the invoicing period 2009 - 2016 the average weights of CEP's have trended downward considerably (see chart below). Many WMMFA member manufacturers are involved in Dfe and Dfr efforts nationally or globally as the majority of the weight of CEP's covered by the Standard Plan are from manufacturers that also sell worldwide. Approximately 85% of the electronic products collected by the WMMFA now (specifically CRT TV's and CRT Monitors)) are no longer being manufactured for sale in the US. The chart provided below illustrates the progress in reducing the overall weight of CEP's currently being produced and sold in Washington and is similar in trend to national results.

Average net weights (excludes packaging) by CEP used to convert NPD and IDC unit sales to pounds								
050.7	2009	2010	2011	2012	2013	2014	2015	weight variance %
CEP Type	Average lb.	09 to 15 - where applicable						
TV LCD 17-39"	24.4	24.2	19.4	18.7	15.7	13.4	11.8	-52%
TV LCD Over 40"	78.7	68.6	65.5	59.4	38.5	50.1	34.6	-56%
TV Plasma 17-39"	42.1	36.2	41.5	41.5	n/a	42.1	negligible volume	n/a
TV Plasma Over 40"	108.4	100.8/81.3	66.7	63	64.2	52.8	59	-46%
TV Rear Projection>40"	109.4	108.3	87.8	94.2	107.8	113.7	negligible volume	n/a
TV Direct View 17-39"	89.6	91.1	84.3	92.8	35.3	35.3	negligible volume	n/a
LCD Monitor Under 19"	9.8	9.9	10.3	9.3	10.4	9.2	9.9	1%
LCD Monitor Over 19"	15.9	16.5	18.4	19.1	13	8.7	13.2	-17%
TABLETS	n/a	n/a	n/a	1.6	1.3	1.2	1.2	n/a
E-READERS	n/a	n/a	n/a	0.7	1	0.6	0.7	n/a
Laptop 3 lbs. and less	2.4	2.5	2.7	2.8	2.7	2.4	2.5	4%

Sum TTL weight all CEP's	535.6	485.9	448.6	449.9	369.9	373.2	179	-67%
Portable DVD	n/a	n/a	n/a	n/a	n/a	2.9	2.4	n/a
PC-Tower	28	21.3	25.6	23.5	14.8	16.9	19.2	-31%
All Laptops average	5.9	5.7	5.8	5.2	5.3	5.4	5.2	-12%
Laptop Over 7 Lbs	10.2	10.3	10.4	8.3	8.6	8.4	9.1	-11%
Laptop >5-7 Lbs	6.7	5.9	5.9	5.9	5.7	5.9	5.9	-12%
Laptop > 3-5 Lbs	4.1	4.1	4.3	3.9	4.1	4.2	4.3	5%



Each of the processors used by the Standard Plan must comply with the "preferred processing standards" as defined in the "Environmentally Sound Management and Performance Standards for Direct Processors." An early survey sent out in 2009 to the Washington state processors used by the Authority revealed these recommendations, in order of perceived impact and importance, pertaining to reducing the overall cost to manufacturers for processing, and for the recycling or diversion of a higher percentage of materials of concern.

- 1. Flat Panels will become a larger percentage of material to be recycled in the future due to the current proliferation of LCD and plasma TV's and LCD monitors being sold now. Processors need an outlet for CRT Glass and LCD screens in order to reduce processing costs to manufacturers.
- Eliminate multi laminated materials and allow for easy separation of plastics from metals from lamps from glass so that the materials separation cost does not exceed the compensation from recycling the material. Assist in providing buy back opportunities for recovered plastics and other reusable items.
- 3. New technologies in manufacture of CEP's should allow for more automated dismantling using snap out fittings that may be accommodated by automated processes for dismantling. Identify components containing hazardous materials for easier and more efficient and complete removal and recycling.
- 4. Removing or reducing lead from glass and circuit boards would reduce downstream processing costs. Reduce or eliminate beryllium, cadmium, mercury and lithium (batteries).

These recommendations, as provided by the participating Washington State Standard Plan processors, are not a new revelation to manufacturers. They are shared with all participating manufacturers as collective information that summarizes some of the obstacles to lowering our (WMMFA) collective processing costs.

Based on feedback from our network of collectors typically involved in refurbishment and/or resale of used electronics the ratio of reused to recycled products varies considerably by type of collector, and, type of product. Many of our non-profit collectors perform some refurbishing and reuse operations with recycling as a secondary option for some higher value devices. Since the E-Cycle Washington program was designed primarily as an end of life program for unwanted electronics many of our collectors focus on getting CEP's to the program for responsible recycling of contents due to the low sales value of refurbished equipment in relation to the sales price of new equipment available at retail. For 2016 we estimate that a weight equivalent to approximately 65,000 pounds of COMPUTERS (laptops and towers) were put into reuse by our collectors. We estimate a negligible amount (<.05%) of CRT TELEVISIONS were put to reuse. Of FLAT PANEL TELEVISIONS AND MONITORS (plasma, LCD, and LED) we estimate that about 450,000 pounds, or 25,000 units were sent to reuse by collectors. CRT MONITOR reuse was negligible (0%). These pounds are NOT included in our collected pounds reports as they are sent to re-use directly by the collectors and therefore not transported or processed within the E-cycle program. Including the 92,073 pounds of reuse reported by our processors approximately 607,073 pounds of CEP materials, in total, were sent to refurbishment and/or reuse. Therefore, approximately 15% of the re-use volume is managed at the processor level with 85% occurring at the collector level.

NOTE: The Authority has no formal data collection means to obtain re-use volumes from our collectors. In fact, many of them compete for collections from the donating public. For this reason we report with reasonable accuracy, the re-use pounds by product type from our PROCESSING network and we make broad estimates about re-use data at the COLLECTOR level based on the types of products they collect and informal conversations with collectors as to the volume of products being sent to re-use.

#### Reuse Pounds Total Reclaim - 2016

Computers	25,662	Approximately 60% drop in volume from 2015 for CPUs in 2016.
Laptops	10,550	In house reuse of working product sent to reuse
Televisions	50,699	Working units sold into reuse
Monitors	5,162	In-house reuse sales of LCD or LED only
Total:	92,073	

### WMMFA Annual Program Revenue and Expenses - 2016

Figures based on "cost" basis: I.E.: Revenue recorded as received and expenses recorded when paid

Audited financial statements for publication in the WMMFA annual report on an accrual basis will be available mid 2017 (for calendar year 2016 statements)

m net CEP pounds collected and processed 2016>	36,834,107	
tal REVENUE from manufacturer payments to plan - including reserve carry forward from 2015	\$10,760,294	10
OPERATIONAL Expenses		
Total COLLECTION EXPENSES - payments to registered collectors and for CEP materials from "covered" events	\$3,242,502	31.
Total TRANSPORTATION EXPENSES - purchased from registered transporters and paid to collectors that transport	\$1,511,693	14.
Total NET PROCESSING EXPENSES - payments to registered processors	\$5,092,234	49.
Public OUTREACH including advertising, educational and promotional efforts	\$25,692	0.3
TOTAL OPERATIONAL DIRECT and SERVICE PROVIDER EXPENSES	\$9,872,121	96
ADMINISTRATIVE Expenses		
Salaries and wages, including payroll taxes	\$297,605	2.9
Professional services: legal and accounting	\$23,808	0.2
Rent expense	\$4,200	0.0
Travel expenses - board and employees	\$3,191	0.0
Office supplies	\$1,441	0.0
Insurance expense	\$5,206	0.0
Telephone and internet expenses	\$4,467	0.0
Meetings and seminars	\$5,599	0.0
Postage and delivery	\$1,539	0.0
Office hardware and IT equipment	\$140	0.0
Utilities	\$502	0.0
Bank service charges	\$1,195	0.0
Miscellaneous	\$0	0.0
TOTAL ADMINISTRATIVE EXPENSES	\$348,893	3.
Total Administrative and Operational EXPENSES	\$10,221,014	100
*NET Reserves to carry forward to 2015 and/or available as credit to manufacturers on future invoices	\$539,280	5.

<sup>\*</sup> Standard Plan finance policy requires reserves to be maintained between 9% and 20% of <u>quarterly</u> manufacturer share expenses

This report was prepared per WAC 173-900-800 and submitted using the template provided by Ecology (converted to workbook) and updated/improved to include additional information required by SHB 1498 passed in 2013. The information within this report/workbook was compiled using sources available to the WMMFA including actual and estimated data from service providers to the WMMFA as outlined in the Standard Plan.

Joh Frul

Submitted electronically on February 27, 2017 to Christine Haun at Christine. Haun@ecy.wa.gov

Authorized signor WMMFA
John Friedrick, Executive Director