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# Program Report on Texas Recycles Computers and Texas Recycles Televisions



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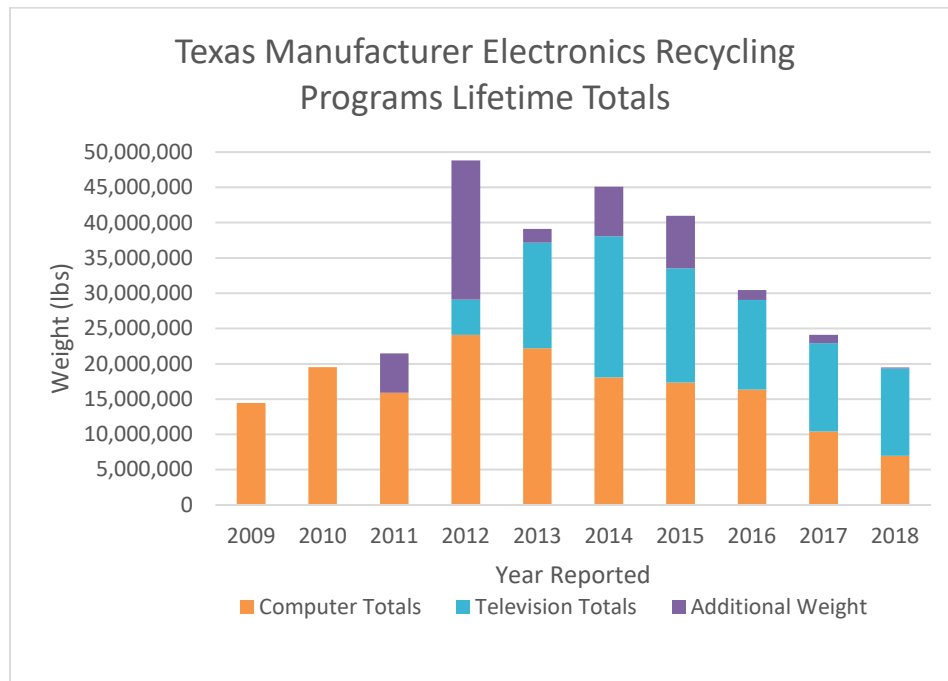
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# Results from Manufacturers' Annual Reports

The Texas Recycles Computers and Texas Recycles TVs programs have been required to submit reports since 2009 and 2013 respectively. Together, these programs have resulted in 259,111,305 pounds of computers and televisions being collected, with 234,304,397 pounds of this being recycled and 8,358,373 pounds being reused. Computer manufacturers also collected an additional 44,420,414 pounds of electronics-related equipment over the lifetime of the program, bringing the total weight of electronics collected to 303,531,719 pounds. For the 2018 calendar year, the programs collected a total of 19,500,706 pounds, comprising 6,987,319 pounds of computers, 146,616 pounds of additional electronic equipment, and 12,366,771 pounds of televisions. See *Chart 1* below for the weights collected since the creation of both programs.

**Chart 1. Texas Manufacturer Electronics Recycling Programs Lifetime Totals**



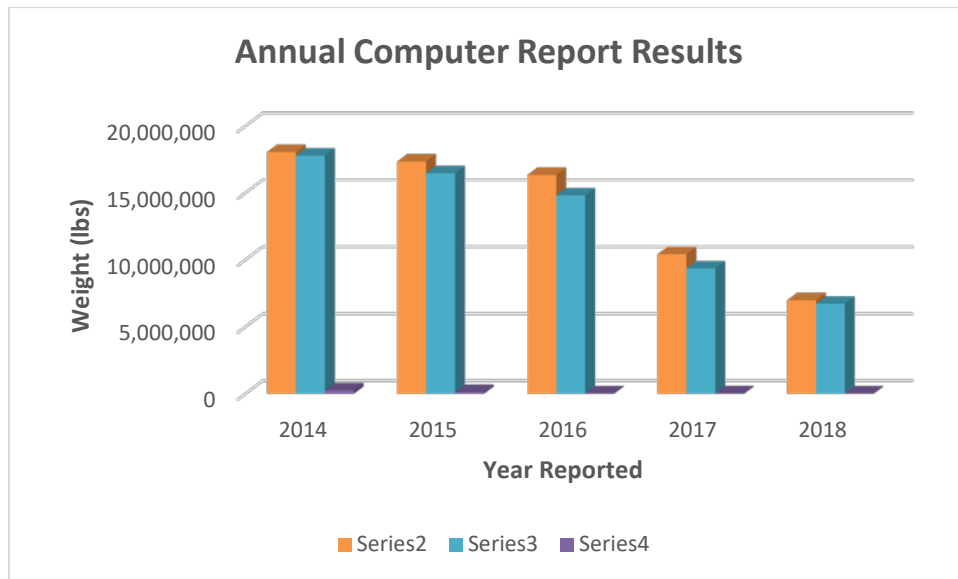
## Texas Recycles Computers Program

In 2018, the total combined weight of computer equipment collected was 6,987,319 pounds. The total amount recycled was 6,722,584 pounds and the total amount reused was 28,080 pounds. Comparatively, the total weight of computer equipment collected in 2017 was 10,423,186 pounds. Of that collected weight, 9,362,462 pounds were recycled, and 30,716 pounds were reused.

In addition to recycling covered computer equipment, many computer manufacturers also voluntarily collect televisions and other electronics for recycling. The TCEQ allows computer manufacturers to report other electronics collected, in addition to the computer equipment covered under the program. For 2018, manufacturers reported collecting 146,616 pounds of additional non-covered electronics. This number was lower than the 2017 voluntary collection amount of 1,199,944 pounds. Some of the manufacturers who typically reported voluntary collection weight indicated that they chose not to report additional voluntary collection weight this year, since the electronics were not computer-related. The voluntarily reported numbers that include televisions reported under the Texas Recycles TVs program were excluded.

Historical data for the past five years of reporting is reflected in *Chart 2* below.

**Chart 2. Annual Computer Report Results**



Texans have many opportunities to recycle their computer equipment and other electronics outside of the Texas Recycles Computers program. Collection events coordinated by municipalities, local nonprofit groups, private recyclers, and community-oriented businesses are additional ways Texans can recycle their computers. Since some of the recyclers do not report to the TCEQ, the agency’s reported number does not fully represent all recycling activity in Texas.

As in previous years, some reports this year listed zero pounds of computer equipment collected, reused, or recycled. A common reason to report collecting no computer equipment is that the manufacturer is a small business with a clientele limited to surrounding homeowners who do not often buy new equipment. Additionally, in situations where manufacturers’ customers are primarily

businesses, and personal equipment is rarely sold, little or no personal or home business computer equipment was returned for recycling or reuse. With the continuing increase in manufacturers entering the tablet market, relatively few new products have reached their end of useful life and been returned for recycling.

As discussed in previous years, with the rapid advancement of technology, electronics continue to become lighter and more compact. We have proposed that this trend could lead to manufacturers reporting lower total weight of materials collected. A report published in July 2011 on behalf of the Consumer Electronics Association detailed this manufacturing trend between 2004 and 2010 from cathode ray tubes to lighter flat panel technology for televisions and computer monitors.<sup>1</sup>

*Appendix 1* lists amounts reported by each manufacturer for the 2018 calendar year. One manufacturer failed to report, as indicated by data in *Appendix 1* being left blank. An additional five manufacturers failed to submit a report and were removed from the program.

### Texas Recycles TVs Program

The weight of television equipment reported as having been collected in 2018 by participating manufacturers was 12,366,771 pounds. Of that collected weight, 12,363,092 pounds were recycled, and 3,679 pounds were reused.

This year, all manufacturers participated in the Market Share option of the television recycling program, in which they are required to collect their assigned market share of television equipment. Of the 24 manufacturers that participated in the program, 18 reported their 2018 collection data and submitted registration for 2019. Five manufacturers reported their 2018 collection data, but did not register for 2019, and one manufacturer did not report their 2018 collection data nor register for 2019; these six manufacturers have been removed from the program. Additionally, one manufacturer that is not part of the program reported their 2018 collection data. The TCEQ calculated the recycling rate for the 24 reporting manufacturers to be 13.3 percent. Based on this recycling rate, manufacturers were provided their market share prior to Dec. 1, 2018. Manufacturers are required to collect at least their market share in 2019, as indicated in *Appendix 2*.

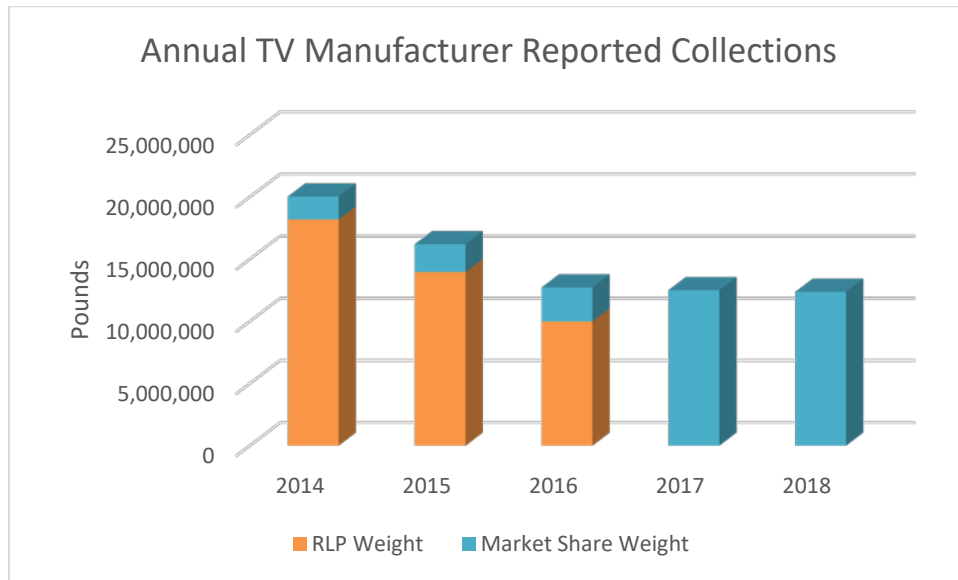
As a mechanism to comply with the rules, manufacturers have the option of participating in a Recycling Leadership Program (RLP). Participants in an RLP do not have a market share to collect but must recycle equipment from a minimum of 200 collections sites, events, or programs available to the public. From 2017-2019, no manufacturers chose to participate in an RLP. As market share requirements continue to grow in the future, TCEQ believes the Recycling Leadership Program will prove to be a valuable alternative for compliance under the rule and statute.

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<sup>1</sup> Available at <[Pike Research: Materials Footprint Reduction of Televisions and Computer Monitors](#)>.

Chart 3 shows the weight of television equipment reported as being collected by manufacturers.

**Chart 3. Annual TV Manufacturer Reported Collections**



Appendix 2 lists data reported by each manufacturer. The numbers reflect amounts sold and collected in calendar year 2018. Additionally, the individual market shares are provided. This data was submitted by manufacturers through February 2019. At the time of this report, 18 manufacturers representing 34 brands have submitted complete 2018 reports and submitted registration for their 2019 programs. Two additional manufacturers representing four brands satisfied their program requirements by participating in the Texas Recycles Computers program.

## Registered TV Recyclers

Beginning Jan. 31, 2014, television recyclers were required to report the total weight or volume of TVs received, recycled, and disposed of in the preceding calendar year (CY). In CY 2018, Texas TV recyclers received approximately 9.7 million pounds, recycled 8.2 million pounds, and disposed of 0 pounds of television equipment.

**Appendix 1- 2018 Computer Manufacturers' Reported Amounts**

Manufacturer Name	Brand Name(s)	Wt Collected (lbs)	Wt Recycled (lbs)	Wt Reused (lbs)
@Xi Computer Corp	@Xi Computer, Xi Computer	0.0	0.0	0.0
Acer America Corporation	Acer View, Aspire, eMachines, Gateway	515,241.0	515,241.0	0.0
Advanced PC Products, Inc.	Advanced PC, Advanced PC Quasar	50.0	50.0	0.0
Altex Electronics Ltd.	Altex Electronics	40,383.0	40,383.0	0.0
Amazon Fulfillment Services, Inc.	Kindle Fire	21,200.0	13,007.0	8,193.0
Apple Inc.	Apple, Next	8,747.0	8,747.0	0.0
ASUS Computer International	ASUS	28.0	28.0	0.0
Avinext	Avinext, MicroAge, SuperMicro	10,296.0	10,296.0	0.0
Azpen Innovation, Inc.	Azpen	72.0	0.0	72.0
Barnes & Noble	Barnes & Noble, NOOK by Barnes & Noble	11.0	11.0	0.0
Bass Computers	Bass Computers, Inc.	0.0	0.0	0.0
BenQ American Corp.	BenQ	0.0	0.0	0.0
Best Buy	Dynex, Insignia	199,747.0	199,747.0	*
Cellco Partnership	Verizon Ellipsis	13,615.0	1.0	13,614.0
Computer Shak, Inc.	Computer Shak, Inc.	5,000.0	4,000.0	1,000.0
Craig Electronics, Inc.	Craig	0.0	0.0	0.0
Curtis International, Ltd.	Klu Proscan	0.0	0.0	0.0
Cyberpower, Inc.	Cyberpower	0.0	0.0	0.0
Dell Inc.	Alienware, Dell, Wyse	2,687,810.0	2,487,810.0	*
DPI, Inc.	Zeki	0.0	0.0	0.0
ECP Computers & More	ECP Computers	0.0	0.0	0.0
Elo Touch Solutions, Inc	Elo	0.0	0.0	0.0
Envision Peripherals, Inc.	AOC, Envision	0.0	0.0	0.0
Equus Computer Systems Inc.	Mirus, Nobilis, Nobleview, VitaMobility	0.0	0.0	0.0
Fujitsu Computer Systems Corporation	Fujitsu, Fujitsu-Siemens	0.0	0.0	0.0
Gammatech Computer Corporation	Durabook, Slimnote	0.0	0.0	0.0
Google, Inc	Chromebook Pixel, Google Chromebook, Pixel C Tablet, Project Tango Tablet	9.0	9.0	0.0
Hewlett Packard Company	Apollo Computer, Compaq, Digital Equipment Corporation (DEC), Hewlett-Packard,	3,212,926.0	3,212,926.0	0.0



Manufacturer Name	Brand Name(s)	Wt Collected (lbs)	Wt Recycled (lbs)	Wt Reused (lbs)
	VooDoo PC			
HUAWEI DEVICE USA, INC.	Huawei	0.0	0.0	0.0
Hyundai IT America Corp	Hyundai, Hyundai Imagequest	*	*	*
iBoss, Inc. (Phantom Technologies)	iBoss	0.0	0.0	0.0
iBuyPower	iBuyPower	0.0	0.0	0.0
Ingram Micro (V7)	V7	0.0	0.0	0.0
Intel	Intel Compute, Stick Intel NUC	0.0	0.0	0.0
International Business Machines	IBM	0.0	0.0	0.0
Kidz Delight Ltd	Kurio	0.0	0.0	0.0
Komputer + Peripherals, Inc.	Komputer+	1,706.0	1,706.0	0.0
Lenovo (United States) Inc.	Lenovo Medion	95.0	95.0	0.0
LG Electronics USA, Inc.	Goldstar, LG, Zenith	165,556.0	165,556.0	*
LINSAY	LINSAY	9.0	0.0	0.0
M&A Technology	M&A Technology, Manda	0.0	0.0	0.0
Mattel	Mattel, Nabi	0.0	0.0	0.0
Maverick Computer Services	Maverick Computer Services	0.0	0.0	0.0
Microsoft Corporation	Microsoft, Nokia	14.0	14.0	0.0
Motorola Mobility LLC	Motorola	0.0	0.0	0.0
MSI Computer Corp.	MSI	0.0	0.0	0.0
Naxa Electronics	Naxa	0.0	0.0	0.0
NEC Display Solutions of America, Inc.	NEC, NEC AccuSync, NEC MultiSync	0.0	0.0	0.0
Nixeus Technology, Inc	Nixeus	30.0	0.0	30.0
NVIDIA Corp	Shield Portable, Shield Tablet	0.0	0.0	0.0
Oracle	Sun	94,560.0	89,297.0	4,617.0
Panasonic Corp of North America	Panasonic	0.0	0.0	0.0
PC & Cable	PC & Cable	1,200.0	1,200.0	0.0
Planar Systems, Inc.	Planar	0.0	0.0	0.0
PLR IP Holdings, LLC	Polaroid	0.0	0.0	0.0
Premio, Inc.	Premio	0.0	0.0	0.0
Proexpress Distributor, LLC	Dragon Touch, KingPad	46.0	0.0	46.0
Samsung Electronics Co.	Samsung, Samsung Galaxy Tab 4 Nook, Samtron, Syncmaster	54.8	54.8	0.0
SCEPTRE, Inc	SCEPTRE	0.0	0.0	0.0
Seneca Data Distributors	Nexlink	0.0	0.0	0.0
Shanghal Ltd.	BLAUPUNKT, EMATIC, PBS Kids, XOVISION	0.0	0.0	0.0

Manufacturer Name	Brand Name(s)	Wt Collected (lbs)	Wt Recycled (lbs)	Wt Reused (lbs)
Shuttle Computer Group, Inc.	Shuttle Computer Group, Inc.	0.0	0.0	0.0
Sony Electronics Inc	Sony	0.0	0.0	0.0
TCT Mobile (US) Inc.	Alcatel, Alcatel One Touch, TCL	5.0	5.0	0.0
TMAX Digital	Apex, NuVision, TMAX	0.0	0.0	0.0
Toshiba America Information Systems, Inc.	Toshiba	5.0	5.0	0.0
Trans Cosmos America, Inc.	VAIO	0.0	0.0	0.0
Venturer Electronics, Inc.	Pro12, RCA	0.0	0.0	0.0
ViewSonic Corporation	Cybervision, Optiquest, Utobia, ViewSonic	0.0	0.0	0.0
Visual Land, Inc.	Visual Land	0.0	0.0	0.0
Vizio, Inc.	Vizio	0.0	0.0	0.0
VTech Electronics North America LLC	LeapFrog, Vtech	4.0	4.0	0.0
Wacom Technology Inc,	Wacom	0.0	0.0	0.0
Westgate Computers	Westgate Computers	2,000.0	1,892.0	108.0
Wintec Industries, Inc.	FileMate	0.0	0.0	0.0
YIFANG USA INC.	Nextbook	0.0	0.0	0.0
Zingarr Sales & Marketing, LLC		0.0	0.0	0.0
Zydeco Computer Technologies	Zydeco Technologies	6,900.0	6,500.0	400.0

\* Manufacturer did not report in this field when submitting a 2018 Texas Recycles Computers Program Annual Report

## Appendix 2- 2018 TV Manufacturers' Reported Amounts and 2019 Market Share

### 2018 Manufacturers' Reported Amounts and 2019 Market Share Allocations

<b>Manufacturer</b>	<b>Brands</b>	<b>Sold (lbs)</b>	<b>Collected (lbs)</b>	<b>Recycled (lbs)</b>	<b>Reused (lbs)</b>	<b>Market Share (lbs) Assigned for 2019</b>
Axess**	Axess	1,316	296	296	0	1,344
Bang & Olufsen America, Inc.	Bang & Olufsen	0	311	311	0	172
Best Buy	Insignia, Toshiba, Sharp	9,829,397	1,206,273	1,206,273	0	1,356,148
Craig Electronics	Craig	1,791	1,078	1,078	0	1,208
Curtis International Ltd	Curtis, ProScan, Sylvania, RCA	127,834	14,708	14,708	0	16,536
DPI, Inc.	GPX, iLive, WeatherX, Memorex	19,734	6,615	6,615	0	4,437
Element	Element	2,042,576	222,518	222,518	0	245,283
EliteLux**	Sansui	59,234	22,000	22,000	0	10,690
Funai Corp.	Funai, Magnavox, Philips, Sanyo	3,822,104	1,090,424	1,090,424	0	854,626
Haier America**	Haier	301,836	54,243	54,243	0	33,515
Hisense USA	Hisense, Sharp	9,155,992	550,096	550,096	0	946,683
Hitachi	Hitachi	466,365	67,275	67,275	0	80,952
JVC America	JVC	42,350	19,340	19,340	0	7,740
LG Electronics	LG, Zenith, Goldstar, LG Signature	14,726,920	1,655,564	1,655,564	0	1,906,222
Naxa Electronics, Inc.	NAXA	293	73	73	0	83
PLR IP Holdings	Polaroid	266,772	31,534	31,534	0	57,638
Samsung Electronics	Samsung	29,188,723	4,604,705	4,604,705	0	4,241,162
Sceptre, Inc.	oCosmo, Sceptre	294,395	15,125	15,125	0	22,512

<b>Manufacturer</b>	<b>Brands</b>	<b>Sold (lbs)</b>	<b>Collected (lbs)</b>	<b>Recycled (lbs)</b>	<b>Reused (lbs)</b>	<b>Market Share (lbs) Assigned for 2019</b>
Seura, Inc.**	Seura	15,120	0	0	0	1,105
Silo TV**	Silo, KC, Dika	2,000	100	80	20	277
Sony Electronics, Inc.	Sony	4,001,840	781,087	781,087	0	775,845
Sunbrite TV, LLC	Sunbrite TV	294,673	23,965	23,965	0	8,201
TTE Technology	TCL	*	461,170	461,170	0	*
VIZIO, Inc.	VIZIO	*	1,702,451	1,702,451	0	*

\*Some manufacturers have marked their sales data as confidential and proprietary, in accordance with [30 TAC §328.189](#)<sup>2</sup>

\*\*5 manufacturers reported their 2018 data but have not yet completed registration for 2019

### 2019 TV Manufacturers Participating under the Texas Recycles Computers Program

<b>Manufacturer</b>	<b>Brands</b>
NEC Display Solutions of America, Inc.	NEC, NEC AccuSync, NEC MultiSync,
Viewsonic Corporation	Viewsonic

<sup>2</sup> Available at < [30 TAC, RULE §328.189](#) >.