



Free e-recycling..  
*but nobody knows*

A REPORT ON LOCAL  
GOVERNMENTS IN TEXAS

November 2009

conducted by Public Research Works  
in conjunction with Texas Campaign for the Environment

# Free e-recycling...but nobody knows

## A Survey of Local Government References to Free

## Manufacturer TakeBack Recycling Options for Obsolete E-Waste

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### SUMMARY

Electronic waste, or “e-waste,” is the fastest-growing portion of the U.S. waste stream and contains an array of toxic materials. A typical old-style, cathode ray tube television or computer monitor contains four to eight pounds of lead, which harms virtually all systems in the human body.<sup>1</sup> Flat panel LCD displays contain mercury, known to disrupt the central nervous system, damage brain development, impair chromosomal function and cause birth defects.<sup>2</sup> Most electronics also contain brominated flame-retardants, which have demonstrated harmful neurological, reproductive and developmental effects in animal studies and are considered a possible human carcinogen.<sup>3</sup> These toxic flame retardants have been detected in mother’s milk samples from all women tested in the U.S.<sup>4</sup> The U.S. EPA estimates that 81% of our e-waste ends up in domestic landfills or incinerators.<sup>5</sup> Consumer electronics already make up an estimated 40% of the lead and 70% of heavy metals in landfills,<sup>6</sup> potentially contaminating municipal water supplies. Burning plastics releases carcinogenic dioxins into the air. According to EPA, over 2.5 million tons of e-waste were trashed in 2007 alone while only 410,000 tons were recycled.<sup>7</sup>

In 2007, the 80<sup>th</sup> Texas State Legislature passed unanimously the Texas Computer TakeBack Law (H.B. 2714), with the intent to divert toxic e-waste from Texas landfills and incinerators through a “comprehensive, convenient, and environmentally sound program for the collection, recycling, and reuse of computer equipment that has reached the end of its useful life.”<sup>8</sup> The law requires all computer manufacturers to provide their consumers with access to free and convenient recycling for obsolete computers and monitors in order to sell products in Texas. The law went into effect on September 1, 2008. The legislation directed the Texas Commission on Environmental Quality (TCEQ) to educate Texas consumers about the new law and to set up a website with links to each manufacturer’s recycling program as well as “computer equipment collection events, collection sites, and community computer equipment recycling and reuse programs.”<sup>9</sup> However, the law did not allocate funding for the agency’s mandate nor did it direct manufacturers, retailers or other stakeholders to participate in public outreach efforts. As a result, most Texans are not aware that free producer takeback recycling options exist. Although e-waste recycling options in general have become more widely available since 2007, particularly in urban population centers,<sup>10</sup> this study shows that free producer takeback programs continue to receive little or no mention on local government websites and among local government officials.

Local government often functions as the “recycler of first resort” for its residents, a kind of information

<sup>1</sup> U.S. EPA: <http://www.epa.gov/iaq/lead.html>.

<sup>2</sup> U.S. EPA: <http://www.epa.gov/mercury/effects.htm>.

<sup>3</sup> “Computers, E-waste and Product Stewardship: Is California Ready for the Challenge?” report for U.S. EPA, 2001.

<sup>4</sup> “Polybrominated Diphenyl Ethers (PBDEs) in U.S. Mothers’ Milk,” *Environmental Health Perspectives*, August 2003.

<sup>5</sup> U.S. EPA: *Electronics Management in the United States: Approach 1*, July 2008.

<sup>6</sup> “Computers, E-waste and Product Stewardship,” report for EPA, 2001.

<sup>7</sup> “Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2007.” U.S. EPA, Office of Solid Waste, November 2008. Data is from Characterization Data Tables 12 – 14, beginning on page 71. See <http://www.epa.gov/osw/nonhaz/municipal/pubs/msw07lrpt.pdf>.

<sup>8</sup> Text of House Bill 2714, Enrolled Version, 80<sup>th</sup> Regular Session of the Texas State Legislature, p. 3, lines 5-8.

<sup>9</sup> *Ibid.*, lines 22-24.

<sup>10</sup> Recent PRW data shows that the number of manufacturer takeback collection sites in Texas is now more than 160. There were zero at the beginning of 2007.

clearinghouse for instructions on responsible solid waste management. Therefore, educating municipal officials regarding producer takeback programs and policies is critical for the development of a long-term, sustainable e-cycling infrastructure in Texas. As the data in this survey indicates, local governments throughout the state still have a long way to go.

## DATA ANALYSIS

Data was collected from two hundred Texas municipalities representing over fifteen million people. The survey documented references to free producer takeback recycling programs on municipal websites and in follow-up calls to local government staff. In the two hundred cities surveyed:

### **83.5% of municipal websites do not reference free producer takeback recycling options**

The overwhelming majority of municipal websites surveyed contain no reference to free producer takeback programs (83.5%), and most contain no reference to e-waste recycling options in general (64.0%). Thus, approximately two in three people served by the examined cities do not have access to information on mandatory or voluntary manufacturer recycling programs through their local government website (66.3%, serving 10,405,797 of 15,691,781 total residents).

### **80.5% of follow-up calls to city officials were not referred to free producer takeback programs, 95.5% of city officials did not reference Texas Computer TakeBack Law**

Follow-up phone calls to local government representatives revealed only a slightly higher percentage of references to free producer takeback programs (19.5% compared to 16.5% via web). However, city officials referenced the Texas TakeBack Law a substantially lower rate (4.5% compared to 12.0%). Over nineteen in twenty residents (14,722,427 residents, 93.8%) received no information from local officials during follow-up calls about the TakeBack Law. By contrast, approximately seven in ten residents (10,812,031 residents, 69.9%) received no information about the law via municipal websites.

### **Nearly half of all references to e-cycling generally were options provided or arranged by government**

Among both websites and follow-up calls, e-cycling infrastructure provided or arranged by political subdivisions themselves (in the form of local e-waste collection events or collection centers) received more references than other options. City or county household hazardous waste/recycling centers comprised almost three of every ten references on municipal websites (21, 29.2% of total references to e-waste recycling generally) and slightly more than one of every three references by city officials (33, 33.7%). Collection events received roughly half as many references via websites (10, 13.9%) and via follow-ups (14, 14.3%). Combined, e-cycling options established by local government entities comprised nearly half of all references to e-cycling options in the survey.

### **Goodwill recycling program accounted for 61.5% of takeback references by local government officials**

The statewide Dell-Goodwill recycling partnership, the Dell-Goodwill program in Central Texas and the MRM-Goodwill program in Tarrant County account for much of the increase in the number of references to free takeback recycling options during follow-up calls (24 references by local officials, 61.5% of total references to takeback overall). Without the Goodwill programs, the number of references to free takeback options by local officials during follow-up calls drops substantially (15 references, 7.5%).

### **Best Buy recycling program received twice as many references as the Texas Computer TakeBack Law during follow-up calls to local officials**

The Best Buy e-waste recycling program was not considered a free producer takeback program for the purposes of this survey due mainly to the fact that Best Buy provides free recycling for its private house brand electronics (Insignia and Dynex), but charges a \$10.00 fee to recycle other branded electronics.<sup>11</sup> Nevertheless,

<sup>11</sup> Best Buy does compensate consumers with a \$10.00 gift card to be used at any Best Buy store. Although the program is not technically a “free producer takeback recycling” option, PRW and TCE applaud Best Buy’s efforts as well as references by municipal websites and officials to the Best Buy e-waste recycling program.

the Best Buy program is in many Texas locales the only available option for television recycling and therefore merits special attention. The Best Buy electronics recycling program received nearly double the total number of mentions received by the TakeBack Law during follow-up calls (16 references, 8.0%). Combined with Goodwill, these programs garnered over three in ten of total e-cycling references via web (23, 32.0%) and four in ten via phone (40, 40.8%). While some websites and local officials mentioned both programs—creating reference overlaps—data indicates a higher overall incidence of references to Goodwill and Best Buy e-cycling programs than any others on a statewide basis, including the Texas TakeBack Law. This suggests that producer takeback programs should link with existing infrastructure for the sales and donations of household e-waste.

**28.0% of city officials serving 2,139,296 Texans recommended landfill among options for obsolete e-waste** Although only two municipal websites (serving 71,071 residents) recommend tossing e-waste in the trash, placing it on the curb or transporting it to the dump, over a quarter of follow-up calls resulted in city officials recommending landfill among the options for handling obsolete electronics (56 references, 28.0%). Thus, a follow-up call to a city official was twenty-eight times more likely than browsing a municipal website to elicit a recommendation or instruction to landfill old e-waste.

**Over half of all follow-up calls yielded: 1) a recommendation to landfill obsolete e-waste, 2) no viable recommendation for e-waste recycling or 3) a referral to local trash haulers or landfill operators**

Combined with follow-up calls that yielded no viable recommendation for proper e-waste handling with no additional referrals (33, 16.5%) and calls referred to local trash haulers or landfill operators (13, 6.5%), more than half of follow-ups resulted in either a recommendation for land disposal or no viable recommendation for proper e-waste disposition (102 combined, 51.0%). However, only about one-fifth of the population represented in the survey falls into the same category (3,307,731 residents, 21.1%), as most large cities did not direct residents to landfill electronics.

## CONCLUSIONS AND RECOMMENDATIONS

1. Overall, the low percentage of references to free producer takeback recycling options on municipal websites and in follow-up calls suggests **a glaring need for robust education efforts among local government officials**. The high percentage of population served for whom municipal websites and city officials do not offer information on free takeback options or on e-waste recycling generally indicates a **massive potential audience for additional public education and municipal-level outreach**.
2. The extraordinary dearth of references or links to the Texas Computer TakeBack Law and the [www.TexasRecyclesComputers.org](http://www.TexasRecyclesComputers.org) website strongly suggests that **the unfunded legislative mandate for public education by TCEQ is failing and that additional funding is required**. A \$1 million budget rider for e-waste recycling outreach proposed by Senator Kirk Watson failed during the legislative session. *As a result, TCEQ should immediately initiate low-cost educational measures to assist Texas local governments in public education efforts. Policies that compel electronics manufacturers and retailers to participate in public outreach and dissemination of e-cycling information are also necessary. Governor Perry vetoed legislation passed during the 81<sup>st</sup> Regular Session that would have implemented such policies.*
3. Despite the reassurance of landfill trade associations and the TCEQ about the ability of modern landfills to contain toxins, given the quantity of electronic waste it is clearly preferable to recycle rather than landfill e-waste. **The high incidence of local government officials recommending landfill disposal for obsolete e-waste suggests an overwhelming need for immediate and aggressive outreach at all levels and in all departments of government if Texas is to succeed in diverting toxic e-waste from landfills. A statewide disposal prohibition for electronic products covered by the Texas TakeBack Law is a necessary step.**
4. Local e-waste collection events and household hazardous waste or recycling centers remain the dominant avenue for electronics recycling, usually at a cost to taxpayers, despite the viable market-based recycling

options often available *at no cost to taxpayers*. **Education initiatives aimed at local officials will facilitate and accelerate the transition from government-run, taxpayer-funded e-waste management options to market-based producer recycling programs, such as those required by the Texas TakeBack Law.**

5. Data indicates a correlation between the size of municipality and the likelihood that city officials will to direct residents to some form of e-waste recycling program. Data also points to a correlation between the lack of available voluntary takeback programs in sparsely populated areas of the state and a lack of direction from local officials regarding responsible end-of-life care for toxic electronic products. Therefore, **outreach regarding general e-waste recycling options must focus especially on less-populated political subdivisions throughout the state.** *If voluntary manufacturer recycling programs continue to disregard these locales, statewide producer takeback legislation covering additional electronic products is the only effective solution.*

## METHODOLOGY

Public Research Works (PRW) and Texas Campaign for the Environment (TCE) program staff and volunteers conducted this survey between August and November 2009. Survey results were obtained through an investigation and inventory of municipal websites and follow-up calls utilizing contact information provided by each website. In each case, the caller made the following inquiry: "I have an old TV and an old computer. How do I recycle them?" The caller then documented the content of each inquiry, including referrals to the Computer TakeBack Law and the TCEQ website, retailer recycling programs, non-profit organizations such as Goodwill, local recycling companies, taxpayer-funded household hazardous waste or recycling centers, landfill operators or trash haulers, city- or county-wide collection events and calls transferred to other officials.

PRW and TCE conducted the survey in two phases, the first of which focused solely on the major urban population centers: the Dallas-Fort Worth Metroplex, Central Texas and the Greater Houston-Gulf Coast region. Phase two expanded the survey to include cities spanning the various geographic regions of the state, ranging in size from El Paso (estimated population 563,662) to Eden (estimated population 2,377). Political subdivisions chosen for the survey represent a diverse cross-section of political, geographical, cultural, fiscal, historical and population factors that typically influence environmental decision-making by local government staff and elected officials.

Overall, the survey accounts for references to producer takeback programs and the 2007 TakeBack Law by political subdivisions representing 15,691,781 Texans, approximately sixty-five percent of the total estimated statewide population (24,326,974) and the majority of the estimated urban population (20,921,197),<sup>12</sup> in which most electronics recycling programs are concentrated. Data may not reflect recent changes to local government websites or personnel.

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<sup>12</sup> U.S. Census Bureau, Population Division, 2008 Estimates.

# LOCAL GOVERNMENT PRODUCER TAKEBACK SURVEY

CONDUCTED AUGUST-OCTOBER 2009 BY PUBLIC RESEARCH WORKS WITH TEXAS CAMPAIGN FOR THE ENVIRONMENT

<b>TOTAL CITIES SURVEYED</b>		<b>200</b>	
<b>TOTAL POPULATION SERVED BY CITIES SURVEYED</b>		<b>15,691,781</b>	
<b>MUNICIPAL WEBSITES</b>			
<b>TOTAL NUMBER OF WEBSITES REFERENCING E-WASTE RECYCLING OPTIONS</b>		<b>72</b>	<i>36.0%</i>
<b>TOTAL NUMBER OF WEBSITES THAT DO NOT REFERENCE E-WASTE RECYCLING OPTIONS</b>		<b>128</b>	<i>64.0%</i>
<b>TOTAL NUMBER OF WEBSITES REFERENCING FREE PRODUCER TAKEBACK RECYCLING OPTIONS</b>		<b>33</b>	<i>16.5%</i>
NUMBER OF WEBSITES REFERENCING TEXAS COMPUTER TAKEBACK LAW		<b>25</b>	<i>12.5%</i>
NUMBER OF WEBSITES REFERENCING FREE PRODUCER TAKEBACK PROGRAMS THAT DO NOT REFERENCE TEXAS TAKEBACK LAW		<b>8</b>	<i>4.0%</i>
<b>TOTAL NUMBER OF WEBSITES CONTAINING NO REFERENCE TO FREE PRODUCER TAKEBACK PROGRAMS</b>		<b>167</b>	<i>83.5%</i>
NUMBER OF WEBSITES THAT CONTAIN NO REFERENCE TO E-WASTE RECYCLING GENERALLY		<b>128</b>	<i>64.0%</i>
NUMBER OF WEBSITES REFERENCING TAXPAYER-FUNDED E-WASTE RECYCLING OPTIONS		<b>39</b>	<i>19.5%</i>
NUMBER OF WEBSITES DIRECTING RESIDENT TO LANDFILL OLD E-WASTE		<b>2</b>	
<b>TOTAL POPULATION SERVED WITH REFERENCE OR LINK TO FREE PRODUCER TAKEBACK OR TEXAS TAKEBACK LAW</b>		<b>5,285,984</b>	<i>33.7%</i>
<b>TOTAL POPULATION SERVED WITH NO REFERENCE OR LINK TO FREE PRODUCER TAKEBACK OR TEXAS TAKEBACK LAW</b>		<b>10,405,797</b>	<i>66.3%</i>
POPULATION SERVED WITH NO REFERENCE TO E-WASTE RECYCLING OPTIONS GENERALLY		<b>4,200,584</b>	<i>26.8%</i>
POPULATION SERVED BY WEBSITES DIRECTING RESIDENT TO LANDFILL OLD E-WASTE		<b>71,071</b>	
<b>TOTAL POPULATION SERVED BY WEBSITE CONTAINING REFERENCE OR LINK TO TEXAS COMPUTER TAKEBACK LAW</b>		<b>4,879,750</b>	<i>31.1%</i>
<b>FOLLOW-UP PHONE CALLS TO MUNICIPAL OFFICIALS</b>			
<b>TOTAL NUMBER OF FOLLOW-UP CALLS REFERENCING VIABLE E-WASTE RECYCLING OPTIONS</b>		<b>98</b>	<i>49.0%</i>
<b>TOTAL NUMBER OF FOLLOW-UP CALLS NOT REFERENCING VIABLE E-WASTE RECYCLING OPTIONS</b>		<b>102</b>	<i>51.0%</i>
<b>TOTAL NUMBER OF FOLLOW-UP CALLS REFERRED TO FREE PRODUCER TAKEBACK PROGRAMS</b>		<b>39</b>	<i>19.5%</i>
NUMBER OF FOLLOW-UP CALLS REFERRED TO TEXAS COMPUTER TAKEBACK LAW		<b>9</b>	<i>4.5%</i>
NUMBER OF FOLLOW-UP CALLS REFERRED TO GOODWILL		<b>24</b>	<i>12.0%</i>
<b>TOTAL NUMBER OF FOLLOW-UP CALLS NOT REFERRED TO FREE PRODUCER TAKEBACK PROGRAMS</b>		<b>161</b>	<i>80.5%</i>
NUMBER OF FOLLOW-UP CALLS DIRECTED TO LANDFILL OLD E-WASTE		<b>56</b>	<i>28.0%</i>
NUMBER OF FOLLOW-UP CALLS IN WHICH CITY OFFICIAL WAS UNAWARE OF E-WASTE RECYCLING OPTIONS AND PROVIDED NO REFERRAL		<b>33</b>	<i>16.5%</i>
<b>TOTAL POPULATION SERVED BY OFFICIAL WHO REFERENCED FREE PRODUCER TAKEBACK OR TEXAS TAKEBACK LAW</b>		<b>4,810,241</b>	<i>30.7%</i>
<b>TOTAL POPULATION SERVED BY OFFICIAL WHO DID NOT REFERENCE FREE PRODUCER TAKEBACK OR TEXAS TAKEBACK LAW</b>		<b>10,881,540</b>	<i>69.3%</i>
POPULATION SERVED BY CITY OFFICIAL WHO DIRECTED CALLER TO LANDFILL OLD E-WASTE		<b>2,139,296</b>	<i>13.6%</i>
POPULATION SERVED BY CITY OFFICIAL WHO WAS UNAWARE OF E-WASTE RECYCLING OPTIONS GENERALLY AND PROVIDED NO REFERRAL		<b>852,740</b>	<i>5.4%</i>
POPULATION SERVED BY CITY OFFICIAL WHO REFERRED CALLER TO WASTE HAULING COMPANY OR LANDFILL OPERATOR		<b>315,695</b>	<i>2.0%</i>
<b>TOTAL POPULATION SERVED BY CITY OFFICIAL WHO REFERRED TO TEXAS COMPUTER TAKEBACK LAW</b>		<b>969,354</b>	<i>6.2%</i>

Goodwill:  
61.5% of total  
references to free  
takeback

89 combined: 44.5%  
of total

3,307,731 combined:  
21.1% of total

## KEY FINDINGS

- ~ Just under two-thirds of municipal websites contain **no reference to e-waste recycling** (64.0%); over four-fifths contain **no reference to free producer takeback options** (83.5%)
- ~ About half of city officials contacted relayed **at least one e-waste recycling option** (49.0%); however, over four in five **did not refer to free takeback options** (80.5%)
- ~ Almost three in ten city officials instructed caller to **landfill** e-waste (28.0%)
- ~ **Majority of population served by municipal sites** (64.1%) **and local government officials** (70.0%) **received no reference to free takeback programs or Texas TakeBack Law**

# LOCAL GOVERNMENT PRODUCER TAKEBACK SURVEY

CONDUCTED AUGUST-OCTOBER 2009 BY PUBLIC RESEARCH WORKS WITH TEXAS CAMPAIGN FOR THE ENVIRONMENT

<b>TOTAL REFERENCES TO E-WASTE RECYCLING GENERALLY VIA MUNICIPAL WEBSITES</b>	<b>72</b>	<i>36.0% of total websites</i>
<b>TOTAL REFERENCES TO E-WASTE RECYCLING GENERALLY VIA FOLLOW-UP CALLS</b>	<b>98</b>	<i>49.0% of total calls</i>

## MUNICIPAL WEBSITES

<b>DATA APPLICABLE TO WEBSITES REFERENCING E-WASTE RECYCLING GENERALLY</b>	<b>% websites</b>	
<b>TOTAL NUMBER OF WEBSITES REFERENCING MARKET-BASED* RECYCLING OPTIONS</b>	<b>44</b>	<b>61.1%</b>
NUMBER OF WEBSITES REFERENCING <b>GOODWILL</b>	<b>12</b>	<b>16.7%</b>
NUMBER OF WEBSITES REFERENCING <b>BEST BUY</b>	<b>11</b>	<b>15.3%</b>
NUMBER OF WEBSITES REFERENCING <b>LOCAL RECYCLING COMPANIES OR A NATIONAL RECYCLING SEARCH ENGINE</b>	<b>14</b>	<b>19.4%</b>
NUMBER OF WEBSITES REFERENCING <b>TEXAS COMPUTER TAKEBACK LAW OR TEXAS TAKEBACK WEBSITE</b>	<b>24</b>	<b>24.5%</b>
<b>TOTAL NUMBER OF WEBSITES REFERENCING TAXPAYER-FUNDED** RECYCLING OPTIONS</b>	<b>39</b>	<b>54.2%</b>
NUMBER OF WEBSITES REFERENCING <b>LOCAL COLLECTION EVENTS</b>	<b>10</b>	<b>13.9%</b>
NUMBER OF WEBSITES REFERENCING <b>CITY OR COUNTY HAZARDOUS WASTE/RECYCLING CENTERS OR DROP-OFF POINTS</b>	<b>21</b>	<b>29.2%</b>
NUMBER OF WEBSITES REFERENCING <b>OTHER RECYCLING OPTIONS (I.E. WASTE HAULERS, THRIFT STORES, CRAIG'S LIST, ETC.)</b>	<b>8</b>	<b>11.1%</b>
<b>TOTAL NUMBER OF WEBSITES REFERENCING BOTH MARKET-BASED AND TAXPAYER-FUNDED RECYCLING OPTIONS</b>	<b>17</b>	

**NOTE:** Many websites referenced multiple, overlapping market-based and taxpayer-funded recycling options, therefore percentages may add up to more than 100%

## FOLLOW-UP PHONE CALLS TO MUNICIPAL OFFICIALS

<b>DATA APPLICABLE TO CITY OFFICIALS WHO REFERENCED E-WASTE RECYCLING GENERALLY</b>	<b>% follow-ups</b>	
<b>TOTAL NUMBER OF CITY OFFICIALS REFERENCING MARKET-BASED* RECYCLING OPTIONS</b>	<b>67</b>	<b>68.4%</b>
NUMBER OF OFFICIALS REFERENCING <b>GOODWILL</b>	<b>24</b>	<b>24.5%</b>
NUMBER OF OFFICIALS REFERENCING <b>BEST BUY</b>	<b>16</b>	<b>16.3%</b>
NUMBER OF OFFICIALS REFERENCING <b>LOCAL RECYCLING COMPANIES OR A NATIONAL RECYCLING SEARCH ENGINE</b>	<b>25</b>	<b>25.5%</b>
NUMBER OF OFFICIALS REFERENCING <b>TEXAS COMPUTER TAKEBACK LAW OR TEXAS TAKEBACK WEBSITE</b>	<b>9</b>	<b>9.2%</b>
<b>TOTAL NUMBER OF CITY OFFICIALS REFERENCING TAXPAYER-FUNDED** RECYCLING OPTIONS</b>	<b>71</b>	<b>72.4%</b>
NUMBER OF OFFICIALS REFERENCING <b>LOCAL COLLECTION EVENTS</b>	<b>14</b>	<b>14.3%</b>
NUMBER OF OFFICIALS REFERENCING <b>CITY OR COUNTY HAZARDOUS WASTE/RECYCLING CENTERS OR DROP-OFF POINTS</b>	<b>33</b>	<b>33.7%</b>
NUMBER OF OFFICIALS REFERENCING <b>OTHER RECYCLING OPTIONS (I.E. WASTE HAULERS, THRIFT STORES, CRAIG'S LIST, ETC.)</b>	<b>24</b>	<b>24.5%</b>
<b>TOTAL NUMBER OF OFFICIALS REFERENCING BOTH MARKET-BASED AND TAXPAYER-FUNDED RECYCLING OPTIONS</b>	<b>16</b>	

**NOTE:** Many officials referenced multiple, overlapping market-based and taxpayer-funded recycling options, therefore percentages may add up to more than 100%

## ADDITIONAL FINDINGS

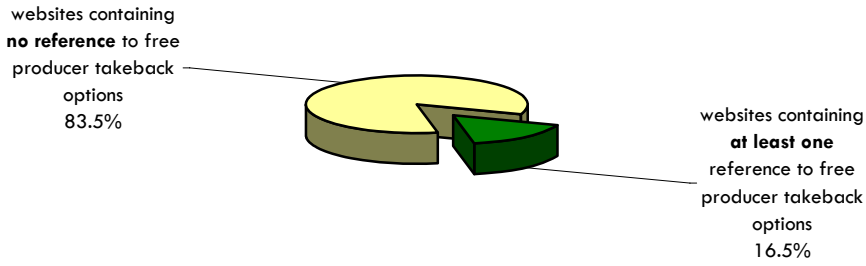
- ~ **Follow-up phone calls more likely than municipal websites to result in reference to e-cycling generally (49.0% vs. 36.0%)**
- ~ **Websites more likely to refer to market-based than taxpayer-funded options (44 vs. 39), officials more likely to refer to taxpayer-funded than market-based options (67 vs. 71)**
- ~ **Goodwill (16.7% web, 24.5% calls) and Best Buy (15.3% web, 16.3% calls) among most pervasive e-waste recycling references (combined 32.0% web, 40.8% calls)**
- ~ **E-waste recycling provided or arranged by local government - collection events or collection centers - mentioned in almost half of all references (43.1% web, 48.0% calls)**

\* **MARKET-BASED** REFERS TO RECYCLING OPTIONS FUNDED BY THE PRIVATE SECTOR (I.E. MANUFACTURERS, RETAILERS, E-RECYCLERS). MAY BE PART OF A PUBLIC-PRIVATE PARTNERSHIP.

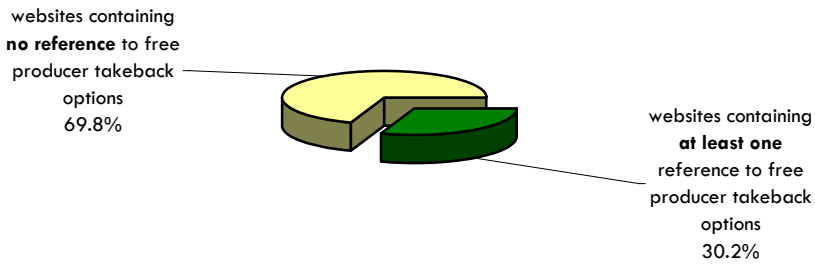
\*\* **TAXPAYER-FUNDED** REFERS TO PUBLIC-SECTOR PROGRAMS IN WHICH TAX DOLLARS SUBSIDIZE WHOLLY OR IN PART RECYCLING OPTIONS (I.E. HAZARDOUS WASTE CENTERS, COLLECTION EVENTS).

# REGIONAL DATA COMPARISON MUNICIPAL WEBSITES

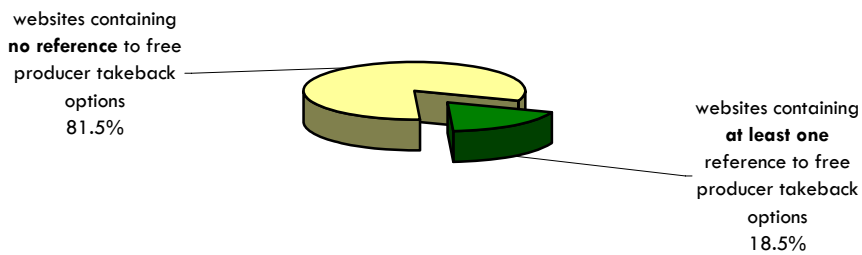
References to Free Producer TakeBack Options  
municipal websites  
(Statewide)



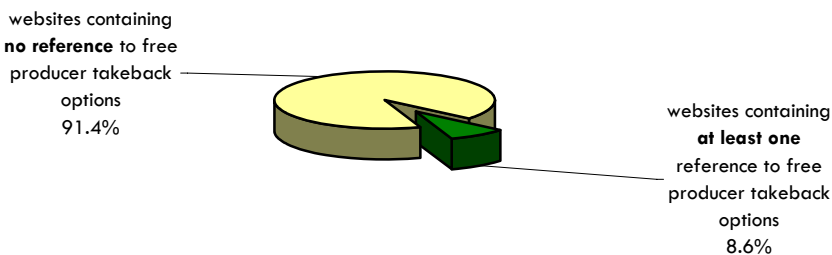
References to Free Producer TakeBack Options  
municipal websites  
(North Texas)



References to Free Producer TakeBack Options  
municipal websites  
(Central Texas)



References to Free Producer TakeBack Options  
municipal websites  
(Greater Houston-Gulf Coast Region)

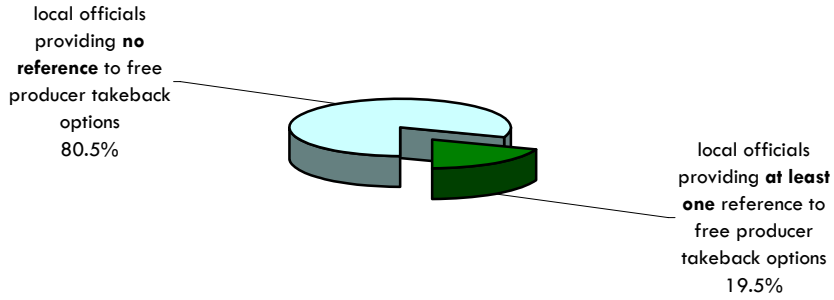




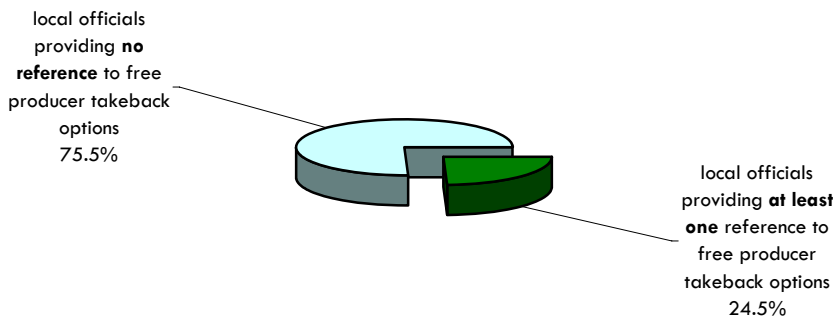
# REGIONAL DATA COMPARISON

## FOLLOW-UP CALLS TO CITY OFFICIALS

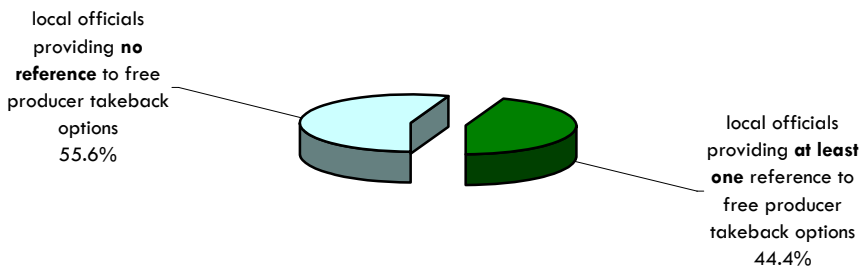
**References to Free Producer TakeBack Options**  
follow-up calls to municipal officials  
(Statewide)



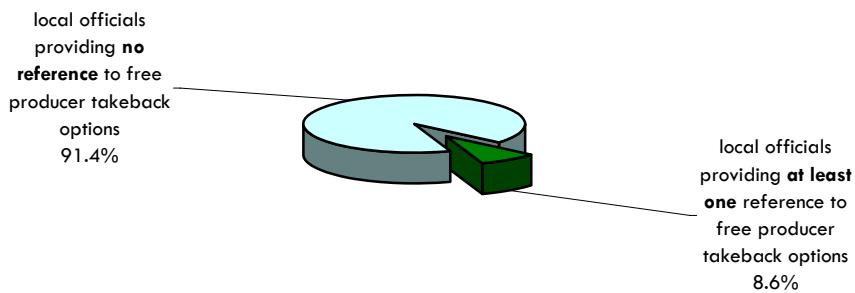
**References to Free Producer TakeBack Options**  
follow-up calls to municipal officials  
(North Texas)



**References to Free Producer TakeBack Options**  
follow-up calls to municipal officials  
(Central Texas)



**References to Free Producer TakeBack Options**  
follow-up calls to municipal officials  
(Greater Houston-Gulf Coast Region)



# TEXAS LOCAL GOVERNMENT PRODUCER TAKEBACK SURVEY

## STATEWIDE CITY-BY-CITY DATA, LISTED ALPHABETICALLY

CITY	POP.	WEBSITE REFERS TO FREE TAKEBACK OPTIONS?	CITY STAFF REFERRED TO FREE TAKEBACK OPTIONS?	CITY	POP.	WEBSITE REFERS TO FREE TAKEBACK OPTIONS?	CITY STAFF REFERRED TO FREE TAKEBACK OPTIONS?	CITY	POP.	WEBSITE REFERS TO FREE TAKEBACK OPTIONS?	CITY STAFF REFERRED TO FREE TAKEBACK OPTIONS?
Abilene	116,219	No	No	Fairview	8,093	No	No	Navasota	7,438	No	No
Alamo	16,476	No	No	Falfurrias	4,969	No	No	Nederland	16,178	No	No
Alice	19,759	No	No	Farmers Branch	26,455	No	No	New Braunfels	53,547	No	Yes
Allen	81,268	Yes	No	Flower Mound	69,307	No	No	N. Richland Hills	65,078	Yes	Yes
Alpine	6,190	Yes	Yes	Forney	15,223	No	No	Odessa	96,824	No	No
Alvin	22,853	Yes	No	Fredericksburg	10,873	No	No	Orange	17,425	No	No
Amarillo	186,106	No	No	Freeport	12,494	No	No	Paris	26,083	Yes	No
Angleton	18,613	No	No	Friendswood	33,979	No	No	Parker	2,911	Yes	No
Arlington	374,417	Yes	Yes	Frisco	96,676	No	No	Pasadena	146,439	No	No
Austin	757,688	Yes	Yes	Ft. Worth	703,073	Yes	Yes	Pearland	82,903	No	No
Ballinger	3,774	No	No	Gainesville	16,352	No	No	Pflugerville	39,653	Yes	No
Bastrop	8,378	No	No	Galveston	57,086	No	Yes	Pharr	63,681	Yes	Yes
Baytown	70,330	No	No	Garland	218,577	No	No	Pittsburg	4,647	No	No
Beaumont	109,579	No	No	Gatesville	15,205	No	No	Plano	267,480	Yes	No
Beaumont	110,553	No	No	Georgetown	49,618	Yes	Yes	Port Arthur	55,313	No	No
Bedford	49,155	Yes	Yes	Gonzales	7,359	No	No	Port Arthur	55,910	No	No
Bee Cave	2,680	No	Yes	Granbury	8,029	No	No	Prosper	7,053	No	No
Bellaire	18,197	No	No	Grand Prairie	160,641	No	No	Red Oak	9,255	No	No
Belton	17,330	No	No	Grapevine	50,471	No	No	Richardson	101,589	No	No
Big Spring	24,075	No	No	Greenville	25,674	No	No	Richmond	13,493	No	No
Blanco	1,557	No	No	Haltom City	40,181	Yes	Yes	Rockwall	35,247	No	No
Boerne	9,414	No	No	Harker Heights	24,546	No	No	Rosenburg	33,595	No	No
Bonham	10,594	No	No	Harlingen	64,221	No	No	Round Rock	104,446	Yes	Yes
Borger	12,901	No	No	Highland Park	9,184	No	No	Rowlett	55,780	No	No
Brady	5,278	No	No	Highland Village	16,737	No	No	Sachse	18,688	No	No
Brownsville	172,806	No	No	Hillsboro	8,908	No	No	Saginaw	19,655	No	Yes
Bryan	72,015	No	No	Houston	2,242,193	No	No	San Angelo	90,483	No	Yes
Buda	6,788	No	No	Humble	14,899	No	Yes	San Antonio	1,351,305	No	No
Bulverde	4,575	No	No	Huntsville	37,747	No	No	San Marcos	52,927	No	Yes
Burkburnett	10,554	No	No	Hurst	38,550	Yes	Yes	Santa Fe	10,479	No	No
Burleson	34,908	Yes	Yes	Hutto	13,599	Yes	No	Schertz	29,330	No	No
Carrollton	125,595	No	No	Irving	201,358	No	No	Seabrook	11,525	No	No
Cedar Hill	44,786	No	No	Jersey Village	7,279	No	No	Seguin	26,051	No	No
Cedar Park	62,308	No	Yes	Jonestown	2,432	No	Yes	Seminole	6,057	No	No
Channelview	34,217	No	No	Katy	13,913	No	No	Sherman	38,077	No	No
Cleveland	7,960	No	No	Keller	38,951	No	No	Smithville	4,458	No	No
Clute	10,765	No	No	Kerrville	22,661	No	No	Snyder	10,447	No	No
College Station	80,315	Yes	No	Kilgore	12,024	No	No	Socorro	31,883	No	No
Colleyville	24,428	Yes	Yes	Killeen	112,434	No	No	South Houston	16,351	No	No
Commerce	9,279	No	No	Kyle	26,103	No	No	Southlake	26,595	Yes	Yes
Conroe	52,516	No	No	La Marque	14,236	No	No	Stafford	19,541	No	No
Conroe	55,429	No	No	La Porte	34,274	No	No	Stephenville	16,715	No	Yes
Converse	15,471	No	No	Lago Vista	6,293	No	Yes	Sugarland	80,704	Yes	No
Coppell	39,154	No	No	Lake Jackson	27,417	No	No	Sunnyvale	4,518	No	No
Copperas Cove	30,027	No	No	Lakeway	11,193	No	No	Sweetwater	10,472	No	No
Corinth	20,773	No	No	Lancaster	35,761	No	No	Taylor	16,090	No	Yes
Corpus Christi	277,454	No	No	Laredo	217,506	No	No	Temple	58,330	No	No
Corsicana	26,459	No	Yes	League City	71,222	No	No	Terrell	19,527	No	No
Creedmoor	210	No	No	Leander	25,424	No	No	Texarkana	36,131	No	No
Crockett	6,906	No	No	Lewisville	101,624	Yes	Yes	The Woodlands	55,649	No	No
Cuero	6,465	No	No	Lockhart	13,661	No	Yes	Tomball	10,234	Yes	No
Dallas	1,279,910	Yes	Yes	Longview	76,816	No	No	Tyler	96,451	Yes	Yes
Deer Park	30,890	No	No	Lubbock	217,326	No	Yes	University Park	24,853	No	No
Del Rio	36,582	No	No	Lucas	4,914	No	No	Uvalde	16,222	No	No
Denison	24,103	No	No	Lufkin	34,070	Yes	Yes	Victoria	62,246	Yes	No
Denton	119,454	Yes	No	Manor	3,471	No	No	W. University Place	15,583	No	No
DeSoto	47,568	No	No	Marshall	23,872	No	No	Waco	122,222	No	Yes
Dripping Springs	1,828	No	No	McAllen	127,245	No	No	Waxahachie	27,311	No	No
Dumas	13,706	No	No	McKinney	121,211	No	No	Weatherford	25,749	No	No
Duncanville	36,109	No	No	Mesquite	132,123	No	No	Weatherford	26,686	No	No
Eagle Pass	26,285	No	No	Mexia	6,606	No	No	Webster	10,665	No	No
Eden	2,377	No	No	Midland	103,880	No	No	West Lake Hills	3,156	No	No
El Campo	10,649	No	No	Midlothian	15,632	Yes	No	Wichita Falls	101,590	No	No
El Paso	563,662	Yes	No	Mission	45,408	No	No	Wimberley	3,797	No	No
Elgin	9,909	No	Yes	Missouri City	74,723	No	Yes	Wylie	37,861	No	No
Eules	52,579	Yes	Yes	Murphy	14,779	No	No	Yoakum	5,503	No	No
Everman	5,771	No	No	Nacogdoches	32,006	No	Yes				

# TEXAS LOCAL GOVERNMENT PRODUCER TAKEBACK SURVEY

## STATEWIDE CITY-BY-CITY DATA, LISTED BY POPULATION

CITY	POP.	WEBSITE REFERS TO FREE TAKEBACK OPTIONS?	CITY STAFF REFERRED TO FREE TAKEBACK OPTIONS?	CITY	POP.	WEBSITE REFERS TO FREE TAKEBACK OPTIONS?	CITY STAFF REFERRED TO FREE TAKEBACK OPTIONS?	CITY	POP.	WEBSITE REFERS TO FREE TAKEBACK OPTIONS?	CITY STAFF REFERRED TO FREE TAKEBACK OPTIONS?
Houston	2,242,193	No	No	Cedar Hill	44,786	No	No	Forney	15,223	No	No
San Antonio	1,351,305	No	No	Haltom City	40,181	Yes	Yes	Gatesville	15,205	No	No
Dallas	1,279,910	Yes	Yes	Pflugerville	39,653	Yes	No	Humble	14,899	No	Yes
Austin	757,688	Yes	Yes	Coppell	39,154	No	No	Murphy	14,779	No	No
Ft. Worth	703,073	Yes	Yes	Keller	38,951	No	No	La Marque	14,236	No	No
El Paso	563,662	Yes	No	Hurst	38,550	Yes	Yes	Katy	13,913	No	No
Arlington	374,417	Yes	Yes	Sherman	38,077	No	No	Dumas	13,706	No	No
Corpus Christi	277,454	No	No	Wylie	37,861	No	No	Lockhart	13,661	No	Yes
Plano	267,480	Yes	No	Huntsville	37,747	No	No	Hutto	13,599	Yes	No
Garland	218,577	No	No	Del Rio	36,582	No	No	Richmond	13,493	No	No
Laredo	217,506	No	No	Texarkana	36,131	No	No	Borger	12,901	No	No
Lubbock	217,326	No	Yes	Duncanville	36,109	No	No	Freeport	12,494	No	No
Irving	201,358	No	No	Lancaster	35,761	No	No	Kilgore	12,024	No	No
Amarillo	186,106	No	No	Rockwall	35,247	No	No	Seabrook	11,525	No	No
Brownsville	172,806	No	No	Burleson	34,908	Yes	Yes	Lakeway	11,193	No	No
Grand Prairie	160,641	No	No	La Porte	34,274	No	No	Fredericksburg	10,873	No	No
Pasadena	146,439	No	No	Channelview	34,217	No	No	Clute	10,765	No	No
Mesquite	132,123	No	No	Lufkin	34,070	Yes	Yes	Webster	10,665	No	No
McAllen	127,245	No	No	Friendswood	33,979	No	No	El Campo	10,649	No	No
Carrollton	125,595	No	No	Rosenburg	33,595	No	No	Bonham	10,594	No	No
Waco	122,222	No	Yes	Nacogdoches	32,006	No	Yes	Burkburnett	10,554	No	No
McKinney	121,211	No	No	Socorro	31,883	No	No	Santa Fe	10,479	No	No
Denton	119,454	Yes	No	Deer Park	30,890	No	No	Sweetwater	10,472	No	No
Abilene	116,219	No	No	Copperas Cove	30,027	No	No	Snyder	10,447	No	No
Killeen	112,434	No	No	Schertz	29,330	No	No	Tomball	10,234	Yes	No
Beaumont	110,553	No	No	Lake Jackson	27,417	No	No	Elgin	9,909	No	Yes
Beaumont	109,579	No	No	Waxahachie	27,311	No	No	Boerne	9,414	No	No
Round Rock	104,446	Yes	Yes	Weatherford	26,686	No	No	Commerce	9,279	No	No
Midland	103,880	No	No	Southlake	26,595	Yes	Yes	Red Oak	9,255	No	No
Lewisville	101,624	Yes	Yes	Corsicana	26,459	No	Yes	Highland Park	9,184	No	No
Wichita Falls	101,590	No	No	Farmers Branch	26,455	No	No	Hillsboro	8,908	No	No
Richardson	101,589	No	No	Eagle Pass	26,285	No	No	Bastrop	8,378	No	No
Odessa	96,824	No	No	Kyle	26,103	No	No	Fairview	8,093	No	No
Frisco	96,676	No	No	Paris	26,083	Yes	No	Granbury	8,029	No	No
Tyler	96,451	Yes	Yes	Seguin	26,051	No	No	Cleveland	7,960	No	No
San Angelo	90,483	No	Yes	Weatherford	25,749	No	No	Navasota	7,438	No	No
Pearland	82,903	No	No	Greenville	25,674	No	No	Gonzales	7,359	No	No
Allen	81,268	Yes	No	Leander	25,424	No	No	Jersey Village	7,279	No	No
Sugarland	80,704	Yes	No	University Park	24,853	No	No	Prosper	7,053	No	No
College Station	80,315	Yes	No	Harker Heights	24,546	No	No	Crockett	6,906	No	No
Longview	76,816	No	No	Colleyville	24,428	Yes	Yes	Buda	6,788	No	No
Missouri City	74,723	No	Yes	Denison	24,103	No	No	Mexia	6,606	No	No
Bryan	72,015	No	No	Big Spring	24,075	No	No	Cuero	6,465	No	No
League City	71,222	No	No	Marshall	23,872	No	No	Lago Vista	6,293	No	Yes
Baytown	70,330	No	No	Alvin	22,853	Yes	No	Alpine	6,190	Yes	Yes
Flower Mound	69,307	No	No	Kerrville	22,661	No	No	Seminole	6,057	No	No
N. Richland Hills	65,078	Yes	Yes	Corinth	20,773	No	No	Everman	5,771	No	No
Harlingen	64,221	No	No	Alice	19,759	No	No	Yoakum	5,503	No	No
Pharr	63,681	Yes	Yes	Saginaw	19,655	No	Yes	Brady	5,278	No	No
Cedar Park	62,308	No	Yes	Stafford	19,541	No	No	Falfurrias	4,969	No	No
Victoria	62,246	Yes	No	Terrell	19,527	No	No	Lucas	4,914	No	No
Temple	58,330	No	No	Sachse	18,688	No	No	Pittsburg	4,647	No	No
Galveston	57,086	No	Yes	Angleton	18,613	No	No	Bulverde	4,575	No	No
Port Arthur	55,910	No	No	Bellaire	18,197	No	No	Sunnyvale	4,518	No	No
Rowlett	55,780	No	No	Orange	17,425	No	No	Smithville	4,458	No	No
The Woodlands	55,649	No	No	Belton	17,330	No	No	Wimberley	3,797	No	No
Conroe	55,429	No	No	Highland Village	16,737	No	No	Ballinger	3,774	No	No
Port Arthur	55,313	No	No	Stephenville	16,715	No	Yes	Manor	3,471	No	No
New Braunfels	53,547	No	Yes	Alamo	16,476	No	No	West Lake Hills	3,156	No	No
San Marcos	52,927	No	Yes	Gainesville	16,352	No	No	Parker	2,911	Yes	No
Eules	52,579	Yes	Yes	South Houston	16,351	No	No	Bee Cave	2,680	No	Yes
Conroe	52,516	No	No	Uvalde	16,222	No	No	Jonestown	2,432	No	Yes
Grapevine	50,471	No	No	Nederland	16,178	No	Yes	Eden	2,377	No	No
Georgetown	49,618	Yes	Yes	Taylor	16,090	No	Yes	Dripping Springs	1,828	No	No
Bedford	49,155	Yes	Yes	Midlothian	15,632	Yes	No	Blanco	1,557	No	No
DeSoto	47,568	No	No	W. University Place	15,583	No	No	Creedmoor	210	No	No
Mission	45,408	No	No	Converse	15,471	No	No				