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## Section 1 Executive Summary

## **Key Findings**

- 1. In recent years there has been a gradual decline in the appropriation of funds to both General Revenue (GR) Accounts 5000 and 0549. GR Account 0549 provides funding for solid waste permitting and enforcement to the Texas Commission on Environmental Quality (TCEQ). GR Account 5000 is dedicated to funding the Councils of Governments (COG) regional solid waste plans approved by the Texas Commission on Environmental Quality (TCEQ).
- 2. The result in the decrease in available funds means that local governments take on an increasing burden of addressing recycling and disposal issues of product packaging.
- 3. The litter caused by mismanaged or discarded packaging represents a liability to local economies and a cost burden to local governments.
- 4. There are multiple key stakeholders that can benefit from the release of this white paper as well as receiving additional funds from GR 5000.

#### Recommendations

- 1. Increase the amount of funding released to COGs from GR 5000. This will help regional and local governments fund litter reduction efforts such as public education and away from home (public bins) recycling infrastructure.
- 2. Prioritize and support the implementation and expansion of infrastructure needed to grow the recycling industry in Texas.
- 3. Support recycling education and industry research to maximize the efficiency of recycling and solid waste management programs at every level.
- 4. Reach out to the identified key stakeholders to provide this white paper and other materials to support the paper's recommendations.

#### Section 2 Introduction

Every day, American consumers utilize products with packaging such as food and drinks, cosmetics, electronics, toys, and many other items. Packaging, and its end-life management, have become a hot topic within the recycling industry recently. With multi-composition packaging innovations being implemented enabling longer product shelf-life and lighter packaging weights allowing more product to be transported, communities are faced with the management of these materials.

New packaging is helpful for extending the life of products, however, the end of life management becomes a hindrance for municipalities as most multi-layered, multi-composition packaging is not recyclable. Even long-used recyclable packaging such as water bottles, aluminum cans, and paper products can be seen as roadside and waterway litter within communities as public access to away-from-home recycling infrastructure is deficient and discarded packaging tends to become windborne litter.

This paper examines the State of Texas' existing policy in regards to packaging management. It identifies concerns in the structure of county and municipal funding allocated by the state; issues with the roadside and waterway litter that result from discarded packaging; and, complications with consumer product packaging not being recyclable within many American community recycling programs.



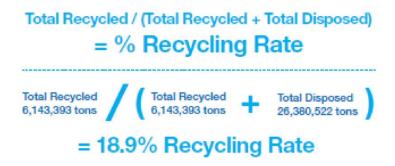
## Section 3 Existing Policy in Texas

### 3.1 History

Texas' existing policy to manage solid waste and recycling is funded by the fees collected under the Texas Health and Safety Code §361.014. Fees are allocated into General Revenue Funds 0549 and 5000. Funds in the GR Account 5000 are dedicated to local and regional solid waste projects that are consistent with Councils of Governments (COG) regional solid waste plans approved by the Texas Commission on Environmental Quality (TCEQ). Appropriations of solid waste disposal fees primarily consist of pass-through grants to COG's for local and regional municipal solid waste planning and management purposes<sup>1</sup>.

Per the Product Stewardship Institute, currently in the United States nearly 50 million tons of packaging and printed paper (PPP) -- a category that includes aluminum, glass, plastic, newspapers, phone books, and office paper -- are disposed of each year. While this waste stream is valued at more than \$11 billion USD, American municipal recycling programs capture only 42 percent of it<sup>2</sup>. Texas' recycling rate as measured by the 2015 Texas Recycling Data Initiative (TRDI) study revealed our state is recycling around 19 percent<sup>3</sup>.

FIGURE 1: 2013 TRDI RECYCLING RATE<sup>4</sup>



Management of solid waste and recycling in Texas is not planned by the TCEQ, but rather through the planning efforts of the regional COGs. This gives local governments a degree of control and prioritization of local issues; however, without the sustained appropriated state funding, COG solid waste and recycling plans can fall short of set goals. Using the allocated funds, the COGs prepare short and long range plans for the disposal and management of municipal solid waste including recycling, neighborhood clean-ups, household hazardous waste management, and infrastructure placement.

<sup>&</sup>lt;sup>1</sup> "HEALTH AND SAFETY CODE CHAPTER 361. SOLID WASTE DISPOSAL ACT." HEALTH AND SAFETY CODE CHAPTER 361. SOLID WASTE DISPOSAL ACT. Texas Commission of Environmental Quality, n.d. Web. 6 June 2016. <a href="http://www.statutes.legis.state.tx.us/docs/HS/htm/HS.361.htm#361.014">http://www.statutes.legis.state.tx.us/docs/HS/htm/HS.361.htm#361.014</a>.

<sup>&</sup>lt;sup>2</sup> "Packaging - Product Stewardship Institute (PSI)." Packaging. Product Stewardship Institute (PSI), n.d. Web. 5 June 2016. <a href="https://productstewardship.site-ym.com/default.asp?page=Packaging">https://productstewardship.site-ym.com/default.asp?page=Packaging</a>.

<sup>&</sup>lt;sup>3</sup> "Texas Recycling Data Initiative (TRDI)." Texas Recycling Data Initiative (2014): 1-43. Http://www.recyclingstar.org/wp-content/uploads/2015/02/TRDI\_Report\_print-0204.pdf. State of Texas Alliance for Recycling, Jan. 2015. Web. June 2016. <a href="http://www.recyclingstar.org/">http://www.recyclingstar.org/</a>.

<sup>&</sup>lt;sup>4</sup> Texas Recycling Data Initiative, 2014, (as n.3 above)

## 3.2 Problems

Throughout the State of Texas even with the large assortment of litter reduction efforts in place and the long-broadcasted Don't Mess with Texas anti-littering campaign, drivers, bikers and those who walk near roadways or waterways continue to witness litter. Texas has a substantial organization of litter cleanups efforts through various agencies such as the Texas Department of Transportation (TxDOT), Keep Texas Beautiful and its local affiliates, and the Adopt-A-Highway program, which covers approximately 10 percent of Texas' roadways. In fact, no other state in the U.S. has consistently monitored roadside litter and provided high-profile litter abatement programs as Texas has done and continues to do<sup>5</sup>. The Texas Department of Transportation (TxDOT) estimates spending \$47 million in 2012 on picking up litter from Texas roadways, which is an increase from \$35 million spent in 2004<sup>6</sup>. Roadside and waterway litter continues to challenge Texas' communities and environment.

Not all litter seen on the roadways and within waterways come from careless acts such as people directly throwing waste onto the ground. Litter can also be windborne from open-top collection receptacles as seen in public areas like on sidewalks and in parks. Also, litter comes from vehicles that do not have their loads correctly secured or covered. Often, cities and towns must self-fund the remediation of litter, or they must wait for grant opportunities.

Litter in its various forms can potentially become fire hazards, attract pests and rodents, carry germs, and cause auto accidents<sup>7</sup>. Toxins enter our food chain through the fish and other animals that we eat. Wildlife effects occur when animals ingest plastics or chemicals from plastics leach into surrounding waters. Harmful toxins leaching from discarded trash can also contaminate plants and other vegetation that humans consume.

While the TCEQ had been receiving its portion of the funding every biennium (approximately \$14 million per year), the funds for local government grants has not been fully appropriated in a number of years. As a result, the associated account—"Fund 5000"—had accumulated a balance of over \$100 million by 2013. GR Account 5000 funds pass-through grants that COGs make available to local governments for solid waste management. These grants trigger cost savings for local governments, generate revenues from the sales of recyclable material, and can support more effective law enforcement against illegal dumping. Table 1 highlights the decrease seen in the number of grants passed through as well as decreased allocated funding from the state.

In 2013, state law reduced the tipping fees from \$1.25 to \$0.94 per ton for weighed material, from \$0.40 to \$0.30 per cubic yard for compacted material, and from \$0.25 to \$0.19 a cubic yard for uncompacted material. A tipping fee is a state mandated fee that is collected from the disposal of municipal solid waste into a landfill or process facility. The manner in which tipping fees were distributed was also revised in 2013, as the share received by the GR 5000 which funds COGs dropped from 50 percent to 33 percent of collected solid waste fees. For the year 2013, the COGs were only appropriated \$5.4 million instead of the \$7 million share after the surcharge was reduced. The current budget is 20 percent less

<sup>&</sup>lt;sup>5</sup> Environmental Planning, LLC. "2013 Texas Litter Survey." 2013 Texas Litter Survey - Final Report (n.d.): 1-61. 2013 Texas Litter Survey. Don't Mess With Texas, 23 Aug. 2013. Web. 5 June 2016. <a href="http://www.dontmesswithtexas.org/docs/DMWT\_2013\_Litter\_Survey.pdf">http://www.dontmesswithtexas.org/docs/DMWT\_2013\_Litter\_Survey.pdf</a>.

<sup>&</sup>lt;sup>6</sup> Environmental Planning, LLC., 2013, (as n.5 above)

<sup>&</sup>lt;sup>7</sup> Detrimental Effects of Littering, n.d. Web. 7 October 2016. http://www.ecomena.org/littering/.

than previous years because of this under-appropriation, yet there maintains to be a large demand for these funds.

TABLE 1: ANNUAL COG PASS-THROUGH GRANT NUMBERS AND FUNDING, FY12-15<sup>8</sup>

FY >>		2012		2013		2014		2015	2	012 - 2015
RECIPIENT TYPE	#	Total \$								
City	66	1,413,854	91	1,994,140	71	1,486,117	86	1,666,116	314	6,560,227
COG	12	861,749	5	153,169	8	744,920	2	153,287	27	1,913,126
County	26	546,368	33	661,573	27	538,639	26	499,924	112	2,246,505
Other	1	77,500	0	-	2	4,821	1	3,200	4	85,521
Public K-12 or ISD	3	434,164	4	69,387	3	252,230	0	-	10	755,781
District or Authority	1	22,049	3	36,496	2	7,700	3	14,437	9	80,683
University or College	0	-	0	-	0	-	1	22,058	1	22,058
TOTAL	109	3,355,685	136	2,914,765	113	3,034,427	119	2,359,022	477	11,663,899
Average grant \$	\$	30,786	9	\$ 21,432	\$	26,853	9	19,824		\$ 24,453

<sup>&</sup>lt;sup>8</sup> "Reports and Publications." Texas Association of Regional Councils. N.p., n.d. Web. 14 July 2016. <a href="http://www.txregionalcouncil.org/display.php?page=references.php">http://www.txregionalcouncil.org/display.php?page=references.php</a>.

Nationally, packaging manufacturers and consumer product companies have been focusing on other aspects of corporate sustainability,<sup>9</sup> and are not placing as much emphasis on the recyclability of their products.<sup>10</sup> As packaging products become more difficult to recycle because of multi-material composition, consumer confusion from various product design changes can lead to contamination in recycling programs. That being said, even when consumers use products that are more recycle-friendly, publicly available recycling is lacking in many populated areas and rural communities.

"As packaging products become more difficult to recycle because of multi-material composition, consumer confusion from various product design changes can lead to contamination in recycling programs."

As packaging becomes lighter and longer lasting, counties and municipalities are facing situations where more recyclable products are ending up in the trash or are seen as roadside or waterway litter. The lighter package composition also poses problems within the recycling material recovery facilities (MRF's) as the products are ending up so flat through the transportation process that the materials are ending up incorrectly sorted. For example, the newer plastic water bottles are increasingly being seen in bales of paper due to their light-weight composition.<sup>11</sup>

There are needs in the State of Texas for the management of packaging material that could be solved through increased COG funding by the State releasing GR Dedicated Fund 5000 monies, recycling prioritization by the COG's, and education about the economic benefits of recycling for the State of Texas. Expanding and creating policy here in Texas should focus on addressing wasteful construction of hard-to-recycle packaging; as well as creating the needed infrastructure to collect, process, and reuse materials that would greatly benefit the state and its constituents.



<sup>&</sup>lt;sup>9</sup> "Sustainability Reports." Environmental Leader RSS. Environmental Leader, 30 June 2016. Web. 12 July 2016. <a href="http://www.environmentalleader.com/category/sustainability-reports/">http://www.environmentalleader.com/category/sustainability-reports/</a>.

<sup>&</sup>lt;sup>10</sup> Wu, Amy. "Good Product, Bad Package: Top Sustainable Packaging Mistakes." The Guardian. Guardian News and Media, 18 July 2014. Web. 12 July 2016. <a href="https://www.thequardian.com/sustainable-business/2014/jul/18/good-product-bad-package-plastic-recycle-mistakes">https://www.thequardian.com/sustainable-business/2014/jul/18/good-product-bad-package-plastic-recycle-mistakes</a>.

<sup>&</sup>lt;sup>11</sup> Moore, Patty. "Recycling Is Not Dead." Resource Recycling (2015): Pg. 27. July 2015. Web. 7 July 2016. <a href="http://www.resource-recycling.com/site-content/publications/articles/Mooreo715rr.pdf">http://www.resource-recycling.com/site-content/publications/articles/Mooreo715rr.pdf</a>.

## 3.3 Solid Waste Fee Fund

Revenue for GR Account 5000 (Solid Waste Disposal fees) comes from fees and charges as directed by Section 361.013 of the Texas Health and Safety code. GR Account 5000, which provides the funding for COGs to implement regional projects, takes in 33.3 percent of the state's solid waste fees. Table 2 shows a three year breakdown of GR Account 5000 (Solid Waste Disposal Fees) and GR Account 5049 (Waste Management) fund totals. Both accounts rest within the General Revenue fund for use by TCEQ.

TABLE 2. GR 5000 & 0549 ACCOUNT BALANCES<sup>12</sup>

GR Account 5000 - Solid Waste Disposal Fees	FY 2014	FY 2015	FY 2016
Beginning Balance	\$114,313,159	\$118,779,678	\$122,966,458
Estimated Revenue	\$9,992,181	\$9,730,116	\$9,490,833
Deductions	\$5,525,662	\$5,543,336	\$5,523,056
Ending Balance	\$118,779,678	\$122,966,458	\$126,934,235

GR Account 0549 - Waste Management	FY 2014	FY 2015	FY 2016
Beginning Balance	\$28,486,235	\$32,408,984	\$31,453,323
Estimated Revenue	\$35,411,752	\$35,164,881	\$32 <b>,</b> 771 <b>,</b> 167
Deductions	\$31,489,003	\$36,120,542	\$37,505,461
Ending Balance	\$32,408,984	\$31,453,323	\$26,719,029

Councils of Governments (COGs) have a great effect on recycling efforts at a local and regional level. Pass-through grant funds are made available from TCEQ and provided to the COGs to help drive initiatives such as implementing recycling programs, purchasing equipment, conducting environmental education campaigns, and engaging in environmental enforcement activities.

Tables 2 and 3 show an overall trend of an increase in the fund balance of GR Account 5000, yet account deductions for the COGs has remained stagnant. The result of withholding available funds means that local governments will take on an increasing burden in addressing recycling and disposal issues of product packaging.

<sup>12 &</sup>quot;Operating Budget for Fiscal Year 2016." TCEQ Operating Budget for Fiscal Year 2016 (2015): 1-120. Texas Commission on Environmental Quality. 1 Dec. 2015. Web. 15 June 2016. <a href="http://www.tceq.state.tx.us/assets/public/comm\_exec/pubs/sfr/030-16.pdf">http://www.tceq.state.tx.us/assets/public/comm\_exec/pubs/sfr/030-16.pdf</a>.

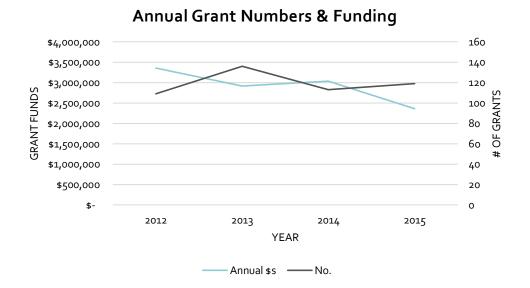
TABLE 3. GR 5000 & 0549 ACCOUNT BALANCE CHANGE<sup>13</sup>

GR Account 5000 - Solid	. •	FY 15-16	FY 14-15	FY 15-16
Waste Disposal Fees	Change (\$)	Change (\$)	Change (%)	Change (%)
Beginning Balance	\$4,466,519	\$4,186,780	3.91%	3.52%
Estimated Revenue	(\$262,065)	(\$239,283)	-2.62%	-2.46%
Deductions	\$17,674	(\$20,280)	0.32%	-0.37%
Ending Balance	\$4,186,780	\$3,967,777	3.52%	3.23%

GR Account 0549 - Waste Management	FY 14-15 Change (\$)	FY 15-16 Change (\$)	FY 14-15 Change (%)	FY 15-16 Change (%)
Beginning Balance	\$3,922,749	(\$955,661)	13.77%	-2.95%
Estimated Revenue	(\$246,871)	(\$2,393,714)	-0.70%	-6.81%
Deductions	\$4,631,539	\$1,384,919	14.71%	3.83%
Ending Balance	(\$955,661)	(\$4,734,294)	-2.95%	-15.05%

Figure 1 presents the recent trend in declining funding for the COG pass-through grants. The average project funding declined over this timeframe from about \$31,000 to \$20,000

FIGURE 1: DECLINING COG PASS-THROUGH GRANT FUNDING



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<sup>&</sup>lt;sup>13</sup> TCEQ Operating Budget for Fiscal Year 2016, (as n.12 above)

## Section 4 Texas Recycling Status

## 4.1 Texas Recycling Data Initiative

Beginning in 2010, the State of Texas Alliance for Recycling (STAR) and the Lone Star Chapter of the Solid Waste Association of North America (TxSWANA) led a consortium of stakeholders to measure the recycling rate in Texas. The goal of what they named the Texas Recycling Data Initiative (TRDI) was "to quantify the amount of recycling in Texas to examine environmental, economic and policy issues of interest to businesses, citizens and governmental agencies." This effort also established a baseline recycling rate to measure future progress.<sup>14</sup>

Burns & McDonnell, an engineering and consulting firm, was awarded a contract to survey processors and end users of recyclables for: traditional recyclables, organic materials, and other commodities such as construction and demolition materials. While the level of TRDI detail did not itemize containers and packaging, the 2014 report findings, plus data from the U.S. Environmental Protection Agency (US EPA), can approximate a level of packaging recovery in Texas. More importantly, this information yields estimates on the missed opportunities in Texas from not recovering these materials.

The US EPA notes that of the 254 million tons of municipal solid waste (MSW) generated in 2013, containers and packaging make up the largest portion: 29.8 percent. The fact sheet also notes that traditional recyclables (all glass, metal, paper, and plastic products including packaging) comprised 53.4 percent.

At this rate, Texans are discarding more than 10 million tons of traditional recyclables each year, 5.7 million tons of which are containers and packaging.

As You Sow calculated that in 2010, the value of paper and paperboard and packaging landfilled in the U.S. was \$11.4 billion.<sup>16</sup> Assuming Texas discards were similar to the US, using As You Sow figures, the value of the packaging materials discarded by Texans was nearly \$900 million.

Recognizing the need to more accurately determine this missed economic opportunity, in 2015 the Texas legislature passed HB 2763 enabling the TCEQ to analyze the state's current efforts by conducting The Study on the Economic Impacts of Recycling. <sup>17</sup> The scope of the TCEQ project will assess current recycling efforts and identify methods to increase recycling. In addition, it will investigate funding, assess jobs, and assess infrastructure needs in rural areas. TCEQ's contractor, Burns & McDonnell, anticipates completing the TCEQ project by spring 2017.

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<sup>&</sup>lt;sup>14</sup> Texas Recycling Data Initiative, 2014, (as n.3 above)

<sup>&</sup>lt;sup>15</sup> "Advancing Sustainable Materials Management: 2013 Fact Sheet." U. S. Environmental Protection Agency (US EPA), June 2015. Web. 20 June 2006. <a href="https://www.epa.gov/sites/production/files/2015-09/documents/2013\_advncng\_smm\_fs.pdf">https://www.epa.gov/sites/production/files/2015-09/documents/2013\_advncng\_smm\_fs.pdf</a>

<sup>&</sup>lt;sup>16</sup> MacKerron, Conrad. Unfinished Business: The Case for Extended Producer Responsibility for Post-Consumer Packaging. As You Sow, 2012. Web. 20 June 2016. <a href="http://www.asyousow.org/ays\_report/unfinished-business-the-case-for-extended-producer-responsibility-for-post-consumer-packaging">http://www.asyousow.org/ays\_report/unfinished-business-the-case-for-extended-producer-responsibility-for-post-consumer-packaging</a>

<sup>&</sup>lt;sup>17</sup> "HB 2763, Relating to a study of the current and potential economic impacts of recycling." 84th Legislative Session. Web. 20 June 2016. <a href="http://www.legis.state.tx.us/BillLookup/History.aspx?LegSess=84R&Bill=HB2763">http://www.legis.state.tx.us/BillLookup/History.aspx?LegSess=84R&Bill=HB2763></a>

## 4.2 Benefits from Increased Funding

Increasing the amount of funds available to the COGs statewide will have a number of benefits not just on packaging recycling, but in other areas as well.

Plastic, paper/paperboard, and rubber/leather combined accounted for 62 percent of visible roadway litter.<sup>18</sup>

<u>Issue</u>: The Texas Department of Transportation (TxDOT) estimates spending \$47 million in 2012 on picking up litter from Texas roadways, which is an increase from \$35 million in 2004. <sup>19</sup> Opportunities exist to increase the anti-littering and recycling message particularly among population segments such as Millennials, Hispanics, single adults, and households with young children. These population groups were the most likely to have higher incidences of littering. <sup>20</sup>

<u>Benefit</u>: Increasing TCEQ allocations for COG regional solid waste projects would result in better waste collection and recycling programs implemented locally. COGs have the ability to fund education programs to address packaging and container litter from major sources like plastic bags, Styrofoam and plastic bottles. When combined with the Don't Mess with Texas campaign, this would result in a reduction in the amount of litter and its effects on Texas road and waterways.

Proper education impacts contamination rates for collected materials, as well as recycling in general.

<u>Issue</u>: A survey conducted by the Institute for Scrap Recycling Industries (ISRI) and Earthg11 found that a lack of knowledge contributed to a confusion surrounding plastics recycling. Survey data indicated that 37 percent of respondents were unsure of acceptable levels of food contamination, followed by 28 percent who stated a lack of understanding when it came to what types of plastics their municipality accepted for curbside recycling.<sup>21</sup> Ultimately, this gap in knowledge contributes to contamination of potentially recyclable products, further increasing the difficulty of end-markets in obtaining reusable materials.

<u>Benefit</u>: By making more funding available to COGs for education related projects, recyclers and municipalities would see a decrease in the contamination rates. The result of this would be a higher quantity and quality of recyclable products finding their way to end-market customers.

Increasing the funding for COG regional solid waste grants will also open up opportunities for attracting and identifying end markets, particularly with products that are less commonly recycled.

<sup>&</sup>lt;sup>18</sup> Environmental Planning, LLC., 2013, (as n.5 above)

<sup>&</sup>lt;sup>19</sup> Environmental Planning, LLC., 2013, (as n.5 above)

<sup>&</sup>lt;sup>20</sup> Environmental Planning, LLC., 2013, (as n.5 above)

<sup>&</sup>lt;sup>21</sup> McTigue Pierce, Lisa. "Confused Consumers Toss out Plastic Packaging Instead of Recycling: Poll." Packaging Digest. N.p., 31 July 2014. Web. 21 June 2016. <a href="http://www.packagingdigest.com/sustainable-packaging/confused-consumers-toss-out-plastic-packaging-instead-of-recycling-poll140731">http://www.packagingdigest.com/sustainable-packaging/confused-consumers-toss-out-plastic-packaging-instead-of-recycling-poll140731</a>.

<u>Issue</u>: Cartons are recyclable and according to the Carton Council, 57 percent of U.S. households have access to carton recycling which indicates a successful program while at the same time highlighting an additional need for carton recycling.<sup>22</sup> Organizations such as the Carton Council work with local governments and recycling processors to facilitate the collection and recycling of products like cartons.

<u>Benefit</u>: If more funds were available through the COG grants, additional projects could be funded to pursue opportunities in building partnerships between recyclers and end-market businesses.

Research by the Tellus Institute found that the recycling industry creates significantly more jobs per tonnage disposed than landfilling and incineration.

<u>Issue</u>: A Tellus Institute study found that waste disposal created one job per 10,000 tons of discards generated. Recycling created 20 jobs per 10,000 tons of discards generated, and composting organics generated 5 jobs with the same amount of discards.<sup>23</sup> An estimated 12,678 Texans have jobs in the processing sector of the recycling industry -- not including those employed in the collection, reuse or remanufacturing sectors.<sup>24</sup>

<u>Benefit</u>: By granting more money to expand recycling programs, more jobs are created overall in the materials management and recovery industry.

COG grants can also be used to fund studies of the economic impacts of recycling at the regional level.

Issue: Data is very important to acquire in order to assess and implement existing or new recycling programs. The EPA releases national recycling figures, however, programs and participation can greatly vary from region to region; without available regional data, it is difficult to measure key performance indicators. The Houston-Galveston Area Council (H-GAC) commissioned David Swenson Consulting and Science Application International Corporation (SAIC) to produce the 2013 report, "The Economic Contribution of the Recycling Industry to the Houston-Galveston Region," finding that recycling directly and indirectly supported over 16,700 jobs in the region -- not including the reuse or remanufacturing sectors.<sup>25</sup>

<u>Benefit</u>: Regional economic studies such as the one conducted by the H-GAC can support effective policy decisions at the local level by fostering a connection between economic development and long-term environmental sustainability.

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<sup>&</sup>lt;sup>22</sup> Carton Council. N.p., n.d. Web. 21 June 2016. <a href="http://www.cartonopportunities.org/">http://www.cartonopportunities.org/</a>>.

<sup>&</sup>lt;sup>23</sup> Goldstein, James, and Christi Electris. "More Jobs, Less Pollution: Growing the Recycling Economy in the U.S.: Publications: Tellus Institute." More Jobs, Less Pollution: Growing the Recycling Economy in the U.S.: Publications: Tellus Institute. The Tellus Institute, 2011. Web. 15 June 2016. <a href="http://www.tellus.org/tellus/publication/more-jobs-less-pollution-growing-the-recycling-economy-in-the-u-s-">http://www.tellus.org/tellus/publication/more-jobs-less-pollution-growing-the-recycling-economy-in-the-u-s-</a>.

<sup>&</sup>lt;sup>24</sup> Texas Recycling Data Initiative, 2014, (as n.3 above)

<sup>&</sup>lt;sup>25</sup> "The Economic Contribution of the Recycling Industry to the Houston-Galveston Region." Houston-Galveston Area Council (2013). Fri. 24 June 2016. <a href="https://www.h-gac.com/community/recycling/workshops/documents/recs\_H-GAC%20-Economic-Contribution-Report.pdf">https://www.h-gac.com/community/recycling/workshops/documents/recs\_H-GAC%20-Economic-Contribution-Report.pdf</a>

## Section 5 Summary, Key Findings, Recommendations

The workgroup that investigated the existing policy regarding packaging in Texas consisted of individuals working in local government, higher education, regional government, non-profit, community advocacy, and the business sector. These members include: Jordan Fengel (Texas Product Stewardship Council / City of Georgetown), Roman Alvarez (Permian Basin Regional Planning Commission), Woody Raine (Austin Resource Recovery), and Melanie Scruggs and Corey Troiani (Texas Campaign for the Environment). The Planning Team members include: Renee Bellew (EPA Region 6), Michele Wagner (Carton Council), Sara Nichols (STAR), Soria Adibi (North Central Texas Council of Governments), and Todd Bryan (CDR Associates).

The efforts of the workgroup to better understand the current status of packaging policy and recycling efforts in Texas has led to a number of key findings. Based on our findings, we offer recommendations that we hope can advise future discussions about the mounting need of increasing recycling program availability at the state and local levels. The findings and recommendations will also demonstrate how increased funding to the COGs can advance litter reduction efforts, in addition to affording communities more opportunities to reduce their expenditures spent on litter remediation and pollution clean-up efforts.

**Key Finding #1**: In recent years there has been a gradual decline in the appropriation of funds to both GR Accounts 5000 and 0549. GR Account 5000 provides the funds for solid waste projects and pass-through grants given to the COGs, while GR Account 0549 provides funding for solid waste permitting and enforcement to the TCEQ.

**Recommendation #1**: Increase the amount of funding released to COGs from Texas' Solid Waste Fund; this will help regional and local governments fund litter reduction efforts such as public education and aid in placing away from home recycling infrastructure.

**Key Finding #2**: The result in the decrease in available funds from the GR accounts means that local governments take on an increasing burden of addressing recycling and disposal issues of product packaging.

**Recommendation #2**: Prioritize and support the implementation and expansion of infrastructure needed to grow the recycling industry in Texas.

**Key Finding #3**: The litter caused by mismanaged or discarded packaging represents a threat to local economies and a cost burden to local governments.

**Recommendation #3**: Support recycling education and industry research to maximize the efficiency of recycling and solid waste management programs at every level.

**Key Finding #4**: There are multiple key stakeholders that can benefit from the release of this white paper, as well as receiving additional funds from GR 5000.

**Recommendation #4**: Reach out to the identified key stakeholders to provide this white paper and other materials to support the paper's recommendations.

## Section 6 Key Stakeholders

The workgroup has developed a roadmap to achieve the mission of releasing the GR 5000 account to the COGs for the funding of packaging recycling infrastructure. A unified state plan to address the issue of packaging is an intended result of this process. Educating stakeholders is a key factor to create a unified message and establishing partners to champion a legislative agenda. Partnerships that will be pursued are:

- Councils of Governments- An important step is for all the COG Solid Waste Coordinators to collectively prioritize the advancement of packaging recycling and the distribution of Fund 5000. The process within the COGs should also be shared with their respective solid waste advisory committees (SWACs).
- Regional Solid Waste Advisory Committee (SWAC) The SWACS provide support and advice to the COG's Executive Board on methods to identify regional solid waste priorities and implementation projects, and review solid waste grant applications and make recommendations on projects to be funded.
- The Municipal Solid Waste Management and Resource Recovery Advisory Council (MSWRRAC)
  MSWRRAC serves an important role in making recommendations to the TCEQ commissioners and
  making recommendations on legislation.<sup>26</sup> MSWRRAC members are an intended audience to
  review and provide recommendations on legislation and policy concerning municipal solid waste
  management.
- Texas Commission on Environmental Quality (TCEQ) Commissioners for the state environmental agency can request full appropriation of the amounts collected in Fund 5000 to redistribute to COGs as pass-through grants. TCEQ staff can also be included in work groups to work with local government officials and other advisory committee members on a standard methodology or protocol for regular distribution of Fund 5000 for legislative consideration.
- **Texas Legislators** are responsible for appropriating Fund 5000 to the TCEQ and can pass legislation to standardize appropriations from Fund 500 to the TCEQ and to COGs rather than leaving it to TCEQ commissioners to decide.

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 $<sup>^{26}\,\</sup>mathsf{TCEQ.}\,\,\mathsf{N.p.,\,n.d.}\,\,\mathsf{https://www.tceq.texas.gov/permitting/waste\_permits/advgroups/msw\_advcouncil.\mathsf{html.}}$ 

## Section 7 Fact Sheet: Packaging and Existing Policy in Texas

State funds support programs through the regional Councils of Governments (COGs) aimed at improving recycling and addressing litter left on Texas roadways and waterways. Changes in funding, however, meant that COGs are not able to meet the needs of local governments when it comes to applying for regional solid waste grant funds.

### Key Facts about GR Account 5000

GR Account 5000 was established by the state Comptroller for use by the Texas Commission on Environmental Quality (TCEQ).

- The account provides funding for Councils of Governments (COGs) to implement regional projects. GR Account 5000 takes in 33.3 percent of the state's solid waste fees.
- Ending balance for GR Account 5000 *increased 3.23 percent* between FY 2015-2016 while deductions decreased 0.37 percent in the same time period.<sup>27</sup>
- Average amount for COG regional grant in 2012 was \$30,786. In 2015 the average award decreased to \$19,824.<sup>28</sup>

## Product Packaging and Littering

- Nationally, an estimated 50 million tons of packaging and printed paper are disposed of every year. <sup>29</sup> This waste stream is valued at approximately \$11 billion and makes up 42 percent of all recycled materials around the country.
- The 2015 Texas Recycling Data Initiative (TRDI) study estimates our state is recycling 6,143,393 tons of material which is around 19 percent.<sup>30</sup>

#### **Economic Benefits of Recycling**

- Every 10,000 tons of municipal solid waste has the potential to create 10 jobs in recycling compared to just 1 job in landfilling or incineration.<sup>31</sup>
- An estimated 12,678 Texans have jobs in the processing sector of the recycling industry -- not including those employed in the collection, reuse or remanufacturing sectors.<sup>32</sup>

 $<sup>^{27}</sup>$  TCEQ Operating Budget for Fiscal Year 2016.

<sup>&</sup>lt;sup>28</sup> "Reports and Publications." Texas Association of Regional Councils. N.p., n.d. Web. 14 July 2016.

<sup>&</sup>lt;a href="http://www.txregionalcouncil.org/display.php?page=references.php">http://www.txregionalcouncil.org/display.php?page=references.php</a>.

<sup>&</sup>lt;sup>29</sup> "Packaging - Product Stewardship Institute (PSI)." Packaging. Product Stewardship Institute (PSI), n.d. Web. 5 June 2016. <a href="https://productstewardship.site-ym.com/default.asp?page=Packaging">https://productstewardship.site-ym.com/default.asp?page=Packaging</a>.

<sup>&</sup>lt;sup>30</sup> "Texas Recycling Data Initiative (TRDI)." Texas Recycling Data Initiative (2014): 1-43. Http://www.recyclingstar.org/wp-content/uploads/2015/02/TRDI\_Report\_print-0204.pdf. State of Texas Alliance for Recycling, Jan. 2015. Web. June 2016. <a href="http://www.recyclingstar.org/">http://www.recyclingstar.org/</a>.

<sup>31 &</sup>quot;More Jobs, Less Pollution." Tellus Institute. 2008.

<sup>&</sup>lt;sup>32</sup> Texas Recycling Data Initiative, 2014, (as n.3 above)









Austin Resource Recovery AustinRecycles.com

Planning Commission pbrpc.org

Permian Basin Regional Texas Campaign for the Environment texasenvironment.org

Texas Product Stewardship Council recyclingstar.org