Winners and Losers Under Iowa House File 575: An Analysis
March 2018

The Container Recycling Institute (CRI) has analyzed Iowa HF 575, successor to HSB 163. It would repeal the beverage container deposit law (“bottle bill”), and would impose a 1¢ “recycling program fee” on carbonated beverages. Fees would go into a Recycling Fund (the Fund), for use in recycling and litter control programs, and would sunset after $60 million has been raised.

While H575 would deliver a policy change that some stakeholders desire, it would have a negative impact on municipalities, small and large businesses, the State itself, charities, consumers, and the environment. By repealing the deposit law, this bill would reduce beverage container recycling, contrary to the bill’s stated intent. Our analysis shows that H575 would:

- Decrease recycling of beverage containers by 620 million bottles and cans per year
- Increase landfiling of beverage containers almost 70,000 tons per year
- Boost beverage container litter, hiking litter cleanup costs by $3.4 million annually
- Decrease revenue to charities by about $2.8 million per year
- Create higher net costs for multiple stakeholders. Over a 10-year period:
  - Beverage distributors and bottlers: a loss of $376 million
  - Municipalities: a loss of $44 million, plus $3.5 million in litter abatement costs
  - Businesses and other private entities: as much as $29 million in litter abatement costs
  - State/taxpayers: $10 million in lost landfill fee revenue and litter abatement costs
  - Consumers: $5 million in retail costs via new beverage excise tax

- Be bad for the environment:
  - Cause more than 1 trillion BTUs of energy to be consumed in replacing wasted containers
  - Increase greenhouse gas emissions by about 69,000 tons per year

- Eliminate as many as 900 jobs, including
  - 500 redemption center jobs
  - Almost 400 redemption-related jobs in retail stores, and
  - Other jobs related to the transportation and processing of beverage containers

The benefits of a new Recycling Fund are temporary and do not come close to compensating stakeholders for their losses. Losses would continue indefinitely, while beverage companies would pay into the Fund for only as long as it takes to raise $60 million (we estimated 5 years).

CRI has conducted a thorough financial analysis of H575 (Appendix A). Our analysis revealed that while recipients of almost $11 million in grants from the new Fund might be considered “winners” under H575, and while grocers might enjoy not having to take back empties after repeal, many more stakeholders stand to sustain significant loses should Iowa’s bottle bill be repealed. We will discuss the various winners and losers in detail in the remainder of this report.
WINNER: Recipients of about $57 million in grants from a new Recycling Fund

The proposed new recycling fund would raise an estimated $11.7 million per year in fees. About $11.1 million would be disbursed as grants for recycling purposes to various entities, after the State uses an estimated 5% administratively.

While this sounds encouraging, it must be noted that it is unknown how these funds would be distributed, or who the recipients of these funds would be. The list of potentially eligible entities, from municipalities and MRFs (materials recovery facilities) to large entertainment venues to groups providing recycling public education, to various state agencies, makes it very uncertain who will receive the funding. As appears imminent from the author’s amendments, disbursal of the funds will be at the discretion of the director of the Iowa Department of Natural Resources. While the amended bill seeks to “prioritize” certain entities as grant recipients—including former redemption centers, operators of commercial and multi-family residential recycling programs, public facilities, and others—there are no guarantees of funding to anyone. This level of funding will not be sufficient to fund enough additional recycling programming to offset the loss of the highly-effective deposit program.

The Delaware Experience: how did the anticipated $22 million in funding turn into only $8 million in actual grant funding?

In Delaware, which H575 looks to for inspiration, there were a host of unmet expectations after the law went into effect and the funding raised was disbursed:

- Only 64% of the anticipated recycling grant funding was raised by the non-refundable fees;
- Only 15% of the anticipated funding was ultimately granted to public and non-profit entities. Municipalities received only $2.5 million in grant funding;
- Only 15 of 57 cities in Delaware received funding through this program;
- The remainder of grants, about $4.6 million, were given to waste haulers and other commercial entities;
- $5 million in dedicated recycling funding was diverted to the State’s General Fund; and
- $1 million was used by the State of Delaware for administration.

By the time the Delaware beverage fee program had sunset, only $8 million, or 36% of projected grant funding had been distributed to grant recipients. If similar conditions transpire in Iowa, and after the DNR uses 5% of collected funds administratively, CRI estimates that only $11.1 million of the projected $18.4 million raised annually will ultimately be awarded as grants to promote recycling. If the State of Iowa claims the same level of proceeds for a sweep into the general fund as Delaware did, then grant recipients would only receive $7.3 million per year.
LOSER: Beverage distributors & bottlers stand to lose $376 million over 10 years

CRI has calculated that the net cost of H575 to beverage distributors and bottlers would be $376 million over the course of 10 years. Initially after a repeal, the industry would save $11.4 million per year by no longer having to pay deposit-program handling fees, and an additional $13.4 million a year by no longer having to pay other collection and processing costs related to container collection, for a total savings of about $25 million. These savings, however, are not as large as new direct costs and revenue losses. Distributors and bottlers would have to pay about $11.7 million into the Fund annually for approximately 6 years, or until $60 million was raised. They would also lose an estimated $22 million in annual scrap revenues. Finally, in the absence of a bottle bill, beverage distributors and bottlers would no longer have $35 million in unclaimed deposits as a revenue source, for a total cost of $68 million per year. The new savings minus the new costs results in a net loss of $43.5 million each year for the first five years. After required payments into the Fund terminated, the distributors and bottlers would experience a net loss of $32 million per year, resulting in a total net loss of $376 million over 10 years.³

LOSER: Municipalities to lose $41 million over 10 years

Our analysis shows that Iowa cities and towns would lose about $44 million over a 10-year period if H575 passes, due to the high costs of recycling and disposing of an influx of new materials; this is a projected net loss after accounting for new scrap revenues from aluminum cans and PET plastic bottles, and after some cities and towns receive grants from the recycling fund.

First, there is no guarantee that all of the expected $60 million to be raised through the fee will be allocated to municipalities as grants. $3 million would be used for state administration of the grants. In Delaware, only 31% of the fees granted were ultimately disbursed to cities and towns; the remainder went to waste haulers and other private entities (and to a much lesser extent to schools); while a third of the funding was swept into the state general fund. Second, even if all of the $57 million were disbursed to Iowa cities and towns, the amount would be inadequate to collect and recycle (and dispose of) the additional material that would then be in the recycling and trash streams.

The new funding of $57 million would not be able to pay for new recycling because it doesn’t even cover the cost of recycling existing deposit container materials that would suddenly be the responsibility of municipalities.

Currently, with the self-funding mechanism of the bottle bill, 71% of containers sold are being recycled at no cost to municipalities. Under H 575, even if the full $57 million were allocated to municipalities, it would only be enough to cover the costs of collecting and processing 22% of the deposit container tonnage sold over a 5-year period. After the first 5 years of grants, municipalities would absorb the full costs of recycling these new materials, with no funding from the grant program.
Most of the material now recycled through the deposit program would be collected by municipalities: either for recycling, or for trash disposal. Some think that a bottle bill repeal would be a boon to their recycling programs by making more valuable aluminum cans and PET plastic bottles available to them—material that is currently being handled by distributors in the deposit system. But our analysis shows that under a deposit repeal, this material would represent more of a new liability than a new asset.

Recycling rates will be lower under curbside programs than under a deposit system, resulting in fewer tons of recyclable beverage containers collected in total, and therefore higher amounts of trash.

In 2015, about 71% of the carbonated beverage containers sold in Iowa were recycled through the deposit system, and to a lesser extent through curbside recycling. But CRI estimates of recycling rates in non-bottle bill states are about 46% for aluminum, 18% for PET plastic, and only 12% for glass, as Figure 1 shows.

On average, only 27% of non-deposit containers are recycled nationally. This is in contrast to the approximately 71% of deposit bottles and cans recycled in Iowa today, and the average of 72% of deposit bottles and cans recycled in the 10 deposit states.

The recyclables themselves will sell for a lower price. Material value is preserved through the clean deposit collection process, but material value is degraded through cross-contamination when collected through a mixed-material process such as single-stream curbside recycling.

Because of cross-contamination (glass shards ending up in PET plastic bales, for example), and because of incorrect “wishful” recycling by residents (putting broken ceramic mugs, drinking glasses, or lightbulbs in with the curbside recyclables) single-stream curbside material is of a much lower quality than clean, separated deposit program material, and it commands lower per-ton scrap revenues. Curbside PET plastic currently sells for $180/ton, compared to deposit PET at $240/ton. Curbside glass, in fact, costs $15/ton to recycle—when markets can be found for it at all—versus deposit glass that has a $20/ton scrap value.

When all of these factors are taken together, we estimate that municipalities could gain about $10 million in scrap revenue per year: far less than the $22 million the beverage companies
would be losing in forgone deposit scrap sales--and still not enough to make up for their additional collection, processing, and disposal costs$^5$ of $16$ million per year: $7.7$ million from increased curbside collection and processing costs, and $8.4$ million from increased trash collection and disposal costs.

While beverage fees are being levied, these additional costs might be offset by grants from the Fund, depending on who receives the grants, but after the grant program ends, municipalities would see a **net annual cost increase of more than $6 million annually.** These costs—more than $44 million over 10 years—would be *new costs* to cities and towns. In other words, under a bottle bill repeal, cities and towns are a loser.

Finally, cities and counties will have to deal with more beverage container litter, which will increase their litter cleanup costs by more than $350,000 annually.

**Litter cleanup could cost $34 million over 10 years: multiple stakeholders affected**

The bottle bill is already providing a cost-savings benefit to the populace of Iowa. CRI conducted a litter study in nearby Michigan in 2015 and we calculated an annual cost savings of $1.24 per capita in avoided litter pick-up costs due to the presence of the bottle bill.$^6$ Applied to the population of Iowa, this translates to $3.9$ million per year in avoided litter pick-up costs that are a benefit of the current program.

H575 calls for an excise tax of “fifteen thousandths of one percent upon the sales price of beverages in beverage containers,” which we project would generate $500,036 in funding annually, based on CRI’s estimate of $3.3$ billion in retail sales of the specified beverages. H575 calls for 10% of the monies to be turned over to Keep Iowa Beautiful for litter abatement and related activities, and for 90% to be distributed to regional entities based on population.$^7$

The difference between the current avoided costs due to the bottle bill ($3.9$ million) and the anticipated litter abatement funding to be generated by the new excise tax ($500,036$) can be considered an “unmet financial need” of **$3.4$ million to various stakeholders,** or $34$ million over 10 years. Parties responsible for cleaning up the excess litter include state highway workers,
storm drain management workers, park maintenance workers, and municipal public works employees.

As Figure 2 shows, the owners of private businesses would be faced with the largest cost of cleaning up increased beverage container litter on their parking lots and grounds, on the sidewalks in front of their businesses, and in many other areas, at approximately $2.9 million per year.

To fully fund the cost of picking up the new containers that will be littered if the bottle bill goes away, the excise tax would have to be about 7 times greater than it is slated to be.

**LOSER: State could lose $11 million in litter abatement costs & landfill revenue**

One cost to the State from a bottle bill repeal would be an estimated $124,800 in net annual litter abatement costs, or about $1.2 million over 10 years. This is the State’s share of the “unmet need” referenced in Figure 2, and represents costs in excess of litter-relating funding raised through the new excise tax.

An additional cost to the State would be up to $1 million in potential lost revenues to the Department of Natural Resources (DNR) if the proposed amendment to H575 is adopted. The amendment calls for up to 50 cents per ton in landfill tonnage fees currently remitted to the DNR to remain in local areas; landfill operators are tasked with using retained funds for planning and environmental protection activities at the local level. CRI has calculated that this could amount to $1 million annually, and our estimates agree with the DNR’s own internal estimates.

**LOSER: Redemption center owners & employees; retail redemption employees**

Under a bottle bill repeal, redemption centers across Iowa would close, and an estimated 500 jobs would be lost. We estimate that almost 400 employees at retail redemption sites would lose their jobs as well. In total, Iowa redemption centers and retail redemption sites will lose about $11 million in handling fees every year as a result of the proposed changes.

**LOSER: Consumers will pay $500K in non-refundable beverage taxes**

In addition to the one-cent fee that distributors will pay into the State’s Recycling Fund for every beverage unit sold, H575 calls for an additional excise tax of “fifteen thousandths of one percent upon the sales price of beverages in beverage containers,” to be used for litter abatement activities. CRI estimates that consumers will pay more than $500,000 annually in non-refundable beverage excise taxes.

**LOSER: The environment: additional litter, energy consumption, GHG emissions**

The environment also stands to suffer if the bottle bill is repealed. CRI estimates that in 2015, more than 90,000 tons of aluminum, plastic, and glass deposit beverage containers were recycled. As previously noted, however, CRI estimates that under the elimination of the deposit
system, the recycling rates for aluminum, plastic, and glass could drop to 46%, 18%, and 12% respectively. We estimate that more than 13,000 tons of previously redeemed deposit material would now be recycled through curbside programs and scrap yards each year. This represents an annual loss of about 70,000 tons that had previously been recycled, but would become trash under a deposit repeal.

Scrap yards would be the recipients of approximately 2,700 additional tons of aluminum cans valued at about $4 million in scrap value.

There are also energy and greenhouse gas impacts from the loss of 70 thousand tons of recyclables. When glass, aluminum, and plastic containers are wasted rather than recycled, they must be replaced with containers made from 100% virgin materials, whose manufacture requires tremendous amounts of energy, and generates CO₂ and other potent greenhouse gasses. CRI estimates that the energy squandered in replacing these wasted containers could supply the total residential energy needs of about 12 thousand Iowa homes for a year. We further estimate that about 69 thousand tons of greenhouse gas emissions would be generated by replacing 70 thousand tons of newly-wasted bottles and cans with new containers made from virgin materials. This is equivalent to the annual emissions from 14 thousand passenger cars.¹¹

Iowa is a leader in recycling; a bottle bill repeal would be a setback

As Figure 3 shows, 472 beverage containers are recycled per capita in Iowa now: nearly twice as many as the average in non-deposit states (226). That per capita number would be even higher were deposits extended to the approximately 50% of beverages that are non-carbonated, as in some of the deposit states with higher per capita recycling rates.

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Worldwide Trend: More Beverage Containers Brought into Deposit Programs

There are more than 50 container deposit programs worldwide. Since the year 2000, there have been 17 new and expanded deposit laws around the world. Container deposit programs have been expanded to include more beverage types, like water, in California, New York, Connecticut and Oregon. In Ontario, Canada, wine and liquor were added to their program in 2007. Hawaii and Germany both started new comprehensive deposit programs in 2005. 2011 brought new programs to Fiji, Guam, the Northern Territory of Australia, Turks & Caicos, and Lithuania implemented their container deposit law in 2015. In 2016, Western Australia, New South Wales, and Queensland all passed deposit legislation. Scotland and Latvia announced intent to implement deposits in late 2017. As Figure 4 shows, 13 countries have introduced deposits to more than 100 million people since 2005. The worldwide trend is clearly to bring more and more beverage containers under deposit programs because of their success.

The beverage container deposit program is the most effective recycling program in Iowa. Repealing it through H575 would be a setback for both the economy and the environment of Iowa.

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>2016 Population (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>2005</td>
<td>4.2</td>
</tr>
<tr>
<td>Estonia</td>
<td>2005</td>
<td>1.3</td>
</tr>
<tr>
<td>Germany</td>
<td>2005</td>
<td>80.7</td>
</tr>
<tr>
<td>Hawaii</td>
<td>2005</td>
<td>1.4</td>
</tr>
<tr>
<td>Fiji</td>
<td>2011</td>
<td>0.9</td>
</tr>
<tr>
<td>Guam</td>
<td>2011</td>
<td>0.2</td>
</tr>
<tr>
<td>Northern Territory of Australia</td>
<td>2011</td>
<td>0.2</td>
</tr>
<tr>
<td>Turks and Caicos</td>
<td>2011</td>
<td>0.0</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2015</td>
<td>2.9</td>
</tr>
<tr>
<td>New South Wales, Australia</td>
<td>2017</td>
<td>7.6</td>
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<tr>
<td>Queensland, Australia</td>
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<td>Australian Capital Territory</td>
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<tr>
<td>Western Australia</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>107</strong></td>
</tr>
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Appendices A and B on the following pages provide a summary of the projected financial impacts of H575 and sources for data.

About the Container Recycling Institute (CRI)

CRI is a nonprofit organization and a leading authority on the economic and environmental impacts of used beverage containers and other consumer-product packaging. Its mission is to make North America a global model for the collection and quality recycling of packaging materials. We do this by producing authoritative research and education on policies and practices that increase recovery and reuse; by creating and maintaining a database of information on containers and packaging; by studying container and packaging reuse and recycling options, including deposit systems; and by creating and sponsoring national networks for mutual progress. CRI envisions a world where no material is wasted and the environment is protected. It succeeds because companies and people collaborate to create a strong, sustainable domestic economy.
## Appendix A. Winners and Losers: A Financial Analysis of Iowa’s HF 575 (formerly HSB 163)

(a repeal of Iowa’s Bottle Bill with a new penny fee on carbonated beverages, wine, and spirits)*

<table>
<thead>
<tr>
<th>Who Wins?</th>
<th>Who Loses?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual savings/(costs), unless otherwise noted</strong></td>
<td><strong>Material Recovery Facilities (MRFs)</strong></td>
</tr>
<tr>
<td>Handling Fees Paid by Beverage Distributors to Redemption Centers and Retailers (a)</td>
<td></td>
</tr>
<tr>
<td>Penny Fee: Payments to, and Grants From, a New Recycling Fund (b)</td>
<td>MRFs, or the companies that own them, may be eligible for grant funding.</td>
</tr>
<tr>
<td>Gross Costs of Collection, Processing, and Disposal (c)</td>
<td>MRFs would receive some portion of containers removed from the bottle bill program, as well as processing fees and scrap revenues.</td>
</tr>
<tr>
<td>Sale of Scrap Material (d)</td>
<td></td>
</tr>
<tr>
<td>Unclaimed Deposits (e)</td>
<td></td>
</tr>
<tr>
<td>Refund Revenue (f)</td>
<td></td>
</tr>
<tr>
<td><strong>Net Annual Total Per Stakeholder (for 5 years) (g)</strong></td>
<td>$7,603,576</td>
</tr>
<tr>
<td><strong>5-Year Total for Each Stakeholder (h)</strong></td>
<td>$38,017,878</td>
</tr>
<tr>
<td><strong>Annual Savings/(Costs) After 5 Years (i)</strong></td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Total Savings/(Costs) for the First 10 Years (j)</strong></td>
<td>$38,017,878</td>
</tr>
</tbody>
</table>

*See Appendix B for notes, sources, and assumptions.

Prepared by the Container Recycling Institute, March 2018
Appendix B. Notes, sources, and assumptions, for Figure 5: "Winners and Losers: A Financial Analysis of Iowa's HF 575 (formerly HSB 163)"

(a repeal of Iowa's Bottle Bill with a new penny fee on carbonated beverages, wine, and spirits)*

* **General note:** The State of Iowa does not collect data on deposit containers sold or redeemed. The sales estimates used here are derived from CRI's 2017 Beverage Market Data Analysis (using 2015 sales data), and the 2015 material-specific redemption rate estimates were derived by the Iowa Department of Natural Resources (DNR) as part of an analysis of the "FINAL 2017 Iowa Statewide Waste Characterization Study," SCS Engineers for Iowa DNR. Dec. 28, 2017.

(a) **Handling Fees Paid by Beverage Distributors to Redemption Centers and Retailers:** Based on 1.84 billion deposit containers sold in 2015 x 62% redemption rate x a 1-cent handling fee.

(b) **Penny Fee: Payments to, and Grants From, a New Recycling Fund.** Payments into a recycling fund are estimated at one cent per container x 1.84 billion containers sold, scaled by 64% annually (using Delaware experience) to account for incomplete industry reporting. Payments statutorily capped at $60 (or about $11.7 million a year for 5 years, after administrative costs). Municipalities would receive some portion of grants, and private companies are also eligible for grant funding. In this analysis, CRI has used grant funding allocation results from Delaware's beverage fee program to estimate that 31% of grant funding will go to municipalities, 58% would go to waste haulers and other commercial entities, and 11% would be awarded to schools and other non-profit entities. We did not include a sweep of grant funding into Iowa’s general fund.

(c) **Collection, Processing, and Disposal Costs:** Beverage companies: assumes 2015 deposit beverage sales multiplied by material-specific redemption rates, multiplied by collection & processing costs of $0.01/unit for deposit cans and plastic, and $0.02 per glass bottle. Municipalities: cities will have almost 70,000 new tons of trash to collect and dispose of, at a cost of about $100 per ton. They will also have more than 13,000 new tons of recycling to collect and process. We’ve used gross cost estimates of $89 per ton for glass, $854 for PET, and $746 for aluminum, before scrap sales (based on the Ontario Blue Box Program Pay-In-Model Fee Calculations), for a total of more than $16 million in new costs annually.

(d) **Sale of scrap material:** Under the bottle bill, beverage companies (bottlers and distributors) retain the revenues from the annual sale of more than 83,000 tons of scrap material returned for refund. This material had a scrap value of $21.6 million at 2017 market prices. Pricing is subject to change.

**Current conditions:** In 2015, about 62% of deposit containers were redeemed. Deposit material is cleaner, and commands higher prices, than material collected through single-stream recycling and processed at a materials recovery facility (MRF). The scrap value of clean, color-separated glass is $20/ton in deposit programs, and is negative (-$15/ton) in Iowa curbside programs. PET scrap is worth $240/ton for deposit material, but only $180/ton for curbside material. Aluminum
currently has a value of approximately $1,420/ton for deposit cans, and $1,200/ton for curbside cans.

**Under repeal:** Under repeal, beverage companies would lose this $21.6 million because municipalities, or their contracted waste haulers, would do collection instead. But it would not be the same $21.6 million in scrap revenues, because only 12%-46% of beverage containers would be recycled in curbside and other recycling programs. The rest would be trash. With lower recycling rates and lower material values, municipalities would gain about $10 million in scrap revenue annually: only one third of what the beverage companies would be losing.

(e) **Unclaimed deposits:** total based on CRI sales estimates x 62% redemption rate. Beverage distributors keep 100% of unclaimed deposits; they would this lose this money under a repeal.

(f) **Refund Revenue.** 1.14 billion deposit containers were redeemed in 2015. We assume charities return 5% of all containers redeemed. With a 5¢ deposit, this comes to just under $3 million annually.

(g) **Net Annual Total Per Stakeholder (for 5 years):** Sum of the above expenditures and revenues in each column.

(h) **5-Year Total for Each Stakeholder:** Net annual total x 5, because we anticipate grant disbursal of about $11.7 million per year, plus some administrative costs, and there is a $60 million cap.

(i) **Annual Savings/(Costs) After 5 Years:** For the beverage companies: the sum of avoided annual handling fees; collection, processing, and disposal costs; loss of unclaimed deposit and scrap material revenue. For all other stakeholders: equal to the sum of annual costs/savings.

(j) **Total Savings/(Costs) for the First 10 Years:** This row shows the net costs and revenues for 5 years with the Penny Fee and Recycling Fund in effect, plus the net costs and revenues for the following 5 years. Redemption centers are dependent on handling fees to offset their operating costs. With a bottle bill repeal, they will go out of business.

(k) **Redemption Centers & Retail Stores:** We assumed 5 FTEs for each of Iowa’s 100 redemption centers, and 0.4 FTEs for each retail store engaged in redemption, based on data gathered for Massachusetts: "Massachusetts Container Deposit Return System: 2016 Employment and Economic Impacts in the Commonwealth." Industrial Economics, Inc., for the Container Recycling Institute, March 2017. Number of retail stores derived using Massachusetts data and Iowa population.

(l) **State of Iowa:** We are assuming that 5% of the penny fees collected annually will be used by State of Iowa to administer the Fund and to provide program oversight.

(m) **Charities as** grant recipients from the penny fee recycling fund: In Delaware, schools, charities, and other non-profit organizations were the recipients of 11% of all grant allocations.
Non-school charities received 1% of grants. Refunds: CRI estimates that 5% of all deposit refunds are collected by or donated to charities.

**Additional trash created:** CRI estimates that in 2015, more than 83,000 tons of aluminum, plastic, and glass were redeemed and recycled through the deposit program. With the elimination of the deposit system, CRI estimates that the recycling rates for non-deposit beverages in aluminum, plastic, and glass will drop to 46%, 18%, and 25% respectively, generating approximately 22,000 tons of material collected for recycling; a loss of almost 70,000 tons that had previously been recycled, but would become trash. Even that is an optimistic scenario, because it is well known that deposit material is of a much higher quality than material that comes through single-stream recycling and MRF processing; so the actual amount recycled if there was a repeal would be significantly lower due to material contamination, and sorting and processing losses.

ENDNOTES

1 “An Act repealing the beverage containers control program, creating a recycling program and a litter control and community enhancement initiative, imposing certain recycling program fees and litter control and community enhancement excise taxes, modifying references to the waste volume reduction and recycling fund, and including effective date provisions.”

2 Recycling fees to be placed in “the solid waste account of the groundwater protection fund” per Code 455E.11(2).

3 Note that some of these costs accrue to private beer and soda manufacturers and distributors, and some accrue to the State. The Iowa Alcoholic Beverages Division is the sole distributor for wine and liquor sold in the state, and they levy a 4-cent surcharge on every bottle of liquor sold. One cent is paid as a handling fee to redemption centers and the other 3 cents is used to defray their own costs of collection and processing of redeemed liquor bottles, and transporting them to markets.


5 For example, in the Province of Ontario, Canada, the curbside recycling program for packaging and printed paper is partially paid for by industry, and they have developed a very good set of peer-reviewed activity-based-costing statistics. Their cost model for 2011 shows that aluminum generates net revenues of $532 per ton, while glass has a net cost of around $150 per ton, and PET is the most expensive, at a net cost of $1,000 per ton. (These statistics are published on the Stewardship Ontario website.)


7 According to the Author’s amendments, the revenue would be “distributed to all planning areas and environmental management systems on a pro rata basis for litter support programs.”

8 “Litter control and community enhancement fee.”

9 “Tonnage fee distribution” sheet, Iowa Department of Natural Resources, January 2018. These conditions only apply to landfill operators who are in Environmental Management Systems or who have achieved 50% or more waste reduction.

10 Personal communication with Jennifer Wright, Iowa DNR, January 30, 2018.

11 It is sometimes said that car and truck travel for recycling of beverage containers is a negative impact, but that reasoning fails to account for the greenhouse gas savings from recycling.
