

*The mission of the Denver Sustainable Food Policy Council is to influence policy that fosters food security for all community members and promotes a healthy, equitable, and sustainable local food system with consideration for economic vitality and environmental impact.*

January 16, 2019

Dear Mayor Hancock,

On behalf of the Denver Sustainable Food Policy Council, we request your approval of the following Mayoral Advisory supporting Pay-As-You-Throw waste management in Denver:

**What are we asking you to do?**

- Adopt a “Pay-As-You-Throw” municipal solid waste disposal system with the following qualities:
  - Incentives for composting and recycling, and disincentives for landfilling
  - Income-based discounts
  - End-use compost promotion and mandated use by public agencies

**Why are we asking you to do this?**

- Pay-As-You-Throw waste programs have been successfully implemented in many cities, and have been shown to improve quality of the natural environment and quality of life for residents.
- Aligns the Mayor’s office with the Denver City Council’s approach to waste reduction, outlined in its [Policy and Budget Vision 2018-2019](#).

**Which of Denver’s current goals would this action help to accomplish?**

- Denver 2020 Sustainability Goals (Materials Goal)
  - Increase Denver’s community recycling rate to 34 percent or greater by 2020
- Denver Food Vision (Resiliency Goal)
  - Reduce residential food waste by 34 percent
- Denver Public Works’ 2010 Master Plan for Managing Solid Waste in the Mile High City
  - Strategies to achieve 30 percent in landfill reduction
- Denver’s 2015 Climate Action Plan
  - Reduce community greenhouse gas emissions 80 percent by 2050

**What are potential impacts of this proposal?**

- Diverting waste through composting and recycling creates a positive economic impact in several major ways: creating jobs, savings in lessened landfill fees, and building a local compost market.
- Greatly decreased amount of waste sent to landfills, which causes a chain of environmental disruptions ranging from air quality and greenhouse gas emissions to toxic groundwater and soil.

The complete Mayoral Advisory is included in the pages that follow. Please reach out to us with any questions or feedback at [DenverSFPC@gmail.com](mailto:DenverSFPC@gmail.com).

Sincerely,

Anne Misak, Denver Sustainable Food Policy Council Co-Chair

Reuben Gregory, Denver Sustainable Food Policy Council Co-Chair

Turner Wyatt, Working Group Co-Chair

Megan Hrdlicka, Working Group Co-Chair

## MAYORAL ADVISORY

To: Mayor Michael B. Hancock  
From: Denver Sustainable Food Policy Council (SFPC)  
Date: 01/16/2019  
Re: Recommended Pay-As-You-Throw Waste Management System

### **I. EXECUTIVE SUMMARY**

Measured in 2017, Denver only recycles and composts 21 percent of its residential waste, significantly lagging behind the national average diversion rate of 34 percent.<sup>1</sup> In recognition of the environmental importance of diverting recyclable and organic materials from landfills, the City and County of Denver committed to the *2020 Sustainability Goals*, which include the Materials goal of increasing Denver's community recycling rate to 34 percent or greater from a 2012 baseline of 14 percent.<sup>2</sup>

To support Denver's progress toward this Sustainability Goal, the Mayor-appointed Sustainable Food Policy Council (SFPC) recommends that the City implement a Pay-As-You-Throw (PAYT) waste removal program (also known as a unit pricing system), which will disincentivize landfill waste while providing substitutable recycling and composting options. Informed by successful PAYT programs in other major U.S. cities, it is critical that Denver's PAYT system includes all of the following elements:

1. Incentivizes less landfill waste through multi-tiered trash bin cost structure paired with no-cost recycling and composting options;
2. An income-based trash bin discount to ensure equity among all Denverites;
3. End-use compost promotion and mandated use by public agencies.

This memo will briefly discuss Denver's waste management practices and the need for policy updates, alignment of a PAYT system with city-wide sustainability goals, SFPC's specific PAYT recommendations, and projected outcomes of implementing PAYT in Denver. Additional resources and research on PAYT systems, successes, and strategies are included at the conclusion of the report.

### **II. ISSUE BACKGROUND AND CURRENT POLICY SHORTCOMINGS**

Denver has long demonstrated interest and investment in environmentally-conscious practices, including a commitment to reduce landfill waste. Called into attention by former Mayor Hickenlooper through his 2006 Greenprint Denver initiative, the City set the goal of 30 percent reduction in landfill disposal by 2011 (using 2004 as a baseline).<sup>3</sup> In pursuit of this goal, the City

of Denver first piloted city-led composting in 2008. Soon after in 2013, the City began exchanging dumpsters for individual trash carts to reduce waste. The smaller receptacle size helped facilitate a 387-pound per household per year reduction in trash since 2014, showing that “the smaller the end container, the more people will think about what they’re throwing away.”<sup>4</sup> During this time, as demand for residential compost collection increased, the city worked to expand the composting pilot program to all of Denver. By November 2017, opt-in compost collection had expanded to all Denver neighborhoods, increasing the number of served households to 176,000.<sup>5</sup> Despite expanded service, only about 18,200 households—or 10 percent of eligible residences—have opted-in to city-provided composting.<sup>6</sup>

While the City’s waste management program has expanded to offer more sustainable options, the City’s program structure and fee schedule have not kept pace. The City provides free recycling and trash services for residents. Trash service provides a default 65 gallon bin and recycling service provides a default 95 gallon bin, but residents must go through the process of contacting the city to both opt-in to recycling service or to receive a smaller (35-gallon) trash bin. Furthermore, the city-provided composting option is an opt-in service billed directly to the user, costing families \$29.25 per quarter or \$107 annually.<sup>7</sup> These fees and opt-in requirements make it much simpler and free for families to dispose of all waste in trash bins, rather than properly sort and dispose of recyclables and compost. **With this structure, the public is severely disincentivized from diverting waste from landfills and is not on track to meet city goals; the City must rework its waste management system to properly incentivize environmentally-friendly practices in order to achieve the 34 percent recycling and composting goal by 2020.**

One way to remedy these waste incentivizing policy shortcomings is to implement a customized PAYT system, which charges households for waste disposal based on the amount of waste generated. In doing so, Denver will join the 30 percent of major U.S. cities using PAYT to increase waste diversion from landfills.<sup>8</sup> PAYT is widely considered one of the most effective methods for incentivizing recycling and composting and disincentivizing landfilling, with some communities reporting reductions of 25 to 45 percent in the amount of waste sent to landfills and disposal facilities.<sup>9</sup> With the fees generated by a PAYT system, Denver should provide no-cost recycling and composting to residents, which will further divert waste from landfills.

On a broader scale, policy investment in composting is growing nationwide. The most recent Farm Bill, signed into law in late 2018, authorized for the first time \$25 million annually through the U.S. Department of Agriculture (USDA) to increase community composting and support food waste reduction projects.

### **III. ALIGNMENT WITH MAYORAL AND CITY GOALS**

Implementing a PAYT system will contribute to the city’s explicit goal of reducing food waste as stated in the *Denver Food Vision* (Resiliency Goal),<sup>10</sup> the Denver Public Works’ 2010 *Master Plan for Managing Solid Waste in the Mile High City*,<sup>11</sup> and the *Denver 2020 Sustainability Goals* (Materials Goal).<sup>12</sup> Creating a PAYT system with a focus on equity among Denver residents will also make progress toward the *Denver Food Vision*’s Inclusivity Goal.<sup>13</sup>

Secondarily, the positive environmental impact of reducing food waste in landfills furthers several of the city’s goals on environmental protection, including those outlined in the *2020 Sustainability Goals* (Climate Goal)<sup>14</sup> as well as the city’s participation in the Climate Mayors initiative and Paris Climate Agreement.

Finally, implementing a PAYT waste management system is consistent with the policy priorities and interests of the Denver City Council, which outlined in its [Policy and Budget Vision 2018-2019](#) the Sustainability priority of “Full implementation of the solid waste master plan, including free citywide composting and incentives to divert garbage to recycling/composting,” and “Recycling for commercial and multifamily buildings.” The Council additionally explored local recycling policy in depth during a December 5, 2018, [Policy Committee meeting](#).

More information on the alignment of the city’s goals and the outcomes of PAYT are included in **Appendix A**.

#### **IV. RECOMMENDED POLICY CHANGES**

Thousands of communities have implemented PAYT waste collection,<sup>15</sup> as both a cost-saving measure and environmental initiative.<sup>16</sup> To institute an equitable PAYT policy that will reduce food waste and increase recycling in Denver, the three components listed below should be included in the City’s design of a PAYT system.

These recommendations have been formed based on the successes of other cities, as well as the U.S. Environmental Protection Agency’s (EPA) extensive guide, *Pay-As-You-Throw: Lessons Learned About Unit Pricing*. Each pillar of PAYT should be appropriately tailored to meet the local needs of Denver to be successful. For additional resources on best customizing policies for cities, refer to the **IX. Additional Resources** section of this memo.

##### **1. Set Trash Bin Pricing to Rise Significantly as Bin Size Increases in Order to Deter Landfill Waste, while providing Recycling and Composting at No-Cost**

As costs of waste disposal increase, consumers will generate less trash. As detailed in the EPA’s guidebook, SFPC recommends using a volume-based PAYT approach in order to utilize existing waste infrastructure and keep overhead costs low. Therefore, the City should set fees for the 35-

65-, and 95-gallon trash bin options that increase between bin sizes in order to incentivize use of the smallest bin possible for that household. Research has shown that to effectively influence behavior, bin cost must increase by 50 to 80 percent per each 100 percent volume increase, with preference toward the higher end of the cost differential.<sup>17</sup> Roughly, this means the cost of the 65-gallon trash bin must be at least 150 to 180 percent of the cost of the 35-gallon bin to incentivize users to choose the smaller bin.

To offer sustainable alternatives to residents when reducing their waste, it is key that trash bin pricing is set at a level that allows recycling and composting services at no-cost to Denverites. The three waste removal components (trash, recycling, and composting) should be offered as a package deal to residents (with price based on the size of the landfill bin), with no need to opt-in to recycling or composting. The City's precise pricing structure (Variable Container Rate vs Multi-Tiered Rate System) and phase-in plan should be based on additional research and local economic considerations.

## **2. Institute Income-Based Discounts on Trash Services to Ensure Equal Access**

In order for the PAYT system to be equitable for all Denver residents, income-based discounts on trash services are necessary. To determine who qualifies for these discounts, the EPA recommends modeling after existing energy-assistance programs in the currently in use.<sup>18</sup> In Denver, this is the Low-Income Energy Assistance Program (LEAP), administered by Denver Human Services. LEAP provides utility assistance to qualifying residents who make 165 percent or less of the federal poverty index.<sup>19</sup> Further information on LEAP is available in **Appendix B**.

To integrate income-based discounts into the PAYT rate structure, SFPC recommends using criteria similar to that of LEAP to create consistency across Denver's assistance programs. To facilitate the implementation of discount determination by the City, SFPC suggests the option of partnering with Denver Human Services to capitalize on existing LEAP infrastructure and appropriately expand the LEAP determination system for PAYT use. As discount rates are determined, they must maintain a tiered pricing structure that incentivizes smaller trash bin use and increased diversion of waste appropriately to recycling or compost.

## **3. Promote Demand Markets for Compost End-Product and Require City Agency Use**

To ensure the environmental benefits of landfill waste diversion and composting are realized, end-market uses for compost must be bolstered. The City should create a plan for promoting the use and sale of the compost generated by the PAYT system. As a secondary benefit, sale of the compost would further offset the cost of city-wide compost and recycling collection.

SFPC recommends working from Denver's *2015 Climate Action Plan*, which outlines a proposal for a city compost program that focuses on improving soil health and reducing greenhouse gas emissions in public spaces throughout the city.<sup>20</sup> To support compost use and the environmental health of city spaces, City and County of Denver agencies should be required to purchase a percentage of needed compost from the compost generated by the PAYT waste management system. The City should seek to make similar agreements with State and Federal agencies, when feasible.

Outside government sectors, the City should pursue sales to other possible end markets, which include agricultural and horticultural producers, construction and land development, low-impact development and green infrastructure, community and residential gardens, silviculture, turf production, landscaping, athletic fields, and land reclamation.

## **V. POTENTIAL IMPACT ANALYSIS**

Outcomes of PAYT systems around the U.S. have repeatedly demonstrated positive impacts in both economic and environmental areas, which can be similarly expected in Denver. More than one fifth of the waste in landfills consists of biodegradable organic matter from households and businesses.<sup>21</sup> If Denver residents diverted this into both composting and recycling efforts, there would be measurable positive economic and environmental impact, outlined below.

While the benefits of a PAYT system are overwhelmingly positive, there are several potential implementation challenges to anticipate. When thoroughly considered and properly factored into the design of Denver's city-specific plan, these challenges can be easily mitigated with proper planning.

### **1. Positive Economic Impact**

Overall, the EPA asserts that the cost of total waste management decreases when the amount of waste collected is decreased.<sup>22</sup> Specifically, diverting waste from the landfill through composting and recycling creates a positive economic impact in several major ways: creating jobs, saving funds in lessened landfill fees, and building a local market for a valuable resource.

Currently, the Natural Resources Defense Council (NRDC) estimates that the collection of 1,000 tons of compost requires 1.67 jobs and processing requires 0.5, while collection of trash requires 0.56 and landfill requires 0.1.<sup>23</sup> As waste systems become more efficient over time, the NRDC projects recycling and composting systems to continue to employ more individuals in the long term than landfill systems. Furthermore, as less and less material is hauled to landfills, the City will save money on the transportation of trash and on the fees charged by landfills to dispose of trash.

Through resident education, required agency use, and external sales of compost, the City would create a market for compost that would return revenue. This income should be used to offset the costs of processing the increased compost and recyclables, as well as any other costs associated with the PAYT model. When setting up the PAYT system for Denver, the City should consider the job creation and composting market to set equitable pricing options that maximize the positive impact for the city and its residents.

## **2. Positive Environmental Impact**

With a PAYT system in place, Denver would greatly decrease the amount of waste sent to landfills, which causes a chain of environmental disruptions ranging from air quality and greenhouse gas emissions to toxic groundwater and soil. Proper composting initiatives would decrease harmful gas emissions while restoring the safety of local water and health of soil.

Food waste, specifically, generates high levels of methane—a harmful greenhouse gas which traps 25 times more heat than carbon dioxide. Landfills are the third largest source of methane in the United States.<sup>24</sup> When food waste is disposed in a landfill, methane is produced for several decades through the process of bacterial decomposition of organic waste in the anaerobic (oxygen deficient) environment. If the organic waste is diverted from landfills through composting (an aerobic process that uses oxygen), significantly less methane gas is produced.<sup>25</sup>

Beyond air quality, water contamination is inevitable when waste amasses in landfills. As rain falls onto landfills, organic and inorganic elements dissolve to form highly toxic chemicals, which permeate the groundwater. This leads to the death of aquatic life and has long-lasting effects on humans; despite the treatment systems in place, not all environmental and human-health hazards are prevented. As landfill waste is reduced, these hazards will decrease.

Finally, soil in many areas surrounding landfills is permanently altered due to the mixture of toxic substances and decaying organic material. With proper composting services in Denver, organic waste can be used to bring nutrients and fertility back to damaged soil.

## **3. Potential Implementation Challenges**

Several potential challenges that must be considered when designing Denver's PAYT program include low community buy-in, the risk of illegal trash dumping, and the administrative burden of creating and instituting the program. With proper planning, the obstacles created by these elements can be minimized greatly.



It is crucial to invest in community buy-in when designing and rolling out a PAYT program. Due to the current design of Denver’s waste removal system, which is funded by city taxes, residents likely have no awareness of the cost they “pay” for their waste removal each year. Therefore, a PAYT system may be seen by families as an additional expense. According to the EPA, “an effective public outreach campaign that clearly demonstrates the current costs of waste management and the potential reductions offered by unit pricing will help to address this perception.”<sup>26</sup> Additionally, public buy-in can be gained through building awareness on the environmental and economic benefits of the PAYT system, discussed above. Fortunately, groundwork has been laid in previous stakeholder engagement efforts (see **Section VI. Stakeholder Engagement** for further detail). More information on building a successful public information campaign can be found in Part IV of the EPA guidebook.

Another potential challenge to the success of a PAYT system is illegal dumping, which is the improper disposal of trash by resident to avoid paying the fee. While this concern can cause public reservations when choosing to convert to a PAYT system, research has shown that “most communities with unit pricing programs have reported that illegal dumping proved to be less of a concern than anticipated.”<sup>27</sup> Both the preemptive concerns and the prevention of illegal dumping can be effectively addressed through building buy-in as part of the public information campaign. Furthermore, enforcement staff can be considered temporarily or permanently if illegal dumping proves to be a problem.

Finally, redesigning the City’s waste collection system could be seen as a daunting administrative task. Fortunately, many of the items that typically need to be considered when a city is converting to PAYT will not be a challenge in Denver. Specifically, cities need to consider resident billing, payment collection, and pickup coordination when building the program, but all of these tools are already in use by the City of Denver as part of the existing fee-based composting program. While expansion of the online portals may be needed to accommodate additional users, the infrastructure is already in place, which will greatly reduce the administrative burden of implementing this program. Additionally, in pursuing a volume-based PAYT program, the trash, recycling, and composting bins already exist, though the numbers of these will need to be adjusted as residents shift their disposal patterns. Because much of the infrastructure is already in place to execute PAYT in Denver, the public information campaign and design of the pricing and discount structure will constitute the majority of the administrative burden and be short-term, meaning the initial investments to set up PAYT are comparatively low (versus other cities with no electronic or physical infrastructure from which to build) and very manageable. Additionally, with recent passage of the 2018 Farm Bill, USDA is set to invest in composting and food waste reduction projects in at least 10 states, as well as create a Food Loss and Waste Reduction Liaison within the agency who will coordinate and serve as a resource for Federal, State, local, and nongovernmental programs working in food waste reduction. Both of these Farm Bill initiatives will create useful information-sharing

opportunities, further assisting in lowering the initial administrative burden of setting up PAYT in Denver. **With groundwork laid on public information and buy-in and the existing online and physical waste disposal infrastructure, the City is very prepared to convert to a PAYT system for long-term use.**

## VI. STAKEHOLDER ENGAGEMENT

As the implementation of a PAYT program in Denver progresses, stakeholder engagement will continue to be a key portion of its success. Much of the groundwork for moving toward a PAYT system has been laid through various City initiatives and through SFPC efforts. In a January 2018 meeting, Denver Mayor Michael Hancock told the SFPC that “Pay as you throw is coming,” which spurred the SFPC to elevate this issue to the top of its policy docket. Members of the SFPC met on various occasions with Denver city staff, who shared knowledge of the status of PAYT from the City perspective. These meetings included discussions with Charlotte Pitt, the Operations Manager at Denver Solid Waste Management.

In 2010, the *Master Plan For Managing Waste in the Mile High City* published survey results from their Solid Waste Management Public Involvement Survey, which included findings that “62 percent [of residents] somewhat supported to strongly supported a PAYT pricing mechanism for refuse collection that charges increased fees for those who generate more refuse (that is not recycled).”<sup>28</sup> It is likely support for PAYT has grown since 2010, through similar research should be conducted by the City to ensure public buy-in for the change to PAYT.

Additionally, the *Denver Food Vision* was developed through a community-informed process, engaging hundreds of Denver residents and businesses. Through this community engagement process, Denver residents highlighted the reduction of food waste as an important part of the food system they desired and specifically included goals and actions to reduce food waste in the city. **Based on previous positive feedback to the PAYT idea, paired with increasing public environmental concern, SFPC expects stakeholder support to be strong, especially when combined with heavy public engagement in the PAYT design and planning phases.**

## VII. CONCLUSION

As Denver moves forward toward the *2020 Sustainability Goals* and the *Denver Food Vision*, a PAYT waste system makes sense from both environmental and economic perspectives. SFPC emphasizes the importance of implementing a PAYT system that is curated to the local community and recommends several essential considerations and components when designing this system. It is crucial to implement a pricing structure that disincentivizes landfill waste, that offers income-based discounts to low-income Denverites, and that supports the end-market for the compost generated through this system.

SFPC recommends various resources at the end of this document for further information on successful PAYT systems (**Appendix C: Case Study Info** and **Section IX. Additional Resources**), and offers any further assistance or support as desired.

## VIII. APPENDIX

### Appendix A: City Goal Alignment Supplemental Info

The *Denver Food Vision* is the community-driven, mayor-approved comprehensive outline for a vision of Denver’s food system for 2030, which aims to make Denver more resilient, inclusive, vibrant, and healthy by strengthening Denver’s food system.<sup>29</sup> The *Denver Food Vision* was adopted by Mayor Michael B. Hancock in October 2017.

A PAYT residential trash collection system contributes to priorities outlined in the Resilient and Inclusive goals of the *Denver Food Vision*. One of the Resilient priorities (PRIORITY R3.) is to reduce the amount of food going to waste—which in turn reduces bulk and emissions at landfills—through expanding composting opportunities. A PAYT residential trash collection system would incentivize Denver residents to divert compostable and recyclable waste to their respective proper waste management streams, thus increasing the number of households composting through city services and reducing the amount of food waste going to landfills. An additional Resilient Vision goal is to promote environmentally regenerative and climate-smart food systems. Expanding the city’s residential composting program alongside implementing PAYT supports this priority through encouraging participation in the environmentally regenerative practice of composting. PAYT also addresses the Inclusive goal of the *Denver Food Vision*: the equity addendum in the proposed policy change for PAYT additionally ensures that the system is inclusive for all to participate in, regardless of income level.

Support for PAYT is also in alignment with Denver Public Works’ 2010 *Master Plan for Managing Solid Waste in the Mile High City*.<sup>30</sup> The outcomes of the *Master Plan* include reducing solid waste disposal through encouraging residents to increase recycling and composting and to maintain and expand Denver’s residential waste management services. The *Master Plan* lays out both short- and long-term options for meeting these outcomes. The City has already made progress on the short-term options, including growing the city’s residential waste program to be city-wide and subscription-based. One of the long-term options the plan lays out is instituting PAYT pricing, citing it as an effective way to increase landfill diversion and decrease greenhouse gas emissions.

Denver’s 2020 *Sustainability Goals* were developed by the Office of Sustainability to provide a roadmap to securing Denver’s basic resources for the long-term in 12 resource areas, including Climate and Materials. The Climate goal is to reduce Denver’s total carbon emissions to below the level of emissions in 1990 and the Materials goal is to increase the city-wide recycling rate to 34 percent or greater.<sup>31</sup> PAYT is in alignment with both of these goals because diverting recyclables and compostables from the landfill will improve recycling and composting rates while reducing emissions associated with organic waste in landfills.

The Denver City Council sets policy priorities annually in its Policy and Budget Vision process that guide City budgeting decisions and priorities. For 2018, the City Council outlined several policy priorities for the City of Denver, including the ongoing goal of increasing Sustainability, specifically through “Full implementation of the solid waste master plan, including free citywide composting and incentives to divert garbage to recycling/composting,” and “Recycling for commercial and multifamily buildings.”

### **Appendix B: LEAP SUPPLEMENTAL INFO**

Colorado’s Low-Income Energy Assistance Program (LEAP) is funded through the federal Low Income Home Energy Assistance Program (LIHEAP). Eligibility is therefore set by federal standards, which specify a qualifying income level of at or below 165 percent of the federal poverty index.<sup>32</sup> In Colorado, LEAP assists qualifying families in paying winter heating costs on a one-time per year basis, while the national LIHEAP program offers assistance to families with both heating and cooling costs in all months.<sup>33</sup>

In addition to the federal income standard to qualify for LEAP—applicants must be a resident of the United States or have household members who are legal residents of the U.S—an applicant must be a resident of Colorado, and must have proof of heating expenses due to either a utility company or landlord. For reference, the state LEAP application is included below.<sup>34</sup>

**COMPLETE ALL  
4 PAGES AND  
SIGN PAGE 4**

FOR COUNTY USE ONLY									
County	Household Number Basic					Suffix			
Case Reg.	Adv.	Exped	Payment Method Client			Vendor		Technician Number	
Date Received									

● **1. APPLICANT**

If you need assistance in completing this application, call HEAT HELP at 1-866-432-8435.

Last Name			First Name			Middle Name			
Address of Residence				City		State		Zip Code	
Mailing Address (if Different Than Residence)				City		State		Zip Code	
Telephone or Cellphone Number	Date of Birth	Place of Birth	Age	Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	Are you a U.S. citizen? <input type="checkbox"/> Yes <input type="checkbox"/> No	Social Security Number			
Email Address				In which county do you live?			Are you a registered alien? <input type="checkbox"/> Yes <input type="checkbox"/> No		

● **2. OTHER HOUSEHOLD MEMBERS**

Complete the following for any other members of your household. "Your household" means the people who live with you for whom you have financial responsibility. List roommates or members of other families that may be living with you in #3.

Name (List all household members)	Social Security Number	Date of Birth	Relationship to You	Age	Sex	Place of Birth	Do you have income?		Are you a U.S. citizen?		*Are you a registered alien?	
							Yes	No	Yes	No	Yes	No

\*If you or members of your household are a registered alien, PLEASE ATTACH A PHOTO COPY (FRONT & BACK) OF THE ALIEN REGISTRATION CARD(S) TO THE APPLICATION.

● **3. DOES ANYONE ELSE LIVE AT THIS ADDRESS?**  Yes  No

List roommates or members of other families that are not part of your household and not listed in #2. If "yes," how many? \_\_\_\_\_.

Name	Relationship to You	Age

● **4. HOUSEHOLD INCOME**

**A.** Does anyone in your household have work income?  Yes  No

Who Receives It?	How Often Paid?	Gross Monthly Amount	Employer Name	Initial this box that you have attached copies of pay stubs for at least the 4 weeks prior to the date of application

**B.** Does anyone in your household have self-employment work income? (Includes baby sitting, etc.)  Yes  No

Who Receives It?	How Often Paid?	Gross Monthly Amount	Employer Name	Initial this box that you have attached copies of self-employment profit and loss statement for the month previous to your date of application

**C.** Does anyone in your household have non-work income (which includes any public assistance programs) as listed below?  Yes  No

Social Security income (SSA); Supplemental Security Income (SSI); Supplemental Security Disability Income (SSDI); Colorado Works (TANF); Old Age Pension (OAP); Aid to the Needy Disabled (AND); child support; alimony/spousal maintenance; veteran's disability; Unemployment Compensation benefits; Workers Compensation/disability or sick benefits; pensions or retirement income; any other income (please describe):

Who Receives It?	How Often Paid?	Gross Monthly Amount	Type of Non-Work Income as Listed Above	Initial this box that you have attached copies of award letters for the month previous to your date of application

**D.** Did you pay your expenses by a loan last month or a gift from a friend or relative?  Yes  No **If Yes, provide a loan repayment schedule.**

If a loan, what date did you receive the money? \_\_\_\_\_ How much is the total loan? \_\_\_\_\_

What date do you begin repaying the loan? \_\_\_\_\_ How much money per month? \_\_\_\_\_

If a gift(s) from a friend or relative, what date did you receive the money? \_\_\_\_\_ How much was the gift? \_\_\_\_\_

**E.** How did you pay for these following costs if your household income does not cover your basic living expenses?

Rent: \_\_\_\_\_ Utilities: \_\_\_\_\_

● **5. LIVING ARRANGEMENTS**

Check (✓) the item that best describes the dwelling where you currently live and are applying for assistance.

- |  |   |   |                                    |
|--|---|---|------------------------------------|
| <input type="checkbox"/> House/Modular Home      | <input type="checkbox"/> Rooming/Boarding House | <input type="checkbox"/> Fraternity or Sorority House           | <input type="checkbox"/> Cabin     |
| <input type="checkbox"/> Duplex/Triplex/Fourplex | <input type="checkbox"/> Hotel/Motel            | <input type="checkbox"/> Rehabilitation Center                  | <input type="checkbox"/> Camper    |
| <input type="checkbox"/> Townhouse               | <input type="checkbox"/> Car/Van/Bus            | <input type="checkbox"/> Correctional Facility                  | <input type="checkbox"/> 5th Wheel |
| <input type="checkbox"/> Apartment/Condominium   | <input type="checkbox"/> Group Home             | <input type="checkbox"/> Nursing Home/Residential Care Facility | <input type="checkbox"/> RV        |
| <input type="checkbox"/> Mobile Home             | <input type="checkbox"/> Dormitory              | <input type="checkbox"/> Other Dwelling, Please Specify: _____  |                                    |

Do you rent?  Yes. If yes, what is your monthly rent? \$ \_\_\_\_\_

Do you have a mortgage payment?  Yes.

If yes, what is the monthly mortgage payment? \$ \_\_\_\_\_; or, do you own your dwelling outright?  Yes

Do you pay a lot or space rental amount?  Yes. If yes, what is your monthly space rent payment? \$ \_\_\_\_\_

What is the name and phone number of your apartment complex? \_\_\_\_\_

● **6. SUBSIDIZED HOUSING**

Do you live in Section 8, public housing, or do you receive a subsidy to pay your rent?  Yes  No

● **7. HEAT/RENT INFORMATION**

**ARE YOU HAVING AN EMERGENCY WITH YOUR PRIMARY HEATING FUEL RIGHT NOW?**  Yes

If yes, check type of emergency below and attach a copy of the notice from your energy provider:

- Already disconnected. Disconnect Date: \_\_\_\_\_
- Received disconnect notice but not yet disconnected. Date disconnect scheduled: \_\_\_\_\_
- Propane tank empty or are you out of a bulk fuel such as wood, fuel oil, etc.? Amount needed for minimum delivery: \$ \_\_\_\_\_
- Propane tank at 20% or below. Amount needed for minimum delivery: \$ \_\_\_\_\_

Check (✓) the main fuel used to heat (not light) your residence. **CHECK ONLY ONE.**

- Natural Gas  Propane  Electricity  Wood  Coal  Fuel Oil  Kerosene  Other: \_\_\_\_\_

**LEAP cannot assist or provide a benefit for any type of portable heating systems.**

Check (✓) the way in which the heat (not light) is paid for at your residence.

- I pay heating costs directly to a utility company or fuel dealer. (If so, attach copy of most recent *heating bill*).

Name of fuel provider: \_\_\_\_\_ Billing account number: \_\_\_\_\_

If your electricity is supplied by a different company, please provide:

Electric company name: \_\_\_\_\_ Account number: \_\_\_\_\_

If your heat bill is in someone else's name, provide name and address of that person and their relationship to you.

Name: \_\_\_\_\_ Address: \_\_\_\_\_ Relationship: \_\_\_\_\_

Explain why your heat bill is in their name: \_\_\_\_\_

- Heat is included in my rent. (If so, attach a copy of the most recent rent receipt that already shows heat is included.)
- Someone other than a member of my household pays my heating costs.  
Provide name and address of that person and their relationship to you.

Name: \_\_\_\_\_ Address: \_\_\_\_\_ Relationship: \_\_\_\_\_


Explain why they pay your heat bill: \_\_\_\_\_

● **8. VERIFICATION OF LAWFUL PRESENCE**

State law requires applicants for LEAP to provide additional documents with each LEAP application. A **READABLE COPY** of one of the following **VALID** identifications must be provided:

1. A Colorado Driver License; or, a Colorado Identification Card; or,
2. A United States military card or, military dependant's card; or,
3. A United States Merchant Mariner card; or,
4. A Native American Tribal document.
5. Any other document authorized by rules adopted by the Colorado Department of Revenue (DOR).

**IN ADDITION:** The applicant for LEAP must also correctly complete, sign and date the Affidavit located below. For more information regarding Lawful Presence law and requirement please go to the DOR web site at: <http://www.colorado.gov/revenue>.



**AFFIDAVIT**  
for the Colorado Department of Human Services and the Department of Health Care Policy and Financing  
as Proof of Lawful Presence in the United States

I, \_\_\_\_\_, swear or affirm under penalty of or perjury under the laws of the State of Colorado that:

**Check only one box** {  I am a United States citizen, or  
 I am a legal Permanent Resident of the United States, or  
 I am lawfully present in the United States pursuant to federal law.

I understand that this sworn statement is required by law because I have applied for a public benefit. I understand that state law requires me to provide proof that I am lawfully present in the United States prior to receipt of this public benefit. I further acknowledge that making a false, fictitious, or fraudulent statement or representation in this sworn affidavit is punishable under the criminal laws of Colorado as perjury in the second degree under Colorado Revised Statute 18-8-503 and it shall constitute a separate criminal offense each time a public benefit is fraudulently received.

Signature \_\_\_\_\_ Date \_\_\_\_\_



**9. ADDITIONAL INFORMATION**

Information reported in this section will not be used to determine your eligibility for LEAP or your payment level. This information will only be used for statistical information.

Check (✓) here if any member of your household is:  Handicapped,  Disabled or a  Veteran

Race of applicant:  Hispanic  White  Black or African American  American Indian or Alaska Native  Asian  
 Native Hawaiian or Other Pacific Islander  Other

I learned about LEAP from the following source (check only one):

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Friend                       | <input type="checkbox"/> 1-866-HEAT-HELP (432-8435) | <input type="checkbox"/> Senior Center | <input type="checkbox"/> Social Services Office |
| <input type="checkbox"/> LEAP Poster                  | <input type="checkbox"/> Newspaper                  | <input type="checkbox"/> Billboard     | <input type="checkbox"/> PEAK Website           |
| <input type="checkbox"/> Heating Company              | <input type="checkbox"/> Radio                      | <input type="checkbox"/> Bus Benches   | <input type="checkbox"/> Other                  |
| <input type="checkbox"/> Received Application in Mail | <input type="checkbox"/> LEAP Website               | <input type="checkbox"/> Television    |   |

**10. CONSENT TO DISCLOSE CUSTOMER DATA**

The Colorado LEAP office' Heat Help Line: (866) 432-8435

(please refer to the LEAP website for a list of affiliated agencies that may provide you with assistance: [www.colorado.gov/cdhs/LEAP](http://www.colorado.gov/cdhs/LEAP))

is requesting that you authorize your utility service provider to disclose the following information to the LEAP office:

- Your utility account payment history and other account details, such as utility charges, payment history, past due amounts, pending deposits, current shut-off due dates or disconnection, current life support status, payment arrangements, and history of energy assistance payments.
- Your general energy usage data for up to twenty-four months (at no greater level of detail than monthly totals), which is customer-specific information that is collected from your  Electric  Natural Gas utility meter by your utility service provider.

The LEAP office will use this information to help determine your eligibility for and assist you in applying to participate in energy assistance programs. If you authorize the disclosure, it will start on the date you sign this application and end when you terminate your participation in the relevant energy assistance program. You have a right to receive a copy of this form.

Please note that:

- You are not required to authorize your utility service provider to disclose your customer data.
- Your decision not to authorize the disclosure will not affect your utility services.
- Your utility service provider may not disclose your customer data except (1) if you authorize the disclosure, (2) to contracted agents that perform services on behalf of the utility, or (3) as otherwise permitted or required by laws or regulations.
- Your utility service provider will have no control over the data disclosed pursuant to this consent, and will not be responsible for monitoring or taking any steps to ensure that the LEAP office maintains the confidentiality of the data or uses the data as authorized by you.
- Pursuant to section 26-1-114, C.R.S., LEAP will not disclose any private applicant information except for the purpose of administering public assistance as defined by State and Federal laws and regulations.

<sup>1</sup> LEAP is the Colorado Low-Income Energy Assistance Program administered by the Colorado Department of Human Services and LEAP's affiliates.

**11. SIGNATURE AND CONSENT**

By signing below I understand, I acknowledge and agree that:

- If I am contacted by weatherization, my refusal to permit weatherization of my home may result in denial of LEAP benefits.
- My Social Security Number will be used to request and exchange information with other agencies as part of the eligibility verification process.
- The Colorado Department of Human Services (CDHS) may use my Social Security Number to get wage data, amount of unearned income, child support case and payment disbursement records, interest income, Social Security benefits, pensions, railroad retirement, or veteran's benefits. As part of the eligibility verification process, the CDHS has my permission to contact other agencies on my behalf to establish eligibility.
- I am the customer of record, the customer's authorized agent, or an authorized third party for the utility service account identified in this application, and I authorize my utility service provider to disclose my customer data as specified in section 10 of this application.
- You may terminate your consent to the disclosure of your customer data by your utility service provider to the LEAP office at any time by sending a written request with your name and service address to your utility service provider identified in section 7.
- If LEAP repairs or replaces my heating system and I refuse to allow access to my dwelling for the purposes of completing the service (including but not limited to government inspections required by law) this refusal may result in denial of all benefits.
- It is a crime to lie on the application or to take benefits that I know my family and I are not eligible to receive and I may be subject to criminal prosecution for knowingly providing false information. Giving false information may be punished by a fine of up to \$250,000 or a jail term of up to 20 years, or both.
- A person found guilty of committing fraud cannot get LEAP assistance for one year for the first offense, two years for the second offense, and permanently following a third offense.

▼ SIGN FULL NAME BELOW ▼			
Signature: _____ <small>Signature of Applicant (must be same person listed in #1, page 1)</small>	Date: _____ <small>Month, Day, Year</small>		
If someone helped the applicant complete this application, such person must sign below.			
_____ <small>Signature of Helper</small>	_____ <small>Address</small>	_____ <small>Phone #</small>	_____ <small>Date</small>

If you would like to know the status of your application please call HEAT HELP at 1-866-432-8435.

## Appendix C: PAYT CASE STUDIES

In Boise, Idaho, curbside collection of recycling began in 2009 and expanded to curbside compost collection in 2017. Both recycling and compost are optional, but incentivized through pricing. For example, opting for just a 95 gallon trash bin is \$28.64 per month but opting for 95 gallon trash, recycling, and compost bins is \$18.64 per month.<sup>35</sup> This is not a traditional PAYT pay structure, but is modified to cover the costs of implementation.

Another PAYT system in Longmont, Colorado, was introduced specifically for trash and recycling with the option of opting into compost in April 2017. They chose an opt-in versus opt-out composting program to encourage community buy-in. This also cut down on the necessary composting education since information only had to be provided to those who opted in. However, such an approach does have a drawback. As of September 2017, the goal for compost enrollment was 25 percent, but only 15 percent of eligible households had opted in.<sup>36</sup> In addition to an opt-in system, their fee structure is also different. Households pay \$24 per month for a 96-gallon trash bin or \$12.90 per month for a 48-gallon trash bin, and recycling is provided at no cost. Since compost is an optional element, it is charged at \$6.60 per month for a 96-gallon bin.<sup>37</sup> Similar to Boise, Longmont needed to modify the PAYT model to fit their community. There are several resources from Longmont officials in **Section IX. Additional Resources** for additional reading.

In building end use markets for PAYT-generated compost, cities take various approaches. For example, Seattle, Washington, sells compost to Cedar Grove Composting, which blends sandy loam into the compost and then sells the product to gardeners, landscape firms, and the construction market for new landscaping. The city of San Francisco, California, sells compost to Jepson Prairie Organics to process and sell predominantly to Napa and Sonoma for vineyards and agricultural producers, as well as the highway department for roadside landscaping. Additionally, Portland, Oregon, sells compost to local farmers and exports compost to other states.

Another commonly addressed portion of PAYT programs is equity. In both San Francisco and Boise, low-income residents are offered a discount on their waste collection.<sup>38, 39</sup> In Boise, residents fill out a “Hardship Discount Application” and their total gross annual income must be less than the annual gross income for the particular family size based on the Housing and Community Development standards set by the Boise Planning and Development Services Department.<sup>40</sup>

# Sewer and/or Trash Hardship Discount Application

**Public Works Utility Billing**  
 150 N Capitol Blvd.  
 PO Box 500  
 Boise, ID 83701

www.cityofboise.org  
 Phone: 208-608-7460  
 Fax: 208-395-7861  
 Utilities@cityofboise.org

Name:

Mailing Address:

City:  State:  Zip:  Phone Number:

Service Address:

List all persons residing at the Service Address and their relationship to the account holder. If a person listed contributes to the Total Annual Gross Income, select Yes in the Income Earner column.

Name	Relationship	Income Earner	
	<b>Account Holder</b>	YES <input type="radio"/>	NO <input type="radio"/>
		YES <input type="radio"/>	NO <input type="radio"/>
		YES <input type="radio"/>	NO <input type="radio"/>
		YES <input type="radio"/>	NO <input type="radio"/>
		YES <input type="radio"/>	NO <input type="radio"/>
		YES <input type="radio"/>	NO <input type="radio"/>
		YES <input type="radio"/>	NO <input type="radio"/>

Source of Income	Annual Income
Earned Income (wages, rent business income)	<small>(include income from all Income Earners living at Service Address)</small> <input style="width: 100%; height: 20px;" type="text"/>
Social Security benefits (retirement, disability)	<input style="width: 100%; height: 20px;" type="text"/>
Interest and Dividends (taxable and non-taxable)	<input style="width: 100%; height: 20px;" type="text"/>
Pension / Retirement Income (401k, PERSI, etc.)	<input style="width: 100%; height: 20px;" type="text"/>
Veteran's benefits, unemployment, other sources	<input style="width: 100%; height: 20px;" type="text"/>
<b>TOTAL ANNUAL GROSS INCOME</b>	<input style="width: 100%; height: 20px;" type="text"/>

Required Documentation (failure to provide will result in denial of this application):  
 A complete copy of your previous years' Federal Tax return is required if your Total Annual Gross Income is more than \$13,000;  
 A complete copy of your previous years' Federal Tax return is required if you have more than one source of income;  
 Copies of all Benefit Statements are required if your only source of income is received from Social Security.

If the above do not apply, please provide copies of other documentation for all sources of income.

**Terms & Conditions**

Applications must be received by May 1 of each year and discounts will be awarded from June 1-May 31 based on income reported for the prior calendar year. Qualifying applications submitted after the May 1 deadline will receive the discount beginning the month following receipt of application.

I certify that the information included in this application is true and accurate. I acknowledge that if any information provided is found to be false or inaccurate, discount(s) received will be reversed.

Signature:  Date:

### **Privacy Statement**

We respect your right to privacy and will treat your personal information responsibly. We follow all data security laws and are compliant with FACTA regulations. We protect your information using physical, technical and procedural safeguards. We limit access to your information to those who need it to do their jobs. We do not share this information with any other entity and the information will only be used for the purposes of this application.

### **Qualification**

To qualify for the hardship discount, Total Gross Annual Income in this application must be less than the Annual Gross Income for your size family based on the **Extremely Low Income Guidelines** of the [Community Development Block Grant Income Guidelines](#) listed on the Housing and Community Development website. Housing and Community Development is a division of the Boise Planning and Development Services Department.

In San Francisco, low-income households are eligible for up to a 25 percent discount, and eligibility is determined via the California Alternate Rates for Energy (CARE) Program.<sup>41</sup> CARE began as a discount program for gas and electric rates but now the same standard is applied to waste collection. There is an online or mail application, answers are confidential, and there is no proof of income needed.<sup>42</sup>

Berkeley, California, handles compost processing through a contractor and receives some of the finished compost for city use. The city owns and operates its own transfer station for waste, recycling, and organics, but a private waste hauler transports organics from the transfer station to its own composting facility. The finished compost that comes out of that composting facility is sold both as a soil amendment and to other compost dealers who process it further. About 5 percent of the finished compost is given back to the city, which is then used primarily at schools, gardens, and parks. Additionally, compost is available for free several times a year to Berkeley residents.<sup>43</sup>

Cities including Austin and Washington, D.C. offer residents a \$75 rebate on the purchase of an at-home composting system after completion of a free composting class.<sup>44, 45</sup> These cities have deemed it worthwhile to incentivize at-home composting to avoid additional collecting and processing of compost, so have chosen to offer these educational opportunities and small incentives to residents to compost in the home.

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