POLICY ASSESSMENT FOR TOWN OF ERIE: INCREASING RECYCLING, COMPOSTING AND WASTE REDUCTION







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Prepared by



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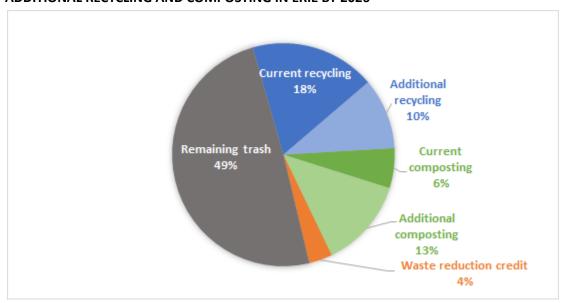


EXECUTIVE SUMMARY: POLICY RECOMMENDATIONS TO DOUBLE ERIE'S RECYCLING RATE BY 2026

Erie residents and businesses currently recycle and compost only 25% of their discards and send over 17,400 tons of materials to the landfill each year. This is over 1,100 pounds of trash landfilled per person per year. By implementing three comprehensive policy initiatives, Erie could double its diversion rate within five years to recover 50% of its discarded materials. By 2026, Erie could be recycling and composting over 12,000 tons per year and reducing over 21,000 MTCO₂e in greenhouse gas (GHG) emissions per year, the equivalent of keeping over 4,500 cars off the road each year. In addition, these new policies will mitigate the current inequities in waste services and pricing in Erie, and reduce truck traffic in Old Town and improve aesthetics by having waste collection aligned on one day per week. Residents have consistently expressed a strong desire to improve recycling and composting efforts, and these initiatives are well aligned with the Town's sustainability commitments.

ERIE SUSTAINABILITY MASTER PLAN GOAL: Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.

ADDITIONAL RECYCLING AND COMPOSTING IN ERIE BY 2026*



^{*} These calculations are based on Erie's current waste diversion data (provided by Boulder County) and using the EPA's <u>Policy and Program Impact Estimator</u> to model additional diversion potential through the policy recommendations.



PRIORITY WASTE DIVERSION POLICIES FOR THE TOWN OF ERIE

I. Adopt a zero waste ordinance to phase in recycling and composting for all sectors.

Significantly increasing recycling and composting in Erie needs to involve all sectors of the community. Through one comprehensive policy, the Town can establish a process to phase in recycling and composting access for all residents and businesses.

- A. Single family households:
 - 1. Universal recycling and composting services
 - 2. Pay-as-you-throw pricing structure
- B. Phased businesses and multi-family properties:
 - 1. Universal recycling services
 - 2. Composting at large food generators
 - 3. Universal recycling and composting

Implement a single-hauler Town Contract for recycling and composting for underserved Old Town residents.

The Town can facilitate cost-effective recycling and composting services in the underserved areas of Old Town and any HOAs that do not currently provide service or want to opt-in to the Town contract. This targeted approach will be easier to implement and less disruptive than a full town-wide single-hauler program while still advancing the goal of curbside recycling access for all residents.

- A. Biweekly recycling and composting services and weekly trash collection
- B. Opt-in for HOAs that do not choose to contract for services
- C. Consider contracting in conjunction with Town waste and recycling services for improved efficiency

III. Update building codes and events permitting to support future waste diversion.

Erie has a significant opportunity to implement supporting policies that will set the foundation for smarter growth that will reduce GHG emissions and increase waste diversion for decades to come. These policies can be implemented through building code updates and permitting processes, and do not require the adoption of an ordinance.

- A. Space for recycling and compost containers
- B. Use of compost in landscaping
- C. Basic construction recycling
- D. All special events are Zero Waste



These new policies will bring convenient curbside recycling and composting to all Erie households. This expansion of services can be done cost effectively by building on the purchasing power of Erie's HOA contracts and the development of a single-hauler contract for Old Town residents. As seen in neighboring communities, the costs of combining trash, recycling and compost collection, especially under a PAYT system, can be comparable to existing open market prices for just trash or trash/recycling. While most communities achieve these prices through a city-wide single-hauler program, Eco-Cycle is recommending a custom approach for Erie based on its majority HOA population. Erie can leverage the existing contracts and minimize disruption to residents by implementing a zero waste ordinance to expand composting services in HOAs, paired with a streamlined single-hauler contract for Old Town to best deliver cost-effective services and reduce truck traffic in non-HOA neighborhoods.

SERVICE AND PRICING EXAMPLES FROM COMMUNITIES WITH SINGLE-HAULER CONTRACTS

Municipality	Service	32g trash	64g trash	96g trash	Compost only
Erie (non-HOA)	Trash + recycling			\$23 - \$30	\$12.50 -\$28
Arvada	Trash + recycling	\$11.50	\$15.63	\$19.76	
Edgewater*	Trash + recycling	\$10	\$15	\$20	
Frederick*	Trash + recycling			\$12.85	
Golden	Trash + recycling + composting	\$11.55	\$18.48	\$27.72	
Louisville	Trash + recycling + composting	\$15.73	\$29.07	\$42.39	
Lafayette	Trash + recycling + composting	\$16.55	\$26.22	\$35.89	

^{* 2018} rates; it should be noted that prices have risen recently in solid waste services due to labor challenges, equipment costs and other factors.

The following timeline outlines a phased approach to program implementation with the zero waste ordinance being adopted in late 2021 and service requirements beginning in 2023. This represents a conservative approach to implementation that could be accelerated with additional staff resources. Experience in other Front Range communities has shown that many businesses and haulers will begin to implement these services sooner as contracts are renewed. The adoption of the zero waste ordinance establishes this vision for recycling and composting access for all residents and businesses, and then allows time for the service providers, residents and businesses to align their services. The staged implementation also allows for strong outreach and education to each sector as new services are developed.



TIMELINE FOR IMPLEMENTATION

	2021	2022	2023	2024	2025
Residential recycling education					
Adopt zero waste ordinance					
Building code updates and permitting					
Negotiate Old Town hauling contract					
PAYT pricing takes effect					
Curbside composting & recycling for all single family homes					
Business and multi-family recycling					
Food composting at large businesses					
Recycling, composting at all businesses					

UNIQUE OPPORTUNITY

While Erie currently lags behind its peer communities in waste diversion actions, these recommendations will leapfrog Erie past its peers to become a leader in Boulder County and throughout the Front Range. Erie is well positioned to move quickly to advance waste diversion and GHG reductions because it already has a strong foundation of cost-effective residential recycling throughout its HOA neighborhoods. With targeted strategies to provide more efficient recycling in Old Town areas, the expansion of curbside composting collection, and a phased approach to provide recycling and composting at businesses, Erie can double its diversion rate within five years and deliver strong community benefits to its residents and businesses.

2019 COMPARISON OF BOULDER COUNTY COMMUNITIES ON THE IMPLEMENTATION OF WASTE DIVERSION STRATEGIES (not diversion rates)

	DIVERSION & GHG REDUCTION STEPS	EDUCATION & ENGAGEMENT STEPS	TOTAL PROGRESS
ERIE	10%	17%	13%
BOULDER	74%	67%	70%
LAFAYETTE	23%	28%	25%
LONGMONT	31%	53%	42%
LOUISVILLE	27%	33%	30%
LYONS	9%	19%	14%
NEDERLAND	21%	42%	31%
SUPERIOR	23%	39%	31%



POLICY DEVELOPMENT PROCESS

The Erie <u>Sustainability Master Plan</u> set the goal to "Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners." This policy assessment provides recommended action steps to meet this goal based upon several foundational components:

- An extensive evaluation of recycling and composting programs and policies in Boulder County
- Proven policies and programs in place in neighboring Front Range communities
- Innovative programs from other fast-growing municipalities in the state and the country
- Interviews with local waste, recycling and composting haulers
- Extensive community feedback through stakeholder workshops, tabling events, an HOA survey and a door-to-door outreach campaign in Old Town.
- Previous waste hauling analysis and work conducted by the Town.
- Analysis from the Boulder County Zero Waste Scorecard and the Boulder County Waste Composition study.



SECTION 1: RESIDENTIAL RECYCLING POLICY RECOMMENDATIONS

In leading municipalities across Colorado and nationwide, recycling and trash services are bundled together so residents automatically receive recycling collection at no additional cost as part of their trash service. This practice is already underway in the majority of Erie's HOA neighborhoods, where residents currently receive recycling with their trash service through their HOA waste hauling contract. The Town HOA survey and Eco-Cycle outreach found 28 HOAs provide bundled services covering 99% of the HOA households in Erie. This puts Erie at a great advantage to improve recycling and expand services compared to most Front Range communities.

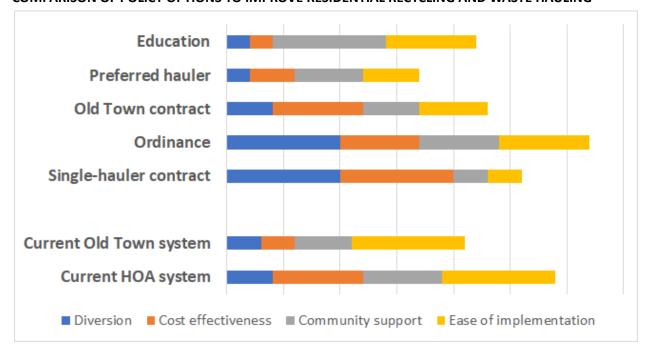
Many Colorado cities and towns adopt a single-hauler waste and recycling contract to achieve this goal of providing convenient curbside recycling to all residents. This approach was recommended to the Town of Erie in the December 2020 board meeting on waste hauling. A single-hauler system in Erie would directly benefit underserved Old Town residents by increasing recycling access, reducing truck traffic and likely resulting in lower trash and recycling costs. However, Erie's HOA households with current waste hauling contracts would see little to no benefit from moving to a Town-wide contract. Each HOA in Erie essentially participates in their own smaller versions of a single-hauler program and most Erie households already have cost-effective recycling services and also enjoy other benefits of a single-hauler contract including reduced truck traffic and safer streets. Single-hauler waste contracts commonly generate significant public opposition based on the HOA stakeholder feedback and experiences in other municipalities. Over 70% of HOA respondents opposed a town-wide recycling program even if the costs were lower than their current services.

Choosing the best path forward for residential waste hauling requires an evaluation of the benefits and drawbacks of the different policy options based on how each policy would impact the unique residential waste system in Erie. Eco-Cycle created the following chart to compare residential waste hauling options based on four criteria: impact on waste diversion; cost effectiveness; community support; and ease of implementation. Each strategy was scored on a scale of 1 to 10 with 10 being the largest impact. The chart shows that a recycling/composting ordinance would provide greater benefits than the current HOA waste hauling system and that a single-hauler contract for Old Town residents will provide greater benefits than the current Old Town waste/recycling system. A town-wide single-hauler system will also deliver strong waste diversion and cost effectiveness, but is paired with less community support and more implementation challenges.

These rankings are based on Eco-Cycle's experience and research in other Front Range communities, and informed by quantitative data such as the HOA community survey results and cost comparisons in other communities. While the scoring is largely subjective, it is an important tool to demonstrate that no single residential waste diversion strategy scores highest across all the impact categories. Each option offers both benefits and challenges, as further outlined in this assessment, and the decision-making process must entail a balance of competing values.



COMPARISON OF POLICY OPTIONS TO IMPROVE RESIDENTIAL RECYCLING AND WASTE HAULING



Eco-Cycle used this policy comparison as well as the HOA recycling survey, the Town survey, stakeholder feedback from haulers and HOAs, and experience in other Front Range communities to craft a tailored approach to residential waste reduction in Erie. Eco-Cycle recommends using a two-part strategy of a community ordinance and a targeted single-hauler contract for Old Town to provide the best balance of cost-effective services while supporting an open market hauling system. This targeted approach will be easier to implement and less disruptive to all residents while still advancing the goal of curbside recycling access for all residents.

The recommended Zero Waste Ordinance would require haulers to provide recycling alongside trash services (which nearly all HOAs already have) and would transition to a volume-based pricing system that will increase waste diversion and provide more cost effective rates for residents. To fill the service gaps and address the price inequities for Old Town residents, Eco-Cycle recommends that the Town develop a single-hauler contract that covers Old Town and any HOAs that do not currently provide service or want to opt-in to the Town contract. Residents of Old Town and in areas not under HOA waste contracts would benefit the most from a hauling contract through reduced truck traffic, equitable service pricing, expanded access to recycling for all residents, and improved aesthetics with trash/recycling carts on the streets only on a single day per week. It is further recommended that the Town explore combining this contract with the Town's existing waste and recycling services (i.e. trash and recycling at Town Hall and other town facilities) in order to attract more interest and potentially better pricing from waste haulers.



KEY FINDINGS ON RESIDENTIAL RECYCLING IN ERIE

- 99% of HOA residents have recycling provided by HOA
- 88% of residents recycle
- Recycling has high amounts of contamination
- Recycling rates are decent but underperforming compared to neighboring communities
- 65% of residents want composting services
- Interest in volume-based pricing to reduce costs
- Old Town residents have multiple haulers on streets
- HOAs primarily have only one hauler servicing their neighborhoods
- 73% of HOA residents oppose a town-wide contract even if it offered lower rates

RECOMMENDED POLICY APPROACH FOR UNIVERSAL RESIDENTIAL RECYCLING

Step 1. Recycling drop-off center



Step 2. Recycling education (in process)

Step 3. Zero waste ordinance for recycling for all residents and pay-as-you-throw pricing

Step 4. Town contract for Old Town residents and optional HOAs



✓ Step 1. Town Drop-off Center for recyclables materials

POLICY OVERVIEW: The Town of Erie provides a convenient drop-off center for residents to recycle.

BENEFITS	DISADVANTAGES/CHALLENGES
 Reduces waste and greenhouse gas (GHG) emissions Provides recycling at no cost to residents Visible commitment to waste diversion Provides additional recycling capacity beyond curbside recycling Serve multi-family residents and businesses 	 Less convenient than curbside pick-up and lower participation rates than curbside programs Requires Town funding Requires residents to have a vehicle to haul materials, raising equity concerns Limited DOC hours Contamination and illegal dumping May be used by residents in other communities



Step 2. Residential recycling education (in process)

OVERVIEW: While most Erie residents have convenient access to curbside recycling and 88% of residents are recycling, the Town's residential recycling program is underperforming and the haulers cited high levels of contamination in the recycling stream. Erie residents currently recycle only 13% of their discards; by comparison, residents in Longmont recycle 37% of their discards thanks to a strong education program and volume-based pricing (note these rates include recycling only, not composting).

A strong community-wide education program can increase the recycling rate and reduce contamination in the program, helping it to become more effective and sustainable in the long term. With funding from the Front Range Waste Diversion Enterprise Fund, Eco-Cycle is implementing a "Can't miss it" recycling education program for Erie residents. This campaign will include extensive communication materials distributed through the Town's website, social media, local newspaper, and utility bills. In addition, community presentations and a door-to-door canvassing campaign in Old Town residents will directly outreach to residents to increase excitement and engagement in recycling. This project will run through early 2022. It is recommended that the Town pursue additional funding to continue to promote recycling education, especially as new policy changes are implemented.

BENEFITS	DISADVANTAGES/CHALLENGES	
 Increases recycling Reduces contamination to improve program efficiency Reaches underserved population Highly visible way to demonstrate Town's sustainability commitment 	 Requires funding Ongoing effort Best results when combined with other policy initiatives such as PAYT 	

Step 3a. Haulers to Provide Recycling Collection for all Residents. (Part of Zero Waste Ordinance)

POLICY OVERVIEW: The Town updates its hauler licensing ordinance to require all haulers to provide curbside recycling services to any resident who receives curbside trash service. Residents continue to choose their own service provider under this system.

BENEFITS	DISADVANTAGES/CHALLENGES	
Convenient curbside recycling for all residentsIncreases recycling ratesReduces GHG emissions	 May increase costs to add new services Must allow time for HOAs to update hauling contracts 	



- Sets level playing field among haulers
- Allows HOAs to choose their own provider
- Improves aesthetics by limiting carts on the streets to one day per week
- May increase contamination in recycling and composting without adequate education for residents
- Increase in truck traffic if HOA does not have contract

LOCAL AND NATIONAL EXAMPLES: Boulder and Fort Collins have municipal ordinances that require haulers to provide recycling alongside trash service. Boulder's policy also extends to composting services. Both cities are state leaders with high recycling rates. However, in both communities, residents pay higher rates for their waste and recycling collection than other Front Range municipalities with universal hauler contracts or HOA contracts. This is why most communities choose to pursue a hauling contract over an ordinance. However, Erie's HOAs are essentially already in smaller versions of a single-hauler contract and already have lower waste and recycling prices than other cities with an open hauling market. This suggests that an ordinance approach can still be cost-effective for Erie because of the large percentage of residents in HOAs with hauling contracts.

Step 3b. Financial Incentives to Reduce Trash and Increase Recycling (Part of Zero Waste Ordinance)

POLICY OVERVIEW: The Town updates its hauler licensing to require all haulers to charge single-family homes for trash service based on volume rather than a flat fee. Some cities call these programs Pay As You Throw (PAYT) or Save Money and Reduce Trash (SMART). Under this program, residents pay more for larger and additional trash containers. This is the same way residents are charged for other utilities, such as electricity, gas and water—based on how much they use.

BENEFITS	DISADVANTAGES/CHALLENGES	
 Creates strong financial incentive for residents to participate in recycling and/or composting services Residents can lower their trash rates by producing less trash Increases recycling and composting rates Reduce waste per household Reduces GHG emissions 	 HOA households typically pay for trash service through HOA fees; this would require homes to be billed directly for trash services. Haulers must purchase and manage multiple cart sizes Must allow time for HOAs to update hauling contracts May increase contamination in recycling and composting without adequate education for residents 	



LOCAL AND NATIONAL EXAMPLES:

Over 7,000 communities across the U.S. use volume-based pricing to provide fair, cost-effective trash services and encourage recycling, making it one of the most proven policies to improve diversion rates. Here in Colorado, PAYT is used by dozens of communities and is a key component of success in the top performing recycling programs in the state. Louisville and Lafayette both have contracts using volume based pricing for recycling, organics and trash.

Case study: The City of Arvada recently launched a new contract for curbside waste and recycling with PAYT pricing. Residents can choose from three sizes of trash carts and are billed based on the size of their trash service. Biweekly recycling is included at no additional cost and residents are also provided with annual yard debris and bulky item collection events. Previous to the new contract, Arvada residents were paying \$20-30 per month for trash and recycling, similar to the current non-HOA rates in Erie.

PAYT PRICING IN ARVADA COMPARED TO TRASH RATES IN ERIE

	32g trash + 96g recycling	64g trash + 96g recycling	96g trash + 96g recycling
Arvada	\$11.50	\$15.63	\$19.76
Erie (non-HOA)			\$23 - 30

Step 4. Town Contract for Curbside Recycling & Composting in Old Town

POLICY OVERVIEW: The Town would issue an RFP for waste hauling services in Old Town areas and negotiate services and rates for residents. All HOAs would have the option to opt-in to the Town contract if desired. The contract could potentially be combined with the Town's existing municipal waste and recycling services would make the package more attractive to area haulers and potentially result in better prices for residents.

BENEFITS	DISADVANTAGES/CHALLENGES
 Guaranteed recycling access for all residents Reduced truck traffic in Old Town and non-HOA areas, resulting in less road damage, reduced air and noise pollution May provide additional services like bulky item collection to participating residents Trash and recycling collected same day of the week, reducing carts on the street and improving aesthetics in Old Town 	 Potential cost increase for some residents Relatively small impact on diversion because only affects Old Town residents Loss of choice for residents covered under contract



- Potential cost savings for some residents

- Options for HOAs to participate

LOCAL AND NATIONAL EXAMPLES:

Over 80% of the U.S. has organized waste hauling where either the municipality contracts with one or more haulers or directly provides services to residents. Organized waste hauling is less common in Colorado but has become more widely adopted in the past 10 years. At least 12 Front Range municipalities currently have contracts for trash and recycling collection. It is common that these contracts only include non-HOA areas since HOAs already have hauling contracts.

Case study: The City of Arvada recently launched a new contract for curbside waste and recycling that only services non-HOA residents because the City found that these residents were paying substantially higher prices than HOA residents for comparable waste and recycling services. Non-HOA residents were paying \$20-\$29 per month for services while HOAs were paying \$8-15 per month for the same services. HOAs can opt-in to the Arvada program at any time.



SECTION 2: RESIDENTIAL COMPOSTING POLICY RECOMMENDATIONS



Over one-third of our waste in Colorado is organic materials such as food scraps, branches, leaves and grass clippings. When these materials decompose in a landfill, they produce methane gas, a greenhouse gas 84 times more potent than CO₂. The Boulder County Zero Waste Scorecard identified residential composting as one of the top four priority policies for reducing waste and GHG emissions.

Erie residents have repeatedly expressed a strong desire for composting services, with nearly two-thirds of residents stating they would like to add food waste, yard waste or both services to curbside offerings based on the Town's 2021 Waste Diversion Survey. In Erie's bi-annual community survey, **two thirds of respondents (65%) said they would be somewhat or very likely to participate in a curbside composting program.** Unfortunately, currently there are very few curbside composting services available. Two new programs launched by waste haulers in 2021 are only servicing a few dozen households.

Curbside composting options in Erie

Hauler	Cost/month per bin size	Households served
Waste Connections	\$12.50 for 96-gallons/EOW	20 homes in Arapahoe Ridge
Clementine Curbside	\$24 for 35-gallon/weekly \$28 for 65-gallons/ EOW	~25

The strong desire of Erie residents for more convenient composting services, combined with the lack of services currently available, provides a great opportunity for the Town of Erie to provide a significant benefit to residents, reduce waste, and reduce the Town's greenhouse gas impact by pursuing a town-wide curbside organics collection program.

HAULER FEEDBACK ON COMPOSTING SERVICES

As Erie pursues additional composting services for residents, it is critical to understand the current challenges facing local haulers in providing compost collection and how to shape policies that can help address these challenges. In stakeholder interviews with all five haulers servicing Erie, haulers expressed the following concerns about composting:

- Strong concerns about the lack of regional infrastructure for composting and the costs to transport materials to the current A1 Organics composting facility.
- Local composting infrastructure is limited which adds to the cost of compost diversion. Haulers reported paying \$75/ton for composting at the Western Disposal transfer station while recycling and trash costs were closer to \$30/ton for comparison.



- Most of the haulers in Erie have limited interest in adding curbside composting services under the current opt-in circumstances because they would not have a large enough density of customers using the service to make it cost effective for them.
- Haulers strongly cited the need for greater local infrastructure and repeatedly mentioned a desire for a Boulder County composting facility to help lower costs and reduce the transportation impacts of hauling compost long distances.

RECOMMENDED POLICY APPROACH FOR ORGANICS DIVERSION

Step 1. Seasonal collection events (pumpkins, leaves, Christmas trees, etc.)

Step 2. Year-round yard waste drop-off site (starting late 2021)

Step 3. Zero waste ordinance for town-wide curbside composting collection

Step 4. Town contract for curbside composting in Old Town

✓ Steps 1 & 2. Seasonal Collection Events and Year-Round Drop-off Location

POLICY OVERVIEW: The Town of Erie is already helping residents divert some of their organic waste by providing seasonal drop-off events for targeted materials like pumpkins, Christmas trees and leaves, and by adding year-round yard waste collection at the recycling drop-off center.

BENEFITS	DISADVANTAGES/CHALLENGES
 Popular with residents Reduces greenhouse gas (GHG) emissions Events target some of the highest yard waste generating times of year with additional promotion of composting from Town staff, while drop-off center allows for continued behavior year round Drop-off site provides a reliable location for residents to take yard waste (this convenience could also support curbside pick up when residents have excessive yard waste from broken trees, etc.) 	 Less convenient than curbside pick-up Lower participation rates than curbside programs Requires funding from Town Does not divert food waste, a significant portion of the waste stream Requires residents to have a vehicle to haul materials, raising equity concerns Limited DOC hours and limited days for collection events



Step 3. Residential Curbside Composting Services (Part of Zero Waste Ordinance)

POLICY OVERVIEW: Under a zero waste ordinance, the Town would require residential haulers to provide curbside composting collection at single-family homes alongside trash service. Providing composting services to all residents will help lower the costs per household compared to opt-in programs and are strongly preferred by haulers over subscription-based programs. Greater route density allows haulers to increase their service efficiency and to spread their fixed costs over more households, resulting in lower costs per household. By servicing the entire community, the hauler can also safely invest in new equipment and staffing to make the program successful.

Since most HOAs have multi-year contracts with waste haulers, Eco-Cycle recommends providing two years for this ordinance to take effect. This will allow time for the HOAs to renegotiate their contracts to provide composting collection, allow time for the haulers to scale up their services, and also allow time for the expansion of more local composting processing facilities and other needed infrastructure. HOAs can be encouraged to add composting earlier as their contracts renew.

BENEFITS	DISADVANTAGES/CHALLENGES
 Divert the majority of residential organic waste Convenient, equal access for all residents Reduce GHG emissions No ongoing cost to Town Allows HOAs to choose their own hauler 	 Limited local processing infrastructure Haulers hesitant to expand services without more local infrastructure Cost increase for residents Need to support small businesses that collect only food scraps Education needed to reduce contamination and increase participation

LOCAL AND NATIONAL EXAMPLES:

Curbside residential food scraps collection programs have grown tremendously over the past decade. There are now well over 5 million households and 150 communities with curbside food scrap composting programs, up from just 1.9 million households in 2009. Locally, Boulder, Golden, Lafayette and Louisville have citywide programs where all residents are provided with curbside composting carts for yard debris and food scraps through year-round programs. Denver, Longmont, Loveland and Superior have subscription-based programs with Loveland and Superior offering only seasonal collections.

Communities with curbside composting programs and volume-based pricing have comparable or better pricing than the current subscription access to composting available in Erie. This suggests that adding composting in Erie can be done cost-effectively when the entire community is enrolled in the program.



Municipality	Service	32g trash	64g trash	96g trash	Compost only
Erie (non-HOA)	Trash + recycling			\$25	\$12.50 -\$28
Golden	Trash + recycling + composting	\$11.55	\$18.48	\$27.72	
Louisville	Trash + recycling + composting	\$15.73	\$29.07	\$42.39	

Case study: Lafayette nearly tripled its diversion rate when it added curbside composting to its residential waste and recycling program.

Step 4. Old Town Contract for Curbside Recycling & Composting

POLICY OVERVIEW: In order to provide cost-effective curbside composting for Old Town residents, Eco-Cycle recommends that the Town pursue a single-hauler contract for Old Town residents that includes both recycling and composting. In addition, HOAs can also opt-in to this program rather than arranging for their own contracts. This may be helpful for smaller HOAs to secure a better rate by being part of the Town's program. Any HOA that does not currently contract for waste hauling would be enrolled into the Town program. See more in the above section on contracting for residential recycling.

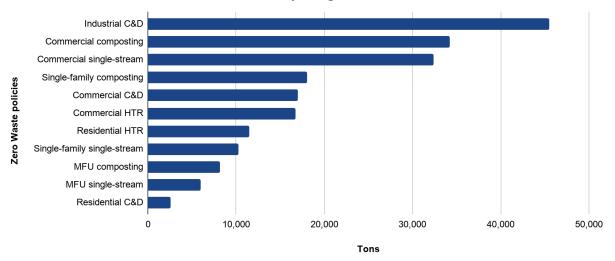
BENEFITS	DISADVANTAGES/CHALLENGES
 Compost access for all residents Increase waste diversion and GHG reductions Reduced truck traffic in Old Town and non-HOA areas, resulting in less road damage, reduced air and noise pollution Options for HOAs to participate Improve aesthetics by limiting trash carts on the street to one day per week 	 Potential cost increase for some residents Relatively small impact on diversion because only affects Old Town residents Loss of choice for residents covered under contract



SECTION 3: MULTI-FAMILY AND COMMERCIAL POLICY RECOMMENDATIONS

Reducing waste from businesses and multi-family properties in Erie is essential to increasing the Town's recovery rate and reducing greenhouse gas emissions. Just under half of Erie's waste currently comes from the commercial sector. This provides a large opportunity for the Town to increase diversion and decrease greenhouse gas emissions by supporting local businesses and helping them move toward Zero Waste through policies that phase in requirements for recycling and composting. In an analysis done for Boulder County, increasing recycling and composting from businesses were shown to be among the top action steps to reduce waste and reduce GHG emissions (see chart below).

Additional Tons That Could Be Diverted by Program



Multi-family properties are considered commercial waste under Colorado law and are included in this section as such. While multi-family properties are generally a small portion of the commercial waste stream, it is critical that multi-family residents receive the same level of recycling services as their counterparts in single-family homes. Colorado law currently prohibits cities and towns from contracting for waste and recycling services at businesses or in multi-family properties with eight units or more.

Eco-Cycle recommends implementing a phased approach to expanding recycling and composting at businesses and multi-family properties to ensure convenient access to services as the Town continues to grow. This can be done through a town-wide zero waste ordinance, with implementation phases rolled out over several years, that also addresses residential recycling and composting. This phased implementation also allows for ample education to apartment owners and residents, and business owners and staff, on how to use the new recycling and composting programs. (Note: state law prohibits the Town from contracting for commercial waste services.)



RECOMMENDED PHASED POLICY APPROACH FOR MULTI-FAMILY AND COMMERCIAL PROPERTIES THROUGH ZERO WASTE ORDINANCE

- Step 1. On-site recycling services at all businesses and multi-family properties by 2023.
- **Step 2.** Composting services for large food-generating businesses by 2024.
- Step 3. Recycling and composting for all businesses and multi-family properties by 2025.

Step 1. Onsite Recycling Services for all Multi-Family Housing & Businesses (Part of Zero Waste Ordinance)

POLICY OVERVIEW: The zero waste ordinance will require property owners and businesses to subscribe to onsite recycling services that are convenient and adequate for residents, tenants and employees.

BENEFITS	DISADVANTAGES/CHALLENGES
 Significant waste diversion and GHG reductions Provides multi-family residents with same convenient recycling access as single-family residences, reducing current inequities in service levels Property managers and businesses choose their service provider Ensures recycling at all businesses 	 Increases costs to some residents and businesses Potential increase in truck traffic Staff needed to provide technical assistance to MFU and businesses around space constraints, other barriers

LOCAL AND NATIONAL EXAMPLES:

More than 20% of the U.S. population lives in an area that requires businesses to recycle. These leading communities are diverting between 60% and 80% of their waste thanks in part to their requirements that businesses recycle: Alameda County, CA; San Diego, CA; San Francisco, CA; Portland, OR; Montgomery County, MD; Madison, WI; Tompkins, NY. In Colorado, business recycling is required in Boulder, Vail and Aspen.

Case study: The Town of Vail requires all trash haulers to provide recycling services to all residents, multi-family properties and businesses within the community. One year after the policy took effect, 85% of multi-family properties and 90% of businesses were providing onsite recycling services. In both Vail and Aspen, trash and recycling are bundled together under one service charge for businesses in order to streamline services and ensure that businesses are not opting out of recycling services.



Step 2. Composting for Food Service Businesses (Part of Zero Waste Ordinance)

POLICY OVERVIEW: The zero waste ordinance will expand to require all businesses generating large quantities of food scraps to have composting service for waste. This may include large grocery stores, food processors, larger restaurants or institutions based on the amount of food scraps generated.

BENEFITS	DISADVANTAGES/CHALLENGES
 Reduces GHG emissions Targets large portion of waste stream, leading to potential big increase in diversion Can increase food recovery and donation of edible food Can phase in requirements on businesses over time based on the waste tons generated or type of business Drives investment in local composting infrastructure so the Town can later expand composting to other sectors 	 May increase costs to businesses May increase truck traffic Limited local composting infrastructure Requires education on how to use new services to keep contamination rates low

LOCAL AND NATIONAL EXAMPLES: Numerous states require large food generators to have composting services, including California, Massachusetts, Connecticut, New York, Rhode Island and Vermont. In addition, several cities have adopted similar policies, including Boulder and Fort Collins, as well as Hennepin County, MN; Portland metro area, OR; and Austin, TX.

Case study: Fort Collins adopted a Community Recycling Ordinance in 2016 that requires all grocers to subscribe to food scraps collection service if they generate 96 gallons / week or more of food scraps. This requirement went into effect at the end of 2017, and Fort Collins grocers are meeting the requirements.

Step 3. Recycling and Composting Services for all Multi-Family Properties & Businesses (Part of Zero Waste Ordinance)

POLICY OVERVIEW: The Zero Waste Ordinance requires all trash haulers to provide recycling and composting collection for all residents and businesses, including multi-family properties. Recycling and composting are bundled together with trash as part of one service package.



BENEFITS DISADVANTAGES/CHALLENGES - Most substantial waste diversion and GHG Increases costs to some residents and reductions businesses Universal access to recycling for all residents Increase in truck traffic Consistent, convenient access to recycling Staff needed to provide technical assistance to throughout the community MFU and businesses around space constraints, Residents and businesses choose their service other barriers provider Can phase in requirements on businesses over time

Case study: The City of Boulder's Universal Zero Waste Ordinance (UZWO) requires all businesses and residents to have recycling and composting collection services. As a result of the policy, the city's overall diversion rate increased 17% within three years, rising from 40% in 2015 to 57% in 2018. The policy also requires all property owners to provide recycling and composting services to their tenants, which was an important component of the policy since 75% of Boulder's businesses are in leased space. Boulder's ordinance is focused on access to services, ensuring that all residents and businesses have recycling and composting service provided in a way that makes the program easy to understand and available to everyone. The city felt it was important to implement universal requirements on all sectors so that no one was singled out and everyone was part of the same effort and goals.



SECTION 4: SUPPORTING BUILDING CODE AND PERMITTING UPDATES TO REDUCE WASTE



In addition to the above policy recommendations, the Town of Erie has a great opportunity to implement supporting policies that will set the foundation for smarter growth that will reduce GHG emissions and increase waste diversion for decades to come. These policies can be implemented through building code updates and permitting processes, and do not require the adoption of an ordinance.

RECOMMENDED BUILDING CODE AND PERMITTING UPDATES TO SUPPORT WASTE DIVERSION

Waste diversion data collection and hauler licensing
Design space for recycling, composting bins at commercial properties
Phased in construction recycling programs
Use compost in landscaping projects
Zero Waste events



Collecting hauler data and hauler licensing

The Town of Erie has taken an important step forward in waste diversion planning and measurement by requiring that waste haulers must be licensed and must report their hauling data in Boulder County's free ReTrac system through the Town's Ordinance NO. 15-2020. Data reported will help staff and elected officials track the Town's recycling, composting and waste generation rates and is essential to helping inform decisions about future waste diversion policies and programs.

Design space for recycling, composting bins at commercial properties

One of the biggest obstacles to recycling at both businesses and multi-family properties is a lack of onsite outdoor space for recycling and composting containers. It is paramount to have convenient onsite access to recycling at all properties, making recycling as easy and convenient as trash services, to encourage people to recycle. The Town's building codes can be updated to require equal space allocation for recycling and compost containers at commercial properties in order to reduce future obstacles to recycling. Code updates can also consider space requirements for reusable foodservice or washing equipment. For example, Berkeley, CA requires new food establishments to include space for dishwashing equipment to reduce the use of single-use disposable plastic food serviceware.



Example: Longmont, Aspen

Phased construction recycling programs

Nearly 50% of what's buried in Colorado's landfills is construction and industrial waste. Construction debris recycling is of growing importance because of its high volume and its high recyclability. In most Front Range communities, concrete, asphalt and other aggregate make up a significant portion of construction debris. However, most of the construction in Erie is new builds, which generate much less asphalt and concrete than demolition projects. Based on Erie's construction market, it is more effective for Erie to first target the recycling of cardboard, clean lumber and scrap metal from existing construction projects. The next step would be to set construction recycling goals that include concrete and aggregate recycling, and prioritizing deconstruction over demolition. The requirements to recycle cardboard, wood and metal are frequently incorporated into the building permit process or in a municipality's green building codes.

Example: Fort Collins, Boulder, Pitkin County, Nederland

Compost use in landscaping

Several Front Range cities require new construction projects to apply compost as a soil amendment to reduce water use, improve water conservation and help retain more water in the soil. In the City of Denver, residents and landscapers are required to add four cubic yards of compost per 1,000 square feet—or about an inch of compost—to any outdoor growing area before installing plants or grass. This policy is also in place in Boulder, Greeley, Castle Rock, Colorado Springs, Fort Collins, and Westminster.

While many communities initially approach this policy as a water conservation strategy, it also has significant benefits to local composting programs. A compost procurement policy can yield a multitude of economic benefits, including increased compost sales for local suppliers; development of compost processing businesses, which strengthens and diversifies organic waste recycling infrastructure; and reduced irrigation and fertilizer costs as a result of greater soil nutrient and water retention. In addition, municipal compost policies can foster sustainability through greenhouse gas emissions reductions (by diverting organic materials from landfills, where they emit methane), soil quality improvements (from cycling carbon and nutrients back into soil), erosion prevention, and reduced stormwater runoff.

Example: Denver, Greeley

Zero Waste Events

Recycling and composting at public events are a great opportunity to showcase the Town's sustainability commitment. Recycling and composting "stations" provide educational opportunities to engage residents in how and why to participate in recycling and composting. The Town has already partnered



with Eco-Cycle to provide recycling and composting services at several Town events. The next step is to amend the Town's special event permit process to include recycling (and composting when appropriate) to the requirements for hosting a public event.

Example: Minneapolis, MN; Louisville, CO



APPENDIX: SAMPLE POLICY LANGUAGE FOR COMMUNITY RECYCLING ORDINANCE

FORT COLLINS REQUIREMENT TO PROVIDE RECYCLING FOR ALL HOUSEHOLDS

"Each solid waste collector licensed by the City shall provide to each residential customer in the City, as a part of any solid waste collection services provided by such solid waste collector and without additional charge other than a service surcharge under Subsection 15-412(e), the collection at curbside of both solid waste and recyclable materials. Charges for such basic service provided to each residential customer shall include recyclable materials in a minimum amount equal to at least eighteen (18) gallons and need not be more than two (2) large volume capacity containers. No collector shall be permitted to divide or diminish charges for the provision of such basic service at the request of such customer or for any other reason."

FORT COLLINS VOLUME-BASED RATES FOR SOLID WASTE SERVICE INCLUDING HOAS Section 15-412, C

(1) Any person licensed to operate as a collector within the City shall charge all residential customers, including, but not limited to, residential customers provided service through a group account, on the basis of the volume capacity category of the solid waste containers placed for collection by each residential customer. Collectors shall determine a rate for, and offer to residential customers, the small capacity container solid waste service, and that rate shall be used to determine the rates for all other service levels. Said charges shall be based upon the solid waste container size, rather than the volume of solid waste actually deposited within such containers by the residential customers. The charge for additional solid waste containers of the same volume capacity category shall be no less than one hundred (100) percent of the charge for the first such container. The charge for solid waste volumes in excess of a customer's service subscription level (based on volume capacity category) shall be proportional by volume to the collector's standard rate for a small capacity container.

FORT COLLINS REQUIREMENT FOR HOMEOWNER ASSOCIATIONS OR OTHER GROUP ACCOUNTS

"(a) Any person who solicits solid waste collection services from a solid waste collector for residential customers through a group account shall arrange for such services in a manner that offers residential customers:

- (1) Choices from amongst volume capacity categories of the refuse containers for solid waste that are placed for collection by the residential customer;
- (2) Charges to residential customers that are based upon such volume capacity categories; and
- (3) Recycling services, including refuse containers required to be provided for recycling, in a manner consistent with § 15-413.



FORT COLLINS REQUIREMENTS FOR FOOD STORE COMPOSTING

Sec. 12-23. - Collection requirement—Food store food scraps.

- A. Food stores—Service requirement. Commencing on December 31, 2017, food stores within the City that dispose of more than ninety-six (96) gallons of food scraps per week shall subscribe to a service for the collection of food scraps by a collector licensed to provide such services within the City or shall obtain a variance in accordance with the following provisions:
 - (1) If a food store desires not to obtain food scraps collection services for any reason, including space constraints, donation of all food scraps for human or animal consumption, self-hauling of food store food scraps to a location or facility permitted by the State of Colorado to accept such material (but not to a landfill), disposal of food scraps via garbage disposal or other similar technology that processes food scraps for disposal via waste water infrastructure, on-site composting or failure to generate food scraps, the food store must submit a written request for variance on a form provided by the City.
 - (2)Upon receipt of such a request for variance, the director shall either approve the
 variance for good cause shown or disapprove the variance. If the variance is approved,
 the food store shall not be required to obtain food scraps collection services for a period
 of twelve (12) months from the date of approval. If, after twelve (12) months, the
 constraints on which the variance was based still exist, the food store may submit a
 request for an additional twelve (12) month variance.
 - (3)For purposes of Subsection 12-23, "good cause shown" shall mean evidence presented by the food store that, to the reasonable satisfaction of the Director of the City's Environmental Services Department, demonstrates that the customer lacks sufficient space for refuse containers for food scraps, donates all food scraps for human or animal consumption, self-hauls food scraps to a facility permitted by the State of Colorado to accept such material (but not to a landfill) or disposes of food scraps via garbage disposal or other similar technology that processes food scraps for disposal via waste water infrastructure, or by on-site composting.

B. Collection frequency. Food stores obtaining such food scraps collection services shall require collection with such frequency as is necessary to present overflow of refuse containers. Service must be provided at least once per week, but no less frequently that may be required by the Larimer County Department of Health and Environment.

C. Disposal of food scraps. Except as permitted by a variance obtained in accordance with Subsection 12-23(a) above, a food store located within the City shall not comingle food scraps with refuse or recyclable material or dispose of food scraps by any means other than at a location or facility permitted by the State of Colorado to collect such material (but not to a landfill).



LAFAYETTE REQUIREMENT FOR HAULERS TO PROVIDE RECYCLING AND COMPOSTING FOR ALL HOUSEHOLDS

"Every collector that provides residential solid waste collection must in addition to weekly curbside collection of solid waste also provide all residential customers single stream recycling and organics collection services. For each residential customer, collectors shall provide curbside recycling and organics collection service at least every other week on the same day of the week as the day of collection of solid waste from the customer."

LAFAYETTE PAYT REQUIREMENT FOR ALL HOUSEHOLDS INCLUDING HOAS

"Effective November 2, 2021, all collectors offering solid waste services to residential customers shall set forth rates for service for each resident based on the volume capacity of three containers provided by the collector and placed for collection by each residential customer. The amount to be charged for such containers shall be determined by each solid waste collector; provided, however, that each collector shall determine a base service rate for a container of not less than thirty-two gallons, and that rate shall be used to determine the rates for all other service levels, which rates shall be increased on a pro rata basis by volume capacity of service levels offered as determined by the solid waste collector, provided that the maximum sized container shall not exceed ninety-six (96) gallons. Said charges shall be based upon the container size, rather than the volume of solid waste deposited within such containers by the residential customer. The charge for additional containers of the same volume capacity shall be no less than the charge for the first such container."

LAFAYETTE REQUIREMENT FOR HOAS TO JOIN CITY PROGRAM UNLESS PROVIDE THEIR OWN SERVICES

Section 100-8 (b), Premises excluded from services, of the Code of Ordinances of the City of Lafayette, Colorado, is hereby amended to read as follows: (b) All homeowner associations in existence upon the effective date of this ordinance, which provide their residents solid waste and recycling collection services, are excluded from the city's residential solid waste, recyclable and organics collection services. Homeowner associations may, however, subject to the requirements set forth in this chapter, participate in the city's residential waste collection service program, and all homeowner associations formed after the effective date of this ordinance shall be subject to the city's residential waste collection program. All homeowner association residents originally excluded from participation in the city's residential waste services program, who have not yet chosen to participate in the city's residential waste services program will as of November 2, 2023 be assessed the current residential waste service fees issued in conjunction with the resident's city water service bill.



APPENDIX: EVALUATION OF PREFERRED HAULER MODEL

Eco-Cycle evaluated a preferred hauler approach to improve recycling in Erie but for the reasons described below, does not recommend this policy for the Town.

POLICY OVERVIEW: The Town would contract with one hauler to be the preferred provider for residential waste and recycling collection. Residents and HOAs could then voluntarily choose the Town's preferred provider to receive the agreed upon pricing and services. The Town would issue an RFP for service options and rates.

WHY IT IS NOT RECOMMENDED: HOAs in Erie currently have negotiated contracts for recycling and waste hauling with cost-competitive rates. Based on the recent RFP process in Arvada for waste and recycling services, it is not certain that the Town of Erie would be able to secure a lower rate for residents through the preferred hauler approach compared to the rates that HOAs are currently paying. This is in part because it is challenging for the haulers to provide pricing and service levels to an unknown or variable number of households. Since participation in the program is voluntary and requires residents to opt-in to services, this approach will likely have lower participation rates among Old Town residents than a municipal contract. There may be some decrease in local truck traffic but not as much as expected under a municipal contract. Given the amount of staff effort to issue an RFP and negotiate a contract, Eco-Cycle recommends pursuing a targeted contract for Old Town residents and those not covered through HOAs (see Recycling Phase 2 above) that would have more clearly defined benefits for residents for a comparable level of effort.

LOCAL AND NATIONAL EXAMPLES: Highlands Ranch has had a preferred hauler system since 2010 and is the only known Colorado community to use this approach. Approximately 70% of the community's households use the preferred hauler, up from 30% when the program began. Some sub-associations within the HOA continue to contract with different haulers. The rates for weekly trash and biweekly recycling were \$14.95/month (2018 pricing), which are comparable with those in cities with municipal hauling contracts. Note Highland Ranch is not a municipality; it is an unincorporated area of Douglas County. The HOA association oversees the waste hauling contract. Nationwide this opt-in hauler approach is very rare; only two communities were found in the U.S. with similar programs, Hudson, OH and Pittsfield Charter Township, PA.



APPENDIX: Waste, Recycling and Composting Strategies from Erie Sustainability Master Plan

Strategy	Priority	Addressed in Recommendations
1. Relocate & improve drop off center (DOC) & add yard waste	High	Town In progress
2. Adopt ReTrac data collection	High	Done
3. Phased approach to universal curbside composting	High	Y
4. Phased approach to Universal Zero Waste	High	Υ
5. Regional partnerships to expand Hard to Recycle collection	Medium	
6. Phased incentives for diversion of Construction and Demolition (C&D) material	Medium	Y
7. Bring a materials reuse center & create local jobs	Medium	
8. Expand zero-waste policies for Town events & meetings	High	Υ
Expand recycling at Town facilities and public locations	High	Y
10. Develop Town-wide green procurement policies	Medium	

