

ISSUE BRIEF

ECONOMIC IMPACTS OF FOOD WASTE DIVERSION IN COLORADO

Food does not belong in the trash. And yet, nearly 1.04 million tons of food are thrown away in Colorado each year.¹ Food waste makes up 18.2 percent of Colorado’s municipal solid waste in landfills, where it creates the potent climate pollutant methane as it decomposes.² Much of this wasted food could be rescued and redistributed to people in need of food assistance; what cannot be eaten should be repurposed for animal feed or compost production or otherwise recycled. Instead, 83 percent of food waste is currently being landfilled.³ This is not just an environmental or hunger issue; it is a missed economic opportunity. Policies that divert food waste from landfills not only reduce climate pollutants and increase food rescue but offer a host of economic benefits.

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To estimate these benefits for Colorado, a new study commissioned by NRDC looks at the potential economic impacts of five food waste diversion policy scenarios that would be gradually phased in over eight years.⁴ The study and modeling, by ICF, were based on similar groundbreaking research ICF conducted to quantify the impact of Massachusetts’s highly successful food waste diversion policy.⁵

According to the study, upon full implementation a comprehensive food waste diversion policy in Colorado could lead to:

- 9,444 jobs created across the state;
- \$2.4 billion in cumulative economic activity annually;
- \$79 million in cumulative tax revenue annually due to supply chain impacts and economic ripple activity;
- 1 million tons of food waste diverted from landfills each year; and
- 4.9 million metric tons of carbon dioxide equivalent (MTCO₂e) pollution avoided over the first 10 years of the policy—the same impact as taking 1 million cars off the road for a year.⁶

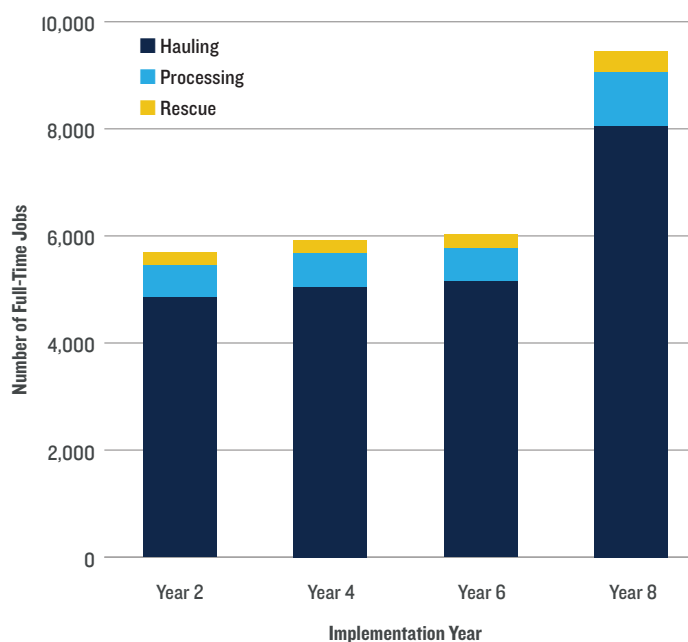
SCENARIOS

Eleven states already have food waste diversion laws in place, which have resulted in substantial growth of food rescue organizations, waste haulers, and organic waste processing businesses.⁷ To understand the potential impact of a similar policy in Colorado, NRDC hired consultant ICF to model the impacts of five potential food waste diversion policies in Colorado. Since most existing policies differ primarily in who is required to adhere to the policy, ICF modeled the following five scenarios:

- A **comprehensive scenario** requires all businesses, institutions, and households across the entire state to divert their food waste.
- A **geographic exclusion scenario** excludes generators located beyond 30 miles of a processor in the Front Range and beyond 60 miles of a processor across greater Colorado. This scenario is based on the recommended organic recycling requirement for commercial, industrial, and institutional food scrap generators in the Colorado Organics Diversion Study but also includes residents.⁸
- A **small generator and geographic exclusion scenario** exempts households and institutions that generate smaller amounts of food waste (K-12 schools, health care facilities, food banks) and those outside the geographic buffers above. This scenario is based on the recommended organic recycling requirement for commercial, industrial, and institutional food scrap generators in the Colorado Organics Diversion Study and does not include residents or small generators.

Figure 1: Gross Cumulative Growth in Employment for Comprehensive Scenario

A comprehensive scenario would result in an increase in direct, indirect, and induced employment, with more jobs added as additional generators are covered by the policy. The model estimates that approximately 9,444 jobs would be supported in total upon full implementation of the scenario in year eight.



- A **small county exclusion scenario** that includes all businesses, institutions, and households across counties with more than 20,000 residents but exempts entities in counties with less than 20,000 residents.
- A **small county and residential exclusion scenario** that exempts entities within counties with less than 20,000 residents and all residents statewide.

While any of these scenarios would reduce the amount of food that ends up in Colorado's landfills, **it is clear from ICF modeling that the comprehensive scenario would produce the greatest economic benefits for the state**, followed by the small county exclusion scenarios. As we have seen in other states, these benefits could come at minimal cost to consumers if states, local governments, and private investors utilize available funding and economic pathways to support the development of new food waste infrastructure and programs.⁹ The specific mechanisms for funding infrastructure and program expansion in Colorado should be researched further.

FINDINGS

A food waste diversion policy would create jobs

A comprehensive food waste diversion policy would support (directly, indirectly, or induced) an estimated 9,444 jobs cumulatively across the state's economy upon full implementation. This would increase the waste management workforce in Colorado by 45 percent. Most of these jobs would be created in the waste hauling sector, but additional gains would be seen in composting and organic waste processing, as well as food rescue. Due to its more limited scope, the small county and residential exclusion scenario would generate 5,917 jobs across the state upon full implementation.

A food waste diversion policy would benefit the economy

Under the comprehensive scenario, diverting food waste from the largest generators in Colorado would initially create \$1.5 billion of economic activity per year. There would be marginal additional growth as more generators are phased into compliance and a leap to \$2.4 billion when the smallest generators are included. However, the small county and residential exclusion scenario offers lower diversion potential. It would result in \$1.3 billion of economic activity initially and \$1.5 billion at full implementation. Economic activity represents all the dollars that are transferred between companies and individuals for the goods and services created by the food waste diversion policy, which in this case can support greenhouse gas reductions as well as a circular green economy. For example, economic activity in these scenarios includes the cost to residents for a hauling company to pick up their food scraps; the cost to the hauling company to buy, operate, and maintain its fleet of vehicles; the cost of manufacturing those vehicles; and the household spending of the people employed.

TABLE 1: ECONOMIC BENEFITS OF EACH POLICY SCENARIO UPON FULL IMPLEMENTATION

Policy Scenario	Jobs (cumulative)	Industry Activity per Year (in millions)	Tax Revenue per Year (in millions)	Food Waste Tons Diverted per Year
1. Comprehensive	9,444	\$2,442	\$79	1,038,830
2. Geographic Exclusion	7,481	\$1,934	\$63	819,159
3. Small Generator and Geographic Exclusion	1,620	\$419	\$14	248,784
4. Small County Exclusion	9,217	\$2,383	\$77	1,018,960
5. Small County and Residential Exclusion	5,917	\$1,530	\$50	725,040

A food waste diversion policy would increase tax revenue

Though there will be costs to state and local governments to implement a food waste diversion policy, there will also be increases in tax revenue, including direct, indirect, and induced revenue impacts from the supply chain and economic ripple activity. The comprehensive scenario estimates new gross state and local tax revenue on the order of \$48 million in the first year. This number would steadily rise as more businesses divert their wasted food, up to \$79 million per year upon full implementation. The small county and residential exclusion scenario offers lower tax revenue gains, estimated at \$50 million per year upon full implementation.

A food waste diversion policy would reduce climate pollution

As food waste decomposes in a landfill, it generates methane, a potent climate pollutant. Composting one ton of food scraps into nutrient-rich soil amendment rather than landfilling it has a net savings of 0.65 metric tons of CO₂ equivalent.¹⁰ NRDC estimates that climate pollution savings in the comprehensive scenario would be equal to 4.9 million metric tons CO₂e over the first 10 years of the

policy. This is the same emissions reduction as would be effected by taking 1.1 million cars off the road for a year.¹¹

Households account for a lot of food waste

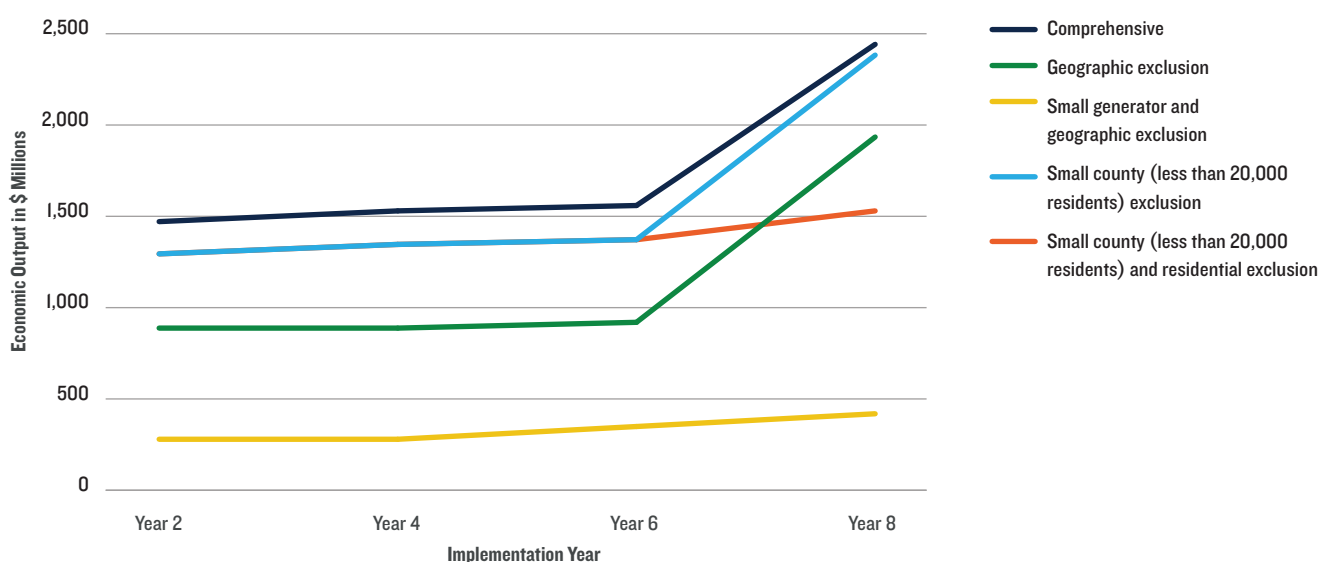
Households account for 51 percent of the food waste generated in Colorado, and a policy that covers only large generators such as grocery stores and food manufacturers would be correspondingly muted.¹² Therefore, the scenarios that exclude residents would produce fewer jobs, lower tax revenue, and less industry activity than the comprehensive scenario. Though ensuring compliance with a food waste diversion policy for all households in a state is a big and expensive undertaking, especially for local governments, the greatest economic impact is realized by ensuring that all households divert their food waste.

The small county exclusion reduces the burden on under-resourced counties

Exempting counties with less than 20,000 residents would exclude 39 of Colorado's 64 counties, which represents more than half of the state geographically but only 5 percent of the state population.¹³ This approach captures most of

Figure 2: Increase in Gross Cumulative Industry Activity by Scenario

Comparison of five policy scenarios' impact on economic activity over time.



the policy's benefits while reducing implementation and enforcement burdens in rural areas where infrastructure and services may be limited.

Geographic exclusions reduce impact

For states without robust food scrap composting infrastructure in place, distance exemptions can potentially limit the policy's impact if infrastructure is not built out. Distance exemptions also introduce extra regulatory and enforcement burdens. Only two-thirds of commercial, industrial, and institutional food scrap generators in Colorado are currently within 30 miles of existing food waste processing facilities in the Front Range or within 60 miles across greater Colorado. This means that, under the geographic exclusion scenario, the relative benefits resulting from a food scrap diversion policy would be that much lower than the corresponding results in the comprehensive scenario.

CONCLUSION

Increased food waste diversion is an incredible untapped economic opportunity for Colorado. By implementing a comprehensive policy or a policy that excludes low-population counties, the state can create thousands of new jobs, generate billions in economic activity, make more food available locally, and reduce climate pollution. By being a leader on this issue, Colorado has an opportunity to turn wasted food into local wealth—for communities, businesses, and the climate.

Endnotes

- 1 Colorado Department of Public Health and Environment, "Waste Diversion Totals," accessed March 17, 2026, <https://cdphe.colorado.gov/hm/colorado-recycling-totals>.
- 2 Colorado Department of Public Health and Environment, "Waste Composition of Municipal Solid Waste Study," 2018, <https://oitco.hylandcloud.com/CDPHERMPop/docpop/docpop.aspx?clienttype=html&docid=3261683>.
- 3 Jace Driver, "Colorado Statewide Organics Management Plan: A Framework for Regional Organics Opportunities," Colorado Department of Public Health and Environment, August 29, 2022, <https://cdphe.colorado.gov/hm/statewide-organics-mgmt-plan>.
- 4 ICF, *Colorado Food Waste Diversion Policy Economic Impact Report*, June 2026, <https://www.nrdc.org/sites/default/files/2026-08/the-economic-impacts-of-food-waste-diversion-policies-in-colorado.pdf>.
- 5 There has been criticism of current state food waste diversion policies' ability to achieve tangible results. Though there are flaws in how some policies have been implemented and how others have been measured, we aimed to model the impact of state food waste diversion policies under ideal circumstances while also recognizing common limitations. More details about how ICF modeled a sensitivity analysis can be found in the report.
- 6 NRDC analysis based on diversion numbers reported in ICF, *Colorado Food Waste Diversion Policy Economic Impact Report*, as calculated via U.S. Environmental Protection Agency (hereinafter EPA), "Current Waste Reduction Model Tool—Version 16," December 2023, <https://www.epa.gov/waste-reduction-model/versions-waste-reduction-model>; EPA, "Greenhouse Gas Equivalencies Calculator," accessed March 17 and June 23, 2026, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.
- 7 Darby Hoover et al., "How State Organic Waste Ban Policies Can Drive Food Waste Reduction," NRDC, July 29, 2025, <https://www.nrdc.org/bio/darby-hoover/how-state-organic-waste-ban-policies-can-drive-food-waste-reduction>. As of January 2026, California, Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Washington had food waste diversion policies.
- 8 Colorado Department of Public Health and Environment, *Colorado Organics Diversion Study*, SB23-191, July 2024, <https://cdphe.colorado.gov/hm/statewide-organics-mgmt-plan>.
- 9 States like Vermont and Maryland have implemented food waste diversion policies without significant changes in costs to consumers.
- 10 EPA, "Current Waste Reduction Model Tool—Version 16".
- 11 EPA, "Greenhouse Gas Equivalencies Calculator."
- 12 ReFED, "Insights Engine," accessed March 17, 2026, <https://insights.refed.org/>.
- 13 U.S. Census Bureau, "Colorado: 2020 Census," August 25, 2021, <https://www.census.gov/library/stories/state-by-state/colorado.html>.