

2024 Annual Report to the Colorado General Assembly:

Status of the Solid Waste Management Program in Colorado

February 1, 2025



COLORADO

**Hazardous Materials
& Waste Management Division**

Department of Public Health & Environment

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Introduction

Colorado's Solid Waste and Materials Management Program (the program) is responsible for ensuring compliance with laws and regulations concerning the management of solid waste. The authority for this program is in the Colorado Solid Waste Act, 30-20-100.5, *et seq.*, C.R.S, and the U.S. Environmental Protection Agency (EPA) has approved Colorado's solid waste management program. With that approval, the authority to implement requirements for managing solid waste in Colorado rests completely with the state.

The program is committed to systematically addressing health equity and environmental justice by administering its programs in a way that makes meaningful decisions concerning the environment, with the participation of affected residents and their communities. Additionally, the program places high priority on working and cooperating with local governments, investigating citizen complaints, and being available to the public through the technical assistance line.

Primary elements of the program include compliance assistance, compliance monitoring and enforcement, permitting, and materials management and recycling. Each of these program elements is discussed in the following sections.

The program currently regulates the following facilities:

Facility type	Number of facilities
Landfills	77
Municipal Solid Waste landfills	55
Construction and demolition debris landfills	5
Waste tire monofills	3
Coal combustion ash monofills	9
Other landfills (special wastes, landfarms)	5
Closed landfills	194
Composting facilities	52
Incinerators	4
Recycling facilities	188
Medical waste facilities	23
Solid waste impoundment facilities	128
Commercial exploration and production waste impoundment facilities	10
Waste tire registrants (facilities, haulers, and generators)	3,072

Accomplishments

Compliance assistance

A goal of the program is for all regulated facilities to be in, and stay in, compliance with state laws and regulations. The traditional inspection and enforcement program serves as one primary mechanism for reaching that goal. However, compliance assistance is another important method for obtaining and maintaining compliance. The General Assembly recognized the value and importance of compliance assistance in Section 30-20-101.5(2)(f), C.R.S., which states the department is to “establish a preference for compliance assistance with at least 10 percent of the annual budget amount being allocated to compliance assistance efforts.” In state fiscal year (FY) 2024, 12 percent of staff time was devoted to meeting regulatory entities’ requests for compliance assistance.

The program has developed, and continues to invest in, a broad range of compliance assistance services, to help the regulated community manage solid waste appropriately. These compliance assistance services include the following activities:

- Managing a part-time customer assistance and technical assistance phone line and email box. This phone line is staffed from 8 a.m. to 12 p.m., Monday through Friday, to provide information on common waste management questions and more complex or detailed regulatory guidance.

Through the technical assistance phone line/email inbox, in FY 2024 the program responded to:

517 Phone calls

172 Emails

- Providing a wide range of solid waste guidance documents, compliance bulletins, and an [informative guidance website](#).
- Maintaining an extensive set of guidance information for regulated entities online and in print.

During FY 2024, the various Solid Waste Management websites received:

78,213 Hits

- Program inspectors routinely incorporate compliance assistance and pollution prevention into compliance inspections performed each year. In the past year, program staff have delivered compliance assistance on 47 of the 217 inspections performed, or on 22 percent of inspections.

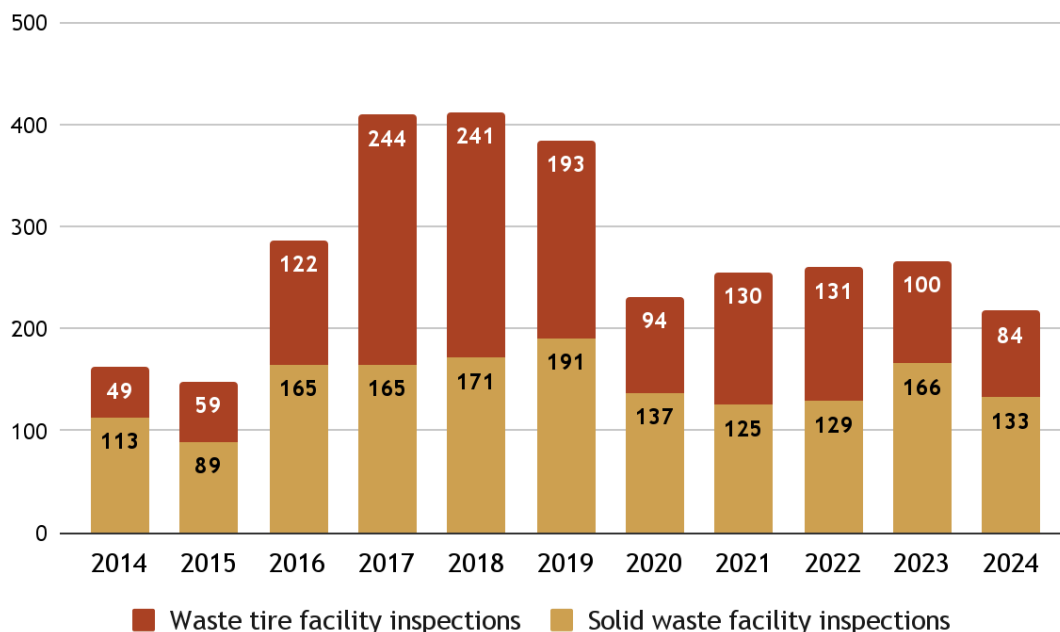
Compliance monitoring and enforcement

Table 1 below illustrates the types and numbers of inspections performed by program staff during FY 2024. Figure 1 illustrates the facility inspections performed by program staff during FY 2024, along with a comparison to previous years. In FY 2024, each solid waste inspector performed an average of 31 inspections. Every inspection carries administrative responsibilities, including reviewing files, preparing inspection reports, and notifying other regulatory agencies of the inspection results. Many inspections result in enforcement, which requires inspectors to track return-to-compliance activities at the facility, prepare enforcement documents, and document the facility history in the solid waste database.

Table 1 - Types and numbers of inspections performed by program staff

Facility type	Number of inspections
Landfills	44
Composting facilities	6
Medical waste facilities	6
Commercial exploration and production waste impoundments	4
Recycling facilities	6
Asbestos in soil sites	1
Beneficial use sites	8
Illegal disposal sites and complaint follow-up	22
Environmental covenant inspections	7
Construction and demolition disposal facilities	1
Paint facilities	16
Waste tire sites (facilities and haulers)	84
Other solid waste sites	12
Total - Inspections performed by program staff	217

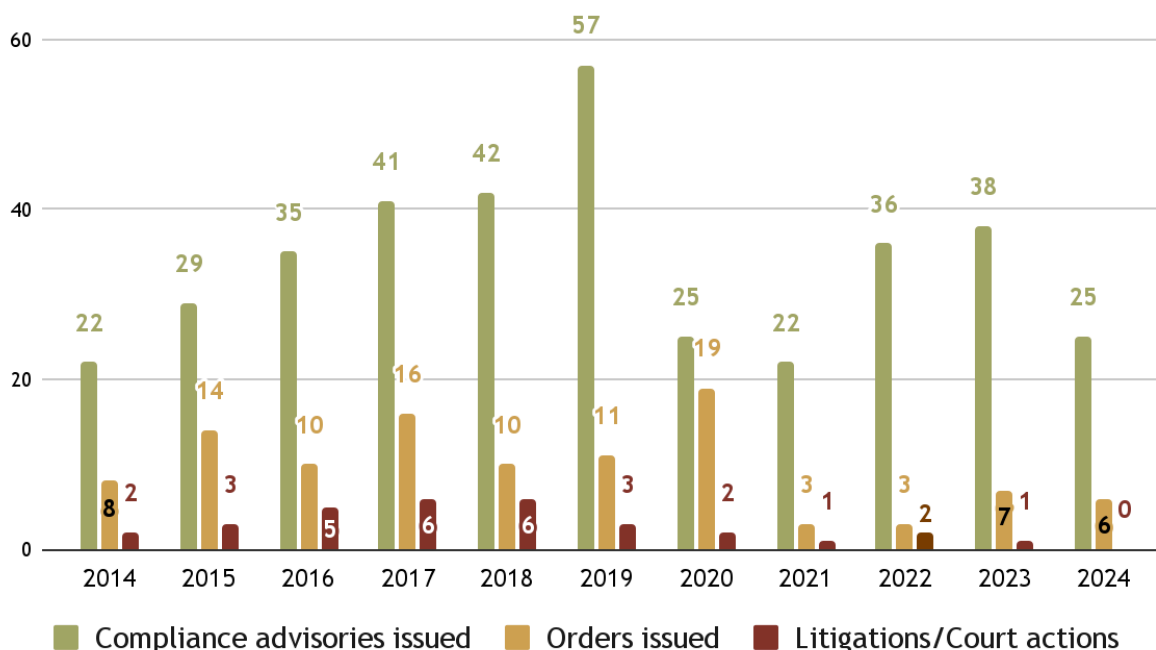
Figure 1 - Solid Waste Program: Facility inspections



The program places high priority on complaints and spill reports. In FY 2024, the program received 34 solid waste complaints. Of those, program staff investigated and/or inspected six complaints and referred 28 to local governments or other agencies. In addition, the program received 446 spill reports. The program followed up on 126 of those spills, to ensure operators completed appropriate cleanup. The program determined that the remaining spill reports were subject to other agency rules or referred the remaining spills to local governments for follow up.

Inspections, complaints, and spill follow-ups may result in formal and informal enforcement actions. Informal actions are called Compliance Advisories, and formal actions include Compliance Orders and civil actions filed in court. Figure 2 presents the number of formal and informal enforcement actions the program completed in FY 2024 and previous years.

Figure 2 - Solid Waste Program: Enforcement actions



Referring to Figure 2, the program issued Compliance Advisories within 90 days 88 percent of the time; the program issued 100 percent of the seven Compliance Orders within the program's 300-day internal goal. Of the six Compliance Orders shown for FY 2024 in Figure 2, three of the orders assessed a combined total of \$73,000 in penalties, payable to the Colorado General Fund. The remaining orders assessed no penalties.

Permitting

In Colorado, most solid waste disposal sites and facilities need Certificates of Designation, which local governments issue. This includes facilities that deposit and treat solid waste, including landfills, incinerators, medical waste treatment facilities, and certain subsets of waste impoundments and composting facilities. However, recycling facilities, transfer stations, and any facility disposing of their own solid waste generated on their own site, do not need a Certificate of Designation.

To obtain a Certificate of Designation, a facility must submit its application to the local government. The local government then refers the application to the program for a technical review, which ensures that the facility can operate safely and in a manner that protects human health and the environment. If the program recommends approving the application,

the local government evaluates whether the proposed facility conforms to local land use plans and zoning restrictions. The local government may choose to approve or disapprove the application. However, if the program recommends disapproval, then the local government must disapprove the application.

The program specifically reviews the Engineering Design and Operation Plan (EDOP) portion of the Certificate of Designation application. Certain facilities that do not require a Certificate of Designation must still secure the program's approval of their EDOP. Therefore, the program's "permitted universe" includes all solid waste facilities with EDOPs. This large universe of sites with EDOPs is not static. New facilities are built and existing facilities add new solid waste management units, waste streams, and treatment capabilities - all of which need the program to review and approve EDOPs or EDOP modifications. The program modified the metrics for tracking solid waste permitting document reviews in FY 2024, in an effort to more accurately track the program's review of permitting documents. Figure 3 presents the large number of documents that program staff review for this universe of facilities on an annual basis, from 2015 to 2024.

Figure 3 - Solid Waste Program: Total project documents received

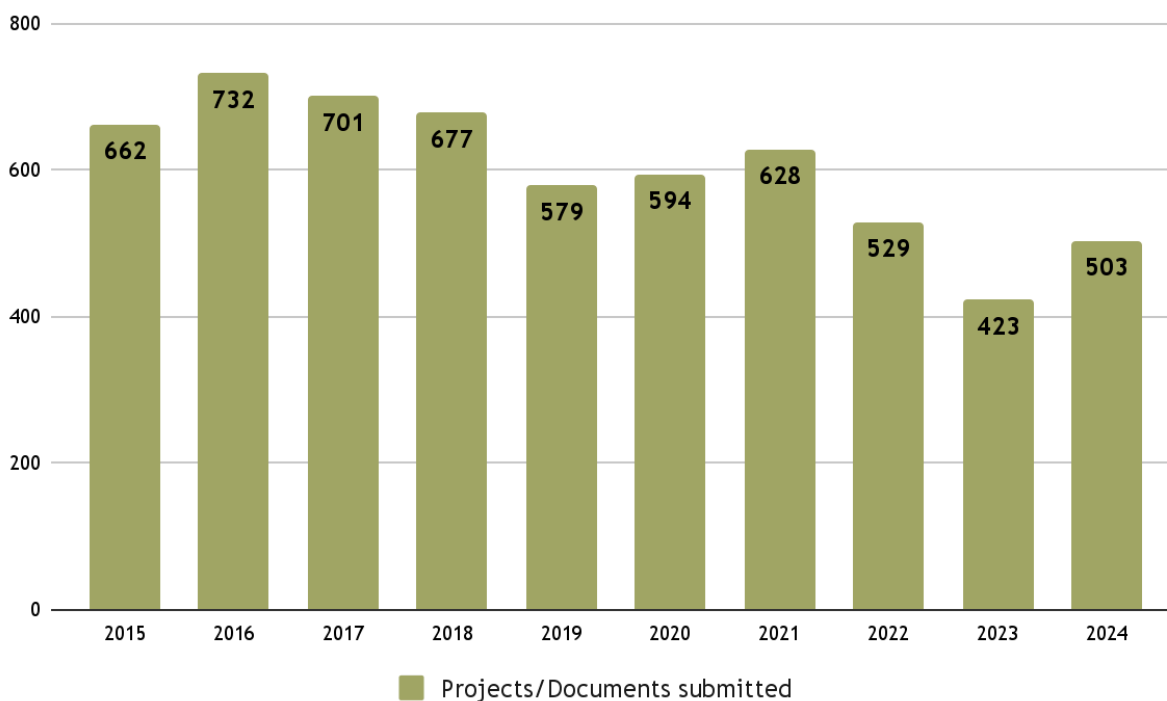
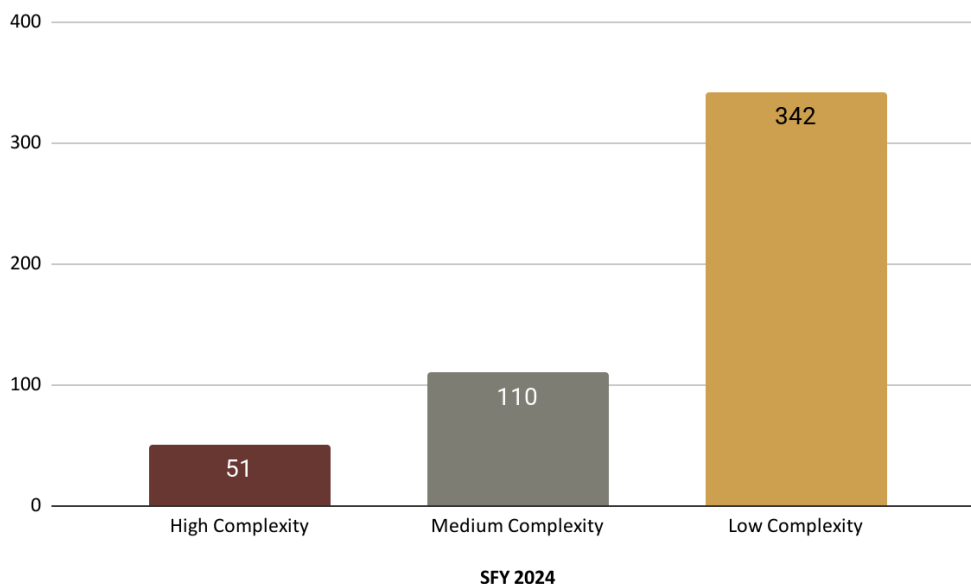


Figure 3 shows a large increase in project documents received by the program from FY 2023 to FY 2024. However, the graph in Figure 3 does not illustrate the relative complexity of these documents. The program differentiates documents regulated entities submit for review and approval into three categories: high, medium, and low complexity. While the Certificate of Designation application category is, by definition, a complex major project, EDOPs and EDOP modifications, for example, can vary in complexity. Additionally, groundwater monitoring reports can be relatively simple, but new engineering designs for treatment technologies and landfill cells with sophisticated liners and caps can be very complex. Figure 4 illustrates the breakdown of documents received, in terms of complexity in FY 2024.

Figure 4 - Complexity of documents received



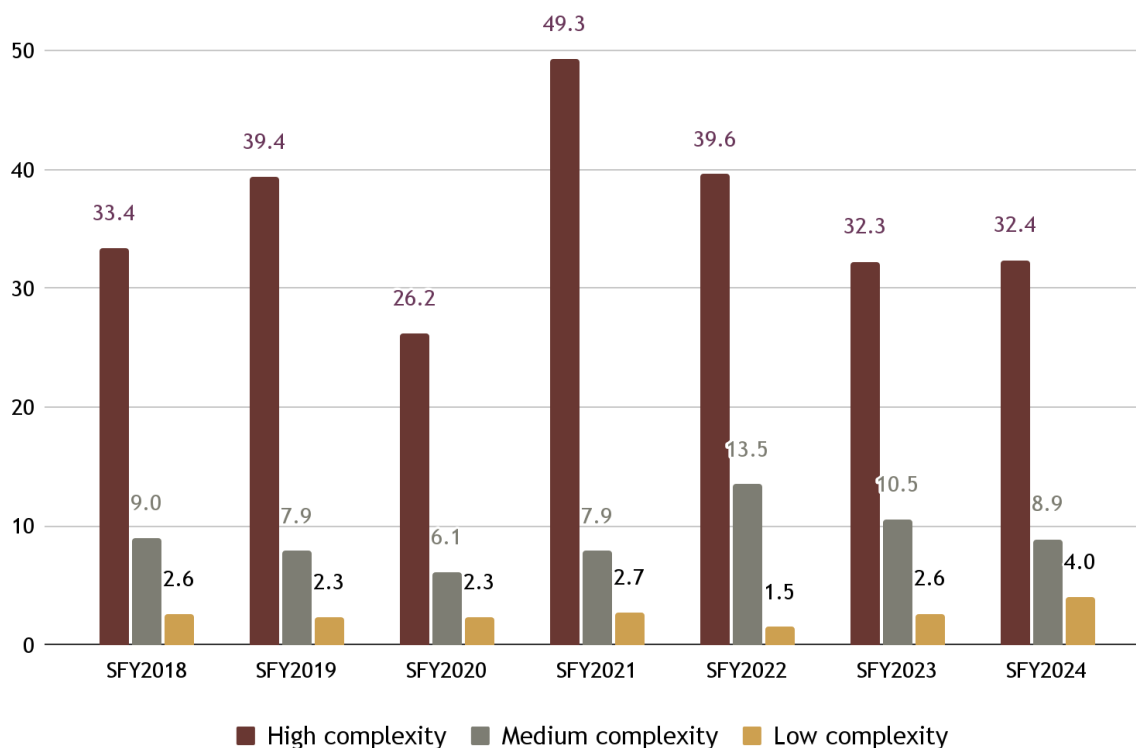
Many permitting documents reviewed by the program require revisions to comply with the solid waste regulations. The program began tracking document completion percentage in FY 2024, in an effort to track staff efforts to provide an initial review of each document submitted. Document completion percentage shows that the program has reviewed a permitting document and provided a response to the facility. A response may include approval, a request for modifications, or denial of a request. In FY 2024, document reviews showed a completion percentage of:

- High Complexity: 46 percent
- Medium Complexity: 60 percent
- Low Complexity: 47 percent

The program backfilled two vacant permitting positions in FY 2024 and expects completion percentages to increase in FY 2025.

Figure 5 shows the average number of hours billed for document types, based on the complexity of the document reviewed. The average number of hours billed per document in FY 2023 remained relatively similar to previous years.

Figure 5 - Average number of billable hours to review document types



Closed landfill remediation grant program

The Colorado General Assembly passed HB 23-1194 during the 2023 legislative session. HB 23-1194 created a grant program to provide funding to eligible local governments to help pay the costs of environmental remediation and mitigation efforts for, and management of, closed landfills that are owned by eligible local governments to protect public health, safety, and welfare and the environment.

As directed by HB 23-1194, the Solid and Hazardous Waste Commission adopted rules on how the grant program will be administered. The Solid Waste and Materials Management Program implemented a stakeholder process for drafting the rules. On May 21, 2024, the Solid and Hazardous Waste Commission voted and adopted an amendment to 6 CCR 1007-2, Part 1, addition of Section 19 - Administration of the Closed Landfill Remediation Grant Program.

As also directed by HB 23-1194, the Solid and Hazardous Waste Commission appointed five members to a Closed Landfill Remediation Grant Program Advisory Committee (the committee) in February 2024. The committee is responsible for reviewing closed landfill remediation grant applications and making recommendations to the department for approval, partial approval, or denial of the grants.

The Solid Waste and Materials Management Program solicited applications for the first grant cycle, covering state fiscal years 2024/2025 and 2025/2026. The program received four applications. The committee held its first grant application review meeting on October 23, 2024 and recommended approval of all four applications to local governments totaling \$687,594 in eligible costs for state fiscal year 2024/2025 and \$8,304,135 for state fiscal year 2025/2026. The Solid Waste and Materials Management Program agreed with the committee's recommendations and issued application approval notices to the applicants in October 2024.

Table 2 summarizes the approved grant funds that will be awarded to local governments for eligible costs prior to July 1, 2025. Table 3 summarizes the approved grant funds that will be awarded to local governments for eligible costs prior to July 1, 2026.

Table 2 - Approved eligible costs for state fiscal year 2024/2025 under the grant program

Local government and closed landfill	Approved eligible costs	Overall scope
La Plata County, Bayfield Landfill	\$194,782	Groundwater, private well, surface water, and soil gas sampling/monitoring; reporting
Grand County, Kremmling Landfill	\$5,422	Groundwater monitoring
Grand County, Granby Landfill	\$22,346	Monthly landfill cover surveys; groundwater monitoring
City of Aurora, Highway 30 Landfill	\$465,044	Air permitting; notice of environmental use restrictions; soil vapor extraction system pilot test; full-scale soil vapor extraction system design; install power; east permeable reactive barrier pilot test design and materials; groundwater monitoring; soil vapor screening/sampling; soil vapor extraction system screening; cover inspection/maintenance; reporting

Table 3 - Approved eligible costs for state fiscal year 2025/2026 under the grant program

Local government and closed landfill	Approved eligible costs	Overall scope
La Plata County, Bayfield Landfill	\$193,973	Groundwater, private well, surface water, and soil gas sampling/monitoring; reporting; cover inspection/maintenance
Grand County, Kremmling Landfill	\$36,655	Groundwater monitoring; reporting
Grand County, Granby Landfill	\$627,400	Geosynthetic cover installation; soil cover placement; monthly landfill cover surveys; groundwater monitoring; reporting
City of Aurora, Highway 30 Landfill	\$7,446,107	Full-scale soil vapor extraction system installation; east permeable reactive barrier pilot test installation; northeast permeable reactive barrier pilot test materials and installation; landfill cover and drainage improvements design/survey/drilling/permitting; materials management plan; extend gas vents; soil procurement and transportation; soil grading; groundwater monitoring; soil vapor screening/sampling; soil vapor extraction system screening; cover inspection/maintenance; reporting

Waste tire program

Retailers are required to charge a fee on the sale of each new tire, known as the waste tire fee. The legislature authorized the Solid and Hazardous Waste Commission to set the waste tire fee for both the waste tire administration fund and the waste tire end user fund. The waste tire administration fund is restricted to a maximum of \$0.50 per tire sold, while the waste tire end user fee is limited to \$0.05 per tire. Purchasers of new tires currently pay a total of \$0.55 per tire, with \$0.50 dedicated to the waste tire administration fund and \$0.05 dedicated to the waste tire end user fund. 30-20-1403(II) C.R.S. authorizes the department to collect the waste tire fee and reimburse for waste tire end uses that occur through December 31, 2025.

In calendar year 2023, the program issued:



\$3,933,377

Rebates for the end use of tire derived products



61,416

Tons of tire derived products

As a result of Senate Bill 24-123, Waste Tire Management Enterprise, the waste tire fee will change on January 1, 2026. The fee will be assessed at the point of sale in a manner similar to current practice, but the fee will be split into a waste tire administration fee and a separate fee to support the Waste Tire Management Enterprise created by SB 24-123. There will be a department-led stakeholder process to develop the fee in 2025, and the newly created Waste Tire Management Enterprise Board will determine the fee necessary to support waste tire end use, illegal waste tire cleanups, and waste tire market development activities.

The program currently implements the waste tire enforcement, illegal waste tire cleanup, and waste tire market development programs using the waste tire administration funds. Program staff use the waste tire end user fund to reimburse end users of products made from waste tires. Beginning in July 2025, the Waste Tire Management Enterprise Board will implement the illegal waste tire cleanup, waste tire market development, and waste tire end user program, utilizing the Waste Tire Management Enterprise fee created by SB 24-123.

Waste tire end user fund

The program issues waste tire end user rebates to the users of products made from waste tires. Rebates are issued according to a tiered structure. The materials types for each tier are defined in statute, but the Solid and Hazardous Waste Commission determined the rebate amounts for each tier. The current and future rebate amounts are shown in Table 4.

Table 4 - Current and future rebate amounts of the waste tire end user fund

	Material end used	Rebate amount per calendar year 2024	Rebate amount per calendar year 2025
Tier 1	Crumb rubber, tire-derived fuel	\$50 per ton	\$100 per ton
Tier 2	Molded products, rubber mulch	\$25 per ton	\$50 per ton
Tier 3	Tire bales, alternative daily cover, tire derived aggregate	\$12.50 per ton	\$25 per ton
Rural hauling rebate	N/A	\$12.50 per ton	\$25 per ton

Waste tire program compliance and enforcement

During FY 2024, waste tire program staff conducted 84 waste tire inspections and compliance assistance visits. Of these 84 visits, the program evaluated 53 retailer facilities selling new tires, for compliance with the requirements for submitting the waste tire fee, which is assessed on the retail sale of each new tire. Additionally, the waste tire program issued 14 compliance advisories (informal enforcement actions), and three consent orders for non-compliance with waste tire laws and regulations.

Illegal waste tire cleanup program

The illegal waste tire cleanup grant program provides funding for the cleanup of illegal or abandoned waste tire sites. The program removed approximately 12,224 passenger tire equivalents in calendar year 2023 (2024 data is not yet tabulated), reducing environmental risks from tire fires and eliminating prime mosquito breeding grounds, at a cost of \$117,983.

Waste tire disposal and recycling metrics

Some of the more significant metrics tracked for the waste tire program are illustrated in Figures 6, 7, and 8 (below).

- Figure 6 shows that in 2023, 109 percent of waste tires generated in, or imported into, Colorado were either recycled or re-used. The waste tire recycling industry was able to recycle or salvage tires from existing stockpiles, to achieve a recycling rate over 100 percent.
- Figure 7 illustrates the top nine uses of waste tires, with tire-derived fuel, salvaged tire reuse, and alternative daily cover (at landfills) being the top three uses.
- Figure 8 shows that up until 2018, and from 2020 through 2023, Colorado recycled or salvaged close to, or more than, 100 percent of the waste tires generated in Colorado. It is important to note that the end user fund was also in existence during these years, until it ended in 2018 and returned again in 2020.

For a complete explanation of the waste tire program, please see the [2023 status report](#).

Figure 6 - Percent of newly generated Colorado waste tires recycled and salvaged

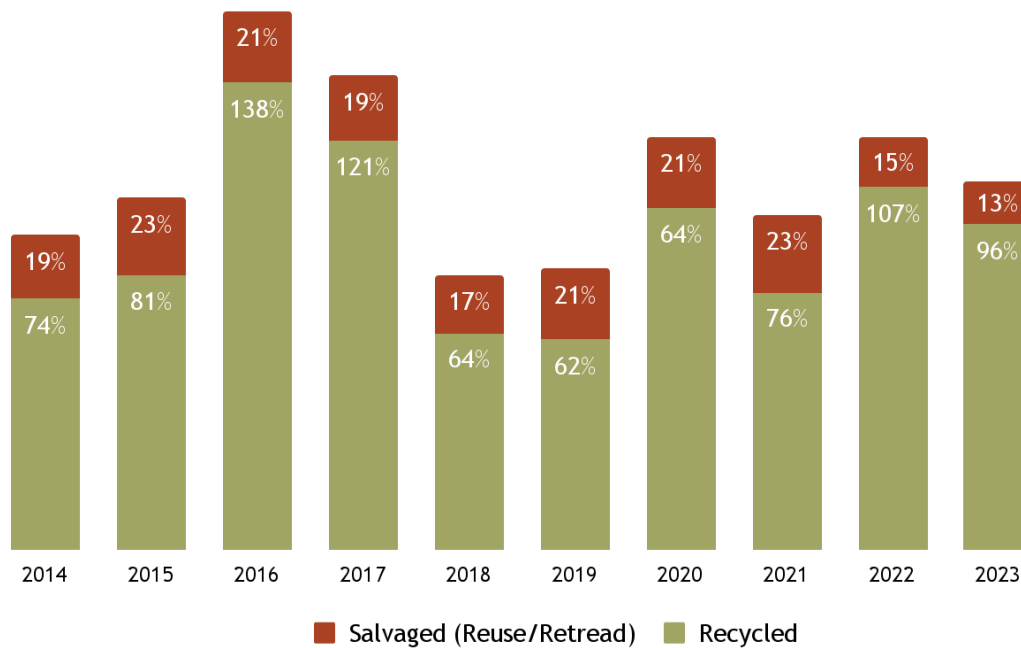


Figure 7 - Nine major waste tire end uses 2023

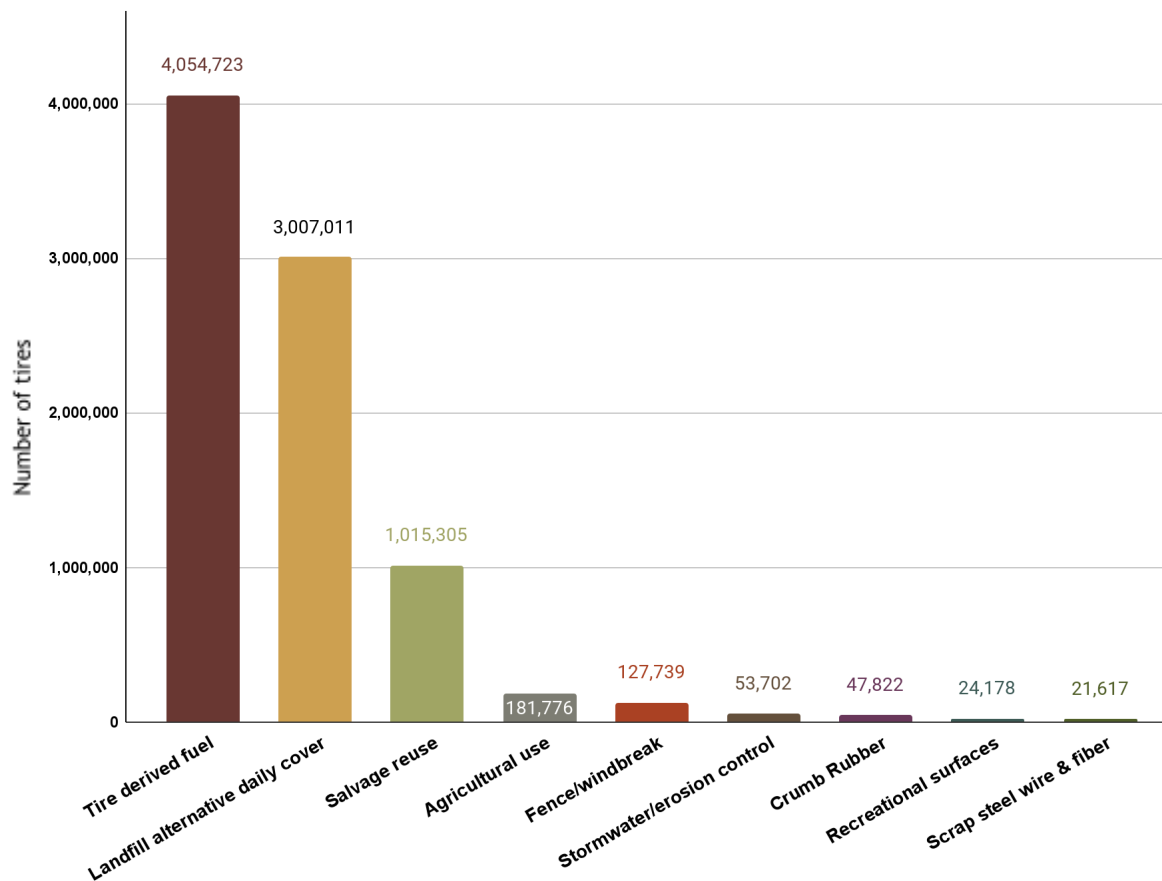
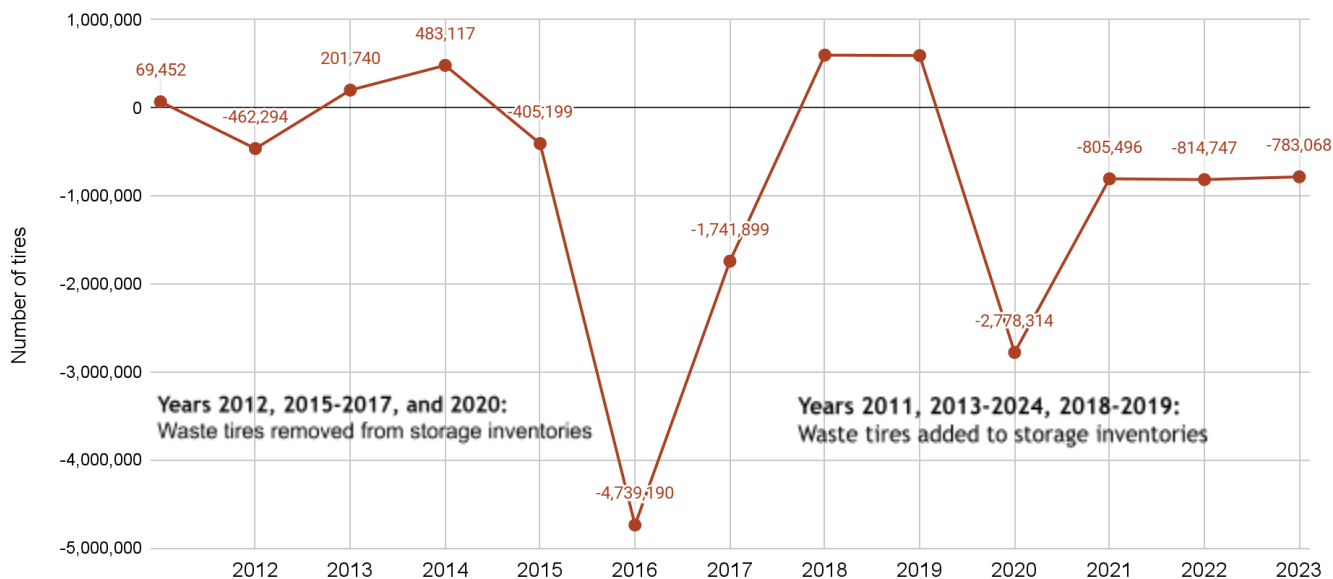


Figure 8 - Trends in waste tire salvage and recycling



For more information about the waste tire program, visit:
<https://cdphe.colorado.gov/wastetires>

Beneficial use applications

Beneficial use of solid waste involves using wastes as a substitute for products or feedstock material. Examples include using industrial wastewater for irrigation or dust suppression; land application of organic materials with beneficial crop nutrients; and using coal ash for cement production. The program's materials management unit reviewed seven applications and approved five beneficial use applications in FY 2024. Approved beneficial use projects diverted 1,801,935 tons of solid waste from disposal and used an additional 211,212 tons of coal ash.

Paint stewardship

Managing unwanted paint occurs under the Architectural Paint Stewardship Act (Section 25-17-4, C.R.S.). Paint manufacturers created PaintCare Inc., a non-profit stewardship organization, which drafted the plan for convenient paint drop-off locations in highly-populated areas and methods for collecting paint in less-densely populated areas. PaintCare contracts with various waste haulers, local household hazardous waste facilities, and paint recyclers to arrange the processing of unwanted paint. While PaintCare does not actually process paint, they contract collection and recycling services, and they are responsible for ensuring that paint recycling and disposal is convenient and free for residents of Colorado.

PaintCare is responsible for reporting to the department by March 31 each year on their performance for the previous calendar year. The program also drafts a report to the legislature annually that summarizes PaintCare's performance.

2023 PaintCare report highlights

In 2023, PaintCare service providers processed 807,872 gallons of unwanted or unusable paint; 89 percent of the paint processed was latex paint and 11 percent was oil-based paint. Most of the latex paint collected was either beneficially used or recycled into new latex paint in Colorado.



The PaintCare Plan, the 2023 PaintCare annual report, and the program's 2023 report to legislature can be found at: <https://cdphe.colorado.gov/paint-stewardship-recycling>

Producer responsibility program for paper and packaging

On June 3, 2022, the Producer Responsibility Program for Statewide Recycling Act, House Bill (HB) 22-1355, was signed into law. HB 22-1355 sets up a Producer Responsibility program that requires companies that sell products in packaging, paper products, and food service ware to fund a statewide recycling system to recycle those materials.

The producer responsibility program completed many notable requirements in FY 2024, including:

- Completing the primary rulemaking, to establish regulatory requirements for producers, the Producer Responsibility Organization, and individual program plans.
- Continuing to solicit meaningful stakeholder feedback for program implementation through the 15-member producer responsibility program advisory board.
- Overseeing completion of the statewide needs assessment which 1) evaluated Colorado's recycling infrastructure and existing gaps, 2) proposed a standardized list of materials to be accepted at all recycling facilities throughout the state, and 3) provided three scenarios for the department to consider in its recommendation to the Colorado Joint Budget Committee to increase Colorado's recycling rates.
- Recommending the "medium scenario" outlined in the statewide needs assessment report, which was approved by the Joint Budget Committee. The medium scenario is projected to increase recycling rates for paper and packaging from 25 percent up to 58 percent by 2035 and expand curbside recycling, at no cost to residents or the state.

Compostable packaging

A number of composting facilities experience increased contamination levels from products that do not break down in their processes. The legislature passed Senate Bill (SB) 23-253 to ensure that any materials labeled compostable truly are compostable. SB 23-253 directed the department to create a forum for citizens to file complaints when they find packaging that does not meet the criteria for compostable packaging established in the statute. After evaluating complaints, the department will refer significant complaints to the Colorado Attorney General's Office for further investigation.

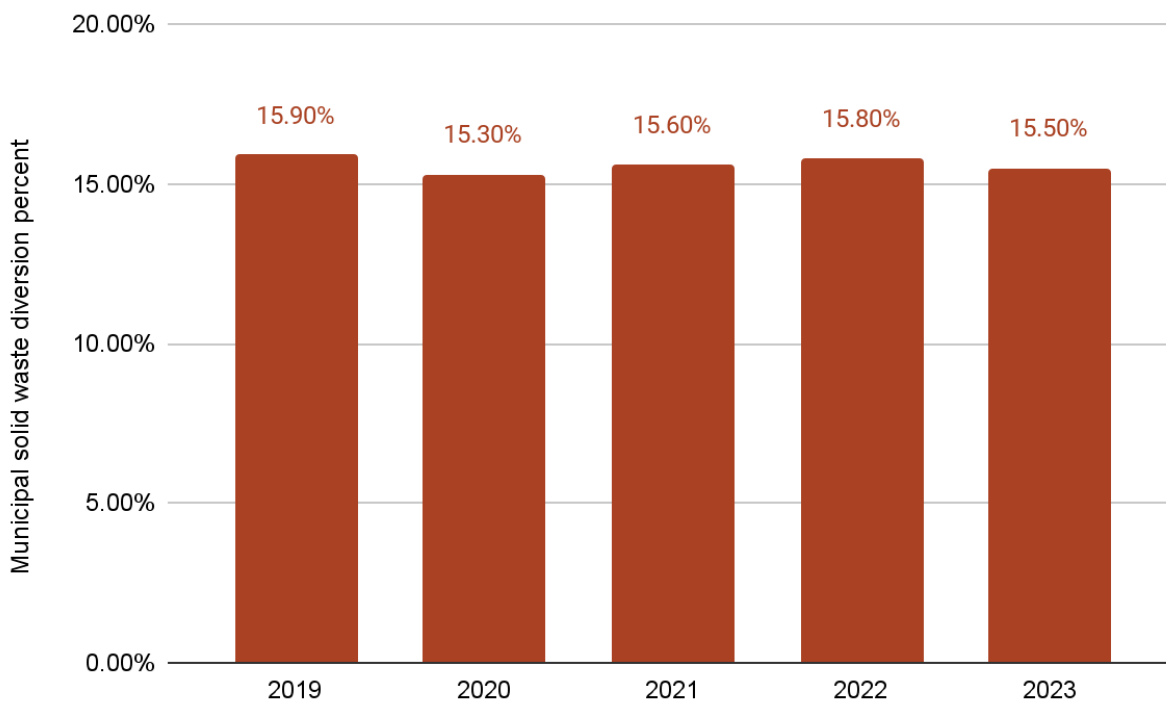
On January 1, 2024, the program activated an [online complaint form](#). In FY 2024, the program received 10 complaints of noncompliant compostable product advertising and referred three complaints to the Colorado Attorney General’s Office for further investigation. As of the date of this report, the program, in coordination with the Attorney General’s Office, has submitted one information request to a product manufacturer seeking information, to determine whether their product meets ASTM standards as a compostable product. The program also created a [website with compost labeling education resources](#).

Recycling and materials diversion tracking

2023 Municipal solid waste diversion data

The program tracks many aspects of recycling and waste diversion. Waste disposal and diversion for household and commercial waste sectors, also known as municipal solid waste, is relatively flat year over year. The industrial waste diversion sector, however, saw a significant increase in the beneficial use of organics. Figure 9 shows that statewide diversion from recycling and composting of municipal solid waste remained relatively similar at 15.5 percent in 2023, compared with 15.8 percent in 2022.

Figure 9 - Colorado municipal solid waste diversion rate



Overall, recycling and composting quantities have remained at a relatively-consistent rate for the last several years. Municipal solid waste diversion slightly declined in 2023. Colorado is still far from the diversion goals that the Solid and Hazardous Waste Commission adopted in 2016, including the first benchmark of 28 percent in 2021, with the goal of reaching 45 percent waste diversion statewide by 2036.

The recycling and composting totals for municipal solid waste and industrial waste are presented in Figures 10 and 11. It is important to note the distinction between the municipal solid waste diversion rate and the total diversion rate. Municipal solid waste includes waste generated by households, businesses, and institutions. Generally speaking, this waste stream

tends to be steady and predictable and is typically used to measure program effectiveness for commonly-generated recyclable materials. The total diversion rate includes all other solid wastes. These wastes consist of items such as construction and demolition debris, aggregates, and coal combustion residuals, all of which fluctuate yearly. While total diversion data is still measured, it is not used in goal setting or measurement because of this unpredictability. While recyclables such as paper, plastic, glass, and metal are often viewed as the primary component of the diversion rate, organic materials such as yard trimmings and food waste have a high percentage of material diversion by weight.

Figure 10 - Waste diversion 2023 composition in municipal solid waste

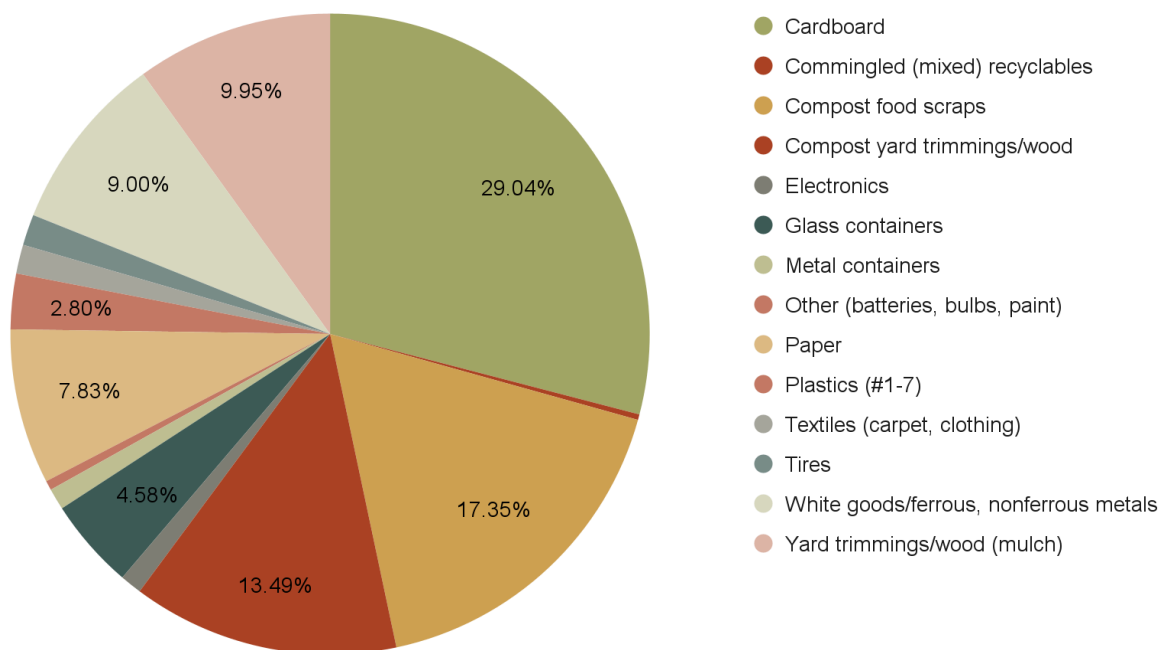
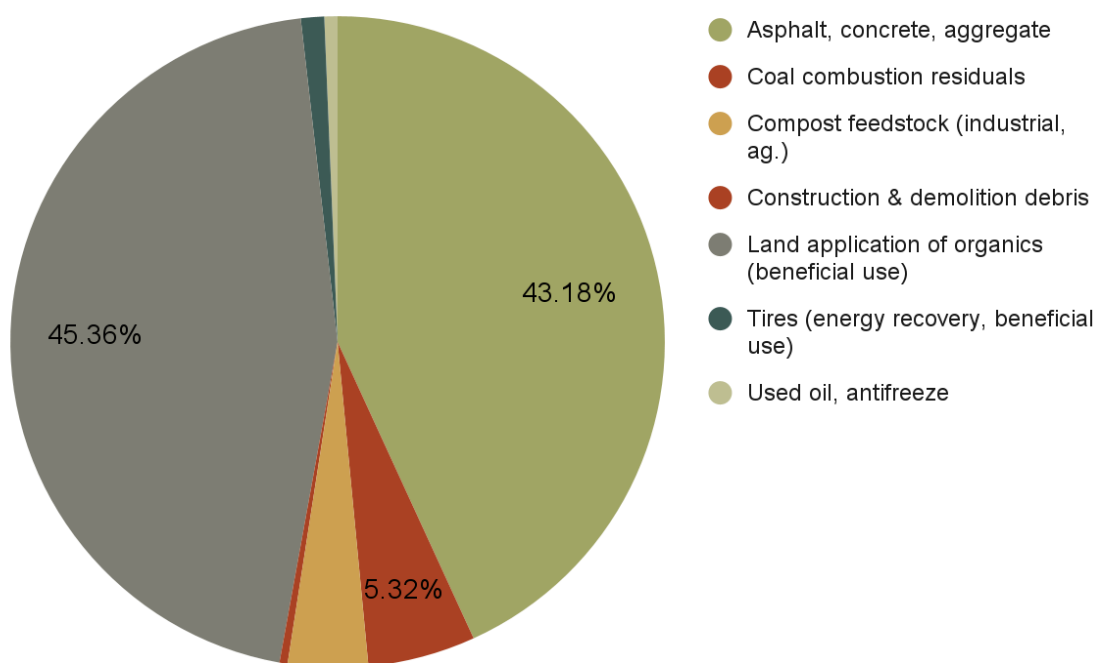


Figure 11 - Waste diversion 2023 composition in industrial waste



Regional diversion

Along with the statewide diversion goals, there are specific regional goals as well. The state is broken into two regions: the Front Range and Greater Colorado. The Front Range region includes the following counties: Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld. The Greater Colorado region includes all other counties.

The goals for these regions consider the economic and logistical challenges of recycling in areas of low population density, existing access to waste diversion infrastructure along the state's urban corridor, as well as the number of residents. The Front Range, for example, accounts for over 70 percent of the state's population and approximately 80% of the waste generated in the state.

Table 5 shows that the Greater Colorado region is achieving the 2026 benchmark for diversion of 13 percent, but the Front Range is well behind the targeted rate of 39 percent. Accordingly, Colorado is short of the 2026 statewide benchmark of 35 percent waste diversion.

Table 5 - Regional diversion rates, including diversion goals

Region	2023 rate	2026 goals	Municipal solid waste disposal	Municipal solid waste diversion
Front Range Region	16.7%	39.0%	4,988,553	991,173
Greater Colorado Region	14.3%	13.0%	815,449	136,017
Statewide	15.5%	35.0%	5,805,900	1,064,498

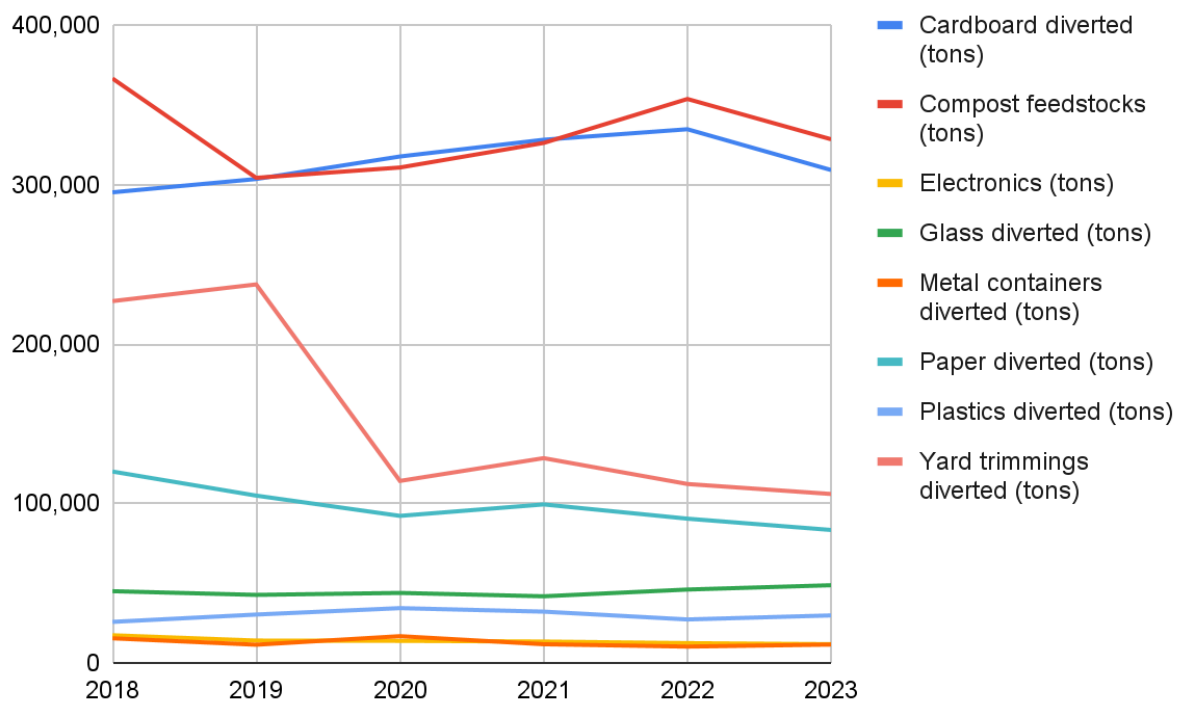
Waste diversion composition and trends

The composition of both the municipal solid waste and industrial waste diverted from disposal are dominated by a few larger and heavier waste streams. As illustrated in Figure 10 above, compost feedstocks, including food scraps and yard waste, are the single biggest component of municipal solid waste diversion, at 31 percent of the municipal solid waste diverted by weight. Cardboard makes up another 29 percent of the municipal solid waste diverted from landfills and is the largest source of recyclable material diverted by weight.

In the industrial sector, beneficial use of organics makes up 45 percent of the industrial waste diverted, and asphalt, concrete, and aggregates make up 43 percent of the industrial waste diverted from landfills, as illustrated in Figure 11. It is important to note that diversion is calculated using weight and not volume, and therefore some of the more-dense material streams tend to make up more significant percentages.

Material-specific waste diversion trends for the last several years are illustrated in Figure 12. Diversion of glass and plastic increased in 2023. Cardboard decreased for the first time in many years, likely due to the shuttering of a large cardboard recycling facility in Colorado. Compost feedstocks also decreased for the first time in many years.

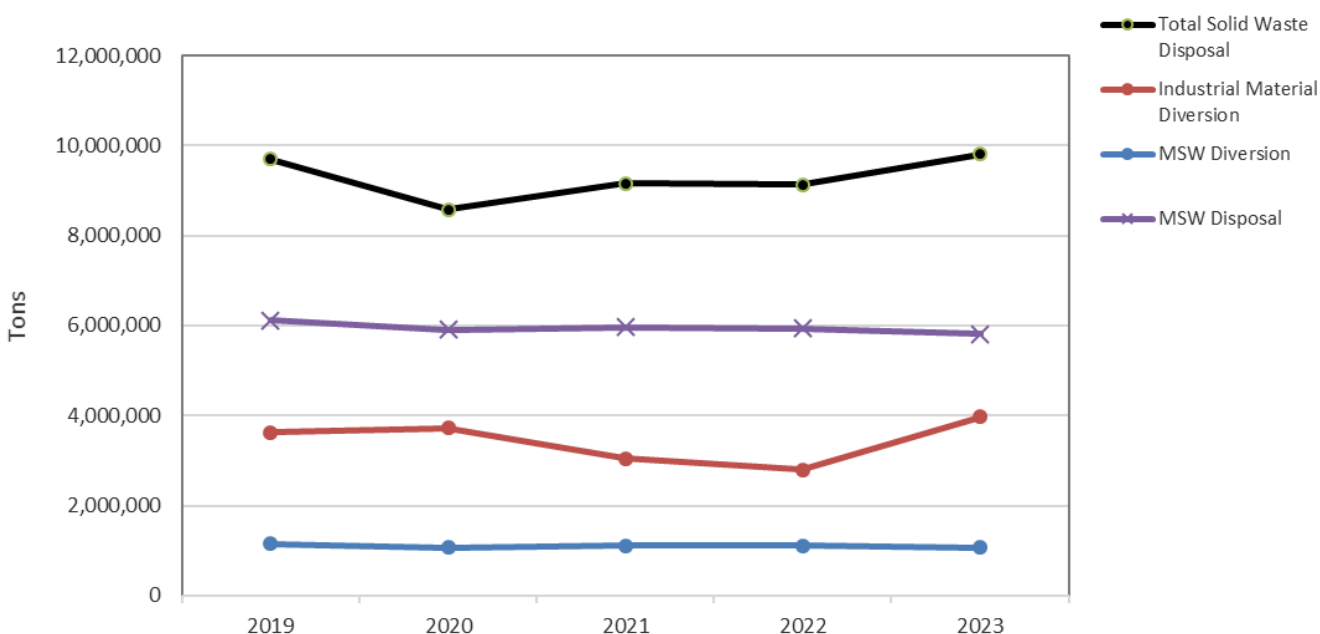
Figure 12 - Annual trends in municipal solid waste diversion



Total waste generation

Annual changes in waste generation, including diversion and disposal, are illustrated in Figure 13. Total waste generation was impacted by the large increase in industrial recycling, which was primarily affected by the increase in materials reported for beneficial use. Municipal solid waste disposal decreased by 130,000 tons, and municipal solid waste diversion also decreased by 46,000 tons. Since both disposal and diversion decreased, the net effect of these decreases ultimately leaves the percentage of municipal solid waste diverted similar to what it has been for many years.

Figure 13 - Annual waste generation by category, including disposal and diversion



Benefits of waste diversion

There are many benefits of diverting materials from landfills. Not only is valuable landfill space saved, but recycling also reduces greenhouse gas generation and energy consumption, and typically creates stronger economic impacts than disposal. Using the EPA's Waste Reduction Model, the projected savings from waste diversion can be evaluated in a different light. In 2023, the Waste Reduction Model estimated that Colorado prevented 1,975,783 metric tons of carbon dioxide from being generated, by preventing material from going into Colorado landfills. This equates to the emissions from 419,487 passenger cars. The energy savings from waste diversion were also equivalent to the energy used in 161,105 homes in a year.

Statewide Organics Management Plan

Based on available waste diversion and landfill composition data, a high percentage of materials sent to landfills in Colorado are organic materials, such as food waste and landscape trimmings. As a result, in 2022, the department worked with a team of consultants to develop a Statewide Organics Management Plan. The Statewide Organics Management Plan includes recommendations to best address diversion of organic waste and incentivize the use of organic materials through localized end markets.

Building off of the 2022 Statewide Organics Management Plan, the Colorado General Assembly passed Senate Bill 23-191, directing the department to create a Colorado Organics Diversion Study. The intent of the study is to evaluate policies intended to divert organic materials from landfills to beneficial uses, identify the infrastructure needed to manage organics, create a toolkit for developing infrastructure, and provide policies to incentivize the use of compost in Colorado. The department worked with contractors in 2023 and 2024 to develop a study that included the statutory requirements. The department submitted the study to the legislature on July 31, 2024.

The 2022 Statewide Organics Management Plan and 2024 Colorado Organics Diversion Study can be found on the department website at:

<https://cdphe.colorado.gov/hm/statewide-organics-mgmt-plan>

Program funding

Funding for the Colorado Solid Waste and Materials Management program comes entirely from fees. The program's funding has five components:

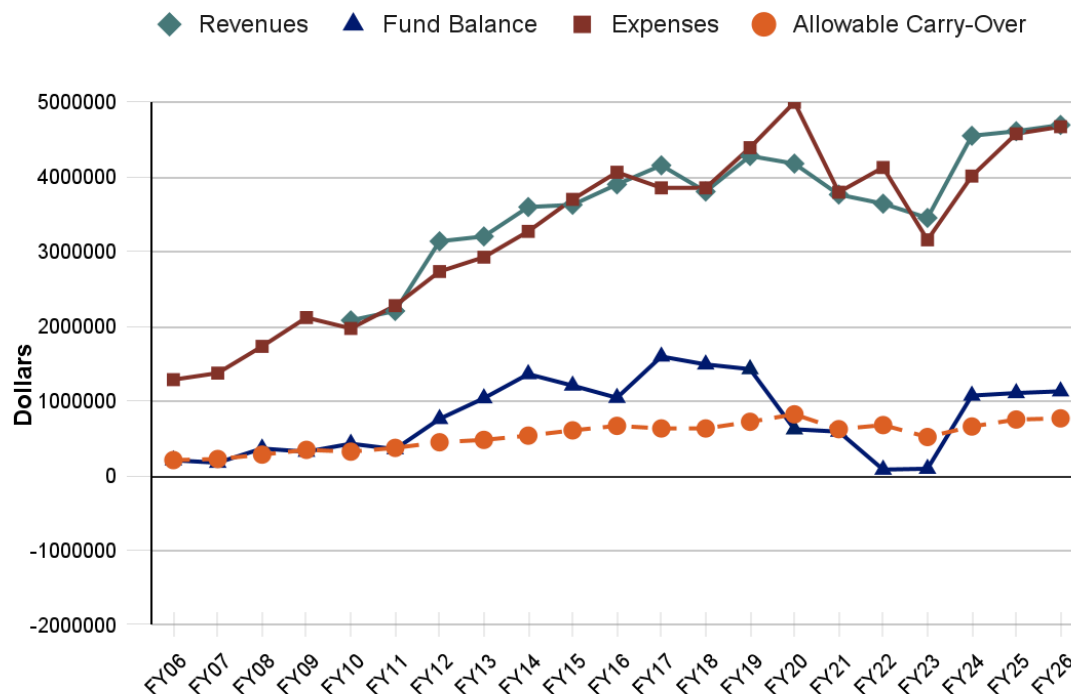
1. Solid waste user fee, which is a fee based on the weight or volume of waste disposed of at landfills, also known as a "tipping fee."
2. Hourly activity fee, assessed for prescribed services provided to facilities.
3. Annual facility fee, which is an annual fee paid by facilities that are not required to pay the solid waste user fee.
4. Waste tire fee, assessed on the sale of new tires.
5. PaintCare program fee, a flat fee PaintCare pays.
6. General Fund to cover one full time position to oversee the Colorado Product Stewardship Program. The department will repay these funds to the General Fund in FY 2027.

In FY 2024, the solid waste user fee and hourly review fees provided about 57 percent of the program's funding. The waste tire fee covered 42 percent of the program's expenses, and the PaintCare program provided the remaining one percent.

The program held a stakeholder process in late 2023 and early 2024, outlining a proposal to 1) increase the total solid waste user fee by \$0.04 per cubic yard, and 2) divert \$0.05 per cubic yard of the Hazardous Substance Response Fund fee to the solid waste fund for FY 2025. The Solid and Hazardous Waste Commission approved the July 1, 2024 fee increase and Hazardous Substance Response Fund fee diversion in February 2024. The program also received a one-time loan of \$970,794 from the Cash Fund Solvency Fund in FY 2025, to bridge the prior fiscal gap until the solid waste fund generates enough revenue from the fee increase to cover program costs. The program is responsible for repaying the loan over the course of FY 2025 and 2026.

Figure 14 illustrates the revenue, expenditures, and fund balance for the portion of the program covered by the solid waste user fee assessed at solid waste disposal sites. This graph shows that, if projections are correct, the program will have adequate revenue streams to fund the program at least through FY 2026 at the current fee levels.

Figure 14 - Solid Waste Program budget



In FY 2024, the program collected \$4,552,506 from the solid waste user fee, document review fees, and annual facility fees, while spending \$4,013,433 to fund program activities.

Staff salaries are the biggest single expense item for the program. Therefore, managing staffing levels is an important part of managing the program's budget. Over the past 13 years, the program has grown significantly, both in terms of the programs administered and the staff needed to implement those programs. However, recent retirements have left some positions vacant, while program finances are monitored. As such, the program observed an increase in permitting document review times, as a result of the inability to backfill permitting positions.

Conclusion

As discussed in this report, the Hazardous Materials and Waste Management Division has implemented an effective and efficient Solid Waste Management program, satisfying the expectations set out in HB07-1288 (Section 30-20-101.5, C.R.S).

Key accomplishments include:

- Ensuring compliance with laws and regulations concerning the management of solid waste.
- Significant progress in implementing the Colorado Producer Responsibility Program created by HB 22-1355.
- Full implementation of the Closed Landfill Remediation Grant Program created by HB 23-1194.
- Full implementation of the Compostables Labeling Act created by SB 23-253.
- Increasing the number of waste tires recycled and salvaged in calendar year 2023.
- Maintaining a program that is credible and accountable to the public.
- Maintaining a program that is cost-effective.
- Energy savings from waste diversion that is equivalent to the energy used in 161,105 homes in a year.

The program has significantly improved both the efficiency and effectiveness of the program, and will continue efforts to improve annually.

Document information

Principal author:	David Snapp, Hazardous Materials and Waste Management Division, Solid Waste and Materials Management Program Manager
Contributing authors/ technical assistance:	<p>Hazardous Materials and Waste Management Division:</p> <p>Wolf Kray, Materials Management Unit Leader Ed Smith, Solid Waste Compliance Assurance Unit Leader Jerry Henderson, Solid Waste Permitting Unit Leader Shana Baker, Waste Tires Team Leader Brian Gaboriau, Solid Waste Admin and Waste Tire Unit Leader Justin Laboe, Solid Waste Database Manager Jace Driver, Recycling Specialist Mellik Gorton, Recycling Specialist Mike Bankoff, Beneficial Use Specialist Caren Johannes, Customer Technical Assistant Specialist Taylor Pierce, Professional Engineer (Closed Landfill Specialist) Laura Dixon, Community Involvement & Communications Manager Venissa Ledesma, Communications Specialist</p> <p>Solid Waste and Materials Management Program staff contact information.</p>
Statute:	Section 30-20-101.5(3), C.R.S.
Date:	February 1, 2025

For additional information or copies:

David Snapp, Solid Waste Management Program Manager
Hazardous Materials and Waste Management Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
david.snapp@state.co.us
(303) 692-3425