



Alabama Recycling Study

PATHWAYS TO BETTER RECYCLING

PREPARED BY RRS FOR THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Executive Summary

Alabama's recycling system has made real progress since the state's last residential recycling study in 2016 with growing grant funding, updated facility registration rules, and a more modern reporting platform. Alabama's commercial and industrial recycling economy is mature. Reuse, repair, and recycling industries support more than 82,000 jobs and generate over \$30 billion in annual economic output, ranking among the state's largest industries. Alabama's residential recycling system is still building toward that same level of maturity. Currently, 48% of households have access to recycling through curbside or drop-off service; the statewide recycling rate stands at 9%; and the state's diversion rate, while it has more than tripled since 2008, has room to grow before reaching the 40% goal set in 2024. The opportunity this report identifies is not that Alabama needs to build demand for recycled material from scratch, as that demand already exists, and in-state end markets report having capacity for far more in-state material than they currently receive. The opportunity is to scale residential participation to meet a market that is already there.

The single main idea that connects nearly every recommendation in this report is Alabama's hub-and-spoke model, first proposed in 2016, but never formally mapped statewide. Access to recycling collection is fundamentally a function of proximity to processing, and this study's gap analysis found that parts of the state, particularly the south, and smaller pockets around Opelika and Dothan, have little residential single stream recycling processing infrastructure within a workable hauling distance. Formally designating hubs and spokes gives every local government in the state a visible path to collection access, and stronger regional planning can help those governments identify existing resources, hauling partnerships, and other opportunities to close the gaps that remain.

Funding to build out recycling access and processing infrastructure is critical. The Alabama Recycling Fund (ARF), which receives 25% of the \$1.00 per ton landfill tip fee surcharge, has changed the look of recycling across Alabama, with many communities relying on that funding to start new recycling programs or expand the ones they already have. That support has already helped fund new processing facilities, collection containers, and education and outreach programs across the state, but demand has consistently outpaced available dollars, with more than half of all funding requests since 2010 going unfunded. The approved increase of the surcharge to \$1.30 per ton, effective January 1, 2027, is a meaningful step forward, though it will not close that gap on its own.

This report translates these findings into a phased roadmap: near-term, low-cost actions ADEM can begin immediately; medium-term investments in regional planning and reporting; and longer-term structural changes that will require legislative support. Together, they give Alabama a realistic path to close its access gaps and build a residential recycling system that gives more Alabamians the opportunity to recycle and complements the industrial recycling efforts that have already laid the foundation for recycling in the state.

Acronyms

Acronym	Definition
ACC	American Chemistry Council
ADECA	Alabama Department of Economic and Community Affairs
ADEM	Alabama Department of Environmental Management
ADPH	Alabama Department of Public Health
AEPACS	Alabama Environmental Permitting and Compliance System
AL	Alabama
ARC	Alabama Recycling Coalition
ARF	Alabama Recycling Fund
ASTEQA	Alabama Scrap Tire Environmental Quality Act
BOF	Basic Oxygen Furnace
CCR	Coal Combustion Residuals
C/DLF	Construction/Demolition-Inert Landfill
CDL	Commercial Driver's License
CMC	Commercial Metals Company Steel (company)
CPI	Consumer Price Index
CWRAR	Community Waste Reduction and Recycling
EAF	Electric Arc Furnace
EPA	(U.S.) Environmental Protection Agency
EPS	Expanded Polystyrene (#6 plastic)
EREF	Environmental Research & Education Foundation
ERF	Energy Recovery Facility
EUMF	End-Use Manufacturing Facility
FL	Florida
FTE	Full-Time Equivalent
FY	Fiscal Year
GDP	Gross Domestic Product
HB	House Bill
HDPE	High-Density Polyethylene (#2 plastic)
HHW	Household Hazardous Waste
ICA	Industry Contribution Analysis
ILF	Industrial Landfill (unit)
IMPLAN	IMPact analysis for PLANning (economic modeling software)
KW	KW Plastics (company)
LDPE	Low-Density Polyethylene
LLC	Limited Liability Company
MP	Mixed Paper
MRF	Materials Recovery Facility
MSW	Municipal Solid Waste
MSWLF	Municipal Solid Waste Landfill (facility)
NAICS	North American Industry Classification System
NHDPE	Natural High-Density Polyethylene
NRDC	National Resources Defense Council
OCC	Old Corrugated Containers

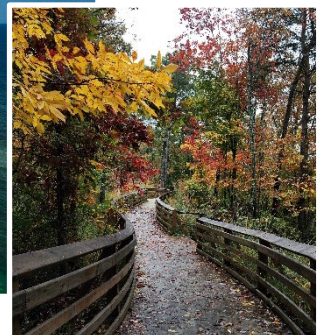
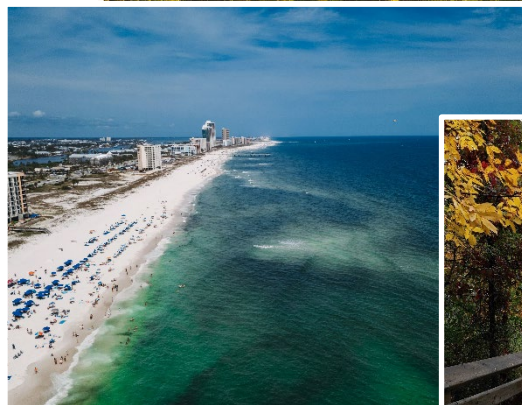
PAYT	Pay-As-You-Throw
PCR	Post-Consumer Resin
PE	Polyethylene
PET	Polyethylene Terephthalate (#1 plastic)
PP	Polypropylene (#5 plastic)
PRM	Principal Recyclable Materials
PSA	Public Service Announcement
PTE	Passenger Tire Equivalent
RBAC	Recycling Business Assistance Center
RFID	Radio-Frequency Identification
RMA	Rubber Modified Asphalt
RME	RME Associates (firm)
RMPF	Recovered Materials Processing Facility
RRR	Reuse, Repair, and Recycling
RRS	Resource Recycling Systems (study consultant)
SERDC	Southeast Recycling Development Council
SMP	Secondary Materials Pricing (index)
SRPN	Sorted Residential Papers/News
STMP	Scrap Tire Marketing Program
STROW	Scrap Tire Right of Way Grant Program
SWA	Solid Waste Authority
SWANA	Solid Waste Association of North America
SWAs	Solid Waste Authorities
SWF	Solid Waste Fund
SWIFR	Solid Waste Infrastructure for Recycling (federal grant)
SWL	Sorted White Ledger
SWMP	Solid Waste Management Plan
SWPU	Solid Waste Planning Unit
SWRMMA	Solid Wastes and Recyclable Materials Management Act
TRP	The Recycling Partnership
UAD	Unauthorized Dump
UBC	Used Beverage Can
UDROW	Unauthorized Dump Right of Way Grant Program
US / USA	United States (of America)
USTA	Unauthorized Scrap Tire Accumulation (or site)
WASDA	(Washington County) Solid Waste Disposal Authority
WM	Waste Management (company)
WTE	Waste-to-Energy
Re-TRAC	Re-TRAC Connect (recycling data reporting platform)

Background and Purpose

Alabama sits in the southeastern United States, with a varied landscape ranging from the Appalachian foothills, to dense pine forests, and down to the Gulf Coast. This geographic variation affects how people live, how goods move, and what kind of industries exist throughout the state. As of 2025, the state is home to just over 5.19 million people,¹ a number that has grown steadily as cities like Huntsville, Birmingham, Montgomery, and Mobile have expanded. However, large stretches of the state remain rural, and those communities face a different set of challenges than their urban neighbors. Alabama has a long-standing manufacturing tradition that includes aerospace, automotive, metals, and other large industries that drive much of the economy, with the state's gross product reaching \$257.5 billion in 2025.² All of this shapes how recyclable material moves through the state, who has easy access to recycling programs, and where local markets for recovered materials can realistically develop.

The Alabama Recycling Study aims to give the Alabama Department of Environmental Management (ADEM) a current, fact-based picture of how recycling is working across the state. The last statewide recycling analysis was completed in 2016 with the release of *A Plan for Boosting Residential Material Recovery and Recycling in Alabama*, produced for the Southeast Recycling Development Council (SERDC) and the Alabama Recycling Partnership by RME Associates.³ This study is tracking progress made over the past decade and taking stock of how collection systems, processing facilities, end-use markets, and program access looks today. The analysis draws on real data and input from stakeholders across the state, so the findings reflect what is happening on the ground rather than what the system looks like on paper.

One of the goals of this study is to identify opportunities for improvement, including gaps in infrastructure, education and outreach gaps, and market or policy conditions that may hold the system back. Identifying the gaps is only useful if strategies and recommendations can help Alabama close these gaps. This study also lays out specific steps ADEM can take to strengthen infrastructure, update policies, and expand recycling service to more residents. It is meant to provide guidance for making strategic investments, growing access in underserved areas, communicating the importance of recycling to Alabama residents, and pushing Alabama closer to its statewide waste diversion goal of 40%, established under the Solid Wastes and Recyclable Materials Management Act (SWRMMA).⁴



¹ U.S. Census Bureau, Population Estimates Program, 2025

² U.S. Bureau of Economic Analysis, Gross Domestic Product by State, 2025

³ RME Associates, *Plan for Boosting Residential Material Recovery and Recycling in Alabama*, August 2016

⁴ Alabama Code 22-27-1 et seq., Solid Wastes and Recyclable Materials Management Act (SWRMMA), 2008

Chapter 1: Alabama's Recycling System

History of Recycling in Alabama

Alabama's organized approach to recycling began in 1989, when the Legislature passed Alabama Law 89-824. That law required the state to create its first Solid Waste Management Plan, which was developed and finalized between 1989 and 1991.⁵ The plan gave local governments their first real framework for thinking about waste and recycling. At that time, the state was only recycling about 5% of its waste stream, and local governments were encouraged, though never required, to work toward a 25% recycling rate.⁶ Alabama's commercial and industrial recycling sector, however, was already well established by this point. KW Plastics, now one of the world's largest post-consumer plastics recyclers, was founded in Troy in 1981 and had launched a dedicated post-consumer recycling division by 1993⁷, more than a decade before the state adopted its first formal residential recycling framework. Progress over the next fifteen years was slow and by the mid-2000s, recycling and beneficial reuse had climbed only to around 8.3% of non-hazardous waste, a sign that without a formal mandate, statewide coordination was hard to achieve.⁸

That changed in 2008, when the Legislature passed the Solid Wastes and Recyclable Materials Management Act, known as SWRMMA. The law set a formal 25% waste reduction goal for the first time, created the Alabama Recycling Fund (ARF), and put in place a \$1.00 per ton fee on waste disposed of in landfills.⁹ Revenue from the fee goes towards the Solid Waste Program including ADEM staffing, the Alabama Recycling Fund, and the Unauthorized Dump Remediation Fund. Since the ARF launched in 2009, it has funded dozens of local recycling programs across the state. Alabama's reporting structure under SWRMMA kept things relatively straightforward with ADEM managing the state plan, regional planning agencies filing annual needs assessments, and counties putting together local solid waste plans that include recycling. Reporting recycling data was required by the regulations for registered facilities to submit it.

As the system grew, Alabama also worked to clarify what kinds of facilities were part of it. Under state rules, a Materials Recovery Facility (MRF) is a solid waste treatment facility that pulls recyclable material out of mixed waste, while a Recovered Materials Processing Facility (RMPF) handles source-separated recyclables that have already left the waste stream and are no longer considered municipal solid waste.¹⁰ These distinctions matter because they determine how facilities are permitted and regulated. ADEM updated its registration requirements for both facility types in 2025, requiring all facilities to re-register under the updated rules starting in February 2026.¹¹

⁵ Alabama Solid Waste Management Plan, 1989–1991, as referenced in the 2008 Alabama Solid Waste Management Plan

⁶ Alabama Solid Waste Management Plan, 1989–1991, as referenced in the 2008 Alabama Solid Waste Management Plan

⁷ <https://www.kwplastics.com/our-history/>

⁸ Alabama Solid Waste Management Plan, 2008

⁹ Alabama Solid Wastes and Recyclable Materials Management Act (SWRMMA), Ala. Code 22-27-1 et seq. (2008)

¹⁰ Alabama Solid Wastes and Recyclable Materials Management Act (SWRMMA), Ala. Code 22-27-1 et seq. (2008)

¹¹ ADEM Administrative Code Chapter 335-13-3, amended effective August 15, 2025

Taken together, the arc from 1989 to today reflects real progress. Each major step, the first state plan, the creation of the ARF, the formal facility definitions, and the 2025 regulatory update, was built on what came before it and moved Alabama closer to a more complete recycling system.

2016 Recycling Report Recommendations

The August 2016 report [*“A Plan for Boosting Residential Material Recovery and Recycling in Alabama”*](#) was prepared for Southeast Recycling Development Council (SERDC) and the Alabama Recycling Partnership by RME Associates to evaluate the state’s material recovery and recycling system, providing eight best practice recommendations.¹² The table below provides a summary of the strategies recommended in the 2016 report and lays the groundwork for the updates and recommendations compiled and analyzed by the RRS Team.

Table 1 - 2016 Report Recommendations

RECOMMENDATION	SUMMARY
1. Creation of a “Hub-and-Spoke” System	Optimize collection, transportation, processing, and marketing of recyclables through eight regional "hubs" (central MRF processing locations) connected by "spoke" transportation corridors to transfer stations in smaller towns, giving the entire population access to recycling.
2. Support Cart-Based Single-Stream Curbside Recycling	Encourage communities with over 5,000 people to offer cart-based single-stream recycling. Curbside programs should exclude glass, with communities instead providing and promoting glass drop-off centers.
3. Provide Comprehensive Drop-Off Recycling	Encourage and incentivize drop-off recycling access, especially for multi-family and rural residents without curbside service. Sites should accept the same materials as curbside programs plus glass, appliances, scrap metal, and lead-acid batteries, and should be centrally located and staffed.
4. A Common Suite of Accepted Materials	Develop a statewide list of accepted recyclable materials in consultation with processors and end markets, supported by a toolkit of consistent material descriptions and terms for local governments to adopt.
5. Standardized Education and Outreach	Establish a consistent statewide recycling brand and theme, with tools to help communities adopt it; require state grant recipients to use the theme. Emphasize treating recycling as a behavior shaped by social norms.
6. Improved Data Gathering	Use a program like Re-TRAC to ensure collectors and markets report annual data to the state, supported by workshops with key participants to build buy-in around data needs and benefits.
7. Tools for Higher Performance	Adopt program strategies proven to boost performance: universal recycling access, state-level disposal restrictions (e.g., aluminum cans, rigid plastics, beverage containers), pay-as-you-

¹² RME Associates, *A Plan for Boosting Residential Material Recovery and Recycling in Alabama*, August 2016

	throw pricing, and hauler licensing requirements that bundle trash and recycling costs.
8. Restructure Grant Program	Restructure the state recycling grant program to target areas with maximum material recovery potential, align funding with system goals (cart-based collection, drop-off infrastructure, material movement, large-scale MRF support), and require clear grant reporting requirements.

Compared to 2016, Alabama has made progress in building the foundation for recycling through a well-established grant program, updated recycling regulations, and streamlined reporting systems. Although Alabama has made advances in the years since the 2016 report, many of the recommendations listed above remain only partially implemented. This report pinpoints where gaps in Alabama's recycling system still exist and how the state can continue to support improved and clearer reporting, widespread access to recycling programs, and increased funding to communities looking to strengthen their programs.

Administrative Functions

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)

Since SWRMMA passed in 2008, ADEM has steadily grown its solid waste and recycling programs to meet the state's needs. In the first years after the law passed, ADEM focused on the most urgent tasks: clearing a backlog of permits and complaints, starting the [ARF grant program](#), launching the [Landfill Operator Certification Program](#), and creating rules for registering recycling facilities. Over time, ADEM added new rules as needed, covering things like wood ash disposal, rules for reusing byproduct materials, and updates to how the public is notified about permit changes. Before 2018, ADEM had EPA approval for most of its solid waste program, but one piece, its financial assurance rules, was still under review. In February 2018, EPA finished reviewing that piece and approved it, giving ADEM full authority over all solid waste issues in the state.¹³

ADEM has also kept improving how it runs its programs. The ARF grant program has been updated, shifting its focus toward partnership projects and collection equipment that support a "hub-and-spoke" system, an approach shaped in part by the 2016 recycling study. ADEM also expanded its inspection program to check landfills more often and improve compliance monitoring. In 2020, ADEM switched from its old system, Re-TRAC Connect, to a new platform called [AEPACS](#). This combined facility registrations, grant applications, and reporting into one online system, making the process smoother and the data more accurate. More recently, ADEM launched the Unauthorized Dump Right of Way (UDROW) and Scrap Tire Right of Way (STROW) grant programs to help clean up debris along roadways,¹⁴ showing that ADEM keeps looking for gaps in service and finding ways to fill them at the local level.

STAFFING LEVELS

Program staffing rose from 32 full-time equivalents (FTEs) in FY 2014 to 41 FTEs by FY 2024. This corresponds with increasing oversight and program management needs as disposal activity increased.

¹³ <https://adem.alabama.gov/programs/land/landforms/SolidWasteReport18-20.pdf>

¹⁴ <https://www.adem.alabama.gov/sites/default/files/legacyfiles/programs/land/landforms/SolidWaste2022-2024BiennialReport.pdf>

Table 2 - ADEM Staffing Levels FY 2014 - FY 2024 (Full-Time Equivalents, FTE)

REPORTING PERIOD	FTE
FY 2014-2016	32
FY 2016-2018	37
FY 2018-2020	40
FY 2020-2022	42
FY 2022-2024	41

FUNDING

A solid waste landfill tip fee surcharge was also established through SWRMMA, and it has been essential in supporting ADEM's work. A fee is assessed on waste disposed in Alabama landfills at a current rate of \$1.00 per ton, or \$0.25 per cubic yard, which is used to fund solid waste and recycling programs in the state. However, a recent proposal to increase the fee to \$1.30 per ton was approved in mid-August 2026, with the new rate effective January 1, 2027.¹⁵ The disposal fee revenues are allocated across three program areas:

- **Solid Waste Program Funds** (approximately 45% of total fee revenue) support the staffing and administrative capacity of ADEM's Solid Waste Program, including compliance and reinforcement staff, landfill inspectors, engineering support, recycling staff, and legal staff.
- **The Alabama Recycling Fund** (25% of total fee revenue) promotes local recycling efforts by providing reimbursement grants to local governments to develop, implement, and enhance recycling programs.
- **Unauthorized Dump (UAD) Remediation Fund** (approximately 25% of total fee revenue) is dedicated to the investigation and cleanup of unauthorized dump sites across the state.

Annual fee collections have grown steadily over the reporting period, rising from approximately \$5.4 million per year in the early program years to over \$8.6 million annually by FY 2023 and 2024, which reflects increased disposal volumes and consistent fee enforcement. Revenues generated through this fee have enabled ADEM to expand staffing and operational capacity for permitting inspections, enforcement, and remediation activities. Table 3 below shows how the funds allocations have shifted across each funding category from FY 2014 through FY 2024.

Table 3 - Solid Waste, Recycling, and UAD Remediation Program Funds FY 2014 – FY 2024

FUNDING PERIOD	SOLID WASTE & RECYCLING FUNDS ALLOCATED	RECYCLING FUNDS ALLOCATED	UAD REMEDIATION FUNDS ALLOCATED
FY 2014	\$ 1,604,381	\$ 2,081,123	\$ 1,796,571
FY 2015	\$ 1,652,969	\$ 2,129,372	\$ 1,217,147
FY 2016	\$ 1,652,997	\$ 1,252,968	\$ 1,070,557

¹⁵ Alabama Department of Environmental Management. *Notice of Intended Action: New Chapter 335-1-8, "Other Fees."* Filed with the Legislative Services Agency, Administrative Procedure Division, May 15, 2026. Available at: <https://admincode.legislature.state.al.us/api/filing/69f2686d6377832a14e7ace3/filing>

FY 2017	\$ 3,403,750	\$ 944,562	\$ 997,411
FY 2018	\$ 3,591,700	\$ 1,247,186	\$ 517,920
FY 2019	\$ 3,962,730	\$ 1,623,560	\$ 228,360
FY 2020	\$ 4,182,590	\$ 1,467,330	\$ 1,429,250
FY 2021	\$ 4,031,707	\$ 1,470,330	\$ 228,362
FY 2022	\$ 4,249,056	\$ 1,700,000	\$ 1,429,251
FY 2023	\$ 4,159,834	\$ 2,311,020	\$ 2,311,020
FY 2024	\$ 4,074,408	\$ 2,263,560	\$ 2,263,560

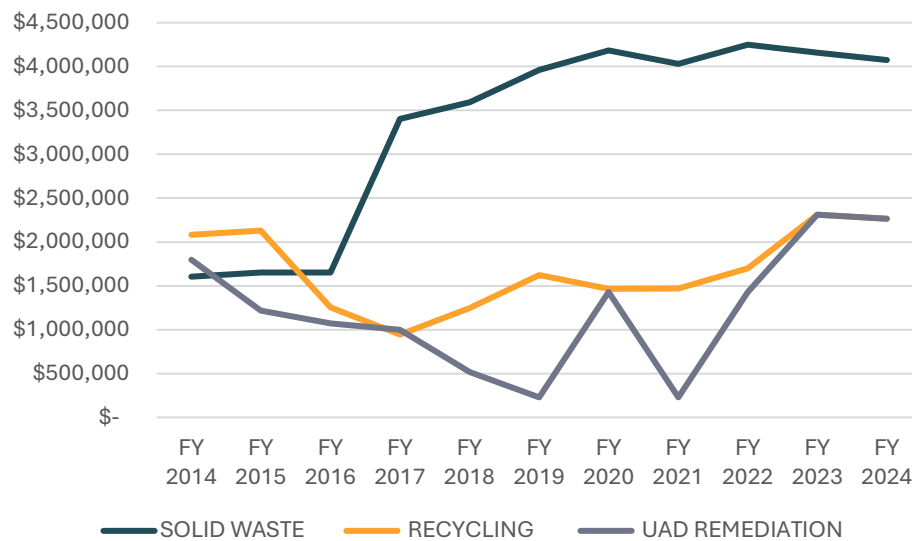


Figure 1 - Solid Waste, Recycling, and UAD Remediation Program Funds Allocated FY 2014 - FY 2024

Between FY 2014 and FY 2024, funding across all three program areas fluctuated year to year, but each ended the period at a higher level than where it started. Solid waste program funding grew the most steadily, roughly doubling after FY 2016 and remaining strong through FY 2024. Recycling program funding dipped to its lowest point in FY 2017 before climbing to its highest level in FY 2023. UAD remediation funding was the most volatile of the three, swinging up and down several times over the period, climbing to its highest level in FY 2023 before dipping slightly in FY 2024.

ROLES OF JURISDICTIONS

Alabama's solid waste and recycling system is implemented locally and regulated at the state level. In their administrative capacity, cities, counties, and solid waste authorities are responsible for adopting and enforcing local ordinances and for implementing recycling programs and other waste diversion practices within their jurisdictions, operating within the framework set by SWRMMA and ADEM. Under SWRMMA, each of Alabama's 67 counties¹⁶ is required to prepare a local solid waste

¹⁶ U.S. Census Bureau

management plan covering both incorporated and unincorporated areas, while each of the state's 465 municipalities may either operate under their county's plan or develop an independent plan of their own.

Alabama's twelve regional planning and development commissions carry a separate, standing duty: each must prepare and annually update a regional solid waste needs assessment and submit it to ADEM and to the local governments in its region.¹⁷ Of the twelve commissions, only the West Alabama Regional Commission (WARC) has a needs assessment publicly posted; however, the posted document is dated 2003, meaning the one plan available for public review has gone more than two decades without an update. ADEM confirmed it has not received a regional solid waste needs assessment from any of the other eleven regional commissions. Because this is a regional planning function, coordinating and submitting updated assessments would fall to the regional commissions and the local communities within each region, rather than to any centralized, hub-and-spoke style process. ADEM has indicated it would accept and file updated assessments if they were submitted. Given how long these documents have gone without renewal, there is a clear opportunity for the regional commissions to bring their needs assessments current and for that update process to be more fully incorporated into each region's overall planning function, reinforcing the regional planning structure already established under state law, rather than shifting that responsibility down to county-level Solid Waste Management Plans.

Counties and municipalities may also form regional Solid Waste Disposal Authorities, entities authorized under Alabama Code Title 11-89A,¹⁸ that manage waste and recycling services across multiple jurisdictions through a single joint plan rather than requiring each locality to administer its own program separately. In practice, these authorities take a range of forms depending on local needs. The Solid Waste Disposal Authority of the City of Huntsville, formed in 1985, is a public nonprofit corporation that finances and operates the shared solid waste system for Huntsville, Madison, and Madison County, including a waste-to-energy facility, a landfill, and a curbside recycling program.¹⁹ In Cullman, the city and county created a joint Solid Waste Disposal Authority in 2023 specifically to take over ownership of the county landfill, with a five-member board split between city and county appointees.²⁰ In Washington County, the Solid Waste Disposal Authority (WASDA) operates more narrowly as a single county agency managing a municipal solid waste landfill along with electronic waste and household hazardous waste collection, rather than serving multiple jurisdictions.²¹ While some cities and counties have come together to form solid waste disposal authorities, many still operate on their own or with private contractors.

ALABAMA RECYCLING FUND (ARF)

State recycling funding turns goals and policy into action at the community level. The case studies below show how ARF has supported real improvements in access, infrastructure, and program performance across the state. Beyond individual projects, this section also looks at how demand for ARF funding has changed over time.

Alabama has maintained steady, ongoing investment in local recycling through the ARF since its launch in 2009. As of 2026, the program has awarded more than \$35 million to municipalities, counties, non-profit organizations, and regional partnerships to help establish and grow voluntary recycling programs statewide.²² Many of the same applicants, particularly

¹⁷ Code of Ala. 1975, 22-27-46; ADEM Admin. Code 335-13-9, Appendix A (Solid Waste Management Plan).

¹⁸ Code of Alabama 1975, Title 11, Chapter 89A – Solid Waste Disposal Authorities.

¹⁹ Solid Waste Disposal Authority of the City of Huntsville. <https://swdahsv.org/>

²⁰ "County, City to form Solid Waste Disposal Authority," The Cullman Tribune, July 19, 2023. <https://www.cullmantribune.com/2023/07/19/county-city-to-form-solid-waste-disposal-authority/>

²¹ Washington County, Alabama – Solid Waste Authority (WASDA). <https://wcalabama.com/solid-waste-authority/>

²² ADEM, Alabama Recycling Fund Grant Program data, FY2010–FY2026; ADEM Solid Waste Biennial Report, October 1, 2022–September 30, 2024

municipalities and regional partnerships, apply year after year, a sign that local programs have come to rely on ARF as a core funding source. In FY 2023, the program received \$4.55 million in requests and awarded \$2.18 million.²³ ADEM ran a supplemental round (FY 2023S) using unspent funds carried over from previous fiscal years, which carried forward FY 2023 applications and resulted in an additional \$1.59 million awarded. FY 2023S is best understood as an extension of FY 2023 rather than a separate grant cycle.

FY 2024 saw the sharpest jump in demand the program has recorded, with requests reaching \$8.78 million and awards totaling \$6.0 million.²⁴ Some of those funds carried over into later cycles due to project timing and scheduling. FY 2025 continued the trend of high demand, with \$6.29 million requested and \$2.58 million awarded. Across the full history of the program:

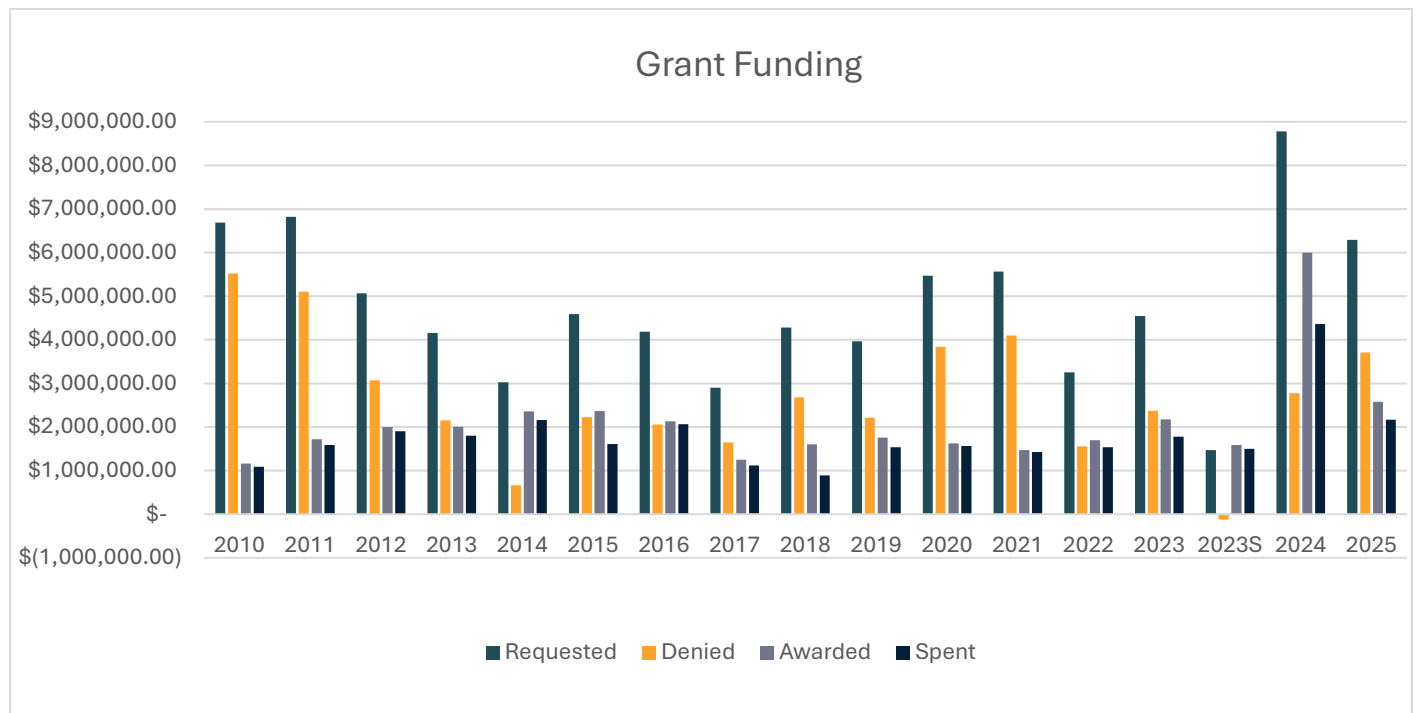
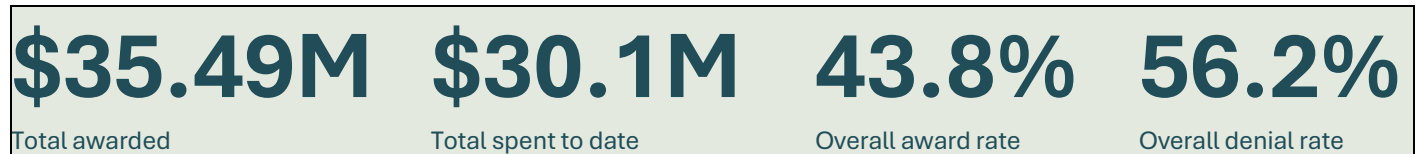


Figure 2 - Grant Funding: Requested, Denied, Awarded, Spent

Sourced from ADEM, Alabama Recycling Fund Grant Program data, FY 2010–FY 2025

²³ ADEM, Alabama Recycling Fund Grant Program data, FY2010–FY2025; ADEM Solid Waste Biennial Report, October 1, 2022–September 30, 2024

²⁴ ADEM, Alabama Recycling Fund Grant Program data, FY2010–FY2025; ADEM Solid Waste Biennial Report, October 1, 2022–September 30, 2024

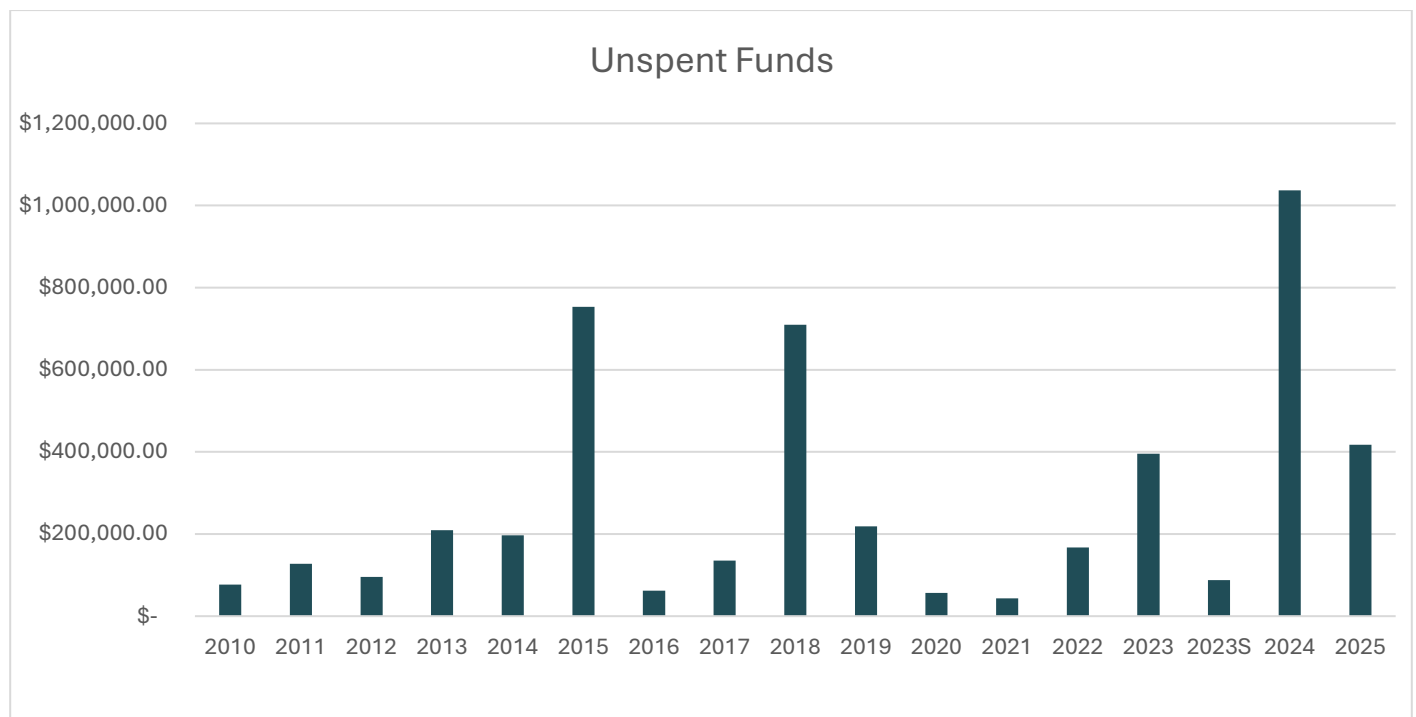


Figure 3 - Grant Funding: Unspent Funds

Sourced from ADEM, Alabama Recycling Fund Grant Program data, FY 2010–FY 2025

Across FY 2010–FY 2025, approximately 85% of all awarded funds have been spent, totaling \$30.10 million out of \$35.49 million awarded. That is a strong follow-through rate and reflects local governments' ability to execute funded projects once awards are made. The remaining 16% represents funds awarded but not yet drawn down by grantees as of this report. In years when money went unspent, the cause was generally project timing, procurement delays, or approved extensions, not program failure. ADEM does not reclaim these dollars but rolls them into the following fiscal year's award cycle. Several years came close to full utilization, pointing to consistent local administrative capacity.

What is also clear is that demand for ARF funding has consistently and significantly outpaced available dollars. Across the full program history, more than half of all funding requests, about 56%, could not be awarded. As request volumes have grown, particularly the sharp increase seen in FY 2024, the distance between what communities need and what the program can provide has widened. The funding gap is not a reflection of weak local interest or poor project quality. It reflects a ceiling that has constrained how much of that demand the program can meet in a given year.

The funding gap is not a reflection of weak local interest or poor project quality. It reflects a ceiling that has constrained how much of that demand the program can meet in any given year.

Beyond the funding totals discussed above, ARF grants have supported a range of project types across recipient communities. The chart below reflects these project types, ranked from most to least common: equipment purchases, collection containers, recycling carts and education (tied), and facility changes. Because individual grants often fund multiple project types, these shares reflect relative frequency rather than distinct portions of total funding.

ARF Grant Allocation by Project Type

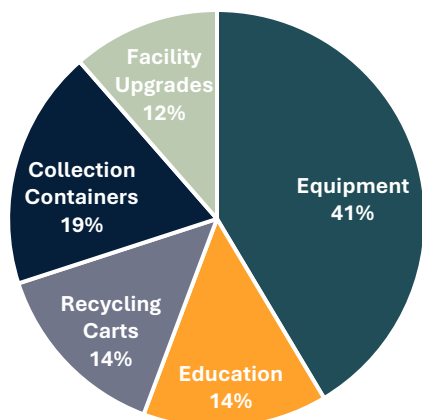


Figure 4 - ARF Grant Allocation by Project Type

Sourced from ADEM, Alabama Recycling Fund Grant Program data, FY 2010–FY 2025

Together, these investments in equipment, collection containers, and recycling carts represent the operational backbone of ARF's impact, translating directly into expanded access and improved system performance across Alabama communities. The case studies below illustrate these meaningful, measurable gains in recycling access and participation throughout the state.

ARF CASE STUDIES

Baldwin County

Baldwin County, Alabama (population 261,608), is one of the fastest growing counties in the state but historically lacked countywide curbside recycling service due to its rural nature. The county did not have a facility to sort and process recyclables, which meant materials would have to be transported to facilities outside the area. Rapid population growth also occupied existing waste infrastructure, which created the need for significant upgrades. In addition, recycling access varied across municipalities leaving most residents limited to a small number of drop-off sites that did not provide consistent or convenient service. Recognizing this gap, the Baldwin County Solid Waste Authority (SWA) initiated a multiyear plan to expand residential recycling, anchored by the construction of a new RMPF and the phased rollout of a curbside program.

In FY 2025, Baldwin County received \$419,977 through ARF to purchase a new side-load recycling collection truck. To manage the complexity of offering service across 14 municipalities with separate customer databases and utility systems, the county divided the service area into geographic pods for phased rollout, with the new side-load truck dedicated to areas that had never previously received recycling service.

The truck entered service in FY 2025, aligning with the county's schedule for phased route deployment. By mid-2025, curbside recycling had been offered to 39,175 households, with 2,800 already enrolled. Participation is expected to rise substantially as outreach and service availability increase. The truck is dedicated to servicing unincorporated areas and municipalities with no

prior recycling infrastructure, allowing Baldwin County to steadily expand access across 14 local governments with diverse utility and customer data systems. The ARF-funded collection vehicle directly enabled Baldwin County to:

- Launch a new curbside recycling service in areas previously without access, supporting statewide goals to increase residential recycling.
- Provide a reliable feedstock stream to Baldwin County's RMPF, strengthening the long-term economic viability of local recycling.
- Build toward countywide coverage by the end of 2026, marking one of the most significant expansions of residential recycling access in Alabama.

Although participation is currently at 7%, the county anticipates reaching 30% enrollment, in line with benchmarks from comparable communities highlighted in national recycling case studies.

Baldwin County found that using an ARF grant for capital equipment both accelerated the launch of its program by closing local budget gaps and allowed for systematic expansion rather than piecemeal growth. It has catalyzed the launch of a new countywide, curbside recycling system and ensuring the long-term success of the county's RMPF investment. By providing essential collection capacity needed to reach residents, the grant is directly improving recycling access, participation, and system resilience.

City of Florence

Florence is a regional hub in the Shoals area, serving as the county seat of Lauderdale County and home to more than 40,000 residents. Its recycling program, first launched in 1992, has long been supported by engaged residents and nearby manufacturers who rely on locally recovered materials.

Beginning in 2016, the City has worked with ADEM over several grant cycles to vastly improve efficiency with the installation of a conveyor system, fiber screen, steel sorting magnet, and eddy current. In FY 23, Florence received \$191,818 for the installation of Eddy current, trailers, recycling dumpsters, and an enclosed trailer. These improvements transitioned the facility from manual sorting to a more automated, higher throughput system that better serves the community and regional industries.

The City's transition from recycling bins to carts also played a major role in increasing resident participation. The cart rollout was supported through a coordinated effort between the city,

Lessons Learned

- Confirm end-market needs before collecting new materials.
- Lean on regional partnerships (e.g., a hub-and-spoke relationship with the county).
- Modernize in stages rather than attempting everything at once.
- Strong education and outreach must continue even after equipment and carts are in place.

Lessons Learned

- Comprehensive planning is essential, both collection and processing infrastructure must be aligned before scaling curbside.
- Procurement timelines are longer than expected, requiring ARF-funded projects to be planned across multiple fiscal years.
- State recycling grants are most effective when used annually to build coordinated system components, rather than isolated improvements.

The Recycling Partnership, and ADEM. The carts were radio-frequency identification (RFID) enabled, which allowed Florence to track set outs and measure participation during a two-year period. As a result, participation rose to nearly 70%, up from roughly 20% before the introduction of carts. Annual processing throughput at the Florence Recycling Center increased from approximately 2,400 tons to about 3,500 tons due to the upgrades at the facility.

Florence staff described ADEM as straightforward to work with and credited the grant program with changing how elected officials viewed the recycling program. Before ARF funding arrived, the recycling center was often seen primarily as a cost to the city. Grant-funded improvements helped showcase the program's value, making it easier to promote its benefits to elected officials and the community. Through it all, the city gained insight into what makes a small recycling program resilient.

City of Guntersville

Guntersville is a lakeside community in Marshall County. With a population of 9,242, the city serves residents and visitors drawn to its recreational amenities and growing commercial base. Before receiving ARF funding, Guntersville's recycling program operated out of an 8,000 square-foot facility with aging equipment, processing roughly 109 to 115 tons of material per month. The program had real potential but needed investment to grow.

Through \$344,547 awarded across fiscal years 2024 through 2026, Guntersville modernized its operations in meaningful steps. The funding supported the purchase of a glass pulverizer, which converts glass back into sand, along with bin trailers, forklifts, trucks, and other supporting equipment. These investments, combined with the city's own commitment to relocate to a 28,000 square-foot facility, transformed what the program could do. Monthly processing output grew to approximately 200 tons, nearly double the previous average, and the expansion added roughly six temporary staffing positions to handle the increased volume.

Looking ahead, Guntersville's most pressing needs are a new baler, additional storage space, and a dedicated structure to house the glass pulverizer and future equipment. The current facility's electrical and water infrastructure was originally sized only for immediate needs, not future growth, a mistake that was corrected when planning the new building. The team fixed this by installing extra electrical and water capacity now, so the facility can expand later without needing major upgrades.

Lessons Learned

- Ask about reappropriation; ADEM allowed Guntersville to redirect funds from a lower priority purchase to a more immediate need.
- Attend the January grant workshop to understand what ADEM is looking for in an application.
- Look beyond ARF for funding (e.g., Keep Alabama Beautiful, Foam Recycling Coalition).
- Plan infrastructure (electrical, water) for future growth up front.

Solid Waste Infrastructure

Solid waste and recycling infrastructure form the foundation of an effective materials management system. Understanding Alabama's existing solid waste and recycling infrastructure is essential for identifying where gaps exist and what opportunities for improvement the state has. The following section summarizes Alabama's current disposal infrastructure, processing infrastructure, and end use markets.

DISPOSAL INFRASTRUCTURE

There are three types of permitted landfills in Alabama, construction/demolition landfills, industrial landfills, and municipal waste landfills. The definitions below are set by Alabama Administrative Code 335-13-1.²⁵

- **Construction/Demolition-Inert Landfill Unit (C/DLF)** - a discrete area of land or an excavation that receives construction/demolition waste, and/or rubbish and/or water treatment (alum) sludge, foundry waste meeting rule 335-13-4-.26(3), and that is not a land application unit, surface impoundment, or injection well as those terms are defined in this rule.
- **Industrial Landfill (ILF) Unit** - a discrete area of land or an excavation that receives industrial solid waste and may in addition receive construction/demolition waste and/or rubbish and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined in this rule.
- **Municipal Solid Waste Landfill (MSWLF) Unit** - a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined in this Rule. A MSWLF unit also may receive other types of solid wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, industrial solid waste, construction/demolition waste, and/or rubbish. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion. A municipal solid waste landfill unit is a sanitary landfill.

These facilities are required to be permitted by the ADEM Solid Waste Branch, with permits active for a fixed term, not exceeding ten years.²⁶ Information regarding landfills in the state can be found on ADEM's Alabama Environmental Permitting and Compliance System (AEPACS) nSite Explorer. As of July 2026, there are 170 landfills permitted in the State. Figure 5 shows the geographic distribution of disposal infrastructure across the state.

²⁵ <https://admincode.legislature.state.al.us/administrative-code/335-13-1-.03>

²⁶ [https://admincode.legislature.state.al.us/administrative-code/335-14-8-.05#:~:text=\(a\)%20Permits%20under%20Division%20335,date%20of%20issuance%20or%20reissuance.](https://admincode.legislature.state.al.us/administrative-code/335-14-8-.05#:~:text=(a)%20Permits%20under%20Division%20335,date%20of%20issuance%20or%20reissuance.)

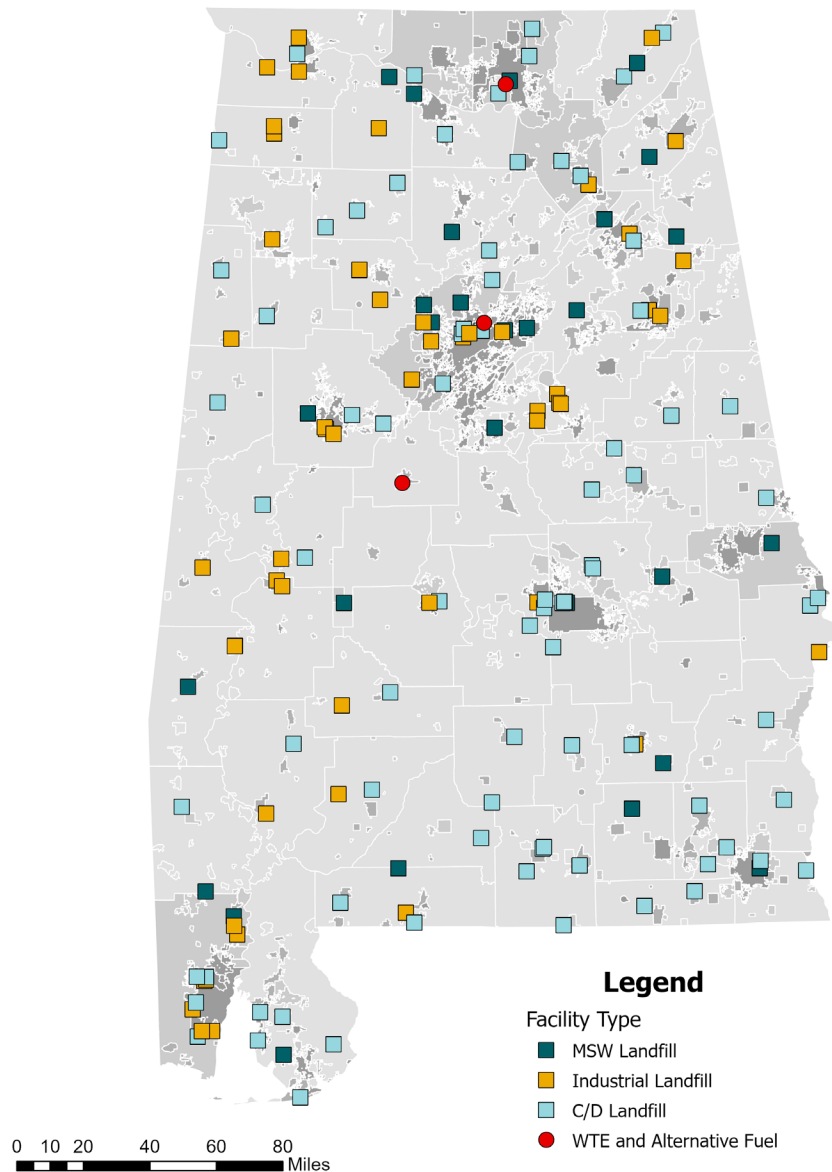


Figure 5 - Solid Waste Disposal Infrastructure in Alabama

PROCESSING INFRASTRUCTURE

Alabama's processing infrastructure is comprised of multiple facility types, including Recovered Materials Processing Facilities (RMPFs), Materials Recovery Facilities (MRFs), compost facilities, Energy Recovery Facilities (ERFs), and scrap tire processor facilities.

- **RMPFs** – as defined under Alabama Administrative Code 335-13-1, a facility primarily engaged in the storage, processing, and resale or reuse of recovered materials. Within Alabama's RMPF infrastructure, this report further distinguishes facilities by the type of material they primarily handle, an operational distinction rather than a separate registration category, to better illustrate how these facilities function across the state:
 - *Residential Processing* – RMPFs that take in curbside, single-stream residential recyclables. Because residential material arrives commingled and includes a broad mix of plastics, metal, fiber, and glass, these

facilities typically operate a full automated sorting line to separate the load into marketable commodities. A typical line includes screens or trommels to sort material by size, magnets to pull ferrous metal, eddy currents to pull non-ferrous metal like aluminum, and optical sorters to separate plastics by resin type, often supplemented with manual sorting stations.

- *Commercial Processing* – RMPFs that primarily or only receive material from the commercial sector, most often fiber (paper and cardboard) or metal, and may accept limited quantities of residential material alongside it. Because commercial loads are typically source-separated by material and made up of one or two material types, these facilities generally require less automated sorting equipment than residential processing facilities and may rely more heavily on manual sorting and baling to prepare material for end markets. For those that do sort mixed material, technology like trommels, eddy currents, magnets, and optical sorters may be commonly used.
- **Materials Recovery Facility (MRF)** – as defined under Alabama Administrative Code 335-13-1, a solid waste management facility that provides for the extraction from solid waste of recyclable materials, materials suitable for use as a fuel or soil amendment, or any combination of those materials. A MRF is deemed a solid waste treatment facility. Unlike RMPFs, which process source-separated recyclables that have already left the waste stream, MRFs pull recyclable material out of mixed municipal solid waste.
- **Energy Recovery Facility (ERF)** – a facility that recovers energy from solid waste, most commonly through combustion, to generate electricity, steam, or fuel. ERFs are a valuable part of Alabama's broader materials management system, but they are more accurately understood as material and energy recovery rather than recycling in the traditional sense. ERFs are not included in Figure 6 or Figure 7.

Prior to August 2025, there were also facilities called “Recycling Centers”, or “registered recycling facilities”. In August 2025, Alabama Administrative Code was updated, requiring these facilities (facilities that use the PRF0000- registration number) to submit a new application to ADEM to be registered as a RMPF or MRF. The former registration expired in February 2026, and at the time of this report ADEM is actively reviewing and adding MRFs and RMPFs to the AEPACS database. As of July 2026, there are 67 facilities still listed under the legacy 'recycling registration' (PRF0000-) status in the ADEM AEPACS database, even though that registration type expired in February 2026. Of these 67, some have submitted a new application to register as an RMPF or MRF and are awaiting ADEM's review, while others have not yet submitted an application at all. Because their status has not been finalized, none of these 67 facilities are included in the July 2026 RMPF and MRF facility totals below.

- **Recycling Center** – for the purposes of this report and Figure 6, a recycling center refers to any recycling facility that does not fall into the RMPF or MRF categories above. This includes the 67 facilities still transitioning from "recycling registration" status, as well as drop-off locations, hand-sort processing operations, bale-and-ship facilities, and other source-separated processing sites. Some of these facilities may have a registration application pending ADEM review.

Figure 6 shows the geographic distribution of recycling infrastructure in Alabama.

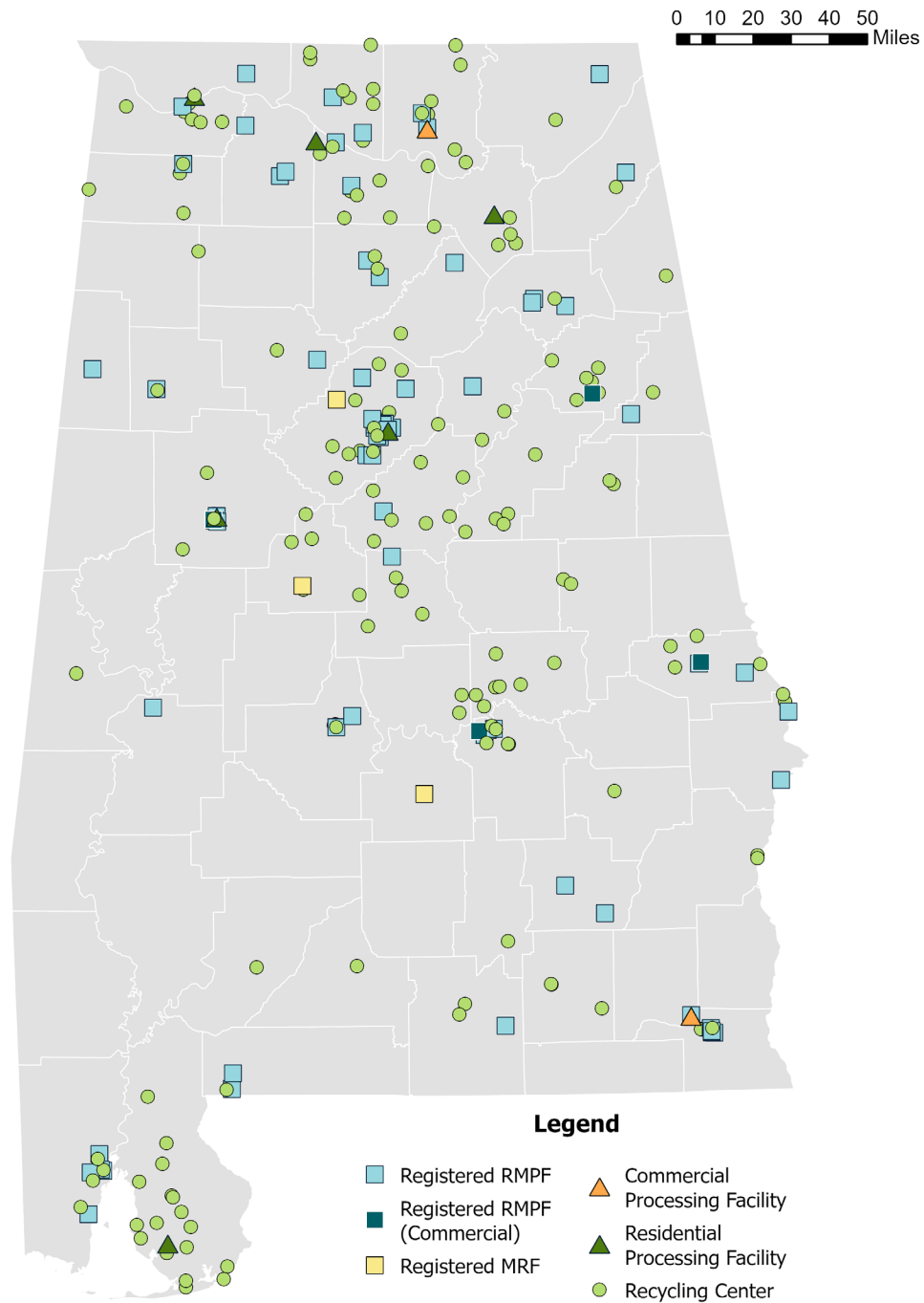


Figure 6 - Recycling Infrastructure in Alabama

Figure 7 narrows in on the facilities that process residential single-stream recyclables, showing the geographic distribution of Alabama's RMPF infrastructure, more specifically residential processing as defined above, serving curbside collection programs. Figure 7 also displays existing recycling facilities in states that border Alabama. Tennessee, Georgia, and Florida have recycling infrastructure within 100 miles of the Alabama state border, but Mississippi does not.

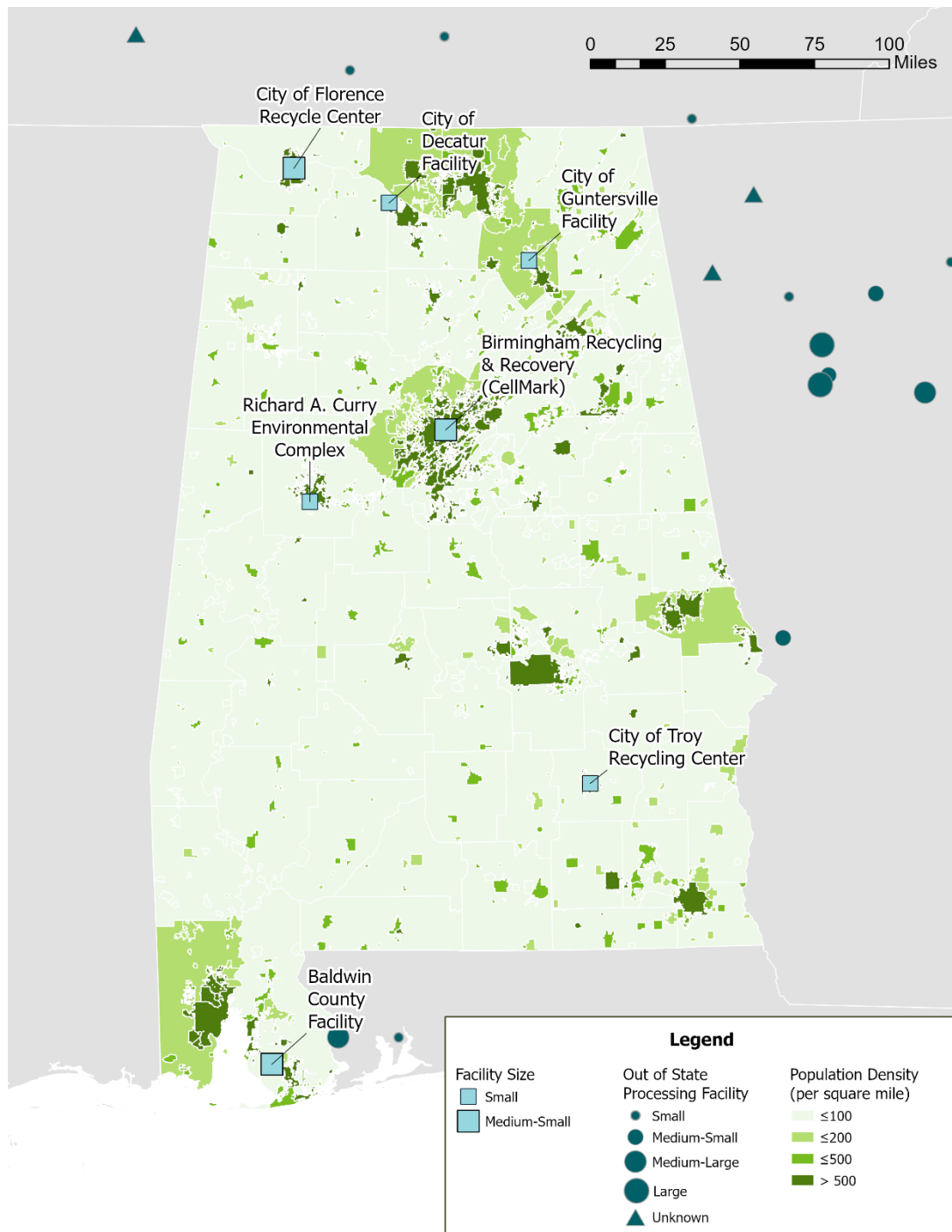


Figure 7 - Facilities Processing Residential Single-Stream Recyclables in Alabama

RECOVERED MATERIALS PROCESSING FACILITIES

A Recovered Material Processing Facility (RMPF), as defined in Administrative Code 335-13-1-.03, is “a facility primarily engaged in the storage, processing, and resale or reuse of recovered materials. A RMPF is not a solid waste management facility; however, any solid waste resulting from the operation of a facility shall be subject to all applicable laws and regulations relating to solid waste and shall be deemed to be generated for purposes of reporting pursuant to solid waste reduction goals,

at the point of collection of the recovered materials from which the solid waste resulted.” A RMPF may not receive, store, process or transfer recovered material without being properly registered with the Department.²⁷

RMPFs are processing facilities that take residential or commercial recycling and separate it for further processing or sale to an end market. They play a critical role in the recycling infrastructure in Alabama. RMPFs are required to be registered with ADEM, with the registration being valid for 5 years. Each facility is also required to prepare and submit an annual report form to ADEM, that includes all recovered materials or recyclable materials transferred, sold, or conveyed out of state, to further processors, to materials brokers in the state, or to end-use manufacturing facilities in Alabama.

In August 2025, Alabama Administrative Code was updated, requiring facilities formally known as “registered recycling facilities” (facilities that use the PRF0000- registration number) to submit a new application to ADEM to be registered as a RMPF or Materials Recovery Facility. The former registrations expired in February 2026, and at the time of this report ADEM is actively reviewing and adding RMPF facilities to the AEPACS database. As of July 2026, there are 68 RMPFs registered by ADEM, but because ADEM is currently reviewing facility registrations, this number is expected to grow.

MATERIALS RECOVERY FACILITIES (MRFs)

A Material Recovery Facility (MRF), as defined in Administrative Code 335-13-1-.03, is a solid waste management facility that provides for the extraction from solid waste of recyclable materials, materials suitable for use as a fuel or soil amendment, or any combination of those materials. A MRF shall be deemed to be a solid waste treatment facility.

MRFs are processing facilities that take in mixed waste, or MSW that still contains recyclable material, and they pull what can be recycled from the solid waste stream. This is an important distinction for Alabama because traditional recycling processing facilities are typically called “MRFs” in most states, but Alabama refers to those as RMPFs, as described in the section above. While these facilities can separate and market recyclable material, like aluminum, certain commodities, such as fiber, end up being too contaminated to sell to an end user.

Like RMPFs, MRFs are required to be registered with ADEM, with the registration being valid for 5 years. Each facility is also required to prepare and submit an annual report form to ADEM, that includes all recovered materials or recyclable materials transferred, sold, or conveyed out of state, to further processors, to materials brokers in the state, or to End-Use Manufacturing Facilities in Alabama.

In August 2025, Alabama Administrative Code was updated, requiring facilities formally known as “registered recycling facilities” (facilities that use the PRF0000- registration number) to submit a new application to ADEM to be registered as a RMPF or MRF. The former registrations expired in February 2026, and at the time of this report ADEM is actively reviewing and adding MRFs to the AEPACS database. As of July 2026, there are two MRFs registered by ADEM, but because ADEM is currently reviewing facility registrations, this number is expected to grow.

COMPOST FACILITIES

According to Alabama Administrative Code, a “composting facility” means the physical site or operation location where the composting of putrescible solid waste from residential, commercial, or industrial property for revenue or non-revenue

²⁷ <https://admincode.legislature.state.al.us/administrative-code/335-13-3>

generating use occurs.²⁸ Composting facilities in Alabama are generally required to obtain a permit from ADEM, though facilities that meet specific exceptions outlined in Alabama Administrative Code are not required to do so. ADEM does not currently have any permitted composting facilities in the state; the composting operations that do exist all fall under this permitting exception, which is why none appear in the AEPACS database. Review of facilities in RRS's facility database shows there are eight known compost facilities in the state operating under this exception.

Although Alabama has an established regulatory framework for commercial composting facilities, statewide organics recycling remains relatively limited. Additionally, reporting does not account for backyard composting, agricultural composting, or other small-scale community composting efforts. There is a large diversion opportunity for Alabama to tap into organics recycling, but for the purposes of this report, "recycling" refers to material that flows through a drop off site or a RMPF.

ENERGY RECOVERY FACILITIES

Under Alabama Administrative Code, energy recovery refers to a series of processes designed to convert waste materials into usable forms of energy, typically electricity or heat, and also includes waste-to-energy.²⁹ Following an August 2026 update to Alabama Administrative Code 335-13-3, Energy Recovery Facilities (ERFs) are now included in the AEPACS database and are required to submit an annual report. That report must include the tons of solid waste received and processed for energy recovery each month, broken out by in-state and out-of-state origin, the amount of each material type transported to a solid waste disposal facility, and a statement confirming the facility's compliance with Code 335-13-3. A review of facilities in RRS's database shows there are three known ERFs in the state.

SCRAP TIRE PROCESSOR FACILITIES³⁰

The Alabama Scrap Tire Environmental Quality Act (ASTEQA) requires the regulation of scrap tire accumulations and to provide for cleanup and remediation of illegal scrap tire piles. By the Act's definition a processor is a person who is engaged in the processing of scrap tires. There are three classes of scrap tire processors in the state,

- **Class One Processors** - shred, size-reduce or alter scrap tires, punch or stamp tire materials to produce an end-product or produce products from ground or crumb rubber.
- **Class Two Processors** - only shred, size-reduce or alter scrap tires.
- **Class Three Processors** - are mobile processors who shred or alter scrap tires at separate locations.

Scrap tire processor facilities are required to obtain a permit from ADEM using the AEPACS system, with the permits having a term of 5 years. As of July 2026, there are seven Class I facilities, fifteen Class II facilities, and two Class III facilities permitted in the State. The state's scrap tire processing program is detailed in *Appendix 1*.

END USE MANUFACTURING INFRASTRUCTURE

Per Alabama Administrative Code, an "End-Use Manufacturing Facility" is "a site that converts a recovered or recyclable material to be utilized in place of a raw material and adds value as a final product or as an ingredient in a subsequent product. An end-use manufacturing facility is not a solid waste management facility; however, any solid waste resulting from the

²⁸ <https://admincode.legislature.state.al.us/administrative-code/335-13-14-.02>

²⁹ <https://admincode.legislature.state.al.us/administrative-code/335-13-1>

³⁰ <https://adem.alabama.gov/sites/default/files/2025-07/STProcess.pdf>

operation of a facility shall be subject to all applicable laws and regulations relating to solid waste. An end-use manufacturing facility shall provide notification to the Department according to the rules adopted by the Department.”³¹

As of July 2026, there are five facilities that are identified in the AEPACS nSite Explorer with end-use manufacturer facility notification. These facilities include,

- American Cast Iron Pipe Company in Birmingham,
- CMC Steel in Birmingham,
- JET Polymer Recycling, Inc. in Fort Payne,
- WestRock Coated Board, LLC in Cottonton and
- WestRock CP, LLC in Stevenson

Seventy-one additional facilities that are operating in the state were identified as likely end-use manufacturers of recovered materials. These include steel mills (e.g., Nucor, US Steel, SSAB), foundries (e.g., US Pipe, McWane), paper mills (e.g., International Paper, Kimberly-Clark, Essity), plastic recyclers (e.g., KW Plastics, Indorama), and aluminum processors (e.g., Novelis, Constellium). It is likely that these facilities have submitted registrations that have not been processed yet and are not currently included in the AEPACS system. A list of these end markets is included in [Appendix 2](#).

Alabama stands out nationally for its strong plastics end market capacity, supported by large-scale PET and recycled resin production facilities that position the state as one of the leaders in plastic reprocessing. Alabama also benefits from extensive fiber-based end markets, including recovered fiber processors and connections to regional paper and tissue mills that consume significant volumes of old corrugated containers (OCC) and mixed paper. Recovered fiber material from Alabama feeds into the broader Southeastern mill network that relies heavily on recycled fiber. Alabama's ferrous and non-ferrous metals end-markets are similarly well established, anchored by in-state steel mills and foundries that process ferrous scrap into products like rebar and pipe, alongside aluminum processors such that convert non-ferrous scrap into new aluminum products for the automotive and packaging industries. A more detailed end market evaluation can be found in [Chapter 2](#).

³¹ <https://admincode.legislature.state.al.us/administrative-code/335-13-1-.03>

Scrap Tire Management

Scrap tire management in Alabama is governed by the ASTEQA and administered by ADEM under a regulatory framework that was updated in 2024. Those updates extended receiver registration periods, shifted to semi-annual reporting, and established new provisions for directing Fund resources toward processing and recycling infrastructure development. A concurrent amendment to Division 13 of the ADEM Administrative Code prohibits the disposal of whole, unprocessed tires in landfills beginning January 1, 2028, which aligns Alabama with the disposal standards of its neighboring states. These regulatory changes, combined with a sustained emphasis on market development and interagency coordination, define the current direction of the state's scrap tire program.

FUNDING AND EXPENDITURES

The Alabama Scrap Tire Program is financed through the Alabama Scrap Tire Fund, which was established under ASTEQA. The Fund collects a \$1.00 per tire fee at the point of sale for each new, used, or retreaded tire sold in Alabama. Cumulative revenues have grown from \$42.4 million (FY 2003–2014) to over \$60 million through FY 2024, with expenditures consistently tracking below revenues. 45–75% of prior-year Fund deposits go toward remediation of scrap tire sites, with the remainder split among regulatory enforcement, market development, county delegation programs, and administrative costs.



See [Appendix 1](#) for the full program write-up, including facility registration data.

REMEDIATION PROJECTS

The Alabama Scrap Tire Program engages in remediation of unauthorized scrap tire accumulations (USTAs) through enforcement actions against responsible parties and fund-supported contracts. These efforts have removed over 8 million passenger tire equivalents (PTE) through large site cleanups and continue to grow in scope: small site remediation reached roughly 496,000 PTE and 10,474 tons of scrap tire material (STM) by FY 2024, while the Right of Way Cleanup Program has removed approximately 1.7 million PTE since its inception, reimbursing counties nearly \$9.6 million to date.

END USERS

An estimated 7.1 million scrap tires from all sources in Alabama are beneficially reused annually. Approximately 96% of beneficially reused tires are consumed as fuel or as a substitute raw material, while the remaining 4% are diverted through

other uses.³² The ADEM Scrap Tire Marketing Program (STMP), has awarded over \$16 million in grants since FY 2011 for demonstration projects, most notably rubber modified asphalt (RMA), including major awards to those listed below.

- St. Clair County
- Joe Wheeler State Park
- Lake Guntersville/DeSoto State Parks
- Lake Lurleen State Park
- Walker County Lake
- Chewacla State Park
- McClellan Development Authority – Lake Yahou
- Coffee County Road 110
- ADEM Mobile Field Office

³² Alabama Scrap Tire Program Biennial Report (2018-2020), Alabama Scrap Tire Program Biennial Report (2022-2024)

Chapter 2: Baseline Assessment

Material Flows and Waste Composition

RECYCLING

Registered recycling facilities in Alabama report the tonnage of recyclable material they process to ADEM. Table 4 presents the statewide recycling totals for 2014 through 2024.³³

Table 4 - Total Tons of Recycling Processed in AL (2014-2024)

REPORTING YEAR	TONS OF RECYCLING
2014	1,538,785
le2015	1,747,345
2016	1,854,003
2017	2,625,563
2018	2,486,319
2019	2,823,595
2020	3,243,468
2021	3,528,183
2022	2,603,754
2023	2,304,272
2024	2,165,554

Per ADEM's biennial Solid Waste Reports, the Department compiles statewide recycling data from tonnage that registered recycling facilities report to it (historically through Re-TRAC Connect and, since 2020, AEPACS). Unlike the disposal figures in Table 5, which are drawn from ADEM's published biennial reports, these recycling totals are not published in a comparable form. Therefore, diversion rates calculated from these figures, including those presented later in this report, should be considered estimates based on the best available data.

DISPOSAL

The disposal figures in Table 5 are drawn from ADEM's published biennial Solid Waste Reports, which record the tonnage of solid waste disposed at Alabama disposal facilities on a state fiscal-year basis, broken out by waste type and by in-state and out-of-state origin.

Alabama's total solid waste disposal increased steadily across most waste categories between FY 2014 and FY 2023 before declining in FY 2024. In-state municipal solid waste (MSW) rose from 4.19 million tons in FY 2015 to 5.5 million tons in FY 2023 but dropped to 4.77 million tons in FY 2024. Construction and demolition (C&D) waste followed a similar trajectory. Industrial waste was more variable year to year but had a notable decline by FY 2024.

³³ Aggregated recycling tonnage data was provided to RRS in January 2026; the RRS project team does not have individual breakdown of facility tonnage.

Table 5 - MSW, C&D, and Industrial Disposal FY 2014 – FY 2024 (tons)

REPORTING PERIOD	MSW (IN-STATE)	MSW (OUT-OF-STATE)	C&D (IN-STATE)	C&D (OUT-OF-STATE)	INDUSTRIAL (IN-STATE)	INDUSTRIAL (OUT-OF-STATE)	TOTAL
FY 2014	4,128,832	406,154	1,080,625	76,297	1,318,566	36,712	7,047,186
FY 2015	4,186,373	419,999	1,221,838	86,701	1,441,476	36,116	7,392,503
FY 2016	4,499,614	420,879	1,141,619	95,307	1,283,682	10,013	7,451,114
FY 2017	4,790,268	410,119	1,236,723	122,936	1,225,858	39,224	7,825,128
FY 2018	4,797,454	425,619	1,353,469	119,979	1,438,437	19,118	8,154,077
FY 2019	4,861,200	680,220	1,422,930	180,970	1,625,760	30,590	8,801,670
FY 2020	5,068,280	861,980	1,444,270	129,790	1,388,190	18,370	8,910,880
FY 2021	5,182,873	888,976	1,632,779	137,092	1,616,188	17,065	9,474,973
FY 2022	5,247,852	1,182,382	1,679,630	154,797	1,389,540	6,105	9,660,307
FY 2023	5,497,484	1,222,213	1,712,625	103,988	1,306,238	0	9,842,548
FY 2024	4,769,714	1,678,899	1,511,719	126,591	1,018,384	64	9,105,370

IN-STATE VS. OUT-OF-STATE DISPOSAL

Most of the waste disposed in Alabama during the FY 2014 to FY 2024 period was generated within the state, with in-state waste accounting for approximately 80% to 93% of total disposed waste annually. In FY 2014, Alabama disposed of 6,528,023 tons of in-state waste (approximately 93% of the total) and 519,163 tons of out-of-state waste (approximately 7%). In-state waste tonnage increased over the period, peaking at 8,516,347 tons in FY 2023 before declining to 7,299,817 tons in FY 2024. In contrast, out-of-state waste more than tripled over the 11-year period, increasing to 1,805,554 tons in FY 2024 and representing nearly 20% of all waste disposed in Alabama. Figure 8 below highlights that:

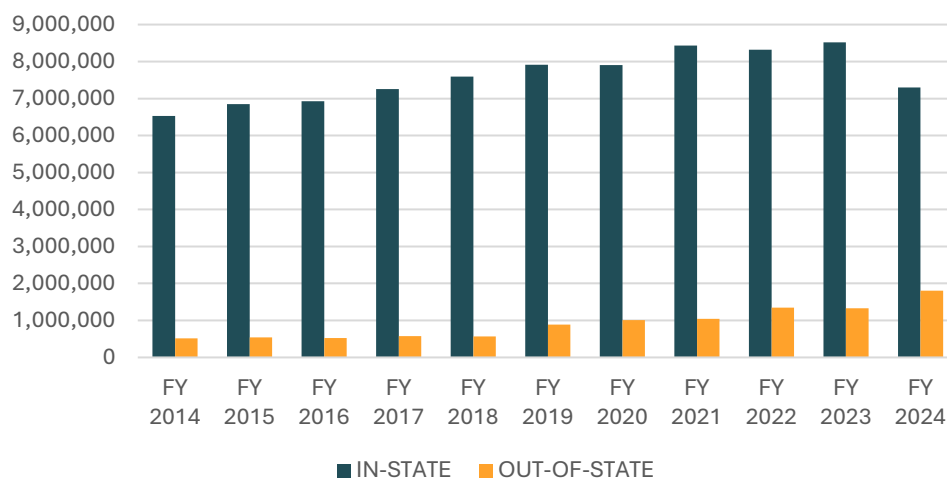


Figure 8 - In-State vs. Out-of-State Disposal FY 2014 – FY 2024 (tons)

MUNICIPAL SOLID WASTE (MSW) DISPOSAL

In-state MSW increased from 4,128,832 tons in FY 2014 to 5,497,484 tons in FY 2023, before declining to 4,769,714 tons in FY 2024. In contrast, out-of-state MSW rose from 406,154 tons in FY 2014 to 1,678,899 tons in FY 2024. Over this 11-year period, out-of-state accounted for a larger portion of Alabama's total MSW disposal tonnage, rising from 9% in FY 2014 to 26% in FY 2024.³⁴ Although in-state waste remained the largest source of MSW disposed in Alabama, the rapid growth in imported waste represents one of the most notable changes in the state's disposal trends over the past decade.

Alabama's relatively low landfill disposal costs may also contribute to the growth in out-of-state waste. The 2023 EREF Tip Fee Report found that Alabama had the lowest average landfill tipping fee in the Southeast at \$35.43 per ton ($\pm$ \$17.05), compared with neighboring states including Mississippi (\$47.74), Tennessee (\$46.54), Georgia (\$48.68), South Carolina (\$41.60), and Florida (\$42.54).³⁵ While tipping fees are only one factor influencing interstate waste flows, lower disposal costs may increase the economic attractiveness of Alabama landfills for imported waste.

As Alabama's in-state waste generation continues to increase over the long term and imported waste comprises a growing share of total disposal, effectively managing both waste streams will be important for preserving landfill capacity, supporting long-term disposal planning, and maintaining the state's role in regional waste management.

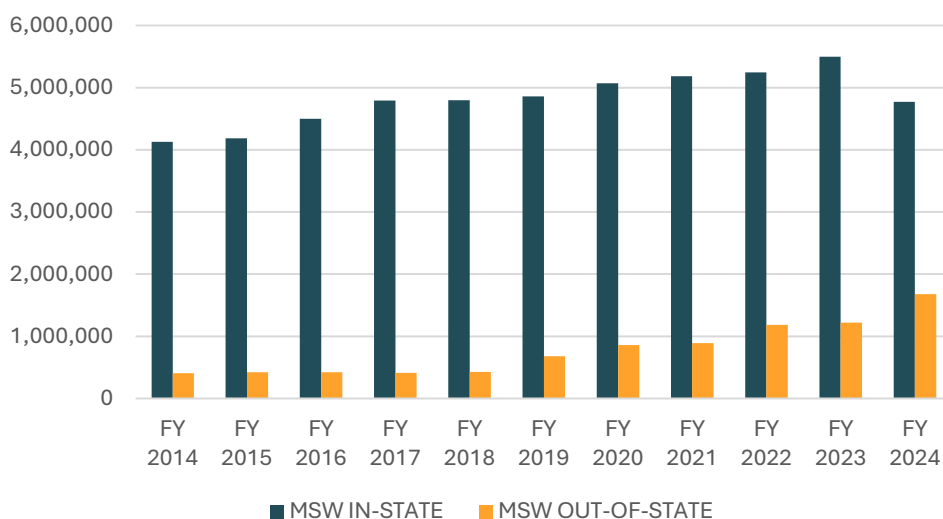


Figure 9 - MSW Disposal FY 2014 – FY 2024 (tons)

CONSTRUCTION AND DEMOLITION (C&D) DISPOSAL

In-state C&D grew from 1,080,625 tons in FY 2014 to 1,712,625 tons in FY 2023 before decreasing to 1,511,719 tons in FY 2024. Out-of-state C&D remained lower throughout this period, ranging from 76,297 tons in FY 2014 to a high of 154,797 tons in FY 2022. By FY 2024, out-of-state C&D declined to 126,591 tons.

³⁴ Environmental Research & Education Foundation (EREF): <https://viewer.mapme.com/ereftipfee2023>

³⁵ Environmental Research & Education Foundation (EREF): <https://viewer.mapme.com/ereftipfee2023>

Overall, these trends indicate that construction and demolition waste disposed of in Alabama is driven primarily by in-state activity, with out-of-state imports representing a small but consistent share of the total.

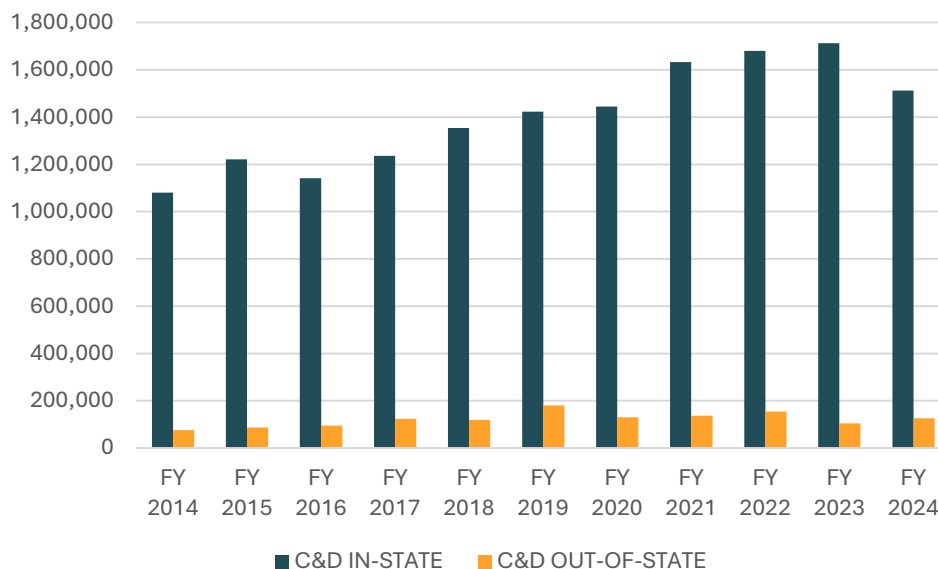


Figure 10 - C&D Disposal FY 2014 - FY 2024 (tons)

INDUSTRIAL DISPOSAL

Industrial disposal tonnage fluctuated during the FY 2014 to FY 2021 period before declining through FY 2024. In-state industrial disposal was reported at 1,318,566 tons in FY 2014, increased to 1,625,760 tons in FY 2019, and fell by FY 2024 to 1,018,384 tons. Out-of-state industrial disposal tonnage remained a relatively small portion of the total amount of industrial waste disposed in the State; it was reported at 36,712 tons in FY 2014, rose to 39,224 tons in FY 2017, then fell to 0 tons in FY 2023. Only 64 tons of out-of-state industrial disposal was reported in FY 2024.

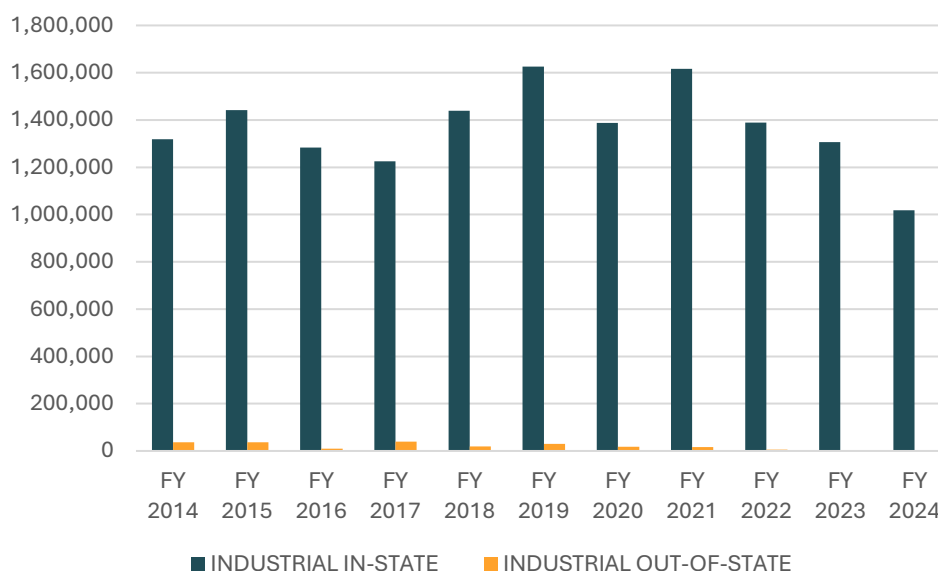


Figure 11 - Industrial Disposal FY 2014 - FY 2024 (tons)

Solid Waste Diversion Rates

According to the state's solid waste management rules, Alabama calculates its statewide solid waste diversion rate as diverted waste divided by total waste generated, expressed as a percentage:

$$\text{Solid Waste Diversion Rate (\%)} = \left(\frac{\text{Diverted Waste}}{\text{Total Waste Generation}} \right) \times 100$$

Within this rate formula the following values are used:

- **"Diverted wastes"**: summation of volumes reported across recycling, beneficial-use programs, and energy recovery including all recovered material types.
- **"Total waste generation"**: summation of reported landfilled (in-state volume reported for municipal solid waste, construction and demolition debris, and industrial landfills) and diverted wastes

ADEM updated the solid waste diversion calculation rate in 2023. Prior to 2023, diversion was calculated by reported materials received at recycling facilities. The current diversion rate calculation uses tonnages of materials that are sent to end-use manufacturers (that are truly diverted), reporting the true diversion rate, as opposed to the total tonnage of material that is sent to processing facilities (which includes material that is not sent to end markets).

Alabama's diversion goal and its measured performance against that goal have both evolved over time. When the Legislature passed the SWRMMA in 2008, it established the state's first formal diversion goal of 25%, at a time when recycling and beneficial reuse stood at only around 8.3% of the non-hazardous waste stream.³⁶ That goal was raised to 40% in a 2024 update to the ADEM Administrative Code 335-13-13. Under the current calculation methodology, Alabama's diversion rate now exceeds 25%, more than triple the rate calculated in 2008, though it remains below the 40% goal.³⁷

Because the total waste generation figure combines landfilled tonnage from municipal solid waste, construction and demolition debris, and industrial landfills, it is worth clarifying what each of these terms means under Alabama law.

Municipal solid waste is generated primarily from household waste that includes garbage, trash, and similar refuse from residences, hotels, motels, and comparable lodging or living quarters, though a municipal solid waste landfill may also accept commercial solid waste generated by stores, offices, restaurants, and other nonmanufacturing businesses, along with limited quantities of industrial or construction/demolition waste.³⁸ Construction and demolition waste refers to building materials, packaging, and rubble resulting from the construction, remodeling, repair, or demolition of houses, commercial buildings, and other structures, including masonry, sheet rock, roofing material, insulation (excluding asbestos), scrap metal, and wood products; uncontaminated concrete, soil, brick, waste asphalt paving, and similar inert materials are excluded from the

³⁶ *Solid Wastes and Recyclable Materials Management Act*, Ala. Code 22-27-1.

³⁷ ADEM Solid Waste Program disposal and diversion reporting data, 2024.

³⁸ ADEM Administrative Code 335-13-1-.03

definition.³⁹ Industrial waste, meanwhile, is solid waste generated by manufacturing or industrial processes that does not meet the threshold for hazardous waste under Alabama's hazardous waste statutes.⁴⁰

These three categories, tracked separately in ADEM's disposal reporting, together make up the landfilled portion of the total waste generation figure used in the diversion rate calculation above.

MSW Characterization

Understanding the composition of the MSW stream is essential for identifying opportunities to prevent, recover, and better manage materials. Alabama has not conducted an on-site statewide waste characterization study, so a desktop waste characterization was completed to understand the current MSW stream.

To reflect current conditions, this report utilizes data from the following three waste characterization study reports from areas similar to Alabama based on geographic regions and population.

- 2024 City of Fayetteville, AR Waste Characterization Study
- 2022 Buncombe County, NC Solid Waste Department Waste Characterization Study
- 2019 Aucilla Area, FL Solid Waste Administration Waste Composition

The results of these waste sorts were averaged and applied to the average of Alabama's reported in-state generated MSW tonnages from 2020 to 2024. This characterization does not include tons of out-of-state material that is disposed of in the state.

The amount of each material in the MSW stream is reported in tons, and represents the weight of each material, not the volume of that material in the waste stream. For example, plastics are often lighter in weight than materials like metal or glass, so these materials may represent a larger volume of the waste stream but appear lower in the composition make up based on weight, potentially understating their prevalence in the waste stream. Table 6 below breaks down the materials in each composition category.

Table 6 - Waste Composition Material Categories

MATERIAL CATEGORY	MATERIALS
Plastic	PET #1
	HDPE #2
	Other Plastic Containers
	Other/Rigid Plastics
	Flexible Plastics
	Polystyrene
Paper and Cardboard	Cardboard
	Other/Non-Recyclable Paper
	Mixed Recyclable Paper

³⁹ ADEM Administrative Code 335-13-1-.03

⁴⁰ ADEM Administrative Code 335-13-1-.03

Metals	Aluminum
	Steel/Tin Cans
	Other Metals (Ferrous/Non-Ferrous)
Glass	Recyclable Glass
Organics	Food Waste
	Yard Waste
C&D	C&D
Other	Electronics
	HHW
	Textiles
	Other

RESIDENTIAL MSW COMPOSITION

Residential MSW is categorized into two components: single-family generation and multi-family generation. For this report, single-family refers to housing with four units or fewer, whereas multi-family refers to housing with five or more units and mobile homes. This designation may differ between jurisdictions but for the purposes of this analysis, single-family and multi-family follow U.S. Census designations.

According to the 2020 U.S. Census, Alabama has 1,584,591 single-family households and 427,228 multi-family households. Using the waste modeling outlined above, on average between 2020 and 2024, single-family households disposed of approximately 1,934,067 tons of MSW, while multi-family households disposed of about 521,452 tons. These figures represent materials found in the garbage (disposal stream) and do not include what was already captured through recycling programs.

Table 7 and Figure 12 show the tonnage of materials found in the residential disposal stream.

Table 7 - Residential MSW Waste Composition

MATERIAL CATEGORY	SINGLE-FAMILY TONS	MULTI-FAMILY TONS	TOTAL RESIDENTIAL TONS
Plastic	387,590	104,500	976,119
Paper and Cardboard	457,473	123,341	1,351,460
Metals	77,000	20,760	177,079
Glass	51,765	13,957	127,013
Organics	387,590	104,500	1,050,921
C&D	117,765	31,751	360,430
Other	454,884	122,643	1,110,220
Total	1,934,067	521,452	5,153,241

Residential MSW Composition

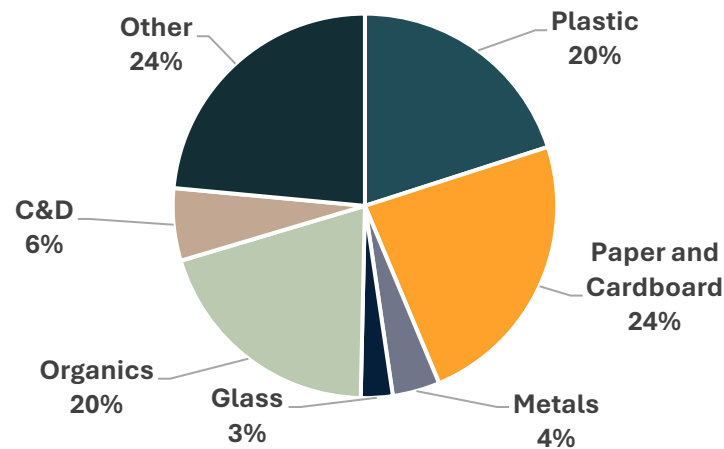


Figure 12 - Residential MSW Composition

COMMERCIAL MSW COMPOSITION

Commercial MSW refers to MSW generated by businesses and institutions, such as office buildings, retail, wholesale trade, health care facilities, educational facilities, accommodation and food services, but excludes industrial byproducts from manufacturing, mining, and construction. Using the waste modeling outlined above, on average between 2020 and 2024, 2,697,721 tons of MSW were generated by the commercial sector. These numbers do not include materials already captured through recycling or organics programs.

Table 8 and Figure 13 show the tonnage of materials found in the commercial disposal stream.

Table 8 - Commercial MSW Composition

GENERAL CATEGORY	COMMERCIAL TONS
Plastic	484,029
Paper and Cardboard	770,646
Metals	79,318
Glass	61,291
Organics	558,831
C&D	210,914
Other	532,692
Total	2,697,721

Commercial MSW Composition

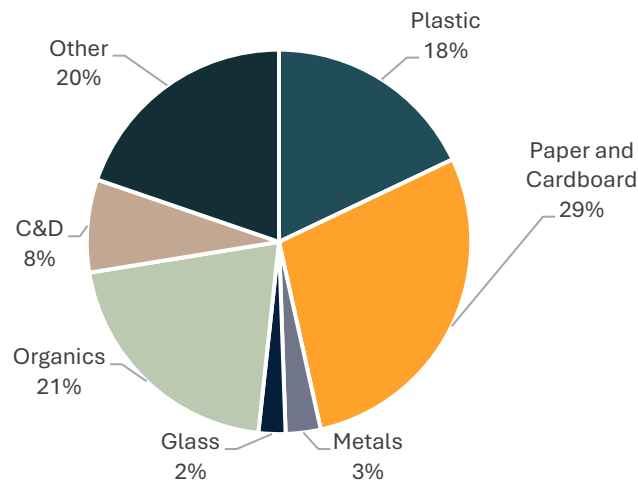


Figure 13 - Commercial MSW Composition

End Market Evaluation

PRODUCT PACKAGING TO RECYCLED COMMODITY

When a consumer puts a product into their recycling container, it is collected by a hauler and delivered to a recovered materials processing facility (RMPFs). At the RMPF, equipment and manual sorting are used to separate collected recyclables into marketable commodity streams, referred to as bales (except for glass which is marketed loose or as cullet material). Reprocessors then purchase bales from RMPFs, and further process recovered materials into feedstocks that manufacturers can use in new products and packaging. These manufacturers then purchase this recycled material to manufacture new packaging and products to sell to brands. Figure 14 below describes this process in more detail.

The Circular Recycling Economy

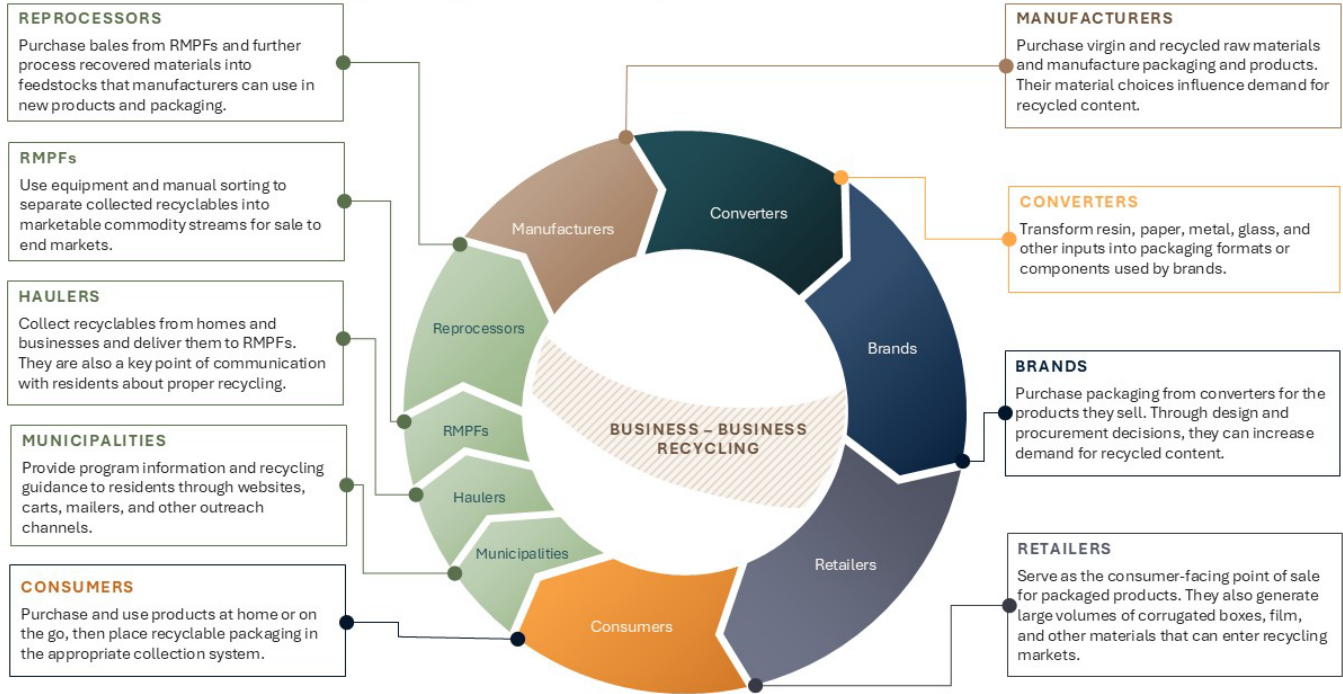


Figure 14 - Diagram of a Circular Recycling Economy

Table 9 categorizes the types of materials collected in the recycling stream and what kind of commodity bales those materials are sorted into and sold as.

Table 9 - Material Collected and Marketed Commodity

MATERIAL TYPE	COMMODITY BALES
Plastic	PET #1 Natural HDPE #2 Colored HDPE #2 Commingled #3-7 Mixed Bulky Rigid Film - GRADE A Film - GRADE B Film - GRADE C PP #5 Post-Consumer EPS #6
Fiber	Mixed Paper (MP) Sorted Residential Papers (SRPN) Old Corrugated Containers (OCC) Sorted Office Paper (SOP) Sorted White Ledger (SWL)
Metal	Aluminum Cans - Baled Aluminum Cans - Loose

	Steel Cans - Baled Steel Cans - Densified Steel Cans - Loose
Glass	Glass Mix

RECYCLED COMMODITY PRICING AND END MARKETS

RMPFs generate revenue by selling sorted recyclable materials into commodity markets. Commodity prices within the United States are reported regionally on the Secondary Materials Pricing (SMP) Index. Alabama is included in the Southeast USA market region. The figures in this section show the trends in commodity pricing for recyclable materials from 2020 to 2025. The corresponding tables define what materials from the waste stream would be included in the commodity bales. A list of current end markets located within Alabama can be found in [Appendix 2](#).

PLASTICS

Table 10 - Plastics Commodity Types and Materials Found in Commodity Bale

COMMODITY TYPE	MATERIALS FOUND IN COMMODITY BALE
PET #1	Predominantly PET bottles, (water bottles, drink bottles) 10-20% PET thermoform (clamshell containers, deli containers)
Natural HDPE #2	Non-colored HDPE bottles, predominantly milk jugs
Colored HDPE #2	Colored HDPE bottles and some containers, mostly household products like shampoo/conditioner/soap, laundry detergent or cleaning bottles
Commingled #3-7	Mostly polypropylene, non-bottle containers including thermoform packaging, cups, trays, clamshells, food tubs and pots, and all large rigid plastics, primarily PE and PP (includes plastic crates, carts, buckets, baskets and plastic lawn furniture) and PET thermoforms
Mixed Bulky Rigid	HDPE, LDPE, and PP such as buckets, crates, children's toys, plastic furniture
Film- GRADE A	Clear PE film, mostly post-use commercial material such as pallet wraps and clear bags
Film GRADE B	Mostly PE film with some colored film allowed, typically originated by store drop-off of retail bags
FILM GRADE C	Seasonal film plastics, agricultural film plastics, and post-commercial
PP #5 Post-Consumer	Containers such as takeout trays, yogurt cups, and lids
EPS #6	Mostly transport packaging such as molded foam to protect electronics, appliances, and furniture, and some food service containers

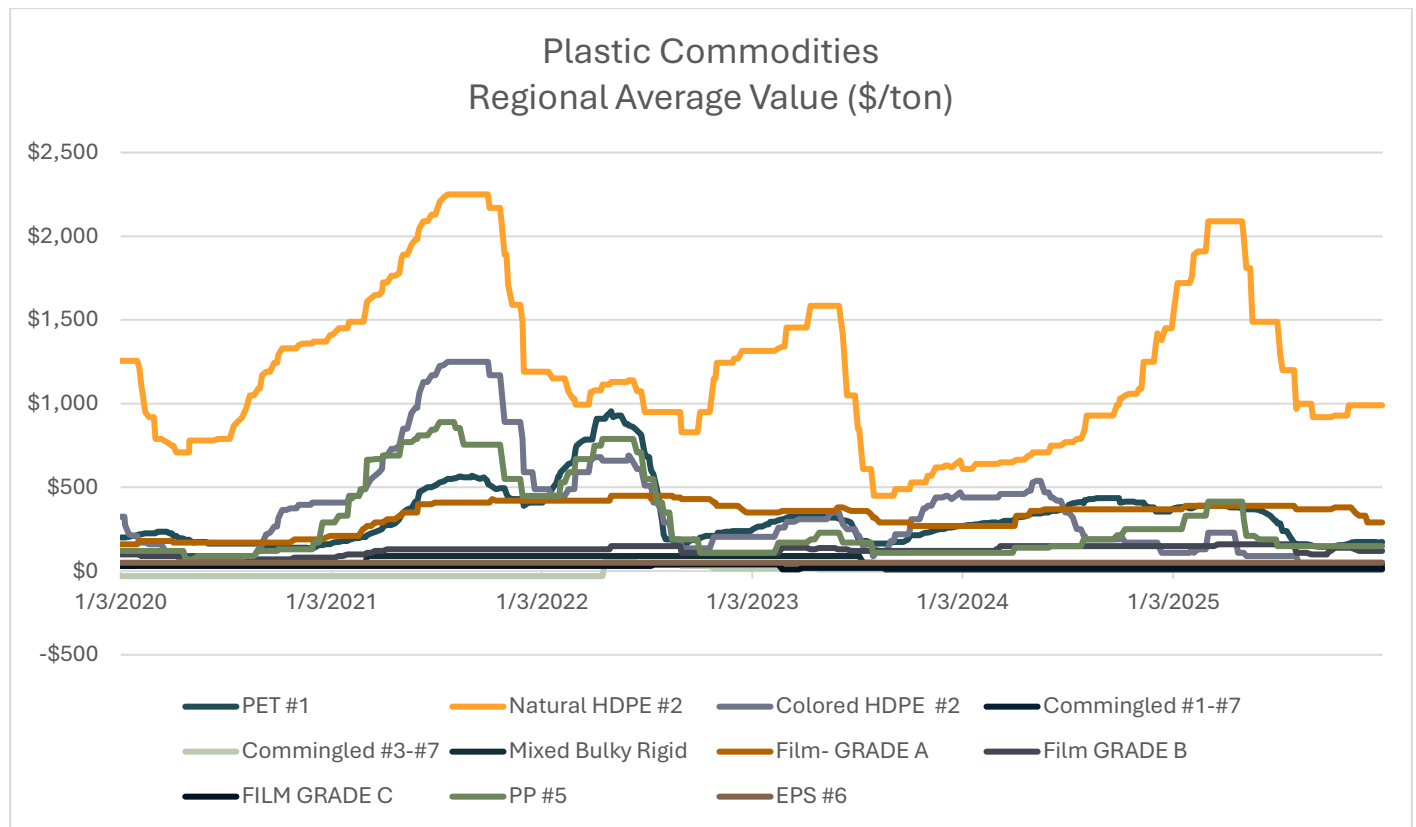


Figure 15 - Plastic Commodities Regional Average Value (\$/Ton)

Table 11 - Plastics End Markets Trends

COMMODITY TYPE	CURRENT MARKET STATUS	RELEVANT MARKET LOCATION	CURRENT MARKET TRENDS	PRODUCTS PRODUCED FROM COMMODITY BALES
PET #1	Strong but Waning	Alabama and Southeast US	Several major PET reclaimer facilities have shut down in the last year due to significant competition from low-cost virgin and low-cost imported recycled PET (rPET) that domestic reclaimers in the United States cannot compete with. PET bottle reclamation was once a very strong US market but with these closures, it has been waning. There is a need to demand domestic use of rPET to help bolster this market.	- Food and beverage bottles (peanut butter jars, water, and soda bottles) - Non-food and beverage bottles (shampoo bottles) - Sheet and thermoforms (cups, salad containers, berry clamshells) - Fiber (clothing, carpet, threads)
Natural HDPE #2	Strong	Alabama and Southeast US	Markets for natural HDPE exist because it is looked at as 'donor' material and can be easily utilized in a multitude of end products of any size and color. HDPE is not widely used in beverage containers outside of milk, though recent shifts in the market have seen decreases in milk jug production due to competition from products like cartons and PET with full shrink sleeves. There is a significantly higher price point for bales of NHDPE compared to other plastic commodities.	- Nonfood bottles (milk jugs) - Lumber/Decking - Pipe - Crates - Buckets
Colored HDPE #2	Strong	Northeast and Midwest US	The market is predominantly built up by durable goods end market, most notably, corrugated pipe. While market has been historically strong, competition from low-cost virgin can result in fluctuations. HDPE is used in colored personal care and home care applications. There is less demand for colored HDPE in high end applications, therefore, the bale value is lower than natural HDPE.	- Lumber/Decking - Pipe - Crates - Buckets
Commingled #3-7	Low	Canada and Midwest US	This commodity has decreased in popularity over the years. RMPFs used to sell all non-PET bottles, natural HDPE, and colored HDPE in a single bale to secondary sorters, primarily on international imports. Now, with stream and demand shifts, many RMPFs have stopped making this bale type, shifting to a PP only stream to increase demand.	Commodity dependent, may be sorted at a secondary facility that sorts by commodity stream, and sells bales by resin type, or sorted by reclaimers for a specific resin, such as PP, while all other materials are re-baled and sold to other markets
Mixed Bulky Rigid	Low	Alabama	Predominantly HDPE and PP materials. Relatively low value due to material mix, quality, and inability to be utilized in food grade applications	Durables
Grade A Film	Strong	Northeast and Southeast US	Grade A film bales are the cleanest and most sought-after commodity of films as they are the	Pyoil

			cleanest and easiest to work with, though may be cost prohibitive for some. This is the main commodity grade used for film-to-film applications, though it can be used in any other end applications utilizing PE films.	• Lumber/decking/roof coverboard • Railroad ties • Block • Bags/ liners
Grade B Film	Some	Northeast and Southeast US	Grade B film bales contain store drop-off film. Most large retailers offer store drop-off and combine with their back of store films. While much of this goes to Trex today, retailers are increasingly looking at film-to-film markets.	• Pyoil • Lumber/decking/roof coverboard • Railroad ties • Block • Bags/ liners (more limited and difficult to achieve using Grade B film)
Grade C Film	(Very) Low	Southeast US	Grade C film supply comes from diverse sources (i.e., seasonal films, agriculture, post-commercial) but collection aggregation is currently underdeveloped. If conversion technologies for Grade C film are successfully developed, this could address technical limitations faced by mechanical markets.	• Asphalt or cement modifiers • Some lumbar/decking/roof coverboard
PP #5 Post-Consumer	Some	Midwest and Southeast US	Post China's National Sword Policy, many RMPFs transitioned from sorting PP and other plastics into mixed rigids bales and started sorting PP as its own commodity. This was done with the help of investment and growing domestic demand. While demand is still increasing, initiatives like the PP Recycling Coalition have helped fund additional sorting and access for increased PP recovery. In Alabama, there is a large buyer of PP material, indicating a stronger market for some areas of the state.	• Paint buckets • Pipe • Caps • Pallets • Crates • Packaging • Automotive
EPS #6	Some	Southeast US	Significantly more transportation packaging [i.e. molded electronics protection] than food service packaging is recovered for recycling. The low density of this material makes it difficult for facilities to collect enough and densify in large quantities. Transportation per pound is also more expensive without densification prior to movement, decreasing the number of outlets for collection and aggregation.	• Transportation packaging • Building material • Food service materials

PAPER AND FIBER

Table 12 - Paper and Fiber Commodity Types and Materials Found in Commodity Bale

COMMODITY TYPE	MATERIAL FOUND IN COMMODITY BALES
Mixed Paper	Paper and Paperboard
Sorted Residential Papers	Newspapers, mail, magazines, printing and writing papers
Old Corrugated Containers	Corrugated containers (cardboard boxes) with liners or kraft paper
Sorted Office Paper	Paper containing primarily white and colored groundwood-free paper, free of unbleached fiber.
Sorted White Ledger	Uncoated, printed or unprinted sheets, shavings, guillotined books, and cuttings of white groundwood-free ledger, bond, writing, and other paper which has similar fiber and filler content.

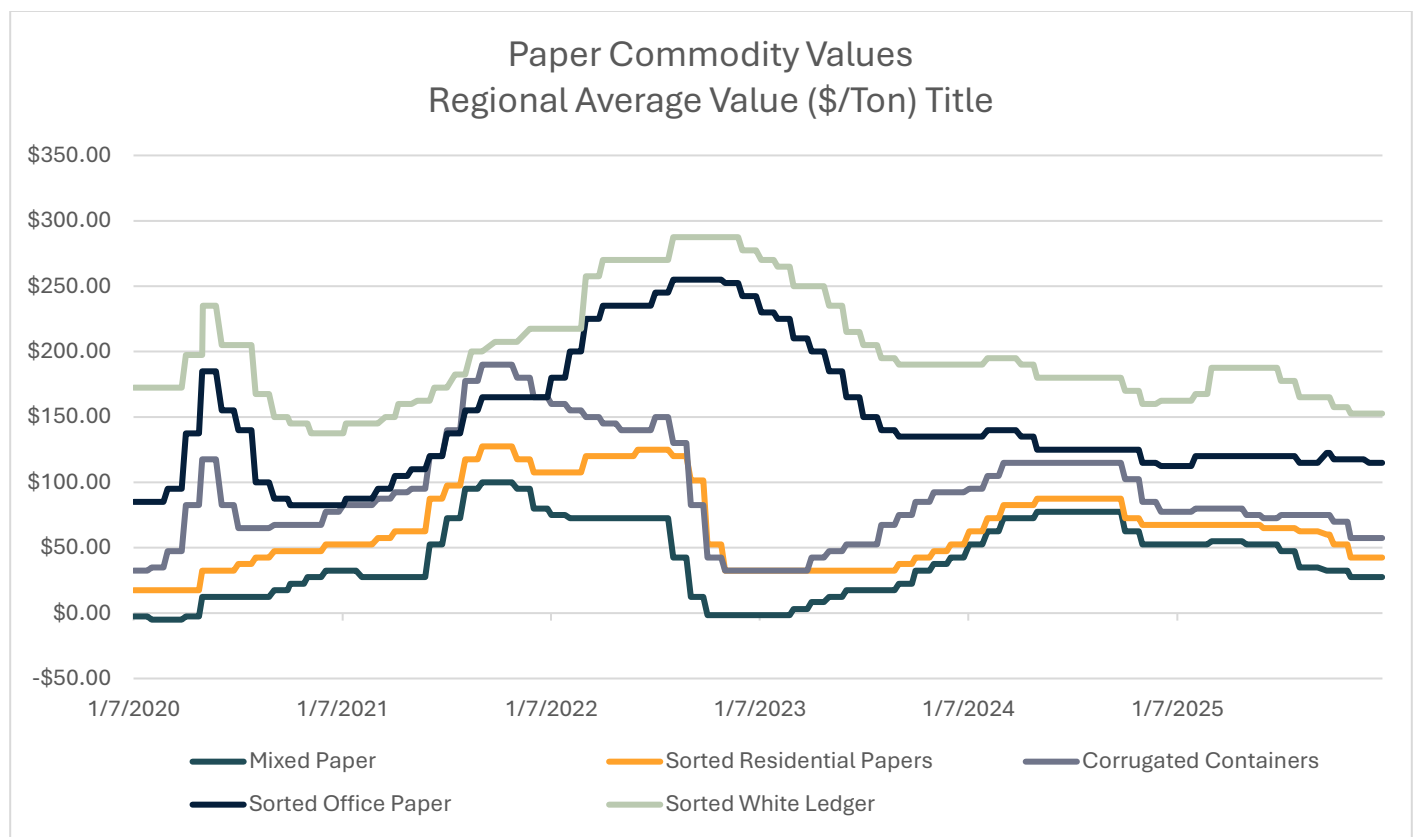


Figure 16 - Paper and Fiber Commodities Regional Average Value (\$/Ton)

Table 13 - Paper and Fiber End Markets Trends

COMMODITY TYPE	CURRENT MARKET STATUS	RELEVANT MARKET LOCATION	CURRENT MARKET TRENDS	PRODUCTS PRODUCED FROM COMMODITY BALES
Mixed Paper	Some	Alabama, Eastern US and International	Mixed paper has an established domestic end market in the eastern United States. However, mixed paper prices and demand have been historically volatile, but it has been increasing slightly over the years. Mixed paper exports are declining while domestic use has been growing. Demand for mixed paper bales is also closely tied to OCC pricing. When OCC prices are low, mills capable of using either feedstock often shift toward OCC because it generally provides higher fiber yield, which in turn reduces demand for mixed paper bales.	• Containerboard • Boxboard • Paperboard • Liner • Flute • Core
Sorted Residential Papers	Some	Alabama, Eastern US and International	Sorted residential paper historically had strong end-market demand and significantly higher value than mixed paper, though its value has also softened in recent years. Recent pricing for sorted residential paper has remained well below year-ago levels, reflecting weaker market conditions for lower-grade residential fiber. At the same time, this commodity is gradually disappearing as newsprint and office paper decline in use, shifting material generation away from sorted residential paper and news and into the lower-value mixed paper stream.	• Containerboard • Boxboard
Corrugated Containers (OCC)	Some	Alabama, Eastern US and International	OCC is the dominant recovered fiber commodity in the US, but demand is volatile due to containerboard production volumes that are impacted by the market (i.e., Covid related rise in e-commerce and now a levelling out). Decrease in production of boxboard means mills aren't operating at full capacity and there's been recent mill closures due to this. For export demand, tariff uncertainty caused export shipments to go down over the last year. When demand is high, prices are high, and vice versa.	• Containerboard • Boxboard • Paperboard • Liner • Flute • Core • Kraft
Sorted Office Paper (SOP)	Some	Alabama, Eastern US and International	Paper use is declining globally due to digitization, so SOP supply has been declining. However, it is considered a high grade because it's composed of strong bleached fiber creating demand for the material in mill mixes. The constricted supply has meant that mills producing white fiber products are looking for ways to incorporate alternative white fiber sources into their systems (e.g., aseptic cartons, release liner).	• White fiber products • Writing papers • Towel and tissue • Some paperboard

Sorted White Ledger	Some	Alabama, Eastern US and International	Paper use is declining globally due to digitization, so Sorted White Ledger supply has been declining. However, it is considered a high grade because it's composed of strong bleached fiber creating demand for the material in mill mixes. The constricted supply has meant that white fiber mills are looking for ways to incorporate alternative white fiber sources into their systems (e.g., aseptic cartons, release liner).	• White fiber products • Writing papers • Towel and tissue
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METALS

Table 14 - Metal Commodity Types and Materials Found in Commodity Bale

COMMODITY TYPE	MATERIAL FOUND IN COMMODITY BALES
Aluminum Cans -Baled	Post-Consumer aluminum can scrap: Aluminum food and/or beverage cans. Other aluminum used beverage can (UBC) scrap grades: Used beverage cans. By ReMA specifications, aluminum cans are the only acceptable material and format in these commodity bales. In practice, aluminum bottles and other aluminum packaging (e.g., foil plates, trays) that if collected and make it to a RMPF would also be sorted to a UBC bale by the eddy current, but they shouldn't exceed 2% of a bale/bundle.
Aluminum Cans - Loose	UBCs - Loose material is not very commonly marketed
Steel Cans - Baled	Steel/tinplate steel food and non-food cans that don't contain hazardous substances (i.e., paint).
Steel Cans- Densified	Steel/tinplate steel food and non-food cans that don't contain hazardous substances (i.e., paint).
Steel Cans - Loose	Steel/tinplate steel food and non-food cans that don't contain hazardous substances (i.e., paint).

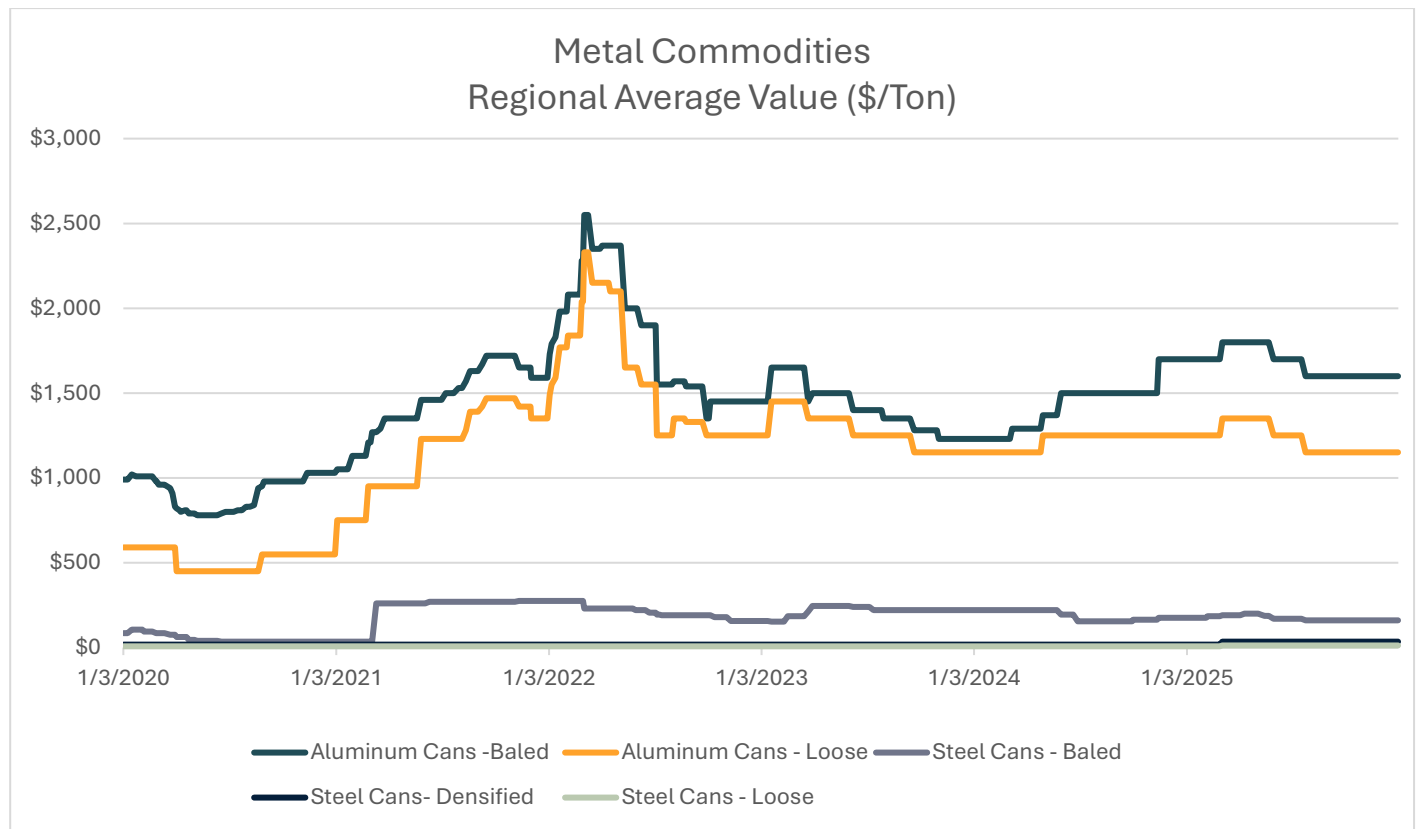


Figure 17 - Metal Commodities Regional Average Value (\$/Ton)

Table 15 - Metals End Markets Trends

COMMODITY TYPE	CURRENT MARKET STATUS	RELEVANT MARKET LOCATION	CURRENT MARKET TRENDS	PRODUCTS PRODUCED FROM COMMODITY BALES
Aluminum Cans – Baled	Strong	Across the US, including Alabama, Northeast, Southeast and Midwest	Recovered scrap UBC is typically recycled back into UBCs. Very strong, well-established recovery system.	- Aluminum Ingot - Sheet - Slab - Bill - Rod
Aluminum Cans- Loose	Some	Across the US, including Alabama, Northeast, Southeast and Midwest	Most scrap yards, traders, or RMPFs will bale aluminum cans, since remelters want dense bales for ease of furnace entry. It's generally accepted (some remelters specify that they only want baled/densified) but baled/densified is more common for transport and kiln loading efficiency. Loose UBCs collected municipally would be sent to RMPFs or scrap yards where the cans would be baled.	- Aluminum Ingot - Sheet - Slab - Bill - Rod
Steel Cans – Baled	Strong	Multiple markets across the US, including Alabama	Tinplate steel containers are not compatible with basic oxygen furnaces (BOFs) that produce the high-quality can sheet used for can manufacturing. Instead, this recovered scrap is sent to electric arc furnaces (EAFs) that have lower standards for scrap metallic charge compared to BOFs and produce products used by the construction, auto, and appliance industries. Steel containers are a very small portion of domestic steel production, so while steel food cans have an estimated recycling rate of 44% (RRS, 2023), it is a small portion of scrap used as PCR steel.	Thick slab products (rebar, girders, beams)
Steel Cans- Densified	Strong	Multiple markets across the US, including Alabama	Tinplate steel containers are not compatible with basic oxygen furnaces (BOFs) that produce the high-quality can sheet used for can manufacturing. Instead, this recovered scrap is sent to electric arc furnaces (EAFs) that have lower standards for scrap metallic charge compared to BOFs and produce products used by the construction, auto, and appliance industries. Steel containers are a very small portion of domestic steel production, so while steel food cans have an estimated recycling rate of 44% (RRS, 2023), it is a small portion of scrap used as PCR steel.	Thick slab products (rebar, girders, beams)

Steel Cans – Loose	Some	Multiple markets across the US, including Alabama	Not a common way for furnaces to receive the material. Transportation and loading efficiency are considered.	Thick slab products (rebar, girders, beams)
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GLASS

Table 16 - Glass Commodity Types and Materials Found in Commodity Bale

COMMODITY TYPE	MATERIAL FOUND IN COMMODITY BALES
Glass Mix	Mixed flint, amber, and green glass

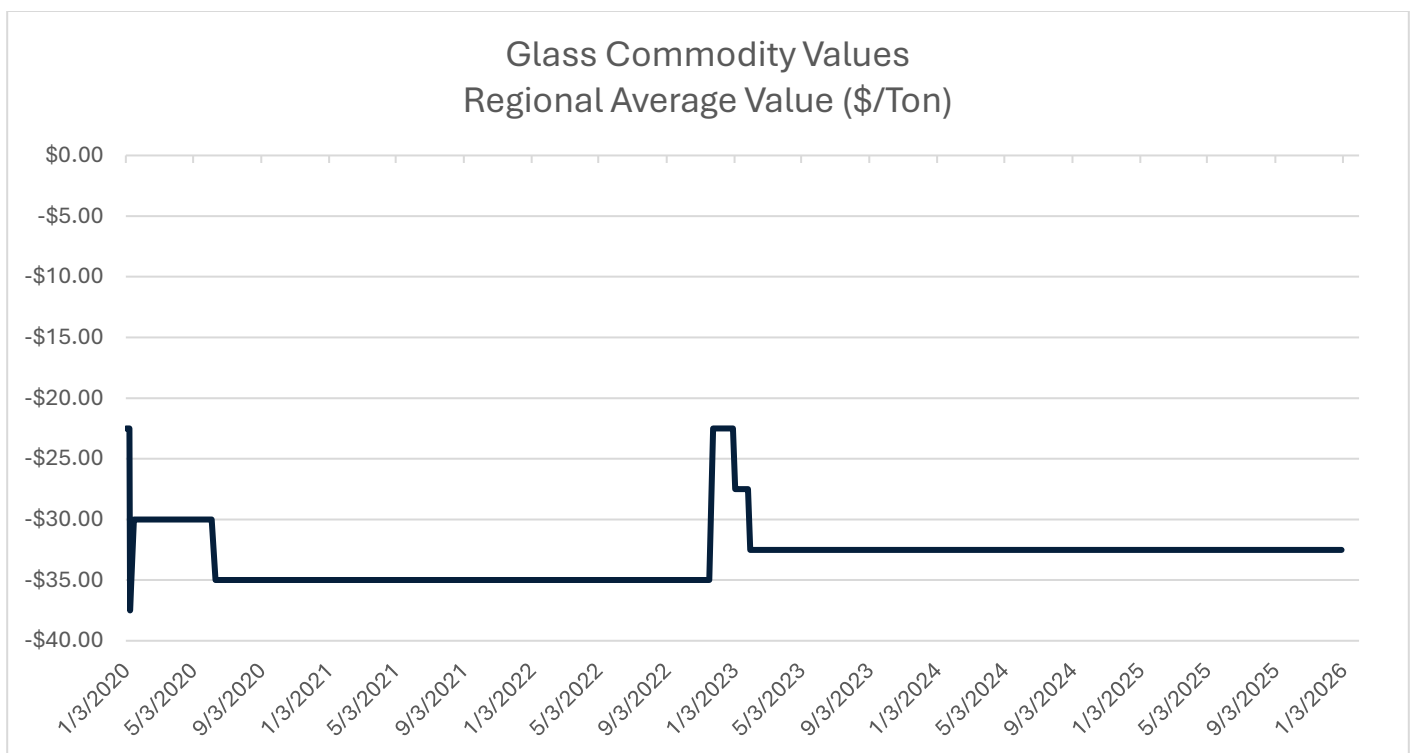


Figure 18 - Glass Commodities Regional Average Value (\$/Ton)

Table 17 - Glass End Markets Trends

COMMODITY TYPE	CURRENT MARKET STATUS	RELEVANT MARKET LOCATION	CURRENT MARKET TRENDS	PRODUCTS PRODUCED FROM COMMODITY BALES
Glass mix	Some	Alabama, Regional Markets	Mixed glass has long been a negative-value commodity for RMPFs. Its marketability depends heavily on contamination levels. RMPFs can improve glass value through investments in sorting technology that reduces contamination from small-format plastics, paper, and organic materials. However, glass from RMPFs still typically requires secondary processing to remove residual contaminants and separate material by color. Unlike metal, plastic, and paper, glass is also more regional because its high weight makes transportation costly. As a result, RMPFs, secondary processors, and glass manufacturers must be located relatively close to one another for glass to be economically turned back into a product. The closest secondary processor to Alabama is located outside of Atlanta, Georgia, which means it is expensive to send glass from many parts of Alabama to be further processed and sent to an end market. As a result, many cities do not take glass in their curbside recycling programs. According to the Glass Recycling Foundation, there are 3 fiberglass insulation manufacturers in Alabama.	New glass containers where specification allows, fiberglass, glass sand, aggregate, abrasives, and other beneficial use products.

Potential Recovery and End Markets

RECOVERABLE MATERIAL IN THE MSW STREAM

The waste composition study allows us to understand how many tons of material that could be diverted for recycling are currently being landfilled. Table 18 below breaks down the landfilled tonnage by current recycling end market status and generator type. The current market status designation in the table reflects the current market status in the end market evaluation section of this report. In addition to the markets analyzed above, materials including food waste, yard waste, C&D, electronics, HHW, and textiles were classified as having low current markets. Tonnage identified as having no current markets include residue, non-recyclable paper and other non-recoverable material.

Table 18 - Landfilled Tonnage by Market Status (tons)

CURRENT MARKET STATUS	SINGLE -FAMILY TONS	MULTI-FAMILY TONS	COMMERCIAL TONS	TOTAL TONS	% OF TOTAL MSW STREAM
Strong Current Markets	122,942	33,147	140,609	296,698	6%
Some Current Markets	344,237	92,811	606,602	1,043,650	20%
Low Current Markets	933,710	251,741	1,280,814	2,466,265	48%
No Current Markets	533,179	143,753	669,696	1,346,628	26%
Total	1,934,067	521,452	2,697,721	5,153,241	100%

Figure 19 shows existing end markets and manufacturing facilities in Alabama. One of Alabama's greatest strengths is the presence of well-established recycling end markets throughout the state, as visualized on the map below. Unlike many states that rely heavily on shipping materials to processors or manufacturers in neighboring regions, Alabama has a diverse network of companies that use recovered materials as feedstocks for manufacturing, supporting Alabama's economic growth. As noted in Table 18, it is estimated that 74% of the MSW being landfilled has potential to be diverted to current markets, with 6% of the material having strong current markets. Much of the material with strong current markets would be able to stay in-state and support Alabama's businesses if it were separated, collected, and processed.

It is estimated that 74% of the MSW being landfilled has potential to be diverted to current markets, with 6% of the material having strong current markets.

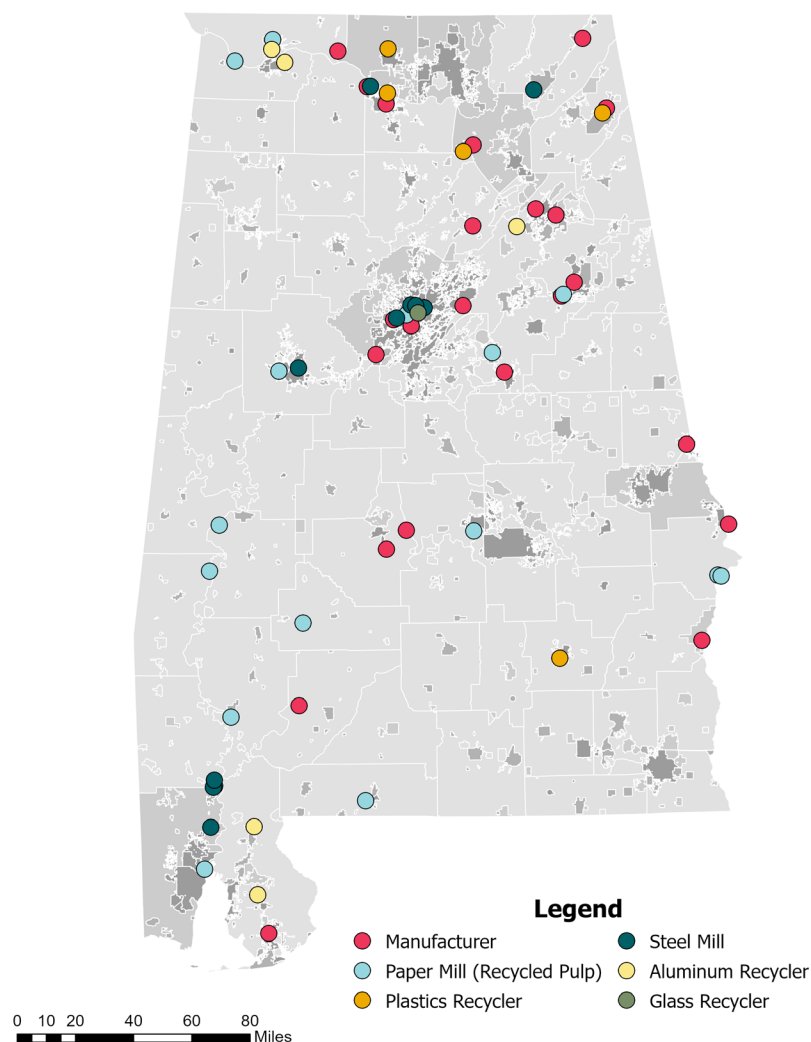


Figure 19 - End Markets and Manufacturers in Alabama

Economic Impact of Recycling in Alabama

Recycling is an important industry in Alabama, and there is opportunity for it to grow with increased diversion. However, recycling alone does not tell the complete story of material recovery in the state: reuse industries extend the life of goods by facilitating their resale, donation, or redistribution, while repair industries restore damaged or worn products to usable condition, keeping them in service rather than in the waste stream. Together, these three activities - reuse, repair, and recycling (RRR) - represent the full scope of material diversion in Alabama, each reducing waste through a different pathway but all contributing to the same outcome of diverting materials from disposal. Because of this, reuse and repair must be evaluated alongside recycling to understand the full impact of material diversion in Alabama on the economy. To quantify this economic contribution, an economic impact assessment was conducted to evaluate Alabama's RRR economy in terms of employment, business activity, economic output, and tax revenues.

This Economic Impact Assessment uses IMPLAN's Industry Contribution Analysis (ICA) framework, which measures the current economic contribution of existing RRR industries by linking industry activity to the broader statewide economy. These contributions are captured by calculating:

- **Direct effects:** Employment, labor income, and economic output generated within RRR industries.
- **Indirect effects:** Economic activity generated through purchases from suppliers and other businesses within the RRR supply chain.
- **Induced effects:** Economic activity generated when employees of RRR industries and their suppliers spend their earnings throughout the Alabama economy.

Together, these components provide a comprehensive picture of how Alabama's RRR economy supports jobs, generates business activity, and contributes tax revenues. The direct, indirect, and induced contributions are measured across the following key indicators:

- **Employment:** Full-time and part-time positions supported.
- **Labor Income:** Wages and salaries earned across the RRR economy.
- **Value Added:** Comparable to GDP, including labor income, business income, and taxes.
- **Economic Output:** Total economic activity generated, measured as sales and revenues.

METHODOLOGY

This analysis began by identifying Alabama businesses engaged in reuse, repair, and recycling (RRR) activities through a review of 2022 U.S. Census Economic Census data at the six-digit NAICS code level. Fifty-three NAICS codes were selected across six categories: recycling collection and processing; manufacturing using recovered materials; repair of goods; wholesale and retail of used or reclaimed products; rental of consumer products; and support services, including environmental consulting and government administrative functions related to recycling.

The analysis includes both first-stage industries (those directly processing recovered materials) and second-stage industries (those manufacturing products from first-stage outputs). Employment and business activity were then adjusted to reflect only the share attributable to RRR activities using conservative allocation factors informed by reports, peer-reviewed literature, trade association data, and Alabama-specific metrics, when available.

Economic contributions were modeled using IMPLAN's Industry Contribution Analysis (ICA) framework with 2024 Alabama data under the 528-industry scheme. All results are presented in 2026 dollars based on the 2024 IMPLAN dataset.

COMPARISON TO 2016 ECONOMIC STUDY

A previous analysis of Alabama's recycling economy was completed in 2016 for SERDC and the Alabama Recycling Partnership. This study methodology was adjusted to better reflect the current nature of Alabama's reuse, repair, and recycling economy. These adjustments include:

- **Baseline data source:** The 2016 study relied on a company survey in which businesses self-identified as recycling-related, meaning industry scope was heavily influenced by which companies responded. This study instead defines industry scope using 2022 U.S. Census Economic data and NAICS industry classifications, allowing for a more consistent approach to identifying relevant industries.
- **Scope of materials:** This study focuses on industries handling materials commonly found in the municipal solid waste stream, such as paper, metals, plastics, and glass. The 2016 study included some industries outside this scope, such

as those handling automotive parts and construction materials, which are not typically managed through municipal solid waste systems and are therefore removed from this analysis.

- **Industry coverage:** This study expanded coverage to reflect industry growth and changes in the Alabama economy since 2016, along with capturing additional industries with documented recycling-related operations that may not have been previously included with the survey approach. These include manufacturers using recycled content as feedstock, including wood pallet manufacturers, plastics packaging, and glass manufacturing, along with administrative and consulting services where a portion of activity may support RRR functions. Industries from the 2016 study with recycling-related activity limited to individual companies, rather than the sector, were removed.
- **Contribution allocation methodology:** The 2016 study relied on self-reported estimates from individual companies regarding their share of recycling-related activity. This study instead applies allocation factors developed from published industry sources, including trade associations, sustainability reports, and government data, combined with Alabama-specific research to estimate the recycling-attributable share of each industry included.
- **RRR definition:** This study includes repair and rental industries, as these activities extend product life, reduce waste, and make significant contributions to the economy. The 2016 study did not include repair or rental industries.

ECONOMIC CONTRIBUTION OF ALABAMA'S RRR ECONOMY

Alabama's reuse, repair, and recycling (RRR) industries support more than 82,000 jobs and generate over \$30 billion in annual economic output across the state. First-stage industries account for 86% of the total RRR employment and 78% of the total RRR economic output. A detailed breakdown of these overall contributions is summarized in Table 19 below.

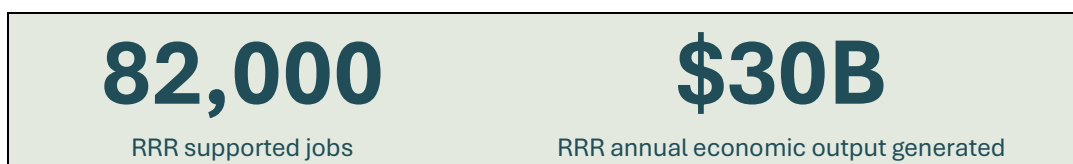


Table 19 - Summary of the RRR Economic Contribution in Alabama

	EMPLOYMENT	LABOR INCOME	VALUE ADDED	ECONOMIC OUTPUT
Direct	40,075	\$3,682M	\$7,430M	\$21,732M
Indirect	24,495	\$1,586M	\$2,636M	\$5,359M
Induced	17,712	\$954M	\$1,966M	\$3,298M
Total	82,282	\$6,222M	\$12,032M	\$30,389M

While the overall economic contribution of Alabama's RRR economy is significant, examining the results by operational category provides additional insight into where economic activity is concentrated. For this analysis, RRR industries were grouped into six categories based on their primary business function: manufacturing, repair and reuse, retail, rental, collections and processing, and administration and consulting.

Manufacturing represents the largest component of Alabama's RRR economy, accounting for approximately 72% of the total RRR economic output (more than \$21 billion) and supporting more than 39,000 jobs. This reflects the substantial presence of both primary processors of recovered materials and manufacturers that incorporate recycled feedstock into new products throughout the state. Repair and Reuse industries comprise the second-largest category, contributing over \$5 billion in economic output and supporting more than 24,800 jobs. While smaller in scale, Collections and Processing, Administration and Consulting, Retail, and Rental remain essential contributors to both output and employment within the RRR economy.

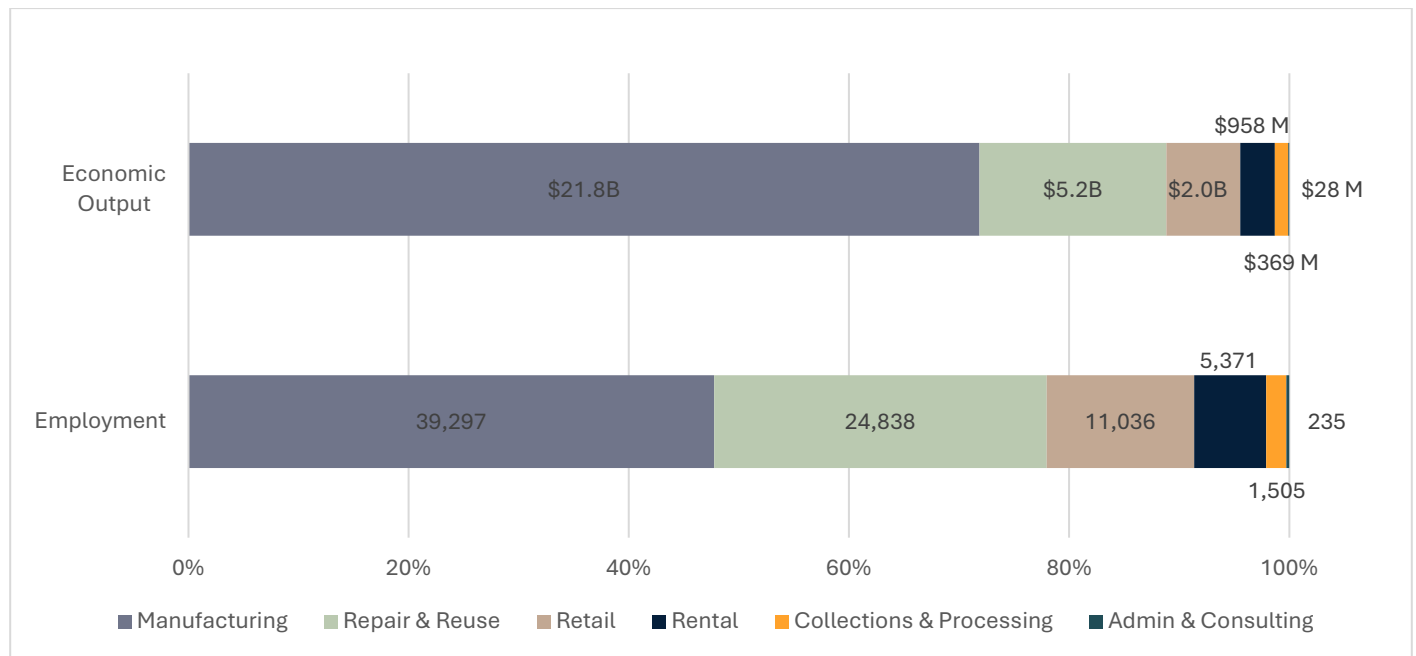


Figure 20 - Proportion of the RRR Economic Output by Operational Focus

The economic contribution of Alabama's RRR industries can also be examined by material stream. Ferrous metals represent the largest single contributor, accounting for 41% of total RRR output and 26% of employment, reflecting the significant role of Alabama's steel recycling and manufacturing sector, including Nucor's Alabama facilities. Personal home and office goods, which capture repair, rental, and reuse activities, represent the second-largest employment category, accounting for 32% of jobs while generating 16% of total output. Non-ferrous metals rank second in economic output, representing 17% of output and 10% of employment. Additional RRR activities that are not material specific, such as recyclable material wholesalers, waste collection, and government support functions, account for 8% of output and 16% of employment. Paper, plastics, tires, glass, and wood collectively represent the remaining share of Alabama's RRR economy, with each material stream supporting economic activity across the state. The plastics sector is anchored by KW Plastics, one of the world's largest post-consumer plastics recyclers.

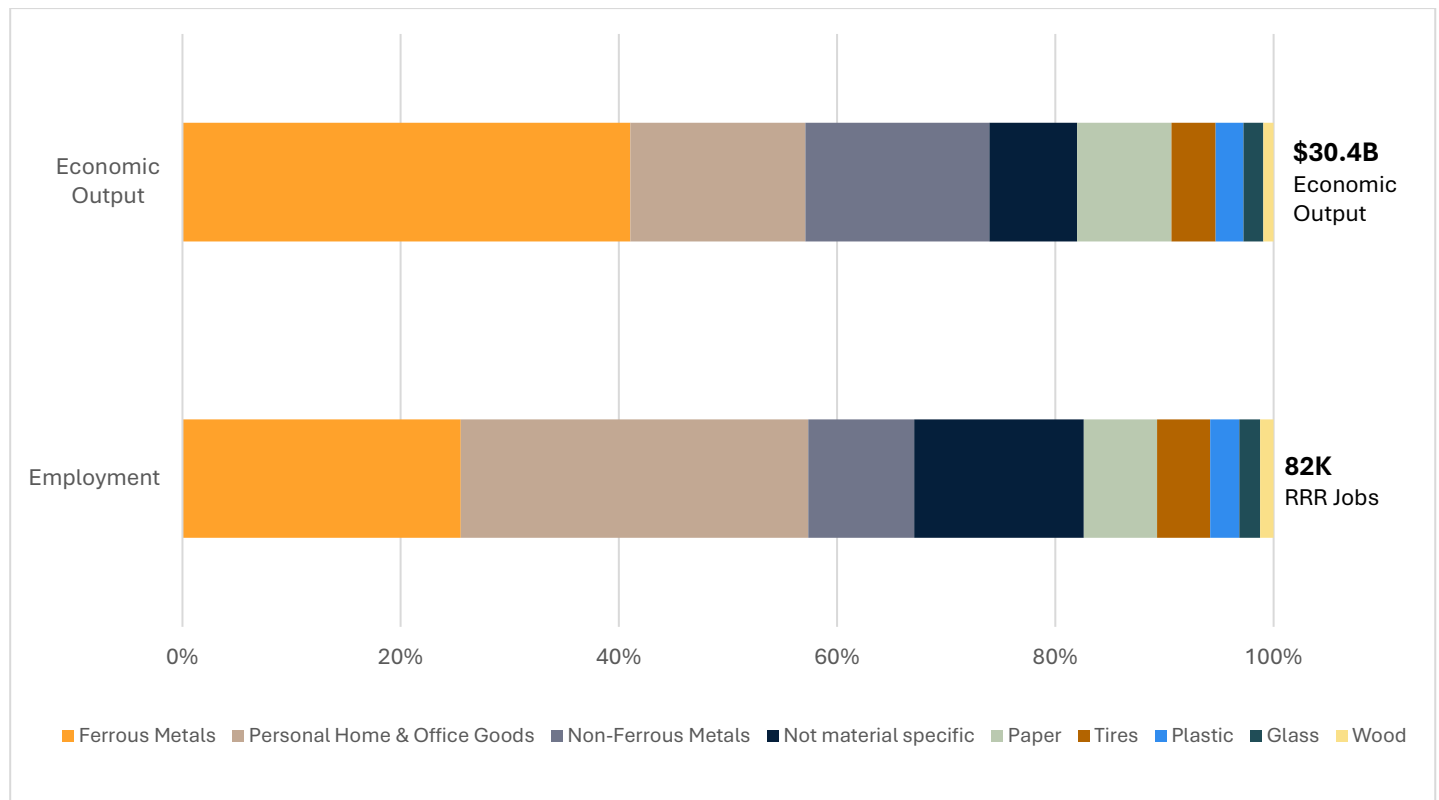


Figure 21 - Proportion of the RRR Economic Output by Material Focus

The direct economic contribution of Alabama's combined RRR industries was compared against other major industries in the state to provide context for its overall economic scale. By direct economic output, the RRR sector ranks second among employing industries in Alabama at \$21.7B, trailing only automobile and light duty motor vehicle manufacturing and surpassing industries such as Scientific R&D, Hospitals, and Legal Services. On an employment basis, the RRR sector ranks 16th statewide, directly supporting over 40,000 jobs, comparable to major employers such as Hospitals and Scientific R&D. Despite similar employment levels, the RRR sector generates a higher economic output than both industries, reflecting the large economic contribution of Alabama's RRR industries.

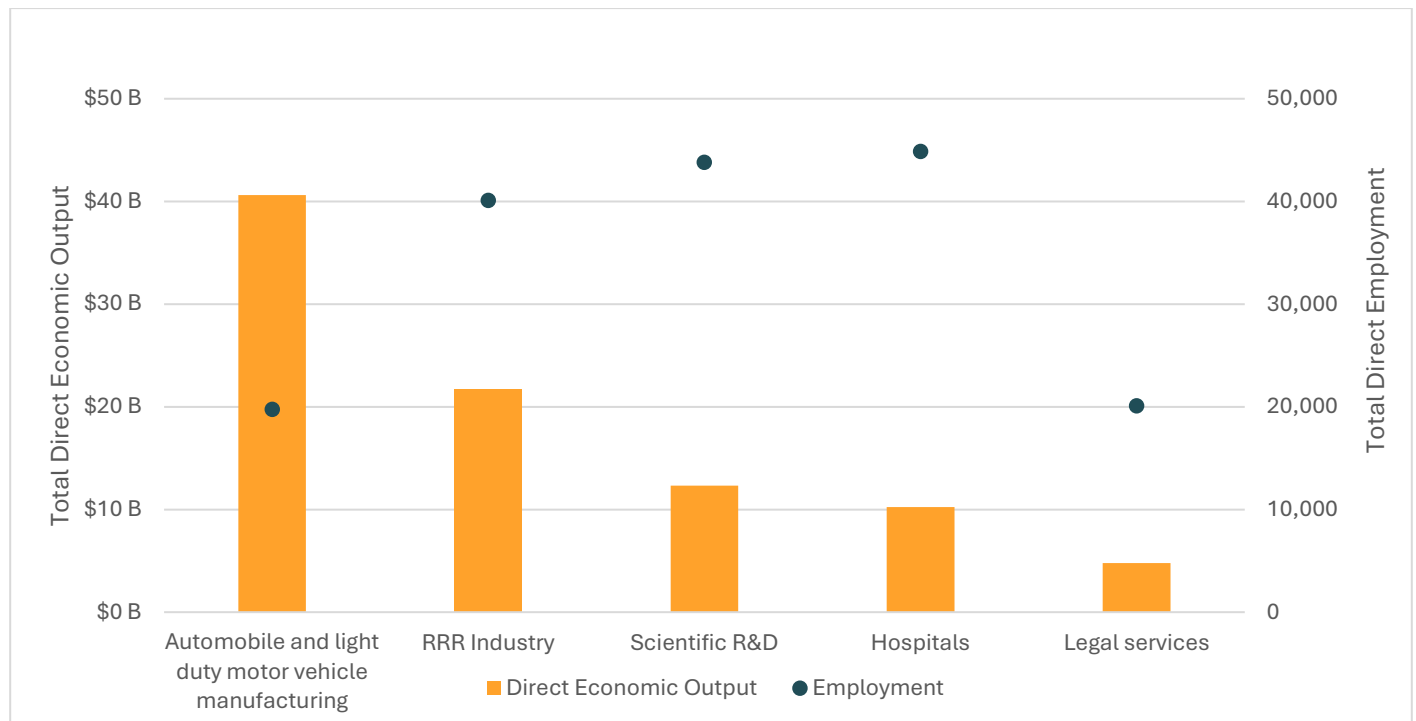


Figure 22 - Direct Output of the RRR Industries with Other Leading Industries in Alabama

Beyond the direct measures of economic output and employment, the RRR industries also generate substantial tax revenue that benefits communities at every level of government. The total estimated tax revenue generated by Alabama's RRR industries across all levels of government is approximately \$2.4 billion. This total includes:

- \$1.4B from direct economic activity
- \$560M from indirect activity
- \$448M from induced activity

The largest share of tax revenue is accrued to the federal government (\$1.4B), followed by the state of Alabama (\$586M), and county-level entities, including general and special districts (a combined \$377M).

Solid Waste and Recycling Policies in Alabama

State recycling policies are a major driver of recycling outcomes in the U.S., shaping both collection systems and material markets. States lay the groundwork for local programs by empowering communities to collect and process recyclable materials, requiring them to participate in regular solid waste planning, and establishing consistent permitting requirements for the service providers and facilities operating within their jurisdictions. State level diversion goals and grant/program funding mechanisms can further influence recycling outcomes at the local level. The following sections explore each of these state level policy tools as they are applied in Alabama.

SOLID WASTE MANAGEMENT PLANNING AND LOCAL EMPOWERMENT

Alabama's solid waste management system consists of a tiered planning hierarchy: ADEM maintains a State Solid Waste Management Plan, regional planning commissions produce annual needs assessments, and counties are required to develop local solid waste management plans that include recycling program descriptions. Cities may choose to create their own independent plans or operate within a county plan, reflecting a flexible but universal planning requirement. Public availability of these plans varies across counties.



In practice, though, compliance with the regional needs assessment requirement has been inconsistent with only one of Alabama's twelve regional commissions having a needs assessment publicly posted, and it has not been updated since 2003 (see Roles of Jurisdictions in [Chapter 1](#) for detail).

Local governments in Alabama have broad authority to implement recycling requirements or programs, though they are not mandated to do so. Under Alabama Code 22-27-3, counties and municipalities are able to adopt ordinances requiring mandatory participation in their solid waste collection and disposal systems, meaning a locality can require every household, business, or institution generating solid waste to subscribe to the local waste service unless they receive an exemption. As of the date of this report, waste service participation has not been mandated in any localities.

PERMITTING AND REGISTRATION

The state of Alabama has established regulatory authority over recycling facilities in ADEM Administrative Code 335-13, which includes registration and operating standards for Materials Recovery Facilities (MRFs) and Recovered Materials Processing Facilities (RMPFs), End-Use Manufacturing Facilities (EUMFs), and Energy Recovery Facilities (ERFs). In 2025, ADEM updated Division 13, Chapter 3, refining registration and reporting requirements for these facilities and transitioning all MRF, RMPF, and ERF registrants to five-year registration cycles, reinforcing a statewide system for tracking recycling and recovered material handling infrastructure. EUMF registrations do not expire.

Composting activities are also governed under Admin Code 335-13-14, which defines feedstocks, facility types, and permitting requirements, though composting activities throughout the state are limited and organized voluntarily. Composting is not mandatory for any residential, commercial, or institutional generators within the state.

HAULER LICENSING

Alabama requires basic safety and health permits for waste haulers. Under Alabama Administrative Code 420-3-5-.10, any person who collects or hauls solid waste must get a Solid Waste Collector Permit (or Transporter Permit) from the Local Health Department in each county where they work. This permit must be renewed every year and covers things like truck cleanliness, how often waste must be picked up, and recordkeeping. While the state and local jurisdictions reviewed for this report do not currently leverage hauler licensing requirements to enhance material recovery, they can be a powerful mechanism for ensuring that recycling is collected as part of standard trash service, material collection data is collected and reported, and service standards for haulers across the state are clearly established.

SCRAP TIRE ENVIRONMENTAL QUALITY ACT

Alabama additionally regulates specialized reuse and recovery streams such as scrap tires through the Scrap Tire Environmental Quality Act enacted in 2003. This act imposes a \$1.00 per tire fee on the sale of all replacement tires in the state. While a portion of the fee is retained by tire dealers and some funds are reserved for program administration and enforcement by ADEM, the majority is allocated to scrap tire clean-up projects. These projects aim to address the estimated 20 million scrap tires that have been illegally dumped throughout the state, which pose public health risks.⁴¹ Under the scrap tire program, the department works to identify each site, assign it a priority ranking, and contract with service providers for tire removal and remediation.

To improve transparency and accountability in the scrap tire supply chain while also preventing future illegal dumping, the act also establishes permitting and registration requirements. Tires must be collected or generated by registered receivers, transported by permitted haulers, and processed by permitted processors.

SOLID WASTE AND RECYCLABLE MATERIALS MANAGEMENT ACT (SWRMMA)

Alabama's recycling and solid waste policy framework is anchored by the Solid Waste and Recyclable Materials Management Act (SWRMMA) signed into law in 2008. This act was instrumental in codifying a nonbinding 25% statewide waste reduction goal and establishing a primary funding mechanism for ADEM's Solid Waste Program through a \$1.00 per ton disposal fee. ADEM's increase of this fee to \$1.30 per ton (along with a corresponding increase from \$0.25 to \$0.32 per cubic yard) was approved in mid-August 2026 under a new Chapter 335-1-8, 'Other Fees' following a notice of Intended Action with the Legislative Services Agency on May 15, 2026, and had a public hearing and comment deadline of July 7, 2026.⁴² The new rate takes effect on January 1, 2027. The fee, paid by generators and collected and remitted by landfill operators or other disposal facilities, supports administrative costs, dumping remediation projects, and several other programs. Since 2008, the fee has supported ADEM staff growth from less than 10 full-time staff members to over 40 as of 2024. With improved resources, the program has facilitated the remediation of more than 2,075 unauthorized dump sites by responsible parties over the same time period.⁴³

Since the enactment of the SWRMMA, several revisions to ADEM's Solid Waste Program regulations have been made. Perhaps most notably, this includes the establishment of the Alabama Recycling Fund (ARF) Grants program in 2009, which has since

⁴¹ <https://adem.alabama.gov/sites/default/files/2025-05/STSites.pdf>

⁴² Alabama Department of Environmental Management. Notice of Intended Action: New Chapter 335-1-8, "Other Fees." Filed with the Legislative Services Agency, Administrative Procedure Division, May 15, 2026. Available at: <https://admincode.legislature.state.al.us/api/filing/69f2686d6377832a14e7ace3/filing>

⁴³ <https://adem.alabama.gov/sites/default/files/legacyfiles/programs/land/landforms/SolidWaste2022-2024BiennialReport.pdf>

awarded local governments and their partners more than \$34 million for recycling initiatives.⁴⁴ Other additions include the Recycling Program, the Solid Waste Fund (SWF) Site Remediation program, the Landfill Operator Certification program, the Coal Combustion Residuals (CCR) Program, the Beneficial Use Program, the Composting Program, and a Statewide Solid Waste Reduction goal.⁴⁵

GRANT STRUCTURES

The ARF has been the foundation of local recycling investment in Alabama for over fifteen years. The program awards annual competitive grants to municipalities, counties, non-profit organizations, and regional solid waste authorities to help establish and expand voluntary recycling programs statewide. Since its launch, ARF has supported collection infrastructure, equipment upgrades, drop-off facilities, and processing capacity improvements across the state. As mentioned previously, demand for ARF funding has consistently outpaced available dollars. Across the full program history more than half of all funding requests have gone unfunded, reflecting strong and sustained local interest in building recycling capacity.

More recently, Alabama also received a federal Solid Waste Infrastructure for Recycling (SWIFR) grant, a competitive EPA program established under the Bipartisan Infrastructure Law that has directed more than \$160 million nationally toward strengthening state and local recycling systems since 2023.⁴⁶ ADEM is directing Alabama's award toward several targeted efforts: commissioning this statewide recycling study; developing the state's own data reporting system to build a more accurate and consistent picture of recycling activity across all regulated facilities; and reviewing and revising Alabama's recycling regulations, statewide waste reduction goals, and the ARF grant program itself to improve overall performance and accountability.

Residential Recycling Access

Access to recycling for residents was evaluated across 20 cities in Alabama, representing a variety of sizes, population densities, and geographic regions to gather insight into the levels of recycling availability within the state. The selected cities were distributed across all four ADEM administrative regions, including five in the Decatur Region, five in the Birmingham Region, seven in the Montgomery Region, and three in the Mobile Region, providing broad geographic representation of recycling access across the state. It is important to note that The Recycling Partnership's 2024 State of Recycling report shows that 48% of households in Alabama have recycling access through curbside or drop-off. The access evaluation conducted for this report employs a different methodology and analysis and looks specifically at 20 cities as an indication of recycling access across the state.

The 20 cities were chosen based on the following criteria:

- The top 10 cities by population in the state
- Represent geographic diversity across the state with cities in the northern, central, and southern regions of the state
- Jurisdictions with a range of population sizes (~6,700 to 250,000 people)
- Jurisdictions with a range of population densities (~260 to 1,860 people/square mile)

⁴⁴ <https://adem.alabama.gov/sites/default/files/legacyfiles/programs/land/landforms/SolidWaste2022-2024BiennialReport.pdf>

⁴⁵ <https://adem.alabama.gov/sites/default/files/legacyfiles/programs/land/landforms/SolidWaste2022-2024BiennialReport.pdf>

⁴⁶ U.S. Environmental Protection Agency, Solid Waste Infrastructure for Recycling Grant Program, recycling grant selectees and recipients, 2023–2025, epa.gov/circulareconomy.

- Jurisdictions with a range of median household incomes (\$34,000 to \$135,000)

The primary sources of information for recycling evaluation were from publicly available information on city and county websites, as well as service availability information on private recycling collection company websites.

Of the 20 cities evaluated, 17 offered residential curbside collection of recyclables. The two collection methods observed most frequently were automatic residential curbside recycling, in which recycling services are provided to households in the jurisdiction automatically, and subscription-based service, where households must contract a private company, pay a fee, and/or opt in to receive curbside recycling services. An additional two cities, Hoover and Montgomery, have a unique collection method in which recycling is collected in one container and is commingled with residential trash. This material is taken to a mixed waste processing facility (or a MRF, using Alabama's definition in statute), where recyclable material is supposed to be extracted from the trash.⁴⁷

Five of the cities evaluated offer automatic, single-stream curbside recycling collection for single-family residential properties on a weekly or bi-weekly basis, with some cities collecting trash and recycling on the same day and others having separate collection days. Twelve cities offer subscription curbside recycling services, many of which are organized through the city and require residential opt-in; however, in some cities residents must contract with a third-party provider that conducts residential recycling collection services in the area. Three evaluated cities do not provide recycling services and are not within the areas serviced by major private collection providers. Residents in these cities must rely on recycling drop-off centers operated by the city or, as in the case of Jasper which has no recycling access, depend on neighboring localities' drop-off centers to recycle their materials.

Among the cities assessed, the availability of curbside recycling appears to be influenced more by population size and density than city size by area or median income level. In contrast, there is little correlation among any of the factors measured and access to automatic versus subscription services. It is up to the city and its residents to decide if automatic or subscription/opt-in recycling is best for its constituents.

Drop-off recycling sites play a vital role in communities without curbside recycling and remain valuable in areas where curbside recycling is available. They serve as a backup option for households that generate more recyclables than their curbside carts can accommodate, residents in multifamily housing without direct access to on-site collection, and residents that wish to recycle additional materials that are not collected curbside, such as glass.

All evaluated communities except Jasper and Demopolis have access to at least one recycling drop-off site. Jasper and Demopolis are among the smaller cities included in the access study, and both are located outside major metropolitan areas. Demopolis offers opt-in curbside recycling but has no drop-off sites. Jasper has neither curbside recycling nor drop-off access.

Materials accepted for recycling are generally determined by the capabilities and guidelines of the processing facilities serving each jurisdiction. Below is a summary of the items accepted for recycling by category:

- **Paper and Cardboard (OCC)** – Ranges from communities that only accept OCC in Anniston to communities that accept OCC, mixed paper (MP) and cartons in Mobile and Dothan.

⁴⁷ RePower South, "Montgomery, AL," <https://www.repowersouth.com/locations/montgomery-ala/>

- **Metal Packaging** – The majority of communities accept aluminum cans, steel cans, and tin cans. Anniston does not accept any form of metal packaging.
- **Glass Containers** – Glass bottle and jar recycling was only found to be available for curbside collection in Montgomery and Hoover as part of their mixed waste collection. However, glass was collected for drop-off in Tuscaloosa, Fort Payne, and Auburn at one or more of their drop-off locations.
- **Plastic** – PET and HDPE bottles and jugs (#1 and #2 plastics) are accepted in all markets except Anniston and Jasper. There is greater variability of communities that accept #3-7 plastics. For instance, City of Troy specifies PP (#5 plastic) only. All #3-7 plastics are accepted by Mobile, Dothan, Montgomery*, Hoover*, Auburn and Phenix City.

Table 20 - Recycling Access by Collection and Material Type

CITY	POP.	AUTOMATIC CURBSIDE RECYCLING	SUBSCRIPTION CURBSIDE RECYCLING	GENERAL RECYCLING DROP-OFF LOCATION	PAPER	GLASS	METAL	PET AND HDPE	#3-7 PLASTIC
Huntsville	249,102	No	Yes	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Birmingham	230,402	No	Yes	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Mobile	201,367	No	Yes	Yes	OCC, Mixed Paper, and Cartons	No	Alum.; Steel/tin	Yes	Yes
Montgomery*	195,818	Yes	No	Yes	OCC and Mixed Paper	Yes	Alum.; Steel/tin	Yes	Yes
Tuscaloosa	114,288	No	Yes	Yes	OCC and Mixed Paper	Yes (drop-off only)	Alum.; Steel/tin	Yes	No
Hoover*	93,013	Yes	No	Yes	OCC and Mixed Paper	Yes	Alum.; Steel/tin	Yes	Yes
Auburn	83,757	No	Yes	Yes	OCC and Mixed Paper	Yes (drop-off only)	Alum.; Steel/tin	Yes	Yes
Dothan	71,650	No	Yes	Yes	OCC, Mixed Paper, and Cartons	No	Alum.; Steel/tin	Yes	Yes
Madison	64,029	No	Yes	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Decatur	57,974	Yes	No	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Florence	42,716	Yes	No	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Prattville	40,139	Yes	No	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Phenix City	38,509	No	Yes	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	Yes
Anniston	21,127	No	No	Yes	OCC Only	No	No	No	No

Troy	17,734	No	Yes	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	Y (only #5)
Fort Payne	15,017	No	No	Yes	OCC and Mixed Paper	Yes (drop-off only)	Alum.; Steel/tin	Yes	No
Jasper	14,561	No	No	No	No	No	No	No	No
Alexander City	14,439	No	Yes	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Andalusia	8,728	Yes	No	Yes	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No
Demopolis	6,724	No	Yes	No	OCC and Mixed Paper	No	Alum.; Steel/tin	Yes	No

*The City of Hoover and City of Montgomery both use mixed waste collection, meaning they do not separate recyclable materials from their trash at the curb. Trash and recyclables are collected together in a single container and brought to a facility that "extracts" recyclables out of the waste stream called a mixed waste processing facility, or MRF, as referenced above.⁴⁸

Regional Benchmarking

To understand how Alabama compares regionally, a benchmarking review was completed comparing the state's recycling system, policies, and funding against those of regional peers. This kind of comparison is useful because it shows where Alabama is doing things similarly to other states, where it stands out, and where gaps in policy or infrastructure might explain differences in outcomes. On several fronts, Alabama stands out: its landfill tipping costs ranks among the lowest in the region, and its long-running recycling grant program has provided steady, consistent support to local governments.⁴⁹

To build a full picture, a range of indicators were reviewed including statewide diversion goals, household recycling access, funding structures, disposal surcharges, business incentives for recycling, the scale of financial support available to local governments, and end market capacity. These data points show where Alabama stands today and helps identify where the most meaningful opportunities for improvement exist.

RECYCLING PERFORMANCE

Table 21 below shows recycling goals and household recycling access for each of the eight states in EPA Region 4.⁵⁰ The access figures come from [The Recycling Partnership's \(TRP\) state-by-state data on residential recycling availability](#). The U.S. Environmental Protection Agency (EPA) has established a national recycling goal of 50% by 2030, recognizing that increasing recycling rates depends on expanding access to convenient recycling opportunities. Access matters because a diversion goal is only reachable if people actually have a way to recycle. Strong policy targets do not translate into results when a large share of households have no convenient option. Alabama has a 40% statewide diversion goal, but only 48% of households currently have access to recycling through curbside pickup or drop-off programs.⁵¹ That puts Alabama noticeably behind North Carolina (75%), South Carolina (72%), and Florida (66%), and points to access as one of the more pressing gaps to address.⁵²

⁴⁸ RePower South, "Montgomery, AL," <https://www.repowersouth.com/locations/montgomery-ala/>

⁴⁹ ADEM, *Solid Waste Biennial Report*, October 1, 2022 – September 30, 2024

⁵⁰ U.S. Environmental Protection Agency, EPA Region 4 State Overview

⁵¹ The Recycling Partnership, *2024 State of Recycling: The Present and Future of Residential Recycling in the U.S.*

⁵² The Recycling Partnership, *2024 State of Recycling: The Present and Future of Residential Recycling in the U.S.*

Table 21 - Recycling Goals and Residential Access

STATE	RECYCLING GOALS	RESIDENTIAL ACCESS
Alabama	Statewide diversion goal: 40%. Diversion calculated annually by weight using recovered, energy-recovered, and beneficial-use material over total waste disposed.	48% of households have recycling access through curbside or drop-off.
Florida	Statewide diversion goal: 75% by 2020.	66% of households have recycling access, mostly through curbside programs.
Georgia	No statewide diversion goal.	62% of households have recycling access through curbside or drop-off programs.
Kentucky	No statewide diversion goal: a new sustainable materials management plan with updated goals is in development.	59% of households have access to recycling via curbside or drop-off programs.
Mississippi	Statewide diversion goal: 25%.	37% of households have recycling access via curbside or drop-off.
North Carolina	No statewide diversion goal: statutory target is 40% per-capita municipal solid waste reduction goal.	75% of households have recycling access through curbside or drop-off.
South Carolina	State plan targets 50% MSW recycling, 50% food-waste reduction, and disposal reduction to 3.25 lbs./person/day by 2030.	72% of households have recycling access through curbside or drop-off.
Tennessee	Statewide diversion goal: 25%	63% of households have recycling access through curbside or drop-off.

State Recycling Goals sourced from individual state solid waste statutes and agency plans

Residential Access Figures sourced from The Recycling Partnership, 2024 State Of Recycling: The Present And Future Of Residential Recycling In The U.S.

Access to recycling is only meaningful if households are using it, which is why recycling rates offer a more complete picture of system performance. A recycling rate measures how much of the total residential recyclable material generated actually gets recycled. TRP calculates this using a methodology that tracks material from single-family and multifamily homes and includes film and flexible materials. Using that approach, TRP estimates that just 21% of residential recyclable material is actually being recycled nationwide, with 76% lost at the household level before it ever reaches a recycling facility.⁵³

Alabama's 9% recycling rate, shown in the chart below alongside the other EPA Region 4 states, places it just above Mississippi and close to several neighbors dealing with similar challenges.⁵⁴ All eight states fall below 25%. It shows Alabama is not an outlier, but it also points to real room for growth.

It is worth noting that this recycling rate is a different measure than the statewide diversion rate Alabama tracks under ADEM Admin. Code 335-13-13, and the two should not be compared directly. The diversion rate compares all material diverted from landfills, including recycling, energy recovery, and beneficial use, across all waste sectors, against total statewide waste disposed, whereas the recycling rate above measures only how much of what households generate is actually recycled. Using its own methodology, Alabama's diversion rate currently exceeds 25%, more than triple the rate calculated in 2008, though it remains below the state's goal of 40% set in the 2024 update to the ADEM Administrative Code.⁵⁵ The two figures reflect

⁵³ The Recycling Partnership, 2024 State of Recycling: The Present and Future of Residential Recycling in the U.S.

⁵⁴ The Recycling Partnership, 2024 State of Recycling: The Present and Future of Residential Recycling in the U.S.

⁵⁵ <https://www.adem.alabama.gov/sites/default/files/legacyfiles/programs/land/landforms/SolidWaste2022-2024BiennialReport.pdf>

differences in scope rather than a factual discrepancy, but both point to the same underlying opportunity: there is meaningful room to grow both residential recycling participation and overall statewide diversion.

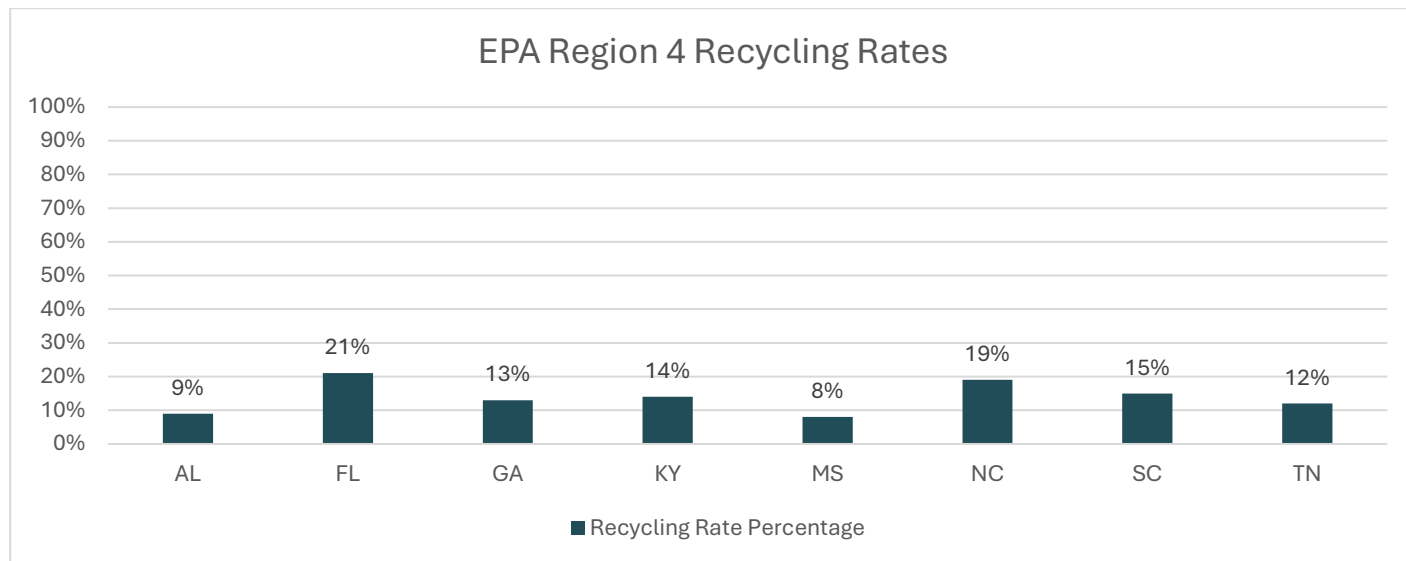


Figure 23 - Recycling Rate Chart

Recycling Rates sourced from *The Recycling Partnership, 2024 State of Recycling: The Present and Future of Residential Recycling in the U.S.*

The EPA reports a national recycling rate of 32% and has set a goal of reaching 50% by 2030.⁵⁶ TRP's figure of 21%, cited earlier, is lower because it measures a different metric. The EPA's rate is based on total municipal solid waste across all sectors, while TRP's rate focuses specifically on residential recyclables. The result is a more conservative but more complete picture of how much residential recyclable material is actually being recovered nationwide. Under either measure, the national system is falling well short of its goals. To help close that gap, the EPA has been distributing funding through the Solid Waste Infrastructure for Recycling (SWIFR) grant program, which has awarded more than \$160 million to states, local governments, and tribes since 2023 to improve recycling infrastructure, expand access, and reduce contamination.⁵⁷

ECONOMIC AND FUNDING INCENTIVES

How a state funds and incentivizes recycling has a direct effect on whether recycling programs grow, shrink, or stall. States that have built strong financial tools like tax credits for recycling businesses, low-interest loans for equipment, and dedicated grant programs for local governments, tend to have more developed infrastructure and higher recovery rates. States that rely solely on general economic development programs, or that have not structured dedicated funding mechanisms, may see slower progress. Understanding where Alabama fits within that landscape is an important part of identifying where targeted investment or policy changes could make the biggest difference. The sections below compare Alabama's funding and incentive structure against neighboring and regional states across several indicators, including recycling tax credits, low-interest loan programs, organics grants, disposal surcharges, and the scale of direct support provided to local governments.

⁵⁶ U.S. Environmental Protection Agency, National Recycling Goal

⁵⁷ U.S. Environmental Protection Agency, *Solid Waste Infrastructure for Recycling Grant Program*, recycling grant selectees and recipients, 2023–2025, epa.gov/circulareconomy

BUSINESS ASSISTANCE

Table 22 below compares recycling related business incentives across Region 4 states and several others. Alabama currently offers no recycling specific tax credits or loan programs, though the state does provide a scrap tire end-use manufacturing grant to businesses. Recycling businesses in the state can also apply for general economic development incentives including job creation credits, capital investment programs, and similar tools, but only if they meet the same requirements as any other industry. Several neighboring states have gone further, building financial tools designed specifically for recycling infrastructure and circular economy businesses.

Table 22 - Regional Comparison of Recycling Business Assistance

STATE	RECYCLING TAX CREDIT	RECYCLING TAX EXEMPTION	LOW-INTEREST LOANS	BUSINESS RECYCLING INCENTIVES
Alabama	No	No	No	<u>Yes</u>
Florida	No	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Georgia	<u>Yes</u>	No	No	No
Kentucky	<u>Yes</u>	<u>Yes</u>	No	No
Mississippi	No	No	No	No
North Carolina	<u>Yes</u>	<u>Yes</u>	No	<u>Yes</u>
South Carolina	<u>Yes</u>	<u>Yes</u>	No	No
Tennessee	No	No	No	No

State policy review compiled from individual state statutes and agency websites

Tax Incentives

Florida offers a sales and use tax exemption on resource recovery and recycling equipment rather than an income tax credit.⁵⁸ Georgia provides a general Investment Tax Credit that, while not recycling exclusive, applies a higher rate to recycling equipment investment (3–8%) than to general manufacturing equipment (1–5%).⁵⁹ North Carolina combines both an income/franchise tax credit and a sales tax exemption for recycling equipment.⁶⁰ South Carolina offers a 30% income tax credit and a sales tax exemption for recycling equipment, though the credit's largest tier applies only to major facilities meeting a \$150 million investment threshold and manufacturing products from at least 50% post-consumer content by weight or volume, limiting access for smaller recyclers.⁶¹ Kentucky offers the most broadly accessible package among the states reviewed: a 50% income tax credit on recycling and composting equipment, open to any taxpayer regardless of size, paired with a sales tax exemption.⁶² Mississippi, Tennessee, and Alabama have no recycling specific tax credit or sales tax exemption; recyclers in these states can access only general economic development incentives not tailored to recycling, such as Mississippi's MFLEX

⁵⁸ Florida Department of Environmental Protection, "Sales Tax Exemption on Resource Recovery Equipment." <https://floridadep.gov/waste/permitting-compliance-assistance/content/sales-tax-exemption-resource-recovery-equipment>; Fla. Stat. §212.08(7)(q); §403.715.

⁵⁹ Georgia.org, "Investment Tax Credit." [Georgia's Incentives | Georgia](https://georgia.org/incentives); O.C.G.A. §48-7-40.7.

⁶⁰ North Carolina Department of Environmental Quality, "Financing Tools for North Carolina Recycling Businesses." <https://www.deq.nc.gov/energy-mineral-and-land-resources/land-resources/publications/recycling-business-financing-fact-sheet/download>; N.C. Gen. Stat. §105-164.13(5k).

⁶¹ South Carolina Department of Commerce, "Corporate Income Tax & Incentives." <https://www.sccommerce.com/why-sc/incentives/corporate-income-tax-incentives>; S.C. Code Ann. 12-6-3460; sales tax exemption under S.C. Code Ann. 12-36-2120(17) and (51).

⁶² Kentucky Department of Revenue, "Recycling or Composting Equipment Tax Credit." <https://revenue.ky.gov/Business/Pages/Recycling-Composting-Tax-Credit.aspx>; KRS 141.390.

and Jobs Tax Credit⁶³ or Alabama's Capital Investment Tax Credit, which defines recycling and reclaiming facilities as qualifying industrial activity but is not a dedicated recycling program.⁶⁴

Loans, Grants, and Business Assistance

Florida is the only state in the region with a state administered low-interest loan program dedicated to recycling equipment purchases, offering long-term fixed-rate financing up to \$300,000 at rates as low as 2% below prime.⁶⁵ North Carolina pairs its tax incentives with direct business assistance through its Recycling Business Assistance Center (RBAC), including grants of up to \$60,000 to private recycling and composting businesses and referrals to third-party lenders.⁶⁶ Alabama has begun offering Scrap Tire End-Use Marketing Grants to private and public businesses, a narrower, material specific grant option not currently matched by most neighboring states.⁶⁷ Georgia, Kentucky, Mississippi, South Carolina, and Tennessee offer no loan, grant, or business assistance program available to private recycling businesses; where recycling related grants exist in these states, they are directed at local governments, solid waste authorities, or nonprofits rather than private companies. Together these programs show the range of approaches states are using and give Alabama useful reference points as it evaluates its own incentive structure.

DISPOSAL FEES

A state with a low landfill surcharge fee and low landfill tipping fees (what landfill operators charge to accept waste) can inadvertently undercut the economic case for recycling. Alabama's \$1.00 per ton surcharge fee has been in place since SWRMMA passed in 2008 and has not been updated since.⁶⁸ However, that may be changing as an increase to \$1.30 per ton has been approved and takes effect January 1, 2027.⁶⁹ Even at the higher rate, Alabama's disposal fee would remain on the lower end compared to regional and national peers.

Alabama's average landfill tipping fee of \$38.78 per ton is well below both the 2024 national average of \$62.28 per ton and the Southeast regional average of \$50.12 per ton, making Alabama one of the lowest-cost disposal states in the country.⁷⁰ That combination of a low disposal fee and low overall disposal costs matters because it reduces the financial pressure on local governments, businesses, and haulers to seek recycling alternatives. Understanding where Alabama's fee structure sits relative to neighboring and national peers helps identify whether the current rate is generating enough revenue to support the recycling programs the state needs, and where adjustments might be warranted.

⁶³ Mississippi Development Authority, "Incentives Directory." <http://mississippi.org/doing-business/incentives/>

⁶⁴ Alabama Department of Revenue, "Income Tax Incentives." <https://www.revenue.alabama.gov/tax-incentives/income-tax-incentives/>; Code of Alabama 1975, 40-18-190 et seq.

⁶⁵ Florida Department of Environmental Protection, "Recycling Loan Program." <https://floridadep.gov/waste/waste-reduction/content/recycling-loan-program>

⁶⁶ North Carolina Department of Environmental Quality, "Recycling Business Development Grant." <https://deq.nc.gov/conservation/recycling/programs-offered/grants-recycling-businesses>; "Loans for Recycling Businesses." <https://www.deq.nc.gov/about/divisions/environmental-assistance-and-customer-service/recycling/programs-offered/recycling-business-assistance-center/financing/loans-recycling-businesses>

⁶⁷ Alabama Department of Environmental Management, "Scrap Tire Program." <https://adem.alabama.gov/waste/scrap-tire-program>

⁶⁸ Alabama Solid Wastes and Recyclable Materials Management Act (SWRMMA), Ala. Code 22-27-1 et seq. (2008)

⁶⁹ Alabama Department of Environmental Management. *Notice of Intended Action: New Chapter 335-1-8, "Other Fees."* Filed with the Legislative Services Agency, Administrative Procedure Division, May 15, 2026. <https://admincode.legislature.state.al.us/api/filing/69f2686d6377832a14e7ace3/filing>

⁷⁰ Environmental Research & Education Foundation (EREF), *Analysis of MSW Landfill Tipping Fees — 2024*, eref.org

Table 23 - Regional Comparison of Landfill Surcharge Fees

STATE	\$/TON	FEE NOTES
Alabama	<u>\$1.00</u>	Increase to <u>\$1.30</u> approved; effective January 1, 2027.
Florida	\$0.00	No statewide per ton fee. <u>Collects per new tire</u> (\$1) and <u>lead acid battery</u> (\$1.50).
Georgia	<u>\$1.00</u>	Private disposal sites are required to charge \$2.50/ton
Kentucky	<u>\$2.00</u>	Updated from \$1.75 in the 2025 legislative session.
Mississippi	<u>\$1.00</u>	\$2.00/ton for hazardous waste
North Carolina	<u>\$2.00</u>	
South Carolina	\$0.00	<u>Specific fees per material including waste tires.</u>
Tennessee	<u>\$0.90</u>	

State policy review compiled from individual state statutes and agency websites

Among its immediate neighbors, Alabama's current \$1.00 per ton rate is consistent with Mississippi and Georgia, and slightly above Tennessee (\$0.90). It is below Kentucky and North Carolina, both of which now assess \$2.00 per ton, with Kentucky's rate having increased from \$1.75 during the 2025 legislative session. Florida and South Carolina remain the only surrounding states with no statewide MSW surcharge at all. The approved increase to \$1.30 per ton, effective January 1, 2027, would keep Alabama in roughly the same position within the region, still below Kentucky and North Carolina, and still well below the \$2.00–\$5.00 per ton range common among many states nationally. States like Pennsylvania (\$6.25/ton), Iowa (\$4.25/ton), and Ohio (\$4.75/ton) assess substantially higher fees, and Alabama would remain on the lower end even after the approved adjustment takes effect.

REGIONAL GRANT STRUCTURES

Across the Southeast, states use a range of grant structures that reflect their own policy priorities, available revenue, and program histories. Understanding how Alabama fits into that landscape helps put ARF's performance and scale in context.

Alabama stands out for having one of the most consistent, long-running statewide grant programs in the region specifically dedicated to local recycling capacity. Many neighboring states have filled gaps with more narrowly targeted programs or have seen funding mechanisms come and go over the years. A few neighboring states are worth highlighting for comparison. Kentucky directed \$6 million in 2025 across competitive programs covering diversion from landfills and household hazardous waste, one of the more robust funding structures in the region.⁷¹ North Carolina maintains annual grants with requests that consistently exceed available funds, reflecting strong local demand similar to Alabama's.⁷² On the other end of the spectrum, Mississippi currently has no recurring grant cycle, with its last major recycling program last administered in 2013, a contrast that shows what the absence of dedicated funding looks like over time.⁷³ Florida eliminated its competitive recycling grant program in 2010, leaving only its small county consolidated grant in place.⁷⁴

⁷¹ <https://www.ecos.org/news-and-updates/kentucky-awards-waste-management-grants-from-pride-fund/>

⁷² North Carolina Department of Environmental Quality, Community Waste Reduction and Recycling Grant, deq.nc.gov

⁷³ Mississippi Department of Environmental Quality (MDEQ), Regional Recycling Cooperative Grants Program

⁷⁴ Florida Department of Environmental Protection, Recycling Grants and Loans, floridadep.gov/waste/waste-reduction/content/recycling-grants-and-loans

Table 24 - Regional Comparison of Grant Programs

STATE	GRANTS
Alabama	Recycling Fund Grants Program awards annual grants for program improvements: \$2.5M in FY 25.
Florida	Small County Consolidated Waste Grant provides equal funding to counties under 110,000 population; innovative recycling grants ended in 2010.
Georgia	RWD Grants are awarded annually through the Solid Waste Trust Fund; recent totals include \$3.18M in FY 25.
Kentucky	Three competitive grant programs, recycling, composting, and HHW, are funded through the Kentucky Pride Fund , with \$6M allocated to recycling in 2025.
Mississippi	Local support provided but no recent funding cycle amounts reported; last major program was the Regional Recycling Cooperative Grant (up to \$1M total) last administered in 2013.
North Carolina	Community Waste Reduction and Recycling (CWRAR) grants awarded \$339,400 in FY 25-26
South Carolina	Solid Waste Grant awarded \$1.16M in FY 25 to recycling programs.
Tennessee	Waste Reduction Grants provide separate funding pools for rural counties or municipalities (\$2.25M total)

Sourced from agency websites

Taken together, these comparisons show that Alabama's ARF program is one of the more stable and reliable sources of recycling investment in the Southeast. States with dedicated, recurring grant programs tend to sustain more active local recycling systems over time, and the gap left when those programs disappear is hard to close.

SOLID WASTE POLICIES

To drive greater recycling access, participation and material recovery, Alabama and other Southeast states have explored a variety of policy solutions at different levels of government. These policies largely rely on incentive-based models rather than mandates. The following section summarizes policy initiatives put forth by the Alabama Legislature in recent years, and/or adopted by other state or local governments in the region.

TAX CREDITS, GRANTS AND LOANS FOR RECYCLERS

States may incentivize recycling market and infrastructure development through direct economic signals including tax credits, grants, and loans. Throughout the 1980s and 1990s, many states enacted these programs to encourage recycling and investment in recycling infrastructure. They provided financial support for equipment purchases, research and development, market studies, as well as waste processing. Tax incentives included income, property, and sales tax credits for businesses and manufacturers using recycled materials, aiming to stimulate both supply and demand in-state recycling markets.

In the Southeast, both Florida and North Carolina adopted recycling-related tax incentive policies in the late 1990s. Florida's policy, still in effect, provides sale tax exemptions for businesses purchasing recycling machinery or transporting recycled goods.⁷⁵ According to the Florida Division of Waste Management, businesses saved over \$42.7 million in sales tax as of 2023. In North Carolina, equipment and facilities used exclusively for recycling and resource recovery are exempt from property taxes.⁷⁶ Additionally, the North Carolina Departments of Environmental Quality and Commerce have collaborated to form the Recycling Business Assistance Center which offers a variety of financial support tools to recycling businesses.⁷⁷ Grant funding

⁷⁵ <https://floridadep.gov/waste/permitting-compliance-assistance/content/sales-tax-exemption-resource-recovery-equipment>

⁷⁶ <https://www.deq.nc.gov/about/divisions/environmental-assistance-and-customer-service/recycling-and-materials-management/programs-offered/recycling-business-assistance-center/financing/tax-incentives>

⁷⁷ <https://edpnc.com/incentives/pollution-abatement-and-recycling/>

up to \$75,000 per business is made available through a request for proposal process each year.⁷⁸ According to Waste Advantage, the program has catalyzed more than \$9.2 million in private investment, supported more than 65 projects, and diverted thousands of tons of material from landfills in the past 5-years.⁷⁹ Alabama does not currently have a recycling tax credit system in place.

Collectively, credit, grant, and loan programs strengthen state recycling systems by creating stable markets, supporting manufacturing of recycled-content products, and encouraging private sector investment. These economic levers are proven strategies for stimulating the materials recycling marketplace with the potential of bringing new business into the state and creating jobs.

LANDFILL BANS AND DIVERSION REQUIREMENTS

Apart from changing incentives through programs and permitting, states may also mandate solid waste and recycling policy. These policies mandate diversion or ban landfilling of certain material streams like organics and other recyclable materials. While diversion efficacy varies by the strength of enforcement, Alabama's landfill ban on whole scrap tires, discussed in previous sections, demonstrates how mandates can act as catalysts for economic investment in the recycling industry.

Organics

Although organics recycling is not a focus of this report, it is worth noting that policies aimed at diverting organic material from landfills can be impactful diversion tools. It is also worth noting that many states in the Southeast have established landfill bans for yard trimmings.

Organics, including yard waste and food waste, when landfilled can take up large volumes of space, generate atmospheric pollutants as they decompose, and contribute to odor, pests, and the contamination of nearby waterways through stormwater run-off. To avoid these issues while also taking advantage of remaining energy and nutrient stores within organic waste via alternative anaerobic digestion and composting technologies, many states have adopted landfill bans and diversion requirements.

Between the late 1980s and 2010, 25 states shown in Figure 24 had implemented bans on landfilling yard trimmings (leaves, grass, brush, and/or wood), often motivated by diminishing landfill capacity.⁸⁰

⁷⁸ <https://www.deq.nc.gov/about/divisions/environmental-assistance-and-customer-service/recycling-and-materials-management/programs-offered/recycling-business-assistance-center/news-and-publications/recycling-works-newsletter/winter-2024>

⁷⁹ <https://wasteadvantagemag.com/fueling-market-growth-north-carolinas-2026-recycling-business-grants-now-open/>

⁸⁰ <https://cdn.ymaws.com/www.compostingcouncil.org/resource/resmgr/documents/Yard-Trimming-Ban-Impacts-a.pdf>

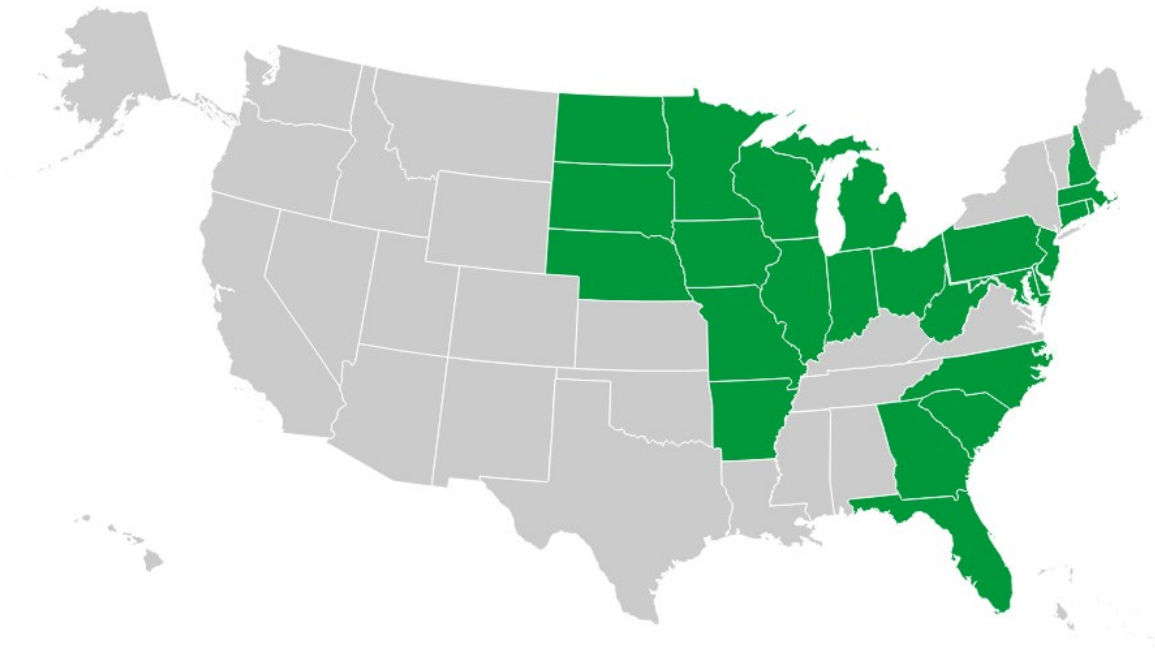


Figure 24 - States with Bans on Landfilling Yard Trimmings, 2010

From 1988 to 1995, disposal bans stimulated a rapid increase in composting. The U.S. Composting Council noted the following impacts of these yard waste disposal bans:⁸¹

- Composting facilities increased from ~600 in 1989 to >3,000 in 1993 and close to 4,000 by 1999.
- Composted tons increased from 0.5 million tons in 1988 to >21 million tons in 2008.

The Council further noted that this policy helped create jobs not only in composting facilities, but also in factories that manufacture composting equipment and in the marketing and distribution of compost and mulch products.

In the Southeast, Florida, Georgia, North Carolina, and South Carolina continue to ban yard waste from landfill.

Other Recyclable Materials

Beyond yard waste, jurisdictions commonly ban the landfill disposal of recyclable materials to encourage greater diversion. In the Southeast, North Carolina prohibits any person from knowingly landfilling fifteen waste categories spanning packaging, electronics, automotive waste and more.⁸² On a local scale, the Metropolitan Government of Nashville and Davidson County in Tennessee has banned solid waste disposal facilities and incinerators from accepting any whole waste tires, lead-acid batteries or used automotive fluids and oils.⁸³ A separate ordinance additionally prohibits yard waste, corrugated cardboard, and electronic waste from being placed in solid waste containers or collected and disposed with solid waste.⁸⁴ Between the

⁸¹ <https://cdn.ymaws.com/www.compostingcouncil.org/resource/resmgr/documents/Yard-Trimming-Ban-Impacts-a.pdf>

⁸² <https://www.deq.nc.gov/about/divisions/waste-management/solid-waste-section/compliance-and-monitoring/items-banned-disposal-landfills>

⁸³ [Solid Waste Management Act of 1991](#)

⁸⁴ [Metro Code of Ordinances 10.20.095](#)

two policies, landfill bans in the Metro region may apply to end users, collectors, or generators. While data to demonstrate efficacy in these policies is limited, the strength of enforcement structures and penalties generally predict success.

UNIVERSAL ACCESS TO RECYCLING

While landfill bans may be a first step towards greater diversion, alternatives to disposal must be widely available to facilitate compliance. For commingled household recyclables, requiring that communities across the state have universal access to recycling can be a foundational policy change. In practice, this requirement means that any waste hauler offering trash services must also offer recycling services. In the Southeast, such policies have been applied at the state and local levels.

In Florida, Statute 403.706⁸⁵ states that a small county of less than 100,000 residents must provide the “opportunity to recycle.” This is defined as providing curbside or drop-off recycling collection services and conducting public outreach and education. While the current regulations do not offer explicit enforcement mechanisms, earlier versions stated that local governments out of compliance with this section shall not be eligible for grants from the Solid Waste Management Trust Fund.⁸⁶

At the local level, universal recycling policies in the Southeast have also been tied to hauler licensing requirements. For instance, the Metro Government of Nashville and Davidson County requires that all waste haulers offering solid waste collection services within the jurisdictional area of the metro government also offer recycling collection services in order to obtain a private collection permit.⁸⁷ While this approach requires additional administrative oversight, it is also more enforceable.

REGIONAL COLLABORATION THROUGH HUB-AND-SPOKE SYSTEMS

In rural communities, solving for recycling access often means addressing transportation and processing challenges in tandem, where waste haulers that are required to offer comingled recycling services to residents must also have access to supporting storage or sortation infrastructure. While a rural community may not generate sufficient material volumes to justify the operation of a local MRF, several communities may be able to contribute to centralized processing centers. This approach, a hub-and-spoke recycling system, has been applied in a number of communities in the Southeast to better capture remotely collected material.

As an example, the West Tennessee Regional Recycling Hub, a materials recovery facility in the rural town of Henderson, was established in 2010 to serve a collection of rural jurisdictions in the region. Today, the facility serves 350,000 residents across 13 rural cities and counties.⁸⁸ While private partnerships with Keep Chester County Beautiful and other organizations have contributed to success and expansion in recent years, \$6.5 million in initial funding for construction came from the Tennessee Department of Environment and Conservation (TDEC). As authorized by the Solid Waste Management Act of 1991 and supported by the Tennessee Solid Waste Management Fund, TDEC awarded several million dollars in additional grant funding for other hub-and-spoke recycling projects in the years to follow.^{89 90}

⁸⁵ <https://www.flsenate.gov/Laws/Statutes/2025/403.706>

⁸⁶ <https://www.flsenate.gov/laws/statutes/1999/403.706>

⁸⁷ https://library.municode.com/tn/metro_government_of_nashville_and_davidson_county/codes/code_of_ordinances?nodeId=CD_TIT10HESA_DIVIGERE_CH10.2OWAMA_ARTIGERE_10.20.105RESEBEMAAVWAHA

⁸⁸ <https://wasteadvantagemag.com/the-west-tennessee-regional-recycling-hub-a-critical-piece-of-recycling-infrastructure/>

⁸⁹ <https://www.tn.gov/former-governor-haslam/news/2012/12/13/haslam-announces-1.7-million-in-recycling-equipment-and-hub-grants.htm>

⁹⁰ <https://www.tn.gov/news/2013/12/23/tdec-announces-2.3-million-in-recycling-equipment-and-hub-grants.html>

Ultimately, hub-and-spoke systems create an opportunity to maximize operational and financial efficiencies by sharing resources, infrastructure, and grant funds regionally. While motivation to participate must come from municipalities directly, states and other organizations can support hub-and-spoke efforts through grant funding, technical assistance, and sample resources. For instance, the Nebraska Recycling Council developed a sample cost sharing agreement⁹¹ which could be used in a Request for Proposals for the lease of a central recycling center.

PAY-AS-YOU-THROW (PAYT) PRICING MODELS

Once recycling services are established, municipalities can play a central role in shaping how they are delivered to residents. For instance, shifting standard tax-funded or subscription service delivery models to pay-as-you-throw (PAYT) programs can effectively increase diversion and resident participation in recycling.

PAYT programs require residents to pay for solid waste services based on the amount of waste they generate. Most commonly, residents are required to pay A) monthly or annual fees based on the size of the garbage cart they use, B) per trash bag fees that may also vary by bag size, or C) the cost of stickers to place on each trash bag. In these communities, recycling (and sometimes composting) services are provided at no additional cost, sending a direct economic signal to residents to waste less and recycle more.

A 2010 study by the U.S. EPA found that the average community with curbside PAYT programs generates nearly half the waste of its non PAYT counterparts.⁹² Following the study, Waste360 reported that about 25% of communities operate PAYT programs nationally.⁹³ In the Southeast region, the EPA provided a case study on one notable PAYT program run by Gainesville, Florida, which charges residents by cart size. In Gainesville, the implementation of PAYT increased the amount of recyclables recovered by 25% and reduced municipal disposal costs by more than \$186,000 in the first program year.⁹⁴

END MARKET CAPACITY

Alabama holds a strong, more diversified end market position than most of its regional neighbors, anchored by a rare concentration of large-scale buyers across nearly every major recyclable commodity. The state is home to KW Plastics, the world's largest plastics recycler, and Indorama Ventures, one of North America's largest PET reproducers, giving Alabama an outsized plastics end market presence for a state its size. Alabama's fiber markets are similarly well developed, led by Kimberly-Clark's Mobile mill and supported by a broader Southeastern paper mill network, while its metals end markets are anchored by in-state steel producers and aluminum processors, soon to be reinforced by Novelis's \$4 billion-plus aluminum recycling and rolling mill under construction in Bay Minette, one of the largest such investments in the country.⁹⁵ Compared to neighboring states, which generally have less or more narrowly focused end market bases (concentrated in one or two

⁹¹ <https://nrcne.org/wp-content/uploads/2021/05/Southeast-Hub-and-Spoke.pdf>

⁹² <https://nepis.epa.gov/Exe/ZyNET.exe/P10088LB.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyf%5CIndex%20Data%5C06thru10%5Ctxt%5C00000020%5CP10088LB.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>

⁹³ <https://www.waste360.com/waste-collection-transfer/the-recycling-and-economic-benefits-of-payt>

⁹⁴ <https://nepis.epa.gov/Exe/ZyNET.exe/P1002W97.txt?ZyActionD=ZyDocument&Client=EPA&Index=1995%20Thru%201999&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C95THRU99%5CXTX%5C00000023%5CP1002W97.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1>

⁹⁵ <https://investors.novelis.com/news-events/press-releases/detail/56/novelisbuild-2-5-billion-low-carbon-aluminum-recycling-and-rolling-plant>

commodities, such as fiber in Georgia, rather than the breadth Alabama offers), Alabama stands out for having an in-state processor for nearly every major material stream, giving the state a genuine geographic and economic advantage.

Stakeholder Engagement

The RRS project team conducted targeted stakeholder outreach to better understand how recycling programs operate across the state, what barriers limit participation, and where opportunities exist to strengthen the system. Outreach included email and phone contact with public and private sector stakeholders representing collection, processing, manufacturing, and education roles within Alabama’s recycling system. Interview questions were tailored by stakeholder type to reflect differences in recycling roles and follow-up attempts were made when initial outreach was unsuccessful.

METHODOLOGY

The project team conducted ten, 45-minute virtual interviews from March to June 2026. Stakeholders represent a cross-section of recycling activity in Alabama, including residential collection programs, drop-off systems, industrial processing facilities, recycled content manufacturing, scrap recycling, and statewide education and coordination efforts. Multiple attempts were made to contact all identified stakeholders. Of the identified stakeholders, all responded to outreach and participated in an interview with the exception of the Small Municipality category which did not respond and is not included in the table below.

Table 25 - Summary of Identified Stakeholders

AUDIENCE	NUMBER OF STAKEHOLDERS	ORGANIZATION	INTERVIEWED
Solid Waste Authority	1	Huntsville	✓
Hauler	1	WM	✓
RMPF	1	Baldwin County	✓
End Market	3	Greif, Indorama, KW Plastics	✓✓✓
Large Municipality	2	Tuscaloosa, Auburn	✓✓
Non-Government Organization	2	ARC, Scrap Recyclers Association of Alabama	✓✓

KEY FEEDBACK

THE BOTTLENECK IS COLLECTION, NOT MARKETS.

Every end-market stakeholder interviewed including KW Plastics, Indorama Ventures, and Greif, reported operating below capacity because Alabama does not generate enough collected material to meet their in-state demand and thus imports material from the Northeast and Canada. KW Plastics noted that all HDPE and polypropylene currently collected in Alabama amounts to less than two days of their processing capacity. Indorama said it could process 100% of all PET bottles used in Alabama if they were collected and baled. Greif sources fiber from across the Southeast because in-state capture is insufficient. Waste Management echoed this from the hauler side, noting capacity to expand services in urban and suburban markets but significant barriers in rural areas due to long haul distances and limited nearby processing infrastructure.

ALABAMA HAS A GEOGRAPHIC ADVANTAGE IT IS NOT FULLY USING.

Nearly every major recyclable commodity has an in-state processor. Florence noted that its collected materials travel short distances to reach Indorama, Constellium, and a local paper mill. This level of market proximity is uncommon in the Southeast and means that material collected in Alabama does not need to travel far to find a buyer. The economic and environmental case for expanding collection is stronger here than in many other states.

STRONG LOCAL PROGRAM MODELS SHOW WHAT IS POSSIBLE.

Baldwin County and Huntsville both demonstrated that low contamination and high engagement are achievable when infrastructure and education are aligned. Baldwin County's subscription-based model produces more committed recyclers by design, supported by a full-time education coordinator, a 7,000-square-foot education facility, and staffed drop-off sites. Huntsville's compliance-based model, requiring residents to complete an educational video and quiz before receiving additional carts and following up directly when contamination is flagged, has built public trust and reinforced correct behavior over time. These are different approaches to the same problem, and both are working.

ARF GRANTS HAVE CHANGED WHAT IS POLITICALLY POSSIBLE AT THE LOCAL LEVEL.

All three grant case study communities described the ARF program as a genuine enabler, not just of infrastructure, but of political will. Florence said that before ARF funding arrived, the city's recycling program was treated as a liability by the council. Once grants produced visible upgrades and increased tonnage, elected officials became supporters.

CONTAMINATION IS A SYSTEM WIDE PROBLEM WITH NO MEASUREMENT INFRASTRUCTURE.

Plastic bags, lithium-ion batteries, propane tanks, and ammunition were cited across interviews as the most common and damaging contaminants. These items cause equipment damage, fire risks, higher disposal costs, and price downgrades or rejection at end markets. Tuscaloosa reported no formal contamination measurement and no composition studies underway, making it impossible to identify where problems are concentrated or show progress over time. This is not unique to Tuscaloosa.

WORKFORCE PRESSURES AND THIN PROGRAM CAPACITY ARE REAL CONSTRAINTS.

CDL driver shortages, competition from higher-wage industries, and rising fuel costs are straining operations across the state. Large processors have responded with automation, but that is not accessible to smaller programs. Tuscaloosa's recycling education function runs on a single staff person with other responsibilities. Guntersville's director noted that this year was his first writing a grant himself, and it was an eye-opening process.

RURAL COMMUNITIES ARE THE MOST UNDERSERVED AND THE HARDEST TO REACH.

Recycling is not mandated statewide, producing uneven service levels. Rural residents rely on patchwork solutions like drop-offs, and county partnerships, rather than consistent service. Small programs often lack the staff to sustain education efforts in schools and local government offices, compounding the access gap with an awareness gap.

THE ARF GRANT PROGRAM STRUCTURE HAS ROOM TO IMPROVE.

Grant timing is misaligned with municipal budget cycles. Some local governments, like Baldwin County, plan budgets starting in May or June around an October 1 fiscal year, but ARF applications are due March 1, a point when some communities have already committed their plans for the year. The award-to-delivery timeline is also longer than most applicants expect. For example, one truck applied for in FY 23 did not enter service until FY 25. More structurally, awards are currently evaluated without adequate consideration of regional fit. A municipality within Baldwin County's service area could receive a grant for equipment Baldwin County already operates duplicating capacity and potentially diverting material from the county RMPF. Smaller communities also lack the staff to compete for or execute grants effectively, and many are unaware of other funding sources, such as Keep America Beautiful or recycling coalitions, which could reduce pressure on the state fund.

STAKEHOLDER RECOMMENDATIONS

The following recommendations reflect the most consistent and actionable themes across all interviews, including the grant case studies mentioned earlier in this chapter. They are organized from most immediate to more structural.

1. PRIORITIZE COLLECTION INFRASTRUCTURE INVESTMENT.

Every interviewed processor has capacity for more Alabama material today. State investment through grants, planning support, and policy should focus on expanding curbside access, supporting drop-off networks, and strengthening collection program capacity rather than on building new end-market infrastructure that already exists.

2. ESTABLISH CONTAMINATION TRACKING AS A STANDARD PROGRAM REQUIREMENT.

No program can improve what it cannot measure. ADEM should encourage, require, or fund grant recipients to conduct baseline composition studies and track contamination rates over time. Standardized reporting metrics would allow the state to identify where problems are worst, target education resources, and demonstrate systemwide progress.

3. REFORM THE ARF GRANT APPLICATION TIMING AND EVALUATION CRITERIA.

Move the application window closer to municipal budget planning cycles, ideally with a deadline in the May to July window so grants can be incorporated into the following year's budget. Require applicants to demonstrate how a proposed investment fits within the regional system and does not duplicate capacity already available nearby. Consider funding solid waste planning as its own grant category so that communities can develop plans before applying for equipment.

4. CONNECT GRANT APPLICANTS TO THE FULL FUNDING LANDSCAPE.

ADEM's orientation process should expand to cover other available funding sources like Keep America Beautiful, recycling coalitions, The Recycling Partnership, and others so that communities are not treating ARF as the only option and so that state funds can be reserved for gaps those other sources do not cover.

5. INVEST IN PROGRAM STAFFING AND EDUCATION CAPACITY, PARTICULARLY FOR SMALLER COMMUNITIES.

Equipment purchases are only as effective as the staff available to operate them and educate residents about them. Grants should be prioritized for education coordinator positions, community outreach campaigns, and school programming, not mainly capital equipment. Regional partnerships, where larger programs like Florence or Baldwin County support smaller neighboring communities, should be encouraged and potentially incentivized.

6. BUILD A REGIONAL HUB-AND-SPOKE STRUCTURE INTO STATE PLANNING.

The hub-and-spoke model was the most consistent structural recommendation across interviews. ADEM should divide the state into regions, identify a hub facility in each based on program maturity and infrastructure capacity rather than city size, and build regional recycling plans around those hubs. Critically, this framework should be embedded in both state and local solid waste management plans and given real weight in the ARF grant evaluation process. Hub selection should reflect which community can best anchor the regional system, not simply which is the largest.

7. REFRAME RECYCLING AROUND ENERGY, ENVIRONMENT, AND ECONOMIC SUPPLY CHAINS.

The framing of recycling primarily as a landfill diversion issue limits its political appeal. The stronger story, one that resonated across interviews, is about reducing energy use, cutting environmental impact, and feeding local manufacturers who employ Alabama residents. This reframe is more compelling to elected officials, businesses, and residents alike, and it is more accurate given Alabama's in-state market strength. Kimberly-Clark's \$100 million investment in its Mobile mill, which employs more than 680 workers producing Scott and Cottonelle tissue and towel products from recovered fiber⁹⁶, makes the case

⁹⁶ <https://www.investor.kimberly-clark.com/news-releases/news-release-details/kimberly-clark-announces-strategic-investment-its-mobile-alabama>

concrete: companies like Kimberly-Clark have already bet on Alabama by building and expanding their operations here. It follows that political leaders can make a parallel investment, funding the collection infrastructure needed to get more in-state material to mills like this one, and see that investment pay off directly in jobs and economic activity rather than as an abstract environmental ask.

Chapter 3: Gaps and Opportunities

The RRS project team conducted an analysis of strengths and potential gaps in Alabama's statewide recycling system. The gaps identified are indicative of opportunities for additional programs, optimization of existing components, or actions and investments to help Alabama improve its recycling rates and advance the materials management system statewide.

This gap analysis was conducted in support of ADEM's ongoing statewide recycling planning efforts. The findings are intended to inform targeted strategies that expand access, improve infrastructure capacity, strengthen end markets, enhance public education, and build the policy and data foundations necessary for a well-functioning recycling system across all of Alabama's communities.

Methodology

To complete this gap analysis, the RRS team reviewed Alabama's materials management system through multiple lenses: an analysis of ADEM's Biennial Solid Waste Report and related regulatory documents, review of the 2016 SERDC Recycling Report, interviews with municipal recycling program managers, RMPF operators, haulers, and other stakeholders across the state, Alabama Recycling Fund (ARF) grant information and case studies, and a scan of peer state programs and national best practices for model recycling systems.

The analysis identifies gaps that may require new approaches or investments to move Alabama toward higher recycling rates. Collectively, these gaps represent opportunities for targeted strategies to improve access, strengthen infrastructure, develop end markets, and support communities in building effective, lasting recycling programs.

The RRS team organized the gap analysis around six focus areas, each representing a distinct section of a well-functioning statewide recycling system. A strong system requires all six focus areas to function. The six focus areas are described below.

Table 26 - Gap Analysis Focus Areas

#	GAPS ANALYSIS SECTION TITLE	CORE QUESTION ANSWERED FOR ADEM
1	Residential Collection Access	<i>Examines where Alabamians lack convenient access to recycling services, through curbside programs, drop-off sites, or hub-and-spoke networks, and identifies which populations are most systematically excluded.</i>
2	Processing and End Market Infrastructure	<i>Assesses whether Alabama has sufficient recyclable materials processing and RMPF facility capacity, evaluates geographic coverage relative to population centers, and identifies infrastructure gaps that limit the system's ability to handle collected materials.</i>
3	Policy, Regulatory and Enforcement	<i>Reviews Alabama's legal and regulatory framework for recycling including hauler licensing, reporting requirements, and access mandates, and identifies where state law supports or hinders progress.</i>
4	Funding and Grant Programs	<i>Analyzes the level and distribution of public investment in recycling infrastructure and education, assesses whether grant programs reach communities with the greatest need, and identifies funding gaps that limit system growth.</i>

5	Statewide Data Reporting and Measurement	<i>Evaluates ADEM's ability to track recycling progress across the state, identifies gaps in what is measured and reported.</i>
6	Statewide Education and Outreach	<i>Examines the reach and effectiveness of current recycling education and public outreach efforts across Alabama, identifies gaps in public awareness, program consistency, and audience reach.</i>

Description of Gaps

1. RESIDENTIAL COLLECTION ACCESS

STRENGTHS

While residential collection access is limited in certain areas of the state, an advantage Alabama has that will make access affordable and worthwhile is the state's concentration of end markets and the capacity for these markets to absorb feedstock collected by residential curbside programs. Alabama houses strong end markets for fiber (paper, cardboard, fiberboard cores) metals (aluminum and steel cans), and various types of plastic. During our stakeholder interviews ([Chapter 2](#)), many end markets expressed a desire to accept more materials collected in-state by curbside programs.

Another strength is that Alabama currently has several strong model communities for curbside recycling programs. Communities such as Auburn and Baldwin County have long-standing curbside recycling programs supplemented by a large recycling drop-off network accessible to residents who do not live within the city limits or in a home with curbside recycling. City of Auburn residents who receive curbside trash collection services are eligible to receive curbside recycling and can request a recycling cart at no extra cost. The Solid Waste Disposal Authority of Baldwin County similarly offers curbside recycling services to County residents for \$10 a month. Both Baldwin County and Auburn's programs are supported in part by ADEM and the Alabama Recycling Fund (ARF).

These communities provide proven frameworks that other municipalities can adapt when developing or expanding residential recycling programs. By building on the lessons learned from Auburn and Baldwin County, local governments can reduce implementation challenges and establish more effective and sustainable collection systems.

ADEM has also created a good framework for a hub-and-spoke system that can be applied to areas in the state with minimal access to recycling. A hub-and-spoke model, where smaller collection points such as transfer stations gather recyclables ("spokes") and feed them into a central processing facility ("hub"), can potentially lower operating and staffing costs while strengthening access to recycling markets for smaller localities, increasing the affordability of providing recycling access for residents.

OPPORTUNITIES FOR IMPROVEMENT

An opportunity for improvement in residential recycling collection is to expand service coverage in rural areas, where access remains inconsistent across the state as compared to urban centers. The Project Team found through the access study in [Chapter 2](#) that areas with lower population density have unequal access to automatic and subscription curbside collection including opt-in programs, as well as a more limited range of accepted materials. For example, the City of Anniston currently provides residents with only a recycling drop-off program that accepts only corrugated cardboard. Rural areas also had few to no recycling drop-off locations available to residents. Drop-off recycling sites, whether they are publicly or privately operated, play a vital role in communities without curbside recycling if curbside programs are not feasible.

Additional gaps exist in the lack of hauler licensing and requirements of haulers to provide equal trash and recycling services. Without such requirements, many residents are unable to register for recycling collection through their trash service providers. Similarly, there is a lack of hauler incentives to provide recycling services, such as financial offsets for transportation costs.

Finally, Alabama has a gap in the availability of intermediate collection infrastructure, such as transfer stations and recycling consolidation sites that can serve as a halfway point between communities and processing facilities. Haulers interviewed during stakeholder engagement (*Chapter 2*) noted long hauling distances and infrastructure availability as some of the biggest challenges when it comes to providing recycling services.

2. PROCESSING AND END MARKET INFRASTRUCTURE GAPS

STRENGTHS

A strength of Alabama's processing infrastructure is that the state currently has great model communities for recycling management chains, from collection to Recovered Material Processing Facilities (RMPFs), particularly using the hub-and-spoke model. An example of such model is the Decatur Recycling Department, which has recently been approved to expand and enhance the technology of its processing facility. These improvements will double the facility's material processing capacity, allowing the facility to process most, if not all, recyclables generated in County. The Decatur Recycling Department currently runs a curbside recycling program which is automatically provided to residents, as well as monthly drop off events for hard-to-recycle/hazardous household materials. This processing model in which a solid waste authority can service curbside collection in the area as well as drop-off sites is one that can be adopted in other areas across the state. Using a model community provides a proven roadmap for implementation of similar programs while reducing risk and uncertainty.

Another significant strength is Alabama's robust end market infrastructure for plastics, including HDPE, PET, PP, metals like steel and aluminum cans, and fibers, such as corrugated cardboard, mixed paper, and fiber cores. Having a strong end market industry provides Alabama with the capacity to increase their in-state material acceptance by a significant amount. Almost all end market facilities interviewed by RRS listed securing instate materials as one of their largest operational challenges. KW Plastics, a plastics processor located in Troy, noted that they could process all Alabama-generated materials acquired each year in two days if it ran all at once. The capacity reflects an already mature commercial and industrial recycling economy. Alabama's end market strength is not just broad; it is actively growing. Indorama Ventures invested more than \$50 million to expand its Athens PET reclamation plant in 2021, increasing its recycled PET capacity roughly 2.4x from 65 million to 155 million pounds per year.⁹⁷ Novelis is currently building a multi-billion dollar aluminum recycling and rolling mill in Bay Minette, the first fully integrated greenfield aluminum mill built in the United States in roughly 40 years, expected to add approximately 600,000 tons of annual capacity and 1,000 jobs once online.⁹⁸ Compared to its regional neighbors, Alabama's end market network is also unusually complete as one of the only states in the region with a genuine in-state buyer for nearly every major recyclable commodity, plastics, fiber, and metals alike. These are not aging or static investments, they represent some of the newest and largest recycling related capital projects in the Southeast, evidence that Alabama's end markets are positioned to grow alongside any increase in materials collected.

⁹⁷ <https://resource-recycling.com/plastics/2021/06/03/indorama-invests-over-50-million-in-alabama-rpet-plant/>

⁹⁸ <https://refractorynews.com/novelis-breaks-ground-on-4-1-billion-aluminum-plant-in-bay-minette-alabama/>

As detailed in *Chapter 2*, Alabama's reuse, repair, and recycling industries support more than 82,000 jobs and generate over \$30 billion in annual output, ranking among the state's largest industries. The commercial and industrial side shows what a fully built out recycling system in Alabama can achieve, and residential programs have a proven, in-state model to grow toward.

OPPORTUNITIES FOR IMPROVEMENT

Although Alabama has a large end market industry, glass processing represents an opportunity for improvement. Because glass is heavy and prone to contamination, it typically requires specialized sorting investments, such as color sorters and contaminant removal equipment, to be economically processed and requires nearby secondary processing and end markets to make that investment worthwhile. Alabama's closest secondary glass processor is located outside Atlanta, Georgia, which may make it costly for many RMPFs to justify glass specific investment. As a result, several Alabama communities do not accept glass through curbside programs at all. Out of the twenty cities evaluated in this report's access study, only Montgomery and Fort Payne offer curbside glass collection.

A major gap in the state's recycling system is the limited coverage of RMPFs near both some urban and most rural population centers, which restricts municipalities' ability to haul recyclable materials efficiently and limits in-state supply to end markets. RMPFs and other processing infrastructure are a necessity, as they are needed to supply end markets with high-quality recyclable materials collected in-state. Additionally, more processing infrastructure is needed to further define hub-and-spoke assignments for regional hubs. In a hub-and-spoke model, the goal is to create a network of transfer stations and smaller processing facilities which can act as a halfway point for rural municipalities to haul their recyclables to a central RMPF for processing. If done properly, this model will allow more municipalities to launch curbside recycling collection and drop-off programs, increasing access across the state.

Figure 25 depicts a 20- and 50-mile radius around Residential Processing RMPFs, the subset of RMPFs that take in curbside, single-stream residential recyclables and likely run a full automated sorting line, using screens or trommels, magnets, eddy currents, and optical sorters, to separate that commingled material into marketable commodities, as defined earlier in this report. This map is intended to show where the natural processing hubs already exist based on where this type of facility is located, and how far material can reasonably be hauled to reach one. For local governments, it identifies which existing Residential Processing RMPF, if any, is within a workable hauling distance and what that hauling relationship would look like. For ADEM, it identifies which areas of the state already have the infrastructure to serve as a regional hub, which areas sit within a hub's service radius and are better suited to function as spokes focused on hauling rather than processing, and which areas have no residential processing infrastructure within reach at all, information that can help target where grant funding is most needed and what type of investment, hauling support versus new processing capacity, is most relevant for a given area. The map indicates that the southern part of the state represents the largest contiguous region lacking access to dedicated recycling processing infrastructure for residential single-stream materials within these radii, with smaller pockets of limited access also remaining around Opelika and Dothan in the southeast.

This map reflects only Residential Processing RMPFs; other recycling infrastructure, including Commercial Processing RMPFs, MRFs, and recycling centers, is not shown here. A complete list of all recycling related facilities identified during this study, including those not shown here, is provided in Figure 6. All RMPFs in this map were confirmed through this study and should be understood as the most complete picture currently available rather than a fully exhaustive account; additional facilities, particularly smaller or less publicly documented operations, may exist that are not captured here.

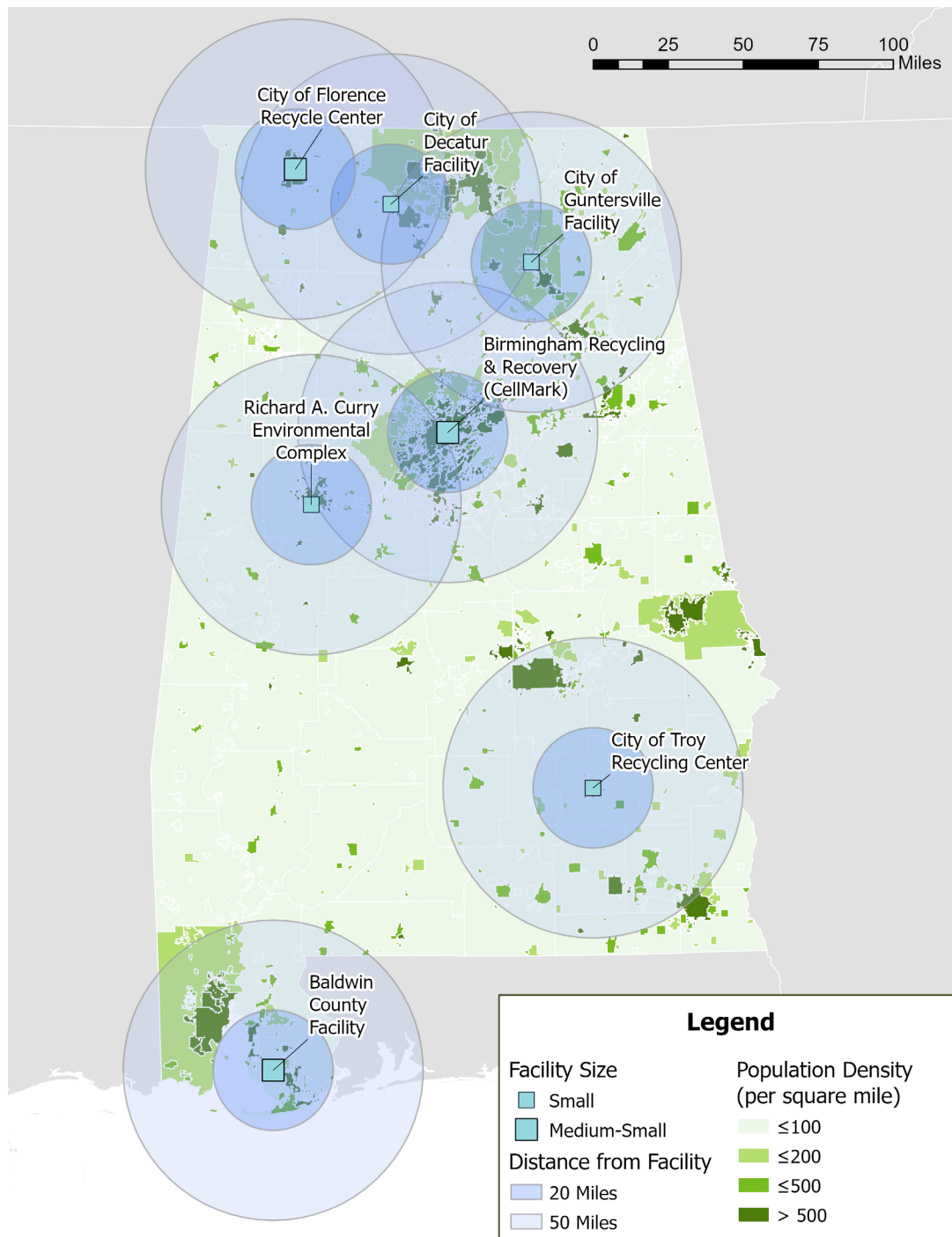


Figure 25 - Area of State in Proximity to RMPFs Processing Residential Single-Stream Recyclables

Not only do certain regions of the state lack access to a nearby Residential Processing RMPF, but regions that do have access to a Residential Processing RMPF often lack the capacity needed to process the full volume of material generated. This is distinct from drop-off sites or hand-sorting operations, which can collect material but are not equipped to sort and process it at the throughput or quality level of a Residential Processing RMPF. Figure 26 shows additional regional RMPF capacity needed to process all single-stream recyclable materials generated at current participation rates identifying where existing Residential Processing RMPFs could serve as regional hubs with additional investment and where no such facility currently exists at all.

Annual MSW disposal and generation tonnages were used to estimate tons of recyclable material generated per capita at the current statewide recycling rate of 9%⁹⁹. Per capita recyclable material generation was then multiplied by county population to estimate regional recyclable material generation. Existing facility throughput for each region was then used to calculate the capacity of additional sorting infrastructure needed to process all recycled material in each hub-and-spoke region.

This analysis found that all regions of the state lack necessary capacity, except for the Northwest corner (Hub Region 1) containing Colbert, Franklin, and Lauderdale counties. Additionally, regional population growth estimates will increase the demand for residential processing capacity in future years. Investment in additional residential processing infrastructure within each region would facilitate the development of a regional hub-and-spoke model to manage recyclable material generated in Alabama, which is further outlined in [Chapter 4](#).

⁹⁹ TRP recycling rate methodology, see Chapter 2: Baseline Assessment – Regional Benchmarking, “Recycling Performance” section

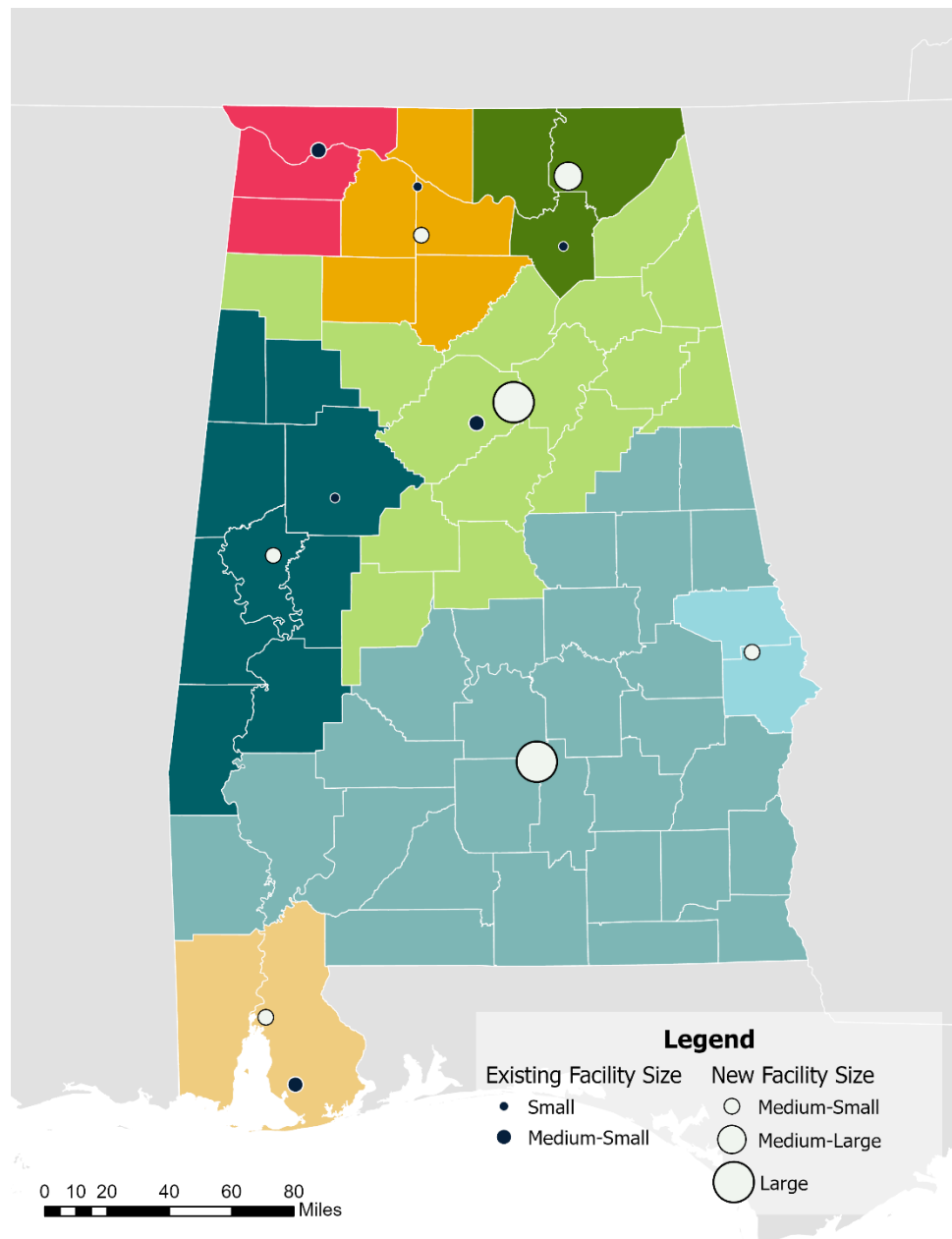


Figure 26 - Additional Single-Stream Recycling Infrastructure Required to Fill Capacity Gaps

3. POLICY, REGULATORY, AND ENFORCEMENT GAPS

STRENGTHS

Alabama has built a solid policy framework for recycling over the past two decades. SWRMMA established dedicated funding, a statewide waste reduction goal, and a grants program that has put real recycling infrastructure in the ground. ADEM has continued to strengthen the system through regulatory updates, most recently overhauling recycling facility registration requirements in 2025 and modernizing how the state tracks recycling activity statewide. Alabama also took a meaningful step in 2024 by banning whole tires from landfills starting in 2028, which has already prompted private investment, including two new tire processing facilities announced by Liberty Tire Recycling that will serve Alabama and neighboring states. Alongside this ban, ADEM's Scrap Tire Marketing Program has awarded over \$16 million in grants since FY 2011, funding projects ranging

from rubber modified asphalt to processing infrastructure that keep scrap tires out of the landfill and put them to productive use. The state recently surpassed its 25% waste reduction goal and has now raised the target to 40%, signaling genuine momentum and ambition.

OPPORTUNITIES FOR IMPROVEMENT

An enforcement gap exists in Alabama's regional solid waste planning structure. State law requires each of the state's twelve regional planning and development commissions to prepare and annually update a regional solid waste needs assessment, but only the West Alabama Regional Commission has one publicly posted, and that document dates to 2003. ADEM confirmed it has not received an updated assessment from any of the other eleven commissions. ADEM has indicated it would accept and file updated assessments if they were submitted, which suggests that clearer communication to the regional commissions, both about the requirement itself and about what happens once a plan is submitted, is needed.

Alabama's policy tools for driving greater recycling participation are limited compared to peer states. Many communities still lack access to curbside recycling, and Alabama does not yet have voluntary frameworks or incentive programs to encourage haulers offering trash service to also offer recycling. Alabama's existing hauler licensing structure, administered through local health departments, covers basic safety and health requirements but does not currently incorporate recycling-related elements such as tonnage reporting, bundled service, or PAYT pricing, tools other states and cities have introduced to increase diversion, often through voluntary programs and incentives rather than blanket mandates. Alabama has no tax credits or loans for recycling businesses. Its only dedicated incentive program, ADEM's Scrap Tire Marketing and Processing grant, is narrowly scoped to tire-derived materials and does not extend to the broader range of recycling businesses that states like North Carolina and Florida support through tax credits, loans, and grant programs. Florida, Georgia, North Carolina, and South Carolina have each addressed yard waste, organics, and construction and demolition debris through a mix of policy tools, ranging from landfill bans to voluntary diversion guidance and incentive programs, giving Alabama a range of models to consider as it builds out its own approach to these material streams.

4. FUNDING AND GRANT PROGRAMS

STRENGTHS

Among Southeast states, Alabama's approved landfill tip fee surcharge increase to \$1.3 per ton, effective January 1, 2027, 25% of which is dedicated specifically to recycling through the ARF, compares favorably to Florida and South Carolina, which charge no statewide per ton landfill fee dedicated to recycling at all, and Georgia, which charges only \$0.50, demonstrating that Alabama has made a stronger commitment to dedicated recycling funding than a few of its neighbors. The per ton fee has generated a steady, reliable stream of funding for the Alabama Recycling Fund (ARF) since 2008, giving Alabama a dedicated recycling fund that does not depend on the legislature approving money each year. That stability has produced real results, including helping to fund new recycling material processing facilities in Decatur, Limestone County, and Baldwin County, glass processing equipment in Mobile County and Guntersville, curbside cart programs in Huntsville, Madison, and Madison County, and equipment upgrades in dozens of communities across the state. In total, more than \$30 million has been spent on recycling infrastructure that communities are using today. Demand for the program is also growing. ADEM's grant workshop in February 2026 drew roughly twice the number of participants expected, showing that local governments are eager to invest in recycling and are looking to the state for support.

OPPORTUNITIES FOR IMPROVEMENT

Alabama's main source of recycling grant funding, the Alabama Recycling Fund (ARF), has received over \$81 million in requests from local governments since 2010, but only about \$35 million has been awarded, meaning more than half of what

communities asked for was never funded. The ARF's share of the landfill tip fee surcharge, currently 25% of the \$1.00 per ton fee, is set to grow with the approved increase¹⁰⁰ to \$1.30 per ton, effective January 1, 2027, still leaving Alabama well below neighboring states like North Carolina (\$2.00) and Kentucky (\$1.75). Even when grants are awarded, about \$5.4 million has gone unspent, showing that some communities struggle to complete projects once funded. While certain projects and/or communities may need more support to use all granted funding, unspent funds are rolled into the next fiscal year award cycle to ensure all funds generated by the surcharge go back into Alabama communities. Repeat communities also tend to receive grants year after year, those with existing programs and staff experienced in applying, while smaller and rural communities that need help the most are least equipped to compete.

Beyond ARF, interviews with stakeholders pointed to funding gaps that the state grant program alone cannot fix. The Solid Waste Authority of Huntsville pays more than \$500,000 every year to transport its recyclables to a facility in Chattanooga because there is no processing facility close enough to make that cost go away. Prior grant applications to build a regional processing facility have been unsuccessful due to funding gaps. Tuscaloosa has space to grow its recycling facility but cannot afford the additional equipment, such as balers, that it needs; ARF funding opportunities were identified late, though an application was still submitted. The Alabama Recycling Coalition, which helps connect recycling programs across the state, runs on about five hours of paid staff time per week, far too little to provide the support that local programs need. Waste Management noted that state funding for facility upgrades and rural collection would make it much easier to expand recycling services into areas where it does not currently make financial sense to do so. These examples show that closing Alabama's recycling gaps will require more dedicated funding. There is opportunity for additional investment in regional processing facilities, staffing for programs and coalitions, and targeted support for rural communities.

5. STATEWIDE DATA REPORTING AND MEASUREMENT

STRENGTHS

Alabama received a SWIFR grant from the U.S. EPA in 2023. As part of this grant, ADEM has worked to streamline reporting systems across all state-regulated recycling facilities. Using an online reporting portal, recycling facilities must annually submit data to ADEM detailing the types and quantities of materials received, processed, or transferred from the facility. In addition to facility reporting, ADEM already has a strong infrastructure for counties/cities/solid waste authorities to create Solid Waste Management Plans (SWMPs). Plans must outline the county's/municipality's goals to help the state reach its 40% diversion goal.

OPPORTUNITIES FOR IMPROVEMENT

While Alabama has made meaningful progress in data reporting, there is room to strengthen how Solid Waste Management Plans function in practice. Under Alabama Code 22-27-47, counties are required to develop and maintain local solid waste management plans, but the statute does not establish a required interim review cycle within each planning period. This means a plan can remain on the books for up to ten years without being formally revisited, leaving missed goals unaddressed and plans that no longer reflect the community's actual system still in effect. Without a structured requirement to check in on progress at a set interval, there is no mechanism for ADEM or local governments to course correct between plan cycles, adjust goals as the recycling landscape changes, or confirm that what was committed to in writing is actually being implemented on the ground.

¹⁰⁰ Alabama Department of Environmental Management. *Notice of Intended Action: New Chapter 335-1-8, "Other Fees."* Filed with the Legislative Services Agency, Administrative Procedure Division, May 15, 2026. Available at: <https://admincode.legislature.state.al.us/api/filing/69f2686d6377832a14e7ace3/filing>

Beyond local planning, significant gaps remain in what ADEM can see and track across the full recycling system. Some data exists but lacks the dedicated staff time needed to be consistently reviewed and acted on, as ADEM staff have acknowledged, while other data is not collected at all. Key blind spots include material flows, RMPF and MRF processing capacity relative to what communities are generating, hauler tonnage and routing, household-level curbside access coverage, and end market destinations. ADEM also has no oversight of transfer station permitting, which falls under local and state health departments, meaning the points in the system where materials are most likely to hit a bottleneck may not be visible to the agency responsible for statewide recycling planning. Together these gaps make it difficult to know where the system is working, where it is breaking down, and where investment will have the greatest impact.

6. STATEWIDE EDUCATION AND OUTREACH

STRENGTHS

Alabama's public recycling education efforts are led by the Alabama Recycling Coalition (ARC), a nonprofit organization that connects residents, businesses, and local governments with recycling information and resources across the state. ARC maintains ALRecycles.org, a public website where anyone in Alabama can find out how to recycle, locate nearby recycling drop-off sites, and access toolkits designed to help local programs educate their communities. In 2025, ARC launched the Alabama Recycles video campaign, developed in partnership with ADEM, which uses short video spots designed for broadcast and digital platforms to encourage residents to recycle correctly, reduce waste, and understand the real benefits of recycling. KW Plastics



in Troy, AL has opened its doors to public tours each May as part of a national initiative, giving Alabama residents a rare look at what actually happens to materials after they are recycled. The Solid Waste Disposal Authority of Baldwin County has taken this further with its Waste & Recycling Adventure Center, a 7,000-square-foot, two-floor education space at its new Summerdale MRF featuring 20 interactive stations, a live overlook of the sorting facility in operation, and a mobile version that travels to schools and community events across the county.¹⁰¹ The Alabama Recycling Coalition also hosts an annual Conference and Expo where local governments, recycling businesses, and state agencies come together to share what is working and celebrate progress across the state.

OPPORTUNITIES FOR IMPROVEMENT

Contamination, putting the wrong things in the recycling bin, remains one of the most consistent challenges reported by communities across Alabama, and it points directly to a need for broader, clearer public education. Whether residents are confused about what is accepted, skeptical that recycling actually works, or simply not engaged, the result is the same: materials that cannot be recycled oftentimes ruin the whole load. Program differences from one city to the next make this harder to solve. In Birmingham, residents use a dedicated recycling cart for single-stream recyclables. Just a few miles away in

¹⁰¹ <https://baldwincountyswda.org/materials-recovery/>, <https://wasteadvantagemag.com/solid-waste-disposal-authority-of-baldwin-county-of-baldwin-county-al-inc-opens-new-25-million-recycling-center-to-serve-the-states-southwest-region/>

Hoover, recycling works differently; residents bag everything together in their regular garbage cart on a second pickup day, and the materials are sent to RePower South to be sorted.¹⁰² A resident who moves between those two cities may have no idea the rules are different.

While ARC completes statewide campaigns and tracks performance data across its existing channels, the campaign's current channel mix does not include streaming platforms such as Hulu, Spotify, or podcast advertising. This means a share of Alabama residents who consume media primarily through streaming or on-demand audio, rather than traditional broadcast, cable, or YouTube, may never encounter the campaign at all, limiting ARC's ability to reach audiences outside its current channels.

Some local programs want to do more on education but simply do not have the capacity; Tuscaloosa cited a single staff person splitting time across multiple responsibilities, Huntsville noted the ongoing challenge of reaching multifamily residents and commercial customers, and the Alabama Recycling Coalition is similar with little staff time and multiple responsibilities.

¹⁰² [Montgomery, AL - RePower South](#)

Chapter 4: Strategies and Recommendations

The recommendations in this report were developed following the gap analysis and in consultation with stakeholders across Alabama's recycling system. They are grouped into four strategic priorities: expanding access and participation, increasing education and outreach, providing technical assistance and resources to local governments and SWAs, and strengthening regional solid waste planning and reporting. Each strategy targets a distinct piece of a well-functioning statewide recycling system. These strategies are designed to work together rather than in isolation; progress in one area such as expanded access depends on parallel progress in others like education and regional planning. The recommendations below range from near-term, lower-cost actions to longer-term investments. Collectively, these recommendations aim to build a recycling system that is accessible and effective for Alabama communities.

Table 27 - Overview of Strategies and Recommendations

STRATEGIES AND RECOMMENDATIONS	
Expand Access and Participation	
1.1	Utilize/expand hub-and-spoke system
1.2	Fund mobile collection for rural / underserved areas
1.3	Financially incentivize increased collection and processing
1.4	Perform a more detailed access evaluation and study
1.5	Consider policy levers that can drive expanded access and participation
Increase Education and Outreach	
2.1	Develop a statewide list of core recyclable materials
2.2	Create templated signage and other educational material for local governments and SWAs
2.3	Develop curriculum resources for schools to discuss recycling
2.4	Partner with Alabama Recycling Coalition (ARC) to expand statewide education campaign
2.5	Develop a Recycling Facility Operator Training
2.6	Training for education and outreach to local governments and SWAs
Provide Technical Assistance and Resources to Local Governments and SWAs	
3.1	Develop model tools and incentive programs for local governments
3.2	Increase ARF grant funding by increasing tip fee allocation
Strengthen Regional Solid Waste Planning and Reporting	
4.1	Align regional and county solid waste plans to hub-and-spoke roles on a defined update cycle
4.2	Require detailed data and tonnage reporting for all recycling facilities
4.3	Strengthen annual reporting of diverted materials by local governments and SWAs

Recommendations Details

RECOMMENDATION #1: EXPAND ACCESS AND PARTICIPATION

UTILIZE AND/OR EXPAND HUB-AND-SPOKE SYSTEM

Access to recycling collection is fundamentally constrained by proximity to processing: a local government cannot reasonably offer curbside or drop-off collection if there is no facility within a workable hauling distance to receive that material, and [Chapter 3](#)'s gap analysis found that the southern part of the has the least residential processing infrastructure within reach.

Alabama's hub-and-spoke model, first discussed in the 2016 Residential Recycling Report but never formally mapped statewide, is the mechanism for closing that gap: a clear, published designation of which facility serves as the regional hub for each area of the state, and which counties and municipalities connect to it as spokes, gives every local government in the state a visible path to collection access, either by building toward its own hub role or by connecting into a spoke relationship with a hub already in reach. Figure 27 shows the regional hub-and-spoke boundaries identified in the 2016 Residential Recycling Report.

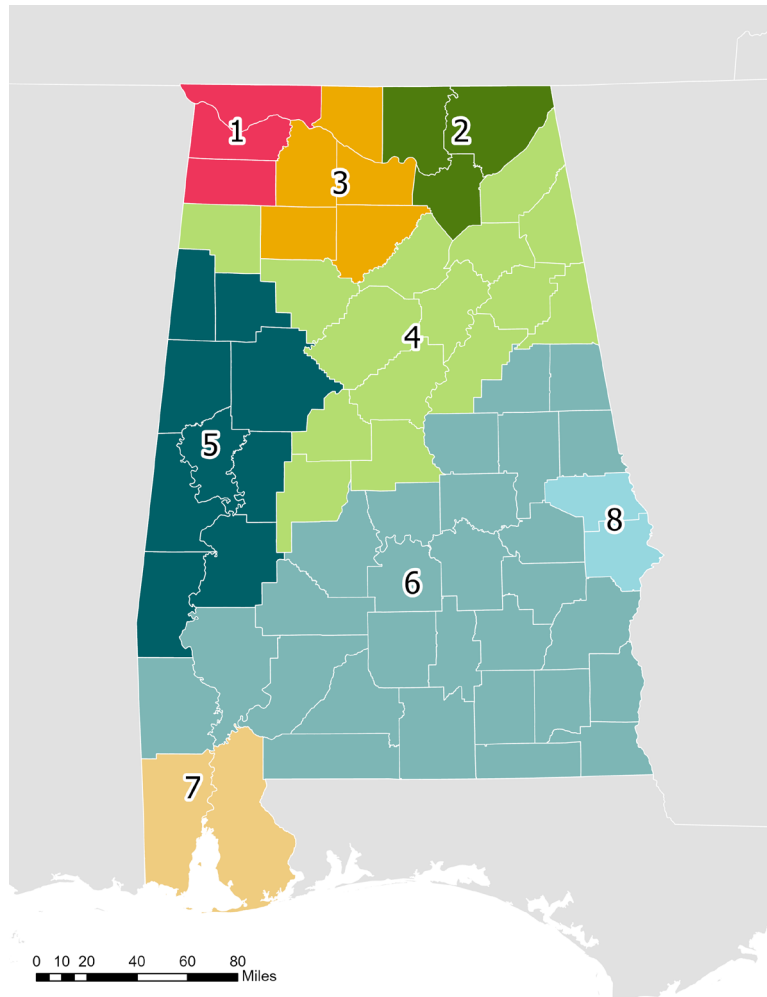


Figure 27 - 2016 Study Proposed Hub-and-Spoke Regions

Hub designations should be based on what currently exists: communities with established recycling infrastructure, functioning collection systems, and the processing capacity to receive material from surrounding areas are the natural starting points, noting that population size alone should not determine a hub. In areas of the state where that infrastructure does not yet exist, particularly in southern Alabama where single-stream recycling processing capacity is limited, targeted investment will be needed before a functional hub can be designated; in those areas, the goal should be building toward a self-reliant hub rather than forcing material to travel long distances to facilities elsewhere.

Once hubs and spokes are formally defined, the state should actively build the system out by strategically placing spoke facilities to extend collection access into rural and currently underserved areas without requiring them to fund large-scale processing infrastructure of their own. Designating several spokes to feed into a particular hub gives that hub a more consistent material stream, improving its long-term operating economics and making continued investment there more likely. Targeted

grant funding should prioritize building out hub-and-spoke connections in the specific access gaps identified in Chapter 3, rather than spreading investment evenly regardless of need.

Without a foundational map of hubs and spokes, communities will continue making independent decisions about equipment and infrastructure that may duplicate what already exists nearby, and local governments in genuine access deserts have no clear sense of what path, if any, could bring collection service to their residents. The New Mexico Recycling Coalition offers a useful model and a practical resource as it has developed one of the first statewide comprehensive hub-and-spoke strategies for rural recycling and has made all of its resources, templates, designs, and specifications freely available for other states to adapt and use in building their own systems.¹⁰³

FUND MOBILE COLLECTION FOR RURAL / UNDERSERVED AREAS

For more rural and less populated areas of the state, it may not make sense for there to be year-round collection or drop-off sites for certain materials, as they may not be generated in high enough quantities. An alternative collection system such as mobile collection events may be a great way to increase recycling access in underserved areas and optimize the variety of items that can be collected. A mobile collection event may look like a pop-up drop-off event where a specialized collection truck will station itself in different parts of the region and community members can drop off items that aren't accepted by a curbside trash or recycling service. Examples of materials best suited to mobile collection events include hard-to-recycle materials such as e-waste, household hazardous waste, and shredded paper. It also can be used for glass recycling which is not commonly accepted by curbside services in Alabama, as well as seasonal materials such as leaf and yard waste. These periodic specialty pick-up programs allow for equitable and comprehensive access to recycling without putting the burden entirely on the residents to drive to a permanent drop-off site that may be farther away.

FINANCIALLY INCENTIVIZE INCREASED COLLECTION AND PROCESSING

A way to increase rural access could be to dedicate portions of ADEM's grant funding through SWRMMA specifically to rural communities. ADEM has previously provided grants to various localities and SWAs; however, to increase recycling access statewide, extra financial incentives need to be made available to low-access areas. This funding can be used to incentivize increased collection and processing through subsidies for hauling in rural areas, capital grants, or low/no-interest loans for infrastructure development. Financial incentives for haulers are vital to encourage haulers to offer recycling services in rural areas of the state, as the Project Team found through our access study (*Chapter 2*) that several low-density municipalities do not have the option to receive recycling collection through their city or through a third-party provider. However, a large barrier to collection feasibility in rural areas is the lack of infrastructure and long hauling distances for recyclables. By providing financial support along all points of the recycling process and targeting funds to fill gaps in access and infrastructure, ADEM can work to develop more efficient systems.

PERFORM A MORE DETAILED ACCESS EVALUATION AND STUDY

The access evaluation performed for this report (*Chapter 2*) covered a sample of ten cities based on information available on city and third-party service provider websites. That approach provided a useful starting point but has limits: it assumes city webpages are accurate and current, and it does not capture how access varies across the suburbs and rural areas surrounding each city hub. A statewide picture requires surveying every county and municipality directly, not relying on a sample or on what is publicly posted online.

¹⁰³ New Mexico Recycling Coalition, Hub and Spoke Recycling, <https://recyclenewmexico.com/hub-spoke-recycling/>

Other states have already built this kind of comprehensive assessment, and their approaches offer a direct template for how ADEM could do the same. Illinois is currently running its own statewide needs assessment, created by legislation and funded through the same EPA Solid Waste Infrastructure for Recycling (SWIFR) grant program Alabama received funding from in 2023.¹⁰⁴ Illinois hired an outside consultant to conduct a statewide waste characterization study and survey municipalities, counties, haulers, and recycling facilities directly, rather than relying on published information. Oregon took a similar full-coverage approach, surveying all 241 cities and all 36 counties in the state, but solved the participation problem by tying survey completion to eligibility for state recycling expansion funding.¹⁰⁵ That incentive, rather than a survey mandate on its own, produced an 83% response rate among cities and a 97% response rate among counties.

Alabama could adapt both models using tools it already has. ADEM could contract a statewide survey, following Illinois's approach, sent to every county and municipality and covering whether curbside recycling is offered and whether it is automatic or opt-in, whether drop-off sites exist and how many, whether multi-family properties have recycling access, whether commercial recycling is available, and what materials are accepted through each channel. To drive participation the way Oregon did, ADEM could tie survey completion to ARF grant eligibility, giving local governments a direct incentive to respond rather than depending on voluntary participation. For a model of how far this kind of assessment can go once the basics are covered, the New York Needs Assessment offers a quality example.¹⁰⁶ New York's statewide needs extended beyond access to also measure service costs, material specific recycling rates, and resident awareness levels, additional layers ADEM could build toward once a complete statewide access baseline is established.

CONSIDER POLICY LEVERS THAT CAN DRIVE EXPANDED ACCESS AND PARTICIPATION

Any diversion goal outlined in this report depends on residents having adequate access to recycling, and policy levers can help expand that access without requiring it outright, in line with the state's broader approach of encouraging progress rather than mandating it. Hauler licensing frameworks, for example, could encourage licensed haulers that already provide trash collection to voluntarily extend recycling collection to the same customers, paired with recognition or incentive programs for haulers that choose to participate. Haulers could similarly be encouraged to offer discounted bundled pricing for customers receiving both trash and recycling collection, or to explore pay-as-you-throw pricing, in which customers' costs are tied to how much waste they generate, as voluntary options that reward communities and haulers who choose to adopt them with increased diversion.

RECOMMENDATION #2: INCREASE EDUCATION AND OUTREACH

DEVELOP A STATEWIDE LIST OF CORE RECYCLABLE MATERIALS

To help improve the consistency of recycling access across the state, Alabama should develop a statewide list of core recyclable materials. This list will outline the materials that are the baseline of what is accepted in recycling programs throughout the state. A survey to all jurisdictions that currently recycle and all RMPFs that process residential single stream recycling can be completed to create the baseline of the core list of accepted recyclables throughout the state. Individual localities and SWAs may choose to expand upon this list if they have the infrastructure and market to accept additional materials.

¹⁰⁴ <https://epa.illinois.gov/topics/waste-management/materials-management/srnaac.html>

¹⁰⁵ <https://www.oregon.gov/deq/recycling/Documents/recLocGovNeedsAssess.pdf>

¹⁰⁶ <https://www.centerforsmm.org/needs-assessment>

By creating a universal list of core accepted materials, educational messaging, outreach, and hauler reporting requirements can be standardized to reflect these consistencies. This can lead to decreased confusion and contamination, which may improve the capture rate of high-value recyclables and overall diversion.

CREATE TEMPLATED SIGNAGE AND OTHER EDUCATIONAL MATERIAL FOR LOCAL GOVERNMENTS AND SWAS

To promote proper recycling, ADEM can develop template signage and education materials that local governments and SWAs can distribute to their residents and/or customers. North Carolina's Department of Environmental Quality has developed various types of readily available outreach materials to be used by local governments, recycling haulers, other North Carolina organizations, and residents to help educate the public on proper recycling behaviors and fight contamination.¹⁰⁷

North Carolina DEQ's education materials cover a wide range of topics, including lists of state-wide accepted recyclable materials, Recycling Guide templates for counties and towns, recycling cart sign up promotion, and oops tags, which are placed on recycling bins/carts to inform residents their cart contains unrecyclable material. These education materials are also available in a wide range of media types, such as printable flyers, mailers, brochures, and social media collateral.

ADEM should develop similar materials to promote recycling statewide and develop proper recycling habits. Not only can these materials be used to educate consumers on what types of materials to recycle and how, but they can also be used to raise awareness of the importance of recycling.

¹⁰⁷ <https://www.deq.nc.gov/about/divisions/environmental-assistance-and-customer-service/recycling-and-materials-management/recycle-right/free-outreach-designs>



Figure 28 - NC General Statewide Accepted Materials Guide

Sourced from NCDEQ

DEVELOP CURRICULUM RESOURCES FOR SCHOOLS TO DISCUSS RECYCLING

To create good recycling habits and truly understand the benefits of recycling from a young age, ADEM should create curriculum guides that align with the state's overall public education campaign on recycling. Including recycling education in school curriculum helps students understand how their everyday actions affect waste generation, public health and safety, resource conservation, and environmental quality. By learning what can and cannot be recycled, why contamination matters, and how materials move through the recycling system, students develop practical habits and an understanding on why recycling is important. Over time, recycling education can help build a more informed public, increase participation in local recycling programs, and support broader waste reduction and sustainability goals.

Nevada Division of Environmental Protection first created their [Recycling Curriculum Teacher Handbook](#) in 2006 with multiple iterations since then, that can be used in classrooms for grades 4 through 12. They even have created a dedicated lesson plan that fits into the state's fifth-grade Common Core and Next Generation Science Standards. Lesson plan handbooks such as these can take the burden away from educators to create detailed and accurate recycling curriculum and guarantee consistent recycling education across the state.

Future iterations of curricular handbooks could include waste reduction topics beyond recycling, including litter prevention, wasted food prevention, and organics management/composting.

PARTNER WITH ALABAMA RECYCLING COALITION (ARC) TO EXPAND STATEWIDE EDUCATION CAMPAIGN

The ARC has developed an education campaign, Alabama Recycles, with the help of ADEM funding. The video campaign revolves around various short educational videos that promote correct recycling behaviors, the importance of waste reduction, and the environmental and economic benefits of recycling in Alabama¹⁰⁸. Currently, the campaign is promoted through ARC's website, YouTube, and paid digital advertising, with radio and television support tracked through reports provided by the vendor. The Project Team recommends ADEM partner with ARC to expand the campaign's advertisement reach into channels not currently in use, particularly streaming platforms (e.g., Hulu) and audio streaming/podcast advertising (e.g., Spotify, Pandora), which reach residents who may not engage with traditional broadcast, cable, or web-based content. ARC's social media presence is currently limited to Facebook and LinkedIn, platforms that tend to reach a narrower audience. It is recommended for ARC to expand its social media strategy to platforms like Instagram and TikTok, and lean into trending audio, formats, and humor to reach wider and more engaged audiences. Educational content that is funny, edgy, or culturally relevant often outperforms traditional PSA-style messaging, particularly with younger audiences, and can meaningfully extend the campaign's reach. This approach has precedent:

- In public health communication, research on humor-based messaging during the COVID-19 pandemic found that humorous content helped spread protective health information further through increased online engagement, illustrating how humor can extend an educational message's reach on social platforms.¹⁰⁹
- Research on [science communication](#) has found that audiences who experience more amusement from humorous educational content are more likely to actively engage with it, such as by commenting.¹¹⁰

New Mexico's anti-litter and beautification campaign, Breaking Bad Habits, has seen great success with 10.5 million pounds of litter removed thus far across 250 organized clean-up events¹¹¹. The campaign utilizes a combination of physical and digital media to spread their message. One of the largest advertisement methods used is billboards that feature iconic characters from the TV show *Breaking Bad*, which took place in New Mexico. Alabama should similarly promote ARC's Alabama Recycles campaign using billboards to expand ARC's message to a broader audience. The Alabama Recycles campaign can also be expanded through a theme, similar to New Mexico's use of *Breaking Bad*, which ties the campaign to Alabama popular culture. Keeping with ADEM's dedication to accessibility, using both physical and digital media ensures the campaign can reach various demographics.

¹⁰⁸ Alabama Recycles Campaign Homepage: <https://alrecycles.org/campaign/alabama-recycles/>

¹⁰⁹ Using Humor to Promote Social Distancing on TikTok During the COVID-19 Pandemic: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9261496/>

¹¹⁰ "That's some positive energy": how social media users respond to #funny science content, Journal of Science Communication (2024)

¹¹¹ <https://www.governor.state.nm.us/2026/01/08/breaking-bad-habits-campaign-removes-10-5-million-pounds-of-litter-more-than-19000-volunteers-joined-250-cleanups-through-community-partnerships/>



Figure 29 - Example of a "Breaking Bad Habits" Billboard

Several states, non-profits, and companies have developed consumer-facing tools that visually trace the journey of recycled materials from collection to new product, helping build public understanding of and trust in the recycling system.

North Carolina DEQ's "What Happens to Your Recycling" walks residents step-by-step through the MRF sorting process and follows specific material loops, including how a plastic bottle becomes a new bottle at Southeastern Container's Enka, NC facility, which supplies Coca-Cola.¹¹² Alabama could adapt this bottle-to-bottle (or can-to-can) concept using its own in-state end markets, such as KW Plastics or Indorama, to visually demonstrate the state's circular recycling economy to residents and reinforce participation in ADEM/ARC's education campaign.

Domtar's video, "The Paper Recycling Process"¹¹³ shows the kind of short, consumer-facing format that works well for this material. Alabama could produce something similar using Kimberly-Clark's active Mobile facility, which manufactures tissue and towel products from recovered paper, giving residents a real, current in-state example.

For metals, the Can Manufacturers Institute promotes the "infinite loop" of aluminum can recycling, showing how a can collected today can be back on shelves as a new can within about 60 days.¹¹⁴ Alabama could adapt this loop using Novelis for

¹¹² [What Happens to Your Recycling | NC DEQ](#)

¹¹³ <https://www.bing.com/videos/riverview/relatedvideo?q=journey+of+recycled+paper&mid=A01BBA7EA8329B295B62A01BBA7EA8329B295B62&churl=https%3a%2f%2fwww.youtube.com%2fchannel%2fUCh8Zhq2RmxhI5Km0krrGoYw&FORM=VRDGAR>

¹¹⁴ <https://www.cancentral.com/sustainability/>

aluminum cans and in-state mills like Nucor or US Steel for steel cans, giving residents a concrete, local version of the same story.

For glass, Diageo's "Don't Trash Glass" partnership with glass recycler Strategic Materials traces bottles from collection through processing back into new glass containers.¹¹⁵ While Alabama's glass end markets are more limited, this format could still be adapted to show residents what does happen to glass collected through the state's drop-off programs.

For tires, ADEM's own Scrap Tire Marketing Program has already funded rubberized asphalt and other beneficial use projects made from Alabama scrap tires. Rather than looking outside the state for an example, Alabama can point directly to roads and park surfaces built from in-state tire-to-road loops to make the case to residents.

Together, these formats would let ADEM and the ARC visually demonstrate the state's circular recycling economy across the materials residents interact with most, reinforcing participation in the broader education campaign. Rather than producing generic explainer content, ADEM and the ARC could partner directly with each of these in-state end markets; KW Plastics or Indorama for plastics, Kimberly-Clark for paper, Novelis or in-state mills like Nucor and US Steel for metals, and ADEM's Scrap Tire Marketing Program partners for tires, to produce a series in the style of the popular "How It's Made" format. That approach pairs the same behind the scenes manufacturing footage audiences already find engaging with a clear recycling message, giving residents both an entertaining watch and a concrete answer to what happens to the material they put in the bin.

DEVELOP A RECYCLING FACILITY OPERATOR TRAINING

Various states have begun implementing operator training and certification programs for solid waste facilities, such as transfer stations, landfills, compost facilities, and recycling facilities. The purpose of these trainings goes beyond safety and best practices trainings to protect the safety of operators. Operator trainings also improve regulatory compliance by ensuring that operators at all registered solid waste facilities strictly follow the regulations mandated by the state. For example, trainings may review how to adequately track and report diversion tonnages to the state. In addition, these trainings can be a great opportunity to ensure operators are up to date with technological advancements in the marketplace and how they can increase operational efficiency.

The New Mexico Environmental Department has partnered with the Solid Waste Association of North America (SWANA) and the New Mexico Recycling Coalition (NMRC) to create a specific training for recycling operators which must be renewed every 3 years by all operators of registered facilities.¹¹⁶ ADEM should develop a similar training and certification program which can help support the effectiveness of other recommendations covered in this report such as improving annual tonnage reporting.

TRAINING FOR EDUCATION AND OUTREACH TO LOCAL GOVERNMENTS AND SWAS

Increasing recycling statewide requires a cooperative effort, clear guidance, and accessible resources. To support local governments and SWAs in increasing recycling within their jurisdictions, ADEM can use their knowledge and resources to establish a training program for local officials as to how to best deploy recycling programs and resident education and outreach campaigns. Additionally, using peer communities with thriving programs as mentors, local governments and SWAs can learn from past campaigns and confidently deploy their outreach to their residents. Consumer education campaigns can build public awareness and participation, ensuring residents understand how to properly recycle within their community.

¹¹⁵ <https://www.diageo.com/en/news-and-media/press-releases/2024/diageo-north-america-expands-don-t-trash-glass-partnership>

¹¹⁶ New Mexico Solid Waste Trainings Homepage: <https://www.env.nm.gov/solid-waste/training/>

An education and outreach training program dedicated to this level of training was launched by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in 2022. They established the Michigan Small Community Education Grant Program to help small governments strengthen their recycling outreach and education program. This grant initiative enables eligible communities to access free, customized recycling education materials created by EGLE that can be sent directly to residents.

RECOMMENDATION #3: PROVIDE TECHNICAL ASSISTANCE AND RESOURCES TO LOCAL GOVERNMENTS AND SWAS

DEVELOP MODEL TOOLS AND INCENTIVE PROGRAMS FOR LOCAL GOVERNMENTS TO USE TO ENCOURAGE RECYCLING

An effective path to increase recycling in Alabama is helping local governments build recycling programs voluntarily, in line with the state's broader approach of encouraging progress rather than requiring it. Many communities are still in the early stages of building out basic recycling access. Some local governments, especially smaller ones, do not have staff with the expertise to structure voluntary incentive programs or build partnerships with haulers on their own. ADEM and the ARC are well positioned to fill that gap by developing a suite of model incentive programs, partnership frameworks, and implementation guides that any community can customize and adopt without starting from scratch. These tools should be made freely available through ALRecycles.org. Increasing the amount of material collected statewide benefits Alabama on multiple fronts: it strengthens the supply available to in-state industry, reduces landfill reliance, and responds to resident demand for recycling access in communities where it does not yet exist.

When Solid Waste Disposal Authority of Huntsville relaunched curbside recycling through the Recycling Alliance of North Alabama in 2019, more than 67,000 households opted in during the program's early enrollment phases, reaching an 82% participation rate on a purely voluntary, opt-in basis.¹¹⁷ That level of uptake, achieved without any mandate, points to a real appetite for the service once it is made available. In the Birmingham area, that same expectation shows up as a desire to know where the material actually goes once it's collected. Reporting into how recycling from Cahaba Solid Waste Disposal Authority-served communities is processed was driven in large part by Birmingham residents' questions about what happens to their recyclables after pickup, interest strong enough to prompt an independent look into the process. Florence tells a related story: its curbside program, running continuously since 1992, has stayed viable in large part because residents have come to see it as part of what their city offers, not an optional extra. Communities that lack the service risk being seen as falling behind their peers, while those that offer it can point to resident enrollment, engagement, and interest in where their material goes as evidence that the investment is meeting real, ongoing expectations.

- **Hauler partnership framework:** a model framework encouraging haulers operating within a jurisdiction to voluntarily offer recycling service alongside trash collection, paired with recognition or incentive programs for participating haulers. Because hauler licensing falls under the Alabama Department of Public Health (ADPH) rather than ADEM, this framework should be developed in coordination with ADPH rather than positioned as an ADEM led licensing requirement.
- **PAYT pricing:** a policy guide that walks communities through the PAYT model, including its demonstrated benefits in increasing diversion and reducing disposal costs, alongside considerations around equity, implementation complexity, and public communication that communities should weigh if they choose to explore adopting it.

¹¹⁷ <https://www.recyclingtoday.com/news/northern-alabama-curbside-recycling-program/>

- [The Natural Resources Defense Council \(NRDC\)](#) provides a model framework communities can use as an optional starting point if they decide PAYT fits their local system.
- **Construction and demolition debris recycling:** a voluntary guide encouraging C&D contractors to develop a waste management plan, set their own diversion goals for project debris, and track progress against those goals, paired with a directory of regional processors and end markets.
 - CalRecycle's [Construction and Demolition Diversion Guide](#) offers a flexible model that jurisdictions can adjust to local capacity and goals rather than a fixed mandatory diversion percentage. Contractors and developers can also be encouraged to pursue [LEED certification](#), which awards credit for construction waste diversion as a market and reputational incentive rather than a compliance requirement.
- **Multi-family and commercial recycling access:** guidance and technical assistance helping property owners and managers of multi-family buildings and commercial properties voluntarily add dedicated recycling container space and collection service, including bin sizing, signage, and hauler coordination support.
 - North Carolina's [Multifamily Recycling Grant Program](#), administered by NC DEQ, is a competitive, voluntary grant program that provides funding to help property owners, local governments, and nonprofits establish or expand multifamily recycling access, an incentive-based model Alabama could adapt rather than a mandatory ordinance.
- **Recycling space guidance for new development and renovation:** guidance encouraging developers and contractors to voluntarily incorporate dedicated, accessible recycling storage space into the design of new residential, commercial, and mixed-use construction, as well as major renovation projects, with reference design standards for minimum square footage, placement, and signage.
 - [Charlotte](#), North Carolina and [Seattle](#), Washington, have both published detailed space and design standards for solid waste and recycling service areas. While both cities require this space as a condition of permit approval, their published specifications can still serve as a useful planning reference for how much space to allocate, even where Alabama communities choose to offer this guidance voluntarily rather than tie it to permitting.



Providing these tools does not require the state to mandate anything statewide. It simply lowers the barrier for willing communities, property owners, and contractors to act voluntarily, and ensures that when they do, they are building on proven models rather than inventing them from scratch.

INCREASE ARF GRANT FUNDING BY INCREASING TIP FEE ALLOCATION

The approved increase to the landfill tip fee surcharge from \$1.00 per ton to \$1.30 per ton, effective January 1, 2027, with 25% going to the ARF is a meaningful first step and a genuine win for recycling in Alabama, but it should not be viewed as the finish line. It is the first landfill surcharge tip fee adjustment since 2008, and one increase alone will not close the gap between what communities are requesting and what the ARF can deliver. To prevent a repeat of the last 18 years, where the fee sat unchanged while its purchasing power steadily eroded, Alabama should pair any legislative increase with the CPI-based adjustment

mechanism ADEM has already proposed.¹¹⁸ That mechanism would allow fee adjustments every 5-years tied to the Consumer Price Index, capped at 2% annually.¹¹⁹ Starting from a \$1.30 baseline, that translates to a fee of roughly \$1.43 by 2031, \$1.58 by 2036, and \$1.74 by 2041, meaning it would take about 15 to 20 years of CPI adjustments alone to reach \$2.00 per ton, where North Carolina is today.¹²⁰ The CPI mechanism is a useful maintenance tool that protects the fee's value between sessions, but it is not a growth strategy on its own. The legislature should view it as a floor, not a ceiling, and pursue additional increases over time to keep pace with growing demand for ARF dollars and the expanding infrastructure needs of a system being asked to do more.

More funding in the ARF translates to more impact, but how those dollars are structured matters just as much as how many there are. Right now, applicants are split into two categories based on community size: Category 1 for communities over 40,000 households and Category 2 for communities under 40,000 households. 60% of annual funding goes to Category 1 and 20% to Category 2, with the remaining 20% allocated as needs arise. This two-category structure works well, but it sorts applicants by the size of the jurisdiction rather than the size or cost of the project being proposed, which leaves smaller communities boxed out of capital-intensive investments like regional processing facilities that cost the same to build regardless of the applicant's population. Splitting the program into three tracks defined by project type, Operations & Access, Regional Infrastructure, and Technical Assistance and Planning, would let household size continue to guide routine equipment and collection funding while directing capital projects toward whichever community can best serve as a regional hub, not just whichever community happens to be large enough to qualify. With criteria published for each track, the ARF can move from a program that rewards readiness to one that actively builds capacity statewide.

Table 28 – Proposed Refined Allocation Structure

TRACK	WHO IT SERVES	KEY FEATURES
Operations & Access	All communities: award size and match requirements scaled to household count and financial capacity	Funds equipment, carts, collection expansion, and education
Regional Infrastructure	Hub facilities and regional projects serving multiple spoke communities, regardless of the lead applicant's own population	Funds capital projects such as RMPFs and processing facility upgrades; evaluated on regional fit, number of spoke communities served, and avoidance of duplicate capacity
Technical Assistance and Planning	Communities not yet positioned to compete for the other tracks and all communities in need of planning expertise	Funds feasibility studies, solid waste plan updates, and grant writing support to prepare communities to apply for the other two tracks

RECOMMENDATION #4: STRENGTHEN REGIONAL SOLID WASTE PLANNING AND REPORTING

¹¹⁸ LaBella Associates, ADEM Proposes Significant Regulatory Fee Increases Effective October 2026, <https://labellapc.com/news/adem-proposes-significant-regulatory-fee-increases-effective-october-2026/>

¹¹⁹ LaBella Associates, ADEM Proposes Significant Regulatory Fee Increases Effective October 2026, <https://labellapc.com/news/adem-proposes-significant-regulatory-fee-increases-effective-october-2026/>

¹²⁰ NC rate

ALIGN REGIONAL AND COUNTY SOLID WASTE PLANS TO HUB-AND-SPOKE ROLES ON A DEFINED UPDATE CYCLE

Once regional hub-and-spoke assignments are established, both levels of Alabama's planning structure, the regional solid waste needs assessments prepared by the state's twelve regional planning and development commissions, and the Solid Waste Management Plans (SWMPs) prepared by individual counties, should be updated to reflect those assignments. Right now, only the West Alabama Regional Commission has a needs assessment on file, and that document dates to 2003. ADEM has confirmed it has not received an updated assessment from any of the other eleven commissions, despite state law already requiring each to prepare and annually update one. Bringing those regional assessments current and structuring them around the hub-and-spoke framework gives counties a shared regional context to plan against rather than leaving each county's SWMP to define its own role in isolation. County SWMPs should then nest under that regional picture: hub jurisdictions planning for processing capacity, facility investment, and the infrastructure needed to receive material from surrounding communities, and spoke jurisdictions planning for collection access, transportation logistics, and how material moves efficiently to the hub. This reframing changes what counties prioritize and invest in, reduces the equipment redundancy that stakeholders have flagged in grant cycles, and opens the door to coordinated regional grant applications where a hub and its spokes apply together for complementary investments rather than competing independently for the same funding.

Extending the county SWMP's horizon to 20 years while requiring meaningful 5-year progress reviews would give communities a realistic long-term vision while ensuring goals are regularly revisited, updated to reflect what has actually been built, and responsive to how the local recycling system continues to evolve. [Washington State](#) offers a direct model: state law requires every local government to maintain a comprehensive solid waste management plan with 20-year estimates for needed facilities, recycling programs, and waste reduction strategies, with a full plan update required every 5-years and amendments available between cycles to address emerging needs¹²¹. In addition, [Illinois](#), [Ohio](#), [California](#), [Vermont](#), [Virginia](#), and [Kansas](#) all require 5-year evaluations of their local jurisdiction plans. Alabama already requires Solid Waste Management Plans, meaning the legislative change needed is not starting from scratch but amending the existing requirement to extend the horizon and codify the update cycle.

Dedicated technical assistance during the planning process produces better plans, and better plans produce real action, at both the regional and county level. A consultant or facilitator who understands recycling infrastructure, regional material flows, and the hub-and-spoke framework can help regional commissions and individual communities alike think through what their role in the regional system actually looks like, what investments make sense given that role, and how to set goals that will still be relevant five or ten years from now. For counties and commissions with limited or no dedicated solid waste staff, that outside expertise is especially valuable in translating a state requirement into a document that actually drives progress; without it, plans risk becoming compliance documents written to meet a requirement rather than roadmaps that reflect a community's real system, challenges, and achievable goals. Because Alabama already requires these plans, the state has an interest in making sure both levels are done well, which means helping fund the process of developing them.

A statewide plan refresh could be coordinated across all jurisdictions and regional commissions at once, giving them a shared timeline and framework to update their plans together rather than on staggered, individual cycles. This coordinated approach could also support multi-jurisdictional planning processes that bridge city, county, and regional-commission gaps within the same area.

¹²¹ Washington State Department of Ecology, Local Waste Planning, RCW 70A.205.040 through RCW 70A.205.075.

REQUIRE DETAILED DATA AND TONNAGE REPORTING FOR ALL RECYCLING FACILITIES

Significant gaps exist in Alabama's current solid waste data collection and reporting framework for recycling facilities. Recycling facilities, comprising both Materials Recovery Facilities (MRF) and Recovered Materials Processing Facilities (RMPF), are required to be registered through ADEM. While the annual reports completed by these facilities describe the contents and tonnage of all materials received, the reports do not allow ADEM to understand material flows in the state.

To track incoming materials, all materials received at the facility should be identified by generator type, material type, and quantity. If materials are transported to the facility from another recycling facility, the origin's facility name should be listed. If material moves from the reporting facility to a further recycling facility, the name of that further facility should also be included. Detailing the movement of material throughout facilities will also prevent double counting of recycling material, making the state's overall diversion rate more accurate.

To track movement of materials from recycling facilities, end markets, or at least a general location, should be listed as materials are shipped. If brokers are used to transfer materials, that should also be listed in the report. If materials are transferred to disposal instead of recovered for recycling, that tonnage should be listed and the final destination included.

Information regarding the origin, types, amounts, and destinations of Alabama's recycling will help provide context on the current recycling systems in the state. This information is essential for state and local solid waste planning, assessment, and compliance assurance.

Below lists the recycling facility reporting requirements and information from New York and Oregon. These examples are not meant to suggest Alabama replicate those states' full tracking systems, but rather to illustrate that the individual data points they capture, such as material breakdowns, origin/destination tracking, and residue calculations, are basic reporting elements that align with the foundational improvements ADEM is already working to build.

New York: Recyclables Handling and Recovery Facilities are required to submit an annual report that includes¹²²:

- Detailed information about the facility, including contact information
- A breakdown of material received monthly
- Where the material was received from (another facility or a generator) with tons listed for each material type
- Residue calculation
- List tons of recovered material, and destination details
- Space to identify problems and changes at the facility

Oregon: Oregon's Administrative Code requires the privately operated recycling, material recovery and energy recovery facilities to report¹²³:

- The weight of each material recovered broken down by waste shed of origin and by source
- The weight and sources of material they collected from other recyclers, subsequent recyclers and end users that directly receive their material and the weight of material sold or delivered to each directly subsequent recycler or end user
- The final status of each material sold, delivered or utilized. The report must indicate whether the material was recycled, composted, or burned for energy recovery

¹²² <https://dec.ny.gov/environmental-protection/waste-management/solid-waste-management-facilities/recyclables-handling-recovery>

¹²³ <https://www.oregon.gov/deq/recycling/pages/survey.aspx>

- The total weight of material recovered by each private recycler must be reported based on actual measurement.

STRENGTHEN ANNUAL REPORTING OF DIVERTED MATERIALS BY LOCAL GOVERNMENTS AND SWAS

To be able to track the progress of the state's recycling program and future initiatives, the state will need to strengthen the annual reporting requirements of local governments and Solid Waste Authorities (SWAs). Various states have implemented required state reporting for diverted materials in both the residential and commercial sectors. Many of these reports are in support of a recycling rate requirement; however, it can still be a valuable resource without a recycling requirement. By being able to assess diversion rates in different areas of the state, the state can continuously measure the success of regional recycling programs. Using this information, the state may decide where to dedicate time and resources to improve overall diversion.

Virginia currently requires each Solid Waste Planning Unit (SWPU) in the state to submit an annual Recycling Rate Report (RRR)¹²⁴. RRRs help the state measure regional performance when it comes to diversion. SWPUs must list the tonnages of each material in the state's list of Principal Recyclable Materials (PRMs), which include paper, plastic, metal, glass, and commingled (mixed recyclables), as well as yard waste, food waste, and textiles. There is also a supplementary list for hard-to-recycle materials, household hazardous waste (HHW), etc. By compiling the RRRs from each SWPU, the state can then report out a statewide diversion rate annually. This level of tracking and transparency is vital in continuing to grow recycling markets and diversion in Alabama.

Identification of Priorities

RRS used a prioritization matrix to decide which recommendations should come first. Each recommendation was scored using four measures: how much it would help divert waste from landfills, how much it would cost the state, how easy it would be to put in place, and whether it needs a new law to happen. Feedback from stakeholders across Alabama's recycling system also shaped these scores, so the priorities reflect real experience on the ground.

Using these measures, recommendations were sorted into high, medium, and low priority. High-priority actions tend to share three traits: they make a big difference in diversion, they are not too expensive, and they can be started without waiting on new legislation. Several stand out clearly:

- Expanding the hub-and-spoke system so regions across the state can share processing capacity and reach more residents.
- Creating a statewide list of core recyclable materials, so every community and hauler is working from the same simple guide.
- Building templated signage and school curriculum, which are low-cost tools that build public understanding quickly.
- Partnering with the Alabama Recycling Coalition (ARC) to extend outreach.
- Increasing ARF grant funding through the tip fee allocation, since this directly expands what local programs can do.

A smaller group of recommendations requires action from the Alabama Legislature. These are still important and impactful but may take longer to move forward, so they were placed on a slightly different track than actions ADEM can start on its own.

¹²⁴ <https://www.deq.virginia.gov/land-waste/waste-management/recycling/recycling-data/recycling-rate-report>

This scoring approach gives ADEM a defensible, transparent way to explain why some actions are happening now, and others are planned for later. It also keeps the plan flexible: as conditions change, priorities can be revisited using the same set of measures.

Roadmap

The recommendations in this plan are not meant to happen all at once. They are organized into three timeframes so the state can build momentum step by step.

Short term (2026–2030): This phase focuses on quick, practical wins that build a strong foundation. These are actions that are low-cost, do not require legislative action, and can start almost immediately. These early wins matter because they build trust and momentum, while also setting up the systems the state will need for bigger changes later.

Medium term (2030–2035): Once the early groundwork is in place, the state can take on projects that need more coordination or funding. This includes things like requiring counties to update their existing SWMPs on a regular review cycle (every 5 years) and align them with a statewide hub-and-spoke framework, and strengthening how facilities report their data, including material flows, MRF and RMPF processing capacity, hauler tonnage, and household level curbside access coverage. These actions depend on the structure and relationships built in the short-term phase.

Long term (2035–2045 and beyond): This phase includes the most structural changes, such as fully mature regional planning systems and stronger statewide reporting standards. These recommendations often require legislative action or significant new investment, so they need the longest pathway. By the time the state reaches this phase, the short- and medium-term work should have created the systems, staff, and relationships needed to carry these larger efforts forward.

Some actions, like the state's compliance inspections or ongoing ARF grant administration, are treated as continuous work rather than one-time steps. These "ongoing" items run throughout all three phases and keep the core recycling system functioning while everything else builds on top of it.

Together, this phased approach lets Alabama tackle recycling improvements in a realistic order: quick wins first, structural coordination next, and bigger systemic reform once the foundation can support it.

ACTION ITEMS TIME FRAME	
Short	
2026 - 2030	
Medium	
2030 - 2035	
Long	
2035 - 2045 +	

TIMELINE

To guide implementation, recommendations were assigned to one of four timeframes: ongoing, short term (2026–2030 or 0–4 years from creation), medium term (2030–2035 or 5–10 years), and long term (2035 and beyond or 10+ years). Many of the recommendations call for immediate, ongoing action to capture early, low-hanging-fruit wins while laying the groundwork for larger efforts. Others are designed for the medium and long term, once that foundation is in place and the necessary resources can be secured.

Table 29 - Implementation Roadmap

Recommendations	2026-2030	2030-2035	2035-2045+
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Expand Access and Participation			
1.1	Utilize/expand hub-and-spoke system		
1.2	Fund mobile collection for rural / underserved areas		
1.3	Financially incentivize increased collection and processing		
1.4	Perform a more detailed access evaluation and study		
1.5	Consider policy levers that can drive expanded access		
Increase Education and Outreach			
2.1	Develop a statewide list of core recyclable materials		
2.2	Create templated signage and other educational materials		
2.3	Develop curriculum resources for schools to discuss recycling		
2.4	Partner with Alabama Recycling Coalition (ARC)		
2.5	Develop a Recycling Facility Operator Training		
2.6	Training for education and outreach to local governments and SWAs		
Provide Technical Assistance and Resources to Local Governments and SWAs			
3.1	Develop model incentive toolkits and guides for local governments		
3.2	Increase ARF grant funding by increasing tip fee allocation		
Strengthen Regional Solid Waste Planning and Reporting			
4.1	Align regional and county solid waste plans to hub-and-spoke roles on a defined update cycle		
4.2	Require detailed data and tonnage reporting for all recycling facilities		
4.3	Strengthen annual reporting of diverted materials		

	Implementation target year
	Ongoing implementation

PERFORMANCE METRICS

To support implementation and prioritization, the Project Team developed a set of performance metrics for each recommendation in this plan. For each recommendation, Table 30 indicates its expected diversion impact, costs to the state, ease of implementation, and overall priority with each being rated high, medium, or low. For ease of implementation, a rating of “Low” indicates a recommendation that will be easier to implement, while a rating of “High” indicates greater complexity or effort. There is an additional column indicating whether legislative action is required to implement that recommendation. No single recommendation is intended to address all performance metrics at once; rather, the recommendations are intended to work together with each contributing to a different piece of a well-functioning statewide recycling system. Together, these ratings allow Alabama’s communities, agencies, and partners to weigh the relative costs and benefits of each recommendation to sequence implementation accordingly and plan future investments.

While not captured as a column in Table 30 below, each recommendation also implies a responsible party and a set of impacted entities. Responsible parties include the ADEM, ARC, local jurisdictions and municipalities. These responsible parties will lead or coordinate implementation while impacted entities include rural communities, local jurisdictions, and

residents and are those most directly affected by each recommendation. Identifying these roles early in the planning and implementation process for each recommendation clarifies ownership and highlights where coordination across state, regional, and local partners will be the most critical to success.

Table 30 - Recommendations Matrix

Recommendations		Diversion Impact	Cost Impact	Ease of Implementation	Priority	Require Legislative Action
Expand Access and Participation						
1.1	Utilize/expand hub-and-spoke system	High	Low	Low	High	
1.2	Fund mobile collection for rural / underserved areas	Medium	Medium	Low	Medium	
1.3	Financially incentivize increased collection and processing	High	High	Low	Medium	
1.4	Perform a more detailed access evaluation and study	Low	Medium	High	Medium	
1.5	Consider policy levers that can drive expanded access	Medium	Low	High	High	Yes
Increase Education and Outreach						
2.1	Develop a statewide list of core recyclable materials	High	Low	Medium	High	
2.2	Create templated signage and other educational materials	Medium	Low	Medium	High	
2.3	Develop curriculum resources for schools to discuss recycling	Medium	Low	Medium	High	
2.4	Partner with Alabama Recycling Coalition (ARC)	Medium	Low	Low	High	
2.5	Develop a Recycling Facility Operator Training	Low	Medium	Medium	Medium	
2.6	Training for education and outreach to local governments and SWAs	Medium	Medium	Medium	Medium	
Provide Technical Assistance and Resources to Local Governments and SWAs						
3.1	Develop model tools and incentive programs	Medium	Low	Low	Medium	
3.2	Increase ARF grant funding by increasing tip fee allocation	Medium	High	Medium	High	Yes
Strengthen Regional Solid Waste Planning and Reporting						
4.1	Align regional and county solid waste plans to hub-and-spoke roles on a defined update cycle	Medium	High	High	Low	Yes
4.2	Require detailed data and tonnage reporting for all recycling facilities	Low	Low	Medium	Low	Yes
4.3	Strengthen annual reporting of diverted materials	Low	Low	Medium	Medium	

FUNDING REQUIREMENTS

Implementing the recommendations outlined in this chapter will require additional funding. While increasing funds provided to local governments and nonprofits through the ARF is a foundational strategy, several recommendations depend on staff capacity and programmatic support from ADEM that will require additional administrative funds. The approved landfill tip fee surcharge increase to \$1.30 per ton, effective January 1, 2027, paired with a CPI-based adjustment, will expand available grant funding and help close a persistent funding gap.

Several medium-priority recommendations will require additional staff time: developing model incentive toolkits and guides for local governments (Action 3.1), developing an Operator Training (Action 2.5), creating school curriculum (Action 2.3), and providing hands-on local government training (Action 2.6). ADEM's staffing grew from 32 to 41 FTEs between FY 2014 and FY 2024, mostly to keep pace with permitting and compliance, not the technical assistance and training these strategies call for.

Meeting this plan's full scope means funding three things: capital grants (ARF's strength), staff or contracted technical assistance, and a mechanism to draw private capital into RMPF capacity the state cannot fund through grants alone. Colorado's experience, layering two funding tools into one dedicated revenue source, offers a useful model for that last piece.

Case Study: Colorado's Circular Communities (C3) Enterprise and NextCycle Colorado

The Colorado Circular Communities (C3) Enterprise is a statewide program dedicated to supporting communities, businesses, schools, institutions of higher learning, and tribes with resources to advance the state's transition to a circular economy. C3 was established by HB24-1449 on May 8, 2024.¹²⁵ The enterprise promotes a circular economy statewide by incentivizing and supporting local, regional, and statewide infrastructure, systems, logistics, studies, and marketing; creating local jobs and diversifying end markets; extending the useful life of landfills; and supporting recycling education. What makes the model distinctive is that it funds two different things:

- Community and infrastructure grants: the traditional grant mechanism, similar to ARF, that supports local jobs, end-market diversification, and extending the useful life of landfills through direct investment in recycling infrastructure.
- NextCycle Colorado: a six-month business accelerator that identifies, recruits, and supports new and expanding recycling, composting, and reuse businesses, explicitly designed to move private projects toward investment readiness rather than simply funding public equipment purchases.¹²⁶ This market development program is something that Alabama could consider that aligns with the state's strong business ethos.

Funding

C3 is funded through fees charged at landfills.¹²⁷ Every load of trash dropped off pays a small fee, and that money funds the program. The fee differs from Alabama's landfill tip fee surcharge as outlined below:

Table 31 - Alabama and Colorado Funding Comparison

	ALABAMA (ARF)	COLORADO (C3)
Fee Type	Flat rate	Rate varies by region and load size
Current Rate	25% of \$1.00/ton (increasing to \$1.30, effective January 1, 2027)	100% of \$0.54–\$15/ton depending on region/load type
What it Funds	Public grants only	Public grants and a private business accelerator

Demonstrated Impact:

In its fifth year alone, NextCycle Colorado provided nearly \$3 million in grants to just over a third of 34 participating teams, and those same teams went on to attract more than \$70 million in outside private investment; a return ratio that illustrates how a relatively modest public investment, aimed at de-risking and preparing businesses, can unlock private capital many times its size.¹²⁸

Why This Model Is Relevant to Alabama

¹²⁵ [Colorado Circular Communities Enterprise \(C3\) | Colorado Department of Public Health and Environment](#)

¹²⁶ [NextCycle](#)

¹²⁷ [C3 - Colorado Circular Communities Enterprise](#)

¹²⁸ [CDPHE launches applications for fifth year of NextCycle Colorado program focused on recycling, composting, and reuse | Colorado Department of Public Health and Environment](#)

Colorado's structure suggests a path Alabama could adapt that adds a second layer of private sector funding in addition to its existing grant program, which primarily supports local governments and nonprofits. This funding can be used to spur new RMPF capacity, particularly in regions of the state (such as Southwest Alabama) where processing capacity is thinnest. It can also be used to help offset transportation costs for haulers operating from more rural spokes to a dedicated hub, providing recycling access for rural communities where it may have previously been cost prohibitive. A program modeled after Colorado's would not need to fund construction outright; its value would be in preparing private projects (business plans, siting, market analysis, financing packages) to the point where they are ready to attract private lenders, investors, or federal infrastructure dollars, the same function NextCycle serves in Colorado's. Pairing that with a revenue source structured more like Colorado's, one that scales with disposal volume rather than a flat per-ton rate, could also generate additional dedicated funding without relying solely on ARF's existing landfill surcharge allocation, which is already stretched thin against demand.

A STRONG FOUNDATION FOR A STRONG FUTURE

Alabama has a strong foundation on which to build a more resilient and accessible recycling system. The strategies and implementation roadmap presented in this section provide a practical framework for prioritizing actions that ADEM can take to advance recycling in the coming years. Success will rely on continued collaboration between ADEM, local governments and solid waste authorities, nonprofit organizations, and private industry. By implementing these recommendations in a coordinated and phased approach, Alabama can provide more Alabamians with the opportunity to participate in recycling programs and increase material recovery to support Alabama manufacturers.

Conclusion

Since the publication of Alabama's 2016 recycling report, the state has taken important steps that reflect genuine progress, including raising its diversion goal, supporting communities and nonprofits through the ARF, and passing meaningful legislation, like the whole tire landfill ban. At the same time, this report shows that Alabama's recycling system still faces real gaps in access, funding, and policy when compared to many neighboring states, and closing those gaps will require sustained investment and coordinated action across the state.

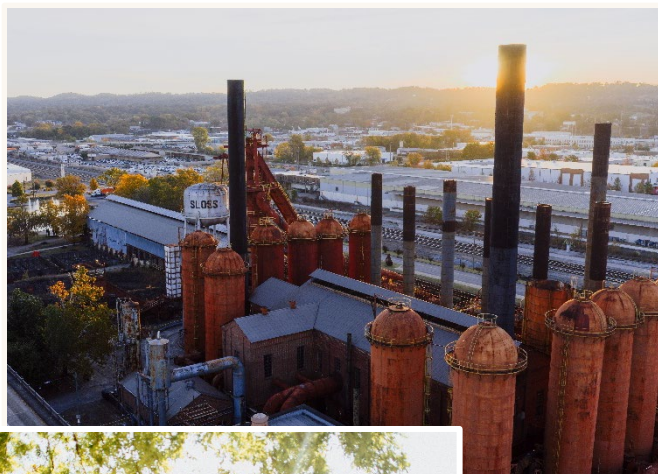
The case for that investment begins with the economy. Alabama's reuse, repair, and recycling industries already support more than 40,000 jobs and generate over \$21.7 billion in direct economic output each year, placing recycling as the second-largest industry in the state by direct economic output, trailing only automobile and light duty motor vehicle manufacturing. This is not

a small or emerging part of Alabama's economy, but rather one of its largest, and its continued growth depends on a steady and reliable supply of recyclable material.

That reality is what makes funding such a central piece of this report's recommendations. Alabama's landfill tip fees remain well below the national average, and its landfill tip fee surcharge to support recycling activities has not changed since 2008, a combination that makes it cheaper in many cases to dispose of material than to recycle it. The proposed increase to \$1.30 per ton is a meaningful and overdue first step, but it should be understood as the beginning of a longer conversation rather than its conclusion. Continued investment in the ARF, paired with a more reasonable structure for distributing that funding across both large and small communities and unlocking a funding mechanism to support the private sector, will play a significant role in determining how much of Alabama's economic potential in recycling is ultimately realized.

The recommendations throughout this report are designed to work together in support of that goal. Expanding access, particularly in rural and underserved areas, ensures that

more residents and businesses are able to participate in recycling programs, while stronger education and outreach helps that participation translate into cleaner and more valuable material. Technical assistance and clearer regional planning allow communities to build the right infrastructure in the right places rather than duplicating existing efforts, and improved data and reporting give the state the visibility it needs to track progress and adjust its approach over time. No single recommendation can solve the full range of challenges facing Alabama's recycling system on its own, but together, they form a system built to grow. The opportunity in front of Alabama is significant. By expanding access, strengthening funding, and building out the policies and planning tools recommended in this report, the state has the ability to transform recycling from a patchwork of local efforts into a coordinated, statewide system.



Appendix

Appendix 1: Scrap Tire Program Details

Scrap tire management in Alabama is governed by the Alabama Scrap Tire Environmental Quality Act (ASTEQA) and administered by ADEM under a regulatory framework that was updated in 2024. Those updates extended receiver registration periods, shifted to semi-annual reporting, and established new provisions for directing Fund resources toward processing and recycling infrastructure development. A concurrent amendment to Division 13 of the ADEM Administrative Code prohibits the disposal of whole, unprocessed tires in landfills beginning January 1, 2028, which aligns Alabama with the disposal standards of its neighboring states. These regulatory changes, combined with a sustained emphasis on market development and interagency coordination, define the current direction of the state's scrap tire program.

FUNDING AND EXPENDITURES

The Alabama Scrap Tire Program is financed through the Alabama Scrap Tire Fund, which was established under ASTEQA. The Fund collects a \$1.00 per tire fee at the point of sale for each new, used, or retreaded tire sold in Alabama. From when the program began in FY 2003 through FY 2014, cumulative revenues reached \$42.4 million, with total program expenditures of \$36.2 million and a fund balance of approximately \$8.0 million. By FY 2016, cumulative revenues grew to \$51.8 million with expenditures of \$37.8 million and a remaining balance of \$14.0 million. Biennial revenues in the FY 2017 - FY 2018 period totaled \$8.2 million against \$5.8 million in expenditures, while the FY 2019 - FY 2020 period saw revenues of \$8.6 million and expenditures of \$6.5 million. Revenues for both the FY 2021 - FY 2022 and FY 2022 - FY 2024 reporting periods were reported at \$9 million, with program expenditures of \$5.0 million in each period.

The ASTEQA specifies that 45% to 75% of the prior year's Fund deposits must be directed toward remediation, abatement, and removal of scrap tire sites. Up to 20% may be used for ADEM regulatory development, enforcement, personnel, training, and equipment costs. Up to an additional 20% may support market development activities. County delegation programs may receive up to 10%, tire retailers may retain up to 7% of fees collected to offset collection and accounting costs, and the Department of Revenue may retain up to 2% for administrative functions associated with the Fund.

STATEWIDE FACILITIES

ADEM regulates five categories of facilities under the ASTEQA. These include Class One Receivers (facilities generating more than 10 scrap tires per year), Class Two Receivers (government, fleet, and dismantling operations generating more than 10 scrap tires annually), Scrap Tire Transporters (those hauling more than 8 tires per load), Scrap Tire Processors, and Fuel Users.

The total number of registered and permitted facilities fluctuated across reporting periods, reaching a high of 3,313 facilities as of FY 2016 before declining. As of September 2020, there were 2,780 total facilities statewide, with 2,662 registered receivers, 102 permitted transporters, and 9 processors. By September 30, 2022, total facilities had grown to 2,879, including 2,757 receivers, 110 transporters, and 11 processors. The most recent reporting period ending September 2024 reflects 2,714 total facilities, comprising 2,587 receivers, 107 transporters, and 12 processors. Jefferson County has consistently maintained the largest number of registered and permitted facilities across all reporting periods, followed by Mobile, Madison, and Montgomery counties.

Since the program began, more than 4,700 receiver registrations and over 600 transporter and processor permits have been issued. Staff of the ADEM Materials Management Section conduct compliance inspections with a program goal of visiting every

registered and permitted facility at least once every three years. Inspections are prioritized based on complaints received, non-submittal of required reports, lapses in financial assurance, and time since the previous inspection. Facilities with histories of non-compliance receive more frequent inspections. Over 12,400 compliance inspections of registered and permitted facilities had been conducted as of the FY 2018 – FY 2020 report, with an additional 460 inspections performed during the FY 2022 - FY 2024 period alone.

REMEDATION PROJECTS

The Alabama Scrap Tire Program engages in remediation of unauthorized scrap tire accumulations (USTAs) through enforcement actions against responsible parties and fund-supported contracts. A total of eight large scrap tire site remediation projects have been completed since the program began, which removed a combined 8,028,810 PTE at a total cost of \$8,361,290. Small site remediation has grown steadily in scope and cost over the reporting period. From FY 2009 through FY 2016, approximately 380,000 PTE were removed from more than 200 small sites at a cost of roughly \$2.2 million. By FY 2024, that total had grown to approximately 496,000 PTE and 10,474 tons of scrap tire material from more than 285 sites at a cumulative cost of approximately \$4.8 million. The number of small site projects completed per biennial period has ranged from fewer than 10 to more than 30, with contract amounts per project varying from several hundred dollars to over \$800,000 in cases where sites also contained unauthorized solid waste. The Right of Way Cleanup Program provides reimbursements to county governments for the removal of discarded tires from county rights-of-way. Cumulative removals under this program have grown from approximately 300,000 PTE at a cost of \$1.9 million as of FY 2014 to approximately 1,736,762 PTE at a cost of \$9,614,889 as of September 2024.

END USERS

Per ADEM's FY 2018–2020 Scrap Tire Program Biennial Report, an estimated 7.1 million scrap tires from all sources in Alabama are beneficially reused annually. Approximately 96% of beneficially reused tires are consumed as fuel or as a substitute raw material, while the remaining 4% are diverted through other uses.¹²⁹

The ADEM Scrap Tire Marketing Program (STMP), originally administered by the Alabama Department of Economic and Community Affairs (ADECA) and transferred to ADEM in 2009, provides grant funding for demonstration projects involving scrap tire-derived products and applications. The program uses an open grant process to select local government-sponsored projects intended to document the performance and feasibility of tire-derived materials as substitutes for conventional raw materials. Total grant awards have increased from approximately \$7.8 million as of FY 2011 to over \$16 million as of FY 2025. Project types have included rubber modified asphalt (RMA), recycled tire mulch for playgrounds and parks, walking tracks, solid rubber surfacing, and tire-derived aggregate. The Coffee County Scrap Tire Processing Facility, at \$5,842,177, remains the largest single grant award in the program's history.

In more recent biennial reports, RMA projects have become a prominent focus of the STMP. Major RMA awards include a \$1,355,342 grant to St. Clair County for repaving Annie Lee Road, a \$1,164,222 award to the Alabama Department of Conservation and Natural Resources for Joe Wheeler State Park, a combined \$829,080 award for Lake Guntersville and DeSoto State Parks, and a \$653,424 award to the McClellan Development Authority for Lake Yahou Park. Additional RMA awards include a \$762,449 grant for Lake Lurleen State Park, a \$340,464 grant for Walker County Lake, a \$288,800 grant to Coffee County for an RMA project, and a \$485,942 grant to ADEM for the Mobile Field Office parking lot.

¹²⁹ <https://adem.alabama.gov/sites/default/files/legacyfiles/programs/land/landforms/ScrapTireReport18-20.pdf>

Appendix 2: Commodity End Markets in Alabama

The following lists include current commodity end markets that are in Alabama by general material type.

PLASTIC COMMODITY END MARKETS

- Activa
- AR Recycling Arab
- Blue Diamond Industries, LLC
- Clean Planet Energy AL
- Custom Polymers PET
- Custom Synthetic Fibers
- Dow Circulus Arab
- Eovations, LLC
- Indorama Athens
- Interstate Advanced Materials
- JET Polymer Recycling, Inc.
- KW Plastics
- Max Packaging
- Plastipak
- PRSEI Decatur
- Ropak Manufacturing Company, Inc.

PAPER AND FIBER COMMODITY END MARKETS

- Alabama River Cellulose
- Bowater - Coosa Pines Mill
- Essity USA Barton Mill
- GP Naheola Mill
- Kimberly-Clark Corp. - Mobile Mill
- National Gypsum Co. - Anniston Mill
- GP Brewton Mill
- International Paper (Multiple Locations)
- Maryland Paper Tuscaloosa Mill
- MeadWestvaco - Mahrt Mill
- Newark Recycled Fibers - Mobile Paperboard Corp
- PCA Jackson Containerboard Mill
- Smurfit WestRock (Multiple Locations)
- Sonoco Products Co.
- WestRock CP, LLC

METAL COMMODITY END MARKETS

- American Buildings Company (Nucor)
- American Cast Iron Pipe Company
- ArcelorMittal Calvert

- CMC Steel Alabama
- Constellium Aluminum Muscle Shoals
- Ecovery LLC
- Gerdau Long Steel North America (Birmingham Reinforcing Steel)
- Huron Valley Steel Corp.
- Kaiser Florence
- Metal Source Scottsboro
- Nemak Alabama
- Novelis Bay Minette
- Nucor Steel (Multiple Locations)
- Outokumpu (Two Locations)
- Real Alloy
- SSAB Axis Steel Works
- Tennessee Aluminum Processors
- U.S. Steel Fairfield Works (Two Locations)
- Vulcan Inc.
- Vulcraft Alabama

GLASS AND OTHER COMMODITY END MARKETS

- Glass Half Full Birmingham
- Johns Manville Phenix City
- Knauf Insulation Lanett
- Rock Wool Manufacturing Leeds