



**The Recycling
Partnership**

Building a Better Recycling System

Northwest Arkansas Recycling Roadmap

August 2025

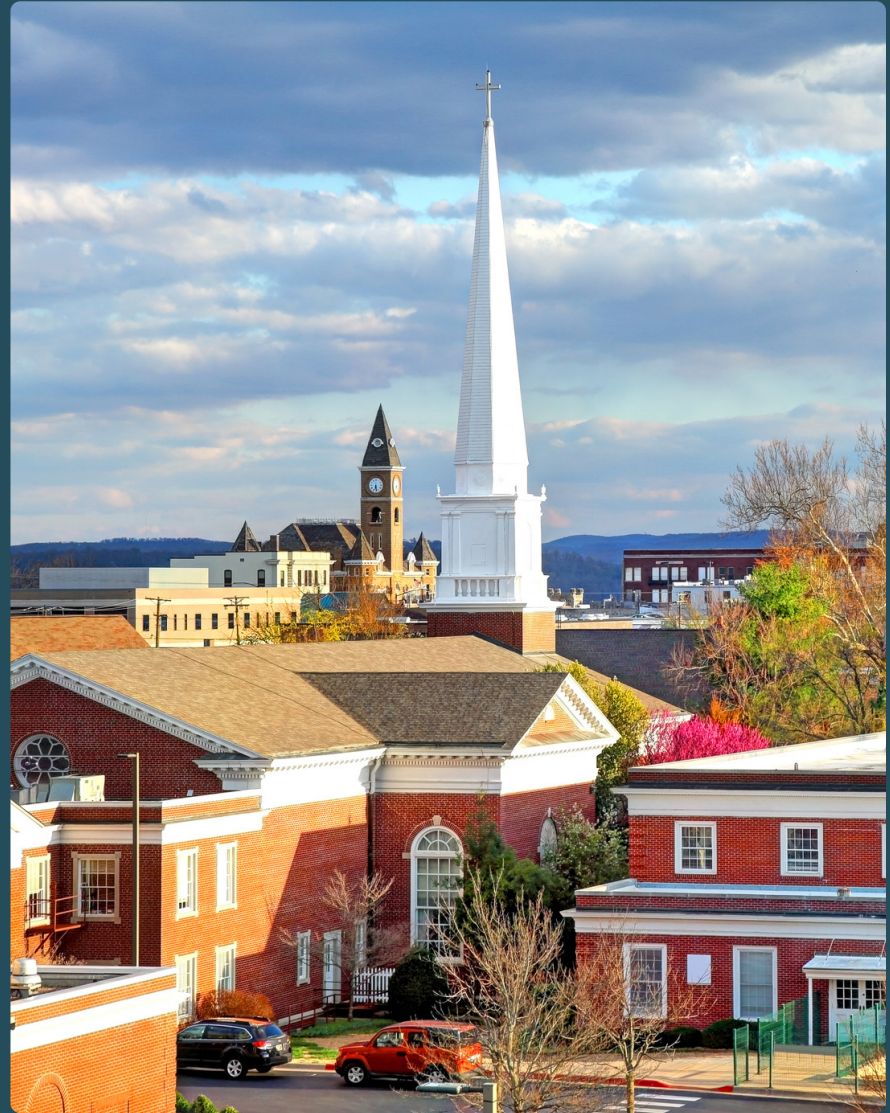


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Executive Summary



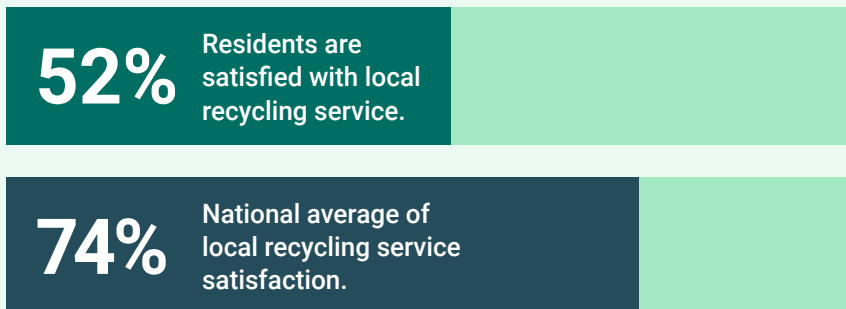
Home to more than half a million people and a growing economy, Northwest Arkansas needs a recycling system that reflects its economic ambitions. Research shows Northwest Arkansans believe recycling is the right thing to do, and many are already in the habit of doing it. But only about 52% are satisfied with local recycling services — well below the national average of 74%. There is an opportunity to strengthen the region by building a local supply chain of secondary materials and end markets by expanding the reach of recycling services.

With that in mind, The Recycling Partnership met with elected officials, community leaders, solid waste authorities, and the Northwest Arkansas Council's Recycling Steering Committee to better understand the needs and challenges that affect the recycling system in this region. Through these conversations and by analyzing current data, The Partnership has developed the Recycling Roadmap, which details the incredible opportunity to build a better recycling system for Northwest Arkansas.

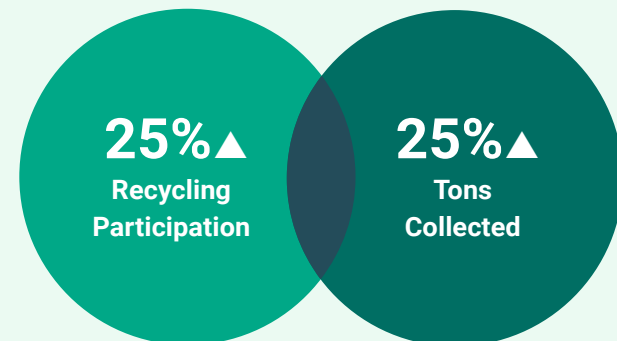
The Roadmap's targeted recommendations and projects aim to **increase recycling participation by 25% and increase tons collected by 25% by 2030.**

While these increases do not completely encompass the full scale of system change needed in the region, they serve as catalytic progress markers, moving Northwest Arkansas toward a position of leadership and a future where everyone can and does recycle.

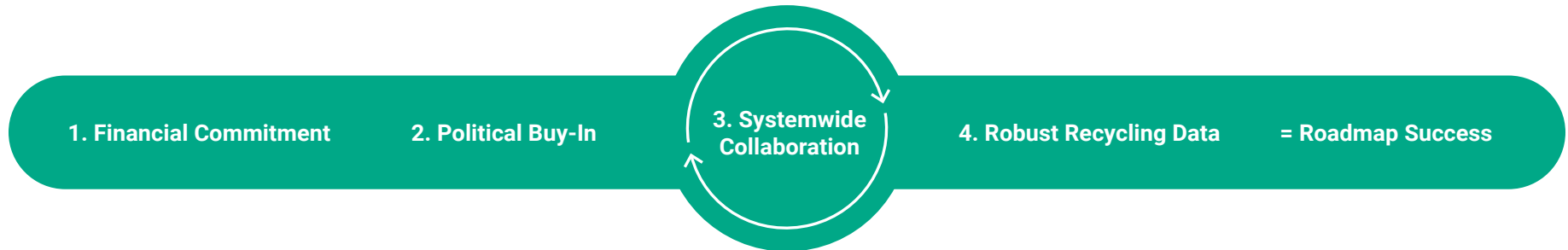
Arkansas vs. National Recycling Sentiment



2030 Recycling Roadmap Goals



**We highlight four key enabling factors for system change
that must be true for the roadmap to succeed:**



The roadmap is organized into three priority pillars comprised of specific projects in mid- to large-size communities, each of which will help drive the region's transformation into a recycling leader:



I. Increase Household Participation and Capture

1. Transition to Cart-Based Curbside Recycling Collection in Fayetteville and Siloam Springs
2. Launch/Expand Cart-Based Curbside Recycling Collection in Jurisdictions over 4,000 Households
3. Standardize Hauling and Processing Contracts in the Region
4. Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots in Fayetteville, Siloam Springs, and One Other Community
5. Standardize Recycling Education and Outreach Across the Region



II. Enhance and Optimize Processing Capacity at Regional Material Recovery Facilities

1. Evaluate and Implement Processing Upgrades to Expand Capture of Specific Materials
2. Develop Public-Private Partnerships for Future Processing Infrastructure
3. Use and Support Local End Markets for Recycled Materials



III. Build Regional Capacity for Collaboration and Coordination to Support and Oversee Roadmap Recommendations

- Option 1:
Combine Expertise and Resources to Form a Single Solid Waste Authority
- Option 2:
Formalize a Partnership Between Existing Solid Waste Districts

Background

Northwest Arkansas has made notable recycling system progress in recent years. This includes comprehensive strategic planning, expansion of organics services, and pending updates to the state's solid waste management plan. But much more is needed. Recycling and waste diversion are becoming critically important as growth continues ([See Appendix A](#)), and the region relies on a single landfill fraught with ongoing challenges.

Northwest Arkansas is home to more than 570,000 people across approximately 45 towns, cities, and census designation places, each providing different levels of waste and recycling services. Approximately 60% of the region's single-family households have access to curbside recycling collection, but not all of it mirrors regular trash collection, and an estimated 117,000 tons of recyclable materials are lost to landfills¹ each year. Along with the challenges of limited recycling access and low resident participation, processing infrastructure in the region is not prepared to handle the projected increase in material as the local population grows over time.

Currently, one materials recovery facility (MRF, a facility that sorts and processes recyclable materials) is operating in the region, and one MRF from Marck Industries is considering rebuilding after a recent fire. The operating CARDS MRF has an estimated capacity of about 40,000 tons per year but currently recycles only about 20,000 tons per year — wasted potential due to insufficient capture. But if the growth continues in the next five years, significantly more capacity will be needed.¹

With generous support from the Walmart Foundation, The Recycling Partnership spent one year evaluating community-level recycling data in the region and interviewing key interest holders. This roadmap lays out the recommended actions and investment over the next five years to position the region as a leader, improve resident satisfaction with recycling, and help reduce pressure on the local landfill.



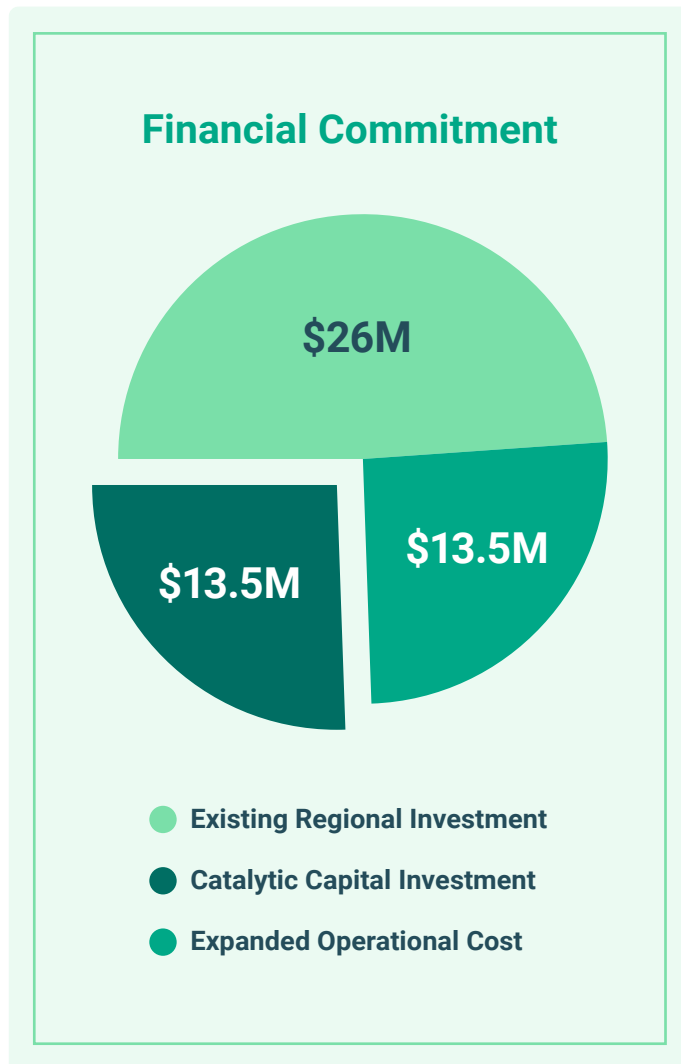
Vision

The Recycling Partnership and partners envision a future where all Northwest Arkansas residents have access to recycling at home, use services correctly, and know and trust that collected recyclables are being converted into new materials.

In the immediate term, this report outlines a roadmap in the region to achieve a **25% increase in recycling participation and a 25% increase in tons collected by 2030.**

¹ <https://nwarecycles.org/wp-content/uploads/2021/10/FINAL-Plan-NWA-Regional-Waste-Red-Recyc-Optimization-052821.pdf>

Factors to Enable System Change in Northwest Arkansas



Realizing this kind of effective system requires both bottom-up AND top-down projects for scaled impact. In Northwest Arkansas, four key enabling factors will drive this change:

1. Financial Commitment

Our economic modeling estimates that the total regional cost of improvements to achieve a 25% increase in participation and tons collected over the next five years is approximately **\$53 million**. Our estimated distribution of these costs follows:

a. Existing Regional Investment: \$26 million

This is the cost of maintaining the current level of recycling in the region. These costs are currently covered by existing service fees and budgets that are already being paid into the system.

b. Catalytic Capital Investment: \$13.5 million

An additional \$27 million in funding is needed to bridge the gap from the existing regional investment to the total cost. We recommend investing half of this — approximately \$13.5 million — in the region over the next five years to cover the capital and engagement expenses recommended in the roadmap. This includes residential collection infrastructure, technical assistance needs, and other roadmap projects, as described here.

c. Expanded Operational Cost: \$13.5 million

As the recycling system grows and services expand with catalytic capital investment, the operational costs of administering a growing program will also increase. We estimate that if catalytic capital investments are secured, communities will be able to absorb the remaining expanded operational cost, allowing the region to move toward the 25%/25% goal at only half the cost of the required system investment. This estimate does not incorporate economies of scale, and the actual operation cost may be lower as the program grows at the regional level.



2. Political Buy-In

Many of the roadmap recommendations move against the status quo. Support from elected officials and government leaders is needed to champion these changes, secure financial commitment, and establish long-term stability for systemic change. Without political buy-in, even the most well-designed recycling initiatives risk stalling due to fragmented authority, regulatory inconsistencies, or lack of sustained investment. Political leadership signals commitment and creates an enabling environment for cross-sector collaboration, public engagement, and enforcement mechanisms.

3. Systemwide Collaboration

Consistency is key to improving recycling performance and efficiency, but recycling's inherently decentralized nature makes it challenging to implement the system-level changes needed. To effectively implement the roadmap recommendations across the region, key businesses and local governments must coordinate and build trust through mutually beneficial partnerships.

4. Robust Recycling Data

Without adequate data, it is not possible to thoroughly understand how the recycling system is performing and what kind of support is needed if it is underperforming. Robust data collection is necessary to provide evidence-based rationales for new projects, illustrate successes, and strategize improvements.

Roadmap Recommendations

This roadmap consists of projects sorted into three broad recommendations for investments and actions to generate system-wide recycling improvement in Northwest Arkansas. Each project was developed based on local interest-holder engagement, regional research, and best practices derived from The Recycling Partnership's decade of expertise working with community recycling programs.

Increase Household Participation and Capture



I. Increase Household Participation and Capture

① Transition to Cart-Based Curbside Recycling Collection in Fayetteville and Siloam Springs

Current Status

Bin-sort program. Residents are provided with 18-gallon bins for curbside set out. Collection truck drivers manually sort materials at the curb.



Current Challenge

Poor Participation

<35% in both communities.

Safety Concerns

Drivers risk injuries and accidents from getting in and out of the truck and from lifting the heavy bins.

Inefficiency

Trucks and drivers usually are the costliest components of a program. Curb sort means the number of households served per truck is low, and the number of trucks and drivers needed is high.

Staffing

Communities struggle to retain staff to fill their driving and sorting positions.

Necessary Conditions

Political Support

Significant service changes require political will to champion and fund the project. It appears there is political support to make this transition in Fayetteville and Siloam Springs, but upfront capital funding will remain a key challenge for both communities.

City Budget

Capital funding for the trucks and carts is required to implement the service changes. There will need to be support to fund both the capital and operational costs.

MRF Cooperation

CARDS is the only cart-based MRF currently operating, so they must bid a mutually beneficial processing fee for the materials and be a good partner.

Recommended Actions

1. Replace bins with carts.
2. Upgrade collection trucks to launch automated service.
3. Standardize processing contracts for the communities.

Estimated Impacts

- Increases participation rate
 - Fayetteville: 60%
 - Siloam Springs: 50%
- Increases new tons collected annually
 - Fayetteville: 3,000–5,000
 - Siloam Springs: 500–750
- Reduces number of trucks and drivers needed.
- Drivers will be able to service more households per truck.
- Mitigates safety concerns as drivers remain in the truck.
- Starting a new program provides an opportunity for improved education and outreach to increase participation and reduce contamination.

Implementation Team

- **Lead:** Community staff with technical support from The Recycling Partnership
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, solid waste districts

[Fayetteville Project Detail](#)

[Siloam Springs Project Detail](#)

② Launch/Expand Cart-Based Recycling Curbside Collection in Jurisdictions over 4,000 Households

Current Status

In a number of communities that have grown significantly over the past several years, trash is collected curbside, but recycling service is drop-off only. Bella Vista is the largest community where this remains true.

Current Challenge

Poor Participation

Nationally, less than 10% of households participate in drop-off recycling programs.

Regional Misalignment

Bella Vista has more than 12,000 households and is one of the largest communities that does not provide cart-based curbside recycling as part of its collection contract.

Necessary Conditions

Political Support

Significant service changes require political will to champion and fund the project, but whether this support exists is unclear from our community engagement findings.

Waste Contract Negotiation

Implementing this project requires current trash contracts to either be rebid or renegotiated. Best practice indicates that a year ahead of contract expiration is the best time to think about changes.

City Staff Capacity

Implementation requires staff that can lead at the local level.

Willingness to Incur Cost

A best practice is for the community to own the recycling carts, which requires an upfront cost. This cost may be passed to the customer through an increase in service fees or funded by capital funding support like grants.

Recommended Actions

1. Establish cart-based curbside recycling collection service in Bella Vista and two other communities that comprises carts and contracted, automated truck collection.
2. Standardize hauling and processing contracts for the communities (see project 1.3 on next page).

Estimated Impacts

- Increases participation rate to 40% of eligible households.
- Increases new tons collected annually to 800–1,200.
- All the region's most populous cities will be operating under recycling program best practices, signaling the value of improved services to the rest of the region.
- Offering curbside recycling typically benefits drop-off recycling programs.

Implementation Team

- **Lead:** City staff from Bella Vista and other communities, Benton County Solid Waste District, and Boston Mountain Solid Waste District
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, The Recycling Partnership, consultants

[Bella Vista Project Detail](#)



3 Standardize Hauling Contracts

Current Status

Regionally, there is very little consistency across contracted waste and recycling services, resulting in confusion, inadequate recycling participation, and missed capture of materials.



Current Challenge

Inconsistent Service Requirements

Collection schedules, cart colors, accepted materials, who fields customer calls and complaints, how communication happens with residents, and who is responsible — all of these are variable under the status quo, leading to confusion for both customers and service providers.

Lack of Data

Due to lack of information and data about recycling performance, there is a limited understanding of the scope of this challenge in the region.

Underperforming Programs

When residents face barriers to access and confusion about how and what they can recycle, programs see low participation and collection.

Necessary Conditions

Political Support

Currently, no authority requires communities to align on this project. Communities would need to enforce it themselves in the near term.

Demonstrative Success

Bentonville, Springdale, and Rogers can create buy-in for other communities to follow suit, if they lead.

Industry Cooperation

Service providers must be willing to align on terms.

Recommended Actions

Support contract negotiation with communities such as Springdale, Rogers, and other communities as contract timelines align. This will ensure they are applying similar terms to their service providers, with the goal of proving this concept and deploying it to all communities throughout the region.

In practice, this could look like creating a set of key contract provisions that communities voluntarily insert into their contracts with service providers; the solid waste districts developing contracts with these provisions, bidding them, and allowing communities to be included on the agreements; or a combination of these two approaches.

Estimated Impacts

- Increases participation rate to 50% of eligible households.
- Increases new tons collected annually to 800–1,200.
- Allows haulers to better understand requirements.
- Facilitates economies of scale and regional collaboration.
- Provides an opportunity to set requirements that protect customers.

Implementation Team

- **Lead:** City staff from each community, a partnership between solid waste districts
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, The Recycling Partnership, consultants

[Bentonville Project Detail](#)

[Springdale Project Detail](#)

[Rogers Project Detail](#)

④ Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances Through Pilots in Fayetteville, Siloam Springs, and One Other Community

Current Status

Northwest Arkansas communities are growing at a considerable rate, driving an increase in multifamily construction and new commercial businesses. Existing recycling guidance does not meaningfully account for growth in these sectors.

Current Challenge

No or Limited Recycling Access

Only 37% of multifamily complexes in Northwest Arkansas have equitable recycling service. Significant recyclable material is lost from these residences.

Lack of Data

Due to a lack of information about multifamily property recycling performance, there is a limited understanding of the scope of this challenge.

Necessary Conditions

Policy Support

Especially as property development is projected to grow, policy is crucial to ensuring programs are in place.

Multi-Interest-Holder Collaboration

Multiple parties, including property developers and apartment managers, must be willing to collaborate.

Industry Cooperation

Haulers must be willing to share data to inform smart policy.

Recommended Actions

1. Implement and test a series of best practices for multifamily and commercial recycling in Fayetteville, Siloam Springs, and one other community, aimed at improving existing services, creating a proof of concept, and collecting data.
2. Implement policies throughout the region that encourage standardization of best practices, such as enhanced hauler licensing policy to begin collecting more data, space requirements for new construction, policy support, collection contract support, and open market collection improvements, among others.

Estimated Impacts

- Increases participation rate to 20–30% of eligible households.
- Increases new tons collected annually to 200–265.
- Proves multifamily recycling services are worth the investment, laying the groundwork for similar projects (and policies to support them) in more populous municipalities such as Bentonville, Rogers, and Springdale.
- Facilitates improved data collection through the solid waste district licensing programs.

Implementation Team

- **Lead:** City staff
- **Support:** The Recycling Partnership, consultants, Northwest Arkansas Council's Recycling Steering Committee with solid waste districts supporting

[Fayetteville Project Detail](#)



5 Standardize Recycling Education and Outreach Across the Region

Current Status

Very little communication is being delivered to the public about how to properly use recycling services. Many communities are too small to justify funding a local position that could support community engagement. Aligning programs in the above recommendations would allow a more regional approach to engagement that would create economies of scale and consistency across communities.

Current Challenge

Limited Engagement

There is very little or no direct to resident communication about proper use of services. Only 14% in Northwest Arkansas feel well or very well informed about what happens to their recycling after it leaves their home. Engagement data consistently show that lack of outreach results in confusion, which ultimately leads to poor participation and capture.

Lack of Ownership

Haulers don't conduct education and outreach with their customers unless it is specifically/contractually required.

Necessary Conditions

Funding

Solid waste districts will need financial support to develop and implement materials. Communities that would benefit from the service could help fund district efforts.

Regional Coordination

Communities must align with common services.

Recommended Actions

Engage the solid waste districts to lead development and implementation of an education and outreach program for the region, ensuring consistent messaging and accurate service information for all participating communities.

Estimated Impacts

- Increases participation rate to 25% of eligible households.
- Increases new tons collected annually to 1,000–1,400.

Implementation Team

- **Lead:** Solid waste districts
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, The Recycling Partnership

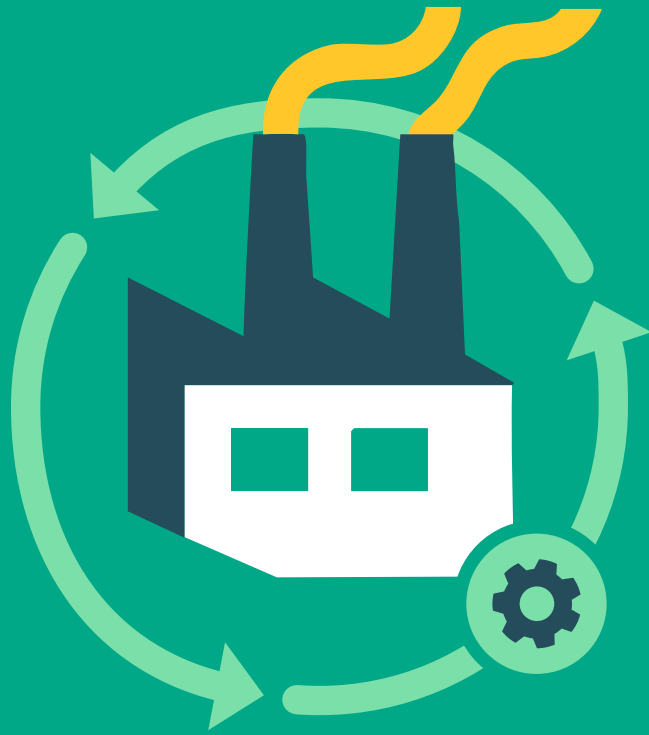
Demonstrative Project Underway - Springdale

The Recycling Partnership is currently working with the Boston Mountain Solid Waste District and CARDS to deploy an engagement campaign in Springdale as they seek to improve cart-based curbside recycling collection program. Materials are being developed for the effort with standardization in mind, to be easily applicable to all municipalities within the solid waste district, not just Springdale.

See Appendix C for a case study of this effort.



Enhance and Optimize Processing Capacity at Material Recovery Facilities



II. Enhance and Optimize Processing Capacity at Material Recovery Facilities

① Evaluate and Implement Processing Upgrades to Expand Capture of Specific Materials

Current Status

The region currently does not consistently accept glass, polypropylene, aseptic cartons, or PET thermoforms. Both the CARDS MRF and Marck's sorting capabilities could be upgraded to accept these materials and to improve processing efficiency.



Current Challenge

Contamination

These materials are consistently turning up in recycling bins, making them contaminants when they reach the MRF.

Insufficient, Low-Value Supply

Facilities need more supply of material to run optimally, and the current volumes of cartons and polypropylene are low. There is also limited incentive because these are not high-value commodities.

High Cost, Low Demand

Capital costs for sorting equipment upgrades are high, and current community demand for these services is low.

Necessary Conditions

Sufficient Supply

The quantity of recyclable materials facilities receive must increase to justify upgrades. This is made possible and likely through the implementation of the short-term roadmap recommendations above.

Catalytic Funding

Catalytic funding to purchase sorting equipment upgrades will facilitate acceptance of new materials more quickly, as collection can be “turned on” at the household level.

Recommended Actions

1. Evaluate the cost/benefits for recovering additional materials such as glass, polypropylene, PET thermoforms, and cartons at existing regional facilities.
2. Following evaluation, deploy catalytic funding to support processing/sortation upgrades that would be needed to capture identified materials.

Estimated Impacts

- Increases materials captured by 20%.
- Increases new tons collected annually to 1,200.
- Transforms materials from contaminants into acceptable recyclables.

Implementation Team

- **Lead:** The Recycling Partnership
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, solid waste districts

② Develop Public-Private Partnerships for Future Processing Infrastructure

Current Status

CARDS has an estimated capacity to recycle about 40,000 tons per year and currently operates at an estimated 20,000 tons per year. To be successful in increasing the supply of recyclable materials, planning for the additional processing capacity is needed.

Current Challenge

Material Supply

CARDS only operates at half its capacity. But that gap could close quickly as the regional population continues to grow and recycling increases.

Necessary Conditions

Catalytic Funds

MRFs are expensive to construct, and committed funds are necessary to ensure a project breaks ground.

Political Will

MRFs are complicated to site and fund, and a project like a new MRF would have to be championed through regulatory hurdles.

Recommended Actions

1. Begin planning for future processing infrastructure.
2. Strongly consider public-private partnership that will ensure more than one interest-holder has a vested interest in the facility. Commonly, a local government or an authority owns the land and the building and will contract with a private vendor to equip and operate the facility. It is important to have multiple parties involved when considering a larger investment that impacts many regional communities.



Estimated Impacts

- Ensures processing capacity is in place when it is needed.
- May enable additional waste diversion infrastructure for other waste streams such as organics, or construction and demolition debris.

Implementation Team

- **Lead:** Northwest Arkansas Council's Recycling Steering Committee
- **Support:** The Recycling Partnership, consultants

③ Use and Support Local End Markets for Recycled Materials

Current Status

Most of the material collected and sorted in the region is sold out-of-state or to international markets.

Current Challenge

High Transportation Costs

Material can be shipped across the country or internationally.

Missed Economic Opportunity

There are sufficient end markets in Arkansas that desire the material but are not getting it.



Necessary Conditions

End Market Transparency

MRFs will need to disclose what markets they are using, which may be enforced through policy or other regional coordination.

End Market Investment

Investing in end market development to support the use of recycled materials may be necessary.

Awareness of Cost Uncertainty

It is difficult to accurately determine what the potential cost of this project might be, as market fluctuations can be unpredictable.

Recommended Action

Encourage and/or enforce use of local end markets through contractual provisions.

Estimated Impacts

- Reduces transportation costs, since material travels a much shorter distance.
- Encourages regional economic growth and the opportunity for new end markets to develop.

Implementation Team

- **Lead:** Northwest Arkansas Council's Recycling Steering Committee

Build Regional Capacity for Collaboration and Coordination to Support and Oversee Roadmap Recommendations



III. Build Regional Capacity for Collaboration and Coordination to Support and Oversee Roadmap Recommendations

Regional coordination is one of the key enabling factors of system change. Here, we recommend two options for fostering and/or formalizing collaboration between key owners of the recycling value chain across the region.

Option 1: Combine Expertise and Resources to Form a Single Solid Waste Authority

Current Status

Northwest Arkansas currently has two independently operated solid waste districts.

Current Challenge

Inconsistent Administration

Services, enforcement, and other operational aspects can vary between the districts.

Inadequate Resourcing

Solid waste districts are tasked with planning and overseeing regional waste management, giving them a broad, strategic view of needs and challenges. However, these districts often lack the resources to fully implement solutions on their own.

Necessary Conditions

Comprehensive Analysis

This would not be a simple effort. To make this vision a reality, key leader input and consensus must be established early in the process, and legal analysis will be necessary to understand what it would take to formally establish a single authority.

Leadership from Current Districts

A successful transformation will depend on clear governance, stakeholder alignment, and a strong commitment to regional collaboration.

Recommended Action

Consolidate into one solid waste authority.

Estimated Impacts

- Increases efficiency of operations (one administration vs two, one board, etc.).
- Combines financial resources.
- Ensures consistency in services.
- Allows the opportunity to create more authority to set minimum standards for municipalities while leveraging shared contracts and coordinated public engagement to create economies of scale.

Implementation Team

- **Lead:** Solid waste districts with close support from The Recycling Partnership and consultants
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, local communities



Option 2: Formalize a Partnership Between Existing Solid Waste Districts

Current Status

Northwest Arkansas currently has two independently operated solid waste districts.

Current Challenge

Inconsistent Administration
Services, enforcement, and other operational aspects can vary between the districts

Necessary Conditions

Strong Collaboration and Partnership
While we recommend prioritizing the suggestion above, this alternative is another option to strengthen regional coordination.

Recommended Actions

Establish a formal partnership to ensure mutually beneficial coordination, delivery of shared services, and increase authority and capacity of the existing districts.

Estimated Impacts

- Coordinated public engagement to create economies of scale.
- Coordinated services and policies.
- Consistent data collection.

Implementation Team

- **Lead:** Solid waste districts
- **Support:** Northwest Arkansas Council's Recycling Steering Committee, The Recycling Partnership, consultants



Conclusion



The Recycling Partnership's long experience in strengthening recycling capacity, along with the many conversations held with Arkansans while developing this report, indicate that strong potential exists in Northwest Arkansas to make incremental but extraordinarily effective recycling system improvements that will spark larger changes.

Through a combination of catalytic funding, political buy-in, and regional coordination, Northwest Arkansas could see a 25% boost in household recycling participation and a 25% increase in tons of material collected by 2030. This achievable target sets the stage for Arkansas to realize broader access to recycling and grow a statewide recyclables supply chain based on materials that are currently being wasted and taking up valuable space in landfills.



Acknowledgement

This work would not have been possible without the invaluable contributions of the Northwest Arkansas Council, whose dedication to providing crucial local context and facilitating connections with key stakeholders was essential. We are also deeply grateful to the many stakeholders who helped us better understand the region and provided thoughtful feedback throughout the process. Key contributors include representatives from Benton County and Boston Mountain Solid Waste Districts, local agency staff from the communities referenced in the roadmap, and participating private companies. We especially thank the City of Springdale, Boston Mountain Solid Waste District, and Madison County for their collaboration on two outstanding projects aimed at engaging residents about the importance of recycling.



Appendix

Appendix A

Research References – Previous Work in the Region

[Creating Circular Economies in Northwest Arkansas](#)

A synopsis of the Northwest Arkansas Council and The Sustainability Consortium “Creating Circular Economies in Northwest Arkansas” recycling study completed in 2020.

[Northwest Arkansas Council Website and Annual Reports](#)

Key insights, reports, and recommendations from Northwest Arkansas Council on the status of recycling in the region.

[Northwest Arkansas Regional Waste Reduction & Recycling Optimization Study](#)

Regional solid waste plan published by Boston Mountain Solid Waste Management District and the Northwest Arkansas Council in May 2021. It provides a comprehensive strategy to improve recycling and waste diversion across the region.

[City of Fayetteville, Arkansas Solid Waste Reduction, Diversion, and Recycling Master Plan](#)

City solid waste plan prepared by Kessler Consulting for the city of Fayetteville in 2016.

Appendix B

City Project Details

City of Fayetteville

Recommendations Summary

1. [Transition to Cart-Based Curbside Recycling Collection \(Roadmap Recommendation I.1\)](#)
2. [Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots \(Roadmap Recommendation I.4\)](#)

1. Transition to Cart-Based Curbside Recycling Collection

Current Status

Fayetteville currently offers a bin-sort program. Residents are provided with 18-gallon bins and set them out at the curb. Drivers exit the recycling truck and sort the materials into multiple categories while at the curb for each house.

Appendix

(Appendix B)

Challenges with Status Quo

- **Poor Participation** – Less than 35% of households participate in the current system, despite the city’s robust pay-as-you-throw pricing structure, good recycling education, and the overall commitment to environmental stewardship and sustainability.
- **Low Performance** – Currently, the city collects approximately 244 pounds per household. The Recycling Partnership data shows that mid- to high-performing programs collect between 400 and 600 pounds per household.
- **Safety Concerns** – Drivers risk injuries and accidents each time they exit and enter the truck, and from lifting the heavy bins.
- **Inefficiency** – Trucks and drivers usually are the costliest components of a collection program. Sortation at the curb means the number of households served per truck is low, while the number of trucks and drivers and the amount of gas needed due to idling during sortation is high.
- **Staffing** – The City is struggling to retain staff to fill their driving and sorting positions.
- **Limited Service** – Curb sortation limits the city’s ability to provide services to smaller and mid-size multifamily buildings.

Moving to Cart-Based Recycling Isn’t Always Easy...

- The capital cost of automated recycling trucks and carts to transition to a new style of service can be challenging for communities.
- There is not always political support to make major service changes. Even where political support exists for service changes, political support is also needed to fund a service transition.
- There is often a concern that cart-based recycling will result in increased contamination (unwanted items) in the recycling stream that the city will not be able to manage.

Appendix

(Appendix B)

...But the Benefits of Transitioning Outweigh the Costs

- Cart-based recycling increases operational efficiency by reducing the number of trucks and drivers. Each truck and driver will be able to service more households per route. Typically, a community does not reduce its current workforce in transitions like this but rather leaves vacant positions open over time or repurposes positions to other functions.
- Improves safety by allowing drivers to stay in the truck to collect carts.
- Automated trucks require additional skills and training that will provide career growth opportunities for collection drivers.
- Residents can wheel their recycling to the curb.
- Residents will also have greater capacity for recycling materials in 65- or 95-gallon carts.
- The amount of recycling collected by the city will increase.
- Starting a new automated program provides an opportunity for a community to establish procedures to mitigate contamination, particularly with the use of smart truck cameras.

Estimated Impacts

- Participation increases from 35% to 60% of all households
- New tons collected annually = 3,000– 5,000

Needed to Transition to Cart-Based Recycling

- **Political Support** – Significant service changes require political will to champion and fund the intervention. It appears there is political support to make this transition in Fayetteville, but perhaps not a political appetite to fund it quickly. There is a possibility for some City Council debate.
- **City Budget** – Capital funding for the trucks and carts is required to implement the service changes. Budget support is needed to fund capital and operational costs, possibly through reserve/replacement funds and expansion funding. External assistance with capital funding could come from grants and potential loans. Without external funding support, it may take the city longer to make the transition, primarily because they may have to replace trucks on their normal replacement schedule.
- **Materials Recovery Facility (MRF) Cooperation** – Local MRF operators must be responsive to the city's request for proposals (RFP) for material processing and explore the possibility of sorting additional recyclable materials.

Appendix

(Appendix B)

2. Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots

Current Status

Northwest Arkansas communities are growing at a considerable rate, which is driving an increase in multifamily construction and new commercial businesses. The existing body of recycling planning work in the region (identified in Appendix A) has not provided significant recommendations to address recycling in these sectors, so it is critical for the region to begin planning and developing a strategy for improving recycling multifamily and commercial access across the region.

Challenges with Status Quo

- **No or Limited Recycling Access** – Our data show that only 37% of multifamily complexes in Northwest Arkansas have equitable recycling service. It is likely that significant recyclable material is lost to landfill from these residences annually, and residents are noticing the lack of recycling.
- **Lack of Consistent Data** – Due to a lack of information about multifamily property recycling performance, there is a limited understanding of the true scope of this challenge.
- **Limited Commercial Recycling** – Few commercial businesses divert their recyclables.

Needed to Expand Multifamily and Commercial Recycling

- **Data Collection and Transparency** – The City and the region must fully understand the impact of multifamily waste generation and the recycling landscape through improved data collection. Stronger data reporting through solid waste district licensing programs would help support the argument for policy. Haulers must share accurate data.
- **Build Evidence Base** – The region needs to demonstrate success through improved services and demonstrative pilot projects that highlight best management practices in the region. Fayetteville can support these projects through their existing services.
- **Cross Collaboration** – Multiple interest holders must be willing to come to the table to begin policy evaluation, including developers and multifamily property managers.

Estimated Impacts

- Participation increases to 20–30% of all multifamily households in Fayetteville
- New tons collected annually = 165 from demonstration projects, with expansive impact through future policy

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Needed to Improve Multifamily Recycling and Support the Region

- Demonstrate the success of different collection opportunities and best management practices locally.
- Begin to identify needs to move toward a policy/ordinance that drives efficiency and scaled impact.
- The path to new policies can be lengthy to build consensus and deliver stakeholder trust and agreement, but there are many strategies the region could choose to adopt, from policy to technical assistance. These could include strengthening hauler licensing policy to begin collecting more data; establishing rate structures or mandating recycling services; adding space requirements for new construction; introducing collection contract resources and requirements; and improving open market collection, ultimately leading to developing universal waste and recycling ordinances.

City of Siloam Springs

Recommendations Summary

1. [Transition to Cart-Based Curbside Recycling Collection \(Roadmap Recommendation I.1\)](#)
2. [Standardize Recycling Education and Outreach Across the Region \(Roadmap Recommendation I.5\)](#)

1. Transition to Cart-Based Curbside Recycling Collection

Current Status

Siloam Springs currently offers a bin-sort program. Residents are provided with 18-gallon bins and set them out at the curb. Drivers exit the recycling truck and sort the materials into multiple categories while at the curb for each house.

Challenges with Status Quo

- **Poor Participation** – Less than 35% of households participate in the current system, despite the city’s robust pay-as-you-throw pricing structure, good recycling education, and the overall commitment to environmental stewardship and sustainability.
- **Low Performance** – Currently, the city collects approximately 224 pounds per household. The Recycling Partnership data shows that mid- to high-performing programs collect between 400 and 600 pounds per household.
- **Safety Concerns** – Drivers risk injuries and accidents each time they exit and enter the truck, and from lifting the heavy bins.
- **Inefficiency** – Trucks and drivers usually are the costliest components of a collection program. Sortation at the curb sort means the number of households served per truck is low, while the number of trucks and drivers and the amount of gas needed due to idling during sortation is high.
- **Staffing** – The City is struggling to retain staff to fill their driving and sorting positions.
- **Limited Service** – Curb sortation limits the city’s ability to provide services to smaller and mid-size multifamily buildings.

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Moving to Cart-Based Recycling Isn't Always Easy...

- The capital cost of automated recycling trucks and carts to transition to a new style of service can be challenging for communities.
- There is not always political support to make major service changes. Even where political support exists for service changes, it also requires political support to fund a service transition.
- There is not always political support to make major service changes. Even where political support exists for service changes, political support is also needed to fund a service transition.
- There is often a concern that cart-based recycling will result in increased contamination (unwanted items) in the recycling stream that the city will not be able to manage.

...But the Benefits of Transitioning Outweigh the Costs

- Cart-based recycling increases operational efficiency by reducing the number of trucks and drivers. Each truck and driver will be able to service more households per route. Typically, a community does not reduce its current workforce in transitions like this but rather leaves vacant positions open over time or repurposes positions to other functions.
- Improves safety by allowing drivers to stay in the truck to collect carts.
- Automated trucks require additional skills and training that will provide career growth opportunities for collection drivers.
- Residents can wheel their recycling to the curb.
- Residents will also have greater capacity for recycling materials in 65- or 95-gallon carts.
- The amount of recycling collected by the city will increase.
- Starting a new automated program provides an opportunity for a community to establish procedures to mitigate contamination, particularly with the use of smart truck cameras.

Estimated Impacts

- Participation increases from 23% to 50% of all households
- New tons collected annually = 500–750

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Needed to Transition to Cart-Based Recycling

- **Political Support** – Significant service changes require political will to champion and fund the intervention.
- **City Budget** – Capital funding for the trucks and carts is required to implement the service changes. Budget support is needed to fund capital and operational costs, possibly through reserve/replacement funds and expansion funding. External assistance with capital funding could come from grants and potential loans. Without external funding support, it may take the city longer to make the transition, primarily because they may have to replace trucks on their normal replacement schedule.
- **MRF Cooperation** – Local MRF operators must be responsive to the city’s RFP for material processing and explore the possibility of sorting additional recyclable materials. There could be an opportunity to collaborate with Fayetteville on an RFP process or piggy-back on their future contract.

2. Standardize Recycling Education and Outreach Across the Region

Current Status

Very little communication about recycling is being delivered to the public about how to properly use recycling services. Many communities — especially smaller ones — do not have the staff time or expertise to provide recycling education to their residents.

Challenges with Status Quo

- **Limited Engagement** – There is very little or no direct to resident communication about proper use of services. Only 14% in Northwest Arkansas feel well or very well informed about what happens to their recycling after it leaves their home. Engagement data consistently show that lack of outreach results in confusion, which ultimately leads to poor participation and capture.
- **Lack of Ownership** – Haulers aren’t incentivized to conduct education and outreach with their customers unless it is specifically/contractually required.

Benefit of Consistent Engagement

- Informing residents about recycling and how to properly participate is critical to minimize contamination and increase capture of quality materials.

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Needed to Standardize Recycling Education and Outreach

- **Regional Approach** – Aligning the recycling programs in the region would allow for a more regional approach to engagement that would create some economies of scale, reduce confusion between communities, and help build trust that recycling is working.
 - **Aligning Services** – If service changes in Siloam Springs are aligned regionally, the ability to use regional engagement information will allow the city to achieve efficiencies and free up other resources while maximizing the residential recycling programs ([Roadmap Recommendation I.3](#)).
-

City of Bentonville

Recommendations Summary

1. [Standardize Hauling and Processing Contracts in the Region \(Roadmap Recommendation I.3\)](#)
2. [Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots \(Roadmap Recommendation I.4\)](#)
3. [Standardize Recycling Education and Outreach Across the Region \(Roadmap Recommendation I.5\)](#)

1. Standardize Hauling and Processing Contracts in the Region

Current Status

Communities across the region who contract with private haulers for waste collection services have all developed slightly unique contracts that set different expectations and different services. There is very little consistency between contracts across the region. Aligning a key set of terms and conditions would allow haulers to operate under a consistent system, allow for economies of scale, and allow for regional recycling engagement.

Opportunities

- Bentonville renegotiated its current contract just prior to the release of this report, at is expected to have a contract end date through 2030.
- As the region aligns on contract terms and conditions, Bentonville could collaborate with its current hauler to voluntarily adopt some of the recommendations.
- Bentonville should begin preparing for a new RFP process in 2029 to include key requirements that align them with the region.

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Options to Approach Regional Contract Alignment

- Create key contract provisions that communities voluntarily insert into their contracts.
- Solid waste districts could help develop contracts, bid them and allow smaller communities to piggyback.
- Some combination of these options.

Estimated Impacts

- Participation increases to 70%
- New Tons = 500-750 tons annually

Needed to Support Regional Contract Alignment

- Political support
- Staff resources and adequate time to conduct an effective RFP process
- The ability of issue an RFP for services versus an Invitation for Bid (IFB)

2. Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots

Current Status

Northwest Arkansas communities are growing at a considerable rate which is driving an increase in multifamily construction and new commercial businesses. The existing body of recycling planning work in the region ([identified in Appendix A](#)) has not provided significant recommendations to address recycling in these sectors, so it is critical for the region to begin planning and developing a strategy for improving recycling multifamily and commercial access across the region.

Challenges with Status Quo

- **No or Limited Recycling Access** – Our data show that only 37% of multifamily complexes in Northwest Arkansas have equitable recycling service. It is likely that significant recyclable material is lost to landfill from these residences annually, and residents are noticing the lack of recycling.
- **Lack of Consistent Data** – Due to a lack of information about multifamily property recycling performance, there is a limited understanding of the true scope of this challenge.
- **Limited Commercial Recycling** – Few commercial businesses divert their recyclables.

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Needed to Effect Change

- **Data Collection and Transparency** – The City and the region must fully understand the impact of multifamily waste generation and the recycling landscape through improved data collection. Stronger data reporting through solid waste district licensing programs would help support the argument for policy. Haulers must share accurate data.
- **Build Evidence Base** – The region needs to demonstrate success through improved services and demonstrative pilot projects that highlight best management practices in the region. Bentonville can support these projects through their existing services.
- **Cross Collaboration** – Multiple interest holders must be willing to come to the table to begin policy evaluation, including developers and multifamily property managers.

Estimated Impacts

- Participation increases to 20–30% of all multifamily households in Bentonville
- New tons collected annually = 165 from demonstration projects, with expansive impact through future policy

Needed to Expand Multifamily Recycling and Support the Region

- **Build Evidence Base** – Demonstrate the success of different collection opportunities and best management practices locally.
- **Need Identification** – Begin to identify needs to move toward a policy/ordinance that drives efficiency and scaled impact.
- **Pathway to Policy** – The path to new policies can be lengthy to build consensus and deliver interest holder trust and agreement, but there are many strategies the region could choose to adopt, from policy to technical assistance. These could include strengthening hauler licensing policy to begin collecting more data; establishing rate structures or mandating recycling services; adding space requirements for new construction; introducing collection contract resources and requirements; and improving open market collection, ultimately leading to developing universal waste and recycling ordinances.

3. Standardize Recycling Education and Outreach Across the Region

Current Status

Very little communication about recycling is being delivered to the public about how to properly use recycling services. Many communities — especially smaller ones — do not have the staff time or expertise to provide recycling education to their residents.

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Challenges with Status Quo

- **Limited Engagement** – There is very little or no direct to resident communication about proper use of services. Only 14% in Northwest Arkansas feel well or very well informed about what happens to their recycling after it leaves their home. Engagement data consistently show that lack of outreach results in confusion, which ultimately leads to poor participation and capture.
- **Lack of Ownership** – Haulers aren't incentivized to conduct education and outreach with their customers unless it is specifically/contractually required.

Benefit of Consistent Engagement

- Informing residents about recycling and how to properly participate is critical to minimize contamination and increase capture of quality materials.

Needed to Standardize Recycling Education and Outreach

- **Regional Approach** – Aligning the recycling programs in the region would allow for a more regional approach to engagement that would create some economies of scale, reduce confusion between communities, and help build trust that recycling is working.
- **Aligning Services** – If service changes in Bentonville are aligned regionally, the ability to use regional engagement information will allow the city to achieve efficiencies and free up other resources while maximizing the residential recycling programs. ([See Roadmap Recommendations I.3 and I.5](#))

City of Rogers

Recommendations Summary

1. [Standardize Hauling and Processing Contracts in the Region \(Roadmap Recommendation I.3\)](#)
2. [Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots \(Roadmap Recommendation I.4\)](#)
3. [Standardize Recycling Education and Outreach Across the Region \(Roadmap Recommendation I.5\)](#)

Appendix

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1. Standardize Hauling and Processing Contracts in the Region

Current Status

Communities across the region who contract with private haulers for waste collection services have all developed slightly unique contracts that set different expectations and different services. There is very little consistency between contracts across the region. Aligning a key set of terms and conditions would allow haulers to operate under a consistent system, allow for economies of scale, and allow for regional recycling engagement.

Opportunity

- Rogers' current contract expires at the end of 2025. The timeline is tight, but it is possible for the city to consider taking a lead on this recommendation.

Options to Approach Regional Contract Alignment

- The City could create key contract provisions that communities voluntarily insert into their contracts.
- Solid waste districts could help develop contracts, bid them and allow smaller communities to piggyback.
- Some combination of the above.

Estimated Impacts

- Participation increases to 70%
- New tons collected annually = 250

Needed to Support Regional Contract Alignment

- Political support
- Staff resources and adequate time to conduct an effective RFP process
- The ability of issue an RFP for services versus an IFB

2. Build Evidence Base for Multifamily and Commercial Recycling Policies and Ordinances through Pilots

Drop-off recycling centers conveniently located to multifamily residences are a great precursor to providing system-wide multifamily recycling access. The city is proposing to develop a new drop-off recycling site that will incorporate traditional recycling as well as some hard-to-recycle materials.

Estimated Impacts

- Provide recycling access to about 1,500 units
- New tons collected annually = 500

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Needed to Set Up Drop-Off Recycling for Multifamily

- **Political Support** – Significant service changes require political will to champion and fund the intervention.
- **Budget and Grant Funds** – Budget support is needed to fund capital and operational costs. External assistance with capital funding could come from grants and potential loans.

3. Standardize Recycling Education and Outreach Across the Region

Current Status

Very little communication about recycling is being delivered to the public about how to properly use recycling services. Many communities do not have the staff time or expertise to provide recycling education to their residents.

Challenges with Status Quo

- **Limited Engagement** – There is very little or no direct to resident communication about proper use of services. Only 14% in Northwest Arkansas feel well or very well informed about what happens to their recycling after it leaves their home. Engagement data consistently show that lack of outreach results in confusion, which ultimately leads to poor participation and capture.
- **Lack of Ownership** – Haulers aren't incentivized to conduct education and outreach with their customers unless it is specifically/contractually required.

Benefit of Consistent Engagement

- Informing residents about recycling and how to properly participate is critical to minimize contamination and increase capture of quality materials.

Needed to Standardize Recycling Education and Outreach

- **Regional Approach** – Aligning the recycling programs in the region would allow for a more regional approach to engagement that would create some economies of scale, reduce confusion between communities, and help build trust that recycling is working.
- **Aligning Services** – If service changes in Bentonville are aligned regionally, the ability to use regional engagement information will allow the city to achieve efficiencies and free up other resources while maximizing the residential recycling programs. ([See Roadmap Recommendation I.3](#))

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City of Springdale

Recommendations Summary

1. [Standardize Hauling and Processing Contracts in the Region \(Roadmap Recommendation I.3\)](#)
2. [Standardize Recycling Education and Outreach Across the Region \(Roadmap Recommendation I.5\)](#)

1. Standardize Hauling and Processing Contracts in the Region

Current Status

Communities across the region who contract with private haulers for waste collection services have all developed slightly unique contracts that set different expectations and different services. There is very little consistency between contracts across the region. Aligning a key set of terms and conditions would allow haulers to operate under a consistent system, allow for economies of scale, and allow for regional recycling engagement.

Opportunity

- Springdale's current contract expires at the end of 2028. The City could use its pilot project and existing partnerships with CARDS to explore voluntarily establishing some of the key requirements.

Options to Approach Regional Contract Alignment

- The City could create key contract provisions that communities voluntarily insert into their contracts.
- Solid waste districts could help develop contracts, bid them and allow smaller communities to piggyback.
- Some combination of the above.

Estimated Impacts

- Participation increases to 70%
- New tons collected annually = 250

Needed to Support Regional Contract Alignment

- Political support
- Staff resources and adequate time to conduct an effective RFP process
- The ability to issue an RFP for services versus an IFB

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2. Standardize Recycling Education and Outreach Across the Region

Current Status

Very little communication about recycling is being delivered to the public about how to properly use recycling services. Many communities do not have the staff time or expertise to provide recycling education to their residents.

Challenges with Status Quo

- **Limited Engagement** – There is very little or no direct to resident communication about proper use of services. Only 14% in Northwest Arkansas feel well or very well informed about what happens to their recycling after it leaves their home. Engagement data consistently show that lack of outreach results in confusion, which ultimately leads to poor participation and capture.
- **Lack of Ownership** – Haulers aren't incentivized to conduct education and outreach with their customers unless it is specifically/contractually required.

Benefit of Consistent Engagement

- Informing residents about recycling and how to properly participate is critical to minimize contamination and increase capture of quality materials.

Needed to Standardize Recycling Education and Outreach

- **Regional Approach** – Aligning the recycling programs in the region would allow for a more regional approach to engagement that would create some economies of scale, reduce confusion between communities, and help build trust that recycling is working.
- **Aligning Services** – If service changes in Springdale are aligned regionally, the ability to use regional engagement information will allow the city to achieve efficiencies and free up other resources while maximizing the residential recycling programs.

Appendix

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Bella Vista

Recommendations Summary

1. Launch/Expand Cart-Based Curbside Recycling Collection in Jurisdictions over 4,000 Households (Roadmap Recommendation I.2)
2. Standardize Recycling Education and Outreach Across the Region (Roadmap Recommendation I.5)

1. Launch/Expand Cart-Based Curbside Recycling Collection in Jurisdictions over 4,000 Households

Current Status

Bella Vista has grown significantly over the past couple of years and currently has about 12,000 single-family units in the city. Curbside recycling is not offered to residents, but waste collection is. While the community has a robust and well-loved drop-off recycling center, this as a standalone service will not result in optimal recycling.

Challenges with Status Quo

- Low Participation – It is estimated that less than 10% of households participate in drop-off recycling programs.

Opportunities

- Bella Vista's current waste contract expires at the end of 2026. There is adequate time to add recycling into their next RFP for services.
- A best practice is for the community to own their recycling carts, as it allows the community to easily change hauling companies at each rebid. While there is an upfront cost to carts, delivering city-branded carts with a new service is the best time to do this.
- Providing citywide services will allow Bella Vista to equitably engage residents about a single service.

Estimated Impacts

- Participation will increase to 40% of all households
- New tons collected annually = 800

Needed to Transition to Cart-Based Recycling

- **Political Support** – Significant service changes require political will to champion and fund the intervention.
- **City Support** – This transition will need support from City staff.

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2. Standardize Recycling Education and Outreach Across the Region

Current Status

Very little communication about recycling is being delivered to the public about how to properly use recycling services. Many communities do not have the staff time or expertise to provide recycling education to their residents.

Challenges with Status Quo

- **Limited Engagement** – There is very little or no direct to resident communication about proper use of services. Only 14% in Northwest Arkansas feel well or very well informed about what happens to their recycling after it leaves their home. Engagement data consistently show that lack of outreach results in confusion, which ultimately leads to poor participation and capture.
- **Lack of Ownership** – Haulers aren't incentivized to conduct education and outreach with their customers unless it is specifically/contractually required.

Benefit of Consistent Engagement

- Informing residents about recycling and how to properly participate is critical to minimize contamination and increase capture of quality materials.

Needed to Standardize Recycling Education and Outreach

- **Regional Approach** – Aligning the recycling programs in the region would allow for a more regional approach to engagement that would create some economies of scale, reduce confusion between communities, and help build trust that recycling is working.
- **Aligning Services** – If service is added in Bella Vista and is aligned regionally, they will have the ability to use regional engagement information, allowing the city to achieve efficiencies in maximizing the residential recycling programs.

Appendix

(Appendix C)

Springdale Case Study

The groundwork for many of the recommendations outlined in the roadmap has already been laid through previous and ongoing projects in the region. Here we share an exciting proof of concept that demonstrates local appetite and capacity for regional cross-collaboration between stakeholders and the resulting system-level impact.

Capturing More Material at the MRF

The Recycling Partnership awarded a grant to CARDS in 2024 for the purchase and installation of sortation equipment to improve capture of PET at their Springdale facility, increasing processing efficiency and delivering additional automation.

However, this capacity is not being fully utilized, largely due to low participation. Only approximately half of Springdale households are actively participating in the curbside recycling program. Of households that do recycle, 50% are doing so incorrectly, resulting in an estimated 45% contamination rate of inbound recyclables at the MRF, increasing costs and causing safety concerns at the MRF. To fulfil the potential of the MRF grant, we must optimize participation at the household level.

The primary driver of low recycling participation is inadequate education and outreach to help residents understand and utilize their service, but what are the right messages and tactics that will result in the capture of more, better quality recyclables?

Regional Behavior Change Research

In 2024, The Partnership investigated this question through in-depth ethnographic household research and a regional quantitative survey in Northwest Arkansas to understand local motivations, barriers, perspectives, and attitudes toward recycling in the region. Findings from these efforts will inform the implementation of Roadmap Recommendation I.5 and have already been used to develop key messages and tactics for an education and outreach initiative actively underway in Springdale, described below.

Appendix

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Comprehensive Outreach to Improve Participation

Leveraging findings from the regional behavior change research, The Partnership is working with Boston Mountain Solid Waste District, the City of Springdale, and CARDS to deploy an innovative, multifaceted recycling engagement campaign, to reduce contamination, raise participation rates, and increase capture of recyclable material from more than 22,600 households. The effort includes:

- **Baseline data collection:** An audit will determine how many households are setting out carts and will measure contamination levels at the materials recovery facility.
- **Smart cameras on collection trucks:** Cameras will capture set-out behavior and enable mailers that provide direct feedback to households on cart contents.
- **Personalized mailers:** Mailers containing tips and photos will be sent to households where cameras detected contamination. The mailers will also direct residents to a city website and chatbot with more information.



Appendix

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- **In-home bin incentive:** Households that are not setting out their recycling bins receive a business-reply mailer offering a free in-home recycling bin kit.
- **Digital outreach:** An updated web page on the City of Springdale's website features accepted items, FAQ, downloadable guides, and an interactive chatbot that can answer specific questions about what and how to recycle, as well as a digital campaign in Madison County to increase participation at drop-off locations.
- **Multilanguage communication:** All printed material will be in English and Spanish. A QR code will offer digital download of materials in Marshallese.

Looking Ahead

At the conclusion of the six-week engagement campaign, a second audit will measure results through participation rates, digital interactions, tonnage collected, and contamination rates. We look forward to sharing the results of these parallel tactics with a full case study and data in Fall 2025.

This series of projects and the dedicated partners that collaborated to make them possible demonstrate the value of coordinated interventions at each phase of the recycling process. Investing in one phase of the process (outreach, collection, sortation, etc.) is useful, but parallel investment across phases works to create synergies and impact greater than improving just one element on its own. Reproducing these synergies on a regional scale is a key tactic driving roadmap implementation.