# Methodology for How2Recycle's Integration of the National Recycling Database's Community Recycling Program Acceptance Data

A Joint Initiative from The Recycling Partnership & GreenBlue

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# **Unifying Efforts to Increase Understanding of Recyclability**

The domestic residential recycling system moves billions of pounds of material each year through complex regional and global networks, delivering many recycled commodity grades to a wide range of markets. Yet, the entire system traces back to 9,000 local community recycling collection programs operating independently, with their own curated lists of accepted recyclables. The result is a fragmented landscape in which the acceptance of any given type of packaging is highly variable from community to community.

To understand how to improve and expand the residential recycling system, it is essential to first understand the types of items that it is designed to handle. Rapidly shifting community acceptance guidelines driven by unique pressures, including costs, policies, public expectations, and access to downstream buyers, make it difficult to gain a strong footing upon which packaging and infrastructure investment decisions can be made.

The Recycling Partnership (The Partnership) and GreenBlue, two trusted organizations working to deliver greater impact through recycling, have joined forces to address the growing demand for precise, actionable, and readily accessible data that affords a more in-depth understanding of material acceptance in recycling programs across the country.

Historically, GreenBlue's How2Recycle® program relied on the Sustainable Packaging Coalition's (SPC) Centralized Study on Availability of Recycling for data on material and format acceptance and collection. While this national-scale study, conducted every five years, provided a foundational understanding of recycling acceptance, the data did not always reflect current acceptance rates of material formats. Given that community acceptance guidelines can change more frequently than the study's cycle, there has been a clear need for more current and frequent updates.

To address the need to provide more frequently updated data to the industry, GreenBlue partnered with The Partnership to integrate its National Recycling Database (Database) Community Recycling Program Acceptance Data (Acceptance Data) into How2Recycle's recyclability assessments<sup>1</sup> for on-pack labeling.

The Database provides frequently updated data on the acceptance of over 50 different categories of recyclables across several key dimensions of recycling program information for communities with greater than 2,500 households. In total, the Database reflects data on more than 9,000 domestic community recycling programs, representing over 99% of the U.S. population.

Rather than every five years, Acceptance Data will be published at least twice a year. This will help ensure How2Recycle's on-pack labels deliver the most accurate and up to date recycling information, reflecting the dynamic recycling landscape shaped by policy changes, recycling infrastructure investments, and local decisions. More frequent reporting will provide greater understanding, build a more holistic view of residential recycling material flows and losses, and highlight opportunities to continue to improve the recycling system.

In addition to increasing the frequency and recency of Acceptance Data, this joint initiative is delivering an industryfirst harmonization of definitions and taxonomies. This is one important step toward reducing complexity in the recycling system, including establishing a common understanding of the key differences between—and definitions of—access and acceptance, as presented herein.

Through this collaborative effort, The Partnership and GreenBlue seek to deepen the industry's understanding of and engagement with the domestic recycling system, and to establish industry-wide alignment to ensure more informed decisions can be made to strengthen the effectiveness of recycling efforts nationwide.

<sup>&</sup>lt;sup>1</sup>How2Recycle retains sole discretion of overall recyclability assessments, of which the Acceptance Data is one component.





### **How to Use this Document**

This document serves as a methodological reference for those reviewing Recycling Category acceptance rates presented as part of GreenBlue's How2Recycle program. This document provides a valuable yet limited view into residential recycling programs and the recyclability of packaging within them.

As part of considering this joint initiative, readers will want to reference The Partnership's complementary documents:

- National Recycling Database Methodology Overview
- National Recycling Database Community Recycling Program Acceptance Taxonomy Overview
- Understanding Community Recycling Program Acceptance
- National Recycling Database and Community Recycling Program Acceptance Frequently Asked Questions

Other reference documents used in the creation of this document include the following:

- The Recycling Partnership's State of Residential Recycling Report
- The Recycling Partnership's Circular Packaging Assessment Tool
- The Recycling Partnership's Residential Recyclability Framework
- How2Recycle Guide to Recyclability
- How2Recycle Guide to Future Recyclability
- U.S. Federal Trade Commission Green Guides

Contained herein are the following elements developed in close collaboration between GreenBlue and The Partnership, leveraging the work of each organization to increase industry and public understanding of and engagement with the U.S. community recycling program acceptance of materials.

- An outline of the harmonization of data between the Database and the SPC Centralized Study on Availability of Recycling
- · Considerations for the future evolution of this joint initiative, including guidance for pursuing supplemental research

As the definitions, categories, and other details presented in this document are updated, this document will reflect those changes. Further, each release of Acceptance Data will indicate its latest publication date and previous reports will be archived.

#### **Statement on Substantiating Recyclability Claims**

It must be emphasized that the U.S. Federal Trade Commission (FTC) regulates recyclability claims. As shown in this excerpt from the FTC Green Guides, the achievement of certain acceptance rates does not equate to overall packaging recyclability.





"A product or package should not be marketed as recyclable unless it can be collected, separated, or otherwise recovered from the waste stream through an established recycling program for reuse or use in manufacturing or assembling another item."

 Federal Trade Commission's Green Guides § 260.12 (Guides for the Use of Environmental Marketing Claims, pursuant to Code of Federal Regulations, Title 16 Part 260)

The rates presented in the Acceptance Data indicate how commonly a recycling category is accepted in residential recycling collection programs, which is an important component of assessing whether the item can be considered recyclable. However, acceptance rates should not be used as the sole means of determining recyclability.

MRF Reprocessor Market Material **Acceptance** Compatibility Compatibility Health **Demand** 

Acceptance is one component of many considerations when assessing a product's recyclability.

A full recyclability assessment should be conducted, including the package's acceptance rate alongside other recyclability indicators, such as its likelihood of being sorted correctly at a MRF and its compatibility with reprocessing operations. This assessment should also consider other practical factors in accordance with applicable law and established frameworks, such as the How2Recycle Guide to Recyclability and the Residential Recyclability Framework.

Multistage assessment frameworks are also emerging in state regulations such as California Senate Bill 343 and Oregon Senate Bill 582, and it should be noted that these regulatory frameworks may use different methods of determining state-level acceptance rates.





## **Acknowledgements**

Joint initiatives such as the one undertaken by The Partnership and GreenBlue are made possible through the hard work, determination, and openness of the people who worked diligently to ensure the needs of the industry are paramount in the goals of the initiative. The following individuals were instrumental in bringing this effort to life, and both organizations are grateful to them for their commitment and passion for excellence.

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### Standardization and Harmonization

Consistency in recycling data categories and their definitions is essential to the understanding and forecasting of trends in acceptance rates. That is now possible because of the harmonization between the industry expertise that guided the publication of past SPC Centralized Study on Availability of Recycling reports and the cutting-edge data that The Partnership collects and analyzes through its Database.

Not only will this harmonization enhance the credibility of this component of How2Recycle's recyclability assessments, but it will also reduce the overall complexity associated with understanding the U.S. recycling system.

Set forth below is the framework by which How2Recycle will leverage the Acceptance Data and the relationship between recycling data categories of the SPC Centralized Study on Availability of Recycling and The Partnership's Database.

### Integration of Acceptance Data into How2Recycle Recyclability Assessments

How2Recycle follows the framework below for defining and assessing recyclability, centered on five key pillars:



Applicable Law, Collection (Access and Acceptance), Sortation, Reprocessing, and End Market. Additional factors that may impact these pillars, such as Material Health, are also considered.

The How2Recycle label was designed to comply with the FTC's Green Guides and the Competition Bureau Canada's Enforcement Guidelines, which govern whether and how product manufacturers can make claims about recyclability. The label is designed to comply with all active relevant federal, state, and province legislation. For collection, How2Recycle uses third-party access to recycling studies and additional scientifically credible data to assess national access to recycling rates for package types—The Partnership's Acceptance Data is one source of collection data How2Recycle uses. For more information on how How2Recycle defines recyclability, visit the How2Recycle Guide to Recyclability.

How2Recycle will use the acceptance rates derived from the Acceptance Data as the foundation for substantiating collection data, based on data trends. Changes in acceptance rates may influence recyclability assessments and, consequently, the How2Recycle label featured on packaging. Should any changes be anticipated, How2Recycle will notify members in advance and provide ample time to update their labels in compliance with the program. However, recognizing that each material format presents unique challenges, How2Recycle reserves the right to determine when and how those changes will be implemented.





How2Recycle acknowledges that companies may have their own data and may wish to present a case to justify the acceptance rate for specific material formats. How2Recycle welcomes the submission of such data for review while maintaining sole discretion over how this information is integrated into assessments. For more details, please refer to the "Our Call to Action" section below.

### Harmonization of National Recycling Database Recycling Categories and **SPC Packaging Categories**

The below table shows the relationship between recycling data categories from The Partnership's Database and those studied in SPC's 2020—2021 Centralized Study on Availability of Recycling. The Example column is a nonexhaustive list of terms that community members may use or understand when perceiving each package category.<sup>2</sup>

Database Acceptance Data Category Name	SPC Centralized Study Category Name	Examples
Recycling categories as listed in The Partnership's Community Recycling Program Acceptance Data Release	Packaging categories as formerly referenced in SPC's 2020—2021 Centralized Study on Availability of Recycling	Example products that fall into the Recycling Category. Not an exhaustive list.
Aluminum aerosol containers	Aluminum aerosol containers	Sprayable personal care and food products
Aluminum cans	Aluminum Beverage Cans (with and without deposit) Aluminum food cans	Soda cans, beer cans, cat food cans
Aluminum foil	Aluminum foil	Household foil wrap, takeout wraps
Aluminum trays	Aluminum foil pans and trays	Catering trays, semi-rigid foil takeout containers
Aseptic/gable top cartons	Aseptic/gable top cartons	Juice cartons, milk cartons, shelf-stable food, and beverage cartons
Corrugated cardboard	Corrugated boxes	Shipping containers, coffee cup sleeves
EPS packaging	n/a	Protective foam packaging shapes and fill, polystyrene packaging
EPS foodservice packaging	n/a	Foam cups, tubs, trays, plates, and containers, polystyrene takeout food containers
Glass bottles & jars	Glass beverage bottles (with deposit); Glass beverage bottles (w/o deposit)	Beer, wine, and spirits bottles, pickle jars, jelly jars
HDPE bottles/jugs & jars	HDPE bottles, jugs & jars	Milk jugs, detergent bottles, shampoo bottles, high-density polyethylene
HDPE bulky rigid plastics	n/a	Crates, laundry baskets, large toys, patio furniture
HDPE cups	n/a	#2 plastic cup
HDPE lids	n/a	#2 plastic lid

<sup>&</sup>lt;sup>2</sup>Please refer to The Recycling Partnership's National Recycling Database Community Recycling Program Acceptance Taxonomy Overview for more detail on how the recycling categories were developed and implemented.





Database Acceptance Data Category Name	SPC Centralized Study Category Name	Examples
Recycling categories as listed in The Partnership's Community Recycling Program Acceptance Data Release	Packaging categories as formerly referenced in SPC's 2020—2021 Centralized Study on Availability of Recycling	Example products that fall into the Recycling Category. Not an exhaustive list.
HDPE trays	n/a	#2 plastic tray
HDPE tubes	HDPE tubes	Squeezable tubes for personal care, food products, #2 plastic tube
HDPE tubs	n/a	#2 plastic tub
LDPE bottles/jugs & jars	LDPE/linear low density polyethylene (LLDPE) bottles, jugs & jars	Squeezable bottles, #4 plastic bottles
LDPE lids	n/a	Flexible lids on dairy product tubs, #4 plastic lid
LDPE tubs/cups	LDPE/LLDPE tubs	#4 plastic tub and cup
Magazines	n/a	Magazines
Mail, Office paper	n/a	Office paper, paper mail
Molded fiber nonfood packaging and trays	Molded fiber nonfood packaging and trays	Protective packaging shapes, egg cartons, molded paper tray, foodservice and beverage carrier
Molded fiber foodservice packaging	Molded fiber food packaging and bowls	Takeout containers and bowls, molded paper food packaging, paper clamshell, paper bowl, paper tray, paper lid
Monomaterial PE bags and film	n/a	Shopping bags, bread bags, dry cleaning bags
Multimaterial flexible packaging	n/a	Chip bags, metalized wrappers, shelf-stable food/sauce pouches
Newspaper	n/a	Newspaper
Nursery (plant) packaging	n/a	Seedling trays, semi-rigid plastic planters, plant/flower pots
Other plastic packaging	n/a	Other/#7 plastic packaging, tubs, cups, trays, bottles, jugs, jars, pouches, bags
Paper bags	n/a	Takeout bags, multiwall sacks, large format flour and pet food bags
Paper ice cream containers	Paper ice cream tubs and cartons	Ice cream tubs and cartons
Paper hot cups	Paper cups	Paper hot cup
Paperback books	n/a	Paperback book, softcover book
Paperboard	Paperboard boxes	Cereal boxes, shoe boxes, folding cartons, paper insert
PET bottles/jugs & jars	PET bottles, jugs & jars	Soda bottles, water bottles, peanut butter jars, #1 plastic bottles





Database Acceptance Data Category Name	SPC Centralized Study Category Name	Examples
Recycling categories as listed in The Partnership's Community Recycling Program Acceptance Data Release	Packaging categories as formerly referenced in SPC's 2020—2021 Centralized Study on Availability of Recycling	Example products that fall into the Recycling Category. Not an exhaustive list.
PET thermoforms	PET packaging, trays, clamshells	Produce clamshells, takeout containers, tubs, #1 plastic tray and clamshell
PET cups	PET cups	Beverage cups, #1 plastic cups
PET lids	n/a	Domes and flat lids for takeout containers, #1 plastic lids
Pizza boxes	Corrugated boxes	Pizza boxes
Plastic buckets (≥ 3 gallons)	n/a	5-gallon plastic buckets
Polycoated paperboard	Frozen food boxes	Coated paper boxes, bakery boxes, blister cards, paper blister packaging, frozen food boxes
PP bottles/jugs & jars	PP bottles, jugs & jars	#5 plastic bottles, jugs & jars
PP bulky rigid plastics	n/a	Plastic crate, laundry basket, large toys
PP clamshells	PP tubs and other containers	Takeout containers, #5 plastic clamshell
PP cups	PP cups	Beverage cups, #5 plastic cup
PP lids	n/a	Flat lids for takeout containers, #5 plastic lids
PP pods	PP coffee pods	Single-serve coffee pods
PP trays	PP tubs and other containers	Takeout containers, plastic trays
PP tubes	n/a	Squeezable tubes
PP tubs	PP tubs and containers	Yogurt and dairy product tubs, #5 plastic tub
PS lids	n/a	Beverage cup lids, #6 plastic lids
PS foodservice packaging	Rigid PS containers	Plastic takeout clamshells, #6 plastic containers
PVC packaging	n/a	Plastic tray, #3 plastic packaging
Shredded paper	n/a	Shredded paper
Spiral wound containers	Metal-bottomed spiral-wound canisters	Juice concentrate cans, formed potato chip cans, composite cans
Steel aerosol containers	Steel aerosol containers	Spray paint, sprayable personal care products, metal spray cans
Steel/tin/bimetal cans	Steel cans	Round metal food cans, metal food cans
Nonmetalized wrapping paper	n/a	Wrapping paper (no metallization or glitter)





### **Our Call to Action**

The recycling system is constantly changing and evolving, and new innovations may allow for changes in community acceptance of material formats. We invite trade associations and companies to pursue their own research in support of a reconsideration of the acceptance rates listed in the most up-to-date version of the Acceptance Data. Please review <u>Understanding Community Recycling Program Acceptance</u> for more detail and then reach out to The Partnership and/or How2Recycle.

It is important that supplemental data rely on research with sound methodology, scope, and intended application. The following are examples of supporting data:

- Demonstration of explicit acceptance/prohibition via systematic testing of communities' recyclability wizard tool, to validate whether communities intend their implicit acceptance language to convey acceptance of the item in question
- · Demonstration of implicit acceptance according to community general program guidance

For a further exploration of supplemental data and quality of research, visit the "Considerations for Substantiating Data" section of The How2Recycle Guide to Future Recyclability.



### **About The Recycling Partnership**

The Partnership is a purpose-driven organization committed to building a better recycling system, one that delivers the economic and environmental benefits our communities and the hundreds of thousands of people who work throughout the recycling industry deserve. The Partnership's team of experts, practitioners, and thought leaders bring real-world experience to this mission. Together with partners, we insist on meaningful change across the recycling system, and we assist communities, companies, and policymakers in enacting such change. Through the one-of-a-kind National Recycling Database, which encompasses more than 9,000 U.S. recycling programs, The Partnership develops practical and innovative solutions to address critical gaps in the recycling system. Learn more at recyclingpartnership.org.



#### About GreenBlue

Founded in 2002, GreenBlue facilitates education, collaboration, and action to empower sustainable packaging practices at every level of the value supply chain. GreenBlue's projects include the Sustainable Packaging Coalition, the How2Recycle on-pack labeling system, and the Recycled Material Standard.







### **About How2Recycle**

Launched in 2012, How2Recycle is the leading on-pack disposal label program in the United States and Canada, comprising over 800 members and issuing labels for hundreds of thousands of packaging products. A project of the environmental nonprofit GreenBlue, How2Recycle simplifies the recycling process by providing clear, standardized instructions that help consumers get more materials into the recycling bin.

How2Recycle was developed by a Sustainable Packaging Coalition working group to offer consumers accessible and consistent on-pack disposal instructions. It has since become the most recognizable recycling label in North America.

To determine a material's recyclability, How2Recycle uses national data, evaluating factors such as applicable law, access to collection, sortation, technical reprocessability, and end markets. The program has set a new standard for on-pack disposal instructions and is driving industry leadership in sustainable packaging and consumer education across the supply chain.

### Disclaimer

The information provided in this methodology document ("Methodology") does not, and is not intended to, constitute legal advice or provide one or more legal opinions. All information is for general informational, educational, and illustrative purposes only and may not apply to, or be relied upon, for specific circumstances, including, but not limited to, recyclability claims, substantiation of recyclability claims, or to satisfy legal requirements such as Truth in Labeling laws. Any use or reliance upon any of the information contained in the Methodology is at the user's sole risk. The Recycling Partnership and GreenBlue disclaim all liability in respect to actions taken or not taken based on such information to the fullest extent permitted by law. An attorney should be consulted for advice on specific legal issues. Moreover, the Methodology could include inaccuracies or typographical errors. The information in this Methodology is provided "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.



