

REUSE

Environmental, Economic, & Social Impacts of Reuse in Minnesota



December 2020



*ReUSE Minnesota contracted **Brio Marketing** to evaluate the environmental, economic, and social impacts of reuse in Minnesota.*



ReUSE Minnesota's team compiled and authored the final report. For questions contact info@reusemn.org.

Contents

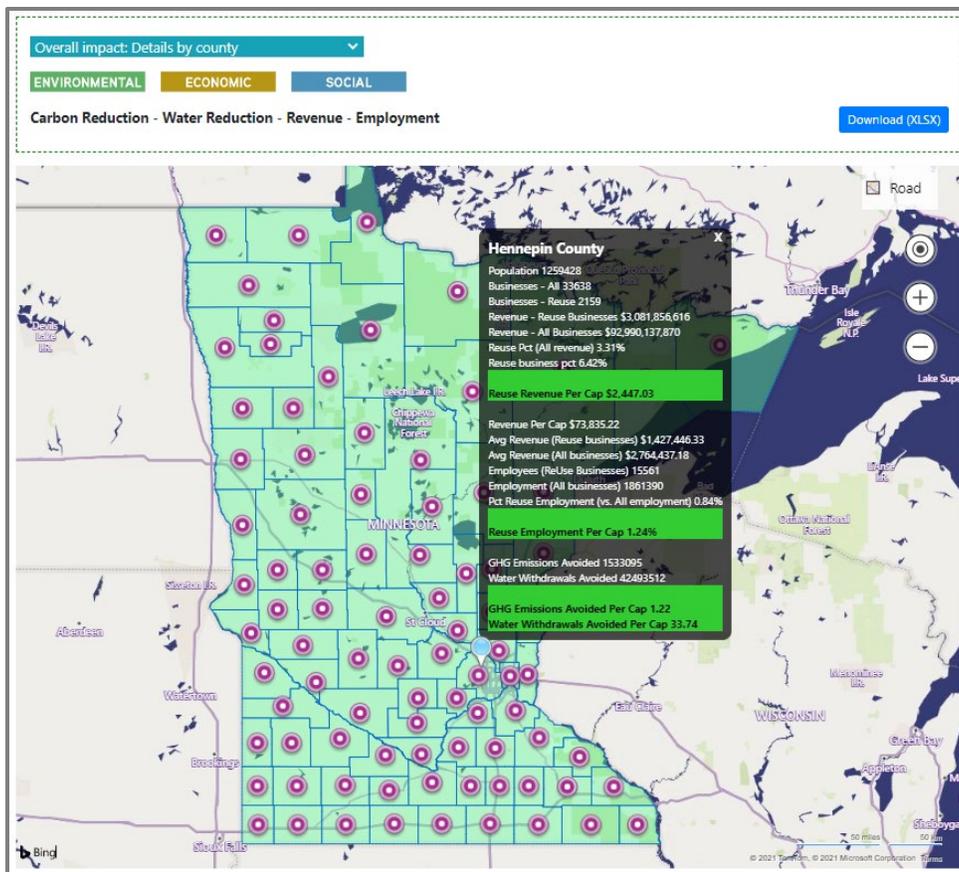
- Executive Summary 3
- Introduction..... 4
 - ReUSE Minnesota 4
 - Background..... 4
 - Note on Funding 4
- Methodology 5
 - Defining Reuse Businesses 5
 - Data Dimensionality 7
 - Acquiring Data 7
 - ReUSE Minnesota Impact Survey 8
 - Data Modeling & Analysis 9
 - Data Mapping & Display 12
- Key Findings..... 16
 - Environmental Impacts..... 16
 - Economic Impacts..... 18
 - Social Impacts 20
- Storytelling Strategy 22
 - Storytelling Recommendations for ReUSE Minnesota Member Businesses..... 22
- Marketing Campaign for ReUSE Minnesota 24
- Future Opportunities 26
- Appendix A – Reuse, Resale, & Secondhand Stores NAICS Codes & Descriptions 27
- Appendix B – Rental Businesses NAICS Codes & Descriptions 28
- Appendix C – Repair Businesses NAICS Codes & Descriptions 29
- Appendix D – ReUSE Minnesota Impact Survey 30
- Appendix E – Data Measures by County : Economic 34
- Appendix F – Data Measures by County : Environmental 39
- Appendix G – Impact Marketing Guide for Reuse Businesses 43

Executive Summary

Reuse, including rental and repair, extends the life of products and decreases the demand for manufacturing new replacements. This results in environmental, economic, and social benefits. However, these benefits tend to be overlooked, with businesses opting to continue sourcing virgin materials for manufacturing new products instead of maintaining products already in circulation, and individuals purchasing new instead of renting, repairing, or buying used.

For this study, Brio Marketing launched a survey in February 2020 to gather data directly from reuse businesses and purchased additional business data from Dun & Bradstreet (D&B). Several models were used to analyze this data, ultimately leading to this summary of findings for the environmental, economic, and social benefits of the reuse, rental, and repair sectors across Minnesota. These findings were also compiled in an interactive map, available at impact.reusemn.org, allowing for a statewide perspective and more granular exploration of individual counties. This report also includes a recommended strategy for telling the story of the impact of reuse activities statewide.

ReUSE Minnesota will use these results and storytelling strategy to support reuse businesses, strengthen the state's reuse economy, and promote the value of reuse as an essential sustainability strategy.



Introduction

ReUSE Minnesota

ReUSE Minnesota, founded in 2012, is a 501(c)(3) non-profit working to grow and advocate for reuse, rental, and repair businesses. Through education and outreach, business-to-business (B2B) networking, and policy support, ReUSE Minnesota aims to highlight the importance of reuse and establish it as the norm across the state and nationwide. ReUSE Minnesota believes:

- The current practice of throwing away reusable goods is not sustainable.
- An ethic of reuse, rental, and repair is a restorative process, keeping materials at their highest value for longer.
- Producing new materials and even recycling materials consumes limited natural resources and requires significant energy inputs, polluting water, land, and air.
- Reuse, rental, and repair offer opportunities for local job growth and wealth creation.
- Reuse, rental, and repair foster collaboration between businesses and consumers, while building vibrant economic networks and strong communities.

Background

ReUSE Minnesota contracted Brio Marketing, a relationship marketing firm for nonprofits, to develop a methodology and tools for collecting data to measure the environmental, economic, and social impacts of reuse, rental, and repair activities statewide. The scope of this study was to:

- Estimate the environmental impacts of reuse, including reducing greenhouse gas emissions, reducing wasted materials disposed at the landfill, and reducing water use.
- Estimate the economic impacts of reuse, including direct jobs and sales generated in these sectors.
- Define a clear measure for determining the social impacts of reuse.

Brio Marketing had the opportunity to build off work and strategies previously explored at the Minnesota Pollution Control Agency (MPCA) for the environmental and economic analysis in this study; however, the social impacts required the development of a new approach. Brio Marketing also partnered with INNOVADATA for its IT and database management services as a key aspect of this study and interactive mapping.

Note on Funding

Funding for this project was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR). The Trust Fund is a permanent fund constitutionally established by the citizens of Minnesota to assist in the protection, conservation, preservation, and enhancement of the state's air, water, land, fish, wildlife, and other natural resources. Currently 40 percent of net Minnesota State Lottery proceeds are dedicated to growing the Trust Fund and ensuring future benefits for Minnesota's environment and natural resources.



Methodology

Defining Reuse Businesses

The first step in measuring the impact of reuse businesses was determining the type of businesses that qualify. The MPCA provided a solid baseline for this determination in its 2011 study, *A Study of the Economic Activity of Minnesota's Reuse, Repair and Rental Sectors*. The MPCA report defined reuse businesses as organizations involved in the following activities:

- Reselling an item provided by an original owner either through consignment or through donation of the item to a charitable or community group
- Salvaging and refurbishing materials to extend their life and reduce the overall first costs of constructing materials and products
- Extending a product's life through repair so it can be used longer and replace the need for a new item
- Renting an item for short-term use as an alternative to purchasing that item new

The MPCA also identified a set of industry codes, defined by the North American Industry Classification System (NAICS), to help specify businesses in scope for the study. NAICS codes are used by businesses and governmental agencies in the United States, Canada, and Mexico to classify businesses by the types of activities they perform.

This report adopts the MPCA's definition of reuse, rental, and repair sectors defined in its 2011 study; however, there were three modifications made:

- **Personal Automobile Industry Businesses:** Excluding businesses that serve the personal automotive industry
- **Businesses Commonly Involved in Reuse Activities:** Including businesses that are commonly involved in reuse activities, but not strictly categorized as such by NAICS codes
- **Businesses Engaged in Activities beyond Reuse:** Including businesses engaged in other activities beyond reuse that embrace and promote the circular economy

Personal Automobile Industry Businesses

Businesses that provide rental, resale, and repair services for automobiles were excluded from this study for two reasons. Primarily, the intent of this project was to measure the impact of reuse where a consumer's decision to purchase a new item instead of repairing, renting, or buying secondhand was a balanced decision. Because of the high cost of new automobiles relative to their useful life, that decision is skewed heavily toward repairing a car, renting a car when an owned car is unavailable, or purchasing a used car. For example, no one chooses to replace their car with a new car when it is time for its first oil change. Secondly, the emergence of ride-sharing services such as Uber and Lyft since 2011 has altered usage and ownership patterns in the automobile industry. It is unclear what the long-term effect of these innovations, as well as the anticipated development of self-driving cars, will have on consumer decisions. These points, combined with the dominance of automobile industry businesses in the MPCA 2011 survey, guided ReUSE Minnesota to choose to exclude these businesses.

Businesses Commonly Involved in Reuse Activities

Businesses self-report NAICS codes, which offers an insight into how a business identifies itself. However, certain businesses do not choose to identify as reuse businesses or have accountants select NAICS codes for them that

don't specify reuse as a primary function. This report aimed to include some of these businesses to more accurately reflect the full reuse economy. For example, bookstores and bicycle shops, though they sell new equipment, also often embrace reuse and engage in resale, repair, or rental activities as key components of their business. It is important to include the contributions these businesses make to the reuse economy, so businesses like this were included in this study.

Businesses Engaged in Activities beyond Reuse

Similarly, there are examples of large organizations that engage in reuse activities among many other lines of business. These organizations generate revenue and employ people in both reuse and non-reuse activities. Because it's difficult to segment revenue or employment by business unit with the data supplied by Dun & Bradstreet, this report includes all revenue and employment data from these businesses. As a result, large businesses that embrace the principles of reuse are included in their entirety.

Using these criteria, the businesses included in this report were divided into six segments:

1. Reuse, resale, and secondhand stores, identified by NAICS code(s)

For reuse, resale, and secondhand stores, a supplemental categorization system was used. Standard Industrial Code (SIC) codes allow more detailed categorization for these types of businesses, as all are rolled up into a single code under the NAICS taxonomy. This segmentation may be useful in the future for more detailed analysis and reporting by industry sector. A complete list of the 2017 NAICS codes, 2011 NAICS codes (used by the MPCA for its study), and SIC codes are available in Appendix A.

2. Rental businesses, identified by NAICS code(s)

A complete list of the 2017 NAICS codes and 2011 NAICS codes (used by the MPCA in its study) for rental businesses is available in Appendix B.

3. Repair businesses, identified by NAICS code(s)

A complete list of the 2017 NAICS codes and 2011 NAICS codes (used by the MPCA in its study) for repair businesses is available in Appendix C.

4. Businesses regularly involved with reuse activities, identified by NAICS code(s)

2017 NAICS Code	2011 NAICS	SIC Code	Code Description
451211	451211	59420000	Book Stores
		56210102	Bridal Shops
		37510000	Motorcycles, Bicycles, and Parts

5. Businesses by name, identified by keywords appearing in the business name

The business population for this report was augmented to include businesses with the following keywords in their name. This list was subsequently edited to remove businesses with activities that were clearly not aligned with reuse.

- Rental
- Repair
- Reuse
- Thrift
- Vintage
- Consignment

6. Individual businesses, identified individually by ReUSE Minnesota

ReUSE Minnesota curated a list of businesses to be included in this project regardless of their NAICS code, due to their leadership or reputation in the reuse community. Examples include:

- Goodwill Industries
- Subsidiaries of Winmark Corporation:
 - Plato's Closet
 - Music Go Round
 - Play It Again Sports
 - Once Upon a Child
 - Style Encore
- Half Price Books
- Savers and all affiliated d/b/a
- Salvation Army
- All current ReUSE Minnesota business members
- All participants in the Impact Measurement Survey

Using these groups, 10,631 Minnesota businesses were identified as contributing to the reuse economy.

Data Dimensionality

The primary dimension of data analysis in this project is geographic. ReUSE Minnesota represents a heterogeneous group of businesses in multiple industries, but its primary constituency is defined by its geography (the state of Minnesota). Therefore, the primary visualization tool for impact data is the interactive map showing relative performance of counties on four distinct measurements per capita: reuse business revenue, employment, greenhouse gas emissions avoided, and water withdrawals avoided.

Many of the hypotheses that guided data collection for this project referenced the impact of reuse businesses on local environments, local economics, and individuals in communities. Additionally, public policies around reuse are typically shaped at the county or city level, so comparing reuse activity and impact between counties in Minnesota was a primary focus of the data analysis. For comparison purposes, subtotals are provided for the 7-county metropolitan area and the Greater Minnesota region, as well as statewide totals and averages. Though the data collected in this project can be segmented and analyzed by individual industries, reporting wasn't done at this level to evaluate different industries or business types.

Acquiring Data

The data used in this study originated from five sources:

- Dun & Bradstreet for individual business revenue and employment counts
 - www.dnb.com
 - www.dnb.com/content/dam/english/dnb-data-insight/quality-data-from-dnb.pdf
- Minnesota Department of Revenue for statewide economic data by county (2017)
 - www.revenue.state.mn.us/2017-sales-and-use-tax-revenue-county
- Minnesota Department of Employment and Economic Development for quarterly census of employment and wages and statewide employment data by county (2017)

- mn.gov/deed/data/data-tools/qcew
- Minnesota State Demographic Center for population by county (2017; except for demographic data which was derived from the 2010 US Census)
 - mn.gov/admin/demography/data-by-place
- ReUSE Minnesota Impact Survey for social impact stories and economic and environmental impact trends (launched in 2020, data collected for 2019)
 - impact.reusemn.org

ReUSE Minnesota Impact Survey

In order to develop a methodology for measuring the impact of reuse activities in the state, ReUSE Minnesota and Brio Marketing developed an online Impact Survey. The survey was designed to engage member businesses in reporting on their business activities and tell the story of their impact. When combined with business data acquired from D&B, the survey begins to reveal a picture of the environmental, economic, and social impacts that reuse business activities have on the state of Minnesota. Before building the survey, ReUSE Minnesota developed a list of statements that served as hypotheses for the survey to validate.

Environmental Impact Statements

1. Reuse businesses help decrease the annual waste (landfill) production in my community and my state.
2. Reuse businesses help decrease greenhouse gases and emissions in my community and my state.
3. Reuse businesses help decrease water use (withdrawals) in my community and my state.

Economic Impact Statements

1. Reuse businesses grow the local economy by keeping spending in my community and my state.
2. Reuse businesses increase job creation in my community and my state.

Social Impact Statements

1. Reuse businesses build a community of like-minded individuals. They encourage community identity and involvement.
2. Reuse businesses provide value to individuals.
3. Reuse businesses create job opportunities for people with disabilities and underserved communities.

A complete list of the survey questions is available in Appendix D.

This Impact Survey was sent via email to ReUSE Minnesota members beginning in early February 2020. The small sample size (12 completed surveys) of the survey responses collected precludes analysis of the quantitative data that reuse businesses shared. This limited the survey results from being factored into economic and environmental measures. However, responses have started to provide insights into the actual activities of reuse businesses and offered valuable accounts around the social and community impacts of reuse businesses. This is data that cannot be acquired from organizations like Dun & Bradstreet.

This survey is intended to be a tool to be used on an ongoing basis to collect data from current and future members of ReUSE Minnesota. The Impact Survey provides a foundation for continued data collection around:

- The types of activities that reuse businesses engage in (for example, what types of items they sell, how much of their inventory comes from donations, which activities in the resale, rental, or repair sectors they engage in, etc.).
- Staffing details, including employees, volunteers, and commitment to providing job opportunities and job skills development for workers with disabilities or underserved communities.
- Anecdotal stories of impact, purpose, and mission that describe the social impact that reuse businesses have on the people in their communities.

Data Modeling & Analysis

Using the data gathered through the Impact Survey, downloaded from MN state government sites, and purchased from D&B, Brio Marketing used three different approaches for quantifying and analyzing the environmental, economic, and social impacts of reuse. Detailed tables by county are available in Appendix E and F, and available for download on the interactive mapping site (impact.reusemn.org).

Environmental Impact Metrics

Model Overview

The environmental impact statements were validated using individual business data from D&B as inputs to the [Economic Input-Output Life Cycle Assessment \(EIO-LCA\) model](#) developed and published by Carnegie Mellon University. The EIO-LCA model simulates and measures the environmental outcomes of business activity, including the entire supply chain that supports it, based on economic input. Under the assumption that economic activity correlates to output, measurements of environmental impact can be derived from level of economic activity. This method follows an approach provided by the MPCA.

There are acknowledged limitations for this model, including:

- The age of the data. The most robust model available (“US 2002 Benchmark Model – producer price”) uses baseline data from 2002.
- The perspective of the data. The selected model from 2002 uses producer prices, not consumer prices. Therefore, economic measurements are based on the selling price of manufactured goods.
- Comparison of retail vs. wholesale transactions. Economic activity at the retail level does not equate to economic activity at the wholesale level.
- Comparison of economic activity with new vs. used items. The model was created to estimate the environmental impacts for new products, not specifically for the reuse sectors. Reuse sector product and service costs can vary drastically to new product costs (e.g. new couch vs. reused couch vs. reupholstered couch). This can result in both overestimations, typically with reused products that have a lower market value, and underestimations, typically for repaired or refurbished products, that may have a higher market value given the additional skilled-labor costs.

For purposes of this project, all these limitations are acknowledged but not integrated into the methodology. The analysis involves comparing retail transactions to wholesale transactions, comparing retail transactions involving used items to manufacturing costs for new items, without attempting a value conversion. Any attempt to interject a conversion given the highly aggregated level of data available would have resulted in negligible changes. Because

the primary dimension of analysis for this project focuses on geographies, the comparative analysis afforded by this model is relevant because the same rules were applied equally to all counties.

Calculations & Analysis

Calculating environmental impact by county required first calculating it by sector. The EIO-LCA model estimates environmental outputs by industry sector, so output data needed to be generated for each individual business, then aggregated geographically. The model defines sectors as 4-digit NAICS codes, so each business was assigned to a sector. For purposes of the calculation, these sectors were used to determine the environmental effect of new product manufacturing. Businesses whose NAICS code did not map directly to a 4-digit sector were treated as general used merchandise stores.

Sector	Description	# of businesses
8114	Personal and Household Goods Repair and Maintenance	3136
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	1495
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1247
4412	Other Motor Vehicle Dealers	1137
4533	Used Merchandise Stores	883
8112	Electronic and Precision Equipment Repair and Maintenance	688
5322	Consumer Goods Rental	601
5321	Automotive Equipment Rental and Leasing	347
4512	Book Stores and News Dealers	328
4481	Clothing Stores	119
5222	Nondepository Credit Intermediation (Pawnshops)	84
4539	Other Miscellaneous Store Retailers	59
8131	Religious Organizations	31
4511	Sporting Goods, Hobby, and Musical Instrument Stores	28
5323	General Rental Centers	10

After revenue figures for each sector was input to the EIO-LCA model, revenue figures for the corresponding activities themselves were entered. The difference between the two was then assigned per business, and multiplied by business revenue to determine the levels of GHG emissions and water withdrawals avoided for each business. At that point, these measurements could be aggregated by county.

Environmental impact measurements reported by county include:

- **Greenhouse Gas (GHG) Emissions Avoided:** Total amount of greenhouse gas production avoided as a result of reuse business activities, measured in metric tons
- **Water Withdrawals Avoided:** Total amount of water withdrawals avoided as a result of reuse business activities, measured in kilo gallons
- **GHG Emissions Avoided Per Capita:** Total amount of greenhouse gas production avoided per person as a result of reuse business activities, measured in metric tons
- **Water Withdrawals Avoided Per Capita:** Total amount of withdrawals avoided per person as a result of reuse business activities, measured in kilo gallons

Economic Impact Metrics

The calculation of economic impact was a straightforward process of totaling revenue and employment numbers provided by the D&B dataset and combining it with publicly available data from the Minnesota Department of Revenue, the Minnesota Department of Employment and Economic Development, and the Minnesota State Demographic Center.

Economic impact measurements reported by county include:

- **All Businesses:** Total number of businesses
- **All Revenue per Capita:** Overall business revenue per person
- **Reuse Businesses:** Number of reuse businesses
- **Avg Revenue (reuse businesses) :** Average revenue of reuse businesses
- **Revenue - Reuse Businesses:** Total revenue of reuse businesses
- **Avg Revenue (all businesses):** Average revenue of all businesses
- **Revenue - All Businesses:** Total revenue of all businesses
- **Employees (reuse businesses):** Total number of employees in reuse businesses
- **Reuse percentage of all revenue:** Percentage of business revenue derived from reuse businesses
- **Employees (all businesses):** Total number of employees in all businesses
- **Reuse Business Percentage:** Percentage of businesses that are reuse businesses
- **Percent Reuse Employment:** Percentage of employees working of reuse businesses
- **Reuse Revenue Per Capita:** Reuse business revenue per person
- **Reuse Employment Per Capita:** Ratio of reuse business employees to population

Social Impacts

The social impact statements were validated through personal interviews with a wide range of leaders and subject matter experts in Minnesota, in both public and private sectors, including:

- Annika Bergen, Sustainable Materials Management, Minnesota Pollution Control Agency
- Madalyn Cioci, co-founder of ReUSE MN and subject matter expert
- Nancy Ford, Owner, Repair Lair
- Colleen Hetzel, Sustainable Materials Management, Minnesota Pollution Control Agency
- Jenny Kedward, Environmental Specialist for Dakota County and President of ReUSE MN
- Todd Tanner, Zero Waste Program Manager, University of Minnesota
- Steve Thomas, Consultant, Better Futures Minnesota

These interviews were supplemented by responses to the ReUSE Minnesota Impact Survey conducted in February 2020.

Featured Social Storytelling

By providing access to low-cost technology for the underprivileged in our community, we train people to build computers and help keep e-waste out of landfills, all while providing low-cost access to the technology for the underprivileged in our community. Everything works together!

- Free Geek Twin Cities

Our organization provides resources and educational experiences that help people maintain & rehab old buildings. In 2019, nearly 1000 homeowners, DIYers, and property owners believe in reusing existing building stock came to us for skills-based, hands-on classes on a variety of rehab and maintenance topics. We believe we're investing in people who see themselves as stewards of buildings who want to extend the lives of our old homes and pass them along to the next generation of stewards.

- Rethos: Places Reimagined

Last year, we partnered with the cities of Duluth and Superior, the DECC and Port Authority to organize Minnesota's largest electronic waste collection event. We took in nearly 100,000 lbs of electronic waste in 8 hours! We have also partnered with organizations in Duluth, donating tech labs, iPads, and network hardware and creating jobs for adults with disabilities so they can be more self-sufficient.

- Global Ewaste Solutions

We collect used bicycles, repair them, and give them away to people who need them. We keep bicycles in use that would otherwise be discarded, and people can get bicycles who otherwise couldn't afford them.

- Mr. Michael Recycles Bicycles

Data Mapping & Display

For purposes of displaying and communicating the resulting data of this project to its members, ReUSE Minnesota has established a dedicated website at impact.reusemn.org. This website displays the interactive data visualization map, allows members to download county-level aggregated data, and access the Impact Survey.

Overall impact: Details by county

The interactive map includes the complete dataset summary breakdown by county (Fig 1).

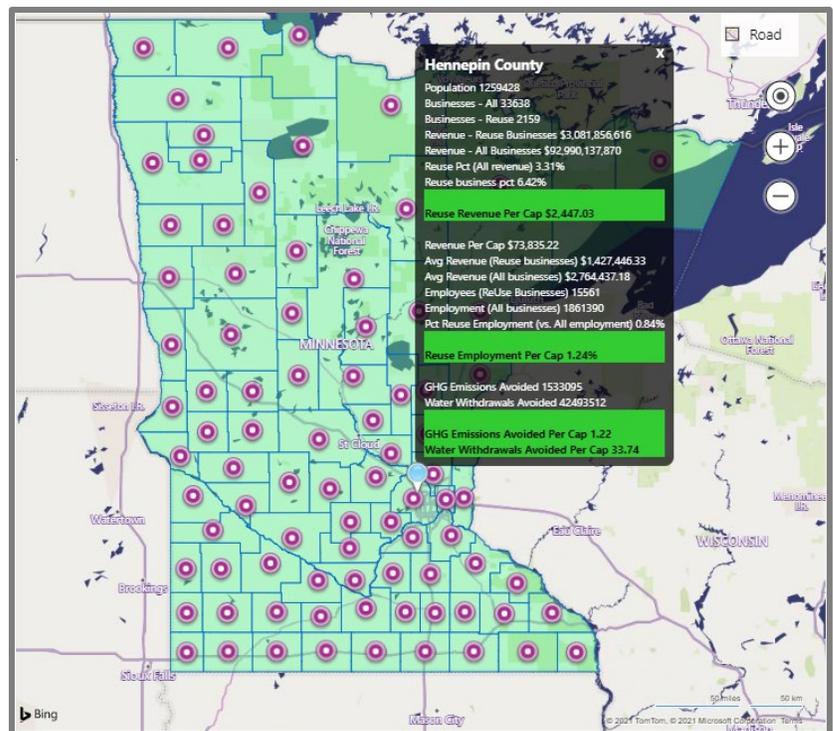


Figure 1. Overall impact: Details by county

Reuse revenue: By county – Heat Map

The interactive map includes a heat map showing the distribution of reuse revenue by county. Hot spots are located in the center of county lines on the map (Fig 2).

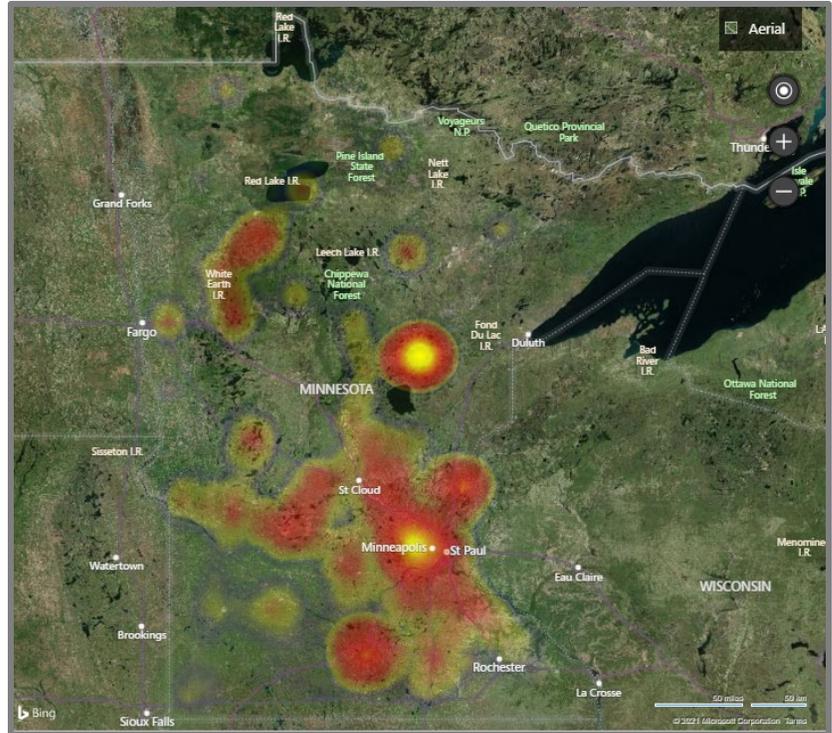


Figure 2. Reuse revenue: By county – Heat Map

Reuse employment: By county – Heat Map

The interactive map includes a heat map showing the distribution of reuse employment by county. Hot spots are located in the center of county lines on the map (Fig 3).

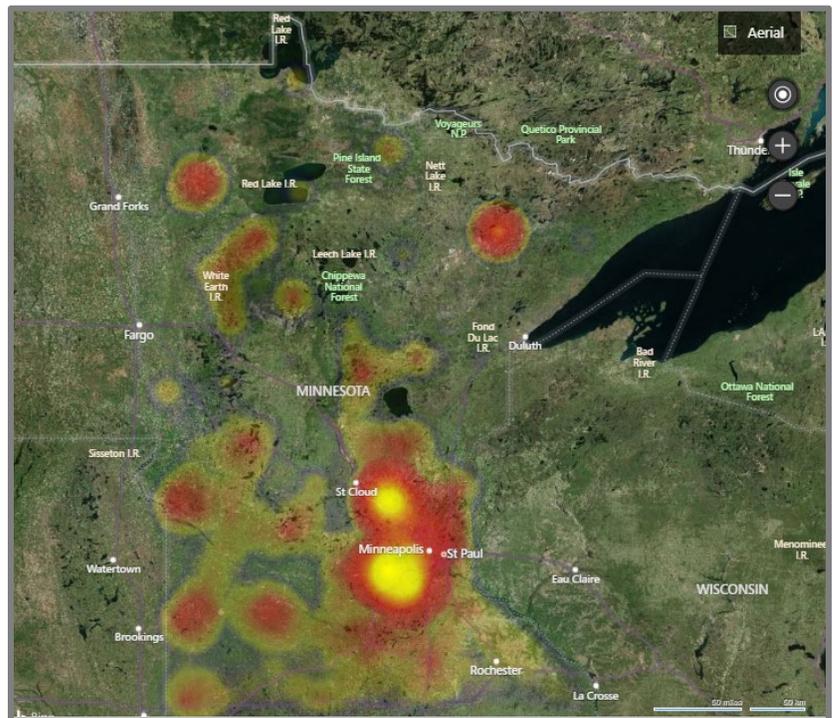


Figure 3. Reuse employment: By county – Heat Map

GHG Emissions reduction: By county – Heat Map

The interactive map includes a heat map showing the distribution of greenhouse gas (GHG) emissions reduction because of reuse by county. Hot spots are in the center of county lines on the map (Fig 4).

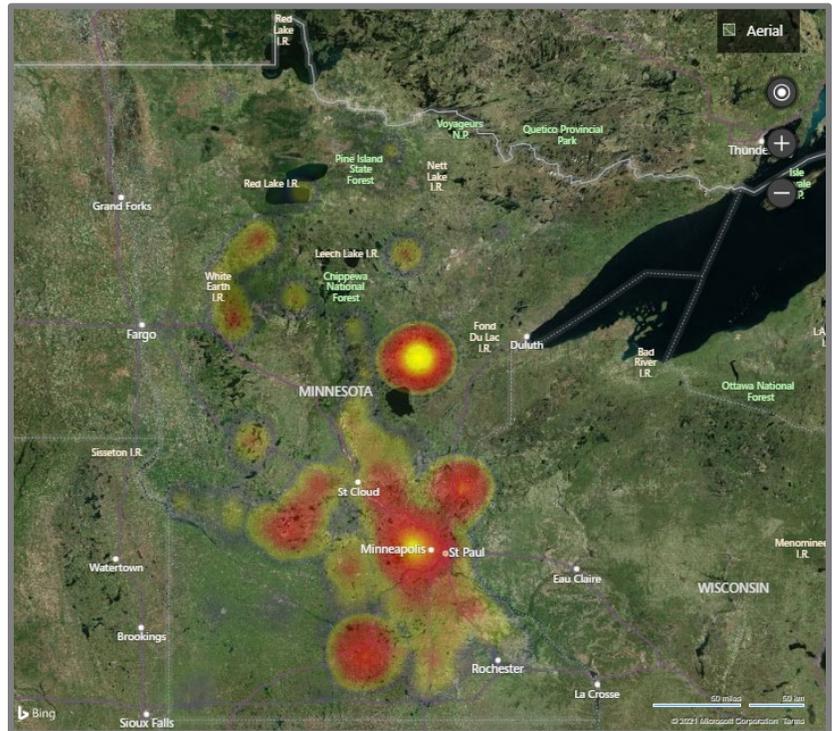


Figure 4. GHG Emissions reduction: By county – Heat Map

Water withdrawal reduction: By county – Heat Map

The interactive map includes a heat map showing the distribution of water withdrawal reduction because of reuse by county. Hot spots are located in the center of county lines on the map (Fig 5).

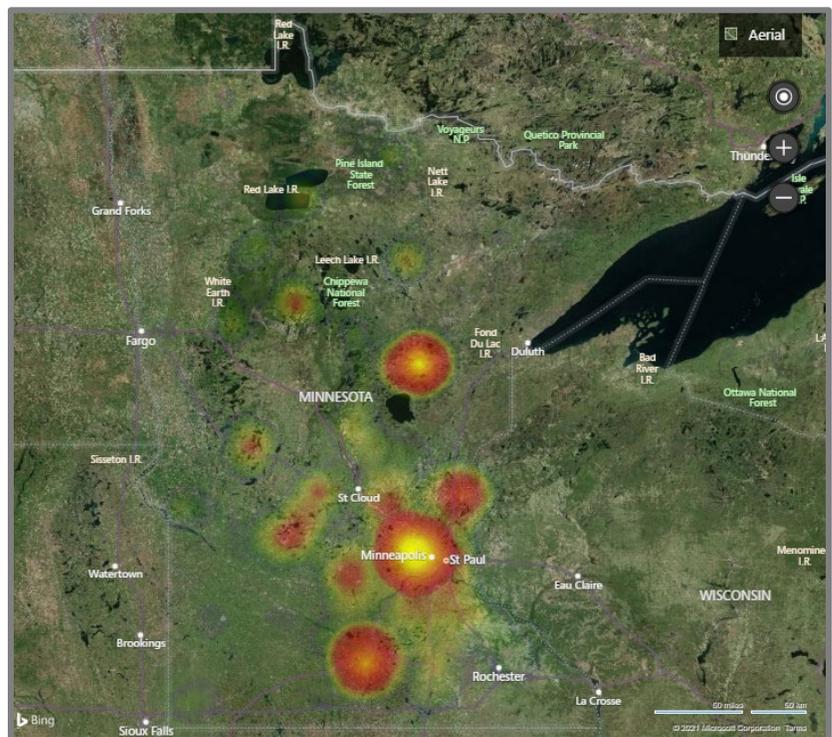


Figure 5. Water withdrawal reduction: By county – Heat Map

Reuse businesses: By location – Heat Map

The interactive map includes a heat map showing the distribution of reuse businesses by exact location (Fig 6).

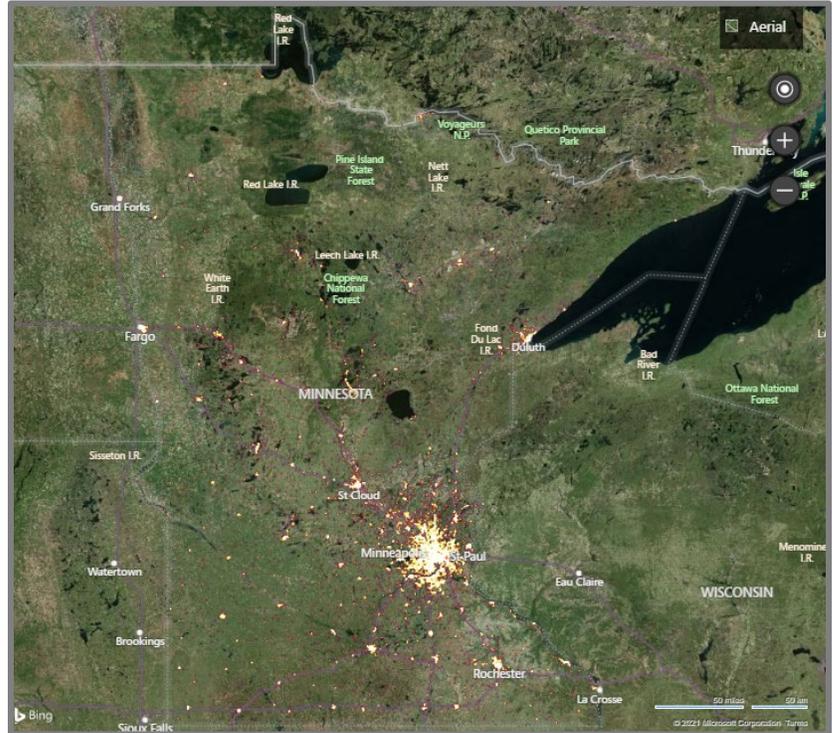


Figure 6. Reuse businesses: By location – Heat Map

Reuse businesses: Details

The interactive map includes a statewide view of reuse businesses with business details by exact location (Fig 7).

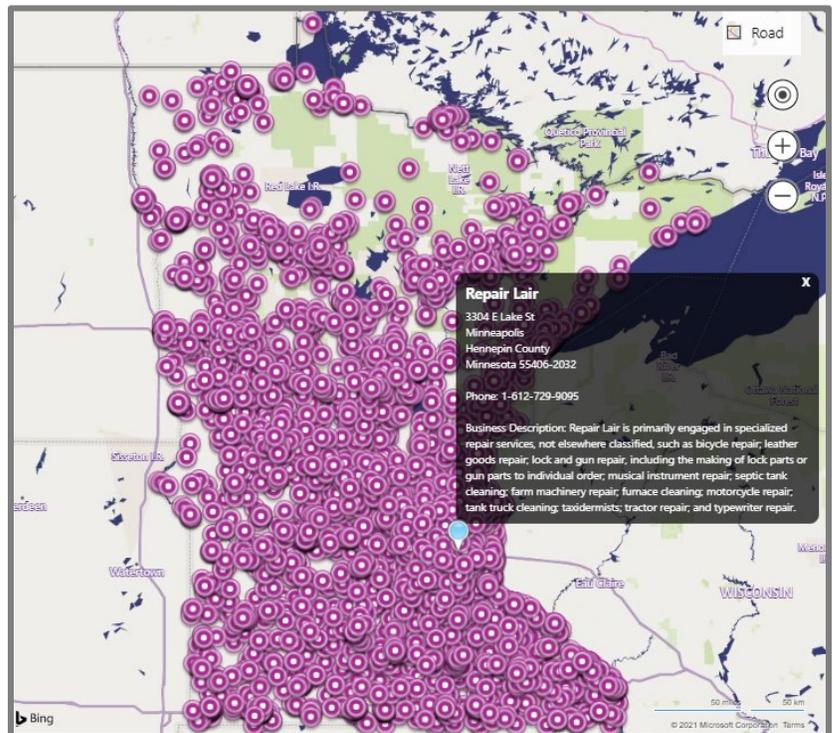


Figure 7. Reuse businesses: Details

Key Findings

Environmental Impacts



Reuse businesses help decrease the annual waste (landfill) production in my community and my state.

By soliciting and accepting donated or consigned items from households and businesses, reuse businesses divert materials from landfill disposal and recycling streams. Repair businesses produce the same benefit by lengthening the useful life of items. Activities in both sectors reduce the demand for landfill capacity, postponing the need for new landfills and reducing the legacy impacts of closed landfills. **The survey of ReUSE Minnesota members indicates that over 80% of resale businesses accept donations.**



Reuse businesses help decrease greenhouse gases and emissions in my community and my state.



Reuse businesses help decrease water use (withdrawals) in my community and my state.

Reuse activities provide:

- Alternative channels for businesses and households to transfer ownership of belongings they no longer need
- The ability for many consumers to share a single item by renting it for a fixed period of time before making the same item available for others to use
- The ability to extend the useful life of an item by repairing

Through reuse, consumers have an opportunity to own or use an item in a way that does not require a new material or product to be manufactured. In this way, all of the resource and energy inputs and waste and pollution outputs of the manufacturing and distribution of that item are avoided. These effects include:

- **Avoidance of over 2.7 million metric tons of CO₂ equivalent emissions per year, including greenhouse gases such as carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.**
- **Reduction of over 67 billion gallons in withdrawals of freshwater each year from ground or surface water sources.**

While Greater Minnesota has more individual reuse businesses (5,790) than the seven-county metro (4,841), the metro area reuse activities result in significantly higher environmental benefits. This is likely due to more reuse happening at the individual metro businesses with increased population density, but variance in the types of reuse businesses in the regions can also contribute to this difference. New manufacturing of certain materials and products contribute more to greenhouse gas emissions and require more water resources, and, as a result, finding reuse alternatives can lead to more notable benefits for higher impact material and product categories.

	Businesses - Reuse	GHG Emissions Avoided (metric tons)	Water Withdrawals Avoided (kGal)	GHG Emissions Avoided per Capita	Water Withdrawals Avoided per Capita
Subtotal: Greater Minnesota	5,790	780,832	15,296,183	0.31	6.09
Subtotal: 7-County Metro Area	4,841	1,990,325	52,554,997	0.64	16.96
MN Totals	10,631	2,771,157	67,851,180	0.49	12.09

Figure 8 shows the top ten counties with the greatest avoided greenhouse gas emissions from reuse per capita. Despite Hennepin County having the greatest avoided greenhouse gas emissions overall, Aitkin County is leading in its per capita avoidance.

Avoided GHG Emissions from Reuse Per Capita

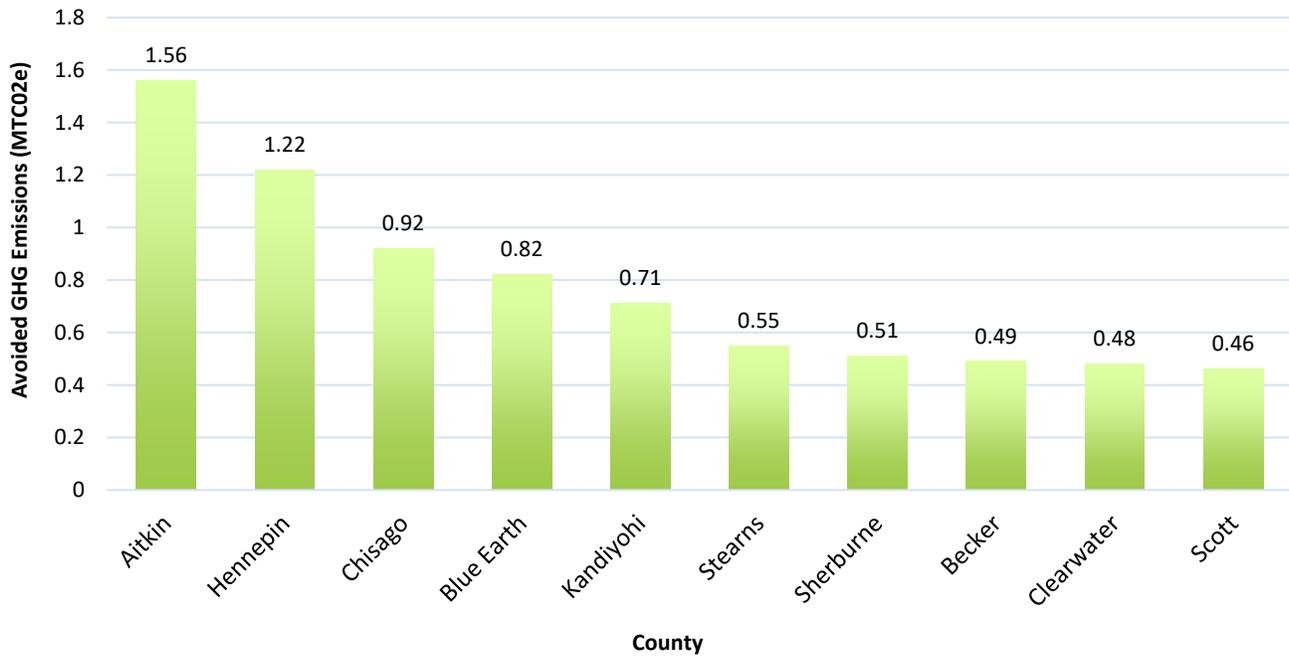


Figure 8. Avoided Greenhouse Gas Emission from Reuse Per Capita

For avoided water withdrawals per capita, Hennepin County’s reuse activities placed them in the lead; however, Aitkin County followed with the second highest (Fig 9). Additional analysis on the types of reuse businesses in these counties can help explain these variances.

Avoided Water Withdrawals from Reuse Per Capita

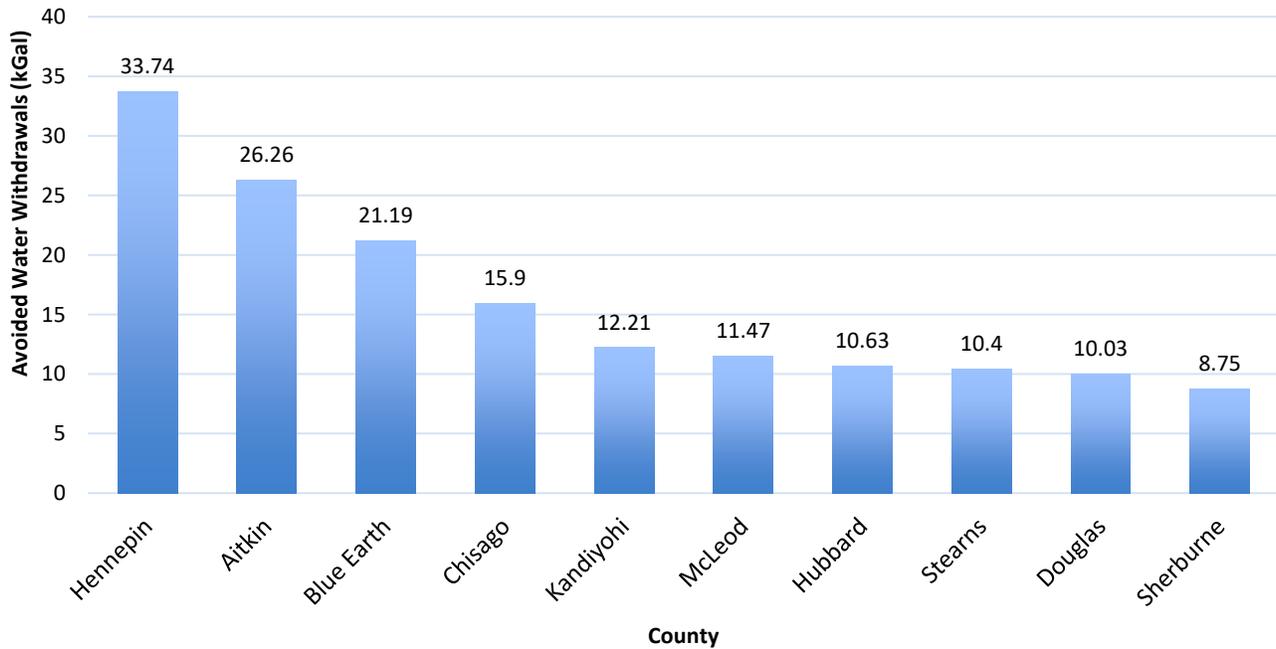


Figure 9. Avoided Water Withdrawals from Reuse per Capita

Economic Impacts



Reuse businesses grow the local economy by keeping spending in my community and my state.

The vast majority of reuse activities occur at a local retail level. Reuse activities avoid new retail purchases by either replacing them (in the case of resale or rental transactions) or forestalling them (in the case of repair transactions). New retail sales are considerably less likely to be conducted locally due to increasingly global supply chains and the prevalence of online shopping.

Statewide, the reuse economy generates about \$5.8 billion each year – \$1,035 per capita per year. The 10,631 reuse businesses make up 7% of all statewide businesses.

	Businesses - Reuse	Revenue - Reuse Businesses	Reuse % (all revenue)	Reuse Business %	Reuse Revenue Per Capita
Subtotal: Greater MN	5,790	\$1,683,078,196	1.66%	8.23%	\$669.97
Subtotal: 7-County Metro Area	4,841	\$4,129,991,213	2.30%	6.55%	\$1,332.68
MN Totals	10,631	\$5,813,069,409	2.07%	7.37%	\$1,035.98

Reuse activities in Greater Minnesota accounts for 1.66 percent of the annual revenue generated in the community, compared to 2.3 percent in the seven-county metro. However, the contribution of reuse activities to

individual counties’ annual revenue has a fairly broad range. Sixty-eight counties align with the statewide total, where reuse revenue is approximately 2 percent or less of the county’s total revenue, but the remaining counties span 2 – 11 percent. Aitkin County’s reuse revenue contributes the most to its local economy with 11.06 percent, likely related to the reuse and repair with recreational goods and equipment occurring in the area (Fig 10).

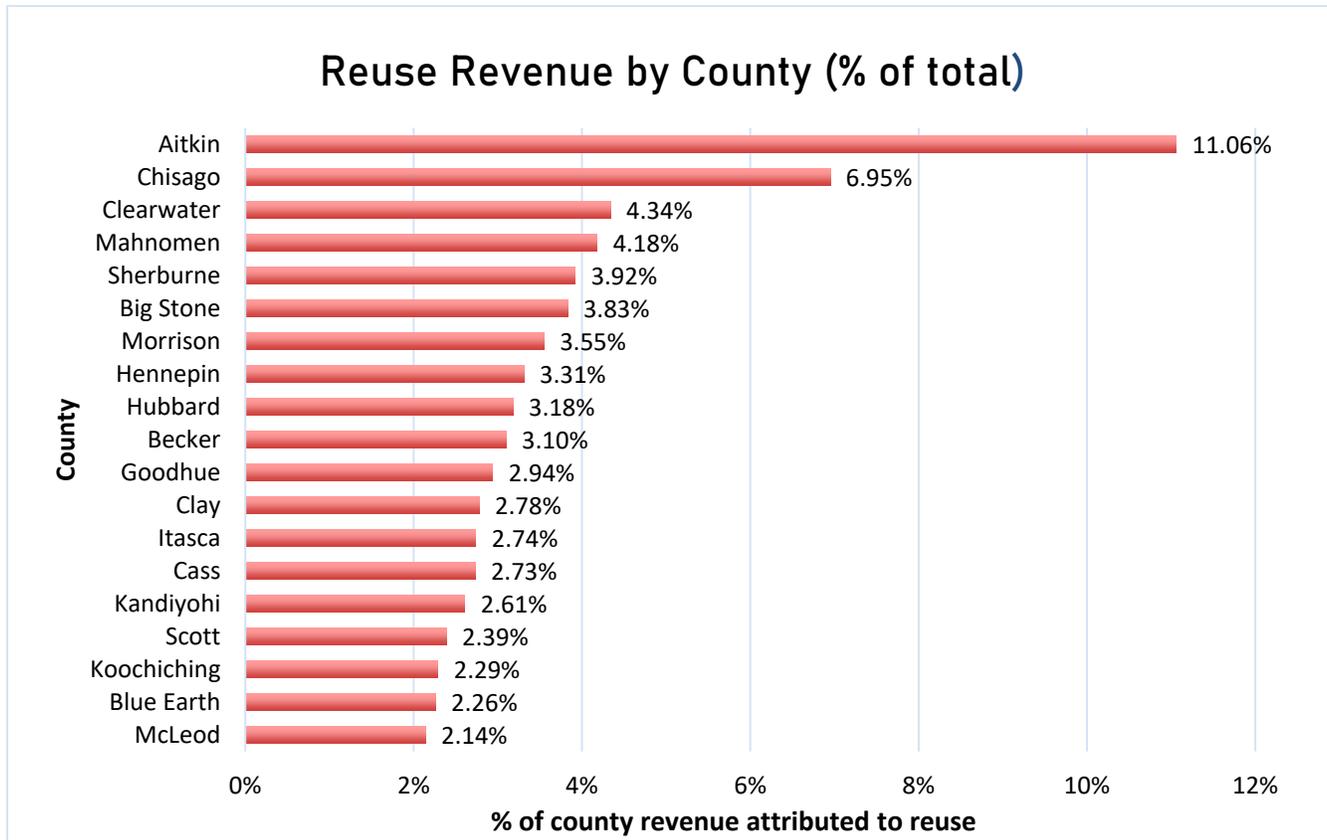


Figure 10. Reuse Revenue by County (% of total)



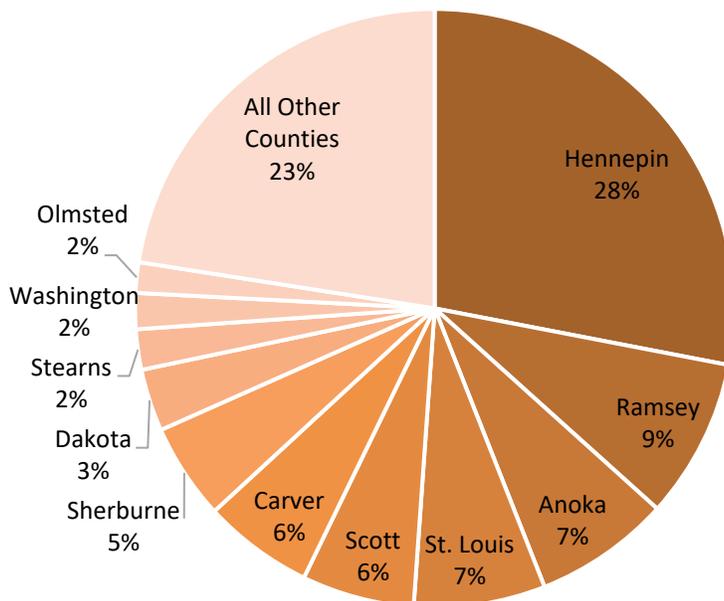
Reuse businesses increase job creation in my community and my state.

The reuse sector accounts for over 55,000 jobs in Minnesota, about 1 percent of overall employment in the state. The jobs created are distributed fairly equally between the seven-county Twin Cities Metropolitan Area and Greater Minnesota, providing opportunities in towns and communities throughout the state.

	Population	Employees - Reuse businesses	% Reuse Employment (vs. all employment)	Reuse Employment Per Capita
Subtotal: Greater MN	2,512,172	21,450	1.04%	0.85%
Subtotal: 7-County Metro Area	3,099,007	34,059	0.97%	1.10%
MN Totals	5,611,179	55,509	0.99%	0.99%

Unsurprisingly, the counties with the greatest percentage of reuse jobs start by following those with the biggest populations - Hennepin with 22 percent of the state’s population and 28 percent of the state’s reuse jobs, and Ramsey with 10 percent of the state’s population and 9 percent of the state’s reuse jobs (Fig 11). However, while Dakota County has the third largest population (8 percent of the state), its employment only covers 3 percent of the state’s reuse jobs. Similarly, while Washington County has the fifth largest population (5 percent of the state), its employment only covers 2 percent of the state’s reuse jobs.

Statewide Reuse Employment: Percent by County



	Population	% of Statewide Population
MN Totals	5,611,179	100%
Hennepin	1,259,428	22%
Ramsey	550,210	10%
Dakota	425,423	8%
Anoka	353,813	6%
Washington	259,201	5%
St. Louis	199,754	4%
Stearns	159,256	3%
Olmsted	156,277	3%
Scott	147,381	3%
Wright	136,349	2%

Figure 11. Statewide Reuse Employment: Percent by County

Social Impacts



Reuse businesses build a community of like-minded individuals. They encourage community identity and involvement.

Reuse business owners describe the camaraderie among regular customers, and the large groups of friends that visit resale shops together for the purpose of social bonding as much as bargain hunting. Belonging to the community of “thrifters” serves as an identity for many individuals and provides them with a common touchpoint that makes them feel at ease in the community.

A different kind of community identity is created by businesses engaged in rental activities. These businesses support Minnesota communities that depend on leisure and recreation by providing affordable and convenient access to boats and other recreational vehicles, camping gear, and sporting equipment. The businesses are vital to the cultural identity of Minnesota’s “lake country” communities.



Reuse businesses provide value and opportunity to individuals.

Reuse businesses provide value to individuals in a variety of ways. **The word most commonly used by owners to describe the impact of their business is “opportunity.”** Reuse business activities give people opportunities for experiences they would not otherwise have, including:

- Access to expensive or higher-quality items, including furniture, tools, and electronics at an affordable cost
- Affordable access to recreational activities such as skiing or boating, resulting in stronger and closer bonds to family and community
- Extended use and enjoyment of property and belongings, including business assets
- Pride and satisfaction in acquiring skills and knowledge to repair and restore household items and furnishings
- Rediscovery of the beauty and value of belongings that had fallen into disrepair
- Acquisition of professional skills and specialized technical training

These activities create intangible value beyond direct economic impact, which could be measured in personal satisfaction surveys.

Storytelling Strategy

The key findings of this report can be summarized into storylines to feature prominently in marketing messaging.

Environmental Impact Storyline

Reuse businesses are contributing in a positive way to local and state-wide efforts to mitigate climate impacts, reducing greenhouse gas emissions and water usage involved in manufacturing new finished goods.

Economic Impact Storyline

Reuse businesses strengthen the local and state economy (specifically in overall revenue and job creation), which is growing as the reuse movement continues to develop and expand.

Social Impact Storyline

Reuse businesses contribute to the community by improving the lives of individuals who engage with them. By providing opportunities for employment, skill development, and community identity, and removing barriers of cost and accessibility, reuse empowers people to have life-changing experiences they would otherwise be unable to have.

These statements help to define what makes reuse businesses and organizations unique. It can be used in marketing messaging to help reuse businesses compete with the “take, make, waste” and single-use economy, while making a case overall for reuse in Minnesota and beyond. Reuse businesses should be encouraged to emphasize the impact they make on their community.

Storytelling Recommendations for ReUSE Minnesota Member Businesses

The storylines listed above represent three distinct narratives that reuse businesses should use in their marketing. This value is best communicated through stories that show examples of the economic, environmental, and social change that can happen when consumers choose to reuse, rent, or repair over buying new items.

To help businesses see and understand the value they create, they should be encouraged to begin by first considering the activities they undertake (for example, renting a canoe, repairing a sewing machine, or selling a used prom dress). Second, look at the outcome from those activities (for example, a family enjoys a camping trip, an individual can sew and mend clothing, a student is able to attend a formal event). Finally, consider the value generated by those outcomes:

- A family trip that strengthened relationships, promoted physical fitness, increased appreciation for the beauty of nature, and don't require purchasing, transporting, and storing equipment used infrequently.
- An economic transaction that benefitted a rental business in a small town in Greater Minnesota, where a higher percent of the revenue is kept local.
- The avoided environmental cost of manufacturing a canoe, sewing machine, or dress, including raw material extraction, resource and energy inputs and waste and pollution outputs for manufacturing, and transportation and shipping costs along the entire supply chain.
- Job opportunities for skilled workers (including opportunities for training and apprenticeship, potentially for underserved communities) and volunteer opportunities for retirees and the community-minded.

- Satisfaction for the donor of the dress, knowing that an item that would otherwise be worn once can be shared with others.

Statements of value like this can be the seed for an inspirational story of the impact of reuse.

Individual Business Storytelling Strategies

Because the operations, products, and services offered by reuse businesses vary greatly, it is not valuable to recommend specific marketing messages and goals for promotions. However, stories of impact transcend operational promotions and provide an ideal base for the content marketing strategy for any reuse business.

When considering promotions based on impact stories, businesses should follow these recommendations:

- Look for everyday examples of interactions among your customers, staff, donors, or other suppliers. Don't be afraid to let stories communicate intangibles such as joy, pride, satisfaction, skill development, or community bonding, because these are things that drive social impact.
- Anonymize particulars of those stories to respect the privacy of the individuals involved.
- Remember that pictures frequently tell stories more effectively than words, especially when using social media platforms. However, make sure to accompany photos with descriptive copy that provides needed context and focuses attention on the aspect of the photo or image you wish to emphasize. Don't leave the interpretation of the story that a photo tells solely to your audience.
- Use and follow the Marketing Guide for Reuse Businesses, specifically its strategic messaging formula. In order for a story to have marketing value, it must be intended to appeal to a specific audience and to work toward a specific goal. The complete Marketing Guide for Reuse Businesses is available online for download at impact.reusemn.org and in Appendix G.

Bottom Line: Lean in to Impact Stories

Ultimately, reuse businesses should be strongly encouraged to lean into their impact when telling the stories of their business. Mission-driven businesses live their mission daily, but consumers don't - so it's beneficial for consumers to have the reminder of these businesses' important roles and impacts. This will create the marketing lift needed to make the case for consumers to patronize reuse businesses. Reuse businesses should not take their impact for granted, taking pride in the value they create in terms of environmental and social impact. Such impact stories appeal to consumer hope and optimism, while cost-savings stories appeal more to consumer fear and worry. If the sole value that consumers see they derive from reuse businesses is cost savings, then the result is a race to the bottom led by businesses who appeal solely to individual financial concerns. Data points uncovered in this project can help to reinforce these messages.

Because they serve and communicate to local communities, individual businesses are best positioned to tell their own impact stories. However, sharing stories through ReUSE Minnesota's Impact Survey provides a valuable way for business owners to inspire their peers to consider stories of their own.

Communicating the story of general impact at a state or regional level is best done by industry advocacy groups such as ReUSE Minnesota. A consumer-focused campaign aimed at telling the story of reuse and the beneficial societal impacts of a lifestyle that emphasizes waste reduction and responsible consumption would be effective at reinforcing stories told by individual businesses.

Marketing Campaign for ReUSE Minnesota

The Impact Measurement Report should serve as the impetus for a marketing campaign aimed at promoting membership in ReUSE Minnesota. The goal of this campaign is to recruit members while also encouraging a second wave of surveys to continue building the repository of survey data and further supporting the findings.

Strategic Approach

Membership Discount

- Limited time discount to attract new members (two weeks recommended)
- Tie together with messaging that promotes the impact data/report

Promotional Tools

- Website - banner ads (homepage & membership pages)
- Website blog post
- Email to current members
- Email to nonmembers currently listed in ReUSE Minnesota online directory
- Cold email campaign to member business contacts not currently listed
- Social media posts (LinkedIn, Twitter, Facebook)

Call to Action

- Become a member and get access to the report to see your impact
- Take the survey and help us build our impact data

Target Audiences

Two counties and five municipalities were originally targeted for the Impact Survey, intended to represent the wide varieties of communities in Minnesota. It makes sense to focus promotional attention in those areas as well to start. Since Brio Marketing was already promoting memberships as a part of the survey promotional campaign, this is a very natural follow-up and will likely lead to conversions.

Ramsey County

- Roseville
- New Brighton
- White Bear Lake

Blue Earth County

- Mankato
- Lake Crystal

Based on the survey results, the largest audience of active reuse businesses are in the Twin Cities. This audience should also be targeted for outreach and engagement, including Hennepin County (which was excluded from the initial survey promotional plan noted above).

Note that sponsored posts on LinkedIn can be targeted directly to decision makers at individual companies. This approach is likely to be effective in reaching the individuals and organizations in the target audience. Running a LinkedIn campaign will require ReUSE Minnesota to establish a presence on the platform first.

Messaging Strategy

In order to promote memberships, all communications need to be focused on what the participating business will get out of the impact report and how it can help their marketing.

XX% OFF REUSE MINNESOTA MEMBERSHIPS (limited-time sale!)

Get access to our network and new impact data & storytelling to help promote your reuse business!

Sample Copy

Advocate for your business using impact data. Now through [insert date], reuse businesses can join ReUSE Minnesota and save [insert percentage]% off regular membership fees! As a member benefit, businesses get access to our Impact Survey Report, which includes county-level metrics that demonstrate the impact of reuse in your community and a marketing guide for how to use impact data in your marketing. **Join today >>**

Measurement & Reporting

Before the marketing campaign is launched, Brio Marketing recommends setting a primary goal for the number of members ReUSE Minnesota wants to recruit by a particular date as well as secondary goals, such as number of surveys filled out, number of blog page views, number of new followers or engagements, etc. Knowing these goals at the outset of the campaign will shape the campaign itself.

PRIMARY GOAL

- Number of members recruited by a particular date

SECONDARY GOALS

- Number of surveys completed by a particular date
- Number of visits to the membership page of the website by a particular date
- Number of blog pages views by a particular date
- Number of new followers by social media platform by a particular date
- Engagements by social media platform by a particular date

Future Opportunities

The tools and methodologies developed in this project are structures that can and should be developed more fully. Below are some recommendations for opportunities for the tools to evolve to provide broader and more accurate measurements of the impact of reuse activities throughout Minnesota.

Individual Impact Reporting

Upon submission of an Impact Survey, an assessment of individual impact could be generated automatically. This would allow a reuse business to view their own contribution to the overall impact of their business immediately. This assessment could be delivered as a webpage or as a downloadable report.

Integration with Membership Portal

The Impact Survey website could be integrated with the ReUSE Minnesota membership portal, sharing authentication. This would force any users wishing to access the Impact Survey to provide login credentials, and would provide the opportunity for ReUSE Minnesota to provide impact survey measurement data as a premium membership benefit.

Broader Data Collection

Because the sample size of quantitative data collected in the initial Impact Survey was small, a continued concerted attempt to solicit responses from a broader range of businesses could yield more insights into all areas of impact, and would allow ReUSE Minnesota to derive more value from those responses.

Appendix A – Reuse, Resale, & Secondhand Stores NAICS Codes & Descriptions

2017 NAICS Code	2011 NAICS Code	SIC Code	Code Description
441210	441210		Recreational Vehicle Dealers
441222	441222		Boat dealers
441229	N/A		All other motor vehicle dealers
453310	453310	59320000	Used merchandise stores
453310	453310	59320100	Home furnishings and appliances, secondhand
453310	453310	59320101	Furniture, secondhand
453310	453310	59320102	Home furnishings, secondhand
453310	453310	59320103	Household appliances, used
453310	453310	59320200	Antiques
453310	453310	59320201	Art objects, antique
453310	453310	59320202	Glassware, antique
453310	453310	59320300	Book stores, secondhand
453310	453310	59320301	Manuscripts, rare
453310	453310	59320302	Rare books
453310	453310	59320400	Clothing and shoes, secondhand
453310	453310	59320401	Clothing, secondhand
453310	453310	59320402	Shoes, secondhand
453310	453310	59320500	Office furniture and store fixtures, secondhand
453310	453310	59320501	Office furniture, secondhand
453310	453310	59320502	Store fixtures and equipment, secondhand
522298	522298	59329904	Pawnshop

Appendix B – Rental Businesses NAICS Codes & Descriptions

2017 NAICS Code	2011 NAICS Code	SIC Code	Code Description
532120	532120		Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing
532210	532210		Consumer Electronics and Appliances Rental
532281	532220		Formal Wear and Costume Rental
532282	532230		Video Tape and Disc Rental
532283	532291		Home Health Equipment Rental
532284	532292		Recreational Goods Rental
532289	532299		All Other Consumer Goods Rental
532310	532310		General Rental Center
532490	532490		Other Commercial and Industrial Machinery and Equipment Rental and Leasing

Appendix C – Repair Businesses NAICS Codes & Descriptions

2017 NAICS Code	2011 NAICS Code	SIC Code	Code Description
811211	811211		Consumer Electronics Repair and Maintenance
811212	811212		Computer and Office Machine Repair and Maintenance
811213	811213		Communication Equipment Repair and Maintenance
811219	811219		Other Electronic and Precision Equipment Repair and Maintenance
811310	811310		Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance
811411	811411		Home and Garden Equipment Repair and Maintenance
811412	811412		Appliance Repair and Maintenance
811420	811420		Reupholstery and Furniture Repair
811430	811430		Footwear and Leather Goods Repair
811490	811490		Other Personal and Household Goods Repair and Maintenance

Appendix D – ReUSE Minnesota Impact Survey

The ReUSE Minnesota Impact Survey is available at <https://impact.reusemn.org/default.aspx>.



This short survey will help measure the economic, environmental, and social impact that your business has on your local community. You'll be able to use the results to promote your business and tell your story!

Please be sure to complete four sections for best results.

About Your Business

- First Name*
- Last Name*
- Company
- Address ; City ; State ; Zip Code
- Phone
- Email Address*

About Your Staff

Many reuse, repair, and rental businesses provide opportunities for disabled or disadvantaged people through paid or volunteer work. This creates substantial economic and social impact.

IMPACT TYPES IN THE SECTION

SOCIAL

ECONOMIC

- How many people does your business employ? (Include both full-time and part-time workers.)
Select
 - 1-4
 - 5-10
 - 11-25
 - 26-50
 - 51-99
 - 100+
- Does your business employ people classified as disabled by the US Department of Labor? (Examples include individuals with mobility difficulty or are blind or deaf.) *Select*
 - Yes
 - No

- Does the mission of your business include providing jobs for people who have difficulty finding employment? *Select*
 - Yes
 - No
- How many people volunteered for your business this year? *Select*
 - 0
 - 1-4
 - 5-10
 - 11-25
 - 26-50
 - 51-99
 - 100+
- How many total hours did volunteers contribute to your business this year? *Select*
 - 0
 - 1-100
 - 101-500
 - 501-1000
 - 1001-2000
 - 2001-5000
 - 5001+

About Your Business Activities

Your business stimulates your community's economy, and its activities reduce carbon emissions and water consumption. Your sales revenue provides an indicator of your individual impact. If your business sold, rented, or repaired goods that were donated or consigned, your business decreased landfill use and created jobs.

IMPACT TYPES IN THE SECTION



- What calendar year are you reporting data for? *Select*
 - 2019
 - 2018
 - 2017
 - 2016
 - 2015
 - 2014
 - 2013
 - 2012
- Select the activities that best describe the type of business you operate. Businesses that sell, rent, and repair products should make a selection in each category. *Select*
 - Resale/Reuse business activity:
 - N/A
 - Antiques

- Book stores, secondhand
- Building materials, secondhand
- Clothing and shoes, secondhand
- Computers and accessories, secondhand
- Furniture, secondhand
- General used merchandise store
- Home furnishings and appliances, secondhand
- Musical instruments, secondhand
- Office furniture and store fixtures, secondhand
- Pawnshop
- Records, secondhand
- Rental business activity:
 - N/A
 - Consumer electronics & appliances rental
 - Truck, utility trailer, and RV rental and leasing
 - Formal wear & costume rental
 - Video tape & disc rental
 - Home health equipment rental
 - Recreational goods rental
 - All other consumer goods rental
 - General rental centers
 - Office machinery & equipment rental
 - Other machinery & equipment rental
- Repair business activity:
 - N/A
 - Tire retreading
 - General automotive repair
 - Automotive exhaust system repair
 - Automotive transmission repair
 - Other automotive mechanical & electrical repair
 - Automotive body, paint, & interior repair
 - Automotive glass replacement shops
 - All other automotive repair
 - Consumer electronics repair
 - Computer & office machine repair
 - Communication equipment repair
 - Other electronic & precision equipment repair
 - Commercial machinery repair
 - Home & garden equipment repair
 - Appliance repair
 - Reupholstery & furniture repair
 - Footwear & leather goods repair
 - Other personal & household goods repair

Survey takers were limited to only choose one activity per category. For the activities selected, the following questions were posed:

- What was your sales revenue for the year (not including charitable donations)? *Select*
 - \$0-\$10,000
 - \$11,000-\$40,000
 - \$41,000-\$100,000
 - \$101,000-\$250,000
 - \$250,000-\$1,000,000
 - \$1,000,000-\$5,000,000
 - \$5,000,000-\$10,000,000
 - \$10,000,000+
- Estimate the weight of donated or consigned items your business accepted during the year. *Select*
 - 0-100 lbs
 - 101-500 lbs
 - 501-1,000 lbs
 - 1,001-5,000 lbs
 - 5,001-10,000 lbs
 - 10,001-50,000 lbs
 - 50,001-100,000 lbs
 - 100,001+ lbs
- Estimate the weight of donated or consigned items that your business discarded, recycled, or threw away during the year. *Select*
 - 0-100 lbs
 - 101-500 lbs
 - 501-1,000 lbs
 - 1,001-5,000 lbs
 - 5,001-10,000 lbs
 - 10,001-50,000 lbs
 - 50,001-100,000 lbs
 - 100,001+ lbs

About Your Business Impact

Every reuse business makes an impact on its community in ways that are difficult to measure. Maybe you help employees or volunteers overcome a disadvantage, or create new opportunities for customers or suppliers, or you have a unique mission to solve a problem.

IMPACT TYPES IN THE SECTION

SOCIAL

- What would you consider to be the most important benefit your business provides to your community? *Open-ended*
- Your business generates social good in your community, and we want to hear your stories. May we contact you to learn more about your business? *Select*
 - Yes
 - No

Appendix E – Data Measures by County : Economic

County	Population	Businesses - Reuse	Revenue - Reuse Businesses	Reuse % (all revenue)	Reuse Business %	Reuse Revenue per Cap	Avg Revenue (reuse businesses)	Employees (reuse businesses)	% Reuse Employment (vs. all)	Reuse Employment per Capita
Subtotal: Greater Minnesota	2,512,172	5,790	\$1,683,078,196	1.66%	8.23%	\$669.97	\$290,687.08	21,450	1.04%	0.85%
Subtotal: 7-County Metro Area	3,099,007	4,841	\$4,129,991,213	2.30%	6.55%	\$1,332.68	\$853,127.70	34,059	0.97%	1.10%
MN Totals	5,611,179	10,631	\$5,813,069,409	2.07%	7.37%	\$1,035.98	\$546,803.63	55,509	0.99%	0.99%
Aitkin	15,902	46	\$46,589,898	11.06%	9.13%	\$2,929.81	\$1,012,823.87	145	1.78%	0.91%
Anoka	353,813	389	\$101,546,100	0.74%	5.19%	\$287.00	\$261,043.96	4,082	1.64%	1.15%
Becker	34,371	108	\$35,838,700	3.10%	10.40%	\$1,042.70	\$331,839.81	305	2.11%	0.89%
Beltrami	46,847	107	\$36,362,400	2.07%	8.73%	\$776.19	\$339,835.51	342	0.87%	0.73%
Benton	40,545	81	\$35,048,000	1.95%	8.36%	\$864.42	\$432,691.36	315	0.90%	0.78%
Big Stone	4,989	13	\$3,450,100	3.83%	6.02%	\$691.54	\$265,392.31	59	1.69%	1.18%
Blue Earth	67,427	163	\$104,620,198	2.26%	8.61%	\$1,551.61	\$641,841.71	495	0.60%	0.73%
Brown	25,111	65	\$10,448,000	0.70%	7.93%	\$416.07	\$160,738.46	172	1.24%	0.68%
Carlton	35,837	69	\$10,532,800	1.39%	8.15%	\$293.91	\$152,649.28	184	0.68%	0.51%
Carver	103,551	140	\$15,416,400	0.42%	5.69%	\$148.88	\$110,117.14	3,308	4.13%	3.19%
Cass	29,519	67	\$19,986,900	2.73%	5.94%	\$677.09	\$298,311.94	198	0.97%	0.67%
Chippewa	11,924	32	\$3,930,600	0.79%	7.86%	\$329.64	\$122,831.25	66	0.57%	0.55%
Chisago	55,922	138	\$97,811,399	6.95%	10.08%	\$1,749.07	\$708,778.25	487	1.58%	0.87%

Clay	63,955	99	\$48,692,900	2.78%	9.16%	\$761.36	\$491,847.47	282	0.73%	0.44%
Clearwater	8,810	23	\$11,432,600	4.34%	9.47%	\$1,297.68	\$497,069.57	97	3.54%	1.10%
Cook	5,393	13	\$1,066,800	0.45%	2.94%	\$197.81	\$82,061.54	21	0.38%	0.39%
Cottonwood	11,277	31	\$4,345,500	0.60%	8.18%	\$385.34	\$140,177.42	67	0.66%	0.59%
Crow Wing	64,889	231	\$46,230,500	1.51%	9.63%	\$712.46	\$200,132.03	680	1.15%	1.05%
Dakota	425,423	514	\$240,105,001	1.19%	5.48%	\$564.39	\$467,130.35	1,866	0.49%	0.44%
Dodge	20,822	41	\$6,581,800	0.97%	8.74%	\$316.10	\$160,531.71	76	0.63%	0.36%
Douglas	37,964	124	\$32,945,200	1.64%	8.31%	\$867.80	\$265,687.10	362	0.97%	0.95%
Faribault	13,758	44	\$4,299,700	0.87%	9.17%	\$312.52	\$97,720.45	74	0.81%	0.54%
Fillmore	21,058	47	\$7,193,000	0.94%	6.10%	\$341.58	\$153,042.55	92	0.75%	0.44%
Freeborn	30,444	67	\$15,937,700	0.77%	7.45%	\$523.51	\$237,876.12	190	0.79%	0.62%
Goodhue	46,403	142	\$46,742,200	2.94%	10.06%	\$1,007.31	\$329,170.42	389	0.89%	0.84%
Grant	6,021	11	\$892,600	0.25%	4.70%	\$148.25	\$81,145.45	33	0.82%	0.55%
Hennepin	1,259,428	2,159	\$3,081,856,616	3.31%	6.42%	\$2,447.03	\$1,427,446.33	15,561	0.84%	1.24%
Houston	18,578	44	\$2,860,700	0.90%	8.70%	\$153.98	\$65,015.91	103	1.98%	0.55%
Hubbard	21,332	48	\$15,954,700	3.18%	6.23%	\$747.92	\$332,389.58	210	1.75%	0.98%
Isanti	39,966	93	\$16,542,500	1.47%	9.75%	\$413.91	\$177,876.34	208	1.90%	0.52%
Itasca	45,108	100	\$39,081,999	2.74%	7.63%	\$866.41	\$390,819.99	278	0.87%	0.62%
Jackson	9,911	17	\$3,320,500	0.77%	4.23%	\$335.03	\$195,323.53	51	0.50%	0.51%
Kanabec	16,207	40	\$4,773,500	1.98%	10.10%	\$294.53	\$119,337.50	76	0.97%	0.47%
Kandiyohi	42,855	103	\$61,952,600	2.61%	8.14%	\$1,445.63	\$601,481.55	432	0.88%	1.01%
Kittson	4,248	5	\$221,000	0.16%	3.23%	\$52.02	\$44,200.00	6	0.19%	0.14%
Koochiching	12,440	31	\$8,166,400	2.29%	8.12%	\$656.46	\$263,432.26	107	1.20%	0.86%

Lac qui Parle	6,658	14	\$1,212,400	0.81%	5.19%	\$182.10	\$86,600.00	24	0.54%	0.36%
Lake	10,658	27	\$4,260,300	1.43%	6.16%	\$399.73	\$157,788.89	62	0.76%	0.58%
Lake of the Woods	3,758	14	\$1,675,600	0.92%	6.48%	\$445.88	\$119,685.71	27	1.70%	0.72%
Le Sueur	28,494	94	\$12,710,200	1.38%	11.76%	\$446.07	\$135,214.89	242	2.74%	0.85%
Lincoln	5,673	15	\$1,274,400	1.02%	6.82%	\$224.64	\$84,960.00	61	1.65%	1.08%
Lyon	25,629	66	\$12,826,800	0.62%	8.32%	\$500.48	\$194,345.45	146	0.50%	0.57%
Mahnomen	5,519	13	\$5,022,900	4.18%	11.11%	\$910.11	\$386,376.92	54	1.40%	0.98%
Marshall	9,390	9	\$705,900	0.33%	3.75%	\$75.18	\$78,433.33	12	0.26%	0.13%
Martin	19,785	49	\$8,557,500	0.92%	7.46%	\$432.52	\$174,642.86	154	0.87%	0.78%
McLeod	35,873	82	\$30,880,500	2.14%	8.03%	\$860.83	\$376,591.46	331	1.01%	0.92%
Meeker	23,141	50	\$12,689,300	1.05%	7.26%	\$548.35	\$253,786.00	113	0.77%	0.49%
Mille Lacs	26,139	83	\$12,679,800	1.94%	12.35%	\$485.09	\$152,768.67	213	1.10%	0.81%
Morrison	33,169	90	\$27,199,300	3.55%	8.45%	\$820.02	\$302,214.44	256	1.18%	0.77%
Mower	40,011	75	\$9,106,400	1.00%	8.48%	\$227.60	\$121,418.67	182	0.55%	0.45%
Murray	8,276	14	\$1,998,700	0.41%	4.22%	\$241.51	\$142,764.29	28	0.46%	0.34%
Nicollet	34,220	50	\$15,026,700	1.69%	6.68%	\$439.12	\$300,534.00	165	0.54%	0.48%
Nobles	21,924	64	\$7,508,600	0.63%	10.92%	\$342.48	\$117,321.88	139	1.32%	0.63%
Norman	6,475	13	\$1,133,800	0.56%	6.53%	\$175.10	\$87,215.38	21	0.61%	0.32%
Olmsted	156,277	265	\$61,954,900	0.98%	7.41%	\$396.44	\$233,792.08	913	0.46%	0.58%
Otter Tail	58,812	185	\$24,021,700	0.87%	9.61%	\$408.45	\$129,847.03	380	0.83%	0.65%
Pennington	14,178	39	\$5,187,900	0.62%	10.37%	\$365.91	\$133,023.08	200	0.98%	1.41%
Pine	29,483	49	\$4,052,100	0.84%	6.49%	\$137.44	\$82,695.92	114	0.69%	0.39%
Pipestone	9,047	25	\$2,384,700	0.67%	7.81%	\$263.59	\$95,388.00	37	0.41%	0.41%
Polk	31,529	54	\$7,311,000	0.89%	7.28%	\$231.88	\$135,388.89	143	0.56%	0.45%

Pope	11,097	36	\$4,506,900	1.09%	9.86%	\$406.14	\$125,191.67	70	0.79%	0.63%
Ramsey	550,210	1,052	\$464,284,597	1.46%	8.72%	\$843.83	\$441,335.17	4,794	0.71%	0.87%
Red Lake	3,999	7	\$414,700	0.42%	6.09%	\$103.70	\$59,242.86	9	0.86%	0.23%
Redwood	15,249	50	\$11,333,800	0.95%	9.52%	\$743.25	\$226,676.00	186	1.52%	1.22%
Renville	14,612	22	\$4,095,100	0.85%	4.95%	\$280.26	\$186,140.91	43	0.34%	0.29%
Rice	66,523	142	\$35,526,700	1.37%	9.20%	\$534.05	\$250,188.03	359	0.72%	0.54%
Rock	9,414	32	\$5,075,100	1.57%	11.07%	\$539.10	\$158,596.88	84	1.16%	0.89%
Roseau	15,150	40	\$8,540,400	1.43%	8.73%	\$563.72	\$213,510.00	80	0.49%	0.53%
Scott	147,381	251	\$144,263,999	2.39%	7.84%	\$978.85	\$574,756.97	3,369	3.09%	2.29%
Sherburne	96,036	173	\$102,168,103	3.92%	7.89%	\$1,063.85	\$590,567.07	2,883	5.59%	3.00%
Sibley	15,028	36	\$3,665,600	0.58%	8.65%	\$243.92	\$101,822.22	57	0.61%	0.38%
St. Louis	199,754	417	\$110,349,300	1.37%	7.60%	\$552.43	\$264,626.62	3,940	1.99%	1.97%
Stearns	159,256	361	\$184,862,399	2.07%	8.05%	\$1,160.79	\$512,084.21	1,209	0.69%	0.76%
Steele	36,803	94	\$25,834,800	0.73%	9.27%	\$701.98	\$274,838.30	263	0.62%	0.71%
Stevens	9,753	28	\$2,487,900	0.68%	8.43%	\$255.09	\$88,853.57	52	0.46%	0.53%
Swift	9,345	21	\$8,775,000	1.42%	6.71%	\$939.00	\$417,857.14	74	0.99%	0.79%
Todd	24,582	47	\$3,098,400	0.37%	6.91%	\$126.04	\$65,923.40	81	1.23%	0.33%
Traverse	3,308	4	\$346,800	0.28%	2.90%	\$104.84	\$86,700.00	7	0.30%	0.21%
Wabasha	21,645	62	\$11,459,500	2.04%	8.71%	\$529.43	\$184,830.65	119	0.88%	0.55%
Wadena	13,773	34	\$3,602,300	0.51%	7.89%	\$261.55	\$105,950.00	66	0.61%	0.48%
Waseca	18,691	33	\$2,860,800	0.85%	7.27%	\$153.06	\$86,690.91	68	0.54%	0.36%
Washington	259,201	336	\$82,518,500	0.77%	5.99%	\$318.36	\$245,590.77	1,079	0.62%	0.42%
Watonwan	10,980	18	\$2,318,900	0.47%	6.32%	\$211.19	\$128,827.78	30	0.68%	0.27%
Wilkin	6,254	23	\$2,948,500	1.02%	15.13%	\$471.46	\$128,195.65	48	1.24%	0.77%

Winona	50,825	116	\$14,227,600	0.56%	9.16%	\$279.93	\$122,651.72	283	0.57%	0.56%
Wright	136,349	290	\$75,268,300	1.52%	8.52%	\$552.03	\$259,545.86	753	0.86%	0.55%
Yellow Medicine	9,795	22	\$4,076,500	1.04%	6.27%	\$416.18	\$185,295.45	67	0.81%	0.68%

Appendix F – Data Measures by County : Environmental

County	Population	Businesses - Reuse	GHG Emissions Avoided (metric tons)	Water Withdrawals Avoided (kGal)	GHG Emissions Avoided per Capita	Water Withdrawals Avoided per Capita
Subtotal: Greater Minnesota	2,512,172	5,790	780,832	15,296,183	0.31	6.09
Subtotal: 7-County Metro Area	3,099,007	4,841	1,990,325	52,554,997	0.64	16.96
MN Totals	5,611,179	10,631	2,771,157	67,851,180	0.49	12.09
Aitkin	15,902	46	24,760	417,526	1.56	26.26
Anoka	353,813	389	40,817	739,528	0.12	2.09
Becker	34,371	108	16,754	248,596	0.49	7.23
Beltrami	46,847	107	16,803	386,612	0.36	8.25
Benton	40,545	81	14,585	211,321	0.36	5.21
Big Stone	4,989	13	1,518	30,168	0.3	6.05
Blue Earth	67,427	163	55,392	1,428,807	0.82	21.19
Brown	25,111	65	4,006	95,054	0.16	3.79
Carlton	35,837	69	4,665	89,772	0.13	2.51
Carver	103,551	140	6,386	134,267	0.06	1.3
Cass	29,519	67	9,722	163,852	0.33	5.55
Chippewa	11,924	32	1,532	39,814	0.13	3.34
Chisago	55,922	138	51,395	889,303	0.92	15.9
Clay	63,955	99	17,912	316,000	0.28	4.94
Clearwater	8,810	23	4,196	56,281	0.48	6.39
Cook	5,393	13	428	11,678	0.08	2.17
Cottonwood	11,277	31	1,564	29,224	0.14	2.59
Crow Wing	64,889	231	20,501	394,332	0.32	6.08
Dakota	425,423	514	112,250	2,473,886	0.26	5.82
Dodge	20,822	41	2,395	43,586	0.12	2.09
Douglas	37,964	124	15,517	380,762	0.41	10.03

Faribault	13,758	44	1,575	35,588	0.11	2.59
Fillmore	21,058	47	3,029	61,244	0.14	2.91
Freeborn	30,444	67	7,423	145,931	0.24	4.79
Goodhue	46,403	142	20,785	342,301	0.45	7.38
Grant	6,021	11	314	4,046	0.05	0.67
Hennepin	1,259,428	2,159	1,533,095	42,493,512	1.22	33.74
Houston	18,578	44	938	21,669	0.05	1.17
Hubbard	21,332	48	8,223	226,859	0.39	10.63
Isanti	39,966	93	7,285	154,047	0.18	3.85
Itasca	45,108	100	19,084	392,353	0.42	8.7
Jackson	9,911	17	1,532	29,248	0.15	2.95
Kanabec	16,207	40	2,174	38,510	0.13	2.38
Kandiyohi	42,855	103	30,408	523,152	0.71	12.21
Kittson	4,248	5	72	1,081	0.02	0.25
Koochiching	12,440	31	3,985	84,765	0.32	6.81
Lac qui Parle	6,658	14	385	6,614	0.06	0.99
Lake	10,658	27	2,026	40,353	0.19	3.79
Lake of the Woods	3,758	14	672	12,412	0.18	3.3
Le Sueur	28,494	94	5,618	127,142	0.2	4.46
Lincoln	5,673	15	492	12,809	0.09	2.26
Lyon	25,629	66	5,076	98,476	0.2	3.84
Mahnomen	5,519	13	1,851	21,566	0.34	3.91
Marshall	9,390	9	272	3,817	0.03	0.41
Martin	19,785	49	4,079	72,675	0.21	3.67
McLeod	35,873	82	15,300	411,522	0.43	11.47
Meeker	23,141	50	4,592	68,845	0.2	2.98
Mille Lacs	26,139	83	5,832	106,995	0.22	4.09
Morrison	33,169	90	13,631	277,950	0.41	8.38
Mower	40,011	75	4,256	103,781	0.11	2.59

Murray	8,276	14	904	14,652	0.11	1.77
Nicollet	34,220	50	7,399	184,543	0.22	5.39
Nobles	21,924	64	3,178	67,381	0.14	3.07
Norman	6,475	13	348	6,623	0.05	1.02
Olmsted	156,277	265	29,428	580,467	0.19	3.71
Otter Tail	58,812	185	10,934	220,083	0.19	3.74
Pennington	14,178	39	2,413	45,465	0.17	3.21
Pine	29,483	49	1,678	31,872	0.06	1.08
Pipestone	9,047	25	892	17,143	0.1	1.89
Polk	31,529	54	3,154	63,658	0.1	2.02
Pope	11,097	36	1,562	28,572	0.14	2.57
Ramsey	550,210	1,052	191,168	4,656,603	0.35	8.46
Red Lake	3,999	7	182	3,337	0.05	0.83
Redwood	15,249	50	3,535	55,931	0.23	3.67
Renville	14,612	22	1,860	29,850	0.13	2.04
Rice	66,523	142	17,110	383,366	0.26	5.76
Rock	9,414	32	2,379	51,798	0.25	5.5
Roseau	15,150	40	3,940	73,094	0.26	4.82
Scott	147,381	251	67,241	1,196,132	0.46	8.12
Sherburne	96,036	173	48,981	840,464	0.51	8.75
Sibley	15,028	36	1,447	25,573	0.1	1.7
St. Louis	199,754	417	49,294	933,874	0.25	4.68
Stearns	159,256	361	87,933	1,656,792	0.55	10.4
Steele	36,803	94	12,617	228,487	0.34	6.21
Stevens	9,753	28	954	17,875	0.1	1.83
Swift	9,345	21	3,097	33,217	0.33	3.55
Todd	24,582	47	1,377	29,674	0.06	1.21
Traverse	3,308	4	135	2,430	0.04	0.73
Wabasha	21,645	62	5,249	89,776	0.24	4.15

Wadena	13,773	34	1,127	21,749	0.08	1.58
Waseca	18,691	33	1,199	26,252	0.06	1.4
Washington	259,201	336	39,368	861,069	0.15	3.32
Watonwan	10,980	18	1,142	20,997	0.1	1.91
Wilkin	6,254	23	1,055	16,052	0.17	2.57
Winona	50,825	116	5,994	145,076	0.12	2.85
Wright	136,349	290	32,369	670,434	0.24	4.92
Yellow Medicine	9,795	22	1,412	21,187	0.14	2.16

Appendix G – Impact Marketing Guide for Reuse Businesses

The Impact Marketing Guide for Reuse Businesses is also available to download at impact.reusemn.org.

REUSE MINNESOTA

Impact Marketing Guide for Reuse Businesses

ReUSE Minnesota's Impact Survey, launched in February 2020, started to get business owners in Minnesota's reuse, rental, and repair community thinking about how to measure their impact on the environment, as well as their local economy and community. This guide offers suggestions for using the survey results in your own business' marketing and promotions.

Storylines

These broad storylines encapsulate the key findings identified in the survey report. Use them in your marketing messaging to compete with the single use mindset. By emphasizing the impact your business makes, you will promote your own business effectively, while supporting the broader reuse movement in Minnesota.

- **Environmental Impact Storyline:**
Reuse businesses are contributing in a positive way to local and state environmental challenges, reducing greenhouse gas emissions and water usage involved in manufacturing new finished goods.
- **Economic Impact Storyline:**
Reuse businesses strengthen the local and state economy (specifically in overall revenue and job creation) which is growing as the reuse movement grows.
- **Social Impact Storyline:**
Reuse businesses contribute to the community by improving the lives of individuals who engage with them. By providing opportunities for employment, skill development, and community identity, and removing barriers of cost and accessibility, reuse empowers people to have life-changing experiences they would otherwise be unable to have.

Strategic Messaging Formula

Whether you're posting to social media, writing a blog post, or connecting over email, use this formula to fortify your messaging.

1. **Identify your marketing goal**
What are you trying to accomplish? Are you looking to increase social media following, increase online sales, ask for direct feedback, or simply generate awareness about your business?
2. **Choose your impact storyline (environmental, economic, or social)**
Consider your audience, any current events that would make your message particularly relevant, and the ultimate goal of what you're trying to communicate.
3. **Use the Impact Report to back up your statement with data**
Find the corresponding section of the report and search for data using the interactive map for environmental and economic data points or the social impact storytelling section for anecdotes.
4. **Craft your message**
Start with the storyline, add facts or data that back up your statement, then add a call to action that speaks directly to your marketing goal.

Strategic messaging example:

1. **Identify your marketing goal**
My business is a secondhand clothing store. I want people to read my new blog post that encourages donations and shows how people can donate.
2. **Choose your impact storyline (environmental, economic, or social)**

During the stay-at-home order in Minnesota in spring 2020, people in town talked a lot about pictures of dramatically cleaner air over major cities. I want to reinforce our environmental impact: Reuse businesses are contributing in a positive way to local and state environmental challenges, specifically Greenhouse Gas Emissions and Water Consumption.

3. Use the Impact Report to back up your statement with data

The survey of ReUSE Minnesota members indicates that over 80% of resale businesses accept donations.

4. Craft your message

Did you know reuse businesses contribute in a positive way to a cleaner environment? By finding new homes for donated items you no longer need or use, reuse businesses divert those materials from landfills and recycling, and avoid all the environmental burden of manufacturing and shipping new items. A recent survey of ReUSE Minnesota businesses indicates that over 80% of resale businesses accept donations...and we do too! Read more on our blog to learn more about our donation program and how you can become a part of this positive environmental impact on our local and state.

Marketing Tips & Tricks

Don't get overwhelmed by the possibilities! Marketing isn't rocket science, and you don't have to tell every compelling part of your story in each message. Here are a few tips and tricks to help you stay consistent with your marketing, specifically when communicating the impact of your reuse business.

- **Tools**
Use what you have! Fundamental, low-cost marketing tools (website, organic social media, and email) are your best friend if you have limited resources. Think creatively about how you can start integrating impact messaging across these platforms.
- **Frequency**
Consistency is key. Make a commitment to post to social media three times a week or send an email weekly or monthly on a consistent schedule. Your audience will start to expect the content and respond to it.
- **Tone**
Your brand should have a voice or tone that helps you communicate to the world. Take a moment to think about how you are currently portraying the business and how you want it to be perceived. Example: If your zero-waste brand is about simplicity, don't use big words or complicated sentence structure.
- **Call to Action**
Marketing is all about creating action, so what do you want your audience to do? Whether it's a comment, reshare, click, or buy, always have a strong, simple call to action with your marketing.



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