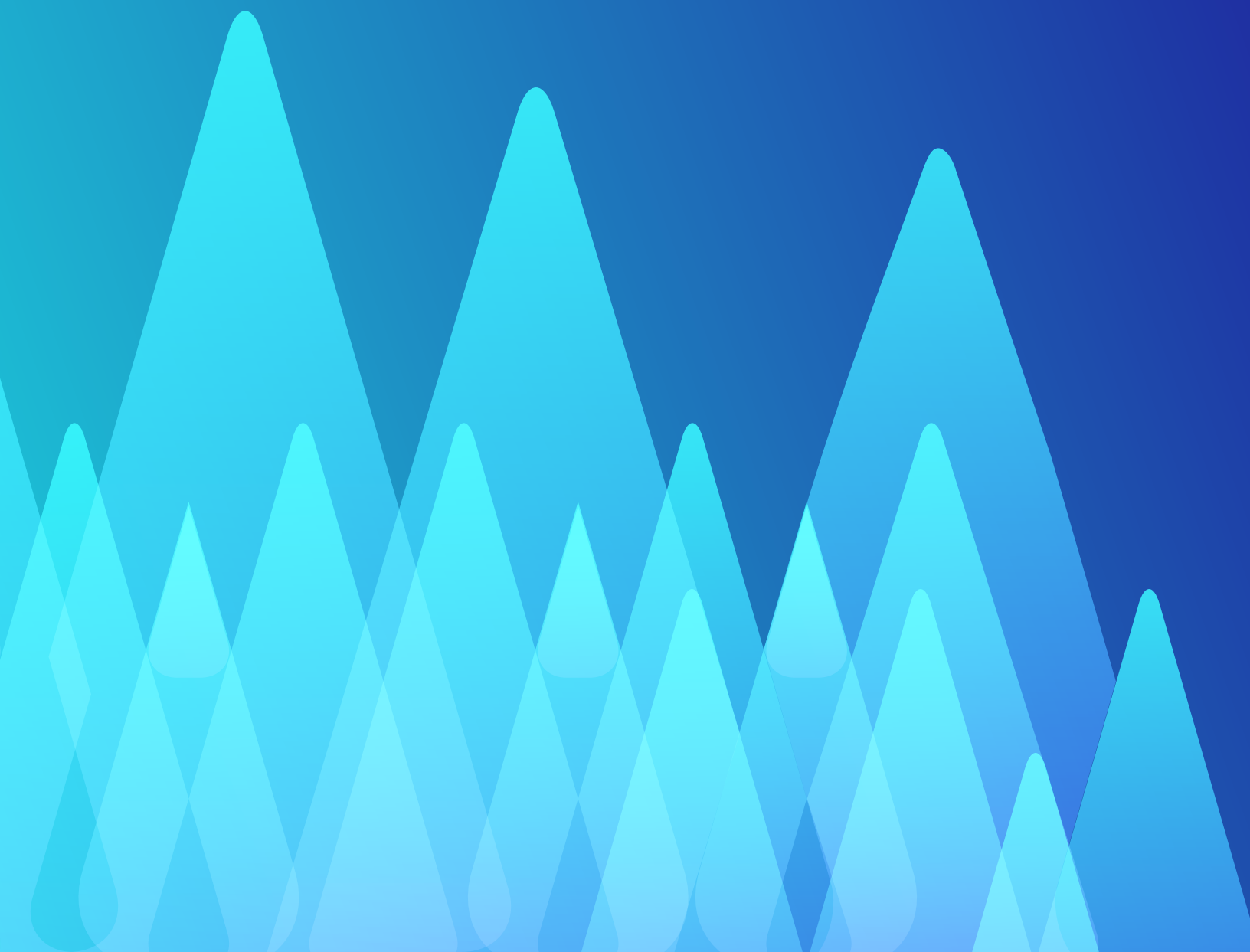


# The State of Online Grocery Shopping 2022: This Holiday & Beyond





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PHONONIC

## The State of Online Grocery Shopping in 2022

Grocery shopping has seen a major shift over the last two and a half years. Since March 2020 online grocery ordering and delivery — a trend once adopted by a very niche demographic and percentage of people — has now become the new way of shopping for many individuals and families. Now, with many (or all) having settled into their post-pandemic lives, there is a shifting tide when it comes to how Americans are shopping for groceries.

For a better understanding of consumers' and retailers' attitudes towards groceries, Phononic surveyed more than 1,200 U.S. consumers and grocery retailers to learn more about their needs and concerns around grocery shopping. The results show a rapidly evolving landscape in grocery ecommerce and fulfillment, highlighting consumer trust issues, food safety, inflation and sustainability.

PHONONIC SURVEYED

1,200

U.S. consumers and grocery retailers to learn more about their needs and concerns around grocery shopping.



Online grocery ordering and delivery has now become the new way of shopping.

Just over 50% of US consumers have returned to in-store shopping year-round. During the busier holiday season, however, that figure increases: 70% of consumers surveyed expect to go in store for their holiday meal and or holiday party groceries.







**7 out of 10 consumers**  
would order more fresh and or frozen food  
if they felt confident that these foods would  
arrive still fresh and or frozen.

## Inside the Mindset of Grocery Shoppers & Retailers



Just over 50% of U.S. consumers have returned to in-store shopping year-round. However, that figure increases for shopping during the busy holiday season: 70% of consumers surveyed expect to go in-store for their holiday meal and/or holiday party groceries. The same number of consumers — 7 in 10 — stated that they would order more fresh and/or frozen food with their grocery delivery if they felt confident that these foods would arrive still fresh and/or frozen. **These findings show that — especially when it comes to the year’s most memorable meals — consumers have yet to fully trust retailers to deliver their most important fresh and/or frozen ingredients.**

Retailers seem to agree with them: 89% of those surveyed admit that they are concerned about keeping their food fresh and/or frozen at curbside pick-up and delivery over the critical holiday season and beyond, further acknowledging a lack of equipment and cold chain technology needed to address this problem.

Despite these findings, 84% of retailers expect their online grocery operations to increase in the next year. This is likely due to the high demand for delivery and pick-up amongst two of the largest **resident populations in the U.S.:** Millennials and Gen Z. Although Baby Boomers and Gen X may currently be driving in-store shopping [83% and 79%, respectively], it’s likely that retailers anticipate that the online grocery delivery and curbside pick-up trend will continue to expand along with the **continued growth** of the younger generations.

25%

**of consumers will order online and have groceries delivered or use curbside pick-up for holiday meals and parties this season.**

## Consumer Trust is Lacking



Whether shopping in-store or ordering online, consumers care deeply about food quality and freshness, speed of delivery, and sustainability.

The holidays are a time when many create some of the year’s most memorable meals to share with family and/or friends. The survey showed that most consumers (including those who do continue to use online grocery shopping or curbside delivery at other times of the year) will get most of their groceries for holiday meals and/or holiday parties in-store. This decision is likely made to avoid the possibility of error for these special occasions, hinting consumers don’t quite have full trust in the retailers to deliver the desired items — specifically fresh and/or frozen ingredients — in a fresh, timely and efficient manner.

Most retailers agree, admitting they are concerned about keeping their curbside pick-up food fresh and/or frozen while waiting for pick-up this holiday season. In fact, 84% of them acknowledge a lack of equipment and tech needed to address this problem and see the clear need to provide this for customers.



89%

**of retailers are concerned about keeping their food fresh/ frozen at curbside pick-up and delivery over the critical holiday season and beyond.**





NEARLY  
60%

of retailers said they need to be able to better put produce, meat, dairy, and frozen items in cold boxes while shopping.

Food Safety is Top of Mind

An astounding 85% of retailers worry about keeping food safe for online delivery and curbside pick-up customers this holiday season, specifically.

Nearly 60% of retailers said they need to be able to better put produce, meat, dairy, and frozen items in cold boxes while shopping, to be able to satisfy that customer concern of refrigerated and/or frozen items spoiling before reaching their destination to a home. To resolve this worry, cold chain technology and/or fulfillment are at the top of the renovation list for retailers, with 67% of them planning to spend between \$500K - \$1.5M on this category in 2023.

Inflation is a Continuing Concern

During this time of economic uncertainty, retailers are focused on how they can continue to best provide for their customers. Two things are top-of-mind for them as we head into the holidays. Staffing concerns plague 88% of retailers as they assess all departments including management of curbside pickup and delivery. Additionally, 53% of retailers are very concerned about keeping shelves stocked and being able to keep prices where they are and not having to raise them due to inflation.

For many customers, nearly half, rising prices are a factor that steers them to grocery shopping online more, as they are better able to compare costs. Even more, 67%, say shopping for groceries online keeps them from impulse buys in-store, which of course adds to the end cost.

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46%

of U.S. consumers use online grocery shopping and delivery.



84%

OF RETAILERS

expect their online grocery operations to increase over the next year.



Online grocery delivery and curbside pickup will continue to expand as Millennials and Gen Z drive growth, leading to increased demand for innovative cooling technology.



THIS HOLIDAY SEASON

85%

of retailers worry about keeping chilled and frozen food safe for online delivery and curbside pick-up customers.

Keeping It Fresh and Frozen with Solid State Cooling Technology



## Sustainability



Sustainability is a hot topic across the board, and in the world of grocery ecommerce and fulfillment, it is no different. It's also a cornerstone on which consumers and retailers agree a great deal. 70% of consumers say they consider sustainability, such as delivery, when it comes to groceries and grocery shopping. Nearly 100% of retailers agree, saying that, as an industry, they need to come up with better sustainability initiatives beyond packaging. However, even as retailers review their operations on a regular basis, they just aren't sure what that something is.



### Reconsider How You Cool

Moving beyond heavy loads of ice and gel packs, cooling can now be achieved via a tiny thermoelectric chip. Implementing a solid state cooling solution such as **Phononic's Active-Cooled Tote** can help make grocery delivery more cost effective, quicker and maintain the ideal temperature across various ranges while also helping retailers meet sustainability goals.

NEARLY

100%



70%

of retailers say they need to come up with better sustainability initiatives beyond packaging.

of consumers say they consider sustainability, such as delivery when it comes to groceries.

## Reducing Toxic Refrigerants

Lowering Global Warming Potential [GWP] refrigerants, like propane, is not enough to stop climate change. Exploring a **solid state technology cooling solution with an environmentally-friendly refrigerant** can not only replace harmful refrigerants in everyday items used for heating and cooling, but it can ease damage caused to the environment by leaked refrigerants which is set to contribute as much to global CO<sub>2</sub> emissions as vehicles by 2045. Phononic's Actively-Cooled Tote platform and solution uses naturally-occurring CO<sub>2</sub> and water as its refrigerant, providing a non-toxic, low carbon footprint option for retailers and their cold chain partners.

GWP<1

Phononic's solid-state solution uses only CO<sub>2</sub> and water, delivering a Global Warming Potential of one or less.



## Revolutionize Delivery

With online grocery ordering here to stay, we need long-term solutions that move the needle towards a more sustainable model. Beyond temperature-controlled storage and totes, we need retailers to take it a step further and consider the last-mile of the cold chain. The emergence of **temperature-controlled last-mile delivery vehicles** will push retailers into the next realm of sustainability and helps grocers enhance their last mile delivery fleet in a sustainable way, offering access to same-day deliveries while driving a strong ROI with enhanced customer loyalty and increased levels of sustainability.





# Looking Ahead: The Future of Online Grocery Shopping



With cold chain technology slated to be a multimillion-dollar investment for nearly a third of retailers surveyed over the coming year, identifying more sustainable solutions such as solid state cooling technology can offer game-changing results for both retailers and consumers.

Retailers that can tackle customer concerns while considering a sustainable way to do so, will claim — and keep — their stake in this fast-evolving sector of the industry while also helping consumers feel a much greater trust in the quality of their fresh and frozen food. Finally, implementing solid state cooling solutions such as Phononic’s Actively-Cooled Tote and platform has the potential to revolutionize the industry — delivering a much higher ROI for retailers and ultimately helping consumers feel a much greater trust in the quality of their fresh and frozen food.



## Features and Benefits

- Improved customer experience
- Strong ROI
- Unsurpassed sustainability
- Flexible
- Compressor-free
- Versatile
- Scalable
- Real-time insights
- Demand-based energy savings



Phononic’s Intelligent, Actively-Cooled Freezer and Refrigerator Totes provide the perfect temperature to maintain frozen and refrigerated orders for grocery retail’s curbside operations, transport and delivery, as well as micro-fulfillment centers [MFCs]. Maintaining cold chain integrity throughout the entire process, the tote and platform offer unmatched ROI, sustainability, and flexibility for your grocery e-commerce operations.



**About Phononic:** As the global leader in solid state cooling technology, Phononic is driving the world to a more sustainable way to cool. Its transformational technology reduces greenhouse gas (GhG) emissions and supports climate goals, while meeting the demanding performance needs of the market. The company's thermoelectric devices and integrated products are mission critical to how people work and communicate; automobiles 'see'; the protection and effective delivery of life-saving vaccines and drugs; last mile solutions supporting e-commerce; and innovative methods to cool living and workspaces.

Learn more at: [www.phononic.com](http://www.phononic.com)