

Demand Update & Role of Financial Sentiment

Executive Summary

In February 2020, the Meat Demand Monitor (MDM) project was launched collecting data from over 2,000 U.S. consumers each month. The MDM project is funded in-part by the beef and pork checkoffs and tracks U.S. consumer preferences, views, and demand for meat with separate analysis for retail and food service channels.¹

In this report, an update on domestic meat demand is provided with additional insight on the role of changes in financial sentiment.

Key insights include:

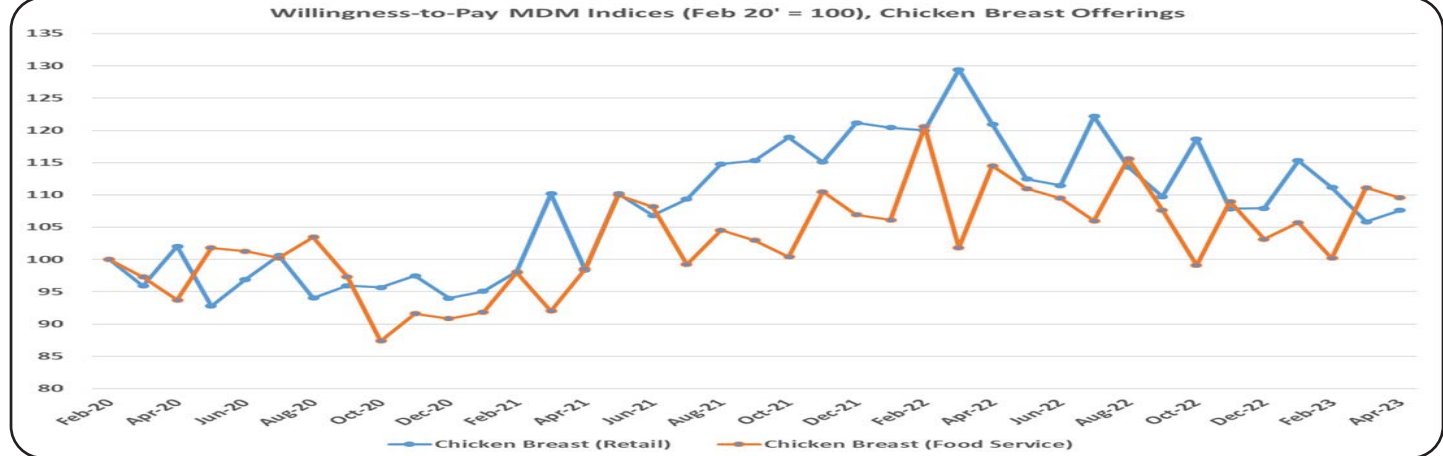
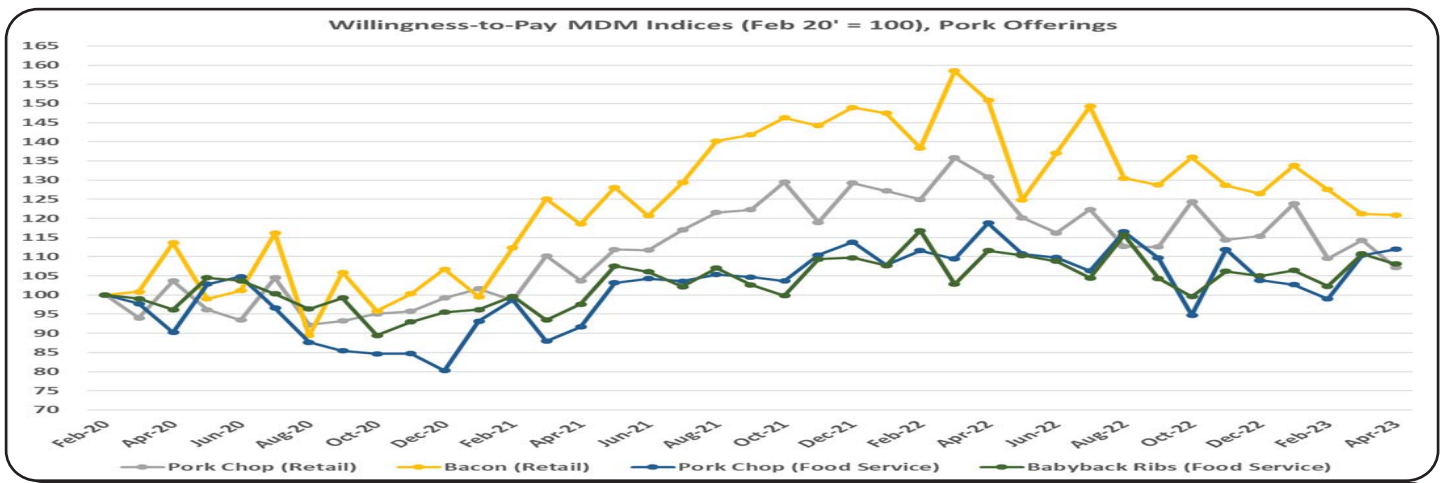
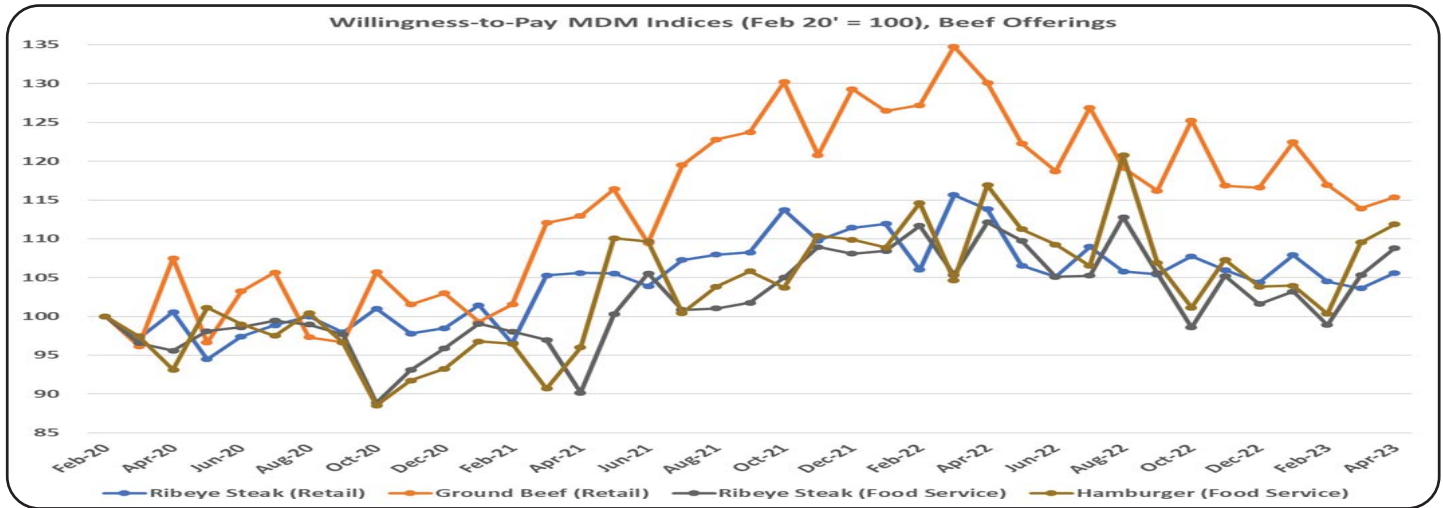
- Both retail (grocery) and food service (restaurant) meat demand peaked during the middle of 2022 and has declined by April 2023. While this decline is notable, April 2023 domestic meat demand remains above the base period of February 2020 when the MDM project was launched.
- Increased pessimism in household finances for many residents aligns with lower buying power (weaker median earnings adjusted for inflation) and declining household savings.
- Reduced financial sentiment directly aligns with altered meat consumption and demand. Those indicating their household finances have improved sustain much higher meat protein meal inclusion rates and overall meat demand.
- While the meat industry is unable to directly impact macroeconomic conditions and hence household finances, it can take note of the relative role of price in protein purchasing decisions and use ongoing MDM insights to further inform their efforts.

The foregoing provides additional details on the above summary of findings.

Domestic Meat Demand Trends

Willingness-to-pay (WTP) for eight different items and meals was calculated, separately for retail (grocery, at-home) and food service (dinner meal at a restaurant, away-from-home) channels, and reported for the representative survey respondent each month in short base reports. Looking back at these values, 2022 peaks in domestic meat demand are readily identified.

The following three figures present WTP estimates for examined beef, pork, and chicken products/meals, as index values relative to Feb. 2020. As an example, the retail WTP index for ground beef peaked at 135 in March 2022 meaning retail demand was 35% stronger in March 2022 than in February 2020. Meanwhile, the April 2023 ground beef demand index was 115 indicating notable demand decline since the March 2022 peak yet demand remaining above February 2020 levels. Looking across the evaluated beef, pork, and chicken products domestic demand peaked in each case in 2022 and similar declines across proteins has occurred in 2023 so far.



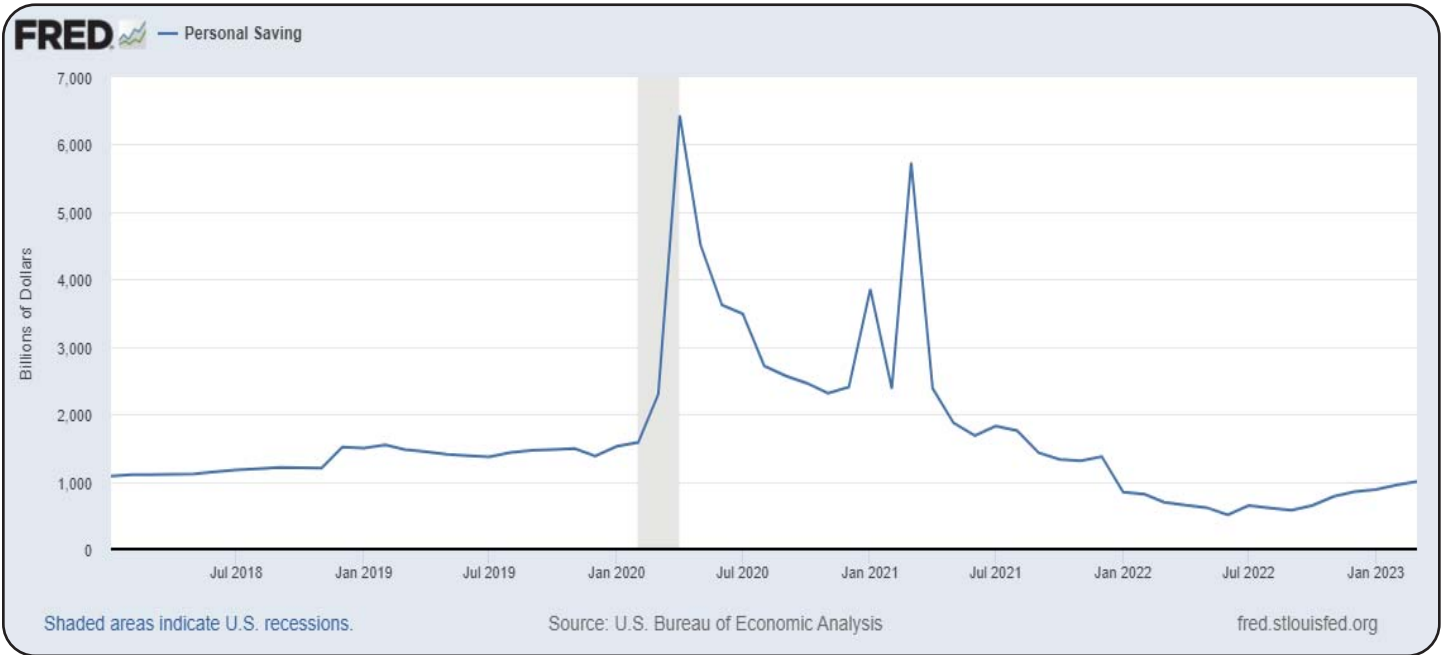
The point above on MDM based domestic retail and food service demand declining for beef, pork, and chicken is consistent with other domestic meat demand indices maintained at Kansas State University based on per capita consumption (disappearance) and other USDA based information.² Those indices indicate domestic beef demand peaked in March 2022, pork demand peaked in March 2022, and chicken demand peaked in August 2022 with demand for all three proteins in March 2023 being 10% or more below those peak levels.

This cross-validation using alternative data sources and methods is noted to reinforce the MDM based insights above on domestic meat demand peaking in 2022 and declining early in 2023 with this being a common story across all three major meat proteins. This also begs the question of what may have changed leading to an across the board decline in domestic meat demand. It is my opinion macroeconomic forces are a primary factor.

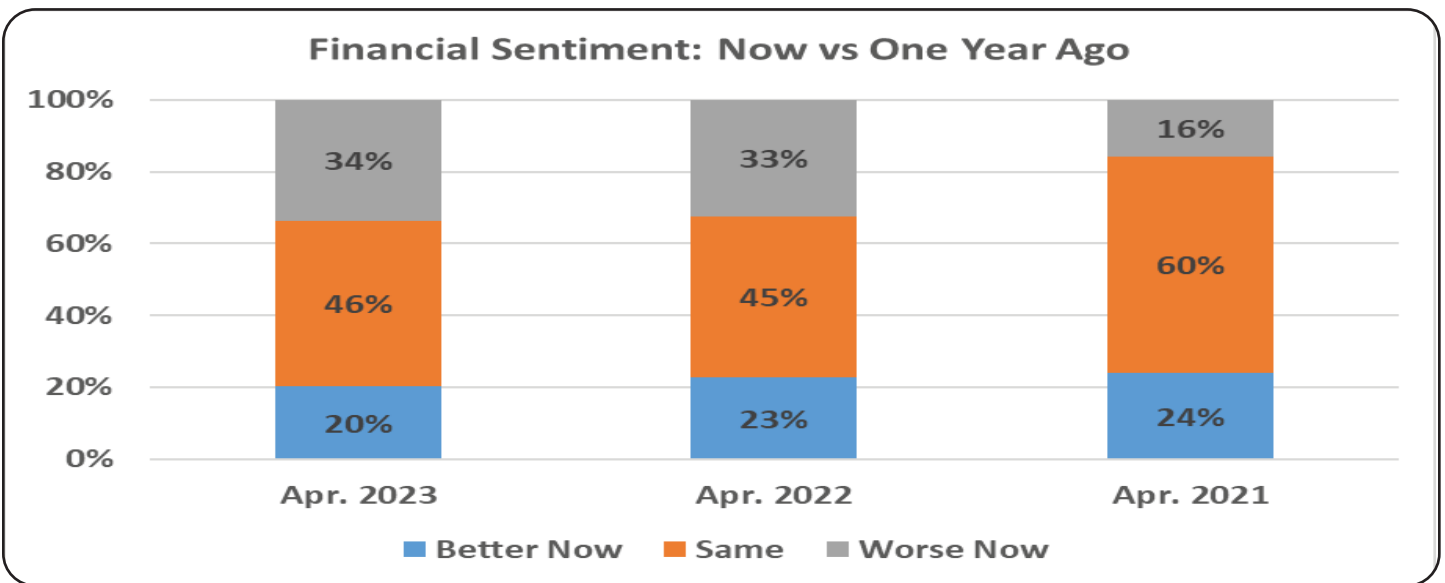
Macroeconomic Patterns & Resident Financial Sentiment

The next two figures are Federal Reserve’s economic research resources indicating how median real wages and aggregate household savings have changed over the last 5+ years. Median real (earnings adjusted for inflation) weekly earnings were rising in the two years preceding the pandemic, peaked in the 2nd quarter of 2020, and were notably lower by the 1st quarter of 2023. Similarly, aggregate household savings went from about 1.5 trillion dollars in January 2020 to a peak of nearly 6.5 trillion dollars in April 2020 before hitting a recent low of about 500 billion in June 2022.





Not surprisingly, these broad macroeconomic trends align with declining financial sentiment of U.S. residents. Evidence of declining sentiment is found in the Meat Demand Monitor as highlighted in the Ad Hoc section of the December 2022 and April 2023 base monthly reports. In April 2023, compared to both April 2022 and 2021, fewer respondents indicated their current financial situation was better than one year earlier and more indicated their situation was worse now.



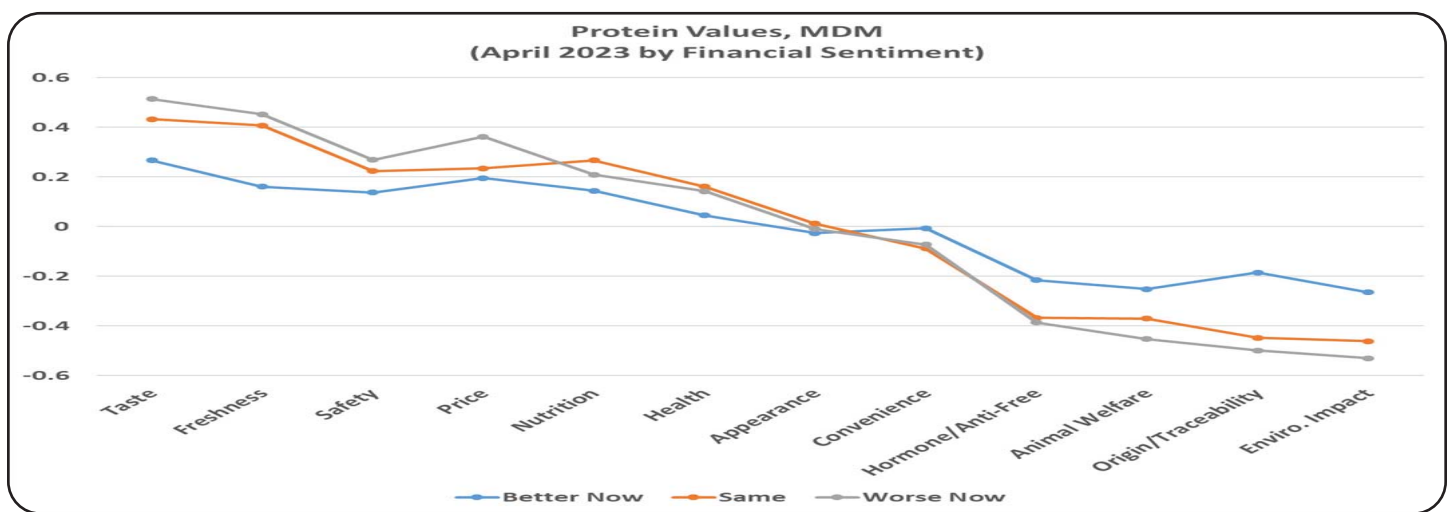
To see the impact of declining financial sentiment on the domestic meat market we can leverage MDM recall data. Narrowly, each survey respondent answers questions regarding their prior day meals revealing what protein (if any) was included in prior day breakfast, lunch, and dinner meals. Corresponding beef and pork meal inclusion rates are reported in each month's base MDM report. Here we use April 2023 as the most recently available MDM data to illustrate how consumption (as approximated by meal inclusion rates) differs among those saying their household financial situation has improved from last year vs. those indicating the same or worse situation applies. For each major protein/species summarized in the following figure, we observe notably higher rates of protein meal inclusion for those indicating improved finances. While this is not surprising, it is important to note and likely underpins notable heterogeneity in price sensitivity and overall meat demand.

Protein Inclusion in Prior Day Meals, by Species and Financial Sentiment (April 2023 MDM)			
	Better Now	Same	Worse Now
Beef	90.7%	66.5%	63.3%
Pork	60.7%	45.7%	44.9%
Chicken	95.5%	76.4%	68.3%
Fish/Seafood	57.9%	29.8%	23.9%

Going deeper, the same sequence of MDM recall questions provide narrower insight at the cut/product level for key beef and pork items. The following figure summarizes how beef steak, ground beef/hamburger, beef roast, bacon, pork chops, and pork sausage are all included in prior day meals at higher rates for households with improving finances. The difference between households with improving vs eroding finances is most stark for beef steak; a point not surprising given expected differences in wealth/income effects across products.

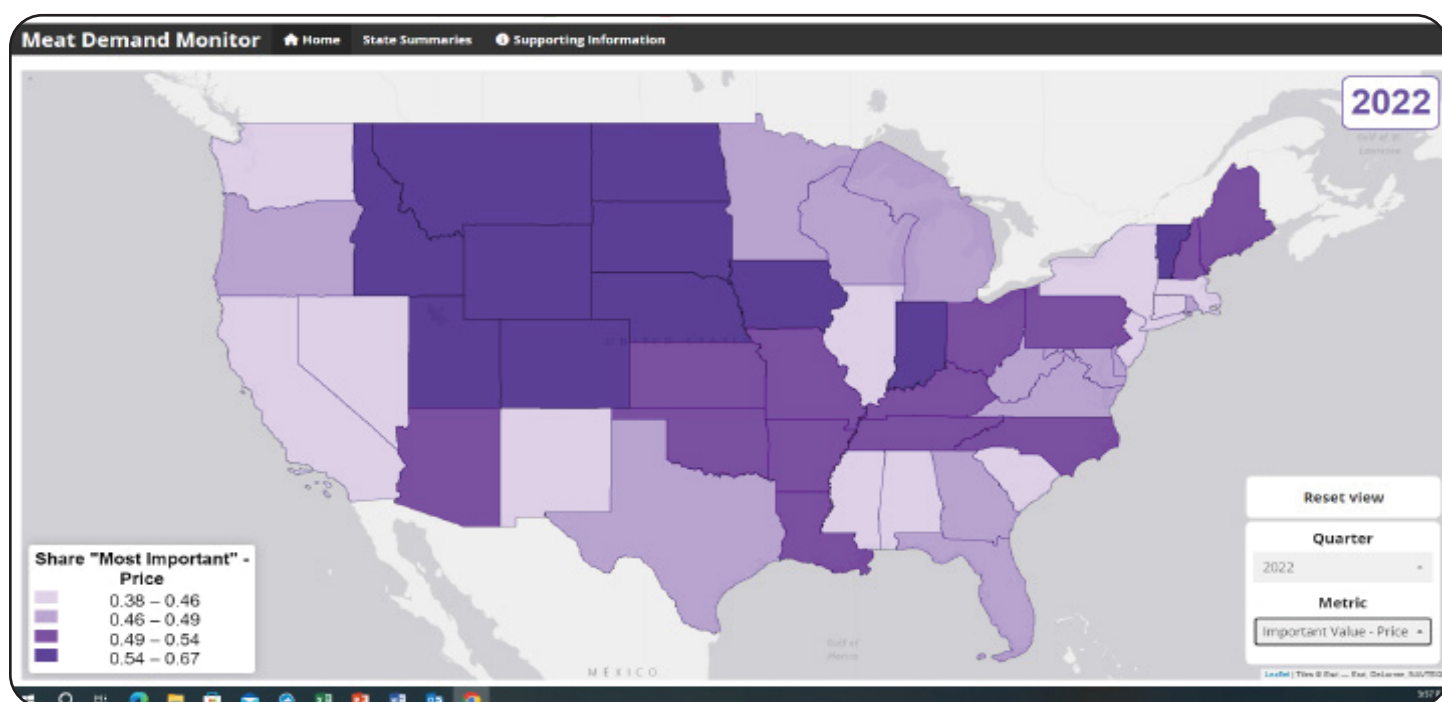
Frequency Indicating They Never Purchased or Cannot Remember Last Purchase, by Product and Financial Sentiment (April 2023 MDM)			
	Better Now	Same	Worse Now
Steak	11.9%	23.0%	23.0%
Ground Beef/Hamburger	6.8%	10.3%	11.1%
Roast	18.5%	34.3%	37.8%
Bacon	11.2%	17.0%	15.2%
Pork Chops	16.9%	23.8%	22.5%
Sausage	12.1%	20.9%	21.4%

A challenge for the meat industry here is broader macroeconomic forces are a key driver of reduced meat demand yet is a factor beyond their ability to influence. While certainly frustrating, it is nonetheless valuable to accurately appreciate the situation. Subsequently, the industry can further assess implications and adjust accordingly. Here it is worth providing an additional finding to help the industry in such adjustment efforts. Every MDM respondent completes a best-worst question sequence where they are presented a list of 12 factors and are asked to identify both the four most important and four least important factors that influence their protein purchasing decisions. Aggregate response data is summarized in each month's base report as Protein Values. Here we summarize April 2023 Protein Values separately by financial sentiment cohort. As shown in the following figure, Price is a top consideration among all three cohorts (a facet that has held every month since MDM launched).



What is important here is to appreciate how much “flatter” the Protein Values line is for those indicating their current finances are better than last year vs. the “steeper” lines for those indicating similar or worse finances. Since these Protein Values are forced-rank in nature (e.g. one can't say all 12 presented factors are important), the relative scores convey willingness to trade-off factors/attributes. Accordingly the ~80% who indicate their finances are the same or worse than last year are much less willing to pay a higher price for claims around Environmental Impact, Animal Welfare, or other considerations than residents indicating their finances have improved. While residents with improving finances may present niche market opportunities, observing the majority have elevated price sensitivity aligns with the preceding broader macroeconomic points shared and can be noted by the industry as it navigates the current market environment.

While the above noted differences in Price importance reflect distinctions in household financial sentiment, there certainly are other drivers of differences in price sensitivity. One area of ongoing difference is geographic, point of residency. Narrowly, MDM data frequently finds residents in coastal states to place lower relative weight on Price in their protein purchasing decisions than those in Rocky Mountain and Central states. The last figure presented here shows this using 2022 MDM data. While this masks variation within each U.S. state, it is included both to highlight a data visualization tool recently added to the MDM project (thanks to Justin Bina, current PhD student who built this) and to provide an additional resource as the industry attempts to understand diversity in price sensitivity among U.S. consumers.³



Endnotes

- 1) MDM project details including survey instruments and individual monthly reports are available here: <https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data>
- 2) These domestic meat demand indices are available here: <https://www.agmanager.info/livestock-meat/meat-demand/monthly-domestic-meat-demand-indices-usdabls-data>
- 3) This and many other visual MDM data summaries are available here: <https://ksumeatdemandmonitor.shinyapps.io/MDMapp/>

Additional MDM Project details including survey questions, past report releases, and a description of methods are available online at:
<https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data>

The MDM Project is funded in-part by the beef checkoff and the pork checkoff.



**Funded in part by
the Beef Checkoff.**

