The Southeast dairy industry has been in decline for decades, but the rate of attrition has accelerated in recent years, impacting both dairy producers and processors. In 2021, five older dairy bottling plants in the region shut their doors, which could prompt additional farm consolidation. This is a challenge for the area, and it could eventually result in more milk and dairy products being shipped in from long distances as investments in extended shelf-life products designed to service the Southeast expand in surrounding milk marketing areas. The pandemic highlighted domestic supply chain weaknesses and lack of investment, both of which have created challenges regarding transporting products to market — something that could worsen or become more routine if the local dairy industry were to wither further. In addition, retail dairy product costs could increase substantially if North Carolina must rely on bringing in dairy products to fill the vacuum created by a dwindling local market.

Throughout the world, governments protect and promote local milk and dairy production. Dairy is a good source of protein, nutrients, and vitamins vital to daily nutrition. Most nations seek to have a robust and diversified dairy market to temper reliance on imports and to provide a market for local processors. While national in scope, these are lessons the Southeast could readily learn and apply to maintain a balance between local milk and dairy products with those brought in from other states. Not only is dairy important for constituents' diets, but dairy and related processing also provide substantial economic returns to a local market. The International Dairy Foods Association (IDFA) estimates the nationwide impact of the industry at $753 billion in 2020, representing 3.3 million jobs and accounting for 3.5% of gross domestic product (GDP). Therefore, a diversified and healthy local dairy industry is vital for all regions of the United States, which highlights the concern in the Southeast, where indicators suggest an industry in decay and one susceptible to irreversible decline.

Second, only to Florida, the Southeast processes nearly three out of four pounds of milk into a gallon jug. Interestingly, almost 100 years ago, when the government introduced the federal milk marketing order (FMMO) system, most Americans consumed milk in a glass with all other milk uses accounting for only 25% of the nation's supply. Over the last century, U.S. consumption patterns have flipped. Today, more than 50% of milk heads to cheese and whey, 20% to milk powder and butter, and 6-7% to yogurt leaving bottled milk at less than 20%, a share that is dropping. Each year, people drink less milk and consume less milk with cereal. Consumers are also migrating away from high-temperature-short-time (HTST) gallons and half-gallon to products with characteristics like lactose-free, higher protein, ultra-pasteurized and aseptic. The pandemic temporarily reversed this slow and continuous descent, but last year, declines accelerated returning to trend swiftly. Annually, the Northeast and California FMMOs each bottle more milk than the Appalachian and Southeast FMMOs combined; milk supplies in the Northeast and California continue to expand while the Southeast experiences yearly losses in processing plants, farms, cows, and milk supplies. Unlike southern states, the Northeast and California diversified by investing in yogurt, cheese, butter, and powder production; bottled milk comprised 30.6% and 22.3% in 2020 for the Northeast and California, respectively. In the Southeast, lack of processing asset diversification has been primarily responsible for recent industry falloff relative to the rest of the nation. While lack of diversification has been a main reason for the decline, other issues suggest North Carolina and surrounding states will need to tackle several problems, including farm practices, investment, milk assembly costs, balancing, and policy to reverse current trends. A considerable endeavor that will require stakeholders to create consensus, buy-in, and cooperation throughout the supply chain.

North Carolina and surrounding states have a large percentage of small dairies that tend to have high average operating costs per pound of milk produced — whether due to lower output per cow, on-farm

practices, seasonality, or distance to market; some of those higher costs and inefficiencies have spilled into the Southeast milk assembly costs. USDA has documented considerable cost disadvantages of small dairy operations. These cost disadvantages have resulted in a consolidation of this farm-size category and the migration of cows to larger dairies. However, opportunities exist to reduce the seasonality of milk production and the cost of milk assembly, which could benefit the entire region. Improvements within the small-farm category, along with creating expansion opportunities for mid-to-large-sized dairies, could promote more milk production from the region and help reduce reliance on milk from outside the area. While this is not the only area of focus for the Southeast dairy industry, streamlining operations and controlling costs should be included as methods to make the region more competitive. Attempting to increase milk prices without addressing inefficiency in the existing supply chain could be fruitless and ultimately yield little benefit. Despite efforts to improve on-farm margin opportunities, for some operations, it may provide little relief, requiring local government intervention to maintain these businesses, a shift toward vertical integration or exit.

Regulation is far from a silver bullet for the Southeast dairy industry. Still, there should be some recognition that the current system may unintentionally create economic disadvantages compared to other FMMOs due to one-off changes and stale-dated information. While the FMMO regulatory construct and framework functions as designed, the system is hobbled with static data that have become increasingly outdated and unrelated to the current operating environments and this could adversely be impacting dairy producers and processors in the region. Data driving decision-making, investment, and returns within the FMMO should be revisited as it has been years, if not decades since the last review. In most instances, change to the existing FMMO rules will require a national hearing process. The federal hearing process is deliberate and requires consensus, which helps avoid the pitfalls of legislative solutions that can come with unintended consequences such as the Class I formula change included in the 2018 farm bill. The region needs to understand the existing system and goals of USDA to avoid the pitfalls of requests that create conflict for the arbitrator. Rule change requests should be designed to position the industry for success in the future by addressing technological improvements, cost of investment, and the like versus attempting to address the ills of the past, which could have less relevance and be ineffective. Some smaller, regional changes could be possible. That said, North Carolina and other southeastern states should understand that the process — which is slow and purposeful — could take longer than most expect, and the outcome could be more generic, addressing concerns throughout the country and ultimately is incapable of substantially increasing prices without negative consequences for the local market.

Change is possible; however, it will take a concerted effort throughout the supply chain to improve milk movements and reduce costs to enhance dairy producer milk checks. It will take time and could be complicated because several aspects of the supply chain, policy, and milk assembly will need to be addressed to be successful. There is no one right solution, but there are plenty of opportunities that if seized could make noticeable changes in the marketplace.