



## Acknowledgments

**Project Funder: United States Department of Agriculture**

**Project Sponsor: Baylor Collaborative on Hunger and Poverty (BCHP)**

**Benjamin Ryan** Ph.D, MPH, REHS, Clinical Associate Professor, Baylor University (PI)

**Mark Brickhouse** Ph.D, Project Manager, Baylor University

**Tim Hatch** MPA, REHS, Assistant Administrator East Central District, AL Department of Health

**Bryan Brooks** Ph.D, MS, Distinguished Professor, Baylor University

Connor Crowe, Graduate Research Assistant, Baylor University

Reiley Jones, Graduate Research Assistant, Baylor University

Tori Telford, Graduate Research Assistant, Baylor University

Matthew Fendt, Technical Expert, Baylor University

Joshua McKone, Undergraduate Student, Baylor University

Jose Carlos Acosta Garcia, Undergraduate Student, Baylor University

## 1. Background and Rationale

An estimated 29.4 million children benefit from the services provided by the National School Lunch Program offered by the United States Department of Agriculture (USDA)(USDA, 2020). This program provides food for children who qualify for free or reduced priced lunches at school. The COVID-19 pandemic left thousands of school-aged children with limited access to essential meal services. To overcome this challenge, the Emergency Meals-to-You (eMTY) program was developed in partnership with USDA, the Baylor Collaborative on Hunger and Poverty (BCHP), Chartwells, McLane Global and PepsiCo.

The eMTY program provided five million meals a week for children affected by nationwide school closures during the COVID-19 pandemic. It was a multi-sectoral program and included, for example, leaders from the business, government, and academic sectors. It was rolled out across 43 states and Puerto Rico and reached as many as 127,216 households and 348 school districts. This included delivery of boxes containing 20 nutritious meals (10 breakfasts and 10 lunches) to cover what would normally be received at school over two school weeks.

To build on the success of the program, workshops and interviews were used to identify strategies for achieving food security and resilience in at-risk communities nationwide. Exploring this is vitally important because food security is required to provide communities with the resilience required to rapidly overcome the health, societal and economic consequences of pandemics and disasters (Ryan, Coppola, Canyon, Brickhouse, & Swienton, 2020).

## 2. Findings

The 20 participants involved in interviews (n=9) and focus groups (n=11) described the eMTY characteristics, and recommended strategies for strengthening food access and resilience. The findings were published in the Journal of School Health (<https://doi.org/10.1111/josh.13188>).

There were 69 participants across the five workshops. The workshop in Montgomery, AL, had the most participants with 20 (16 in-person and 4 virtual). This was followed by Waco, TX, with 15 participants (10 in-person and 5 virtual), Fargo, ND, 14 (11 in-person and 3 virtual) and 10 in-person participants at both the St. Louis, MO, and Charleston, SC, workshops. The findings were compiled into a manuscript and submitted to the Journal of Homeland Security and Emergency Management.

A common priority identified was the need to integrate the food and school sectors within the emergency management system. Participants also discussed the need for data mapping of chronic health issues, comorbidities, geography, climate and weather, farm to table needs, historical disaster footprints, and transportation routes would help in predicting and determining food supply needs. More specifically, determining the origin, collection, flow of food need, supply information and the way in which it could be shared pre-disaster would allow for current and consistent food needs data for schools and suppliers to be available.

## 3. Action Plan

Based on the interviews and workshop findings, discussions with the research team and follow-up input from study participants, a 13-point action plan is recommended (listed in no priority order):

- Local emergency managers integrate food sector stakeholders into activities, explore food access needs, and share findings with community organizations, private sector, and government agencies.

# Emergency Meals-to-You Study

- Schools establish a fully procurable menu that is costed and compliant with school needs and the USDA.
- Strengthen environmental health services at schools and other support functions required for the health and well-being of children.
- Emergency management systems exercise plans, agreements, protocols, and for providing food during a disaster situation.
- Establish early warning systems for food-related emergencies.
- Explore food availability/access risks and identify strategies for mitigating impacts.
- Share data about nutritional and chronic health (e.g., allergies) needs from schools with the local emergency management committee.
- Develop disaster plans for sustaining food supply and access at the school district level.
- Map local food sector capacities and surge needs, including from farm to table.
- Increase availability of the food sector workforce with relevant competencies and skills.
- A nationwide application of the United Nations Food Scorecard, which was piloted and developed as part of this project.
- Conduct a nationwide survey to allow a ranking and prioritization of the actions identified at school, local, regional, and national levels across different USDA regions and settings.
- Explore adapting eMTY to address food insecurity for older adults.

### 3. Conclusions

Food system resilience is vital to mitigate the consequences of disasters and other crises on community and individual well-being. The COVID-19 pandemic demonstrated how food systems can be impacted, especially for vulnerable populations such as children. School closures compromised essential meals for many children across the United States. To help address this food security crisis, a nontraditional public/private partnership model, eMTY, was set up and implemented to deliver meals to students in affected rural areas affected. By leveraging the knowledge and experiences of this program, we were able to identify, rank and prioritize actions for strengthening food system resilience. These include integrating the food sector and schools within emergency management, mapping local food sector capacities, working with schools to receive de-identified data about nutritional, allergy and other health needs, developing disaster plans for sustaining food access at the school district level, and protecting ecosystem services and agricultural areas. Addressing this timely need by delivering on the actions recommended would promulgate coordination of community networks that can pivot quickly to emergency production and distribution. An important step towards mitigating food insecurity before, during and after pandemics and disasters.