



UNIVERSITY *of* MARYLAND  
SCHOOL OF MEDICINE

# Evaluation of COVID-19 School Meals Response in Maryland: Spring 2020

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NOPREN colleagues-  
answering questions and  
reviewing report

# Outline

- I. School Meal Programs in Maryland
- II. Evaluation Overview
- III. Results
- IV. Wrap-Up

## Maryland

### EVALUATION OF COVID-19 SCHOOL MEALS RESPONSE: SPRING 2020

School closures during COVID-19 have increased the risk for food insecurity among children across the United States, including in Maryland. To support access to meals for children during school closures, the emergency Summer Food Service Program (SFSP) was initiated in lieu of traditional school meals programs, the National School Lunch Program (NSLP) and School Breakfast Program (SBP). Federal and State governments also issued several temporary waivers (described in the figure below) to enable flexibilities to existing policies to support the provision of these emergency meals.

The University of Maryland School of Medicine (UMSOM) worked with the Maryland State Department of Education (MSDE), Maryland School Systems (Local Education Agencies or LEAs), and Food Service leadership at three levels (State, LEA, and meal site) to evaluate meal provision during COVID-19-related school closures, in the Spring of 2020 (March 16th – June 27th). This evaluation uses the RE-AMI framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance) to investigate the following:

1. Examine the **reach** (number of free or reduced priced breakfast and lunch meals served before versus after spring 2020 COVID-19-related school closures) and **effectiveness** (number of total breakfast and lunch meals served before versus after school closures), and the role of federal waiver utilization and communication/meal distribution strategies associated with reach and effectiveness;
2. Describe **adoption** (via communication with families) and **implementation costs** of school meal service;
3. Understand public LEA and distribution site-level **implementation** processes for meal provision, including supportive factors and barriers; and,
4. Understand strategies for **maintenance** of meal service (following Spring 2020 school closures).

Throughout the report, we describe evaluation results and key NEXT STEPS for research, policy, and implementation.



### FEDERAL & MARYLAND STATE COVID-19 RELIEF NUTRITION WAIVERS ISSUED BY MONTH

#### MARCH 2020

- Allows meal service time flexibility (National Waiver #1)
- Allows non-congregate meals (National Waiver #2)
- Allows meal and snack provision when no enrichment activity is offered (National Waiver #3)
- Provides meal pattern flexibility (National Waiver #4)
- Allows parents/guardians to pick up meals (National Waiver #5)
- Extends Community Eligibility Provision (CEP) deadlines (National Waiver #6)
- Waives certain onsite monitoring requirements (National Waiver #7-11)

#### USDA Waiver Info:

<https://www.fns.usda.gov/programs/fns-disaster-assistance/fns-responds-covid-19/child-nutrition-covid-19-waivers>

#### MSDE OSCNP Waiver Info:

<http://www.marylandpublicschools.org/>

#### APRIL 2020

- Extends the deadline for reporting requirements (National Waiver #12)
- Permits area eligibility for closed enrolled sites (National Waiver #14)
- Waives Summer Food Service Program (SFSP) first week visits (National Waiver #15)
- Allows for offer versus serve in SFSP (National Waiver #16)
- Waives meal service time restrictions for SFSP and SSO (National Waiver #17)
- Extends the triennial assessment deadline (National Waiver #18)
- Allows for renewal of procurement contracts (National Waiver #19)
- Waives annual review requirements for CACFP (National Waiver #20)
- Extends SFSP and SSO pandemic operations (National Waiver #21)
- Expands area eligibility (State Waiver #1)

#### MAY 2020

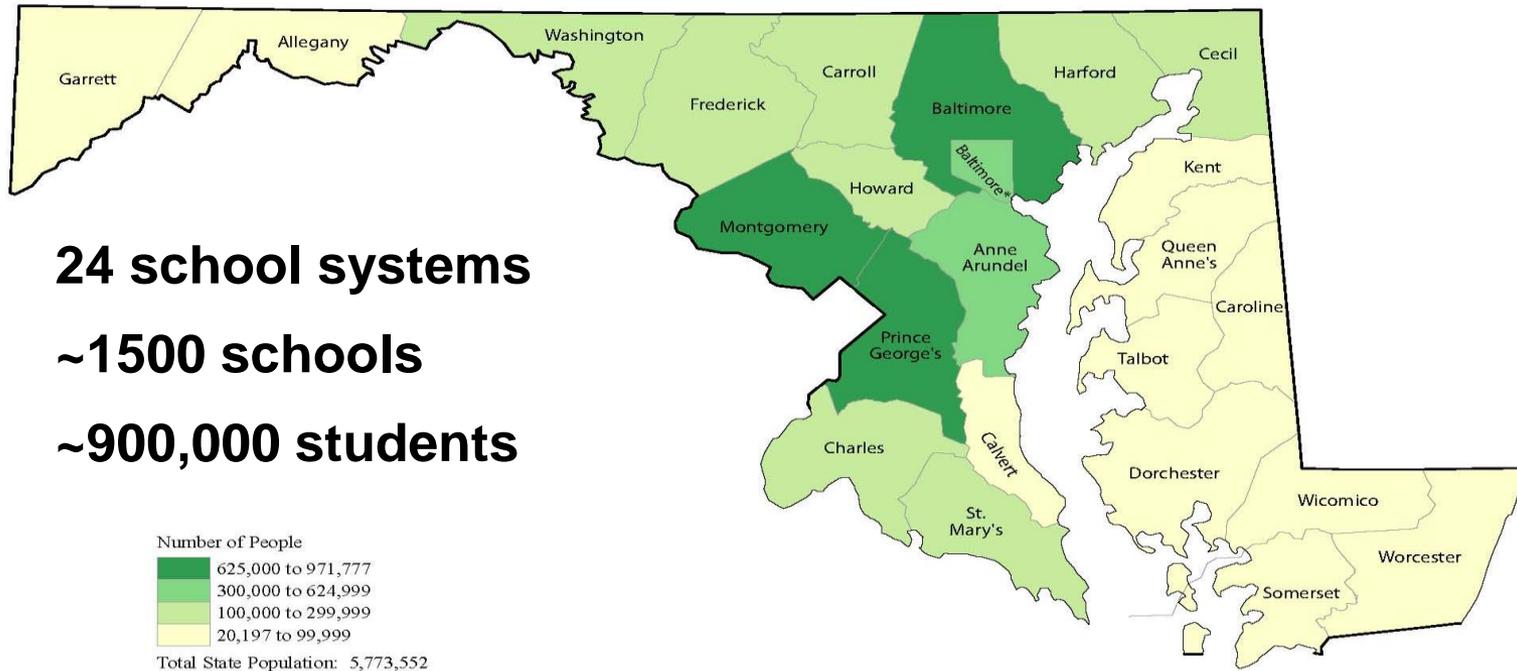
- Allows parent pick-up for Fresh Fruit and Vegetable Program (FFVP) (State Waiver #2)
- Extends non-congregate feeding, meal service time flexibility, meal pattern flexibility, and parent/guardian pick up of meals (National Waiver #22-25)

Twenty-five waivers and subsequent waiver extensions were released by the USDA and the State of Maryland during the first 15 weeks of the pandemic (between March 16th and June 27th), as shown in this timeline.

Report found here:  
<http://www.marylandschoolwellness.org/tools/Data-Reports/>

# Maryland

## MARYLAND - 2010 Census Results Total Population by County



**24 school systems**

**~1500 schools**

**~900,000 students**

# School Meal Programs in Maryland

- Maryland State Department of Education (MSDE): School and Community Nutrition Programs Branch
- 24 public LEAs + other agencies [*Non-Profit Private Schools (NPPs), Residential Child Care Institutions (RCCLs), Summer Food Service Program (SFSP)*]
- Site-level meal preparation and distribution staff

# School Meal Programs in Maryland: COVID-19

**State-wide school closures announced March 12<sup>th</sup>,  
meal distribution started March 16<sup>th</sup>**

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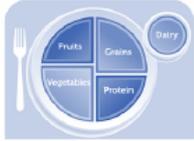
# Evaluation Overview

- Timeframe: Spring of 2020 (March 16th –June 27th)
- RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance)

## Aims

1. To examine **Reach** (*number of free or reduced priced breakfast and lunch meals served before versus after spring 2020 COVID-19-related school closures*) and **Effectiveness** (*number of total breakfast and lunch meals served before versus after school closures*) and the role of federal waiver utilization and communication/meal distribution strategies associated with reach;
2. Describe **adoption** (via communication with families) and **implementation costs** of school meal service;
3. Understand public LEA and distribution site-level **implementation** processes for meal provision, including supportive factors and barriers; and,
4. Understand strategies for **maintenance** of meal service (following Spring 2020 school closures).

# Evaluation Overview: Methods



## Number of Meals Served & Reimbursements

MSDE provided data reported by program operators on the number of meals served per site (total and free or reduced priced) by month from January 2019-June 2020, and financial reimbursements.



## Survey: Food Service Directors/Supervisors and Distribution Site Staff

An online survey was administered during the summer of 2020 to food service directors/supervisors and staff, with 102 individuals responding (22 Public LEAs + Non-Profit Private Agencies represented; 42 distribution site staff and 60 LEA-level directors or supervisors). The survey asked about the perceived impact of the USDA waivers, perceived revenue shortfall, pandemic-related feeding concerns, and difficulties serving meals during the pandemic.



## Maps

ArcGIS (spatial software) was used to map addresses for all sites that provided meals during COVID-19-related school closures (Spring 2020). We overlaid this with other maps on the population of school-aged children, area poverty, and school address (coupled with the number of children who previously received free or reduced price meals in each school).



## Key Informant Interviews

We interviewed a total of 19 food service directors/supervisors and state leaders at two time points to capture implementation processes, including supportive factors for and barriers to pandemic school meal implementation.

# Evaluation Overview: Methods

## Getting to Equity Framework

### Emergency school meals provision during COVID-19



Individual and household resources and capacity



## Coding Communication

Information from LEA websites and Facebook pages were documented at multiple time points in the Spring of 2020 to understand what information was shared with the community. The wording of the communications was evaluated using a rubric based on the Getting to Equity Framework (shown on the left), which describes core strategies to serve meals equitably, such that all children have access to school meals, particularly those at greatest risk for hunger or food insecurity.<sup>2</sup> This framework was adapted from the Getting to Equity framework for increasing equity impact in obesity prevention.<sup>3</sup>

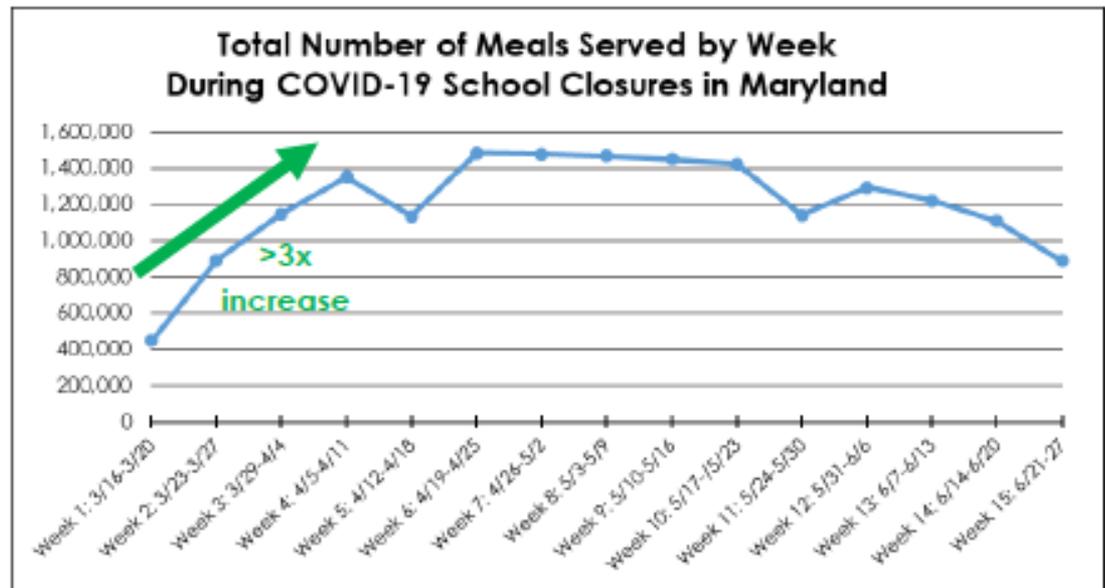
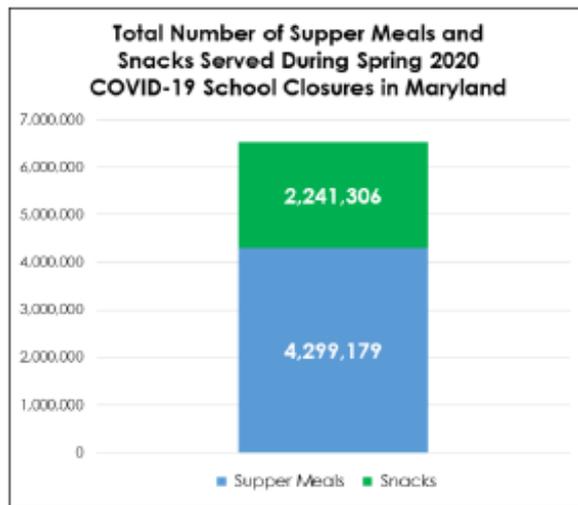
the pandemic.

# RESULTS



# Reach/Effectiveness

## Public-Facing Data:

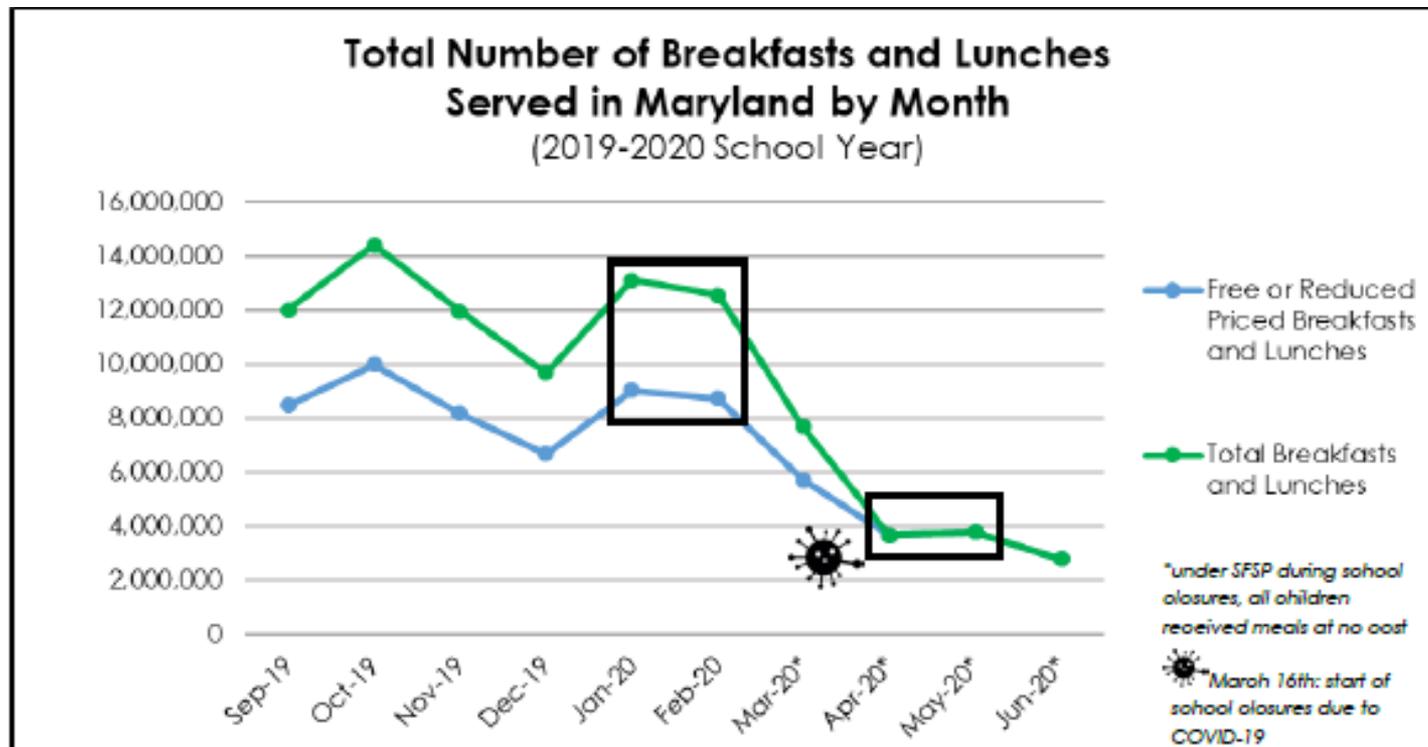


During the first 15 weeks of school closures (March 16th-June 27th), 17,933,659 meals were served to youth in Maryland.

# Reach/Effectiveness

## Planned Comparisons:

- January/February 2020 versus April/May 2020
- Breakfast and Lunch only



# Reach/Effectiveness: Waivers

## Perceived Impact of Waivers:

- Survey: food service directors and supervisors
- Top 3 waivers to have a “significant positive impact” on meal service:
  1. Allow Non-congregate Feeding (and waiver extension; National Waivers #2 & 22): **92% endorsed**
  2. Expand Area Eligibility (State Waiver): **86% endorsed**
  3. Allow meal service time flexibility (National Waiver #1): **85% endorsed**

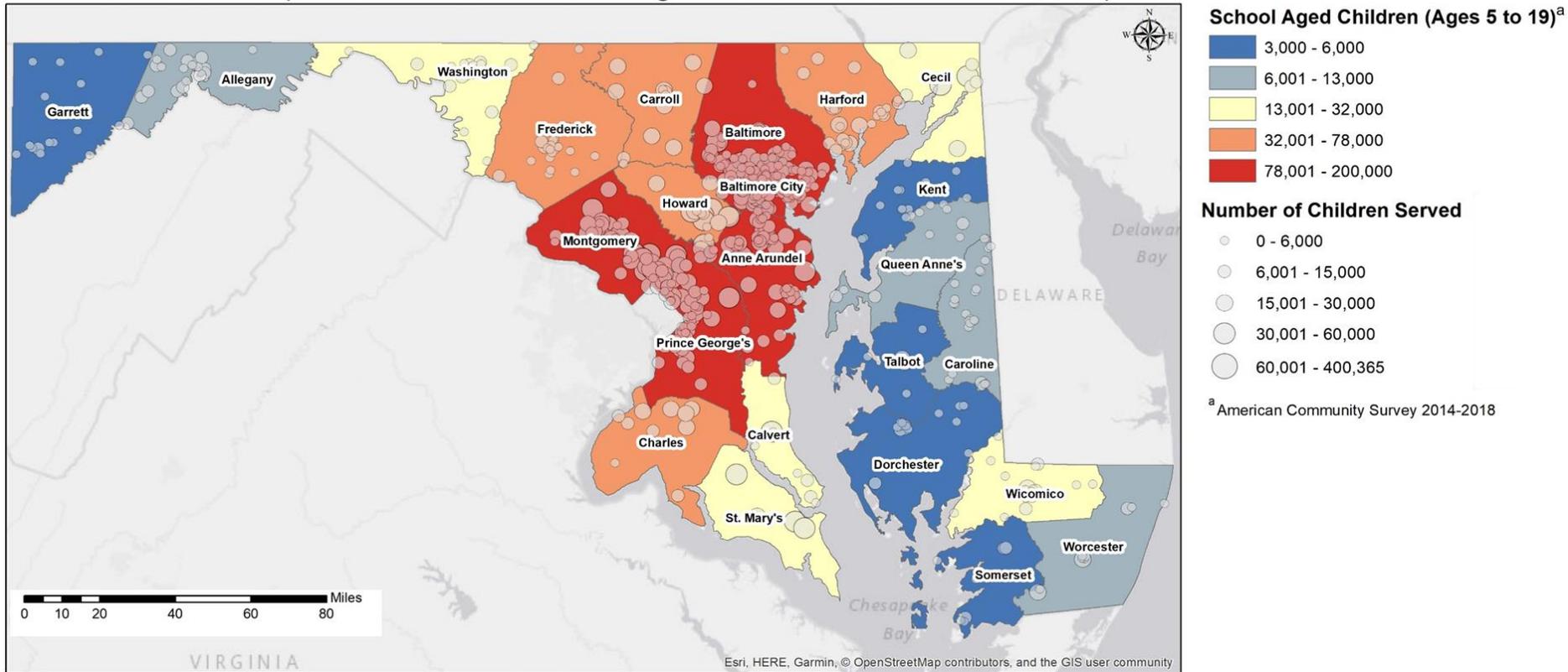
## “What impact did the USDA and State waivers have on your programs during COVID-19?”

- *“The area eligibility was the huge one... The area eligibility really helped us, in that we could serve anywhere in the county, and be reimbursed for those meals... The working families needed help... Those people come through and they would just thank our staff left and right. The area eligibility waiver probably had the biggest impact on us being able to reach more people.” ~Supervisor, Public LEA*

# Reach: Meal Site Placement

- Mapped 656 meal sites open during Spring 2020

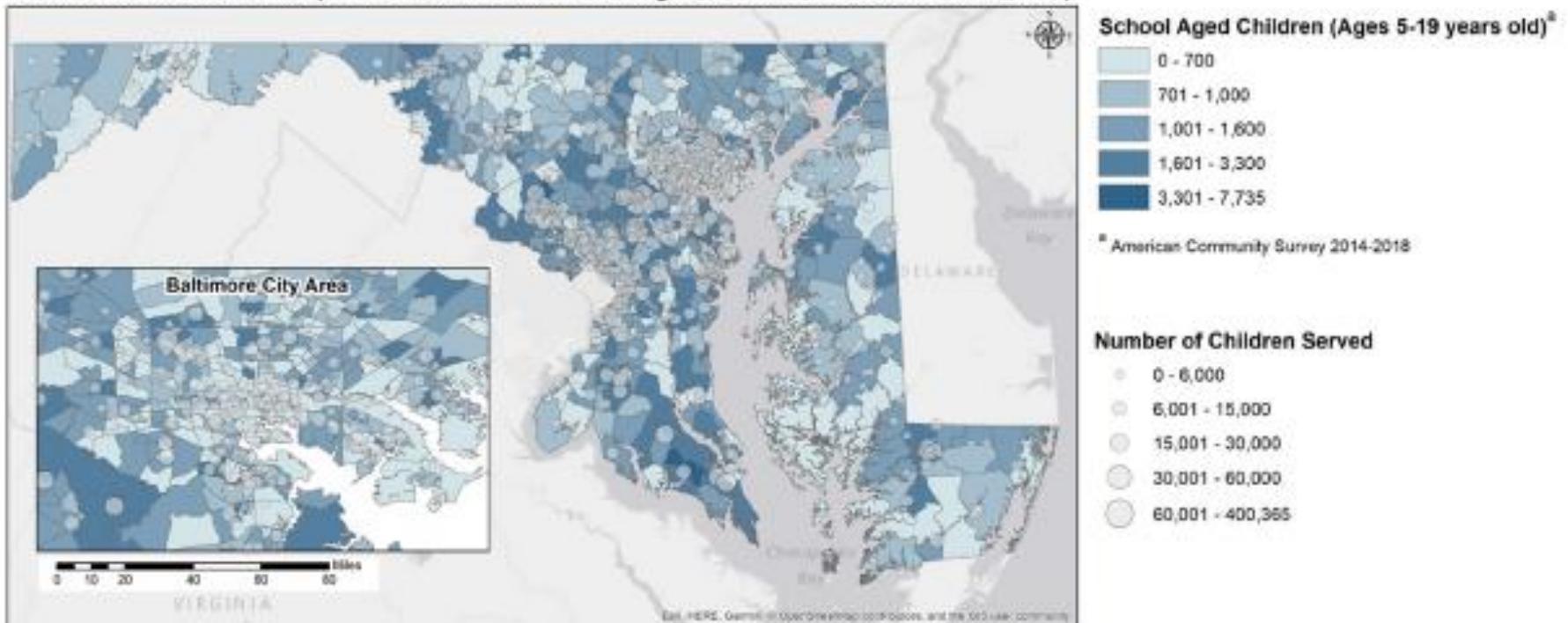
Maryland Public Local Education Agency (LEA) boundaries with number of children served (based on lunches served during school closures March 16-June 30th)



# Reach: Meal Site Placement

- Reach by number of school-aged children in census tract
  - ***Association between population density of school-aged children and reach [proportion of breakfast and lunch meals served between January/February (pre-pandemic) to April/May (pandemic)]***

Number of Children Served (based on lunches served during school closures March 16-June 30th)



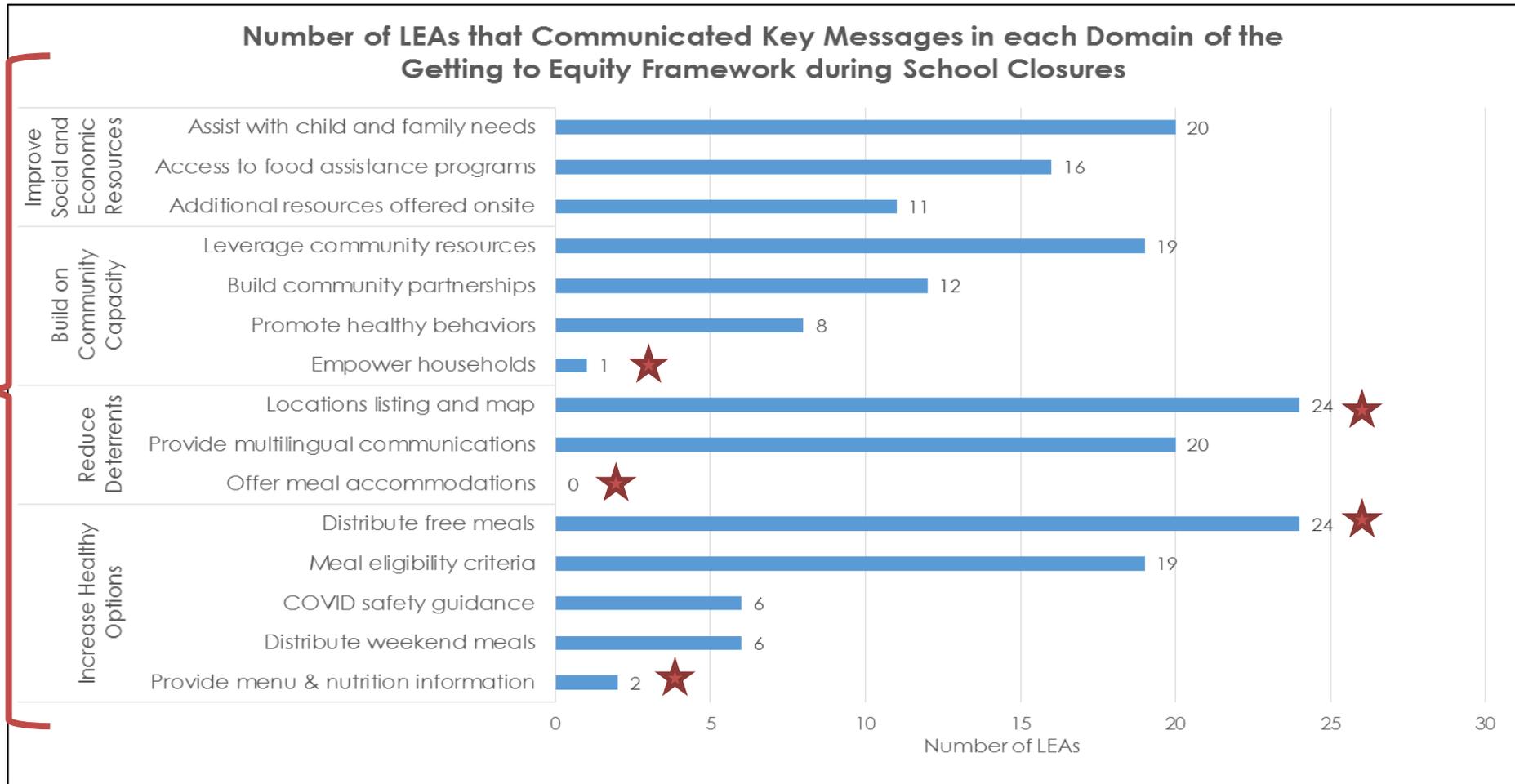
# Reach: Meal Site Placement

- Reach by number of students eligible for free or reduced-price meals
  - Meal sites (point location)
  - Schools (point location) with number of students eligible for free or reduced-price meals
  - Rural and urban analysis conducted separately: 1 or 3 miles for urban sites and 5 or 10 miles for rural sites

	<b>% Students Eligible for Free or Reduced Priced Meals who Attend School in the Meal Site Catchment Area</b>			
	<b>1 mile</b>	<b>3 miles</b>	<b>5 miles</b>	<b>10 miles</b>
<b>Urban</b>	<b>66%</b>	<b>94%</b>	—	—
<b>Rural</b>	—	—	<b>70%</b>	<b>92%</b>

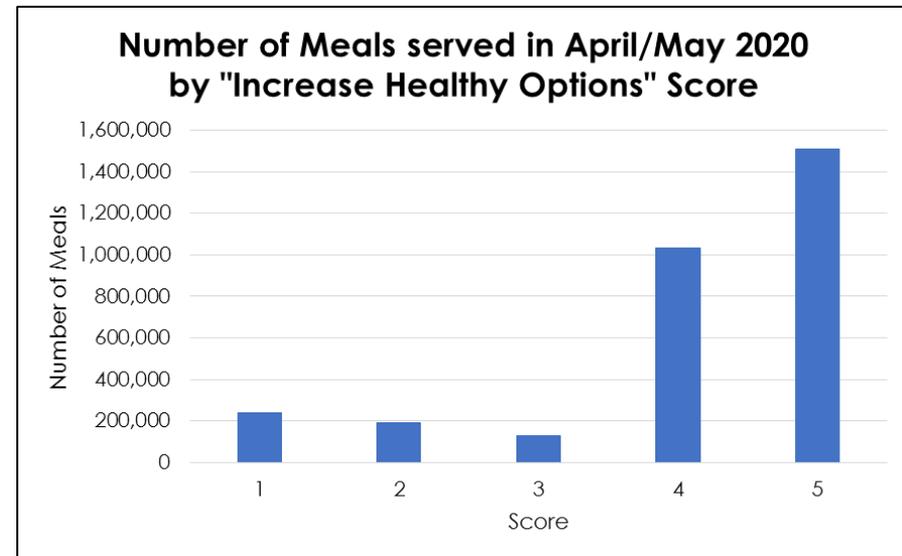
# Adoption: Equitable Communication

Number of LEAs that Communicated Key Messages in each Domain of the Getting to Equity Framework during School Closures



# Adoption: Equitable Communication

- Each additional “Increasing Healthy Options” item adopted by public LEAs through communication strategies associated with an increase in reach during Spring 2020 school closures
- Reach not related to the three other communication strategies



# Implementation

## “What are you most concerned about for your program?”

- Survey: Food service directors/supervisors, the top concern was:
  - **Financial losses for the school meal program: “serious concern”=88%**
    - Significantly more directors/supervisors reported this concern versus distribution site staff (41%,  $p=0.001$ )
  - *“Our staff continues to be paid... all of a sudden, your labor costs, which is normally 30% of \$2 million, ...is only \$500,000. You're running at a deficit at that point, and there's not much we could do about it.” ~Supervisor, Public LEA*
- Survey: distribution site staff, the top concern was:
  - **Potential that students will go hungry during school closures: “serious concern”=74%**
    - Significantly more distribution site staff reported this concern versus directors/supervisors (48%,  $p=0.040$ )
- Both sets of respondents reported **safety of staff** as a serious concern.
  - *“...right now your number one priority is your safety, your staff safety, and [to] feed these children.” ~Director, Public LEA*

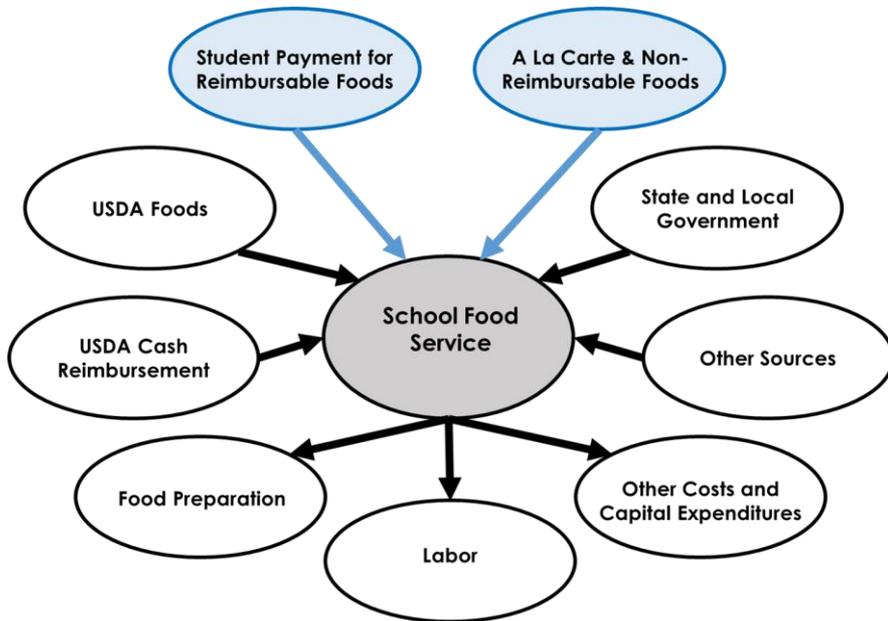
# Implementation

## Implementation Challenges

- Survey: Food service directors/supervisors
  - **Food storage issues: 51% reported difficult/very difficult**
  - *“...so many different moving parts and so many things that we had to order... not having the equipment that we needed... coolers, the shelving, the packaging.” ~Supervisor, Public LEA*
- Survey: Distribution site staff
  - **How to best target the students most in need: 35% reported difficult/very difficult**

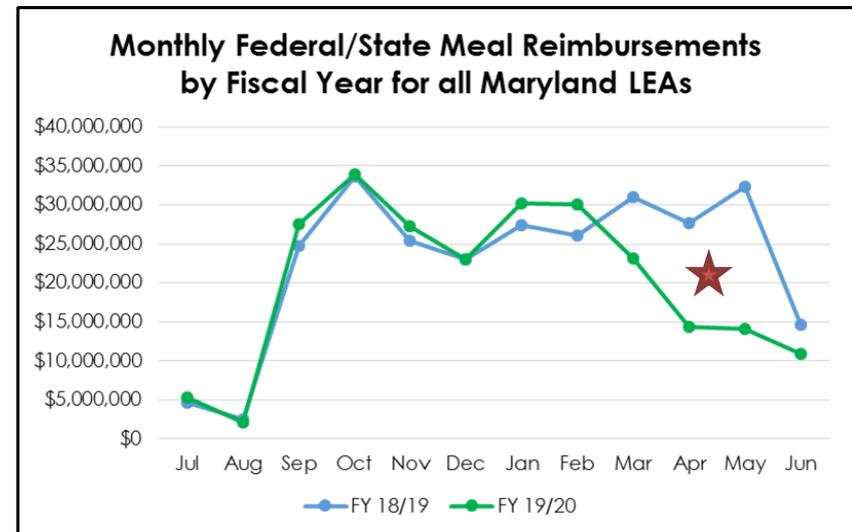


# Implementation Costs



Will you have a revenue shortfall?  
**100% Yes**  
 (Food Service Directors/Supervisors)

Comparison of federal and state school meal reimbursement in Fiscal Years (FYs) 18/19 and 19/20: the total revenues dropped 11%



# Maintenance

- **Simplify the waiver process**

- *“Why should 50 states have to do waivers for the same thing when USDA can just say, ‘Hey. We’re going to waive everything’? And they do that after everybody’s applied.”*  
~State-Level

- **Communication and partnerships were key to success**

- *“Make sure that you have open communications with different community organizations, the health department, local food pantries...have those relationships established so that when you are in need, you can call on them.”* ~Director, Public LEA
- *“The most important thing going into what we experienced, it would probably be relationships...from MSDE to school principals...the fact that when you have strong relationships with your staff and the school staff and your customers and your vendors, it made life a lot easier to make that transition.”* ~ Supervisor, Public LEA

# Maintenance

- **Consider Universal Free Meals**

- *“We're spending a lot of money to make sure that all these meal eligibilities are correct. We've gotten so far away from what we're really supposed to be doing here, feeding children, making sure that the meal is a great meal, it's a healthy meal...let's feed everybody and not worry about who needs it and who doesn't because they all really do need it in the end.” ~ State-Level*
- *“If you and I go to a business meeting at a restaurant and we have lunch, the IRS says, as long as we conduct business after the lunch too, we can deduct that as a business expense. Well, a child's job and their business is to learn... So why don't we just stop the silliness? Students' business is learning.” ~ Supervisor, Public LEA*

# Wrap-Up

## Summary, Recommendations, and Next Steps

**Summary:** In this evaluation of emergency school meal implementation in Maryland during Spring 2020 school closures due to the COVID-19 pandemic, there were 5 primary findings:

1. Meal sites were located in areas with the greatest need, such that over 65% of children eligible for free or reduced priced meals attended a school within close proximity of a meal distribution site.
2. Despite a dramatic increase in meals served in the first few weeks of school closures and temporary waivers to support meal distribution, the statewide average of breakfasts and lunches distributed was 58% lower than the number of breakfasts and lunches served earlier in the school year.
3. Pandemic-related school closures resulted in significant negative impacts on the financial health of school nutrition programs (at the LEA and school/site-levels).
4. Assistance (guidance and operational support) from a variety of partners was a common theme among interviews with food service staff; partnerships contributed to the success of meal programs.
5. The biggest implementation challenges and concerns were related to finding the best ways to reach hungry children and maintaining financial solvency.

### Recommendations:

1. Stakeholders at the national, State, and local level should ensure that school nutrition programs can focus on the logistics of feeding children as opposed to the financial health of meal programs.
2. The expertise of food service directors and staff, who strategically located emergency meal sites in areas of greatest need and quickly adapted to pandemic feeding, should be included in future decision-making regarding meal waivers and implementation during school closures. These individuals possess a wealth of valuable knowledge.
3. As the COVID-19 pandemic continues, school nutrition professionals should continue to evaluate the implementation of waivers and lessons learned regarding meal provision to inform practices during future anticipated or unanticipated school closures.

### Next Steps:

1. This evaluation only considered implementation from the site, LEA, and State-level. Additional information on student- and family-level implementation experience is needed.
2. Additional information on 2020 summer meal implementation and meal implementation during the 2020-2021 school year will provide a better understanding of best practices and lessons learned that can contribute to post-pandemic analysis and the long-term impact on the financial health of the school meals program. This includes future operation of the supper and snack programs.
3. The impact of other efforts to feed children, including pandemic-EBT, should be examined.

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Funding Provided by: MSDE Office of School and Community Nutrition Programs. MSDE and USDA are equal opportunity providers.

# Limitations

1. Since all meals were free during COVID-19 school closures, unable to ensure that the definition of “Reach” is accurate
2. Better definition of “Effectiveness”: YRBS food insecurity data
3. Additional financial data is needed for a full understanding of the impact of COVID-19 on the financial health of school meal programs
4. Additional analyses planned with existing data

# Summary

1. Meal sites were located in areas with the greatest need
2. Despite a dramatic increase in meals served in the first few weeks and temporary waivers to support meal distribution, an overall decline in the number of breakfasts and lunches distributed pre-post pandemic was observed.
3. Significant negative impacts on the financial health of school nutrition programs- perceived and observed.
4. Partnerships contributed to the success of meal programs.
5. The biggest implementation challenges and concerns- finding the best ways to reach hungry children and maintaining financial solvency.

# Recommendations

1. Stakeholders (federal, state, local): ensure that school nutrition programs can focus on the logistics of feeding children versus financial health of meal programs.
2. The expertise of food service directors and staff should be included in future decision-making regarding meal waivers and implementation during school closures. These individuals possess a wealth of valuable knowledge.
3. Continue to evaluation implementation to inform practices during future anticipated or unanticipated school closures.

# Next Steps: Research

1. Essential to understand family-level barriers to school meal access.
2. Evaluation of 2020 summer meal implementation and 2020-2021 school year meal implementation (including future operation of the supper and snack programs).
3. Impact of other efforts to feed children, including pandemic-EBT.

# Acknowledgements

- MSDE
- Maryland School Systems and Schools
- Evaluation Team

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