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2021

Vermont School Districts Meal Service Response to COVID-19

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Recommended Citation

Brand, Stephen; Buick, Will D.; Fernan, John E.; Jin, Gina; Lapidés, Rebecca; Lor, Jennifer; McCleary, Paul; and Long, Timothy L., "Vermont School Districts Meal Service Response to COVID-19" (2021). *Public Health Projects, 2008-present*. 313.

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Background

- The COVID-19 pandemic has posed many challenges worldwide, including lack of food access and security. Food insecurity in Vermont has increased from 18% to 24% since the outbreak of the pandemic (1).
- Food insecurity among families with school-aged children puts children at risk for developmental delays, poor social functioning, and poor academic performance (2).
- One consistent food source for school-aged children is their district's meal program. School based meal programs have historically been associated with 14% reduction in food insufficiency among school-aged children(3). Therefore, they were poised to play a vital role in keeping children fed during this crisis.
- However, the pandemic related changes to school systems and social interactions required meal programs adapt their services through various strategies to continue providing meals(4).
- The goal of this project is to identify the challenges that the COVID-19 pandemic has posed for meal distribution services in school districts across Vermont, recognize the adaptations that were made by schools to address these challenges, and determine which adaptations had positive effects to encourage widespread implementation of these and other strategies to maximize food security for school-aged children nationwide.

Methods

Study Population and Interviews

Representatives from school nutrition programs throughout Vermont participated in a structured interview. Questions ranged from quantitative assessments of their "success" responding to the COVID-19 pandemic to qualitative elaborations on the strategies of meal distribution and the perceived barriers to a more successful implementation, as well as the adaptations that led to the greatest positive change. Quantitative meal program data was provided to Hunger Free Vermont through a data request from the Vermont Department of Education.

Statistical Analysis

Following standard qualitative protocols, notes from interviews coded to identify themes, trends, and patterns in how school nutrition programs addressed challenges and adapted their meal production and distribution strategies throughout the pandemic. We used SPSS Statistics software analyze frequencies of codes. An example of our coding approach is shown in the table below:

Table 1. Frequently reported themes in response to interview question 1.

Response to the question, "What does the workflow of your current food delivery service look like?"	Code	Schools, n (%)	Example
	Adaptability	3 (38)	"Did really well, had two days notice"
	Bulk meals for multiple days	3 (38)	"If family had 5 children, they could pick up 5 meals. Child could pick up multiple meals (for 3 days, for example)"
	Classroom delivery	4 (50)	"Some hand delivering pre-plated meals to classrooms"
	Hybrid	4 (50)	"K-8 schools 2 or 4 day schedules"
	Pre-plated/packaging	3 (38)	"Providing meals pre-plated for children to come and pick up"

Results

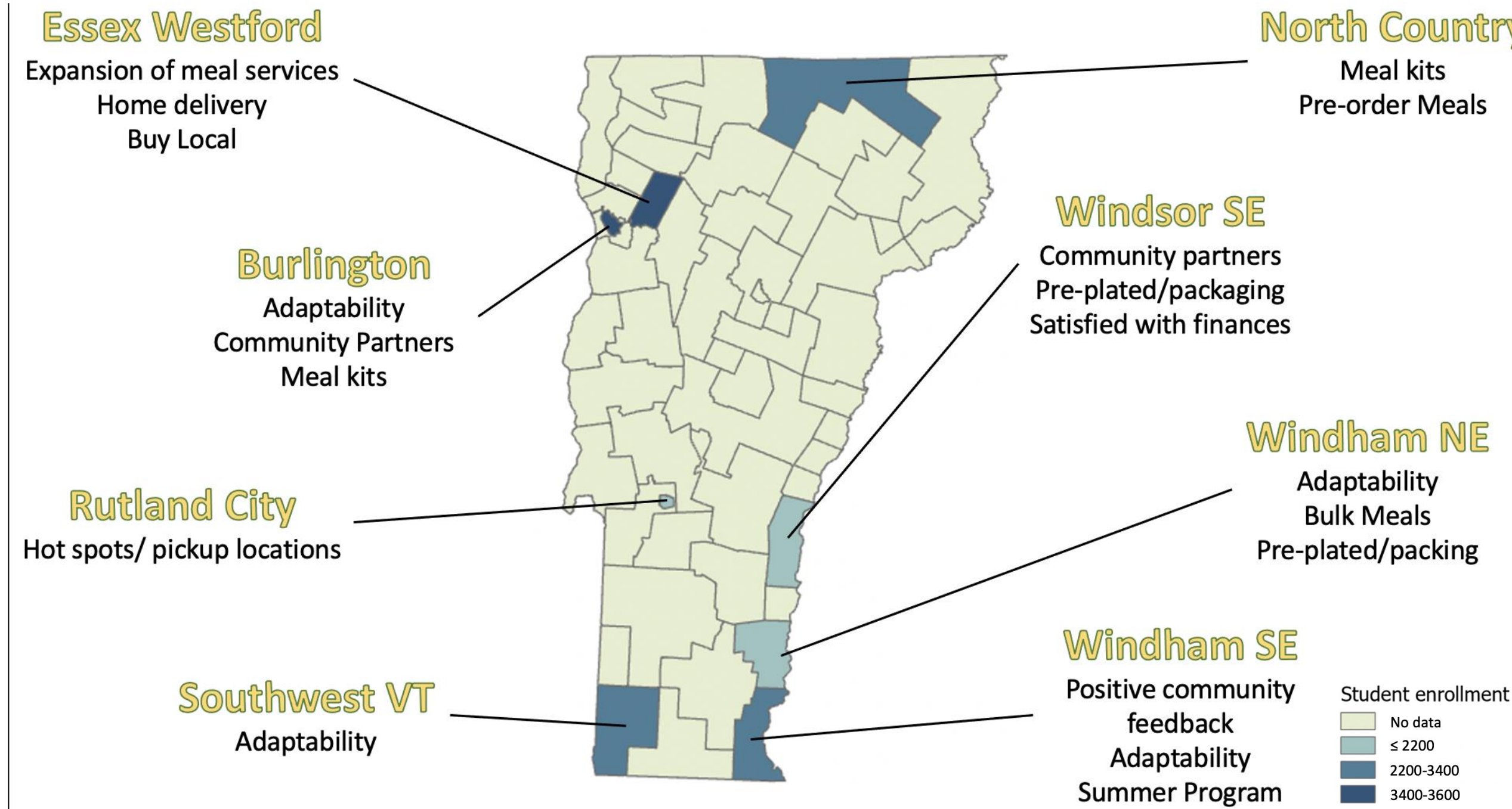


Figure 1: Student population heatmap and reoccurring reported themes by school district.

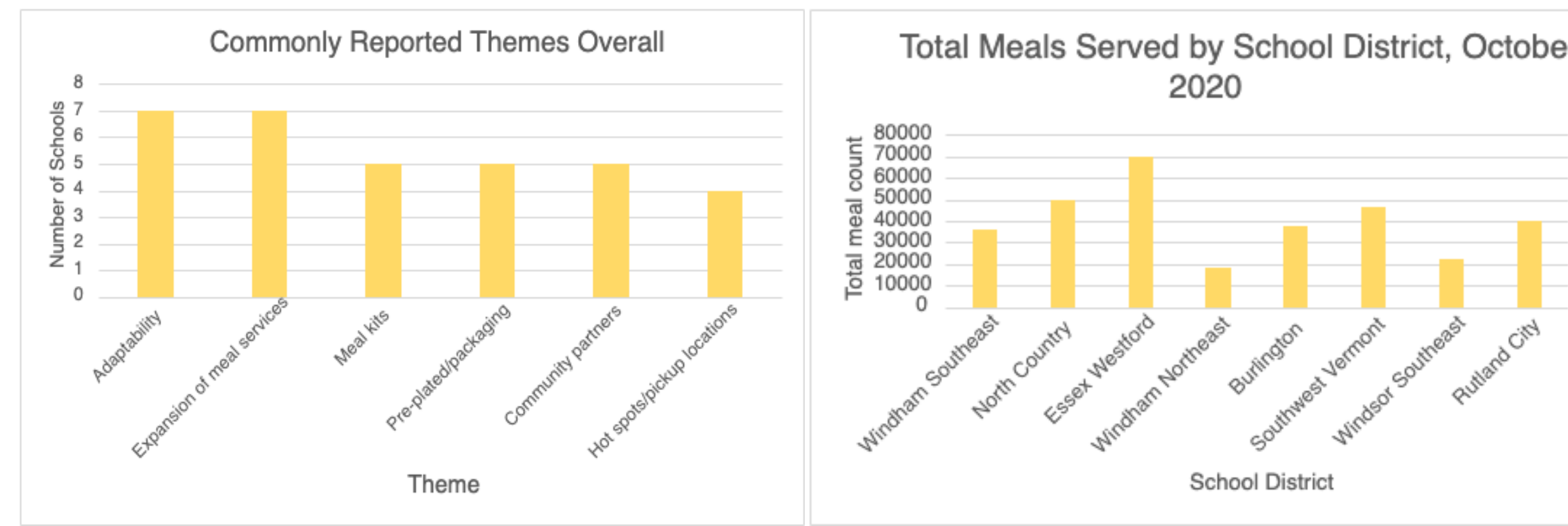


Figure 2: Most common reported themes across all surveyed school districts.

Figure 3: Number of meals served in October 2020 in each school district surveyed.

Discussion

- Our project gave voice to some of the critical food service organizers working on the front lines of meal distribution and how they adapted to the Covid-19 pandemic.
- Commonly reported adaptations included setting up pick-up locations and pre-packaging meals to ease delivery and accessibility of meals.
- In addition to adaptations, similar barriers were encountered regardless of district, including staff burnout, maintaining adequate food temperature quality, and accessibility.
- Most common of all themes observed was an expansion of meal services, which outlines the work each district did to ensure that meals were still properly delivered to all children.

Notable quotes

Essex Westford - "I think we've done an awesome job. From day 1 the most important thing has been sustainability. What can we offer that we can maintain"

Essex Westford - "These meals are not only for families in need, and nobody is taking a meal away from people in need"

Southwest VT - "We're supposed to be essential workers, but we haven't been treated like essential workers" - on lack of hazard pay, mental health challenges with work

Southwest VT - "Those kids wouldn't be fed if we didn't go to them" - on rural spread of their district

Burlington - "Free meals for all kids is working"

Conclusion

Throughout the state of Vermont, school districts were forced to adopt unique strategies to meal delivery during the Covid-19 Pandemic. Regions ranged in geographic distribution and food insecurity, but all reported a high level of satisfaction in their team's ability to continue to provide meals to school-aged children. While some common barriers were observed, all programs appeared to rise to the occasion, expanding their meal services and helping provide a sense of community support through food security.

Future directions

- Perform follow-up interviews focused on common themes identified in our codes to further detail the unique adaptation that each school district used.
- Expand representation of school districts included in our coding by conducting more interviews. Create a better snapshot of Vermont's statewide adjustments to meal distribution.
- Utilizing more of Hunger Free Vermont's quantitative information about meal deliveries to better compare how changes to their numbers of meals served reflect their attitudes and observed themes regarding adapting to the Covid-19 Pandemic.

References

1. Bruce JS, De La Cruz MM, Lundberg K, Vesom N, Aguayo J, Merrell SB. Combating Child Summer Food Insecurity: Examination of a Community-Based Mobile Meal Program. *J Community Health*. 2019;44(5):1009-1018. doi:10.1007/s10900-019-00675-0

2. Weinreb L, Wehler C, Perloff J, et al. Hunger: its impact on children's health and mental health. *Pediatrics*. 2002;110(4):e41. doi:10.1542/peds.110.4.e41

3. Huang J, Barnidge E. Low-income Children's participation in the National School Lunch Program and household food insufficiency. *Soc Sci Med*. 2016;150:8-14. doi:10.1016/j.socscimed.2015.12.020

4. Kinsey EW, Hecht AA, Dunn CG, et al. School Closures During COVID-19: Opportunities for Innovation in Meal Service. *Am J Public Health*. 2020;110(11):1635-1643. doi:10.2105/AJPH.2020.305875