

Breakfast for All and Participation Changes in Pennsylvania

A Case Study

School breakfast is an important source of nutrition that benefits students' health, development and learning. However, only one in three students participate in the School Breakfast Program (SBP), or roughly half the participation rate of the National School Lunch Program (NSLP). Numerous barriers prevent students from accessing school breakfast, including breakfast service before the start of the school day, inconvenient locations, financial constraints, stigma, and other factors.

Federal and state policies have sought to address these barriers. In 2010, Congress established the Community Eligibility Provision (CEP), a federal reimbursement option that allows high-need schools to serve no cost meals to all students regardless of their family income. States have also pursued policies to expand access to no cost meals, particularly after federal waivers expired in 2022 that had allowed schools to provide school meals at no cost to all students during the COVID-19 pandemic. Some promote participation in federal programs such as CEP, while others make school meals available at no cost for all students statewide.

(Some do both.) These include School Meals for All (SM4A), which provides both breakfast and lunch at no cost, and Breakfast for All (B4A), which provides breakfast at no cost to all students. Studies have consistently found increased participation when school breakfast is available at no cost.¹

States have also supported breakfast service innovation to increase participation, primarily through Breakfast After the Bell (BATB) approaches such as breakfast in the classroom (BIC), grab-and-go, and second chance breakfast. These either supplement or replace the traditional before-school, cafeteria-style breakfast service, and have likewise been consistently associated with increased participation, including when implemented in combination with no cost meal policies.²

In October 2022, Pennsylvania became the first state in the country to begin implementing B4A, a policy that has been sustained through recurring funding in the state budget.³ The state implemented B4A for a partial school year in 2022-23 and fully in school year 2023-24. Since then, Arkansas has enacted legislation to implement B4A starting in school year 2025-26, and Delaware will implement B4A beginning in school year 2026-27. Several other states have also considered B4A policies.

As interest in B4A has grown, however, relatively few studies have examined its impact, particularly its effectiveness compared with other no cost meal policies such as SM4A.⁴ Evidence also suggests a potential synergistic effect of BATB and no cost meal policies on breakfast participation,⁵ though this relationship has not been specifically examined in the context of B4A.

KEY FINDINGS

- Average daily breakfast participation (ADP) **increased by 14% after PA's B4A** partial rollout in SY 2022-23, and by **an additional 12% after full implementation** in SY 2023-24.
- In comparison, breakfast ADP **increased by 23% after SM4A** implementation in Michigan in SY 2023-24.
- In PA, participation gains after B4A were **highest in schools implementing Breakfast After the Bell**.

This study examined three questions:

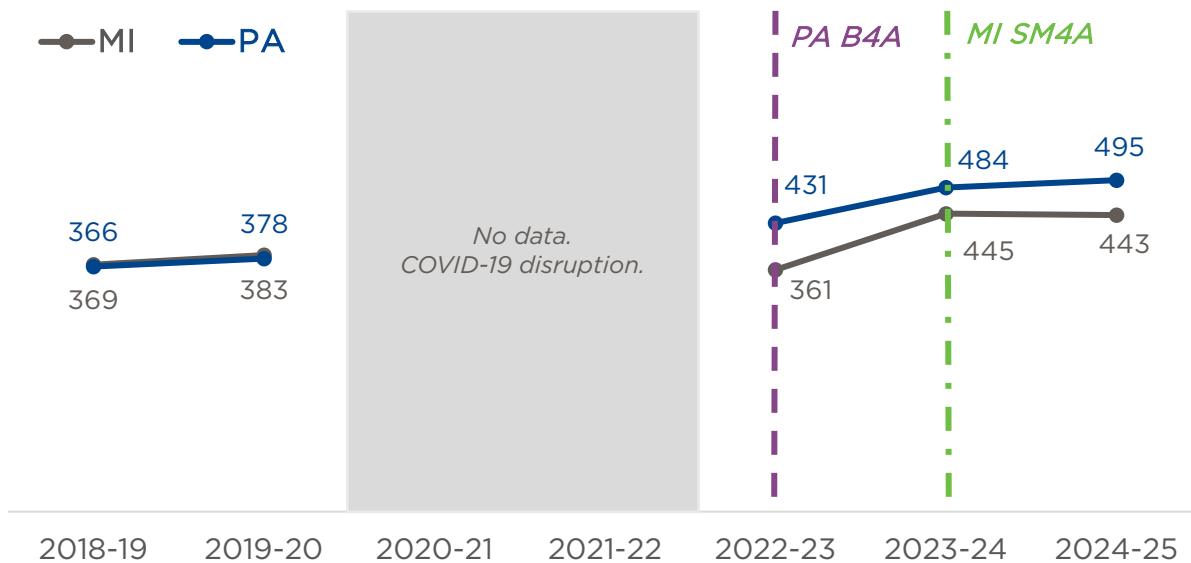
- How did breakfast participation as measured by average daily participation (ADP) change following Pennsylvania's implementation of B4A?
- How did these changes compare with those in a matched state, Michigan, that began implementing SM4A?
- How did changes in breakfast participation in Pennsylvania vary by school-level factors, including breakfast delivery model.

RESULTS

Breakfast participation increased following both partial and full B4A implementation, with a larger increase following SM4A implementation.

Breakfast ADP increased by 14% (378,000 students to 431,000 students) from SY2019/20 to SY2022-23 after the partial B4A policy rollout in Pennsylvania and increased an additional 12% following full implementation in SY 2023-24 (to 484,000 students). In comparison, average daily breakfast participation rose by 23% following SM4A implementation in Michigan, from 361,000 students in SY 2022-23 to 445,000 students in SY 2023-24. (Figure 1) The results for Pennsylvania are comparable to breakfast participation increases observed in the most recent systematic review of universal school meal/SM4A interventions.⁶

Figure 1. Average Daily Breakfast Participation (thousands) in Pennsylvania and Michigan Public Schools Before and After Implementing B4A (PA) and SM4A (MI), SY2018/19 – SY2024/25

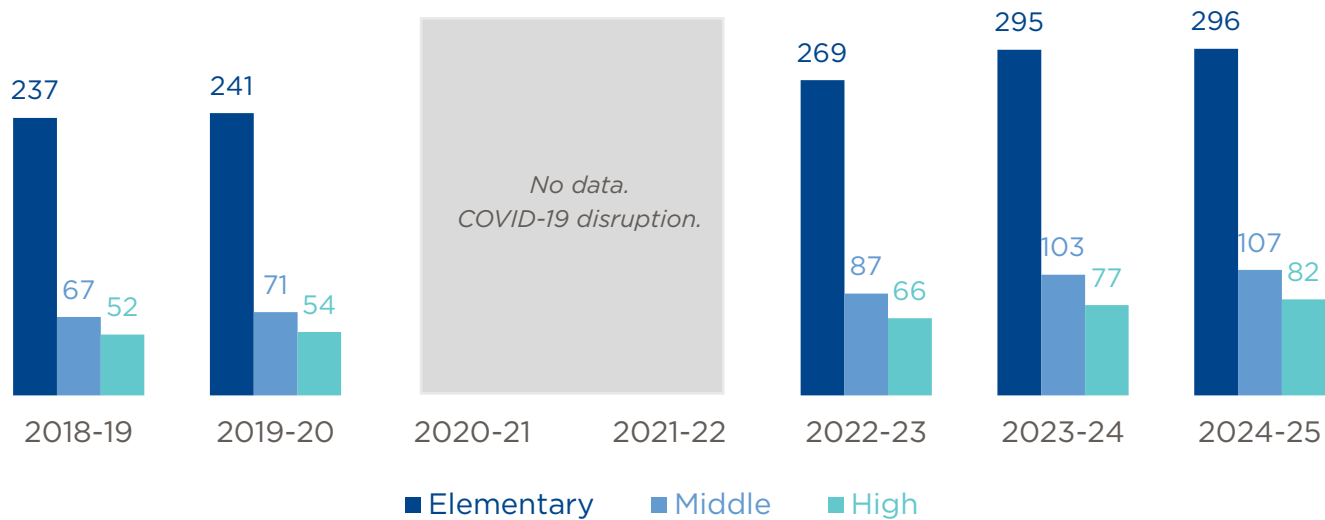


Breakfast participation increased most in schools with historically lower participation.

Although breakfast participation was consistently higher in elementary schools, participation increased more among middle and high schools following B4A implementation, schools where breakfast participation has historically lagged. (Figure 3) From SY2019–20 to SY2022–23, breakfast ADP increased 23% in middle schools (71,000 to 87,000 students) and 22% in high schools (54,000 to 66,000). Participation also increased more among non-CEP than CEP schools (19% vs. 11%) and rural than urban schools (29% vs. 7%).

These findings indicate that participation increased most in school settings where breakfast participation has historically been lower, including middle and high schools, non-CEP schools, and rural schools.

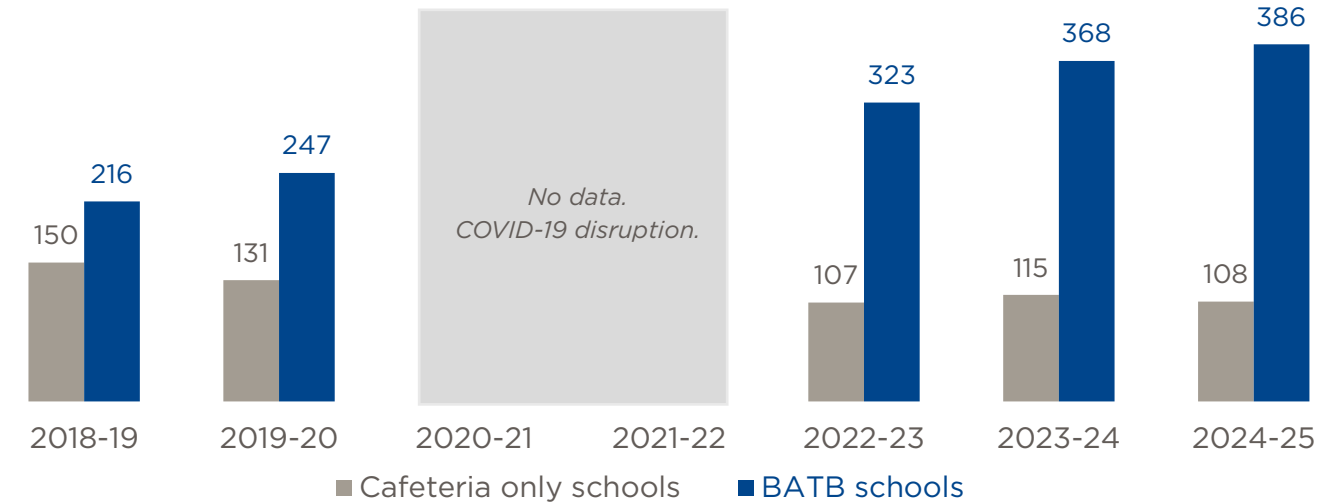
Figure 3. Breakfast Average Daily Participation (thousands) in Pennsylvania Public Elementary, Middle, and High Schools, SY2018/19 - 2024/25



Breakfast participation increased in schools using BATB.

Breakfast ADP was consistently higher in schools using one or more BATB models and increased 31% following B4A implementation, from 247,000 students in SY2019-20 to 323,000 in SY2022-23. (Figure 2) In contrast, participation in cafeteria-only schools declined 18%, from 131,000 to 107,000 students. These changes coincided with increased adoption of BATB models: from SY2019-20 to SY2022-23, the number of schools implementing grab-and-go increased 50% and breakfast in the classroom increased 60%, while the number serving only cafeteria-based breakfast declined. These findings are consistent with prior research linking BATB implementation with increased breakfast participation.

Figure 2. Average Daily Breakfast Participation (thousands) in Pennsylvania Public Schools Implementing One or More BATB Strategies Compared to Cafeteria-Only, SY2018/19 - SY2024-25



POLICY IMPLICATIONS & FUTURE DIRECTIONS

- **B4A: A Lower-Cost Option** – The difference in breakfast participation gains between B4A and SM4A should be considered alongside the substantially different costs of the two policies. For example, Virginia’s legislature estimated B4A to cost \$40.3 million annually compared to \$201.5 million for SM4A.⁷ The lower cost of B4A may appeal to states seeking to increase breakfast participation while limiting the fiscal investment required.
- **BATB Effectiveness** – Our findings add to the well-established research linking BATB with higher school breakfast participation. In this study, schools implementing BATB had higher breakfast participation than schools using cafeteria-only service, highlighting the importance of state policies and resources to help more schools adopt and sustain innovative breakfast service models.
- **Combining Policies to Improve Access** – Our findings also suggest that combining no cost breakfast with BATB may be associated with higher breakfast participation than either approach alone. States could consider opportunities to integrate support for BATB implementation and expansion into B4A or SM4A policies.
- **Continued Research** – As more states implement B4A, such as Arkansas and Delaware, future research should examine if the breakfast participation changes observed in this study replicate across a larger number of states. Similarly, other states implementing SM4A should could be used for comparison. Future research should also assess the causal impact of these policies and the qualitative factors that facilitate BATB implementation within a B4A environment.

METHODS

This study used a descriptive analysis of breakfast average daily participation (ADP), school-level demographics and breakfast delivery model data from SY2018–19, SY2019–20, SY2022–23, SY2023–24, and SY2024–25. Data from SY2020–21 and SY2021–22 were excluded because federal COVID-19 meal waivers disrupted standard participation reporting during those years. No Kid Hungry (NKH) provided data on breakfast ADP and school-level demographics for Pennsylvania and Michigan. These data were merged with school-level breakfast delivery model data – including cafeteria, grab-and-go, breakfast in the classroom, and other Breakfast After the Bell models – from The Pennsylvania Department of Education. Breakfast delivery model data were aggregated into a single BATB variable for schools with at least one BATB model. The final analytic dataset was limited to public schools. SY2022–23 was considered a partial implementation year for Pennsylvania’s B4A policy because the policy took effect in October 2022, while SY2023–24 was considered the first full implementation year. Michigan was selected as a comparison state from among nine states with SM4A policies because of its demographic similarity to Pennsylvania and because it implemented SM4A during the same school year that Pennsylvania reached full B4A implementation. All analyses were conducted in STATA.

This brief was prepared by Shreya Raval, 2026 John M. Green Policy Research Intern, with assistance from Craig Moschetti.

¹ No Kid Hungry, Share Our Strength. “What the Research Says About School Breakfast for All.”

<https://bestpractices.nokidhungry.org/index%2Ephp/resource/what-research-says-about-school-breakfast-all>;

² No Kid Hungry, Share Our Strength. “What the Research Says About Breakfast After the Bell.”

<https://bestpractices.nokidhungry.org/index%2Ephp/resource/what-research-says-about-breakfast-after-bell>

³ Commonwealth of Pennsylvania. “A Game Changer for Students Across Our State:” 2023–24 Budget Provides Universal Free Breakfast to 1.7 Million PA Students.” August 17, 2023.

⁴ Ramponi, F., Zhou, H., Gosliner, W., Ohri-Vachaspati, P., Orta-Aleman, D., Ritchie, L., Schwartz, M., Turner, L., Verguet, S., & Cohen, J. (2025). Universal Free School Meal Policies and Participation in the US National School Meal Programs. *JAMA pediatrics*, 179(10), 1108–1118. <https://doi.org/10.1001/jamapediatrics.2025.2301>

⁵ Ferris, D., Jabbari, J., Chun, Y., & Sandoval, J. S. O. (2022). Increased School Breakfast Participation from Policy and Program Innovation: The Community Eligibility Provision and Breakfast after the Bell. *Nutrients*, 14(3), 511. <https://doi.org/10.3390/nu14030511>

⁶ Community Preventive Services Task Force (CPSTF). Social Determinants of Health: Healthy School Meals for All, Updated 2026. <https://doi.org/10.15620/cdc/168659>.

⁷ Virginia Department of Planning and Budget. State Fiscal Impact Statement, HB1958. January 16, 2025.

<https://lis.blob.core.windows.net/files/1021683.PDF>; Virginia Department of Education. School Meals Stakeholder Work Group Report. November 1, 2024. <https://rga.lis.virginia.gov/Published/2024/RD727/PDF>.