



# COMMONWEALTH of VIRGINIA

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January 12, 2017

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To Whom It May Concern:

Pursuant to Item 136, paragraph c.1-3, Chapter 665, 2015 Acts of Assembly, I am pleased to transmit the addendum to the *Report on Alternative School Breakfast Service Models* prepared by the Department of Education.

If you have questions or require additional information relative to this transmittal, please do not hesitate to contact me or Kent C. Dickey, Deputy Superintendent for Finance and Operations, at (804) 225-2025 or [kent.dickey@doe.virginia.gov](mailto:kent.dickey@doe.virginia.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "S. Staples", with a long horizontal line extending to the right.

Steven R. Staples

SRS/hcj

Enclosure

c: Mrs. Dorothy McAuliffe, First Lady of Virginia  
The Honorable Dietra Trent, Secretary of Education



VIRGINIA DEPARTMENT OF EDUCATION

**Report Addendum**

# **Addendum to the Report on Alternative School Breakfast Service Models**

**Presented to:**

**The Governor of Virginia  
House Appropriations Committee  
Senate Finance Committee**

**January 12, 2017**

*Virginia Department of Education*

*P. O. Box 2120*

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## INTRODUCTION

This report serves as an addendum to the *Report on Alternative School Breakfast Service Models*, prepared and submitted to The Governor of Virginia, the House Appropriations Committee and the Senate Finance Committee on August 1, 2016 according to the 2015 Appropriations Act, item number 136. State budget funds were appropriated in the fiscal year 2016 for a pilot to increase the number of school breakfast meals served to eligible students through an alternative school breakfast service model. As part of this appropriation, the Virginia Department of Education (VDOE) was required to collect data to evaluate the educational impact of the pilot and report the results to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees. At the time of the release of the initial report, state achievement assessment data was not available for analysis. This addendum contains an analysis of the impact of the alternative school breakfast service models pilot on student achievement.

## EXECUTIVE SUMMARY OF ADDITIONAL FINDINGS

Student achievement data, as measured by the Standards of Learning (SOL) assessments, were not available for the initial report on the program's impact and effectiveness. This addendum presents an analysis of achievement data in relation to alternative school breakfast model type implementation and student achievement outcomes for participating schools.

There are two main findings presented in this report addendum:

1. Participating schools most frequently offered traditional breakfast in conjunction with an alternative breakfast model (34%), or offered one of the alternative breakfast models only. The two alternative models offered were breakfast in the classroom (27%) and grab and go breakfast (26%). Further analysis of alternative breakfast model implementation in relation to academic achievement outcomes was not conducted due to a low response rate on model implementation type from participating schools.
2. Of the schools who participated in the Alternative School Breakfast Service Models pilot program, 54 percent of participating schools showed an increase in breakfast meals served in conjunction with an increase in one or both state standards of learning (SOL) assessment pass rates.

## GUIDING QUESTIONS FOR STUDY

In fulfillment of the budget appropriation, this addendum addresses the minimum requirements for reports from participating schools, including an analysis of student achievement measures in relation to the impact of the alternative school breakfast service model type implemented.

As such, the evaluation sought to answer the following guiding questions:

- *What model of alternative school breakfast programs did schools who participated in the pilot program implement?* To answer this question, the VDOE collected reports of model utilization from each participating school. Some participating schools did not report their breakfast delivery model type, or the representative who completed the report was unsure of the model type that was implemented. As a result, a significant amount of data are missing. Missing data could significantly affect any conclusions made regarding the impact of each model type on student achievement. For this reason, only descriptive data are presented in this addendum.

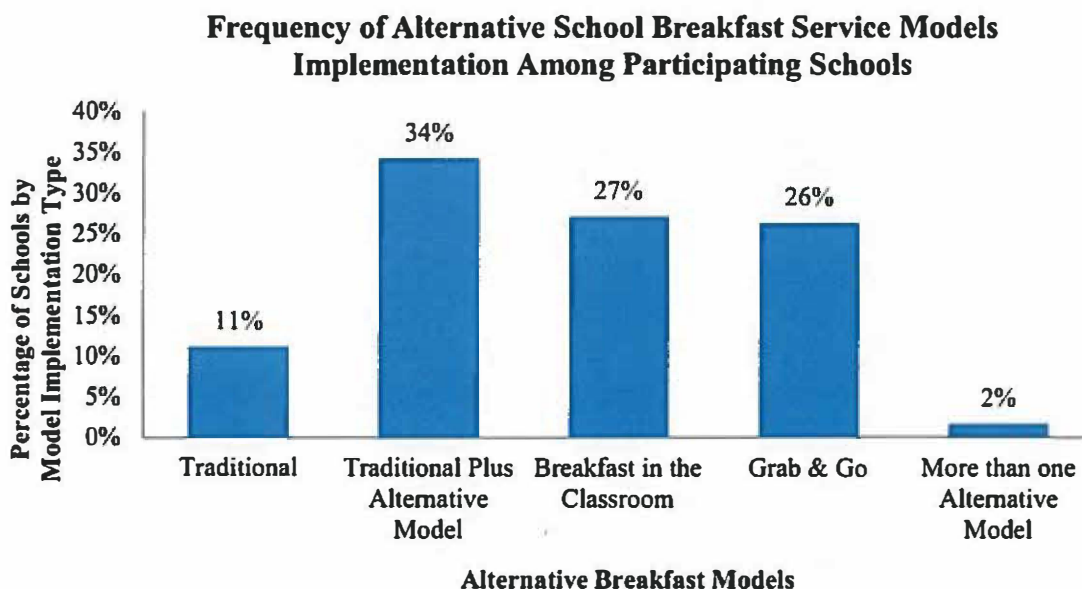
- *What is the impact of the Alternative School Breakfast Service Models program on academic achievement?* For this analysis, VDOE calculated change scores for each school using the school's state achievement assessment pass rates for the 2014-2015 and 2015-2016 school years. The pass rate change score for each school will be presented as a percent increase or decrease between pass rates for the 2014-2015 and 2015-2016 school years. Change scores were then calculated for average number of meals served per student between school years 2014-2015 and 2015-2016 using the same method. This metric provides information on the number of meals served while accounting for enrollment changes from one year to the next. Change scores were then placed on a scatterplot and described in relation to the ideal impact of the Alternative School Breakfast Service Models program. Schools that fell in the upper right quartile of the plot showed both an increase in breakfast meals served per student and overall SOL assessment pass rates.

## FINDINGS

*Finding 1: Participating schools implemented a variety of alternative school breakfast service models.*

When asked to report on what type of alternative breakfast programs were implemented, approximately half of participating schools responded. The most frequently implemented alternative breakfast program reported was traditional service in conjunction with an alternative model (34%), followed by Breakfast in the Classroom (27%), and Grab & Go (26%). Complete results are presented in Figure 1.

**Figure 1. Alternative School Breakfast Service Models Program Model Implementation Frequencies.**



*Finding 2: Schools that participated in the Alternative School Breakfast Service Models pilot program showed preliminary evidence of academic growth in relationship to an increased number of breakfast meals served.*

Achievement data was available for 221 participating schools; eliminated from the analysis were 21 schools because they serve grades preK-2 only and do not administer state achievement assessments (SOL tests). Schools that administered SOL assessments were placed on a scatterplot to examine change



scores for average number of breakfast meals served per student in relation to changes in state reading assessment pass rates (Appendix A) and state math assessment pass rates (Appendix B). The percentage of schools that showed no growth, growth in one subject, or growth in both subjects in conjunction with growth in number of breakfast meals served per student are presented in Table 1. Notably, 54 percent of participating schools showed an increase in number of meals served per student and pass rates in one or both academic areas.

**Table 1. Summary of Participating Schools Academic Growth in Relation to Meals Served Growth.**

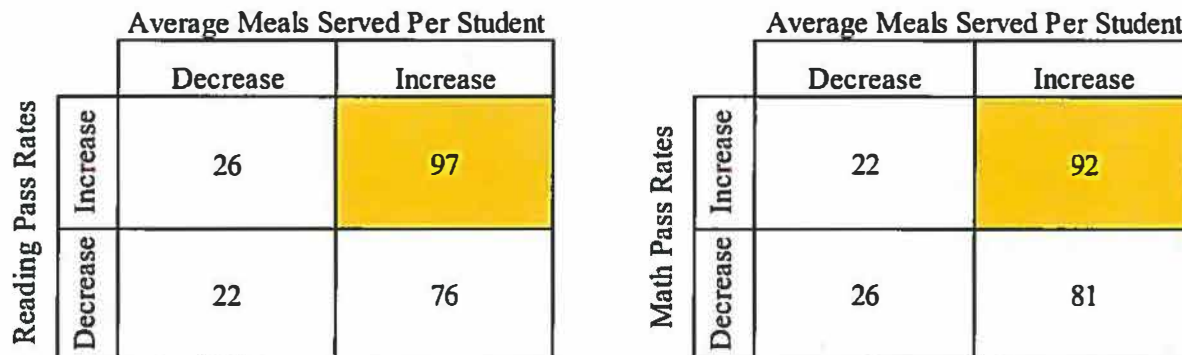
	Number of Schools	Percent of Schools	Percent of Schools with Academic and Meal Growth
Schools without Achievement Assessments	21	8%	
No Academic or Meal Growth	91	37%	
Growth in 1 Subject and Increase in Meals Served	71	29%	54%
Growth in Both Subjects and Meals Served	59	24%	

*Note: Percentages rounded to the nearest whole number.*

Taken by subject, of the schools that administered state reading assessments to their students, 97 schools (44%) fell into the upper right quartile of the scatterplot. These schools showed ideal growth as evidenced by a positive change in number of breakfast meals served per student and a positive change in state reading assessment pass rates for school years 2014-15 to 2015-2016.

Similarly, of the schools that administered state math assessments, 92 schools (42%) showed ideal growth by yielding an increase from school years 2014-15 to 2015-2016 in both number of breakfast meals served per student and state math assessment pass rates. A numeric representation of the scatterplot analysis findings are presented in Figure 2. Each box in Figure 2 represents the number of schools that fell into each quartile of the scatterplot; the number of schools that had ideal growth in both meals served per student and an increase in state assessment pass rates are in the highlighted box.

**Figure 2. Numeric representation of Scatterplot Analysis: Change in Average Number of Meals Served Per Student in Relation to Change in State Achievement Assessment Pass Rates.**



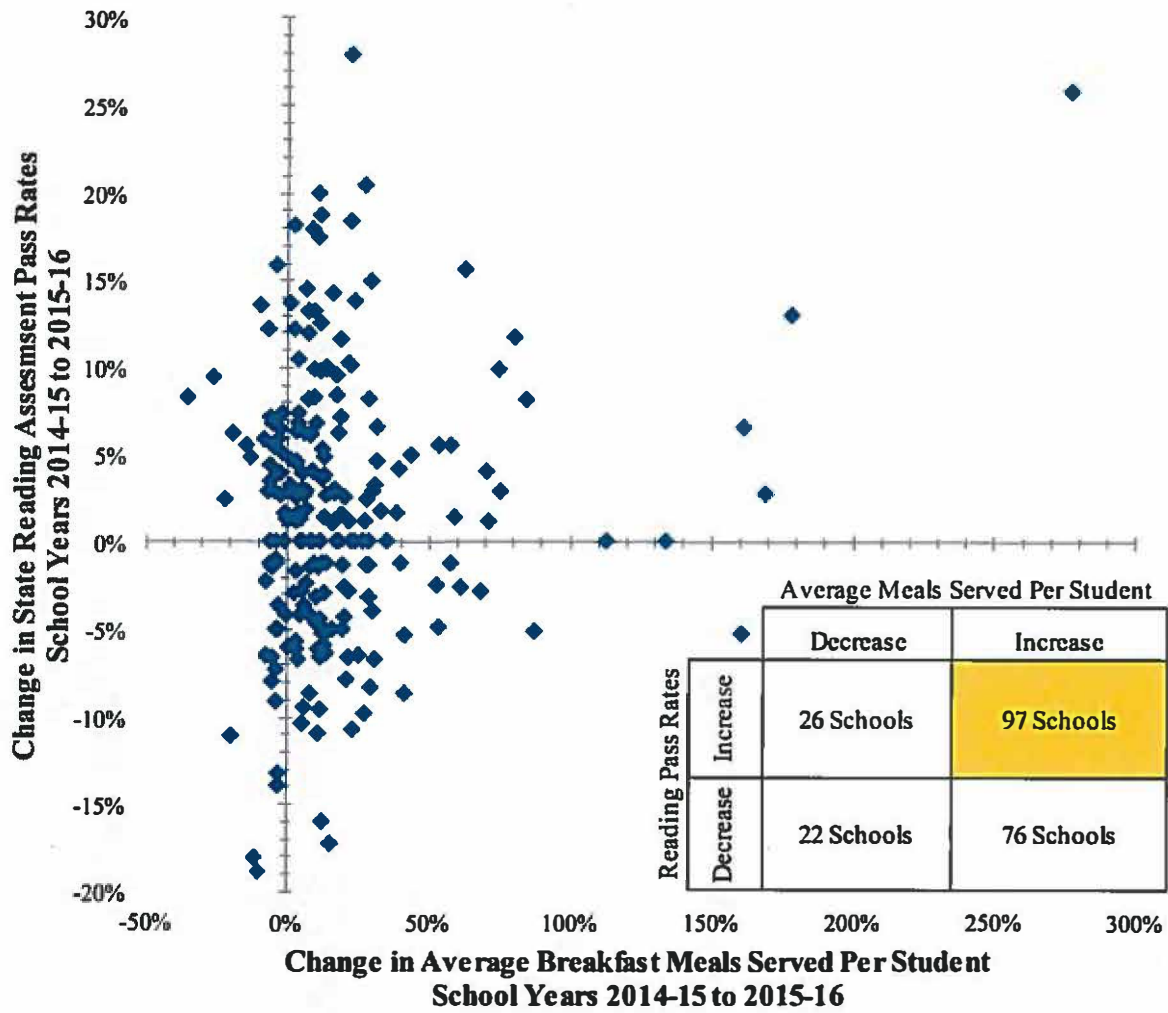
## **SUMMARY**

In summary, schools that participated in the alternative school breakfast service models pilot utilized a variety of service models. The reporting rate of model implementation was too low to analyze any further; as a result, it is difficult to determine the most effective implementation model. Despite the limitation of the data collection, this analysis provided preliminary evidence that schools are delivering breakfast using alternative methods and therefore eliminating barriers that may cause children to not have access to school breakfast. This analysis has also provided evidence that the Alternative Breakfast Service Models program had a positive effect on student academic achievement. Of the 221 participating schools that administered state reading and math assessments, 54 percent of them showed an increase in both breakfast meals served per student and state assessment pass rates in one or more academic areas.

The VDOE recommends more rigorous data collection for future evaluations of the alternative school breakfast model program in an effort to determine which alternative models are most effective. Implementation of a more rigorous data collection would enable the VDOE to more accurately discern the impact of the program as well as make recommendations on which delivery models are most effective in relation to academic achievement outcomes and student body demographics. The VDOE anticipates providing additional support to schools through technical assistance and sharing of best practices to build capacity for the program and address identified barriers to implementation.

Appendix A

**Change in Average Number of Breakfast Meals Served in relation to  
Change in State Reading Assessment Pass Rates  
School Years 2014-15 to 2015-16**





Appendix B

**Change in Average Number of Breakfast Meals Served in relation to  
Change in State Math Assessment Pass Rates  
School Years 2014-15 to 2015-16**

