

University of Texas at Arlington

MavMatrix

2021 Fall Honors Capstone Projects

Honors College

8-1-2021

THE IMPACT FREE UNIVERSAL MEALS HAVE ON STANDARDIZED TEST SCORES FOR PUBLIC SCHOOL STUDENTS

Megan Budnik

Follow this and additional works at: https://mavmatrix.uta.edu/honors_fall2021

Recommended Citation

Budnik, Megan, "THE IMPACT FREE UNIVERSAL MEALS HAVE ON STANDARDIZED TEST SCORES FOR PUBLIC SCHOOL STUDENTS" (2021). *2021 Fall Honors Capstone Projects*. 10.
https://mavmatrix.uta.edu/honors_fall2021/10

This Honors Thesis is brought to you for free and open access by the Honors College at MavMatrix. It has been accepted for inclusion in 2021 Fall Honors Capstone Projects by an authorized administrator of MavMatrix. For more information, please contact leah.mccurdy@uta.edu, erica.rousseau@uta.edu, vanessa.garrett@uta.edu.

Copyright © by Megan Budnik 2021

All Rights Reserved

THE IMPACT FREE UNIVERSAL MEALS HAVE ON
STANDARDIZED TEST SCORES FOR
PUBLIC SCHOOL STUDENTS

by

MEGAN BUDNIK

Presented to the Faculty of the Honors College of
The University of Texas at Arlington in Partial Fulfillment
of the Requirements
for the Degree of

HONORS BACHELOR OF SCIENCE IN ECONOMICS

THE UNIVERSITY OF TEXAS AT ARLINGTON

August 2021

ACKNOWLEDGMENTS

First, I would like to acknowledge the UTA staff who have helped me not only on this project, but during my time at UTA. My mentor, Dr. Timothy Wunder, who took on the responsibility to allow me to do this project. Dr. Christopher Candreva who helped me learn to program as an Economist. Business advisors Ellen Long and Kathy Gutierrez for helping guide me in the right direction. And finally, Honors advisor Bobbie Brown for reassuring me that I belong in this program.

Second, I would like to thank my parents for all their love and support. They have provided me with a life where I can be whoever I want to be. Growing up as the only child in the house is not ideal but being able to call your parents your best friends is something special. My mom especially, thank you for taking care of me, I hope to somehow one day return the favor.

Finally, I would like to thank my girlfriend, Indra. I am a better person because of you. Thank you for always believing in me and most of all, being my best friend. You are my happiness, my future, and my love.

April 23, 2021

ABSTRACT

THE IMPACT FREE UNIVERSAL MEALS HAVE ON STANDARDIZED TEST SCORES FOR PUBLIC SCHOOL STUDENTS

Megan Budnik, B.S. Economics

The University of Texas at Arlington, 2021

Faculty Mentor: Timothy Wunder

This project seeks to explore the impact free universal meals has on standardized test scores. The Community Eligibility Provision (CEP) allows eligible schools to provide USDA school meals at no charge to all students in high-poverty schools. Student demographic and testing data was collected using school report cards from the Texas Education Agency and meal data was collected from the Food Research and Action Center. Statistical analysis is presented using a Linear Regression Analysis model in RStudio comparing STAAR test scores in DFW and individual school participation in the CEP program. Research concluded the dependent variable of students meeting STAAR expectations was statistically significant, and a school participating in CEP increased the number of students who meets grade level by 5%.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
ABSTRACT.....	iv
LIST OF ILLUSTRATIONS.....	vii
LIST OF TABLES.....	viii
Chapter	
1. Introduction.....	1
1.1 Importance of School Meals.....	1
1.2 Introduction to the Community Eligibility Provision.....	2
2. Literature Review	5
2.1 Introduction to the Literature Review.....	5
2.1.1 Healthy Meals and Test Scores.....	5
2.1.2 Fruit and Vegetable Consumption	6
2.1.3 Body Mass Index (BMI)	7
3. Methodology	9
3.1 Data Information.....	9
3.2 Hypothesis Models.....	11
4. Data Findings	14
4.1 Summary Statistics.....	14
4.2 Data Analysis	15
4.2.1 Dependent Variable: Approaches	15

4.2.2 Dependent Variable: Meets.....	16
4.2.3 Dependent Variable: Masters.....	16
5. Conclusion	18
Appendix	
A. SPREADSHEET DATA.....	20
REFERENCES	27
BIOGRAPHICAL INFORMATION.....	28

LIST OF ILLUSTRATIONS

Figure		Page
1.1	Relationship of Child Food Insecurity to Free or Reduced Priced Lunch.....	2
3.1	Approaches Raw Data.....	11
3.2	Meets Raw Data.....	12
3.3	Masters Raw Data.....	12

LIST OF TABLES

Table		Page
4.1	Summary Statistics Table.....	14
4.2	Data Table	15

CHAPTER 1

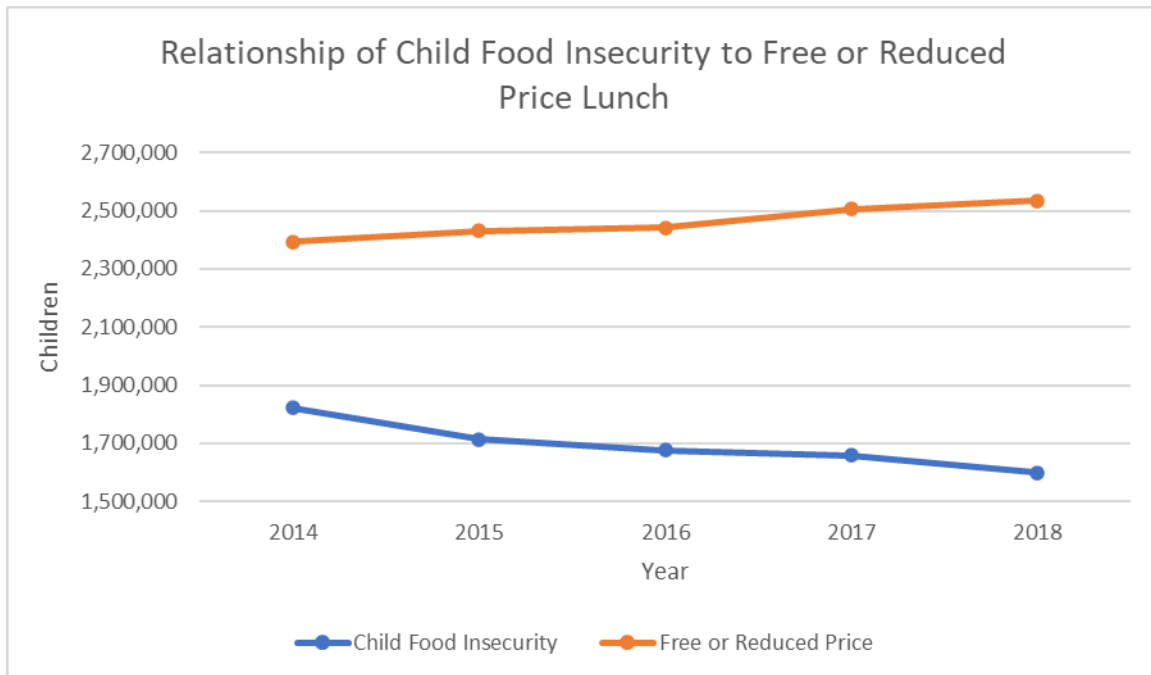
INTRODUCTION

1.1 Importance of School Meals

Each day, the U.S. Department of Agriculture (USDA) serves nearly 35 million children through the National School Lunch Program and School Breakfast Program. An operation of such magnitude delivers vital nutrition to students and financial assistance to families in need. According to the New England Journal of Medicine, “meals and snacks from schools or childcare centers fulfill up to two thirds of children’s daily nutritional needs and are generally healthier than those brought from home.” Now, that schools are closed or students are electing to learn in a virtual setting, children from low-income households, who are already at higher risk for poorer health and academic performance than children from high-income households, may be further disadvantaged by nutrition shortfalls. While the short-term health effects of missed meals include fatigue and reduced immune response, even brief periods of food insecurity can cause long-term developmental, psychological, physical, and emotional harms.

Below is a line graph showing the relationship between the number of food insecure children and the number of students receiving free or reduced priced lunch. Data was collected by the Annie E. Casey Foundation’s “Kids Count Data Center,” and shows the number of children in the state of Texas from 2014-2018.

Figure 1.1: Relationship of Child Food Insecurity to Free or Reduced Priced Lunch



1.2 Introduction to the Community Eligibility Provision

Traditional school meal programs require districts to determine a student's eligibility for free or reduced price school meals on an individual basis, typically by the guardian of the student filling out an application to prove income status. The Community Eligibility Provision (CEP) of the National School Lunch Program (NSLP) allows eligible schools to provide USDA school meals, both lunch and breakfast, at no charge to all students in high-poverty schools. Individual schools, groups of schools, or entire school districts may elect CEP provided they meet the participation requirements. The range of options in how schools can elect to the program can be a beneficial feature for districts and allows greater access into the program. At the individual school level, it allows districts to test the program before they decide to elect in further. At the group level, it reduces confusion on which schools are enrolled in the program, and it allows for schools with a lower Identified Student Percentage (ISP) to join as only one school in the group needs to

qualify based on financial need. Finally, the district level includes the same benefits of the group level, but when whole districts elect to CEP it operates more efficiently and is more widely accepted by parents. There are three ways in which a school can qualify for CEP:

1. Must have an ISP of at least 40% as of April 1st of the school year prior to implementing CEP.
2. Participate in NSLP and School Breakfast Program (SBP)
3. Have a record of administering the Programs in accordance with regulations.

Schools participating in the CEP are reimbursed for meals served, based on a formula that makes use of routinely collected administrative data and use non-federal funds to cover any costs of providing free meals that exceed the Federal reimbursements. Examples of such non-Federal funds are A la cart entrees and caloric regulated snacks students can purchase. Such administrative data is categorical student participation in other assistance programs such as the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), status as a migrant youth, homelessness, foster child, and other approved programs. The share of enrolled students eligible for free meals because of their participation in these programs is referred to as the ISP. Below is the breakdown of the formula of how meals are claimed through CEP:

- ISP is multiplied by a factor of 1.6 to determine the percent of total meals served that will be reimbursed at the federal free rate.
 - The 1.6 multiplier approximates free and reduced percent if applications were still collected.
- The remaining percent of total meals is reimbursed at the federal paid rate.

- If ISP is greater than 62.5, all meals are reimbursed at free rate ($62.5 \times 1.6 = 100$).

There are benefits to schools electing to the CEP program for students, parents, and schools. Students benefit by receiving a free healthy breakfast and lunch each school day. A universal free meal program also reduces the stigma surrounding students who would normally receive a free or reduced price lunch. Parents and guardians benefit by CEP eliminating the need to fill out an application and deadline or income they must meet for their student to receive a free meal, all of which are required when applying for free or reduced price lunch. Parents or guardians also no longer need to worry about sending money with their children to pay for meals. Under CEP, money only needs to be sent with the child if they are wanting to purchase any of the previous examples that moneys are collected for non-federal funds. Districts benefit from a faster and more streamlined service operation. With meals being free, lines move faster due to no money being needed at the point of sale and students not having to put food back or get a specialty meal because they do not have the money to pay. By serving lines moving faster, students get their food in less time and have more time to eat, leading to less waste and higher nourishment.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction to the Literature Review

This project seeks to find the societal benefits of a universal free school meals program. Many of the studies used difference-in-differences type regressions. They were estimated by creating a control group. The control group in the first article was students not receiving free or reduced price lunch, and in the final article the control group was the students being tested before the policy change. These are both critical comparisons to my study on how universal free school meals can positively impact the overall health of school children. The articles also used surveys to directly get information from the students being tested. The below articles used three main variables to estimate their regressions: standardized test scores, intake of fruits and vegetables, and body mass index (BMI).

2.1.1 Healthy Meals and Test Scores

The first peer-reviewed article is “School meal quality and academic performance.” The main interest in the article is whether the quality of school meals impacts student achievement. The researchers observe the State of California’s public school district, and their system of part in-house meal preparation for students and part contracting outside vendors to prepare food. Data is collected from the California Department of Education for all grade levels. The two datasets are they type of vendors and what food they are serving, and the second being the standardized test results. The study estimates the data using difference-in-differences type regressions.

The result of the study is “switching to a healthy meal vendor is associated with a 0.031 standard deviation increase in test scores.” While this may seem small, depending on the cost of meal preparation, this value may be worth the cost. An important finding in the research to be highlighted is the relationship between meals and disadvantaged students. It was found that healthier meals had a greater effect on test scores for disadvantaged students than for students who do not qualify for reduced price. The research also highlighted that the cause is directly tied to the quality of the food due to the number of meals given being constant throughout the study.

2.1.2 Fruit and Vegetable Consumption

The second peer reviewed article “Eligibility for Free and Reduced Priced School Meals and Fruit and Vegetable Intake at Home,” researches the impact school lunch programs and government policies have on low-income student’s fruit and vegetable consumption. Data was collected using a survey on middle school students in Washington state, and estimated using chi-square test of independence and logistic regression analysis focusing on whether students were enrolled in the free or reduced priced meal program or not and their consumption of fruits or vegetables. Students from low-income households are less likely than their higher-income peers to consume fruits and vegetables at home. This is shown through the logistic regression where the odds of students eligible for free and reduced priced meals (FRPM) were 1.35 greater than their noneligible peers for eating fruits or vegetables at school. In contract, the odds of FRPM students eating fruits or vegetables outside of school dropped to 0.65 when compared to their noneligible peers.

Therefore, while higher-income students consume more fruit and vegetables outside of school, free or reduced priced meals for children from low-income households

is associated with more frequent consumption of FV at school and narrows the gap in food disparities. The data for this research was collected in 2007. Since then, the Healthy Hunger-Free Kids Act of 2010 strengthened nutrition standards for meals and beverages provided through the national school meals program. This act requires students to take at least one fruit or vegetable for every meal, and if this study were to be conducted today, the school food environment may have an even greater effect on the diet quality of low-income students.

2.1.3 Body Mass Index (BMI)

The final peer reviewed article, “Changes to dietary and health outcomes following implementation of the 2012 updated US Department of Agriculture school nutrition standards,” studies obesity in school children since the passing of the Healthy Hunger-Free Kids Act. The data was estimated using the difference-in-differences model to compare weekday fruit and vegetable intake between all K-12 students with daily school lunch participation and students without school lunch participation. The study did find an immediate drop in empty calories such as added sugars and saturated fats with the implementation of the new nutrition standards. Unlike the previous article, there was not an obvious change in students’ fruit and vegetable intake. The article also did not find a clear correlation between the new policy and a drop in obesity numbers, or more specifically, their variable studied, BMI. The study did acknowledge that the policy change may have reduced BMI for some children, a more extensive study needs to be done. This can be attributed to the fact that obesity trends need to be studied over a period, whereas this study only observed students for four years following the policy change. Evidence that

the policy has lowered empty calories in school children may be a good indicator that eventually BMI will be decreased in students.

With implementing any program, especially a government-funded program, the benefits must outweigh the costs. This is also true with a universally free student meal program. The issue present is trying to quantify the amount of social benefits received to compare the numerical cost. Not only will alleviating the cost to families for their children's meals grant them more disposable income and less financial pressure, but research is also to be studied on the impact on the overall health free meals can provide students. This project differs by focusing on the academic health of students receiving free meals, particularly in terms of academic test scores. While it is next to impossible to monetize the effect higher tests scores can have for students, this research is important for the future of students as it can be inferred that higher test scores may help students get into college and ultimately have higher paying careers.

CHAPTER 3

METHODOLOGY

3.1 Data Information

The purpose of this research paper is to explore the relationships between free public-school lunches and standardized test scores. Regression analysis sequenced in R conducted using the Ordinary Least Squares (OLS) method. The data consists of 538 schools from six of the largest school districts in DFW, all within Dallas and Tarrant counties. School data such as student demographics and the State of Texas Assessments of Academic Readiness (STAAR) test scores were found using individual school report cards documented on the Texas Education Agency website, tea.texas.gov. School lunch data such as whether each individual school is enrolled in CEP was found at the Food Research & Action Center's website, frac.org. The districts studied are listed below with information found at each district's website:

1. Arlington Independent School District (ISD) – 13th largest school district in Texas with approximately 60,000 students. Encompasses Arlington and Grand Prairie.
2. Dallas ISD – 2nd largest district in Texas with approximately 154,000 students. Encompasses the cities of Dallas, Cockrell Hill, Seagoville, Addison, Wilmer, and parts of Carrollton, Cedar Hill, DeSoto, Duncanville, Farmers Branch, Garland, Grand Prairie, Highland Park, Hutchins, Lancaster, and Mesquite.

3. Fort Worth ISD – 5th largest school district in Texas with approximately 86,000 students. Encompasses the cities of Fort Worth, Benbrook, Westover Hills, Westworth Village, Forest Hill, Haltom City, and Kennedale
4. Garland ISD – 15th largest in Texas with approximately 55,000 students. Encompasses cities of Garland, Rowlett, and Sachse.
5. Grand Prairie ISD – Approximately 30,000 students.
6. Richardson ISD – Approximately 39,000 students.

The variables studied in the regression were organized in an EXCEL spreadsheet and are listed below:

- Type – Qualitative Data. The type of campus the school identifies as. Schools enrolling Pre-K or kindergarten are Elementary, schools enrolling at 6th or 8th grade are Junior High, and schools enrolling at 9th grade are High School.
- CEP – Qualitative Data. This variable shows N if a school is not participating in CEP and Y if a school is participating in CEP.
- ISP – ISP and the following variables are all quantitative data.
- Econ – The percent of economically-disadvantaged students.
- Expend – The total operating expenditures per student. Comprised of the costs for school leadership, instructional leadership, and instruction.
- Approaches – The STAAR performance rate at approaches grade level or above for all grades tested and all subjects in 2019.
- Meets – The STAAR performance rate at meets grade level or above for all grades tested and all subjects in 2019.

- Masters – The STAAR performance rate at masters grade level for all grades tested and all subjects in 2019.

3.2 Hypothesis Models

Due to possible differential effects free lunch can have on the level of test scores, three models were analyzed, one for each of the dependent variables: Approaches, Meets, and Masters. The first Econometric linear regression model estimated is:

$$\text{Approaches}_i = \beta_0 + \beta_1 \text{Type}_i + \beta_2 \text{CEP}_i + \beta_3 \text{ISP}_i + \beta_4 \text{Econ}_i + \beta_5 \text{Expend}_i + \varepsilon_i$$

Figure 3.1: Approaches Raw Data

```
Call:
lm(formula = Approaches ~ Type + DummyCEP + ISP + Econ + Expend,
    data = Main_Data)

Residuals:
    Min       1Q   Median       3Q      Max
-0.65088 -0.05358 -0.00548  0.05085  0.26364

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  1.017e+00  2.688e-02  37.841 < 2e-16 ***
TypeHigh School -6.362e-02  1.368e-02  -4.651 4.23e-06 ***
TypeJunior High -6.657e-02  1.089e-02  -6.112 1.98e-09 ***
DummyCEP      1.485e-02  1.058e-02   1.404  0.161
ISP           -4.256e-01  5.576e-02  -7.633 1.17e-13 ***
Econ          -3.455e-02  4.935e-02  -0.700  0.484
Expend       -1.292e-06  1.393e-06  -0.927  0.354
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.0889 on 502 degrees of freedom
(29 observations deleted due to missingness)
Multiple R-squared:  0.2982,    Adjusted R-squared:  0.2899
F-statistic: 35.56 on 6 and 502 DF,  p-value: < 2.2e-16
```

The second Econometric linear regression model estimated is:

$$\text{Meets}_i = \beta_0 + \beta_1 \text{Type}_i + \beta_2 \text{CEP}_i + \beta_3 \text{ISP}_i + \beta_4 \text{Econ}_i + \beta_5 \text{Expend}_i + \varepsilon_i$$

Figure 3.2: Meets Raw Data

```
Call:
lm(formula = Meets ~ Type + DummyCEP + ISP + Econ + Expend, data = Main_Data)

Residuals:
    Min       1Q   Median       3Q      Max
-0.27203 -0.07497 -0.02000  0.06215  0.46622

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  8.321e-01  3.263e-02  25.501 < 2e-16 ***
TypeHigh School -1.193e-02  1.661e-02  -0.718  0.4729
TypeJunior High -6.044e-02  1.322e-02  -4.570  6.13e-06 ***
DummyCEP      5.178e-02  1.285e-02   4.030  6.44e-05 ***
ISP           -5.650e-01  6.770e-02  -8.346  6.89e-16 ***
Econ          -1.475e-01  5.992e-02  -2.462  0.0142 *
Expend        1.540e-06  1.692e-06   0.910  0.3632
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1079 on 502 degrees of freedom
(29 observations deleted due to missingness)
Multiple R-squared:  0.4003, Adjusted R-squared:  0.3931
F-statistic: 55.85 on 6 and 502 DF, p-value: < 2.2e-16
```

The third Econometric linear regression model estimated is:

$$\text{Masters}_i = \beta_0 + \beta_1 \text{Type}_i + \beta_2 \text{CEP}_i + \beta_3 \text{ISP}_i + \beta_4 \text{Econ}_i + \beta_5 \text{Expend}_i + \varepsilon_i$$

Figure 3.3: Masters Raw Data

```
Call:
lm(formula = Masters ~ Type + DummyCEP + ISP + Econ + Expend,
    data = Main_Data)

Residuals:
    Min       1Q   Median       3Q      Max
-0.2645 -0.0886 -0.0475  0.0037 16.7524

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  4.556e-01  2.283e-01   1.996  0.0465 *
TypeHigh School -5.805e-02  1.162e-01  -0.500  0.6176
TypeJunior High -6.243e-02  9.251e-02  -0.675  0.5001
DummyCEP      4.155e-02  8.988e-02   0.462  0.6441
ISP           2.301e-01  4.736e-01   0.486  0.6272
Econ          -3.998e-01  4.192e-01  -0.954  0.3406
Expend       -4.148e-06  1.183e-05  -0.350  0.7261
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7551 on 502 degrees of freedom
(29 observations deleted due to missingness)
Multiple R-squared:  0.004167, Adjusted R-squared: -0.007735
F-statistic: 0.3501 on 6 and 502 DF, p-value: 0.9098
```

A dummy variable, DummyCEP, was created to test only the schools participating in CEP. The variable 'Type' was also assigned a dummy variable. As shown in the raw

data, the program dropped the Type 'Elementary,' and regressed only 'Junior High' and 'High School' on the dependent variable. For each variable, the mean, median, variance, and standard deviation was also calculated, allowing the data to be compared in perspective to the overall happenings.

CHAPTER 4

DATA FINDINGS

4.1 Summary Statistics

Table 4.1: Summary Statistics Table

Variable	ISP	Economically Disadvantaged	Expenditures	Approaches	Meets	Masters
<i>Median</i>	.59	.90	8,330	.73	.41	.18
<i>Mean</i>	.58	.84	9,236	.72	.42	.23
<i>Variance</i>	.02	.02	2,921,016	.01	.02	.57
<i>Standard Deviation</i>	.15	.15	5,405	.11	.14	.75

The standard deviation is the average amount of variability in your data set. It tells you, on average, how far each score lies from the mean. A small standard deviation means that the values in a statistical data set are close to the mean of the data set, on average, and a large standard deviation means that the values in the data set are farther away from the mean, on average. This is what is being represented in this data set. With very small variance and deviation from the mean for variables ISP, Economically Disadvantaged, Approaches, and Meets, it can be interpreted that the data is closer together across the six districts. In the instance of the variable Masters, which has a higher standard deviation and variance, it can be interpreted that there is a large amount of variation in that group. A reason for this large variation can be outliers that cause the data to be skewed. Ways outliers can affect such a variable is wealth of the parents of students, the curriculum and focus of schools, and the type of school it is, such as a leadership or college readiness campus.

4.2 Data Analysis

Table 4.2: Data Table

	Dependent variable:		
	Masters (1)	Meets (2)	Approaches (3)
TypeHigh school	-0.058 (0.116)	-0.012 (0.017)	-0.064*** (0.014)
TypeJunior High	-0.062 (0.093)	-0.060*** (0.013)	-0.067*** (0.011)
DummyCEP	0.042 (0.090)	0.052*** (0.013)	0.015 (0.011)
ISP	0.230 (0.474)	-0.565*** (0.068)	-0.426*** (0.056)
Econ	-0.400 (0.419)	-0.148** (0.060)	-0.035 (0.049)
Expend	-0.00000 (0.00001)	0.00000 (0.00000)	-0.00000 (0.00000)
Constant	0.456** (0.228)	0.832*** (0.033)	1.017*** (0.027)
Observations	509	509	509
R2	0.004	0.400	0.298
Adjusted R2	-0.008	0.393	0.290
Residual Std. Error (df = 502)	0.755	0.108	0.089
F Statistic (df = 6; 502)	0.350	55.846***	35.557***
Note:	*p<0.1; **p<0.05; ***p<0.01		

4.2.1 Dependent Variable: Approaches

To begin, the coefficients High School, Junior High, ISP, and the intercept itself, Approaches, all showed great statistical significance at the 1% level. This is evident in the small p-value for each. The unit of measurement being used for each coefficient is a percentage, as in the percent of students who scored at approaches for all subjects on the STAAR test. Focusing on the coefficients with significance; both school types, high school and junior high, tend to decrease the percentage of students by 6.4% and 6.7%. ISP, the

other significant coefficient, also decreases the percentage of students. In this case, a school with a high ISP percentage, lowers the number of students who perform at approaches grade level by 42.56%. This means that schools with a high ISP must do more to help these students succeed. This test shows that a school who is participating in the CEP program increases a student's chances of reaching approaches by 1.5%.

4.2.2 Dependent Variable: Meets

This next variable shows strong significance for each coefficient except for high school and the school expenditures. Similarly, to approaches, junior high students have a 6% lesser chance of scoring meets grade level. Both ISP and economically-disadvantaged are alike in that they categorize students based off their financial status. Therefore, it is consistent to see that they both decrease the number of students who do not reach meets grade level. In this analysis, ISP decreases the number of students who meet grade level by 56.5% and economically-disadvantaged decreases the number by 14.75%. CEP has a strong significance and increases the number of students who meets grade level by 5.17%. In addition to its significance, the standard error for a school's involvement in CEP is 1.3%, meaning there is a possibility of it varying by about 1%.

4.2.3 Dependent Variable: Masters

Finally, the masters regression results prove the purpose of the importance for conducting three individual tests. While the data is still valuable and can be interpreted, each coefficient has larger p-values than the previous two hypothesis tests and therefore are not as significant. This was to be suspected since the masters variable showed signs of outliers based off the large standard deviation as previously discussed. Highlighting the participation in CEP, a school participating increases the number of students who master

the grade level by 4% by participating. This inference requires further study as the large standard error indicates that value can vary by as much as 8%.

CHAPTER 5

CONCLUSION

In the state of Texas since 2010, the percent of children facing food insecurity has decreased while the number of students receiving free or reduced priced lunches through the National School Lunch Program (NSLP) has increased. While multiple works exist concerning the impact free and reduced meals have on students, there is a gap in research on complete free meals. Three articles were used to explain how free meals can benefit the overall wellbeing of a student. The first article was like this in that it focused on test scores and found that healthier meals had a greater effect on test scores for disadvantaged students than for students who do not qualify for reduced price. This finding lead to the addition of economically-disadvantaged and ISP in all three hypothesis tests. The next article found that free or reduced price meals for children from low-income households is associated with more frequent consumption of FV at school and narrows the gap in food disparities. While no variable was added to find the analysis, this article proved that school meals are being utilized by students. The final article discussed how school meals are a healthier option for students in finding that there was an immediate drop in empty calories such as added sugars and saturated fats with the implementation of the new nutrition standards.

This project sought to provide research on the impact free universal meals have on test scores. The methodology used to do so was linear regression analysis coded in RStudio. Data was collected on six of the largest school districts in Tarrant and Dallas counties. Variables such as individual school participation in the Community Eligibility Provision

and STAAR scoring categories were compared. It can be concluded that universal free meals have an impact on standardized test scores. The largest and most significant of the tests was the meets grade level. Meets grade level means that a child showed a good understanding of the subject material and is ready for the next grade. Schools who participated in CEP were shown to increase the number of students who meet grade level by 5%. This increase helps to combat the high number of economically-disadvantaged students not meeting their grade level due to their family's income. In simpler terms, the CEP program helps every 1 in 20 students meet their grade level on the STAAR.

APPENDIX A
SPREADSHEET DATA

Name	District	Type	CEP	ISP	Econ	Expend	Approaches	Meets	Masters	DummyCEP
Arlington	Arlington ISD	High School	N	34%	62%	11,460	76%	58%	22%	0
Sam Houston	Arlington ISD	High School	N	48%	86%	8,107	67%	40%	10%	0
Lamar	Arlington ISD	High School	N	43%	66%	10,708	68%	45%	13%	0
Bowie	Arlington ISD	High School	N	33%	65%	10,406	74%	50%	16%	0
Venture Alter	Arlington ISD	High School	N	49%	65%	13,355	51%	22%	6%	0
Turning Point	Arlington ISD	High School	N	59%	76%	43,593				0
Juan Sequin	Arlington ISD	High School	N	34%	62%	11,649	77%	57%	22%	0
Arlington Collegiate High School	Arlington ISD	High School	N	40%	87%	4,889	99%	94%	42%	0
Arlington College And Career High School	Arlington ISD	High School	N	45%	92%					0
Carter	Arlington ISD	Junior High	Y	61%	96%	9,813	60%	33%	13%	1
Bailey	Arlington ISD	Junior High	N	36%	58%	10,745	85%	59%	34%	0
Gunn	Arlington ISD	Junior High	N	48%	79%	12,782	75%	46%	22%	0
Shackelford	Arlington ISD	Junior High	Y	49%	68%	10,931	78%	46%	22%	1
Workman	Arlington ISD	Junior High	Y	57%	94%	8,237	65%	34%	15%	1
Barnett	Arlington ISD	Junior High	N	34%	70%	11,924	76%	45%	21%	0
Nichols	Arlington ISD	Junior High	Y	60%	84%	10,253.00	71%	36%	13%	1
Ousley	Arlington ISD	Junior High	N	40%	72%	7,587	82%	54%	28%	0
Berry	Arlington ISD	Elementary	Y	73%	98%	8,891	65%	27%	11%	1
Blanton	Arlington ISD	Elementary	Y	64%	95%	11,652	66%	34%	15%	1
Crow	Arlington ISD	Elementary	Y	63%	96%	12,258	66%	27%	10%	1
Duff	Arlington ISD	Elementary	N	33%	42%	7,568	90%	68%	39%	0
Kooken	Arlington ISD	Elementary	N	100%	55%	11,868				0
Rankin	Arlington ISD	Elementary	Y	65%	98%	10,276	66%	27%	80%	1
Roark	Arlington ISD	Elementary	Y	64%	96%	13,054	71%	36%	17%	1
South Davis	Arlington ISD	Elementary	Y	69%	97%	13,435	66%	29%	12%	1
Speer	Arlington ISD	Elementary	Y	71%	92%	8,438	61%	27%	10%	1
Swift	Arlington ISD	Elementary	N	66%	81%	12,962	74%	46%	24%	0
Thornton	Arlington ISD	Elementary	Y	70%	99%	7,883	66%	28%	10%	1
Goodman	Arlington ISD	Elementary	Y	58%	97%	10,232	68%	36%	16%	1
Pope	Arlington ISD	Elementary	Y	67%	78%	9,449	74%	37%	17%	1
Johns	Arlington ISD	Elementary	Y	69%	97%	8,934	70%	39%	19%	1
Short	Arlington ISD	Elementary	N	65%	82%	9,634	60%	26%	11%	0
Amos	Arlington ISD	Elementary	Y	67%	95%	10,535	80%	49%	23%	1
Dunn	Arlington ISD	Elementary	N	53%	62%	8,723	73%	45%	21%	0
Foster	Arlington ISD	Elementary	Y	62%	96%	8,846	67%	34%	16%	1
Key	Arlington ISD	Elementary	N	42%	63%	11,224	80%	44%	26%	0
Morton	Arlington ISD	Elementary	Y	62%	96%	13,294	63%	30%	14%	1
Atherton	Arlington ISD	Elementary	Y	64%	96%	10,892	73%	37%	18%	1
Wood	Arlington ISD	Elementary	N	39%	51%	8,718	76%	49%	28%	0
Sherrod	Arlington ISD	Elementary	Y	70%	83%	8,286	65%	30%	12%	1
Miller	Arlington ISD	Elementary	N	52%	64%	8,243	74%	43%	20%	0
Fitzgerald	Arlington ISD	Elementary	N	55%	78%	7,539	81%	54%	31%	0
Starrett	Arlington ISD	Elementary	N	48%	72%	10,579	70%	35%	15%	0
Bebensee	Arlington ISD	Elementary	N	54%	80%	7,485	76%	41%	18%	0
Jane Ellis	Arlington ISD	Elementary	Y	60%	77%	7,315	68%	33%	11%	1
J M Farrell	Arlington ISD	Elementary	Y	49%	85%	7,778	75%	45%	25%	1
Mary Moore	Arlington ISD	Elementary	N	33%	43%	7,001	83%	53%	27%	0
Tommie Williams	Arlington ISD	Elementary	N	55%	72%	7,961	71%	39%	19%	0
Little	Arlington ISD	Elementary	N	34%	42%	7,263	85%	57%	30%	0
Bryant	Arlington ISD	Elementary	N	50%	68%	10,892	87%	56%	30%	0
Webb	Arlington ISD	Elementary	Y	73%	90%	12,391	60%	28%	10%	1
Ashworth	Arlington ISD	Elementary	N	48%	68%	12,737	76%	47%	25%	0
Crouch	Arlington ISD	Elementary	Y	57%	99%	8,462	71%	33%	16%	1
Larson	Arlington ISD	Elementary	Y	67%	77%	10,943	67%	35%	18%	1
West	Arlington ISD	Elementary	Y	47%	61%	8,417	85%	56%	32%	0
Lynn Hale Academy	Arlington ISD	Elementary	Y	70%	95%	9,055	67%	31%	16%	1
Pearcy	Arlington ISD	Elementary	N	41%	58%	10,013	87%	63%	34%	0
Burgin	Arlington ISD	Elementary	Y	66%	97%	9,700	68%	32%	13%	1
Knox	Arlington ISD	Elementary	Y	65%	98%	8,612	68%	32%	14%	1
Backham	Arlington ISD	Elementary	N	42%	65%	8,622	83%	51%	26%	0
Remyse	Arlington ISD	Elementary	Y	63%	95%	10,684	73%	38%	14%	1
Anderson	Arlington ISD	Elementary	Y	68%	99%	8,058	61%	29%	12%	1
Adams	Arlington ISD	Elementary	Y	63%	97%	7,092	70%	40%	20%	1
Patrick	Arlington ISD	Elementary	Y	73%	97%	7,597	63%	34%	15%	1
Iones Academy	Arlington ISD	Elementary	N	36%	60%	7,306	72%	39%	20%	0
Neach	Arlington ISD	Elementary	Y	66%	80%	7,090	64%	29%	14%	1
Monutt	Arlington ISD	Elementary	Y	57%	90%	7,391	73%	42%	17%	1
Wimbish	Arlington ISD	Elementary	N	55%	73%					0
Adella Botello Callejo Elem School	Dallas ISD	Elementary	Y	69%	96%	7,951	75%	41%	19%	1
Adelle Turner El	Dallas ISD	Elementary	Y	73%	82%	10,407	73%	35%	18%	1
Nlex Sanger Preparatory School	Dallas ISD	Elementary	Y	53%	76%	7,759	81%	53%	28%	1
Nlex W Spence Learning Center & Tag Acad	Dallas ISD	Elementary	Y	58%	82%	7,802	73%	48%	26%	1
Ann Richards Steam Academy	Dallas ISD	Elementary	Y	61%	95%	7,163	75%	40%	16%	1
Anne Frank El	Dallas ISD	Elementary	Y	57%	78%	7,312	82%	54%	29%	1
Annie Webb Blanton El	Dallas ISD	Elementary	Y	70%	95%	8,112	83%	56%	32%	1
Anson Jones El	Dallas ISD	Elementary	Y	58%	95%	7,717	67%	33%	14%	1
Arcadia Park El	Dallas ISD	Elementary	Y	65%	92%	8,428	82%	51%	23%	1
Arlington Park Early Childhood Center	Dallas ISD	Elementary	Y	95%	98%	10,621				1
Arthur Kramer El	Dallas ISD	Elementary	Y	55%	70%	8,915	85%	55%	26%	1
Arturo Salazar Elementary	Dallas ISD	Elementary	Y	66%	91%	8,375	86%	52%	27%	1
Aischer Silbertstein El	Dallas ISD	Elementary	Y	63%	93%	8,017	83%	54%	29%	1
B H Macon El	Dallas ISD	Elementary	Y	67%	93%	8,330	76%	43%	20%	1
Balch Springs Middle School	Dallas ISD	Junior High	Y	58%	93%	7,289	83%	52%	24%	1
Barack Obama Male Leadership Academy At A Maceo	Dallas ISD	High School	Y	46%	80%	7,799	98%	75%	37%	1
Barbara Jordan El	Dallas ISD	Elementary	Y	70%	97%	8,008	67%	38%	15%	1
Barbara M. Manns High School For Disciplinary	Dallas ISD	High School	Y	67%	75%	27,303				1
Bayles El	Dallas ISD	Elementary	Y	75%	96%	8,810	69%	37%	15%	1
Ben Milam El	Dallas ISD	Elementary	Y	58%	91%	9,194	82%	45%	19%	1
Benjamin Franklin International Exploratory Academy	Dallas ISD	High School	Y	54%	75%	6,884	77%	38%	13%	1
Billy E Dade Middle	Dallas ISD	Junior High	Y	74%	99%	8,310	54%	24%	10%	1
Birdie Alexander El	Dallas ISD	Elementary	Y	76%	94%	10,270	69%	31%	12%	1
Booker T Washington H S Perf/Vis Arts	Dallas ISD	High School	Y	15%	32%	7,379	97%	89%	47%	1
Boudie Storey Middle	Dallas ISD	Junior High	Y	69%	98%	9,320	65%	31%	9%	1
Bryan Adams H S	Dallas ISD	High School	Y	43%	88%	6,863	77%	55%	19%	1
C A Tatum Jr El	Dallas ISD	Elementary	Y	75%	98%	8,019	72%	40%	20%	1
C F Carr El	Dallas ISD	Elementary	Y	82%	99%	12,266	76%	42%	17%	1
C M Soto Jr Elementary	Dallas ISD	Elementary	Y	58%	92%	8,426	83%	53%	31%	1
Casa View El	Dallas ISD	Elementary	Y	65%	90%	7,962	84%	56%	31%	1

Cedar Crest Elementary	Dallas ISD	Elementary	Y	86%	98%	9,894	44%	22%	9%	1
Central El	Dallas ISD	Elementary	Y	63%	90%	7,917	93%	69%	40%	1
Cesar Chavez L C	Dallas ISD	Elementary	Y	79%	97%	9,932	76%	43%	20%	1
Chapel Hill Preparatory	Dallas ISD	Elementary	Y	64%	93%	8,193	78%	50%	24%	1
Charles A Gill El	Dallas ISD	Elementary	Y	68%	93%	7,828	82%	55%	28%	1
Charles Rice Learning Center	Dallas ISD	Elementary	Y	87%	97%	8,665	79%	49%	27%	1
Citylab H S	Dallas ISD	High School	Y	41%	60%	14,522	80%	57%	12%	1
Clara Oliver El	Dallas ISD	Elementary	Y	79%	98%	11,311	69%	36%	15%	1
Clinton P Russell El	Dallas ISD	Elementary	Y	72%	94%	7,719	65%	35%	18%	1
D A Hulcy Steam Middle	Dallas ISD	Junior High	Y	52%	84%	8,455	84%	49%	21%	1
Dallas County Jaap - Terre Colony	Dallas ISD	Y		85%						1
Dallas Environmental Science Academy	Dallas ISD	Junior High	Y	42%	73%	7,904	10%	91%	62%	1
Dan D Rogers El	Dallas ISD	Elementary	Y	52%	73%	9,547	87%	55%	20%	1
Daniel Webster El	Dallas ISD	Elementary	Y	74%	97%	9,832	59%	27%	12%	1
David G Burnett El	Dallas ISD	Elementary	Y	60%	98%	8,450	79%	52%	28%	1
David W Carter H S	Dallas ISD	High School	Y	56%	84%	8,723	67%	39%	10%	1
Dr Wright L Lassiter Jr Early College H S	Dallas ISD	High School	Y	41%	86%	8,391	99%	97%	50%	1
E B Comstock Middle	Dallas ISD	Junior High	Y	71%	97%	7,894	57%	24%	7%	1
E D Walker Middle	Dallas ISD	Junior High	Y	50%	84%	7,931	72%	37%	13%	1
E H Cary Middle	Dallas ISD	Junior High	Y	55%						1
Ebby Halliday El	Dallas ISD	Elementary	Y	67%	95%	7,446	74%	44%	21%	1
Edna Rowe El	Dallas ISD	Elementary	Y	67%	92%	8,991	75%	43%	19%	1
Eduardo Mata Montessori School	Dallas ISD	Elementary	Y	42%	63%	8,839	73%	42%	23%	1
Edward Titche El	Dallas ISD	Elementary	Y	73%	98%	9,278	80%	48%	27%	1
Edwin J Kiest El	Dallas ISD	Elementary	Y	67%	94%	7,248	76%	47%	23%	1
Eladio R Martinez El	Dallas ISD	Elementary	Y	73%	97%	7,888	70%	39%	19%	1
Elsha M Pease El	Dallas ISD	Elementary	Y	89%	99%	9,121	60%	23%	8%	1
Emmett Conrad High School	Dallas ISD	High School	Y	52%	97%	8,380	69%	45%	13%	1
Esperanza "Hope" Medrano E S	Dallas ISD	Elementary	Y	67%	92%	9,598	77%	50%	30%	1
Everett L Degolyer El	Dallas ISD	Elementary	Y	41%	59%	9,629	81%	55%	29%	1
F G Bonetto Elementary School	Dallas ISD	Elementary	Y	70%	95%	8,039	80%	47%	24%	1
F P Callitt El	Dallas ISD	Elementary	Y	55%	86%	8,423	79%	47%	24%	1
Francisco P Medrano	Dallas ISD	Junior High	Y	56%	95%	7,341	64%	30%	11%	1
Frank Gusic Elementary	Dallas ISD	Elementary	Y	71%	94%	7,539	66%	36%	20%	1
Frederick Douglass El	Dallas ISD	Elementary	Y	84%	99%	7,752	53%	17%	5%	1
Gabe P Allen Charter School	Dallas ISD	Elementary	Y	79%	98%	8,547	65%	34%	15%	1
Gauche Heights Elementary	Dallas ISD	Elementary	Y	45%	63%	9,657	75%	43%	23%	1
George B. Daaley Montessori Academy	Dallas ISD	Elementary	Y	18%	26%	8,056	98%	88%	62%	1
George Herbert Walker Bush El	Dallas ISD	Elementary	Y	52%	79%	7,026	79%	45%	21%	1
George Peabody El	Dallas ISD	Elementary	Y	61%	93%	8,361	78%	45%	22%	1
George W Truett El	Dallas ISD	Elementary	Y	76%	97%	7,456	57%	26%	11%	1
Gilbert Cuellar, Sr El	Dallas ISD	Elementary	Y	69%	97%	7,754	79%	54%	30%	1
H Grady Spruce H S	Dallas ISD	High School	Y	52%	93%	7,340	63%	36%	13%	1
H J Hollan At Lisbon E S	Dallas ISD	Elementary	Y	83%	98%	9,140	72%	36%	16%	1
Harold W Lang Middle School	Dallas ISD	Junior High	Y	56%	96%	8,402	65%	31%	11%	1
Harrell Budd El	Dallas ISD	Elementary	Y	79%	99%	8,740	67%	38%	1700%	1
Harry C Withers El	Dallas ISD	Elementary	Y	33%	47%	9,539	87%	60%	38%	1
Harry Stone Montessori Academy	Dallas ISD	Elementary	Y	36%	58%	7,847	95%	70%	39%	1
Hector P. Garcia Middle School	Dallas ISD	Junior High	Y	61%	93%	7,427	71%	35%	12%	1
Henry B Gonzalez Personalized Learning Academy	Dallas ISD	Elementary	Y	68%	94%	7,440	85%	58%	29%	1
Henry W Longfellow Acad	Dallas ISD	Junior High	Y	45%	78%	7,497	10%	89%	58%	1
Herbert Marcus El	Dallas ISD	Elementary	Y	59%	96%	7,651	76%	47%	22%	1
Highland Meadows Elementary School	Dallas ISD	Elementary	Y	65%	97%	7,906	77%	44%	21%	1
Hillcrest H S	Dallas ISD	High School	Y	39%	72%	7,410	78%	54%	17%	1
Ignacio Zaragoza El	Dallas ISD	Elementary	Y	74%	95%	9,976	74%	42%	21%	1
Ignite Middle School	Dallas ISD	Junior High	Y	46%	71%	12,747	76%	37%	13%	1
Innovation Design Entrepreneurship Academy	Dallas ISD	High School	Y	53%	80%	10,015	73%	46%	15%	1
Irma Lerma Rangel Young Womens Leadership School	Dallas ISD	High School	Y	40%	72%	7,627	100%	96%	73%	1
J L Long M S	Dallas ISD	Junior High	Y	38%	59%	6,718	75%	46%	22%	1
J M Ervin El	Dallas ISD	Elementary	Y	85%	98%	10,930	64%	30%	12%	1
J P Starks El	Dallas ISD	Elementary	Y	77%	99%	8,468	81%	55%	32%	1
J Q Adams El	Dallas ISD	Elementary	Y	64%	96%	7,548	67%	36%	16%	1
J T Brashnar El	Dallas ISD	Elementary	Y	56%	81%	7,627	85%	60%	33%	1
J. W. Runyon Elementary	Dallas ISD	Elementary	Y	72%	92%	8,260	74%	45%	21%	1
Jack Lowe Sr El	Dallas ISD	Elementary	Y	75%	99%	8,551	88%	57%	30%	1
James Bowie El	Dallas ISD	Elementary	Y	67%	97%	8,928	75%	42%	20%	1
James Madison H S	Dallas ISD	High School	Y	64%	97%	11,050	65%	34%	7%	1
James S Hogg El	Dallas ISD	Elementary	Y	67%	93%	11,076	79%	55%	21%	1
Jerry Jenkins El	Dallas ISD	Elementary	Y	55%	78%	8,026	77%	45%	22%	1
Jill Stone Elementary School At Vickery Meadows	Dallas ISD	Elementary	Y	79%	98%	8,800	68%	41%	19%	1
John B Hood Middle	Dallas ISD	Junior High	Y	60%	92%	7,113	64%	30%	10%	1
John F Pawler El	Dallas ISD	Elementary	Y	68%	94%	9,857	73%	39%	19%	1
John H Reagan El	Dallas ISD	Elementary	Y	62%	95%	9,855	80%	46%	22%	1
John Inland El	Dallas ISD	Elementary	Y	72%	98%	7,594	79%	47%	20%	1
John J Purnhing El	Dallas ISD	Elementary	Y	60%	87%	9,460	82%	54%	25%	1
John Neely Bryan El	Dallas ISD	Elementary	Y	83%	99%	8,876	66%	35%	10%	1
John W Carpenter El	Dallas ISD	Elementary	Y	85%	96%	10,742	64%	25%	7%	1
Jose "Joe" Mary Elementary School	Dallas ISD	Elementary	Y	64%	96%	7,887	78%	48%	24%	1
Joseph J Rhoads Learning Center	Dallas ISD	Elementary	Y	78%	100%	8,436	60%	27%	11%	1
Julian T. Saldivar El	Dallas ISD	Elementary	Y	64%	99%	7,480	78%	53%	27%	1
Julius Dorsey El	Dallas ISD	Elementary	Y	75%	98%	8,977	85%	59%	36%	1
Justin F Kimball H S	Dallas ISD	High School	Y	49%	94%	7,182	64%	38%	10%	1
K B Polk Acad Talented And Gifted	Dallas ISD	Elementary	Y	62%	93%	9,674	65%	36%	18%	1
Kathlyn Joy Gilliam Collegiate Acad	Dallas ISD	High School	Y	46%	80%	7,440	97%	86%	29%	1
Kennedy-Curry Middle	Dallas ISD	Junior High	Y	74%	94%	7,451	55%	20%	4%	1
Kieberg El	Dallas ISD	Elementary	Y	67%	89%	8,096	79%	47%	19%	1
L G Pinkston H S	Dallas ISD	High School	Y	56%	92%	8,703	59%	30%	10%	1
L L Hotchkiss El	Dallas ISD	Elementary	Y	77%	97%	8,710	77%	45%	23%	1
L O Donald El	Dallas ISD	Elementary	Y	60%	92%	9,931	84%	53%	26%	1
L V Stockard Middle	Dallas ISD	Junior High	Y	56%	89%	7,141	65%	27%	9%	1
Lakewood El	Dallas ISD	Elementary	Y	4%	6%	6,388	97%	94%	58%	1
Larry Smith Elementary	Dallas ISD	Elementary	Y	66%	93%	7,424	77%	46%	25%	1
Lee A. Mchlan Elementary	Dallas ISD	Elementary	Y	70%	98%	7,389	72%	40%	19%	1
Leila P Cowart El	Dallas ISD	Elementary	Y	68%	93%	8,104	80%	46%	25%	1
Lenore Kirk Hall El	Dallas ISD	Elementary	Y	61%	92%	8,366	78%	53%	31%	1
Leonidas G Cigarroa M D E S	Dallas ISD	Elementary	Y	64%	97%	8,918	77%	41%	17%	1
Leslie A Stemmons El	Dallas ISD	Elementary	Y	59%	91%	8,175	79%	51%	27%	1
Lida Hooe El	Dallas ISD	Elementary	Y	63%	89%	9,161	77%	46%	22%	1
Lincoln H S	Dallas ISD	High School	Y	66%	91%	9,858	59%	32%	7%	1

Lorenzo De Zavala El	Dallas ISD	Elementary	Y	73%	97%	9,138	71%	41%	19%	1
Louise Wolff Kahn El	Dallas ISD	Elementary	Y	69%	92%	7,720	82%	51%	26%	1
Maple Lawn El	Dallas ISD	Elementary	Y	71%	95%	8,250	73%	39%	18%	1
Margaret B Hinderson El	Dallas ISD	Elementary	Y	63%	89%	9,386	86%	68%	45%	1
Marisa Moreno El	Dallas ISD	Elementary	Y	65%	94%	9,544	81%	50%	23%	1
Mark Twain Fundamental Vanguard	Dallas ISD	Elementary	Y	63%	84%	11,022	59%	27%	14%	1
Martha Turner Reilly El	Dallas ISD	Elementary	Y	57%	80%	8,057	83%	54%	31%	1
Martin Luther King Elem	Dallas ISD	Elementary	Y	82%	100%	9,898	76%	42%	17%	1
Martin Weiss El	Dallas ISD	Elementary	Y	78%	98%	8,618	82%	49%	26%	1
Mary McLeod Bethune El	Dallas ISD	Elementary	Y	57%	90%	7,955	78%	47%	21%	1
Maya Angelou H S	Dallas ISD	High School	Y	100%	92%	30,836				1
Mockingbird Elementary	Dallas ISD	Elementary	Y	12%	19%	6,903	91%	71%	49%	1
Moises E. Molina H S	Dallas ISD	High School	Y	43%	87%	7,003	75%	51%	16%	1
Montessori Academy At Onesimo Hernandez	Dallas ISD	Elementary	Y	71%	85%	11,540				1
Mount Auburn Steam Academy	Dallas ISD	Elementary	Y	70%	92%	7,861	67%	33%	11%	1
Multiple Careers Center	Dallas ISD		Y	35%						1
N W Harlee Early Childhood Center	Dallas ISD	Elementary	Y	82%	92%	9,887				1
Nancy J Cochran El	Dallas ISD	Elementary	Y	80%	96%	8,363	51%	27%	12%	1
Nancy Moseley El	Dallas ISD	Elementary	Y	65%	97%	7,583	81%	51%	25%	1
Nathan Adams El	Dallas ISD	Elementary	Y	64%	92%	9,086	79%	47%	25%	1
Nathaniel Hawthorne El	Dallas ISD	Elementary	Y	70%	93%	9,327	80%	51%	23%	1
New Tech At B.F. Darrell High School	Dallas ISD	High School	Y	57%	91%	11,782	82%	57%	20%	1
North Dallas H S	Dallas ISD	High School	Y	51%	92%	8,484	64%	36%	9%	1
North Lake Early College High School	Dallas ISD	High School	Y	56%	88%					1
O W Holmes M S/Classical Acad	Dallas ISD	Junior High	Y	77%	98%	8,409	68%	31%	10%	1
Obadiah Knight El	Dallas ISD	Elementary	Y	59%	96%	8,536	78%	52%	28%	1
Oran M Roberts El	Dallas ISD	Elementary	Y	71%	98%	7,325	72%	36%	18%	1
Paul L Dunbar Learning Center	Dallas ISD	Elementary	Y	83%	99%	10,068	68%	41%	23%	1
Personalized Learning Preparatory At Sam Houston	Dallas ISD	Elementary	Y	59%	77%	13,439	81%	49%	24%	1
Pleasant Grove El	Dallas ISD	Elementary	Y	71%	97%	8,496	75%	47%	24%	1
Preston Hollow El	Dallas ISD	Elementary	Y	60%	79%	9,749	85%	58%	34%	1
Raul Quintanilla Sr M S	Dallas ISD	Junior High	Y	57%	92%	9,040	79%	49%	20%	1
Reinhardt El	Dallas ISD	Elementary	Y	62%	90%	9,029	79%	51%	24%	1
Richard Lagow El	Dallas ISD	Elementary	Y	67%	96%	7,978	73%	43%	18%	1
Robert L Thornton El	Dallas ISD	Elementary	Y	79%	92%	9,696	72%	35%	14%	1
Robert T Hill Middle	Dallas ISD	Junior High	Y	53%	89%	7,213	71%	36%	12%	1
Ronald E McInair El	Dallas ISD	Elementary	Y	79%	95%	7,432	75%	42%	18%	1
Roosevelt H S	Dallas ISD	High School	Y	58%	99%	9,318	61%	31%	6%	1
Rosemont Lower - Chris V Semos Building	Dallas ISD	Elementary	Y	52%	65%	6,674	78%	49%	24%	1
Rosemont Upper	Dallas ISD	Junior High	Y	44%	81%	10,523	90%	55%	21%	1
Rosie Somell's Education And Social Services Hs	Dallas ISD	High School	Y	28%	71%	11,116	99%	94%	39%	1
Rufus C Burleson El	Dallas ISD	Elementary	Y	78%	98%	7,332	58%	29%	12%	1
S S Conner El	Dallas ISD	Elementary	Y	74%	99%	7,871	70%	37%	19%	1
Sam Tasby Middle	Dallas ISD	Junior High	Y	65%	98%	7,736	62%	28%	10%	1
San Jacinto El	Dallas ISD	Elementary	Y	74%	98%	8,261	63%	36%	16%	1
Sarah Zumwalt Middle	Dallas ISD	Junior High	Y	87%	98%	9,317	60%	27%	7%	1
School For The Talented And Gifted In Pleasant Grove	Dallas ISD	Junior High	Y	46%	87%	9,797	99%	86%	59%	1
Seagoville El	Dallas ISD	Elementary	Y	64%	86%	7,396	68%	34%	16%	1
Seagoville H S	Dallas ISD	High School	Y	46%	84%	7,757	67%	42%	12%	1
Seagoville Middle	Dallas ISD	Junior High	Y	56%	90%	7,173	66%	30%	10%	1
Seagoville North Elm School	Dallas ISD	Elementary	Y	62%	91%	6,729	67%	36%	14%	1
Sidney Lanier Expressive Arts Vanguard	Dallas ISD	Elementary	Y	57%	85%	7,672	75%	44%	23%	1
Skyline H S	Dallas ISD	High School	Y	47%	77%	7,220	72%	49%	16%	1
Solar Prep For Boys At John F Kennedy	Dallas ISD	Elementary	Y	38%	52%	12,928				1
Solar Preparatory School For Girls At James B Bonham	Dallas ISD	Elementary	Y	33%	50%	8,684	95%	73%	45%	1
South Oak Cliff H S	Dallas ISD	High School	Y	65%	97%	8,763	65%	35%	9%	1
Stephen C Foster El	Dallas ISD	Elementary	Y	59%	99%	8,481	77%	45%	20%	1
Stevens Park El	Dallas ISD	Elementary	Y	63%	99%	7,951	69%	37%	14%	1
Sudie L. Williams Talented And Gifted Academy	Dallas ISD	Junior High	Y	20%	36%	10,622	98%	90%	60%	1
Sunset H S	Dallas ISD	High School	Y	45%	76%	7,084	72%	48%	16%	1
T G Terry El	Dallas ISD	Elementary	Y	72%	93%	8,620	73%	44%	21%	1
T W Browne Middle	Dallas ISD	Junior High	Y	65%	97%	7,678	63%	29%	10%	1
Thelma Elizabeth Page Richardson El	Dallas ISD	Elementary	Y	65%	94%	7,687	75%	45%	20%	1
Thomas C. Marsh Preparatory Academy	Dallas ISD	Junior High	Y	50%	88%	7,045	65%	30%	10%	1
Thomas J Rusk Middle	Dallas ISD	Junior High	Y	63%	94%	9,723	74%	39%	16%	1
Thomas Jefferson H S	Dallas ISD	High School	Y	41%	64%	7,451	69%	47%	15%	1
Thomas L Marsalis El	Dallas ISD	Elementary	Y	73%	94%	8,381	79%	46%	22%	1
Thomas Tolbert El	Dallas ISD	Elementary	Y	69%	94%	8,759	78%	44%	24%	1
Tom C Gooch El	Dallas ISD	Elementary	Y	64%	92%	9,339	80%	48%	26%	1
Trinity Garza Early College H S	Dallas ISD	High School	Y	35%	85%	7,142	100%	99%	55%	1
Trinity Heights Gifted And Talented School	Dallas ISD	Elementary	Y	63%	90%	10,269	61%	25%	10%	1
Umpfrey Lee El	Dallas ISD	Elementary	Y	81%	98%	9,053	74%	37%	17%	1
Urban Park El	Dallas ISD	Elementary	Y	68%	93%	7,841	75%	43%	18%	1
Victor H Hoeter El	Dallas ISD	Elementary	Y	34%	52%	7,654	84%	58%	36%	1
W A Blair El	Dallas ISD	Elementary	Y	77%	98%	8,085	72%	43%	25%	1
W E Greiner Exploratory Arts Acad	Dallas ISD	Junior High	Y	50%	79%	6,651	81%	48%	21%	1
W H Adamson H S	Dallas ISD	High School	Y	46%	96%	6,830	75%	46%	15%	1
W H Atwell Law Acad	Dallas ISD	Junior High	Y	72%	98%	8,368	61%	27%	9%	1
W H Gaston Middle	Dallas ISD	Junior High	Y	56%	94%	7,596	67%	35%	13%	1
W T White H S	Dallas ISD	High School	Y	37%	67%	6,736	69%	44%	13%	1
W W Bushman El	Dallas ISD	Elementary	Y	82%	100%	9,053	80%	46%	18%	1
W W Samsell H S	Dallas ISD	High School	Y	49%	90%	7,477	62%	37%	12%	1
Walnut Hill El	Dallas ISD	Elementary	Y	47%	67%	9,308	89%	56%	28%	1
Whitney M Young El	Dallas ISD	Elementary	Y	85%	95%	8,359	63%	29%	14%	1
William B Travis Academy/Vnigrd For Academically Tag	Dallas ISD	Junior High	Y	9%	17%	7,349	100%	97%	82%	1
William Brown Miller Elementary School	Dallas ISD	Elementary	Y	74%	94%	11,358	79%	47%	22%	1
William Lipscomb El	Dallas ISD	Elementary	Y	52%	77%	9,082	73%	44%	21%	1
William M Anderson El	Dallas ISD	Elementary	Y	71%	99%	7,271	80%	49%	24%	1
Wilmer-Hutchins El	Dallas ISD	Elementary	Y	74%	95%	6,976	56%	23%	9%	1
Wilmer-Hutchins H S	Dallas ISD	High School	Y	57%	80%	8,446	63%	32%	6%	1
Winnetka El	Dallas ISD	Elementary	Y	66%	93%	6,792	84%	55%	31%	1
Woodrow Wilson H S	Dallas ISD	High School	Y	29%	52%	6,591	83%	67%	30%	1
Young Men'S Leadership Academy At Fred F Florence Ms	Dallas ISD	Junior High	Y	62%	97%	8,566	63%	31%	11%	1
Zan Wesley Holmes, Jr Middle School	Dallas ISD	Junior High	Y	56%	94%	7,722	69%	31%	9%	1
Downtown Montessori At Ida B. Wells Academy	Dallas ISD	Elementary	Y							1
Eddie Bernice Johnson Elementary School	Dallas ISD	Elementary	Y							1
Carter-Riverside H S	Fort Worth ISD	High School	N	44%	95%	9,173	65%	35%	9%	0
Arlington Heights H S	Fort Worth ISD	High School	N	38%	70%	8,000	72%	42%	11%	0
South Hills High School	Fort Worth ISD	High School	Y	47%	91%	7,223	68%	38%	9%	1

Diamond Hill-Jarvis H S	Fort Worth ISD	High School	Y	46%	95%	9,565	55%	23%	5%	1
Dunbar H S	Fort Worth ISD	High School	Y	65%	88%	11,620	59%	33%	6%	1
Eastern Hills H S	Fort Worth ISD	High School	Y	55%	90%	10,368	60%	30%	7%	1
North Side H S	Fort Worth ISD	High School	Y	49%	92%	7,833	67%	38%	8%	1
Polytechnic H S	Fort Worth ISD	High School	Y	55%	92%	9,351	60%	33%	10%	1
Paschal H S	Fort Worth ISD	High School	N	31%	62%	6,977	74%	50%	17%	0
Trimble Technical H S	Fort Worth ISD	High School	N	45%	90%	8,847	82%	53%	14%	0
Southwest H S	Fort Worth ISD	High School	N	47%	82%	9,335	63%	40%	11%	0
Western Hills H S	Fort Worth ISD	High School	Y	57%	88%	11,874	63%	35%	10%	1
O D Wyatt H S	Fort Worth ISD	High School	Y	57%	93%	9,087	62%	33%	8%	1
Middle Ln Lrn Ctr	Fort Worth ISD	Junior High	Y	84%	93%	69,985				1
Metro Opportunity	Fort Worth ISD	Junior High	Y	69%	94%	42,123				1
Jo Kelly Sp Ed	Fort Worth ISD	Elementary	Y	46%	70%	58,432				1
Transition Ctr	Fort Worth ISD	High School	N	39%	74%	39,803				0
Daggett Middle	Fort Worth ISD	Junior High	Y	53%	88%	11,912	63%	33%	12%	1
Wedgewood 6Th Gr Sch	Fort Worth ISD	Junior High	Y	63%	89%	8,814	64%	25%	8%	1
Elder Middle	Fort Worth ISD	Junior High	Y	58%	91%	7,243	63%	30%	11%	1
Forest Oak Middle	Fort Worth ISD	Junior High	Y	68%	95%	9,769	62%	29%	10%	1
Handley Middle	Fort Worth ISD	Junior High	Y	70%	89%	9,969	57%	24%	8%	1
James Middle	Fort Worth ISD	Junior High	Y	54%	94%	8,236	54%	21%	5%	1
Kirkpatrick Middle	Fort Worth ISD	Junior High	Y	62%	96%	8,736	64%	29%	7%	1
McLean Middle	Fort Worth ISD	Junior High	N	37%	65%	7,048	76%	47%	24%	0
Maracham Middle	Fort Worth ISD	Junior High	Y	58%	96%	7,262	67%	30%	9%	1
Meadowbrook Middle	Fort Worth ISD	Junior High	Y	69%	91%	7,987	65%	32%	10%	1
Monnig Middle	Fort Worth ISD	Junior High	Y	52%	78%	8,599	66%	31%	11%	1
Morningside Middle	Fort Worth ISD	Junior High	Y	74%	95%	8,633	54%	20%	5%	1
Applied Learning Acad	Fort Worth ISD	Junior High	N	31%	57%	7,958	84%	50%	21%	0
Riverside Middle	Fort Worth ISD	Junior High	Y	53%	95%	7,784	64%	26%	9%	1
Rosemont Middle	Fort Worth ISD	Junior High	Y	55%	96%	7,515	68%	33%	12%	1
Stripling Middle	Fort Worth ISD	Junior High	N	41%	66%	7,312	77%	43%	18%	0
J Martin Jaquet Middle	Fort Worth ISD	Junior High	Y	75%	97%	8,904	46%	16%	5%	1
Wedgewood Middle	Fort Worth ISD	Junior High	Y	59%	87%	7,460	64%	32%	11%	1
Leonard Middle	Fort Worth ISD	Junior High	Y	67%	92%	8,811	54%	22%	6%	1
Como Montessori	Fort Worth ISD	Junior High	Y	51%	77%	11,662	61%	26%	11%	1
Glencrest 6Th Grade Sch	Fort Worth ISD	Junior High	Y	70%	94%	10,075	62%	22%	7%	1
Rosemont 6Th Grade	Fort Worth ISD	Junior High	Y	58%	96%	7,515	68%	33%	12%	1
McLean 6Th Grade	Fort Worth ISD	Junior High	N	37%	63%	7,267	75%	43%	20%	0
McClung Middle	Fort Worth ISD	Junior High	Y	65%	91%	8,219	60%	25%	8%	1
Benbrook Middle/High School	Fort Worth ISD	Junior High	N	33%	55%	6,862	73%	45%	18%	0
Young Women'S Leadership Academy	Fort Worth ISD	Junior High	N	37%	75%	9,218	96%	74%	31%	0
Young Mens Leadership Academy	Fort Worth ISD	Junior High	Y	48%	77%	13,752	85%	53%	15%	1
World Languages Institute	Fort Worth ISD	Junior High	N	43%	85%	10,727	86%	54%	19%	0
Benbrook El	Fort Worth ISD	Elementary	N	36%	53%	7,592	80%	46%	24%	0
Boulevard Heights	Fort Worth ISD	Elementary	Y	39%	75%	63,403	74%	74%	8%	1
West Handley El	Fort Worth ISD	Elementary	Y	69%	94%	9,108	54%	24%	9%	1
Burton Hill El	Fort Worth ISD	Elementary	N	33%	58%	8,854	87%	64%	37%	0
Carroll Peak El	Fort Worth ISD	Elementary	Y	77%	92%	8,431	60%	27%	10%	1
Carter Park El	Fort Worth ISD	Elementary	Y	66%	92%	7,069	55%	27%	9%	1
Manuel Jara El	Fort Worth ISD	Elementary	Y	59%	95%	7,923	72%	40%	18%	1
George Clark El	Fort Worth ISD	Elementary	Y	60%	88%	9,426	62%	28%	11%	1
Como El	Fort Worth ISD	Elementary	Y	74%	96%	11,852	65%	33%	15%	1
Hazel Harvey Peace El	Fort Worth ISD	Elementary	Y	71%	82%	7,626	61%	30%	14%	1
Daggett El	Fort Worth ISD	Elementary	Y	59%	86%	7,889	65%	30%	10%	1
Rufino Mendoza Sr El	Fort Worth ISD	Elementary	Y	64%	95%	8,415	51%	21%	10%	1
De Zavala El	Fort Worth ISD	Elementary	Y	59%	80%	12,587	75%	43%	22%	1
Diamond Hill El	Fort Worth ISD	Elementary	Y	63%	94%	7,222	72%	40%	18%	1
S S Dilow El	Fort Worth ISD	Elementary	Y	71%	94%	7,841	62%	30%	12%	1
Maude I Logan El	Fort Worth ISD	Elementary	Y	78%	96%	11,246	59%	23%	10%	1
Eastern Hills El	Fort Worth ISD	Elementary	Y	75%	91%	8,673	63%	32%	12%	1
East Handley El	Fort Worth ISD	Elementary	Y	68%	92%	9,611	66%	30%	15%	1
Christene C Moss Elementary	Fort Worth ISD	Elementary	Y	75%	93%	9,207	63%	30%	13%	1
John T Whitte Elem	Fort Worth ISD	Elementary	Y	73%	91%	11,394	59%	25%	11%	1
Harlean Beal El	Fort Worth ISD	Elementary	Y	69%	88%	9,673	60%	22%	7%	1
Rosemont Elem	Fort Worth ISD	Elementary	Y	60%	91%	7,350	68%	34%	14%	1
Glen Park El	Fort Worth ISD	Elementary	Y	64%	90%	8,336	74%	42%	20%	1
W M Green El	Fort Worth ISD	Elementary	Y	69%	93%	7,287	69%	33%	13%	1
Greenbarier El	Fort Worth ISD	Elementary	Y	61%	91%	8,593	67%	34%	15%	1
Van Zandt-Guinn El	Fort Worth ISD	Elementary	Y	78%	96%	9,539	51%	18%	7%	1
Hubbard El	Fort Worth ISD	Elementary	Y	63%	93%	7,645	63%	29%	13%	1
Helbing El	Fort Worth ISD	Elementary	Y	61%	93%	7,838	67%	35%	14%	1
Kirkpatrick El	Fort Worth ISD	Elementary	Y	72%	96%	7,938	66%	33%	13%	1
Meadowbrook El	Fort Worth ISD	Elementary	Y	63%	93%	8,809	75%	43%	19%	1
Mcrae El	Fort Worth ISD	Elementary	Y	64%	93%	7,554	70%	33%	12%	1
Michale Boulevard El	Fort Worth ISD	Elementary	Y	79%	95%	10,243	56%	24%	11%	1
Moore M H El	Fort Worth ISD	Elementary	Y	56%	93%	7,761	71%	33%	15%	1
Morningside El	Fort Worth ISD	Elementary	Y	69%	89%	9,937	58%	28%	13%	1
Charles Nash El	Fort Worth ISD	Elementary	Y	69%	87%	9,092	64%	31%	12%	1
North Hi Mount El	Fort Worth ISD	Elementary	N	36%	51%	7,917	82%	56%	33%	0
Oakhurst El	Fort Worth ISD	Elementary	Y	52%	92%	7,707	78%	47%	25%	1
Natha Howell El	Fort Worth ISD	Elementary	Y	49%	92%	8,063	67%	40%	20%	1
Oaklawn El	Fort Worth ISD	Elementary	Y	73%	94%	7,686	61%	29%	13%	1
A M Pata El	Fort Worth ISD	Elementary	Y	84%	97%	8,553	53%	18%	8%	1
M L Phillips El	Fort Worth ISD	Elementary	Y	59%	85%	9,212	66%	35%	16%	1
Ridglea Hills El	Fort Worth ISD	Elementary	N	31%	44%	7,419	82%	50%	26%	0
Luelia Merritt El	Fort Worth ISD	Elementary	Y	66%	89%	7,262	71%	38%	19%	1
Versia Williams El	Fort Worth ISD	Elementary	Y	64%	96%	8,255	62%	31%	12%	1
Maudrie Walton El	Fort Worth ISD	Elementary	Y	80%	95%	11,193	55%	27%	7%	1
Sam Rosen El	Fort Worth ISD	Elementary	Y	67%	93%	8,349	65%	31%	12%	1
Sagamore Hill El	Fort Worth ISD	Elementary	Y	69%	93%	6,714	65%	31%	13%	1
Bruce Shulkey El	Fort Worth ISD	Elementary	Y	65%	83%	9,060	75%	41%	17%	1
Richard Wilson Elementary	Fort Worth ISD	Elementary	Y	64%	94%	7,172	70%	37%	19%	1
South Hi Mount El	Fort Worth ISD	Elementary	Y	53%	81%	8,171	81%	51%	23%	1
South Hills El	Fort Worth ISD	Elementary	Y	56%	89%	7,218	62%	26%	10%	1
Springdale El	Fort Worth ISD	Elementary	Y	58%	95%	7,709	73%	35%	16%	1
Sunrise El	Fort Worth ISD	Elementary	Y	81%	95%	8,863	52%	19%	7%	1
W J Turner El	Fort Worth ISD	Elementary	Y	67%	93%	8,709	67%	32%	13%	1
Washington Heights El	Fort Worth ISD	Elementary	Y	61%	94%	8,970	78%	42%	17%	1
Waverly Park El	Fort Worth ISD	Elementary	Y	55%	77%	7,769	71%	40%	23%	1
Westcliff El	Fort Worth ISD	Elementary	Y	49%	72%	7,124	83%	53%	29%	1

Westcreek El	Fort Worth ISD	Elementary	Y	65%	92%	8,814	55%	23%	9%	1
Western Hills El	Fort Worth ISD	Elementary	Y	78%	96%	7,350	52%	22%	8%	1
Worth Heights El	Fort Worth ISD	Elementary	Y	57%	95%	7,414	79%	45%	22%	1
David K Sellars El	Fort Worth ISD	Elementary	Y	67%	93%	7,899	79%	43%	19%	1
J T Stevens El	Fort Worth ISD	Elementary	Y	55%	65%	8,077	60%	30%	14%	1
Atwood Mcdonald El	Fort Worth ISD	Elementary	Y	75%	90%	7,498	65%	32%	12%	1
Riverside Applied Lrn Ctr	Fort Worth ISD	Elementary	N	44%	78%	8,976	73%	41%	19%	0
Bill J Elliott El	Fort Worth ISD	Elementary	Y	67%	87%	8,568	72%	37%	18%	1
T A Sims El	Fort Worth ISD	Elementary	Y	67%	94%	7,533	64%	28%	12%	1
Edward Briscoe El	Fort Worth ISD	Elementary	Y	87%	96%	9,594	59%	31%	13%	1
Woodway El	Fort Worth ISD	Elementary	Y	68%	88%	7,272	64%	32%	15%	1
Lowery Road Elementary School	Fort Worth ISD	Elementary	Y	63%	88%	7,744	73%	35%	13%	1
Alice D Contreras	Fort Worth ISD	Elementary	Y	62%	90%	7,346	66%	32%	12%	1
Western Hills Primary School	Fort Worth ISD	Elementary	Y	79%	96%	7,350	52%	22%	8%	1
Clifford Davis Elementary	Fort Worth ISD	Elementary	Y	82%	97%	7,781	60%	28%	13%	1
Cesar Chavez Primary School	Fort Worth ISD	Elementary	Y	58%	96%	7,538	68%	33%	13%	1
M. G. Ellis Elementary	Fort Worth ISD	Elementary	Y	64%	91%	9,482				1
Bonnie Brae	Fort Worth ISD	Elementary	Y	53%	90%	8,374	84%	51%	25%	1
Seminary Hills Elementary	Fort Worth ISD	Elementary	Y	79%	94%	10,225	54%	21%	7%	1
Dolores Huerta Elementary	Fort Worth ISD	Elementary	Y	61%	94%	8,139	65%	32%	14%	1
Garland H 5	Garland ISD	High School	N	33%	64%	8,092	72%	51%	21%	0
S Garland H S	Garland ISD	High School	N	43%	80%	8,189	69%	39%	9%	0
North Garland High School	Garland ISD	High School	N	32%	64%	6,996	83%	64%	28%	0
Lakeview Centennial H S	Garland ISD	High School	N	33%	63%	7,631	83%	60%	21%	0
Naaman Forest H S	Garland ISD	High School	N	33%	67%	7,457	75%	49%	15%	0
Bussey Middle	Garland ISD	Junior High	Y	54%	93%	8,004	63%	29%	9%	1
Sam Houston Middle	Garland ISD	Junior High	Y	45%	86%	7,602	71%	36%	12%	1
Jackson Technology Ctr	Garland ISD	Junior High	Y	33%	64%	5,684	85%	60%	33%	0
O'Banion Middle	Garland ISD	Junior High	N	50%	87%	6,319	68%	30%	9%	0
Brandenburg Middle	Garland ISD	Junior High	N	34%	63%	5,908	86%	61%	32%	0
Sellers Middle School	Garland ISD	Junior High	N	45%	78%	7,233	67%	33%	12%	0
Webb Middle	Garland ISD	Junior High	N	38%	72%	6,360	74%	40%	18%	0
Coyle Middle	Garland ISD	Junior High	N	37%	66%	6,672	77%	42%	17%	0
Lyles Middle	Garland ISD	Junior High	Y	46%	82%	11,348	72%	39%	15%	1
Vernon Schrade Middle	Garland ISD	Junior High	N	32%	53%	6,563	77%	43%	17%	0
Beaver Technology Center	Garland ISD	Elementary	N	32%	57%	6,920	89%	62%	38%	0
Bullock El	Garland ISD	Elementary	Y	53%	86%	7,291	76%	44%	23%	1
Caldwell El	Garland ISD	Elementary	Y	49%	90%	7,710	69%	34%	15%	1
Centerville El	Garland ISD	Elementary	Y	43%	87%	10,719	74%	38%	13%	1
Cooper El	Garland ISD	Elementary	N	46%	81%	7,730	72%	37%	18%	0
Daugherty El	Garland ISD	Elementary	Y	56%	86%	6,944	76%	49%	21%	1
Freeman El	Garland ISD	Elementary	Y	48%	86%	10,302	70%	32%	11%	1
Handley El	Garland ISD	Elementary	Y	47%	81%	10,926	74%	43%	23%	1
Park Crest El	Garland ISD	Elementary	Y	47%	86%	9,654	79%	43%	15%	1
Southgate El	Garland ISD	Elementary	Y	53%	86%	9,308	65%	32%	13%	1
Weaver Elementary	Garland ISD	Elementary	Y	51%	80%	8,135	70%	39%	18%	1
Williams El	Garland ISD	Elementary	Y	39%	82%	10,430	68%	36%	15%	1
Bradfield Elementary	Garland ISD	Elementary	Y	52%	85%	7,379	76%	46%	23%	1
Shorehaven Elementary	Garland ISD	Elementary	Y	45%	90%	10,258	62%	34%	15%	1
Montclair El	Garland ISD	Elementary	N	52%	81%	7,271	63%	30%	12%	0
Golden Meadows El	Garland ISD	Elementary	Y	50%	86%	7,793	76%	49%	24%	1
Heather Glen El	Garland ISD	Elementary	Y	49%	86%	8,123	65%	32%	12%	1
Davis El	Garland ISD	Elementary	N	44%	82%	7,620	77%	46%	22%	0
Roach Elementary	Garland ISD	Elementary	Y	43%	75%	7,956	85%	53%	30%	1
Ethridge Elementary	Garland ISD	Elementary	Y	50%	83%	6,806	77%	43%	20%	1
Club Hill El	Garland ISD	Elementary	N	48%	79%	7,343	69%	35%	13%	0
Hickman El	Garland ISD	Elementary	N	56%	77%	8,001	77%	42%	21%	0
Northlake El	Garland ISD	Elementary	Y	44%	82%	7,353	84%	49%	21%	1
Pathfinder Achievement Center	Garland ISD	Elementary	Y	0%						1
Toler Elementary	Garland ISD	Elementary	Y	45%	70%	7,729	72%	37%	16%	1
Rowlett El	Garland ISD	Elementary	N	39%	61%	7,191	80%	47%	24%	0
Spring Creek El	Garland ISD	Elementary	N	41%	71%	7,391	82%	57%	34%	0
Back El	Garland ISD	Elementary	N	42%	73%	8,387	82%	53%	28%	0
Shugart El	Garland ISD	Elementary	N	51%	79%	7,735	75%	43%	18%	0
Katherine Stephens El	Garland ISD	Elementary	N	49%	71%	7,050	79%	45%	20%	0
Vernal Lister El	Garland ISD	Elementary	N	37%	68%	8,515	76%	43%	24%	0
Steadham El	Garland ISD	Elementary	N	44%	63%	7,747	74%	41%	17%	0
Nita Pearson Elementary	Garland ISD	Elementary	N	44%	63%	6,867	79%	49%	26%	0
Glen Couch Elementary School	Garland ISD	Elementary	N	51%	77%	7,612	67%	36%	19%	0
Liberty Grove Elementary	Garland ISD	Elementary	N	39%	51%	7,517	72%	43%	20%	0
George Washington Carver Elementary	Garland ISD	Elementary	N	51%	77%	6,560	74%	40%	17%	0
Cisneros Pre-K Center	Garland ISD	Elementary	Y	93%	87%	4,842				1
Parsons Pre-K Center	Garland ISD	Elementary	Y	86%	79%	5,566				1
So Grand Prairie H S	Grand Prairie ISD	High School	N	31%	62%	7,459	77%	54%	20%	0
Alternative Education Program	Grand Prairie ISD	High School	N	72%	84%	22,375				0
Crosswinds Accelerated High School	Grand Prairie ISD	High School	N	53%	61%	6,532	52%	17%	4%	0
Dubiski Career High School	Grand Prairie ISD	High School	N	32%	71%	7,035	91%	75%	31%	0
Adams Middle	Grand Prairie ISD	Junior High	N	60%	87%	8,382	66%	31%	10%	0
Jackson Middle	Grand Prairie ISD	Junior High	N	48%	83%	6,465	72%	36%	13%	0
Harry S Truman Middle	Grand Prairie ISD	Junior High	N	46%	74%	8,509	72%	36%	13%	0
Fannin Middle School	Grand Prairie ISD	Junior High	N	53%	91%	7,342	61%	29%	10%	0
Young Men'S Leadership Academy (Kennedy)	Grand Prairie ISD	Junior High	N	55%	91%	7,806	69%	35%	14%	0
Young Women'S Leadership Academy (Arnold)	Grand Prairie ISD	Junior High	N	56%	86%	8,138	79%	37%	15%	0
Austin El	Grand Prairie ISD	Elementary	N	61%	91%	7,116	86%	59%	33%	0
Bowie El	Grand Prairie ISD	Elementary	N	71%	93%	7,581	69%	36%	20%	0
Daniels El	Grand Prairie ISD	Elementary	N	77%	93%	7,448	60%	30%	16%	0
Florence Hill El	Grand Prairie ISD	Elementary	N	46%	67%	7,632	75%	43%	19%	0
Milam El	Grand Prairie ISD	Elementary	N	56%	87%	6,119	71%	40%	21%	0
Eisenhower El	Grand Prairie ISD	Elementary	N	54%	83%	6,695	82%	50%	25%	0
Sam Rayburn El	Grand Prairie ISD	Elementary	N	48%	84%	6,565	75%	40%	20%	0
Zavala El	Grand Prairie ISD	Elementary	N	50%	83%	6,138	82%	52%	28%	0
Dickinson El	Grand Prairie ISD	Elementary	N	63%	43%	8,451	69%	31%	13%	0
Barbara Bush El	Grand Prairie ISD	Elementary	N	62%	89%	6,927	73%	38%	20%	0
Hector P Garcia El	Grand Prairie ISD	Elementary	N	65%	92%	6,873	70%	39%	17%	0
Sally Moore Elementary School	Grand Prairie ISD	Elementary	N	47%	69%	7,780	74%	41%	18%	0
Ervin C Whitt Elementary School	Grand Prairie ISD	Elementary	N	52%	77%	6,496	74%	40%	21%	0
Juan Seguin El	Grand Prairie ISD	Elementary	N	57%	87%	9,954	67%	36%	17%	0
Thurgood Marshall El	Grand Prairie ISD	Elementary	N	46%	72%	5,906	82%	51%	29%	0
Mike Mosley El	Grand Prairie ISD	Elementary	N	42%	70%	6,750	77%	48%	22%	0

Hobbs Williams Elementary School	Grand Prairie ISD	Elementary	N	58%	87%	6,686	91%	63%	38%	0
Lee Elementary	Grand Prairie ISD	Elementary	N	65%	93%	9,214	73%	45%	20%	0
Borham Early Childhood	Grand Prairie ISD	Elementary	N	100%	99%	15,759				0
Uplift Lee	Grand Prairie ISD	Elementary	N	50%	79%	4,561	78%	47%	26%	0
William B Travis World Language Academy	Grand Prairie ISD	Elementary	N	60%	93%	8,872	76%	42%	18%	0
Crockett Early Education School	Grand Prairie ISD	Elementary	N	100%	99%	6,353				0
Lake Highlands H S	Richardson ISD	High School	N	36%	54%	7,869	75%	52%	20%	0
Richardson H S	Richardson ISD	High School	N	31%	50%	7,640	87%	71%	33%	0
Barkner H S	Richardson ISD	High School	N	40%	59%	7,817	77%	53%	19%	0
Christa McAuliffe Learning Center	Richardson ISD	High School	N	65%	70%	36,850				0
Lake Highlands J H	Richardson ISD	Junior High	N	38%	53%	8,966	81%	55%	31%	0
Richardson West J H	Richardson ISD	Junior High	N	36%	56%	9,095	83%	56%	30%	0
Richardson North J H	Richardson ISD	Junior High	N	30%	42%	8,917	82%	60%	38%	0
Forest Meadow J H	Richardson ISD	Junior High	N	49%	69%	8,744	74%	43%	23%	0
Westwood J H	Richardson ISD	Junior High	N	39%	58%	9,606	86%	62%	37%	0
Liberty J H	Richardson ISD	Junior High	N	52%	78%	10,020	77%	48%	24%	0
Apollo J H	Richardson ISD	Junior High	N	41%	59%	10,285	84%	56%	27%	0
Parkhill J H	Richardson ISD	Junior High	N	34%	46%	8,261	86%	65%	41%	0
Dover El	Richardson ISD	Elementary	N	60%	88%	8,204	69%	36%	16%	0
Greenwood Hills El	Richardson ISD	Elementary	N	52%	81%	10,885	70%	41%	16%	0
Hamilton Park Pacesetter Magnet	Richardson ISD	Elementary	N	47%	59%	9,855	73%	43%	26%	0
O Henry El	Richardson ISD	Elementary	N	57%	85%	9,273	78%	46%	22%	0
Northrich El	Richardson ISD	Elementary	N	46%	61%	9,661	73%	39%	18%	0
Northwood Hills El	Richardson ISD	Elementary	N	47%	63%	9,307	72%	45%	23%	0
Richardson Heights El	Richardson ISD	Elementary	N	41%	62%	9,210	72%	44%	20%	0
Richardson Terrace El	Richardson ISD	Elementary	N	47%	71%	8,171	81%	55%	31%	0
Spring Valley El	Richardson ISD	Elementary	N	61%	85%	10,308	75%	39%	15%	0
Stults Road El	Richardson ISD	Elementary	N	61%	78%	7,630	70%	37%	15%	0
Mark Twain El	Richardson ISD	Elementary	N	56%	89%	8,829	73%	44%	18%	0
Wallace El	Richardson ISD	Elementary	N	47%	62%	7,285	74%	44%	22%	0
Dobie Pri	Richardson ISD	Elementary	Y	57%	86%	9,084				1
Forestridge El	Richardson ISD	Elementary	Y	62%	80%	7,897	73%	40%	19%	1
Northlake El	Richardson ISD	Elementary	N	59%	80%	8,458	78%	43%	20%	0
Springridge El	Richardson ISD	Elementary	N	50%	63%	9,740	81%	55%	31%	0
Skyview El	Richardson ISD	Elementary	Y	66%	94%	7,472	70%	40%	19%	1
Jess Harbin El	Richardson ISD	Elementary	N	44%	62%	8,786	77%	43%	23%	0
Richland El	Richardson ISD	Elementary	N	53%	72%	7,224	70%	40%	22%	0
Aikin El	Richardson ISD	Elementary	N	65%	88%	7,423	66%	32%	16%	0
Risd Acad	Richardson ISD	Elementary	Y	59%	95%	9,472	69%	34%	16%	1
Math, Science, Tech Magnet	Richardson ISD	Elementary	N	33%	46%	8,823	92%	73%	47%	0
Forest Lane Academy	Richardson ISD	Elementary	N	53%	95%	8,811	72%	38%	17%	0
Audella Creek Elementary	Richardson ISD	Elementary	N	58%	86%	8,331	67%	30%	13%	0
Carolyn G Bukhair El	Richardson ISD	Elementary	Y	66%	97%	10,600	60%	28%	11%	1
Thurgood Marshall Elementary	Richardson ISD	Elementary	N	65%	95%	10,202	68%	34%	14%	0

REFERENCES

- Di Fang, Michael R. Thomsen, Rodolfo M. Nayga. (2021) The association between food insecurity and mental health during the COVID-19 pandemic. *BMC Public Health* 21:1.
- Dunn, Caroline G., et al. “Feeding Low-Income Children during the Covid-19 Pandemic.” *New England Journal of Medicine*, vol. 382, no. 18, 2020
- Johnson, Donna B. “Eligibility for Free and Reduced Price School Meals and Fruit and Vegetable Intake at Home and at School.” *Journal of Hunger & Environmental Nutrition*. 11.2 (2016): 272–279.
- LaRochelle, Marc R. “Changes to Dietary and Health Outcomes Following Implementation of the 2012 Updated US Department of Agriculture School Nutrition Standards: Analysis Using National Health and Nutrition Examination Survey, 2005–2016.” *Public health nutrition*. 23.16 (2020): 3016–3024.
- Michael L. Anderson, Justin Gallagher, Elizabeth Ramirez Ritchie. “School meal quality and academic performance.” *Journal of Public Economics*. 168. (2018): 81-93.
- Schilling, B. “School nutrition association research shows the benefits of serving universal free school meals will eventually outweigh the costs.” *Food Management*. (2020).

BIOGRAPHICAL INFORMATION

Megan is graduating this summer, August 2021, with her Bachelor of Science in Economics and minor in Business. She hopes to find a job that uses both aspects of her degree. She is interested in an analyst role in either business, data, or finance. After exploring her interests in the career world, Megan plans to return to school to earn her master's degree in potentially finance or economics. After graduation, she plans on marrying her girlfriend and building a family together. Her goal in life above all else is to be happy.