Is There an Equity Gap in Marching Band Competition?
Relationships between School Demographics and Participation and Competitive Rankings at Bands of America Marching Competitions

by

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ABSTRACT

Socioeconomic status (SES) is linked to multiple interacting systems, including students' racial and ethnic background, grade level, and school/neighborhood location (Brooks-Gunn & Duncan, 1997). In music education research literature, SES has often been used as a non-music variable to determine its effect on recruitment and retention in instrumental music programs (Albert, 2006; Corenblum & Marshall, 1988), musical achievement and outcomes (Bailey, 2018; Dame, 2010), and participation in music (Chappell, 2013; Elpus & Abril, 2011).

The purpose of this quantitative study was to examine the relationships between school demographics and participation and competitive rankings at Bands of America (BOA) marching competitions. Specific research questions were:

1) What are the ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating in BOA competitions across the United States of America?
    a. What are the differences between ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating at BOA competitions and all public schools in the United States of America?
    b. What are the differences between ethnicity demographics and free-reduced lunch percentages of Texas schools participating at BOA competitions and all public schools in the State of Texas?
2) Is there a difference between finalist and non-finalist schools' free-reduced lunch percentage and income-to-poverty ratio at BOA competitions?

3) What is the relationship between free-reduced lunch percentage and income-to-poverty ratio and the scores at BOA Regional Championship competitions?

Data were collected from 558 high schools throughout the United States of America that competed at one of the 22 BOA events in 2018. The dependent variables were contest results and scores collected from the Bands of America website. The independent variables were ethnicity demographics, the number of students who were eligible for free and reduced lunch, and income-to-poverty ratio information collected from the National Center for Education Statistics for each of the participating high schools. Simple linear regression, one-sample *t*-test, independent sample *t*-test, and factorial AVOVA were completed to analyze the data, using *Statistical Package for the Social Sciences* (SPSS) 26.0 statistics software.

Results revealed a significant difference between the demographics of schools that participate at 2018 BOA competitions and the public schools in the USA. A school that participated in a BOA competition was more likely to have fewer students on free-reduced lunch and have higher income-to-poverty ratio scores compared to the national average. Based on the Factorial ANOVA analysis, IPR does not appear to have the same relationship as the variable FRL. However, bot variables had comparable results with the regression model and a similar R^2 variance.

Recommendations for future research include examining public records of school budgets to determine the actual expenditures marching bands accrue each competitive season. Another recommendation is examining the impact of COVID-19 on music competitions and how the pandemic impacted participation in marching band competitions. The last recommendation is replicating this current study with other national marching band circuits, such as US Bands.

DEDICATION

To Halya: None of this is possible without you.

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LIST OF ABBREVIATIONS

BOA	Bands of America
IPR	Income-to-Poverty Ratio
NCES	National Center for Education Statistics
SES	Socioeconomic Status
FRL	Free-Reduced Lunch

CHAPTER ONE

INTRODUCTION

The 1954 U.S. Supreme Court decision in *Brown vs. Board of Education* was a turning point in American public education, striking down the "separate but equal" policy in American schools. After this ruling, public schools were required to offer equal access to education for students of all races (Graham, 2005). While many schools began the process of integration, some states avoided the mandate by obstructing the process. Major legislation after *Brown vs. Board of Education* was The Civil Rights Act in 1964, which emphasized racial desegregation in schools, banned discrimination in the workplace, and equalized the voting registration process. This led to the 1965 Elementary and Secondary Education Act (ESEA), which encouraged desegregation by linking federal aid to school districts with students who live below the poverty line. This act only applied to districts that were not in violation of the Civil Rights Act. Today, ESEA is commonly referred as Title 1 within the Department of Education (Graham, 2005).

American schools today serve students representing a wide range of race, ethnicity, language, gender, religion, disabilities, and socioeconomic backgrounds. Willie, Edwards, and Alves (2002) found socioeconomically and racially balanced schools had higher achievement in test scores and school ratings than schools with homogenous populations. Other positive outcomes of a diverse school may include higher graduation rates, higher grades, feelings of safety, and reduced prejudice (Juvonen, Nishina & Graham, 2006; Mickelson, 2007). However, while students my benefit from a diverse population, some schools have failed to meet the needs of specific student populations, including low income and minority students (Willie, Edwards & Alves, 2002).

Poverty is one of the aspects of education that can impact the student's success. According to the U.S. Census Bureau (2020), 16.8% of children under the age of 18 lived in poverty in 2019. One indicator of growing poverty in children under the age of 18 is percentage of students eligible for the National School Lunch Program. According to the U.S. Department of Education National Center for Education Statistics (2017), 52.3% of students in public schools are eligible for the federally assisted lunch program, also known as the Free/Reduced-Price Lunch (FRL) Program. This represents a 9.4% increase in students that qualified from 2009. According to the U.S. Census Bureau (2020), the poverty threshold for a family of four income is $22,600. Children in a household with incomes at or below 130 percent of the federal poverty level are eligible for free school meals. Children in households with incomes between 130 to 185 percent of the federal poverty level are eligible for reduced-price school meals.

Students in poverty face disadvantages compared to higher-income peers. Research indicates that students from low socioeconomic backgrounds tend to have lower achievement levels than students from higher socioeconomic backgrounds (Brooks, 1988; Caldas & Bankston, 1997, Coleman et al., 1966; Duncan & Magnuson, 2005; Entwisle, Alexander & Olson, 2010; Rumberger, 2007; Willie, Edwards & Alves, 2002). Additionally, studies have shown that students from low-income families who attend schools with a majority of low-income students will continue to underperform in school (Rumberger & Palardy, 2005).

Comparable to its relationship with academics, lower socioeconomics impact opportunities for student achievement in music education. Music programs in schools with low socioeconomic levels report fewer students taking private lessons, weak parental support, lower program fees, and few technological resources (Costa-Giomi & Chappell, 2007). Schmidt, Baker, Hayes, and Kwan (2006) found that schools with a higher percentage of students

qualifying for free or reduced lunch receive fewer distinguished ratings at adjudicated music festivals.

Marching Bands

Marching bands have been a long tradition in high schools throughout the United States. Marching band competitions are associated with high levels of performance and pageantry in performing arts. Rockefeller (1982) noted that marching band competitions' popularity increased over the years including local, state, regional and national contests. One marching band competitive circuit with tremendous growth in festival offerings was Bands of America (BOA). There were only eight BOA marching competitions across the country in 1985, but by 2019, BOA had grown to 23 marching band competitions throughout the United States.

Music education philosophers Reimer (1989) and Elliott (1995) suggested that emphasis on competitions may have a negative effect on the philosophical basis of music education and undermine the aesthetic appeal of successful musical performances. Because of the growth of marching band competitions and their popularity (Miles, 1993; Rockefeller, 1982) directors may feel pressure from administrators and parents to compare their program to other bands and use marching band competitions as a part of their curriculum.

Bands of America

Bands of America (BOA) is a division of "Music for All, Inc." BOA was formed in 1976 under the name of "Marching Bands of America." In the beginning, Marching Bands of America was a single summer workshop for band directors held at the University of Wisconsin – Whitewater. The workshop included drill design and adjudication sessions for high school band directors. In 1984, Marching Bands of America was renamed Bands of America and merged with Music for All Foundation in 2006. (www.musicforall.org, 2020).

At BOA events, marching bands only receive ratings during preliminary competition. As the marching season progresses, the rating system for the marching band becomes more stringent. Table 1 and 2 refer to the different rating standards prior to or on/after October 15th for each year.

Table 1

Ratings at BOA events prior to October 15th

Score	Rating
70.00 and above	I
55.00 – 69.95	II
40.00 – 54.95	III
39.95 and below	IV

Table 2

Ratings at BOA events on or after October 15th

Score	Rating
75.00 and above	I
60.00 – 74.95	II
45.00 – 59.95	III
44.95 and below	IV

The total score is comprised of the following categories: 20 potential points for music performance, 20 potential points for visual performance and 60 potential points for general effect. The points for music performance come from two judges: one judge for individual performance and the second judge for the ensemble. Visual performance requires a similar structure with one judge assigned to individual performance and one judge for ensemble. There is one judge for visual general effect for 20 points and two music general effect judges for 20 points each. Scores from the two judges for visual and music performance are averaged for a

total of 20 points for each category. Appendix B are sample scoresheets and criteria reference that are used by the judges during BOA marching competitions.

There was a total of 22 BOA marching competitions scheduled throughout the United States in 2018 (see Appendix C). BOA hosts three categories of competitions each year: Regional (one day only); Super Regionals (held over two days) and concludes with the Grand National Championships in Indianapolis, Indiana. Eighteen of the competitions in 2018 were Regional championships and three of them were Super Regional Championships.

Need for the Study

With the growth of BOA competitions throughout the United States, further examination of the circuit can provide more information about the type of high schools that participate. What are the ethnicity demographics, free-reduced lunch percentage and poverty rate of schools that participate at BOA marching competitions? Previous research has examined demographics of marching bands that participate at individual marching festivals or examined contests in one state (O'Leary, 2016; Stern, 2019; Stern, 2021; Sullivan, 2003; Washington, 2007). This research study will examine the demographics of high schools that competed at BOA marching contests held throughout the United States during the 2018 season.

Purpose and Research Questions

The purpose of this quantitative study was to examine the relationship between selected school demographics on participation and competitive rankings at Bands of America marching competitions. Specific research questions are:

1) What are the ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating in BOA competitions across the United States of America?

a. What are the differences between ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating at BOA competitions and all public schools in the United States of America?
b. What are the differences between ethnicity demographics and free-reduced lunch percentages of Texas schools participating at BOA competitions and all public schools in the State of Texas?

2) Is there a difference between finalist and non-finalist schools' free-reduced lunch percentage and income-to-poverty ratio at BOA competitions?
3) What is the relationship between free-reduced lunch percentage and income-to-poverty ratio and the scores at BOA Regional Championship competitions?

Null Hypothesis:

H_0 = There is no relationship between ethnicity demographics, free and reduced lunch price eligibility, or income-to-poverty ratio on the participation and contest results of Bands of America competitions.

Alternative Hypothesis:

H_a = There will be a statistically significant relationship between ethnicity demographics, free and reduced lunch price eligibility or income-to-poverty ratio with the participation and contest results of Bands of America competitions.

CHAPTER TWO

REVIEW OF LITERATURE

Overview

The purpose of this study was to examine the relationship between selected school demographic variables on participation and competitive rankings at Bands of America marching competitions. This review of literature will examine topics including (a) history of competition in music, (b) history of marching band, (c) research on marching band competition, (d) socioeconomic status, and (e) socioeconomic status and music education.

History of Competition in Music

Competition is a strategy used to embolden students to achieve educational goals. In the area of music, competition has been examined in the literature as a motivational tool (Austin, 1988; Schmidt, 2005) and the influence of extra-musical factors on the fairness of competitive events (Bergee & Platt, 2003; Bergee & McWhirter, 2005). Competition has been a part of musical performances throughout history. Historical evidence suggests that contests for instrumental and vocal performers were present as early as 1737 (Mark & Gary, 1992). Keene (1982) noted that the first contest held for public school music students was in 1897 in Boston, Massachusetts.

Researchers consider the National School Band Contest of 1923 as the official beginning of the music competition movement in the United States (Payne, 1997). This contest was also known as the National School Band Tournament. Sponsored by music instrument manufacturing companies, this competition increased awareness and popularity of marching bands. The tournament took place in Chicago, Illinois during the Music Industries Chamber of Commerce

convention. The goal of the convention was to expand the market for musical instruments throughout the United States (Holz, 1966; Moore, 1972; Payne, 1997).

Between 1926 and the 1930s, national contests continued to grow yearly with scoring modifications made over time. Modifications included scoring for marching execution and music performance to select the winner more accurately. In 1927, bands participating in the national contests divided into different competitive classes based on school enrollment. In 1928, band size began to be considered, with a requirement of 72-members to qualify to participate in national contests. After 1931, the contest scoring system was adjusted from a placement format to a "division" rating system based upon a marching band's performance. A "I" rating indicated a superior performance, "II" for excellent performance, "III" for a good performance, "IV" for a below average performance, and "V" for a poor performance (Rickels, 2011). Rankings, or ratings, were intended to give students a feeling of accomplishment and to develop a sense of pride on a job well done in a competitive situation (Mason et al., 1985).

Before the start of World War II, districts and state contests had become an important factor leading to the promotion and expansion of instrumental music instruction in the United States (Keene, 1982). With the start of World War II, the state contest movement slowed down throughout the county. However, states began to modify their own systems by organizing their district events with traveling judges, requiring graded music selection, and developing educational clinics. These developments at the state level are still key to music education today (Rickels, 2009).

Research on Marching Band Competition

Military tradition was the inspiration of early marching band competitions (Hazen & Hazen, 1987). Most of the early competitions were sponsored by veteran services groups such as

the American Legion and the Veterans of Foreign Wars. These events were for non-school organizations, but later evolved into public school events (Vickers, 2002). Street parade competitions were popular between the 1960s and 1970s, which later evolved to competitions held on football fields (Rickels, 2009). As marching band performances during halftime of football games became prevalent, marching competitions soon spread throughout the United States (Rogers, 1985).

Marching band competitions provide a venue to perform and receive ratings and/or rankings. Formats for marching band competition evaluations have evolved over the years, with most organizers using the same adjudication criteria adopted by Drum Corps International (Laib, 1984). Standardized marching band adjudication systems have evolved and included the use of captions to assess musical, visual, and general effect categories (Vance, 2014). According to Bands of America evaluation system, the visual performance caption measures the individual performers' marching drill and movement execution on the field and includes the individual performers' problems in drill execution. General effect measures the marching band members' ability to produce an emotional response from the audience (www.musicforall.org, 2020). Although BOA has standardized their adjudication training and practices, not all local and state competitions have followed suit (Rickels, 2009).

Payne (1997) reviewed literature concerning band competitions across three different areas of research: history of band competitions, effects of band competitions, and the controversy over competition. He drew four conclusions. First, the literature suggests that attitudes concerning band competitions are a positive experience with those involved, however it becomes less appealing as students grow older. Second, arguments citing "potential damage to student motivation and self-esteem [were] not supported" in the research (1997, pp. 11-12). Third, most

studies demonstrated that the levels of individual and group performance achievement in music tended to be positively influenced in competitive settings. Finally, a trend appeared in the research showing that larger schools tended to outperform smaller schools at marching competitions.

State and Nation-Wide Studies on Marching Band Competitions

Researchers have examined marching band competitions at individual and statewide festivals while looking at variables that could influence results. Saul (1977) examined results of Mississippi marching band festivals and compared the level of director education and experience, student demographics, and administrative support. Saul showed that the most significant predictors for success at Mississippi marching band festivals were the organization and management of the band program. Other variables that influenced results were the number of students receiving private instruction, amount of funding provided by the school district, playing experience of students, cooperation between the high school and feeder programs, and the number of extra rehearsals held during the marching season. Washington (2007) replicated Saul's 1977 study and found that the most significant predictors of marching band success were the director's age, their teaching experience, and their tenure at the school. Washington also confirmed Saul's results that the size of the marching band, as well as the number of assistant directors on staff, were factors that lead to the ensemble's success.

Laib (1984) focused on marching festivals held in Georgia and examined the relationship between marching band competitions, show styles, and the number of shows performed by high school marching bands. Results revealed that bands using corps style of marching tended to adopt rehearsal techniques used by drum corps, required more rehearsal time per marching show, and produced fewer different marching shows during the season.

Eubanks' (2016) case study examined the Camdenton High School band program in Missouri, which regularly participated in BOA competitions. Eubanks found that Camdenton High School band directors were motivated to participate in BOA competitions due to a consistent and rigorous adjudication, motivation to perform, and the effect on students' attitudes. However, the two obstacles that the directors described were school demographics and cost. The director described that adopting the rules and regulations from BOA had changed their approach to show design and increased their expenses for their marching band program. Increased costs for the design of a successful marching band show at BOA were described by the director as follows:

> The single drawback I would highlight would be that each year, bands are constantly trying to "out-do" themselves and each other. I think that someday this may make the proper execution of a marching program in the BOA-style cost and time prohibitive for many groups. (Eubanks, 2016, p. 79)

Sullivan (2003) surveyed Arizona high school band directors to determine what factors influence marching bands to participate at regional and state festivals. Results indicated that smaller bands found it difficult to compete with larger bands due to the differences in the availability of resources and the inconsistencies in judging practices and classification systems. Bands that demonstrated success at marching band competitions, such as BOA, had large memberships, additional staff members and larger budgets.

Rickels (2008) surveyed Arizona band directors to examine the relationship between selected variables (e.g., marching band enrollment, assistant/non-certified marching band staff, and band budget) and the results of Arizona marching band contests. Rickels found that neither the band director's experience nor the number of rehearsal hours per week had a significant impact on the marching band's success. However, Rickels determined that the number of non-certified staff, budget size, and number of contests attended had a positive correlation to the

band's success. Results also indicated that larger schools with bigger marching band enrollment received higher scores.

At the national level, Rickels (2009) surveyed band directors and examined similar variables and competitions as their 2008 study. Four hundred and eighteen band directors from six geographical areas of the United States participated in the questionnaire. Rickels used the following non-performance variables: director age and experience, director level of education, number of band staff members, number of hours spent in marching band rehearsal, marching band size, and school budget. Rickels found comparable results to the 2008 Arizona study. The director's age, experience, level of education, and number of hours spent in marching band rehearsal, were not significantly correlated with the success of the marching band. The size of the marching band was a better predictor of success rather than the school size.

The current literature has focused on the relationship between non-performance variables and the program, or performance variables that are measurable. Less research has been conducted about the relationships between other non-performance variables, such as socioeconomic status variables, and the relationship to marching band results.

Socioeconomic Status

One of the most frequently studied variables in educational data is socioeconomic status (Harwell & LeBeau, 2010). Bornstein and Bradley (2002) defined socioeconomic status (SES) as "the relative position of individuals, families, or groups in stratified social systems where some societal values (e.g., occupational prestige, education, economic resources, power, information) are not uniformly distributed" (p.2). White (1982) conducted the first meta-analysis study reviewing literature published before 1980. In their literature review, White discussed six

different situations in which SES was frequently used in educational research in association with measures of academic achievement:

- a concomitant variable in adjusting for bias or pretreatment differences among groups,
- a covariate or stratifying variable to increase the precision of an experiment,
- a stratifying variable to investigate the effect of interactions with other independent variables,
- a descriptive variable to assist other researchers to replicate findings or generalize results,
- a predictor variable, and
- a causal agent.

Different measurements have been used to analyze SES data in educational research, including parent income (Worely & Story, 1967), teacher salaries (Raymond, 1968), parent education (Stanfiel, 1973) and students eligible for free-reduced lunch (Stein et al., 2008). There are limitations with using SES measurement as a variable in education research because of a lack of key definitions, terms, and theoretical assumptions currently in the literature. Harwell and Lebeau (2010) discussed the importance of researchers clearly describing what SES represents in their study. However, there are still issues that occur when referencing the SES literature and how multiple theoretical models exist with a variety of SES definitions.

Eligibility for free-reduced is a frequently used variable in SES literature. Students from families with incomes at or below 130% of the poverty level are eligible for free meals. Those with incomes between 130% and 185% of the poverty level are eligible for reduced-price meals. Harwell, Maeda, and Lee's (2004) replication of White's (1982) meta-analysis found that from 1996 to 2004 approximately 20% of the articles published in the *American Educational Research Journal* and *Sociology of Education* employing an SES measure used the free-reduced lunch

variable. Sirin's (2005) meta-analysis of the relationship between SES and achievement for studies published between 1990 and 2000 reported that approximately 17% of the sampled studies used free-reduced lunch as a measure for SES.

SES is linked to multiple interacting systems, including students' racial and ethnic background, grade level, and school/neighborhood location (Brooks-Gunn & Duncan, 1997). National Center for Education Statistics (NCES) indicated an equity gap, showing that in 2020 on average, lower scores for minority students in comparison with their white peers fell behind in terms of academic achievement (U.S. Department of Education, 2020). Research indicates three main factors to explain the equity gap of lower academic achievement for minority students: minorities are more likely to live in low-income households or in single parent families, their parents are likely to have less education, and they often attend under-funded schools (National Commission on Children, 1991).

Students' socioeconomic backgrounds can impact their academic achievement. The success rate of low-income students in science, mathematics, engineering, and technology disciplines is much lower than that of students who do not come from economically disadvantaged backgrounds (Doerschuk et al., 2016). Children from lower socioeconomic families are entering high school with average literacy skills that are five years behind those of high-income students (Reardon, Valentino, Kalogrides, Shores, & Greenberg, 2013). After high school graduation, individuals within the top family income quartile are eight times more likely to obtain a bachelor's degree by age 24 as compared to individuals from the lowest family income quartile (U.S. Census Bureau, 2014).

The impact of a student's socioeconomic background can begin at an early age and also impact their future career success. Those from higher social class backgrounds tend to be more

successful in developing career aspirations and are better prepared for the work force because of access to resources such as career offices, guidance counselors, better schools, and familiar experience with higher education (Diemer & Ali, 2009). Socioeconomic status variables can have an impact on a student's access to their learning environment, which can have lasting implications. The effects can be detected in young children from low socioeconomic households and communities, as evidenced by slower academic skills developments compared to children from higher SES groups (Morgan, Farkas, Hillemeier, & Maczuga, 2009).

School location and neighborhoods have been a focus in the literature as possible socioeconomic variables. Factors related to improving the quality of schools in low-socioeconomic neighborhoods include a focus on improving teaching and learning, creating an information-rich environment, building a learning community, on-going professional development, involving parents, and increasing funding and resources (Muijs, Harris, Chapman, Stoll, & Russ, 2009). When considering available resources, schools with students from high concentrations of poverty have fewer library resources to depend on than schools serving middle-income students (Pribesh, Gavigan, & Dickinson, 2011).

The Department of Education recently developed a measurement including multiple variables regarding the community surrounding a school location. School Neighborhood Poverty estimates are based on income data from families with children ages 5-18 who were surveyed over a five-year period as part of the U.S. Census Bureau's American Community Survey (ACS). The ACS is a continuous household survey that collects social, demographic, economic, and housing information from the population in the United States each month. The estimates reflect the income-to-poverty ratio (IPR), which is the percentage of family income that is above, or below federal poverty threshold set for the family's size and structure. The IPR indicator

ranges from 0 – 999. Lower IPR values indicate a greater degree of poverty. A family with income at the poverty threshold has an IPR value of 100 (Geverdt, 2018; Geverdt & Nixon, 2018).

Socioeconomic Status and Music Education Research

In music education research literature, SES is often used as a non-music variable. SES has been used to examine its effect on recruitment and retention in instrumental music programs (Albert, 2006; Corenblum & Marshall, 1988; Justus, 2001; Kinney, 2010; Klinedinst, 1991; McCarthy, 1980; Nierman & Veak, 1997); musical achievement and outcomes (Bailey, 2018; Dame, 2010; Howard, 2012; Lien & Humphreys, 2001; Schmit et al., 2006; Sheldon, 1994; Speer, 2012; Speer, 2014) and participation in music (Chappell, 2013; Elpus & Abril, 2011; Elpus & Abril, 2019; Erb, 2019; Smith, 1997).

Researchers have examined the funding provided to band programs and found that the most schools have inadequate funding to support the high costs associated with a competitive marching band program. Prescott (1982) surveyed band directors and found that only 24% felt that their programs were fully funded by the local school board. Chenault (1993) surveyed band directors in North Carolina and found 50% of the respondents were required to fundraise half of their funding. Galloway (1986) surveyed Alabama high school band directors and found 85% of the bands received most of their funds from band parent booster organizations. Elpus and Grisé (2019) concluded that booster programs often serve to alleviate or exacerbate inequality in the funding of music education. The authors noted a significant correlation between the median household income of a postal zip code and the amount of money raised by music booster clubs within that area. The findings indicate that bands from higher-SES communities are more

successful at fundraising than bands from lower-SES communities who may experience greater financial need.

Researchers have examined the SES of participating marching band's schools in relationship to marching band competitions. O'Leary (2016) found that marching bands advancing to Bands of America Grand National finals tended to be from communities whose families had above-average incomes for their state and have few students on free-reduced lunch at their school. Speer (2014) considered the effects of SES on the University Interscholastic League ratings of concert band and choir programs in Texas. The results indicated a significant correlation between SES and attained contest ratings.

The relationship between participation at music contests and SES has been another area of research interest. Perrine (2016) examined the effects of selected non-musical characteristics and band festival participation scores. Non-musical characteristics examined were band size, school enrollment, school percentage of minority enrollment, and free-reduced lunch compared to the concert band festival participation, scores, and literature selection. Pearson correlations revealed significant relationships between percentage of students on free or reduced lunch and the percentage of minority students ($r = .61$, $p < .001$), including a 36% shared variance. School size and literature difficulty had a significant positive correlation ($r = .51$, $p < .001$) with festival scores. A one-way ANOVA revealed that schools with higher percentages of minority students and students eligible for free-reduced lunch were less likely to participate at a band contest.

Stern (2021) examined the correlation between a school's percentage of students receiving free-reduced lunch and scores attained at a large marching band festival. Stern performed a simple linear regression using SPSS software with competing bands' scores from the BOA San Antonio Super Regional competition serving as the dependent variable, and the

percentage of students receiving free-reduced lunch from each school as the independent variable. Results indicated a significant regression (F (1,67) = 55.63, $p < .001$), with an R^2 of .457, meaning that 45.7% of the variance in rankings can be explained by variance in SES. Because Stern only analyzed data from one BOA contest, expanding the analysis to all contest in a competitive season could provide further insight to the literature.

Summary

This literature review revealed that previous studies employed a variety of method designs to examine the relationship of SES and marching band competitions. Studies with a survey design focused on statewide competitions or national marching band circuits (Mulchay, 2017; Rickels, 2008; Sullivan, 2003). Studies that utilized publicly available information focused on individual marching festivals (O'Leary, 2016; Stern, 2021). This literature review revealed that there is an existing gap in the literature, as there have not been previous studies completed that examine a national band circuit utilizing publicly available data, such as school demographics. Research is needed to expand the current literature by examining the relationship of a school's SES and the participation and results achieved in marching band competitions held throughout the United States using publicly available data including free-reduced lunch, income-to-poverty ratio, and ethnicity demographics.

CHAPTER THREE

METHODS

Research Design

I used a quantitative design focused on collecting data through publicly available information. Data were collected from the Music for All website of high schools ($N = 575$) participating in the Bands of America (BOA) competitions held across the United States of America in 2018. There were three types of BOA marching contests held in 2018 ($N = 22$): Regional Championships ($n = 18$), Super Regional Championships ($n = 3$) and Grand Nationals ($n = 1$).

Student free-reduced lunch eligibility is often used by researchers for measuring poverty and socioeconomic disadvantage (Costa-Giomi & Chappel, 2007; Doyle, 2012; Fitzpatrick, 2006; Good, 1997; Kinney, 2008; Kinney, 2010; Kinney & Forsythe, 2005; Nichols, 2003; Stern, 2021). Based upon the previous research, I elected to use free-reduced lunch percentage as one of the variables in this study along with ethnicity demographics and income-to-poverty ratio. Ethnicity demographics and free-reduced lunch information for schools were collected from the National Center for Education Statistics (NCES) Common Core database. Ethnicity demographic percentage was calculated by the combined number of students identifying with a race category divided by the student population of the school. Free-reduced lunch percentage was calculated by the combined number of students eligible divided by the student population of the school. Income-to-poverty ratio score for each high school were collected from the NCES Education Demographic and Geographic estimates database. High school data were collected and entered in an Excel spreadsheet (see Appendix F).

BOA contest results and demographic information were combined and entered in a separate Excel spreadsheet for each marching competition in 2018. Contest information for each high school included music performance average score, visual performance average score, general effect score, subtotal of score, place overall, class, place in class and rating. Demographic information included NCES school ID, income-to-poverty ratio, total school enrollment, grade level enrollment, ethnicity demographics, and free and reduced lunch eligibility information. Private schools' data are not available on the NCES website and were not included in this study. Data included information from public or charter schools receiving federal funding. Each contest had a preliminary and finals competition, except the Dallas/Fort Worth Regional Championship, which did not have a final performance due to weather cancelation. The Waco Regional Championship was canceled due to weather conditions and was not examined for this study.

Data Analysis

I used the *Statistical Package for the Social Sciences* (SPSS) 26.0 statistics software for data analysis. A simple linear regression was performed using competing bands' scores from BOA competitions as the dependent variable, and the percentage of free-reduced lunch, income-to-poverty ratio and ethnicity demographics from each school serving as independent variables. Using the means for income-to-poverty ratio, ethnicity demographics and free-reduced lunch percentage, One-way analysis of variance (ANOVA) was performed to determine if any statistically significant difference exists between the three independent variables. Similar to Stern (2021), a one-sample *t*-test was performed to compare the mean income-to-poverty ratio, ethnicity demographics and free-reduced lunch percentage of schools whose bands competed at BOA competitions with the similar means of students throughout the United States of America.

The data of all USA public schools includes schools that participated in BOA competitions in 2018. Lastly, an independent sample *t* test was performed to compare the means of the subgroups of finalist and non-finalists of the Regional Championships. See Table 3 for a summary of the research questions, data source, and data analysis procedures.

Table 3

Summary of the Research Questions, Data Source and Data Analysis Procedures

Research Question	Data Source/Variables	Type of Data	Analysis
1) What are the ethnicity demographics, free or reduced lunch percentages, and income-to-poverty ratio of schools participating in BOA competitions across the United States of America?	BOA results from *Music for All* websites. https://marching.musicforall.org/competition-year/2018/ Ethnicity demographics, free and reduced lunch price eligibility and Income-to-poverty ratio data comes from National Center for Education Statistics. https://nces.ed.gov/	Scale	Descriptive (Results in Appendix B) one-sample *t*-test
a) What are the differences between ethnicity demographics, free or reduced lunch percentages, and income-to-poverty ratio of schools participating at BOA competitions and all public schools in the United States of America?			
b) What are the differences between ethnicity demographics and free or reduced lunch percentages of Texas schools participating at BOA competitions and all public schools in the State of Texas?			

Table 3 (continued)

Summary of the Research Questions, Data Source and Data Analysis Procedures

Research Question	Data Source/Variables	Type of Data	Analysis
2) Is there a difference between finalist and non-finalist schools' free or reduced lunch percentage and income-to-poverty ratio at BOA competitions?	BOA results from *Music for All* websites. https://marching.musicforall.org/competition-year/2018/ Ethnicity demographics, free and reduced lunch price eligibility and Income-to-poverty ratio data comes from National Center for Education Statistics. https://nces.ed.gov/	Scale	Factorial ANOVA
3) What is the relationship between free or reduced lunch percentage and income-to-poverty ratio and the scores at BOA Regional Championships competitions?	BOA results from *Music for All* websites. https://marching.musicforall.org/competition-year/2018/ Ethnicity demographics, free and reduced lunch price eligibility and Income-to-poverty ratio data comes from National Center for Education Statistics. https://nces.ed.gov/	Scale	Scatter Plot Pearson Correlation

CHAPTER FOUR

RESULTS

Introduction

The purpose of this study was to examine the relationships between selected school demographic variables on participation and competitive rankings at Bands of America (BOA) marching competitions. I analyzed the 2018 BOA results collected from http://www.musicforall.org and SES demographic variables from https://nces.ed.gov/. The quantitative data analysis was performed using SPSS 26.0 statistics software.

Data analysis for this study proceeded in three steps. First, Excel files were created for each 2018 BOA marching competition and included the following information: contest scores, , income-to-poverty ratio, total students at each school, ethnicity demographics, number of students receiving free lunch student and number of students receiving reduced-price student number. I calculated the percentage of students receiving free-reduced lunch by dividing the number of students receiving free-and-reduced lunch by the total of number of students in the school. I calculated the percentage of each ethnic group by dividing the total number of students in each demographic by the number of students in the school. Second, I created one Excel file for all the schools combined with individual data to answer research question #1. Third, I created a SPSS data file for each BOA marching competition.

Question 1: What are the ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating in BOA competitions across the United States of America?

Data were combined for all participating schools into one Excel file including ethnicity demographic percentage, free-reduced lunch (FRL) percentage and income-to-poverty (IPR) ratio (refer to Appendix F). Private schools not receiving federal funding from the Department of Education were removed from the data sample. One of the participating marching bands, Plymouth-Canton Educational Park, is made up of three separate high schools. To represent one data point for the marching band, the IPR, FRL and ethnicity demographics data from each of the three schools were averaged. Table 4 shows the descriptive statistics for the bands that participated in a 2018 BOA marching competition.

Table 4

2018 BOA Participants Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IPR	544	57	962	388.347	166.814
FRL	544	.33%	100%	33.404%	21.526
American Indian/Native	544	.00%	25.79%	.45%	1.486
Asian	544	.00%	84.04%	5.701%	9.232
Black	544	.00%	68.37%	9.148%	10.085
Hispanic	544	.00%	99.92%	22.561%	25.133
Hawaiian/Pacific	544	.00%	10.00%	.194%	.581
White	544	.06%	98.40%	58.361%	26.827
Two or More Race	544	.00%	25.85%	3.418%	2.173

Question 1a: What are the differences between the ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating at BOA competitions and all public schools in the United States of America?

Table 5 shows the average ethnicity demographics, free-reduced lunch (FRL) percentage and the income-to-poverty (IPR) ratio of schools participating in a BOA competition in 2018 compared to the averages in the United States of America (USA). Available data for USA public school ethnicity demographics and FRL date from 2016 and IPR data are from 2018. Private schools not receiving federal funding from the Department of Education were removed from the data sample.

Table 5

United States of America Schools and 2018 BOA Participants Average Income-to-Poverty Ratio, Free-Reduced Lunch and Ethnicity Demographics Percentages

SES and Ethnicity Demographic+	USA Public Schools	2018 BOA Participants
IPR*	307.09	388.35
FRL**	52.30%	33.4%
American Indian/Native**	1%	0.45%
Asian**	5.10%	5.70%
Black**	15.30%	9.15%
Hispanic**	26.40%	22.56%
Hawaiian/Pacific**	0.40%	0.19%
White**	48.20%	58.36%
Two or More**	3.60%	3.42%

Note. + Based on U.S. Government Categories
* 2018 Data. ** 2016 Data

Schools that participated in a BOA competition on average had a higher IPR score compared to the average of public schools in the USA. Percentage of students that were eligible

for free-reduced lunch was lower for schools that participated at BOA competitions compared to the average for the USA. A one-sample *t*-test for independent samples was conducted comparing the average of FRL, IPR and ethnicity demographics to determine if there was a statistical significance between USA public schools and BOA participating schools (see Table 6).

Table 6

One Sample t-Test comparing United States of America Public Schools and 2018 Bands of America Participants using Free-Reduced Lunch, Income-to-Poverty and Ethnicity Demographics

Demographics	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		Cohen's *d*
					Lower	Upper	
IPR*	11.361	543	p < .001	81.25	67.2082	95.3066	0.487
FRL*	-2.629	543	.009	-12.61	-22.0395	-3.1876	- 0.878
American Indian/Native*	-8.624	543	p < .001	-.55	-.6748	-.4245	- 0.370
Asian	1.52	543	.129	.601	-.1761	1.3791	0.065
Black*	-14.225	543	p < .001	-6.15	-7.0005	-5.3013	- 0.610
Hispanic*	-3.562	543	p < .001	-3.83	-5.9553	-1.7219	- 0.152
Hawaiian/Pacific*	-8.247	543	p < .001	-.205	-.2547	-.1567	- 0.353
White*	8.834	543	p < .001	10.16	7.9020	12.4209	0.379
Two or More*	-1.948	543	.05	-.18	-.3643	.0018	- 0.083

* statistically significant

Data from all USA public schools includes schools participating in a BOA competition in 2018. Bands participating in a 2018 BOA competition came from schools with statistically significant lower percentages of students receiving free-reduced lunch compared to all USA public schools. Income-to-poverty ratio was significantly higher for BOA competing schools compared to all public schools in the United States.

Question 1b: What are the differences between the ethnicity demographics and free-reduced lunch percentages of Texas schools participating at BOA competitions and all public schools in the State of Texas?

Table 7 shows the number of schools from each state participating in at least one BOA contest in 2018. Thirty-seven states had at least one high school from the state participating in a BOA marching competition in 2018.

Table 7

States Represented in a 2018 BOA Marching Contest with at Least One School Participating

State	Number of Schools that Participated	Percentage
Texas	150	27.0%
Ohio	54	9.7%
Indiana	47	8.4%
Missouri	30	5.4%
Illinois	28	5.0%
California	27	4.8%
Florida	26	4.6%
Kentucky	24	4.3%
Utah	17	3.0%
Georgia	16	2.8%
South Carolina	16	2.8%
Tennessee	16	2.8%
North Carolina	11	1.9%
Michigan	10	1.8%
Pennsylvania	9	1.6%
New Jersey	8	1.4%
Virginia	7	1.2%
Arkansas, Oklahoma	6	1.0%
Alabama	5	.09%
Kansas, Mississippi, Nevada	4	.07%
Iowa, Maryland, Minnesota, Nebraska, New Mexico, South Dakota	3	.05%
Arizona, Connecticut, Idaho, Wisconsin	2	.03%
Colorado, Louisiana, Oregon, West Virginia	1	.01%

The majority of schools participating in a BOA competition came from Texas. This can be explained because BOA hosts six Regional Championships and one Super Regional Championship in Texas. Table 8 shows FRL and ethnicity demographics information of schools from Texas participating in a 2018 BOA marching competition. Private schools not receiving federal funding from the Department of Education were removed from the data sample. Income-to-poverty ratio averages for individual States are not currently available through the Department of Education.

Table 8

2018 BOA Texas School Participants Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FRL	150	.89%	98.48%	41.59%	25.91
American Indian/Native	150	.00%	4.91%	.33%	.451
Asian	150	.00%	44.69%	6.09%	8.311
Black	150	.00%	48.54%	8.79%	9.432
Hispanic	150	5.69%	99.92%	48.17%	28.59
Hawaiian/Pacific	150	.00%	3.02%	.15%	.276
White	150	.06%	88.24%	33.96%	22.974
Two or More Race	150	.00%	7.79%	2.51%	1.596

Table 9 shows the average ethnicity demographics and free-reduced lunch percentage of Texas schools participating in a BOA contest in 2018 compared to the average of all Texas public schools. Data from all Texas public schools includes bands that participated in a BOA competition in 2018.

Table 9

State of Texas Public Schools and 2018 BOA Participants Average Free-Reduced Lunch and Ethnicity Demographics

SES and Ethnicity Demographic+	Texas Public Schools*	2018 BOA Texas Participants
FRL	60.6%	41.58%
American Indian/Native	.04%	0.33%
Asian	4.5%	6.08%
Black	12.5%	8.79%
Hispanic	49.8%	48.17%
Hawaiian/Pacific	0.2%	0.14%
White	30.8%	33.95%
Two or More	1.9%	2.51%

Note. + Based on Texas Education Agency Classifications
* 2018 data from Texas Education Agency

Percentage of students eligible for free-reduced lunch was lower for Texas schools that participated at BOA competitions compared to the average of Texas public schools. One-sample *t*-test were conducted to compare the average FRL and ethnicity demographics to determine if there was a significant difference between Texas public schools and BOA participants from Texas (see Table 10).

Table 10

One Sample t-Test comparing Texas Public Schools and 2018 Bands of America Participants from Texas using Free-Reduced Lunch Percentage and Ethnicity Demographics

Demographics	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		Cohen's *d*
					Lower	Upper	
FRL*	-8.986	149	p < .001	-19.01067	-23.1911	-14.8302	- 0.734
American Indian/Native*	7.922	149	p < .001	.29173	.2190	.3645	0.647
Asian*	2.340	149	.021	1.588	.2471	2.9290	0.191
Black*	-4.817	149	p < .001	-3.71	-5.2318	-2.1882	- 0.393
Hispanic	-.698	149	.486	-1.6294	-6.2421	2.9833	- 0.057
Hawaiian/Pacific*	-2.272	149	.025	-.0512	-.0957	-.0067	- 0.185
White	1.684	149	.094	3.1586	-.5482	6.8654	0.137
Two or More*	4.693	149	p < .001	.61173	.3541	.8693	0.383

* statistically significant

Texas bands participating in a 2018 BOA competition came from schools with a statistically significant reduced percentage of students receiving free-reduced lunch compared to all Texas public schools. Ethnicity demographics showed statistically significant differences for all races, except White and Hispanic student populations.

Research Question #1 Summary

The data suggest that FRL and IPR have a statistically significant relationship when examining public schools that participate in BOA competitions compared to all public schools in the USA. FRL also appears to impact participation between Texas bands that compete in BOA in 2018 competitions and public schools in the State of Texas. Data suggests that there is a relationship between ethnicity demographics of schools that participated at the 2018 BOA competitions compared to all public schools in the USA. An analysis of Texas ethnicity demographics does not provide a clear picture if there is a relationship with schools participating in a BOA competition.

Question 2: Is there a difference between finalist and non-finalist schools' free-reduced lunch percentage and income-to-poverty ratio at BOA competitions?

A Factorial ANOVA was conducted to compare the main effects of free-reduced lunch percentage and income-to-poverty ratio and the interaction effect between the type of BOA competition on the outcome of being a finalist or non-finalist. The Northern California Regional competition was removed because all participating bands advanced to the finals, which did not yield the two sub-groups of non-finalist and finalist. The Dallas/Fort Worth Regional competition did not hold finals due to weather, however the schools that were named finalists formed the finalist group. An independent samples *t*-tests were conducted using the average of FRL and IPR from participating schools to compare results from finalist and non-finalist bands for individual BOA competitions (refer to Appendix E).

Competition type included three levels (Regional, Super Regional, Grand Nationals) and SES consisted of two levels (free-reduced lunch and income-to-poverty ratio). The main effect for competition type yielded an F ratio of $F(2, 719) = 4.283$, $p < .014$ with a partial eta effect size of .01, indicating a significant difference between free-reduced lunch percentage. The main effect for finalist and non-finalist subgroups yielded an F ratio of $F(2, 719) = 14.371$, $p < .001$ with a partial eta effect size of .16, indicating a significant difference between free-reduced lunch percentage. The partial eta effect size represents a large effect and explains 16% of the variance.

Table 11

Univariate Analysis of Variance Tests of Between-Subjects Effects (b) of 2018 BOA Marching Competitions

Source	Type III Sum of Squares	*df*	Mean Square	F	Sig.
Corrected Model	13216.395[a]	5	2643.279	5.871	.000
Intercept	183698.383	1	183698.383	408.048	.000
Competition	3856.262	2	1928.131	4.283	.014
Non-Finalist/Finalist	64369.453	1	6469.453	14.371	.000
Competition * Non-Finalist/Finalist	1513.043	2	756.522	1.680	.187
Error	323685.394	719	450.188		
Total	1104826.286	725			
Corrected Total	336901.788	724			

a. R Squared = .039 (Adjusted R Squared = .033)
b. Free-Reduced Lunch Percentage of Schools

The main effect for competition type yielded an F ratio of F (2, 719) = 1.01, $p < .365$, with a partial eta effect of .002, indicating that the effect for income-to-poverty ratio was not significant. The main effect for finalist and non-finalist subgroups yielded an F ratio of F (2, 719) = 2.363, $p < .125$ with a partial eta effect of .003, indicating that the effect for income-to-poverty ratio was not significant.

Table 12

Univariate Analysis of Variance Tests of Between-Subjects Effects (b) of 2018 BOA Marching Competitions

Source	Type III Sum of Squares	*df*	Mean Square	F	Sig.
Corrected Model	356550.272[a]	5	71310.054	2.604	.024
Intercept	34324884.11	1	34324884.11	1253.391	.000
Competition	55343.303	2	27671.652	1.01	.365
Non-Finalist/Finalist	64717.212	1	64717.212	2.363	.125
Competition * Non-Finalist/Finalist	48920.844	2	24460.422	.893	.410
Error	19690251.87	719	27385.608		
Total	131131994	725			
Corrected Total	20046802.14	724			

a. R Squared = .018 (Adjusted R Squared = .011)
b. Income-to-Poverty Ratio of Schools

Research Question #2 Summary

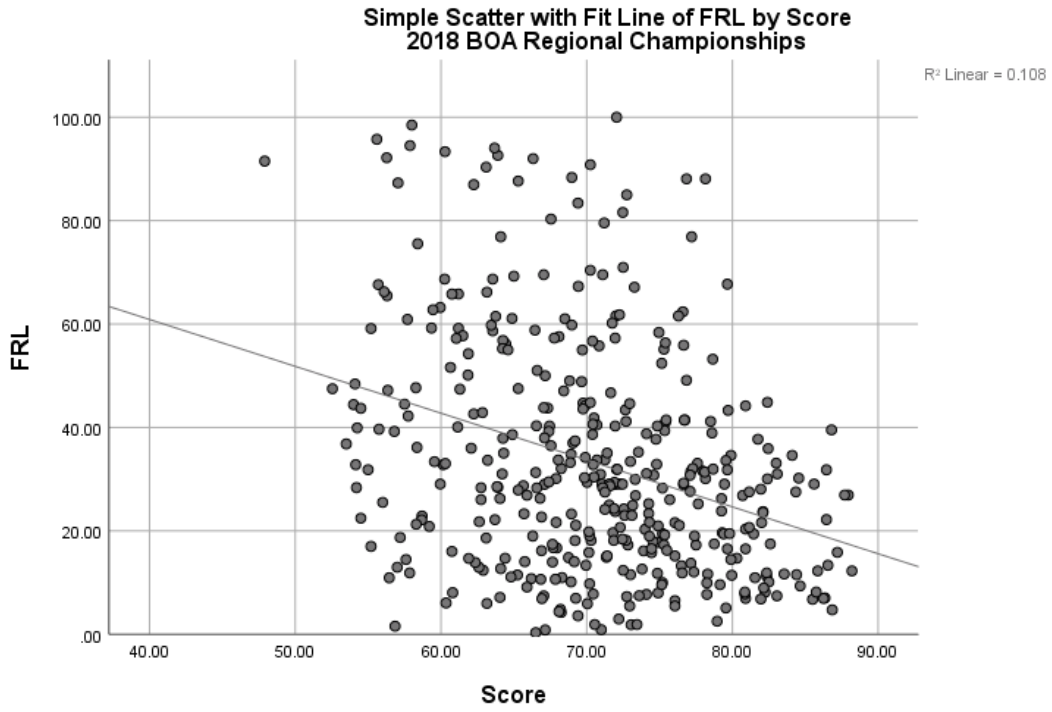
Data analysis revealed a statistically significant difference between FRL and whether a band advanced to finals at the 2018 BOA competitions. However, IPR did not reveal a statistically significant difference between non-finalist and finalist bands. Furthermore, the data analysis revealed that there was a statistically significant difference between the FRL percentage and the type of competition the marching band attended. However, the IPR variable did not reveal a statistically significant difference between schools that participated at different BOA competitions. IPR does not appear to have the same relationship as the variable FRL based on the Factorial ANOVA conducted for each of the variables.

Question 3: What is the relationship between free-reduced lunch percentage and income-to-poverty ratio and the scores at BOA Regional Championships competitions?

A scatter plot (see Figure 1) of all bands that competed in a BOA Regional competition showed a negative linear association between the variables of free-reduced lunch and scores at contest, evidenced by a Pearson's correlation coefficient of r = -.329. The regression model was significant (F (1,403) = 48.943, p <.001, with an R^2 of .108, meaning that 10.8% of the variance in scores can be explained by the variance of free-reduced lunch percentage of the school (see Figure 1).

Figure 1

Relationship between scores at the 2018 Bands of America regional championships and school free-reduced lunch percentage

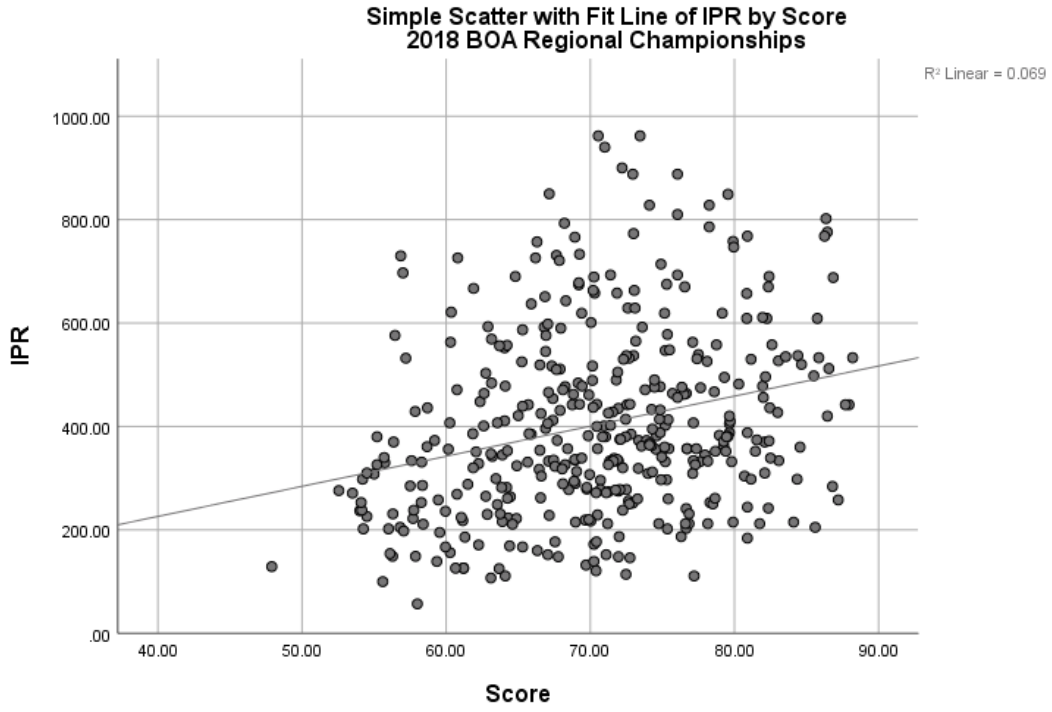


Another scatter plot (see Figure 2) exhibits a positive linear association between the variables of income-to-poverty ratio and scores at contest with a Pearson's correlation coefficient

of .263. The regression model was significant (F (1,403) = 29.899, p < .000, with an R^2 of .069, meaning that 6.9% of the variance in scores can be explained by the variance of income-to-poverty ratio of the participating schools.

Figure 2

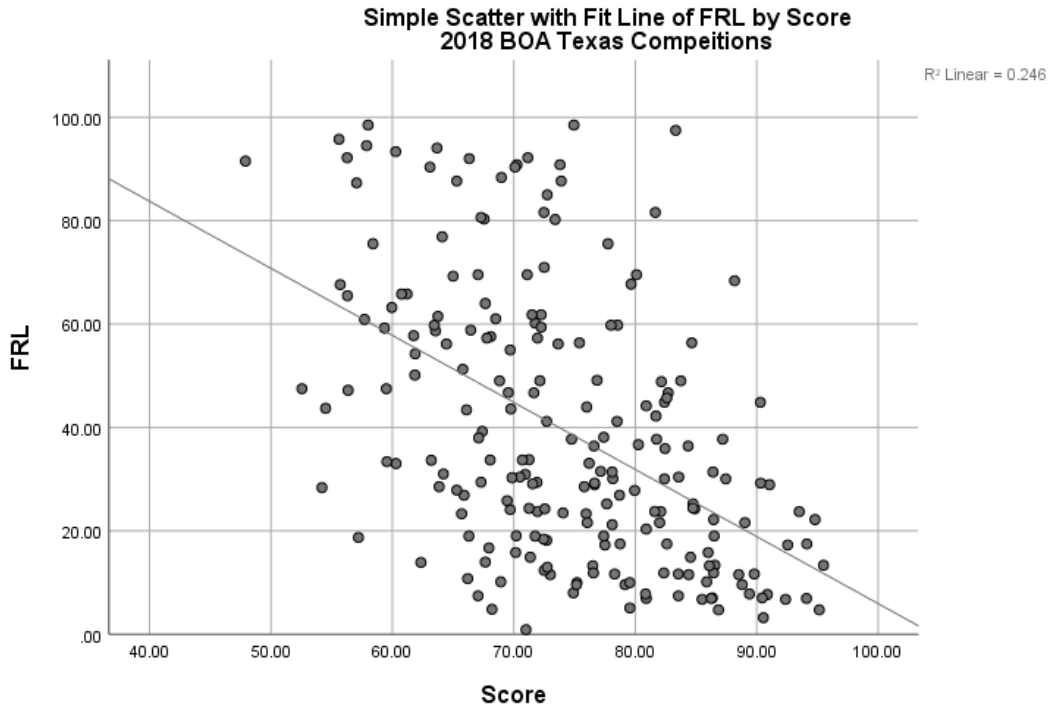
Relationship between scores at the 2018 Bands of America regional championships and school income-to-poverty ratio



A scatter plot examining the 2018 BOA Texas competitions showed a negative linear association between a school free-reduced lunch percentage and scores at contest with a Pearson's correlation coefficient of -.496. There was a significant regression (F (1, 212) = 69.221, p < .000, with an R^2 of .246, meaning that 24.6% of the variance in scores can be explained by the variance of free-reduced lunch percentage of the school (see Figure 3).

Figure 3

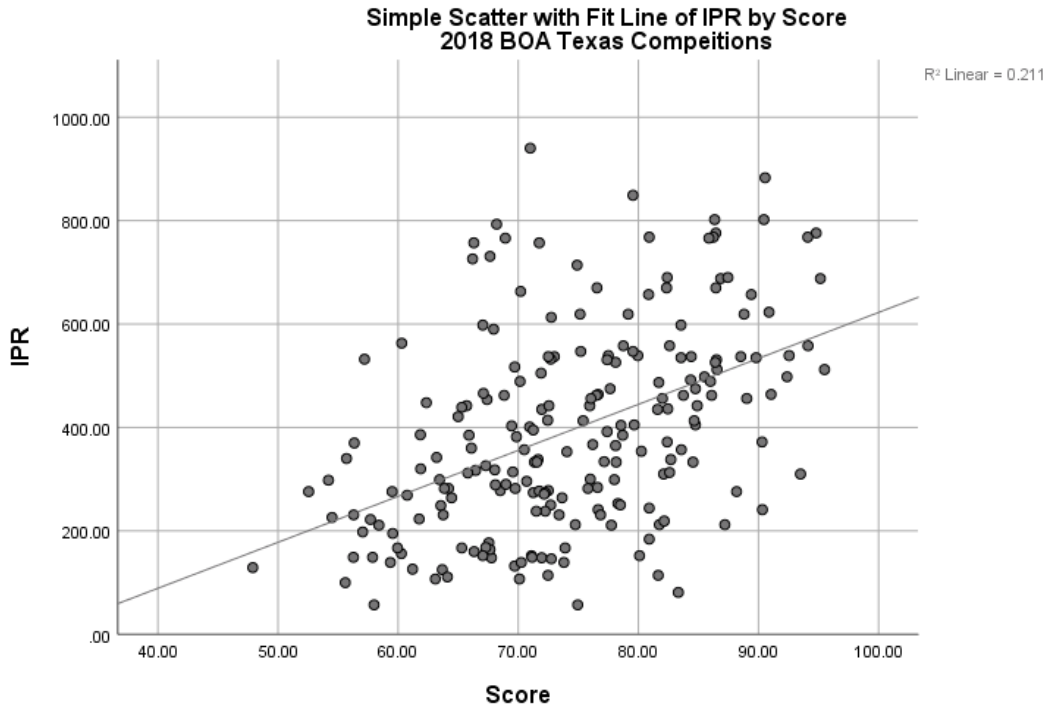
Relationship between scores at the 2018 Bands of America Texas competitions and school free-reduced lunch percentage



Examining schools' participating in a 2018 BOA Texas competition income-to-poverty ratio with a scatter plot showed a positive linear association when compared to competition scores revealed a Pearson's correlation coefficient of .459. The regression model was significant (F (1, 212) = 56.69, p < .000, with an R^2 of .211, showing that 21.1% of the variance in scores can be explained by variance in income-to-poverty ratio (See Figure 4).

Figure 4

Relationship between scores at the 2018 Bands of America Texas competitions and school income-to-poverty ratio



Research Question #3 Summary

Regression analyses revealed little relationship between free-reduced lunch, and income-to-poverty ratio when compared to the scores at 2018 BOA Regional Championships. Unlike research question two, FRL and IPR showed comparable results with the regression model and a similar R^2 variance. However, the R^2 for the scatter plots highlights there was little variance that can be explained with the scores and the independent variables. Appendix F presents the scatter plots for each of the BOA marching competitions in 2018.

Summary

Research question one showed there was a significant difference between the demographic information of schools that participated at 2018 BOA competitions and all public

schools in the USA. A school that participated in a BOA competition was more likely to have fewer students on free-reduced lunch and have higher income-to-poverty ratio scores compared to the national average. Both variables, free-reduced lunch percentage and income-to-poverty ratios, are indicators of the economic impact for that school community. This current study examined the entire school population and not individual students that participate in the marching bands. Examining publicly available data provides a different view of socioeconomic variables of a specific school community.

Based on the Factorial ANOVA analysis, IPR does not appear to have the same relationship as the variable FRL. However, the variables do appear to have comparable results with the regression model and a similar R^2 variance. Further examination of the two SES variables as a reliable predictor of success in marching band competitions is needed based on the results from this current study.

CHAPTER 5

DISCUSSION AND CONCLUSION

Chapter five includes findings, conclusions, discussion, and recommendations for future research implications. The purpose of this quantitative study was to examine the relationship between selected school demographics and participation and competitive rankings at the 2018 Bands of America (BOA) marching competitions. Specific research questions were:

1) What are the ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating in BOA competitions across the United States of America?
    a. What are the differences between the ethnicity demographics, free-reduced lunch percentages, and income-to-poverty ratio of schools participating at BOA competitions and all public schools in the United States of America?
    b. What are the differences between the ethnicity demographics and free-reduced lunch percentages of Texas schools participating at BOA competitions and all public schools in the State of Texas?
2) Is there a difference between finalist and non-finalist schools' free-reduced lunch percentage and income-to-poverty ratio at BOA competitions?
3) What is the relationship between free-reduced lunch percentage and income-to-poverty ratio and the scores at BOA Regional Championships competitions?

Participation at BOA Competitions

The variables analyzed in this study provide an interesting characterization of high school marching bands electing to participate in the 2018BOA marching competitions. I examined BOA because of the multiple marching competitions held across the United States. Because data were

collected from one marching band circuit, these data might not be representative of American marching bands overall. Rickels (2009) collected data through surveys from high schools competing at a variety of marching festivals, which provided information of the average marching band in America. This current study expanded the literature by collecting data from one national marching band circuit that uses a standard rubric for all competitions and collected publicly available data to compare marching bands.

Data analyses compared ethnicity demographics of schools participating in BOA marching competitions with national averages. This analysis revealed statistically significant differences. Schools that participated in the 2018 BOA marching competitions had significantly higher percentage of "White" students and lower percentage of "Hispanic" and "Black" students. Examining schools from Texas that participated in BOA competitions showed different results when comparing to the State of Texas ethnicity demographics. A one sample *t*-test indicated a statistically significant difference in participation in ethnicity demographics except for "Hispanic" and "White" student populations.

The relationships between a school's percentage of students with free-reduced lunch, a school's IPR, and ethnicity demographics and participation at specific marching competitions merit further research. Previous research examined marching competitions in a State or a specific region of the USA. This study only examined one year of a specific marching band circuit, therefore, expanding to all areas of music competition would provide greater insight about schools that choose to participate. As marching band productions and expectations for competition continue to grow, music educators will need to evaluate the equitable access of marching competitions for all schools. Previous research has indicated that Drum Corp International competition has influenced high school marching band programs (Laib, 1984), as

evidenced by the decisions of band directors choosing similar rehearsal strategies and show design. Further examination regarding cost per-a-competitive-year associated to BOA marching competitions would provide further data about how band fees and the economics of a community might impact participation and competitive results.

Free-Reduced Lunch Percentage vs. Income-to-Poverty Ratio

Free-reduced lunch percentage is one of the most used variables for SES in educational research (Sirin, 2005). Income-to-poverty ratio is a newer measurement from the Department of Education that has not been fully examined as a SES variable. This current study showed mixed results when comparing free-reduced lunch percentage and income-to-poverty ratio. Using the Factorial ANOVA for both free-reduced lunch percentage and income-to-poverty ratio showed a difference in the two variables. Free-reduced lunch percentage showed a statistically significant difference between the finalist and non-finalist marching bands at BOA competitions. However, income-to-poverty ratio did not have a statistically significant difference between the finalist and non-finalist. The scatter plot results showed comparable results in the regression model and R^2 variance. Appendix E shows the independent samples *t*-test for each of the BOA marching competitions in 2018. Both free-reduced lunch percentage and income-to-poverty ratio had a statistically significant difference between non-finalist and finalist for McAllen Regional Championship and San Antonio Super Regional Championship.

Overall, this study demonstrated that there are mixed results on how comparable free-reduced lunch percentage and income-to-poverty ratio are in educational research. IPR was developed to have a more reliable measure to identify the poverty levels of publics schools (Geverdt & Nixon, 2018). The validity of free-reduced lunch percentage has been an issue for using the data as an identifier for poverty. Michelmore and Dynarski (2017) discussed how free-

reduced lunch percentage data can obscure important variation in household resources at both the top and bottom of the income distribution. Hawell and LeBeau (2010) discussed how free-reduced lunch is not a valid indicator of poverty because it does not capture household economic recourses. Even with the concerns of validity with free-reduced lunch as an SES variable, it is still used throughout educational research. Income-to-poverty ratio should be examined by researchers about the validity of the measurement for future research.

The Relationship between School Demographic Variables and Results

Stern (2021) found a statistically significant difference in free-reduced lunch percentage of schools that were non-finalist and finalist for the 2017 BOA San Antonio Super Regional Championship. This study expanded Stern's research by examining free-reduced lunch percentage and IPR and the differences between non-finalist and finalists' schools for all BOA competitions in 2018. The factorial ANOVA results for research question two indicated a statistically significant difference between finalist and non-finalist schools and the variables of free-reduced lunch percentage, however income-to-poverty ratio did not have comparable results. This current study was able to replicate Stern's findings for the 2018 competition year.

There were 52 schools that competed both years in the San Antonio Super Regional Championship, indicating that there are a consistent number of schools that participate. Examining multiple years of a single competition would provide a large representation on the correlation between free-reduced lunch and contest scores. Table 15 shows the mean of free-reduced lunch percentage of the subgroups non-finalist and finalist bands between the two years of San Antonio Super Regional competitions. Data from the 2017 San Antonio Super Regional comes from Stern (2021).

Table 13

Free-Reduced Lunch Percentages of Participating Schools at BOA San Antonio Super Regional

Group	*n*	*Range*	*M*	*Mdn*	*SD*
Finalist					
2018	14	41.66%	16.67%	22.73%	12.04
2017	14	23.50%	13.77%	10.40%	8.67
Non-Finalist					
2018	69	91.04%	41.47%	30.42%	25.10
2017	54	96.30%	37.03%	31.15%	26.44
All Bands					
2018	83	95.27%	37.29%	29.42%	25.15
2017	68	96.30%	32.24%	25.55%	25.64

Previous research suggests that socioeconomic variables can impact musical achievement and outcomes (Bailey, 2018; Dame, 2010; Schmidt et al., 2006; Speer, 2014). This study indicated a significant relationship between scores and SES variables of a school. However, the variance in the scores showed a weak relationship when examining free-reduced lunch percentage and income-to-poverty ratio. Research question #3 focused on the BOA Regional Championships in 2018. Individual competitions had a wide range of R^2 variance examining free-reduced lunch percentage and income-to-poverty ratio in relation to the bands scores. Table 14 highlights the relationship of free-reduced lunch percentage and income-to-poverty ratio when compared to band scores for each competition.

Table 14

R^2 of Free-Reduced Lunch and Income to Poverty Ratio Compared to Scores at 2018 Bands of America Marching Competitions

Competition	FRL R^2	IPR R^2
Austin Region	.402	.056
Bowling Green Regional	.259	.048
Canton Regional	.008	.008
Clarksville Regional	.010	.001
Dallas/Fort Worth Regional	.141	.071
Gaffney Regional	.004	.036
Grand Nationals	.124	.030
Houston Regional	.055	.091
Indianapolis Super Regional	.065	.033
Jacksonville Regional	.054	.117
McAllen Regional	.345	.336
Midland Regional	.457	.287
Orlando Regional	.030	.010
Oxford Regional	.000	.019
Powder Springs Regional	.000	.003
Southern California Regional	.117	.033
San Antonio Super Regional	.266	.295
St. George Regional	.178	.293
St. Louis Super Regional	.064	.014

Limitations

One of the limitations of this current study is not knowing the socioeconomic variables of the participating students. However, previous research suggests students who participate in high school music programs typically come from a higher socioeconomic background in comparison with their school's average demographic (Elpus & Abril, 2019). With the likelihood of higher SES students participating in music classes, the percentage of students on free-reduced lunch at a school may not represent the marching band program itself. I examined the school demographics of the entire student population of a school, not the individual students participating in marching band. However, Stern (2021) suggested that the number of students on free-reduced lunch at a

school can still provide a meaningful metric reflecting the number of economic resources available in the community.

Implications and Recommendations for Future Research

Further research is needed concerning the impact of socioeconomic levels on marching band competitions and equitable access to resources. This study could be replicated over several years or expanded to state festivals and other national marching band circuits. The next step in analyzing data is examining the public records of band budgets to determine the actual expenditures marching bands accrue each competitive season. Elpus and Grisé (2019) examined publicly available IRS documents for music booster clubs of schools to estimate the impact on the private financing of public music education at the national and local level. Using contest scores and similar data examined by Elpus and Grisé would be a natural progression of examining relationships between socioeconomic variables of a school and contest results.

A clear understanding of the impact of music funding on contest results can help inform contest organizers of potential inequalities in the opportunities for marching bands to participate at festivals. While this study does not provide an experimental model that could concretely define causal relationships between the examined variable, the results have implications for contest organizers and future research. Organizers of marching competitions should examine rubrics and policies to ensure equity for all marching bands to participate and not let resources be a determining factor. The data gathered in this study could be used by marching band circuits to identify the participation trends of marching bands and help form future policy discussions.

Cost is a key factor when deciding to participate in BOA competitions, and the resources of the community can impact that decision. The cost related to participating in BOA is more than the entry fees, but also includes the cost of copyright fees, additional staff during rehearsals, drill

writers, music arranger, color guard equipment, sound equipment and travel cost (Eubanks, 2016). These costs could vary depending on the show design of the high school and the number BOA competitions that the directors decide to participate in. Further research on the financial impact and budgets of marching bands could provide insight on the state of music education or equity gaps across the United States.

With the impact of COVID-19 on music competitions not yet examined, future research on competitions that took place during the pandemic should be explored. Bands of America did not hold competitions in 2020, some festivals were able to happen based on the policies of individual States. University Interscholastic League (UIL) in Texas held their normal competitive marching band season, however some districts decided that their schools would not participate. Furthermore, it would be important to see how the financial impact of the pandemic affects the 2021 competitive marching band season and examine how it affected participation and results. Examining schools that participated and using variables that were used in this study would provide insight on marching competitions during the COVID-19 pandemic.

Another national marching band circuit, US Bands, offers marching competitions throughout the United States of America. The circuit has several types of championships and had 115 marching band competitions in 2018 compared to the 22 held by BOA. Replicating this current study on the US Bands circuit could provide an understanding on what types of communities choose to participate in the US Bands circuit compared to the BOA circuit. By examining schools that participate in US Bands over BOA competitions, it could provide insight on the impact that resources have on choosing what marching contest to participate in.

Further research examining Texas and the culture of competitive marching band in Texas would provide insight on the impact the culture has had on music education. Schools that

participate in BOA also compete in Texas UIL marching competitions each year. BOA and UIL use different rubrics to evaluate marching band, with the biggest difference being the general effect category for BOA. An analysis of the impact BOA has had on UIL competitions would provide meaningful information for music educators, school administrators and parent organizations.

Access to music education in public schools continue to be the focus of advocacy groups across the USA. Music educators are the advocates within their school districts to ensure music curriculum is available to all students. However, teachers must make sure their own polices are not holding back students from participating based on their economic recourses. Each State and school district have different policies in place that discuss what public schools can charge fees to students for various reasons. For example, in the State of Texas Education Code § 11.158 discusses the authority to charge fees in a school district. One example that a school cannot charge fees to a student is the instructional costs for necessary school personnel employed in any course or educational program required for graduation. In Texas, students are required to take one fine arts credit for their high school diploma. Previous research has discussed how schools hire additional staff for marching band instruction such as marching technicians or color guard instruction (Rickels, 2009). Texas school districts may be breaking Education Code through charging student fees to be in marching band and using the money to pay additional staff. Marching band directors should regularly review district and State policy to ensure they are in compliance. Without self-regulation from music educators, State Legislatures could step in to address equal access to public education courses.

Conclusion

Marching bands have had a long and growing tradition in the United States public schools. The experience of being in a marching band provides meaningful learning experiences for students both musically and socially. Marching band contests provide an opportunity for student ensembles to be evaluated based on the rubric developed by the organizing circuit. This study showed that the ethnicity demographics and SES variables of a school may impact the decision to participate at a BOA marching competition. A relationship exists between a school's free-reduced lunch percentage and the bands' success at a marching band competition. By examining a larger data set from multiple BOA competitions, this study provided a unique view of schools that participate in the circuit and how the SES effects the finals results.

The purpose of this dissertation was to examine the relationships between selected school demographics on participation and competitive rankings at Bands of America marching competitions. The results of this study highlight:

- the relationships between a school's SES demographics and participation in a BOA marching competition.
- the relationships between a school's SES demographics and the overall outcome at a BOA marching competition.

Although there are numerous variables that band directors consider when choosing what marching band competitions to participate in, I hope this dissertation will open a discussion on how the economics of a community can impact the participation of marching competitions. Directors selecting a contest based on available resources in their program is a reality of the profession. Music educators should continue to reflect on what they want the profession to look like in the future. Our profession should welcome all students who want to participate and make

music. However, the systems of competition that we have created may not reflect the core value of welcoming all to participate.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD DOCUMENTATION

Lenard AU IRB #20-385 NHSR "Effects of Selected Variables on Participation and Competitive Rankings at Bands of America Marching Competitions"

IRB Administration <irbadmin@auburn.edu>
Thu 10/8/2020 1:55 PM
To: Martin Lenard <mcl0073@auburn.edu>
Cc: Nancy Barry <nhb0002@auburn.edu>; Marilyn Strutchen <strutme@auburn.edu>

Dear Mr. Lenard,

The IRB has reviewed your request for the study titled "Effects of Selected Variables on Participation and Competitive Rankings at Bands of America Marching Competitions". The IRB has determined that your project, as described in the submission, **is not** considered human subjects research (NHSR).

Further documentation for this study does not need to be submitted. If you make any changes to your study that might include human subjects research, please contact our office. If you need an official letter regarding this decision, please let us know.

Best regards,

IRB Administration
Office of Research Compliance
540 Devall Drive
Auburn University
Auburn, AL 36832

APPENDIX B

BANDS OF AMERICA SAMPLE SCORESHEETS AND CRITERIA REFERENCE

1 Music Performance Individual

Tone Quality / Intonation	Accuracy / Technique
• Consistent Tone Quality • Consistent Tuning and Intonation Control • Characteristic Instrument Sound Quality and Focus • Musical, Environmental, and Physical Challenges	• Accurate Articulation Methodology • Tonal Center • Rhythmic Accuracy and Consistency • Clarity and Uniformity of Dexterity Control • Simultaneous Responsibilities
Score	**Score**
100	100

Total

Maximum 200

JUDGE: _____

Rarely	Infrequently	Sometimes	Usually	Always
0-10	11-30	31-70	71-90	91-100
0 4 8 10	11 18 25 30	31 44 58 70	71 78 85 90	91 94 98 100

SAMPLE

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Music Performance Individual

Tone Quality / Intonation	Accuracy / Technique
To what degree do the performers demonstrate: • a solid fundamental approach to quality of sound and tone production in all ranges and dynamic levels? • an awareness of, and attention to, intonation in all ranges and dynamic levels? • quality and consistency of sound? • quality and consistency of tuning? • mastery of simultaneous responsibilities?	**To what degree do the performers demonstrate:** • articulation, enunciation, and release with clarity, focus, and uniformity? • the ability to uniformly and accurately play rhythms and maintain pulse control at all tempi required. • accuracy, uniformity, and flexibility with the technical skills being demanded? • appropriate touch – weight of stroke and musical colors created? • quality keyboard dexterity – 2 mallet grip/4 mallet grip/timpani grip? • quality in accessory technique/movement? • mastery of simultaneous responsibilities?

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2 Music Performance Ensemble

Overall Sound Quality /Accuracy	Musical Artistry
• Ensemble Sonority, Intonation, and Tuning • Balance and Blend • Tonal Center and Focus • Clear and Appropriate Methodology • Vertical Alignment and Rhythmic Interpretation • Musical, Environmental, and Physical Challenges	• Full Range of Expression, Detail, and Nuance • Phrasing and Musical Inflection • Clarity and Uniformity of Style and Interpretation • Range of Musical Devices • Expressive Qualities of the Music by All Elements • Simultaneous Responsibilities
Score	**Score**
100	100

Total

Maximum 200

JUDGE: _____

Rarely	Infrequently	Sometimes	Usually	Always
0-10	11-30	31-70	71-90	91-100
0 4 8 10	11 18 25 30	31 44 58 70	71 78 85 90	91 94 98 100

SAMPLE

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Music Performance Ensemble

Overall Sound Quality / Accuracy

To what degree do the performers demonstrate:

- consistently playing in tune?
- a beautiful tone quality?
- consistent quality sonority with entire the musical ensemble throughout form changes, musical performance demands, and musical construction?
- a variety of spatial environments throughout the show?
- handling of voice proximity which places demands on players relative to total ensemble pitch, timbre, consistency, and texture?
- exposure of all voices through balance? Textural clarity?
- consistency in timbre, blend, intonation, stylistic uniformity, and sonority through spatial changes and technical demands?
- consistently playing in time?
- rhythmic accuracy and variety?
- mastery of the metric demands placed on the players – variety, speed, layered?
- attention listening center changes throughout the show? Production?
- mastery simultaneous responsibilities?

Musical Artistry

To what degree do the performers demonstrate:

- musical expression which includes shape, natural inflection and weight within the musical phrase – horizontally, harmonically?
- relating phrases, segments, sequences, transitions, and developments expressively?
- musical texture and dynamics to communicate expression?
- mastery of demands required of the performers relative to style, idiom, dexterity, embouchure, touch, or articulation?
- utilization all voices to support the expressive qualities of the music?
- mastery of simultaneous responsibilities?

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3 General Effect Music

Effectiveness of the Musical Repertoire	Effectiveness of the Musical Performance
• Creativity and Imagination • Coordination and Staging of Elements • Use of Time and Pacing of Effects • Appropriate Range of Expressions • Continuity and Flow of musical ideas • Contribution for Enrichment/Enhancement of All Elements	• Communication of Musical Intent • Emotion • Professionalism • Artistry • Involvement
Score	**Score**
100	100

Total

Maximum 200

JUDGE: _____

Rarely	Infrequently	Sometimes	Usually	Always
0-10	11-30	31-70	71-90	91-100
0 4 8 10	11 18 25 30	31 44 58 70	71 78 85 90	91 94 98 100

SAMPLE

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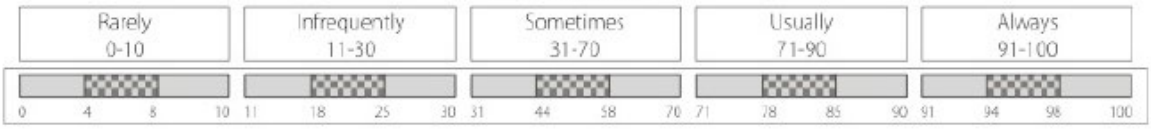
General Effect Music



Effectiveness of the Musical Repertoire

To what degree does the band demonstrate:

- creativity and imagination in the use of something familiar in a new way?
- originality in the use of something fresh and new?
- success in musical staging in both placement and in time?
- strength of coordination among all the musical elements?
- strength of coordination between the music and the visual?
- interpretive and expressive elements used to enhance effect?
- success in musical pacing over the complete program and over each production?
- elevation of the musical repertoire through the performers?
- overall effect of the program through its entertainment value?
- development, connection, and evolution of planned events?
- strength of the aesthetic, intellectual, and emotional facets of the musical repertoire?
- variety of effects?

Effectiveness of the Musical Performance

To what degree do the performers demonstrate:

- communication the musical program intent?
- engagement through an emotional performance?
- precision as a contribution to effect?
- musical artistry as an influence effect?
- communication of the expressive qualities inherent in the program?
- sustained confidence and understanding of the musical program?

SAMPLE

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4 Visual Performance Individual

Challenges and Skills	Accuracy and Definition
• Form, Body, and Equipment Challenges • Variety and Range of Skills • Tempo and Pulse • Variety of Techniques • Simultaneous Responsibilities	• Control of Form, Body, and Equipment • Demonstration of Variety and Range of Skills • Control of Tempo and Pulse • Demonstration of Training and Style • Recovery
Score	**Score**
100	100

Total

Maximum 200

JUDGE: _____

Rarely	Infrequently	Sometimes	Usually	Always
0-10	11-30	31-70	71-90	91-100
0 4 8 10	11 18 25 30	31 44 58 70	71 78 85 90	91 94 98 100

SAMPLE

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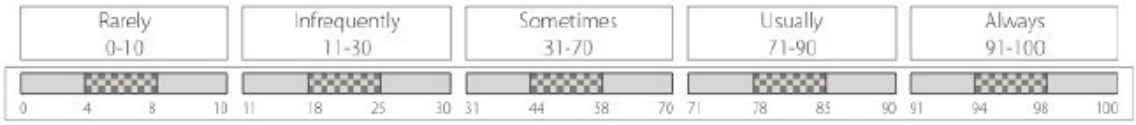
Visual Performance Individual



Challenges and Skills

To what degree do the performers demonstrate:

- high quality depth of Body, Form, and equipment responsibilities?
- a variety and range of skills?
- the principles of movement?
- alignment and spacing challenges?
- range in effort changes?
- training and style?
- tempo, rhythmic variations, or phrases without tempo, and pulse?
- simultaneous responsibilities?

Accuracy and Definition

To what degree do the performers demonstrate:

- control of form, body, and equipment?
- poise in movement and equipment?
- variety, range, and uniformity in technique?
- quality technique in handling equipment?
- control of Tempo and Pulse through a variety of settings?
- detail, nuance, and training in individual technique?
- a clearly defined style?
- training in both mental and physical recovery?
- mastery of simultaneous responsibilities?

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5 Visual Performance Ensemble

Visual Artistry	Excellence and Technique
• Quality use of the Elements of Design • Visual Musicality • Unity • Range and Variety of Skills • Artistic Expression • Integration • Simultaneous Responsibilities	• Control and Balance of Form • Ensemble Cohesiveness • Precision, Uniformity, and Timing • Technique in Form, Body, and Equipment/Recovery • Projection of Style • Achievement of Effort Changes
Score	**Score**
100	100

Total

Maximum 200

JUDGE: _____

Rarely	Infrequently	Sometimes	Usually	Always
0-10	11-30	31-70	71-90	91-100
0 4 8 10	11 18 25 30	31 44 58 70	71 78 85 90	91 94 98 100

SAMPLE

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Visual Performance Ensemble

Visual Artistry	Excellence and Technique
To what degree do the performers demonstrate:	To what degree do the performers demonstrate:
• visual expression? • quality in vertical and horizontal phrasing? • logic, depth, and variety in the use of design elements? • exploration of a wide range of skills? • detail and nuance in the performance • integration of all the parts in a complementary manner? • musicality in form, body, and equipment? • simultaneous responsibilities?	• response to changes in space, time, and form? • control of tempo, pulse, and rhythm? • quality and uniformity of technique? • training in all facets of ensemble performance/recovery? • form control and balance? • overall achievement in ensemble form, body, and equipment? • clarity and readability and projection of style? • quality of form, body, and equipment work as it relates to orientation and timing? • mastery of simultaneous responsibilities?

SAMPLE

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6 General Effect Visual

Effectiveness of the Visual Repertoire	Effectiveness of the Visual Performance
• Interpretation and Enhancement of the Music • Coordination and Staging of Elements • Pacing of Effects • Creativity/Imagination/Originality • Use of Audio-Visual Balance/Blend/Focus • Continuity and flow of visual Ideas • Effective Use of Movement/Form/Color	• Communication of Roles • Emotion • Professionalism • Artistry • Involvement
Score	**Score**
100	100

Total

Maximum 200

JUDGE: _____

Rarely	Infrequently	Sometimes	Usually	Always
0-10	11-30	31-70	71-90	91-100
0 4 8 10	11 18 25 30	31 44 58 70	71 78 85 90	91 94 98 100

SAMPLE

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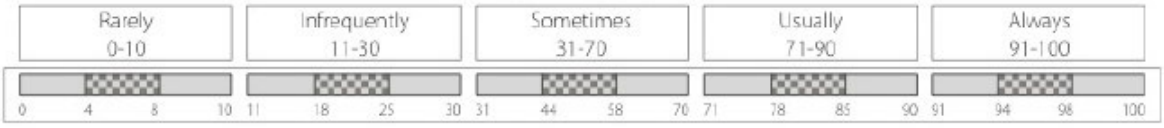
General Effect Visual



Effectiveness of the Visual Repertoire

To what degree does the band demonstrate:

- interpretation and enhancement of the music
- strength of coordination among all the visual elements?
- strength of coordination between the music and the visual?
- staging success in both placement and time?
- pacing success over the complete program and over each production?
- creativity and imagination in the use of something familiar in a new way?
- originality in the use of something fresh and new?
- effectiveness in incorporating form, body and equipment into the design?
- a sense of continuity developed in the program?
- overall effect of the program through its entertainment value?
- strength of the aesthetic, intellectual, and emotional facets of the design?
- variety of effects?

Effectiveness of the Visual Performance

To what degree do the performers demonstrate:

- their role and identity?
- engagement through an emotional performance?
- precision as an influence of effect?
- success in elevating the written program?
- sustained confidence and understanding of the program intent?
- communication of the intent of the program?

SAMPLE

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APPENDIX C

LIST OF 2018 BANDS OF AMERICA COMPETITIONS WITH DATE AND LOCATION

2018 Bands of America Marching Band Competitions

Date	Contest Name	Location
09/22/2018	Oxford Regional Championship	Miami University - Oxford, OH
09/22/2018	McAllen Regional Championship	McAllen Memorial Stadium – McAllen, TX
09/22/2018	Midland Regional Championship	Grande Communication Stadium – Midland, TX
09/29/2018	Austin Regional Championship	Kelly Reeves Athletic Complex – Austin, TX
09/29/2018	Bowling Green Regional Championship	Bowling Green State University – Bowling Green, OH
09/29/2018	Clarksville Regional Championship	Austin Peay State University – Clarksville, TN
10/06/2018	Jacksonville Regional Championship	Jacksonville State University – Jacksonville, AL
10/06/2018	Dallas/Ft. Worth Regional Championship	Pennington Field – Bedford, TX
10/06/2018	Houston Regional Championship	Woodforest Bank Stadium – Houston, TX
10/13/2018	Gaffney Regional Championship	Gaffney High School – Gaffney, SC
10/13/2018	Waco Regional Championship	Waco ISD Stadium – Waco, TX
10/13/2018	Orlando Regional Championship	Camping World Stadium – Orlando, FL
10/13/2018	Canton regional Championship	Tom Benson Hall of Fame Stadium – Canton, OH
10/19-20/2018	Indianapolis Super Regional Championship	Lucas Oil Stadium – Indianapolis, IN
10/20/2018	Mid-Atlantic Regional Championship	Delaware Stadium – Newark, DE
10/20/2018	Northern California Regional Championship	Diablo Valley University – Pleasant Hill, CA
10/26-27/2018	St. Louis Super Regional Championship	The Dome at America's Center – St. Louis, MO

2018 Bands of America Marching Band Competitions (continued)

Date	Contest Name	Location
10/27/2018	St. George Regional Championship	Dixie State College - St. George, UT
11/2-3/2018	San Antonio Super Regional Championship	Alamodome – San Antonio, TX
11/03/2018	Southern California Regional Championship	Monarch Stadium – Valley Glen, CA
11/08-10/2018	Grand National Championships	Lucas Oil Stadium – Indianapolis, IN

APPENDIX D

ETHNICITY/RACE PERCENTAGE OF 2018 BANDS OF AMERICA COMPEITIONS

Table D1

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Grand National Championships

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Prelims	0.36%	4.11%	6.37%	7.29%	0.12%	77.97%	3.90%
Semi-Finals	0.76%	4.37%	6.57%	9.34%	0.19%	74.35%	4.41%
Finals	1.31%	6.45%	9.05%	8.12%	0.18%	69.45%	5.43%

Table D2

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Oxford Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.15%	2.80%	5.91%	4.89%	0.07%	82.61%	3.71%
Finalist	0.17%	5.35%	8.77%	6.89%	0.10%	74.73%	3.99%

Table D3

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

McAllen Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.13%	0.80%	3.50%	89.85%	0.02%	5.31%	0.39%
Finalist	0.12%	4.04%	1.94%	80.08%	0.05%	12.71%	1.05%

Table D4

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Midland Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.27%	1.37%	10.42%	63.70%	0.05%	22.54%	1.61%
Finalist	0.36%	6.72%	5.55%	47.24%	0.14%	37.91%	2.08%

Table D5

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Austin Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.22%	6.79%	9.68%	41.78%	0.20%	35.07%	3.30%
Finalist	0.30%	7.70%	6.70%	32.13%	0.16%	48.85%	4.16%

Table D6

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Bowling Green Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.14%	3.66%	8.80%	10.76%	0.09%	72.01%	4.55%
Finalist	0.17%	6.05%	5.88%	10.60%	0.07%	73.21%	4.02%

Table D7

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Clarksville Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.17%	4.34%	12.03%	7.37%	0.20%	72.00%	3.84%
Finalist	0.17%	3.38%	18.23%	6.05%	0.22%	68.12%	3.79%

Table D8

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America Jacksonville

Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.33%	5.42%	19.42%	8.84%	0.12%	63.21%	2.64%
Finalist	0.15%	3.76%	26.45%	10.09%	0.09%	56.51%	2.94%

Table D9

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Dallas/Fort Worth Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.91%	9.75%	9.33%	20.93%	0.20%	54.75%	4.10%
Finalist	0.52%	9.74%	14.82%	27.89%	0.28%	43.69%	3.01%

Table D10

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Houston Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.42%	10.30%	11.92%	33.41%	0.14%	41.07%	2.72%
Finalist	0.32%	9.47%	6.32%	33.59%	0.14%	46.87%	3.29%

Table D11

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Gaffney Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.63%	4.74%	18.22%	11.05%	0.11%	60.87%	4.38%
Finalist	0.16%	8.67%	12.05%	7.67%	0.07%	67.35%	3.99%

Table D12

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Orlando Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.45%	4.34%	15.08%	26.17%	0.17%	49.94%	3.85%
Finalist	0.74%	4.04%	15.95%	23.53%	0.14%	52.38%	3.21%

Table D13

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America Canton Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.09%	3.28%	10.66%	3.65%	0.13%	78.04%	4.02%
Finalist	0.19%	3.88%	10.84%	6.09%	0.08%	75.04%	3.88%

Table D14

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America Indianapolis Super Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.34%	3.55%	7.37%	8.97%	0.10%	75.83%	3.96%
Finalist	0.49%	5.46%	10.80%	8.63%	0.85%	69.56%	4.89%

Table D15

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America Mid-Atlantic Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.11%	15.59%	10.55%	17.27%	0.13%	55.90%	3.17%
Finalist	0.13%	22.21%	6.58%	9.81%	0.08%	58.31%	2.86%

Table D16

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Northern California Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.27%	36.07%	1.33%	20.95%	0.23%	35.83%	5.29%
Finalist*	0.27%	36.07%	1.33%	20.95%	0.23%	35.83%	5.29%

* All Marching Bands Advanced to Finals

Table D17

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

St. Louis Super Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.47%	4.06%	9.35%	8.41%	0.23%	71.81%	4.11%
Finalist	2.44%	3.59%	7.62%	17.58%	0.26%	63.23%	5.28%

Table D18

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

St. George Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	2.81%	2.13%	2.39%	21.84%	0.73%	67.39%	2.68%
Finalist	0.62%	8.03%	2.24%	22.62%	0.90%	62.24%	3.00%

Table D19

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

San Antonio Super Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.26%	5.95%	8.07%	49.00%	0.14%	33.92%	2.64%
Finalist	0.33%	10.37%	6.82%	25.55%	0.19%	52.69%	4.05%

Table D20

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Southern California Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.20%	24.87%	3.09%	45.04%	0.31%	23.76%	2.72%
Finalist	0.34%	12.55%	6.62%	50.05%	0.52%	26.61%	3.31%

Table D21

Ethnicity/Race Percentage of Schools Competing at 2018 Bands of America

Powder Springs Regional Championship

Round	American Indian/Native	Asian	Black	Hispanic	Hawaiian/Pacific	White	Two or More
Non-Finalist	0.18%	3.49%	25.10%	12.25%	0.10%	55.27%	3.60%
Finalist	0.15%	5.08%	18.53%	10.37%	0.07%	62.01%	3.79%

APPENDIX E

INDEPENDENT SAMPLES T-TEST RESULTS COMPARING NON-FINALIST AND FINALIST FROM 2018 BANDS OF AMERICA MARCHING COMPETITIONS

Table E1

Independent Samples t-Test Results Comparing Non-Finalist and Finalist Free-Reduced Lunch Percentage from 2018 BOA Regional Competitions

Contest Name	*n*	*n*	Free-Reduced Lunch Mean %		Independent Samples *t*-Test	Cohen's *d*
	Non-Finals	Finals	Non-Finals	Finals		
Oxford	18	10	28.52%	29.17%	t (26) = .088, p = .931	.034
McAllen*	18	10	78.47%	59.46%	t (26) = -2.265, p = .032	.819
Midland	10	10	55.03%	38.08%	t (18) = -1.904, p = .072	.853
Austin	12	10	34.00%	19.78%	t (20) = -1.90, p = .072	.840
Bowling Green	14	10	34.29%	22.88%	t (22) = -1.70, p = .103	.728
Clarksville	16	10	31.15%	31.11%	t (24) = -.006, p = .996	.002
Jacksonville	9	10	28.13%	32.65%	t (17) = .440, p = .666	.204
Dallas/Ft. Worth	21	10	32.49%	18.91%	t (29) = -1.705, p = .099	.702
Houston	20	10	30.55%	26.35%	t (28) = -.598, p = .555	.226
Gaffney	13	10	30.43%	26.36%	t (21) = -.511, p = .615	.206
Orlando	21	10	36.01%	31.94%	t (29) = -.707, p = .485	.283
Canton	9	10	30.04%	27.80%	t (17) = -.251, p = .805	.112
Powder Springs	12	10	27.42%	25.81%	t (20) = -.200, p = .843	.083
Mid-Atlantic	15	10	21.33%	15.11%	t (23) = -1.079, p = .292	.464
Southern California	10	10	47.80%	43.04%	t (18) = -.427, p = .675	.190
St. George	18	10	30.88%	21.40%	t (26) = -1.524, p = .14	.644

* statistically significant

Table E2

Independent Samples t-Test Results Comparing Non-Finalist and Finalist Free-Reduced Lunch from 2018 BOA Super Regional Championships and Grand Nationals

Contest Name	*n*	*n*	Free-Reduced Lunch Mean %		*t*-Test	Cohen's *d*
	Non-Finalist	Finalist	Non-Finalist	Finalist		
Indianapolis*	56	14	31.98%	21.91%	$t(68) = -2.193, p = .032$	.697
San Antonio*	69	14	41.47%	16.67%	$t(81) = -3.600, p = .001$	1.259
St. Louis	60	13	32.41%	19.44%	$t(71) = -1.314, p = .193$	.449
Grand Nationals*	91	12	32.41%	19.44%	$t(101) = -2.173, p = .032$	.479

* statistically significant

Table E3

Independent Samples t-Test Results Comparing Non-Finalist and Finalist Income-to-Poverty Ratio from 2018 BOA Regional Competitions

Contest Name	*n*	*n*	Income-to-Poverty Ratio Mean		Independent Samples *t-Test*	Cohen's *d*
	Non-Finalist	Finalist	Non-Finalist	Finalist		
Oxford	18	10	369.11	393.50	t (26) = .446, p = .659	.179
McAllen*	18	10	187.55	309.50	t (26) = 2.335, p = .028	.833
Midland	10	10	265.60	340.10	t (18) = 1.198, p = .247	.535
Austin	12	10	449.83	434.40	t (20) = -.186, p = .855	.08
Bowling Green	14	10	406.78	405.50	t (22) = -.021, p = .983	.009
Clarksville	16	10	368.56	330.90	t (24) = -.522, p = .607	.227
Jacksonville	9	10	371.77	424.60	t (17) = .743, p = .467	.337
Dallas/Ft. Worth	21	10	426.95	526.10	t (29) = 1.347, p = .189	.496
Houston	20	10	441.80	528.00	t (28) = 1.157, p = .257	.439
Gaffney	13	10	383.76	395.10	t (21) = .154, p = .879	.062
Orlando	21	10	386.47	411.40	t (29) = .449, p = .657	.174
Canton	9	10	429.11	383.00	t (17) = -.755, p = .461	.345
Powder Springs	12	10	401.66	433.40	t (20) = .546, p = .591	.226
Mid-Atlantic	15	10	538.73	637.40	t (23) = 1.320, p = .200	.529
Southern California	10	10	506.30	346.60	t (18) = -1.944, p = .068	.869
St. George	18	10	319.22	389.80	t (26) = 2.047, p = .051	.795

* statistically significant

Table E4

Independent Samples t-Test Comparing Non-Finalist and Finalist Income-to-Poverty Ratio from 2018 BOA Super Regional Championships and Grand Nationals

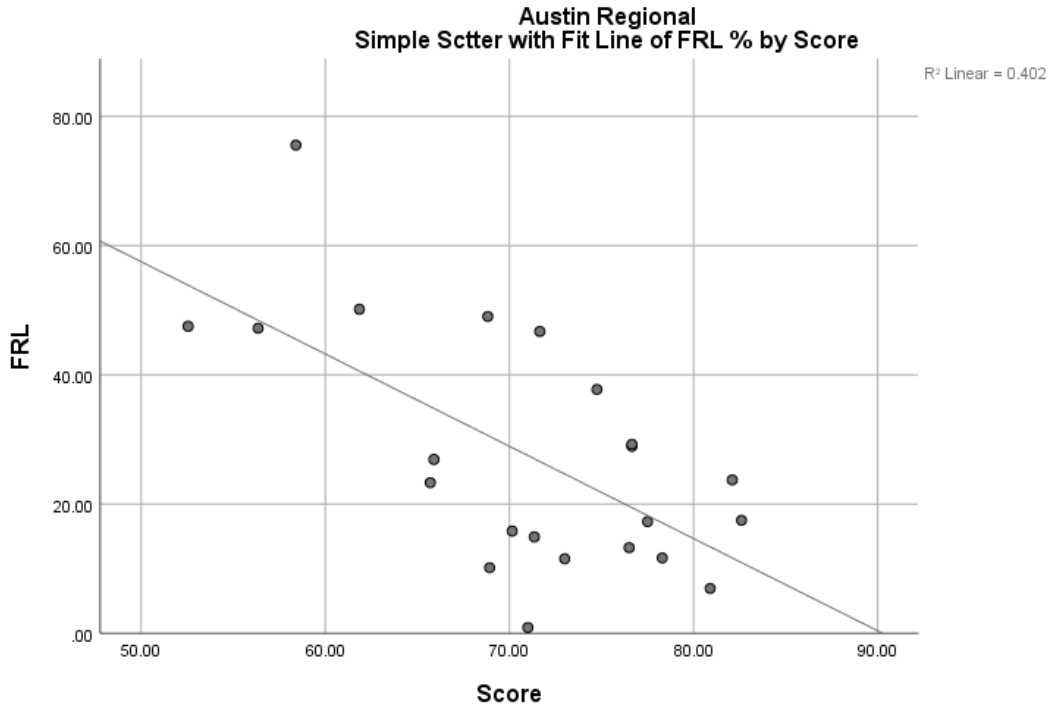
Contest Name	*n*	*n*	Income-to-Poverty Ratio Mean		Independent Samples *t*-Test	Cohen's *d*
	Non-Finalist	Finalist	Non-Finalist	Finalist		
Indianapolis	56	14	363.03	400.57	t (68) = .917, p = .362	.304
San Antonio*	69	14	373.78	573.85	t (81) = 4.020, p = .000	1.113
St. Louis	60	13	391.61	356.38	t (71) = -.748, p = .457	.263
Grand National	91	12	356.36	423.66	t (101) = 1.563, p = .121	.802

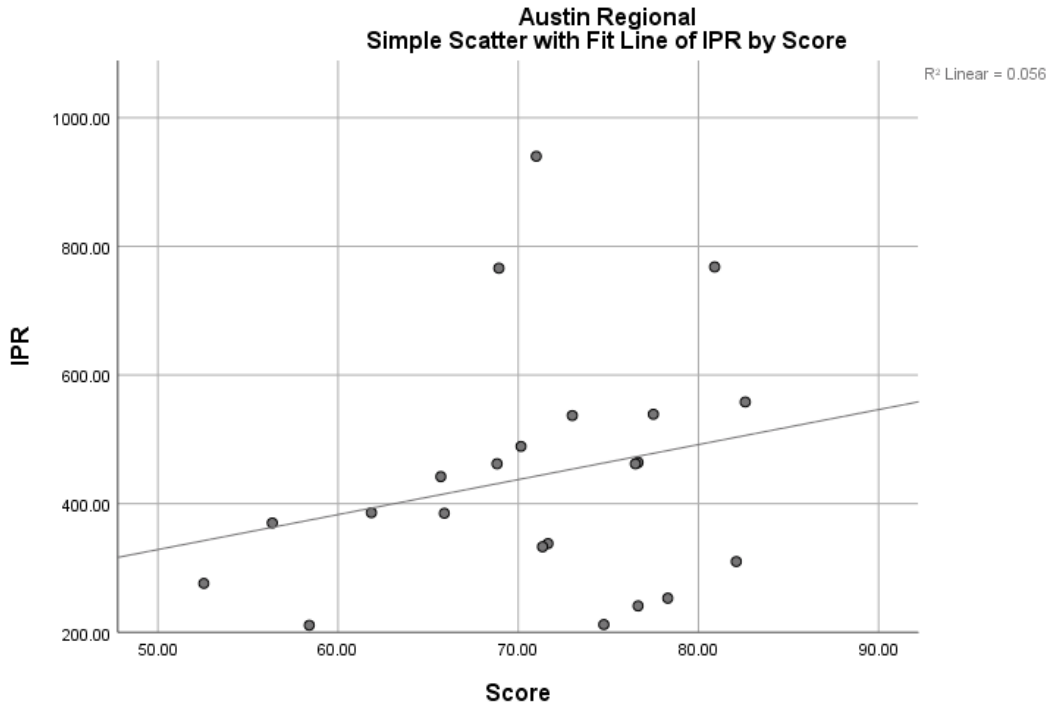
* statistically significant

APPENDIX F

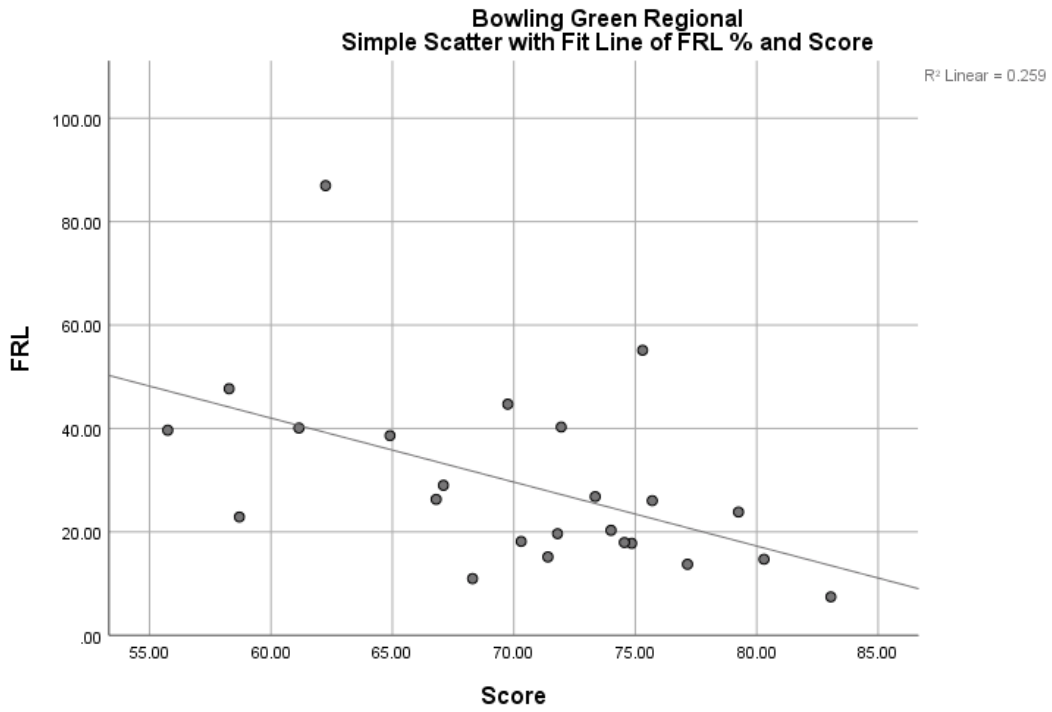
2018 BANDS OF AMERICA COMPETITIONS SIMPLE SCATTER PLOTS OF FREE-REDUCED LUNCH AND INCOME-TO-POVERTY RATIO COMPARED TO SCORES

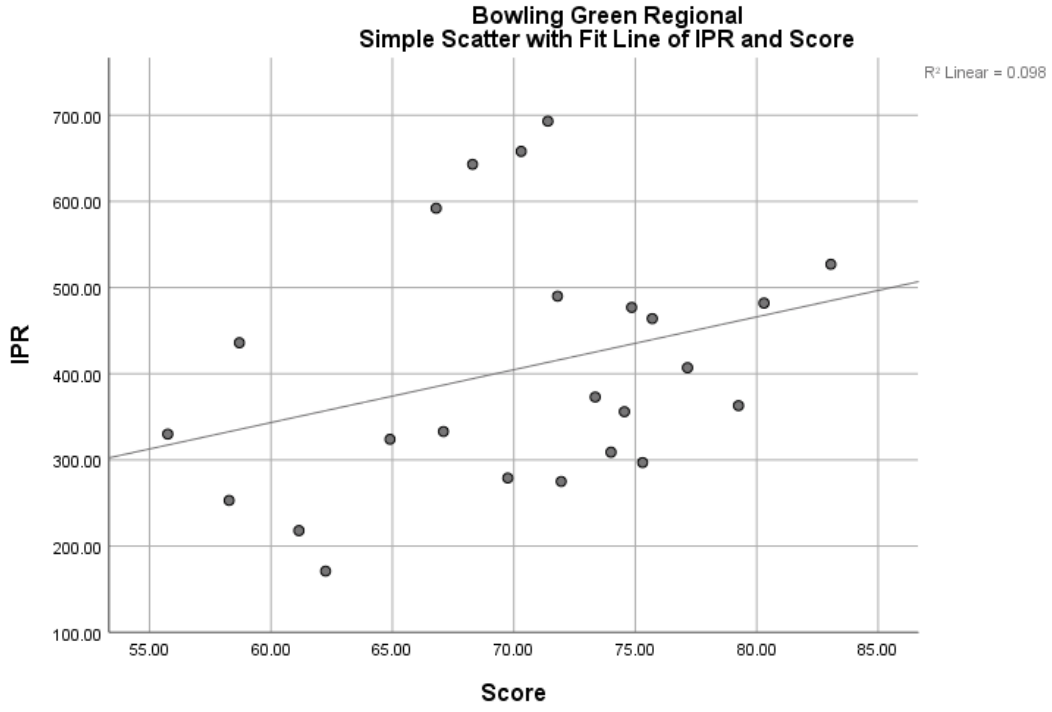
AUSTIN REGIONAL



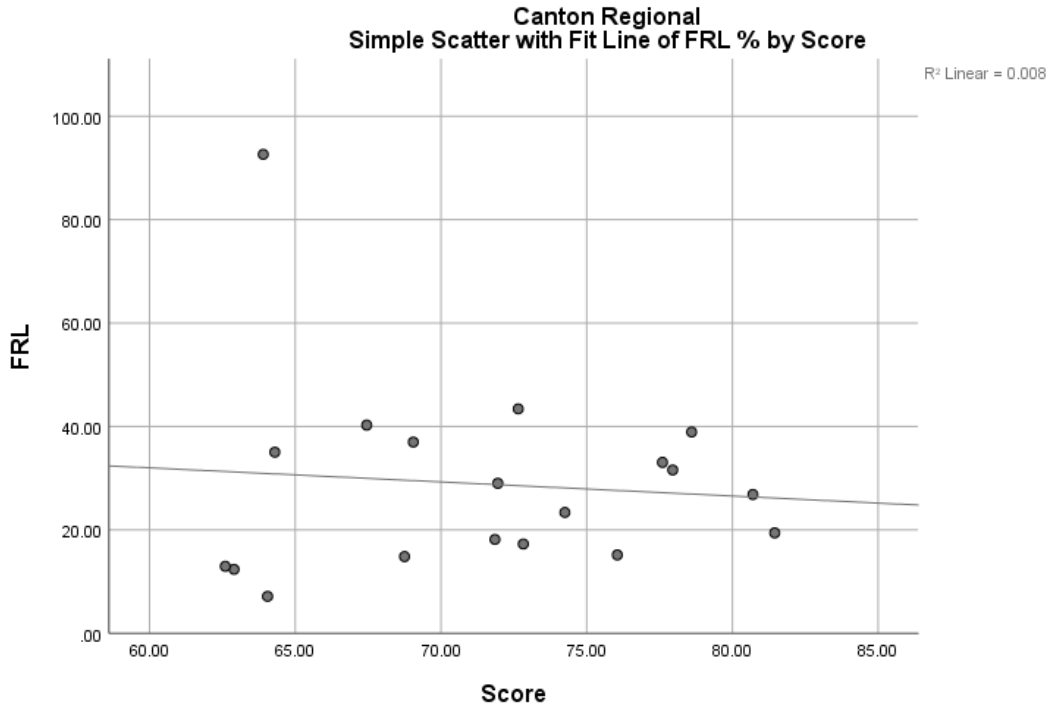


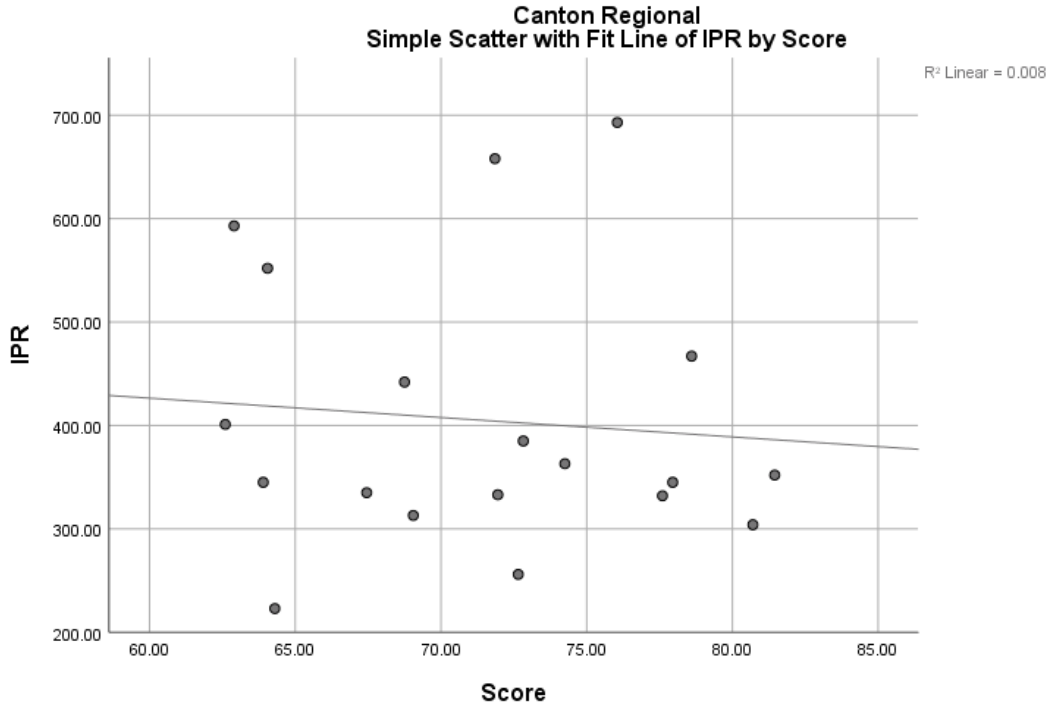
BOWLING GREEN REGIONAL



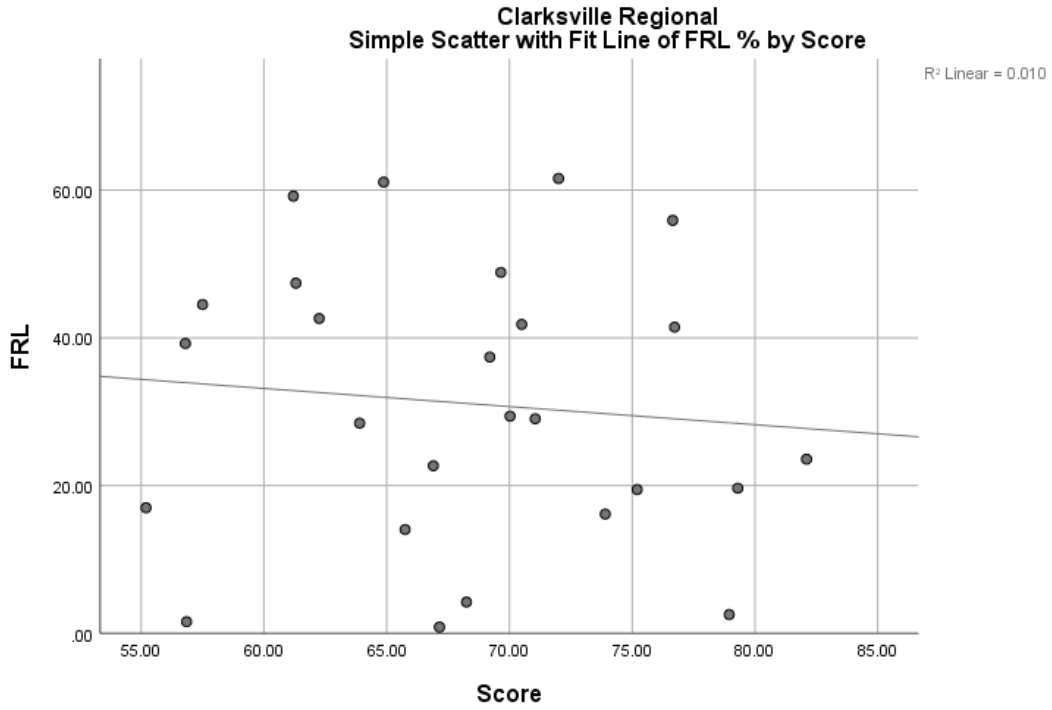


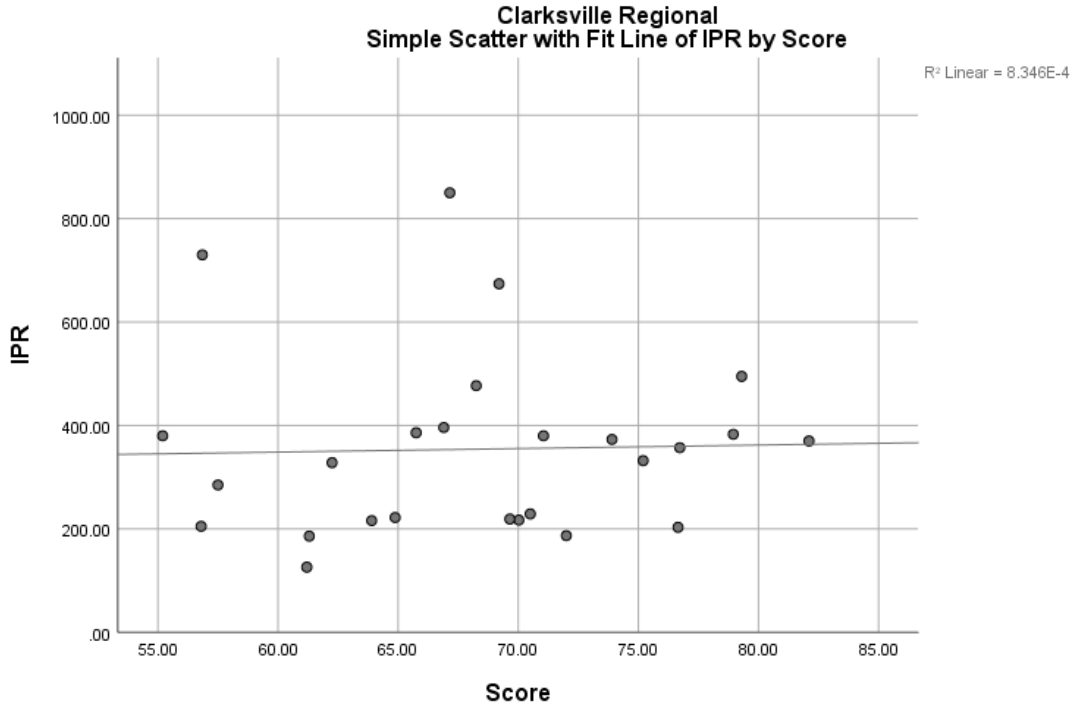
CANTON REGIONAL



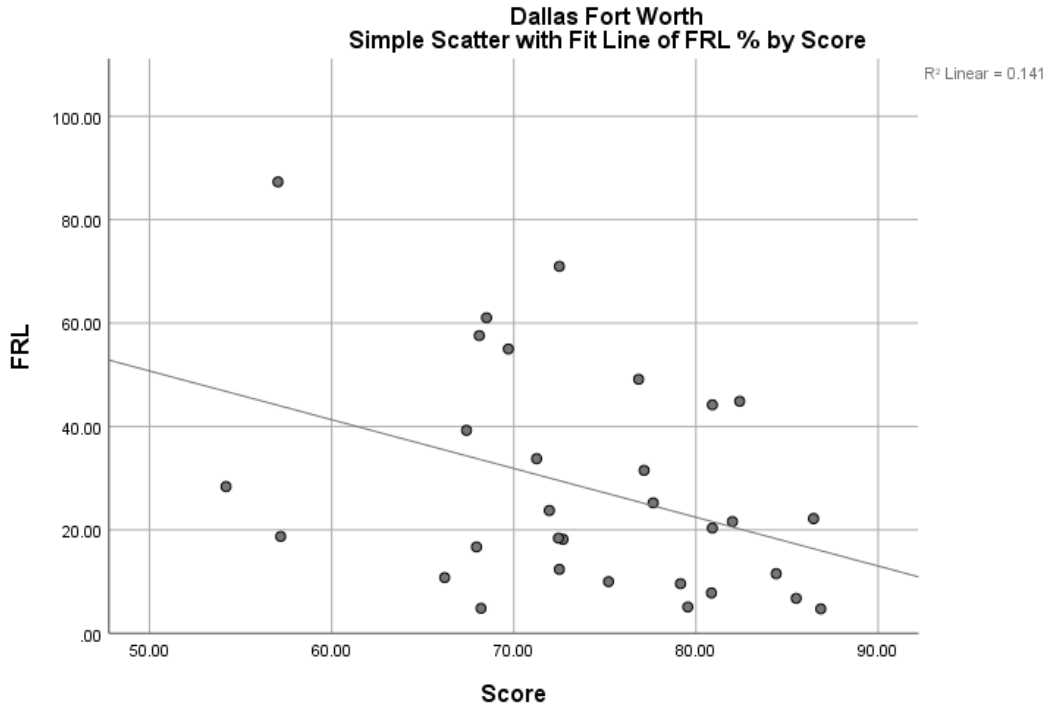


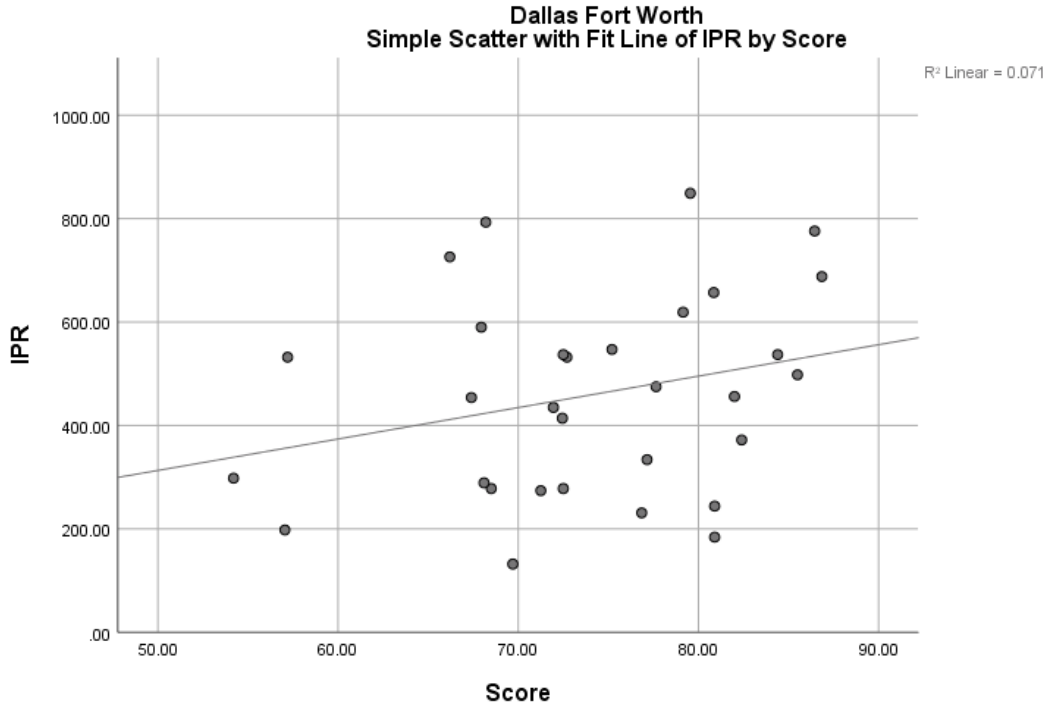
CLARKSVILLE REGIONAL



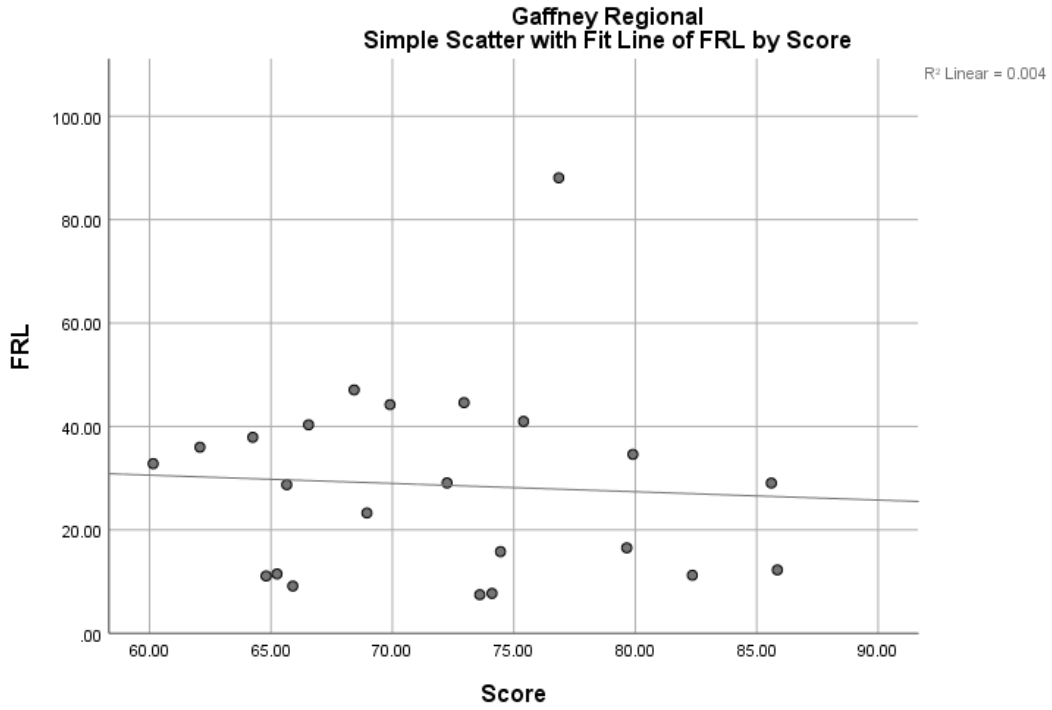


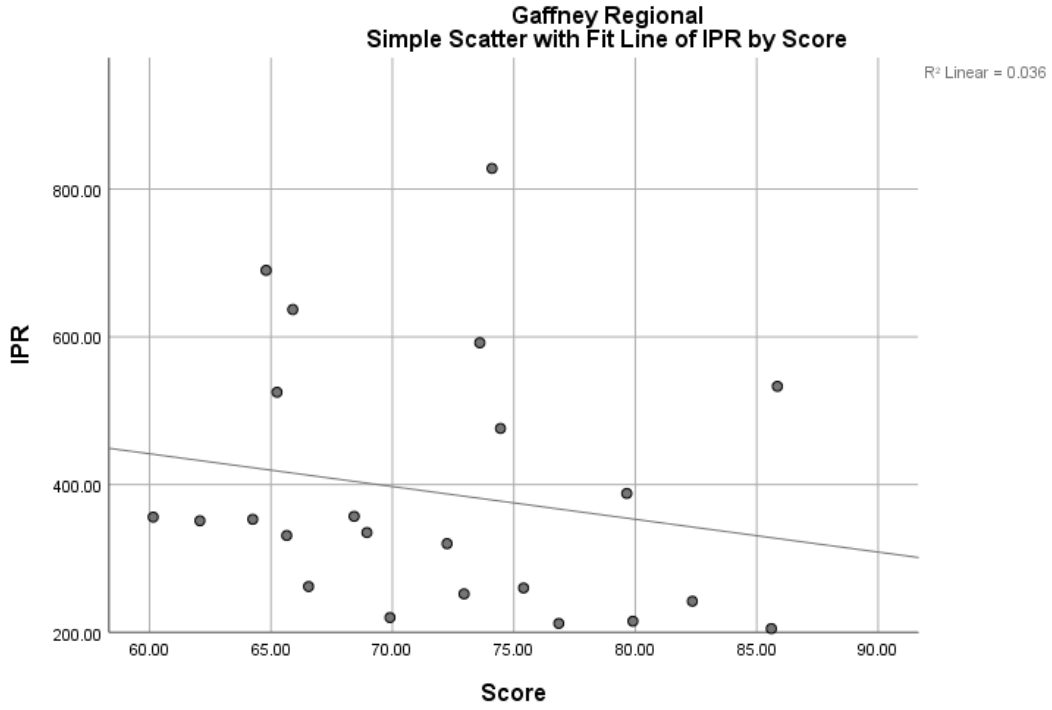
DALLAS/FORT WORTH REGIONAL



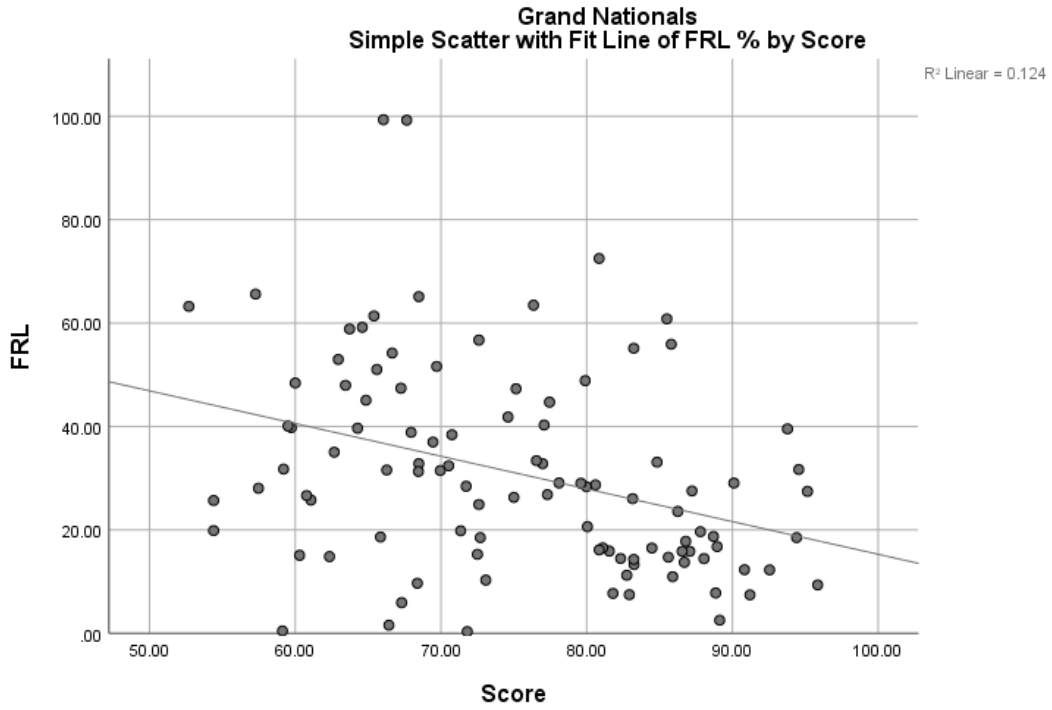


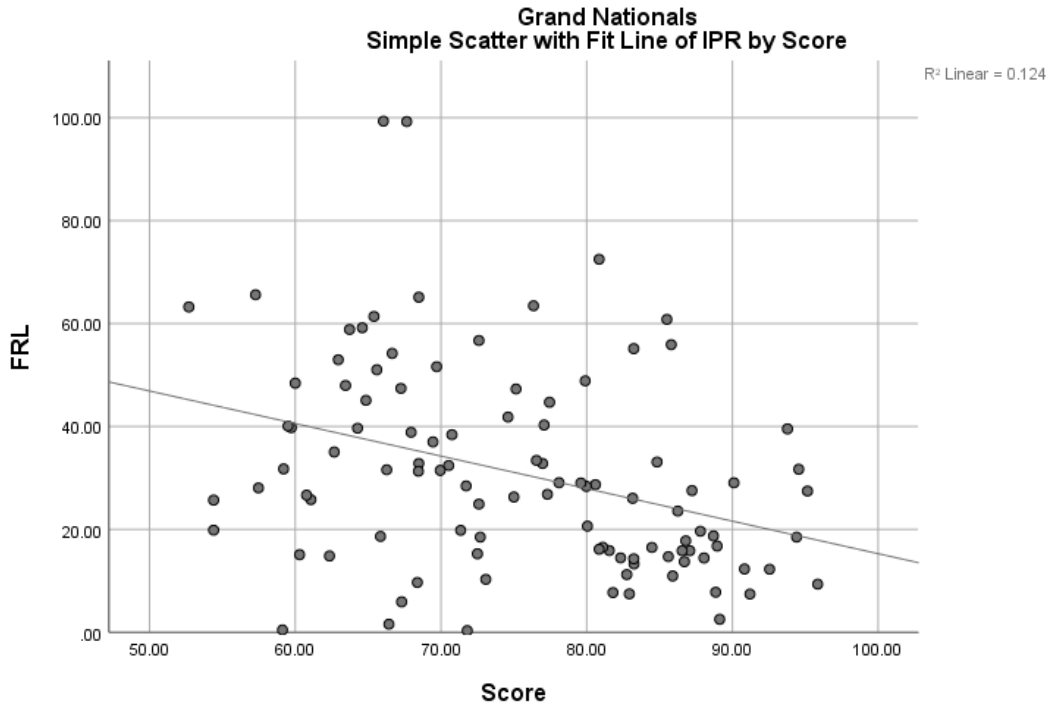
GAFFNEY REGIONAL



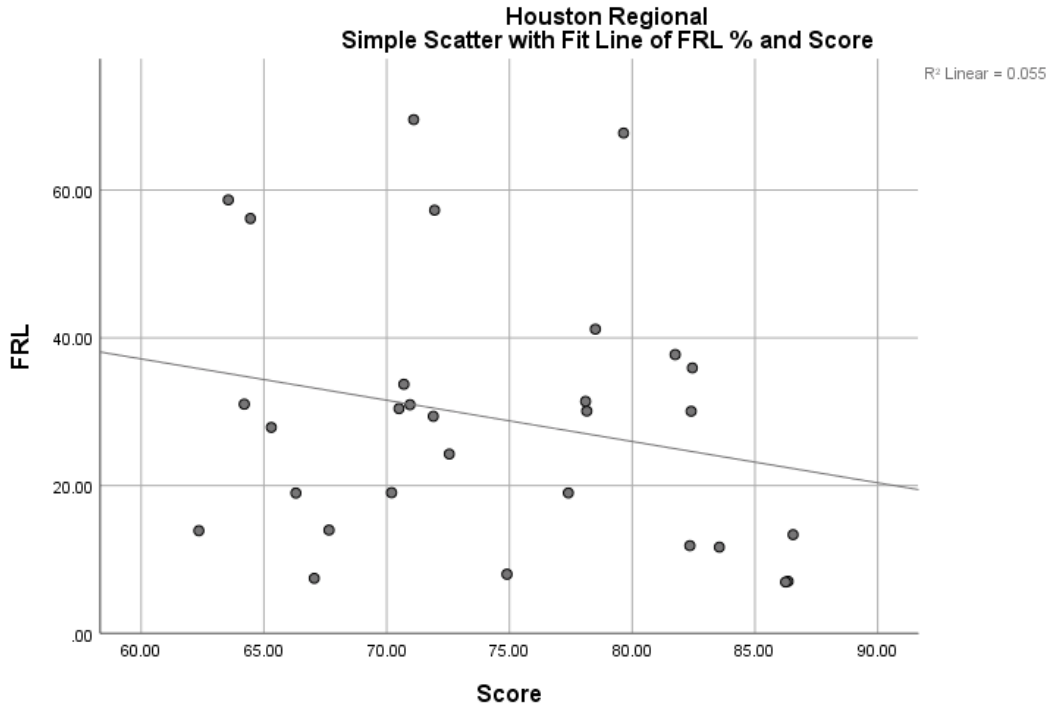


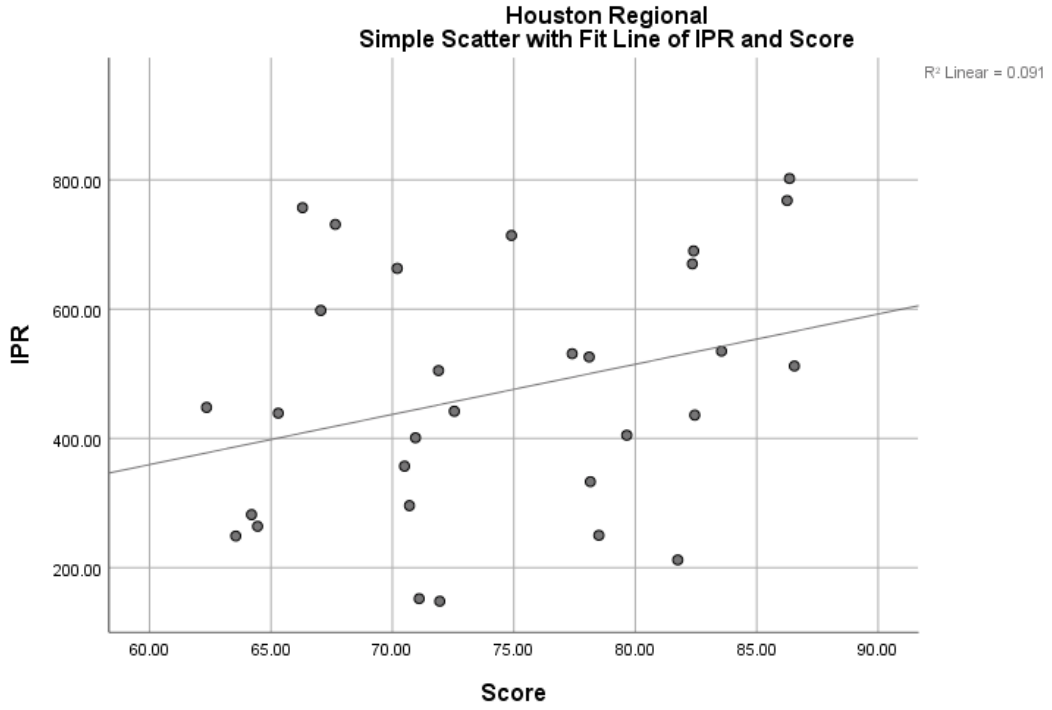
GRAND NATIONALS



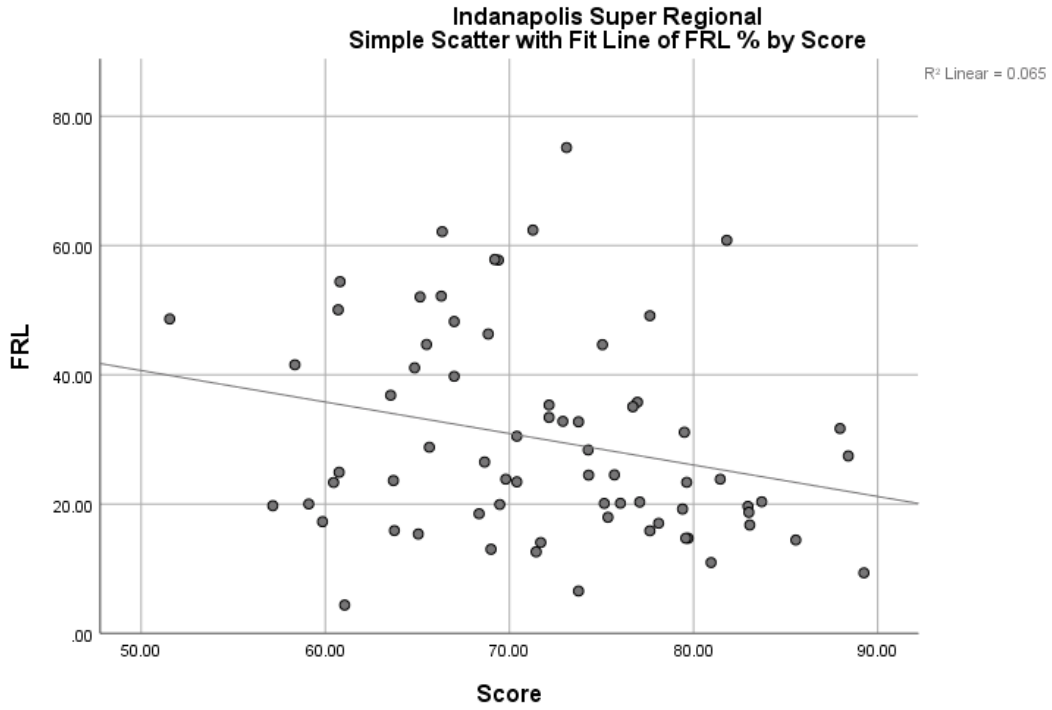


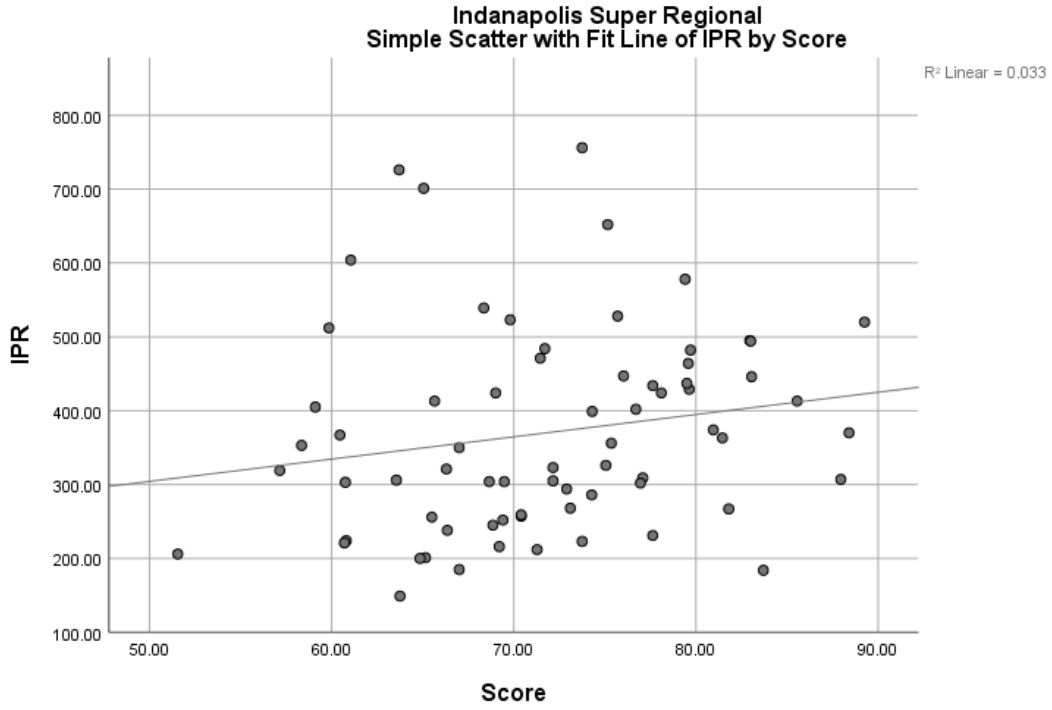
HOUSTON REGIONAL



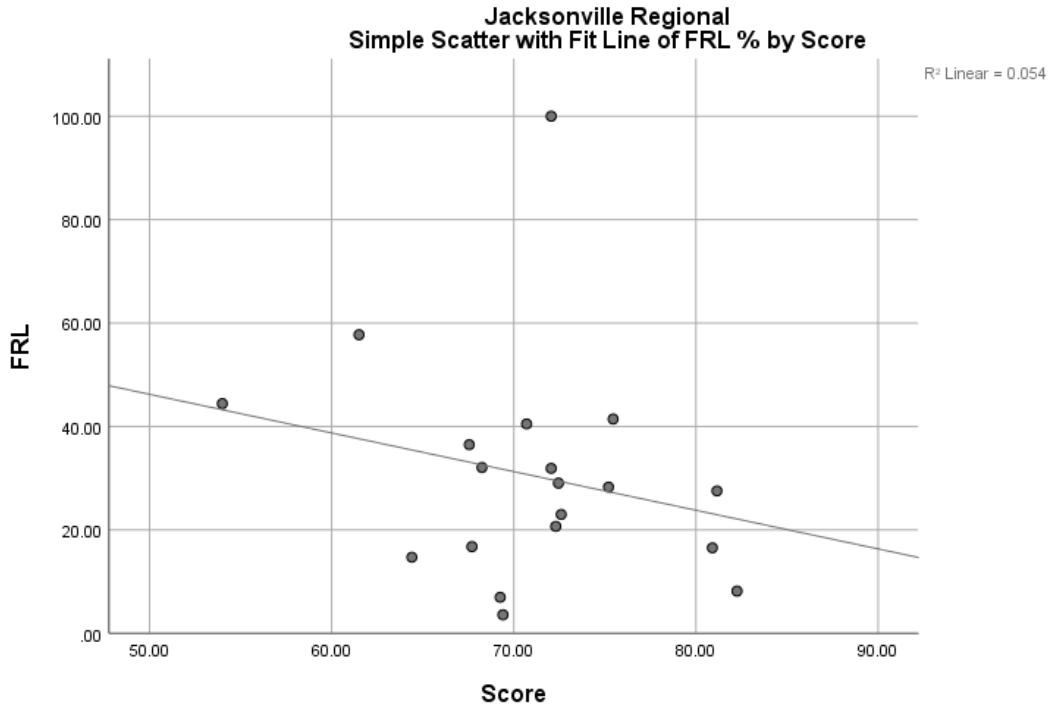


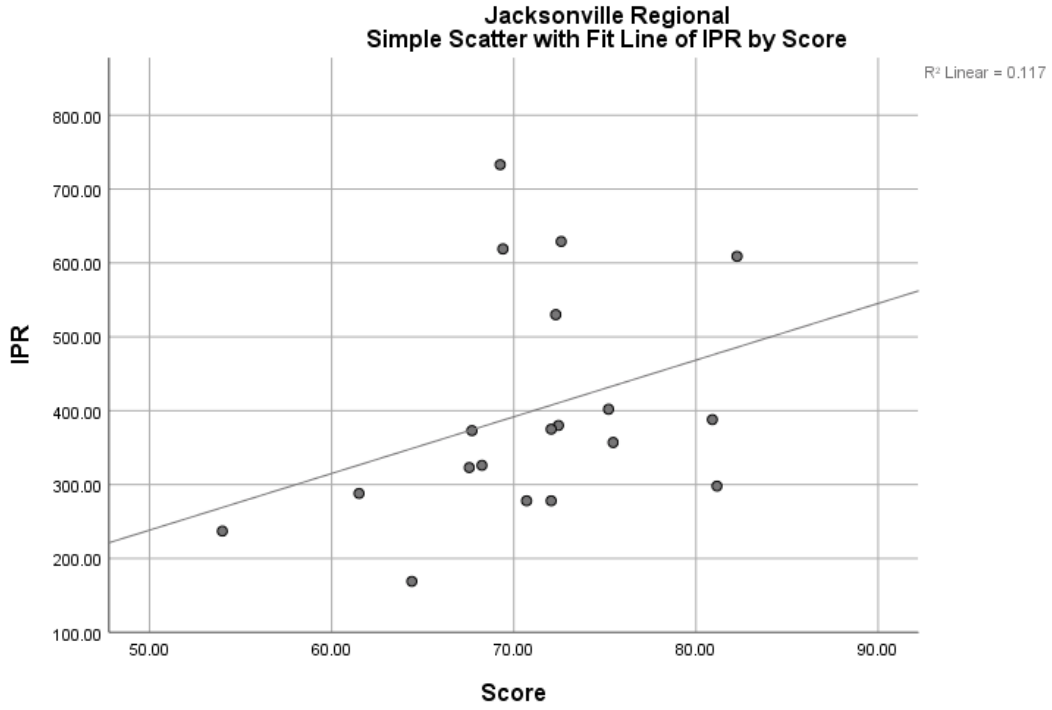
INDIANAPOLIS SUPER REGIONAL



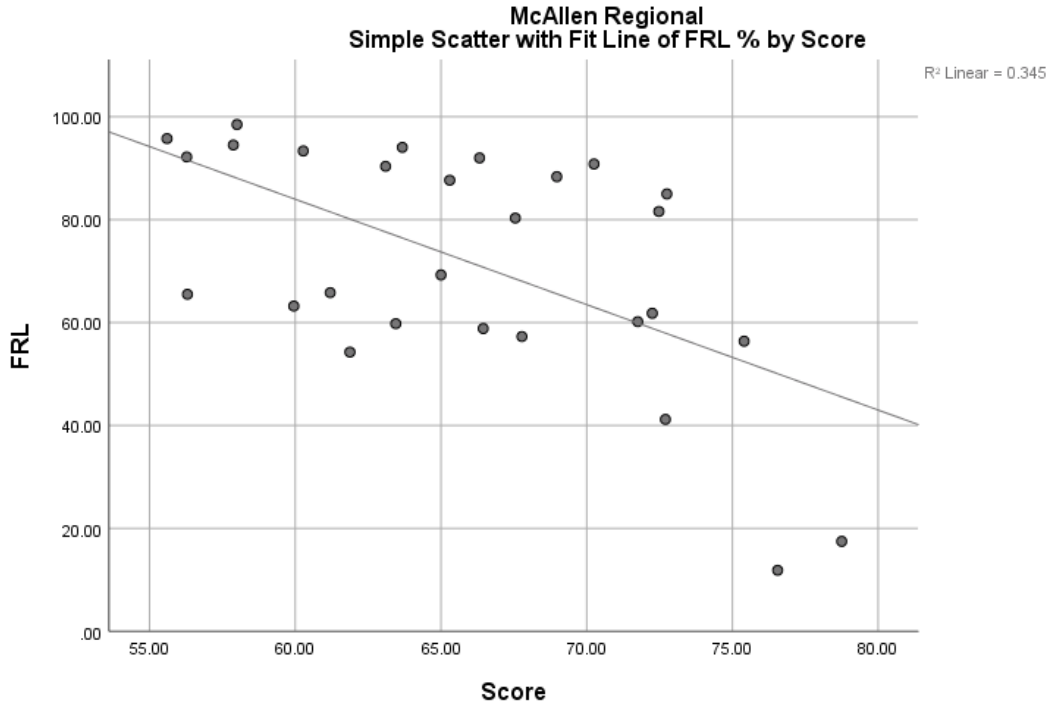


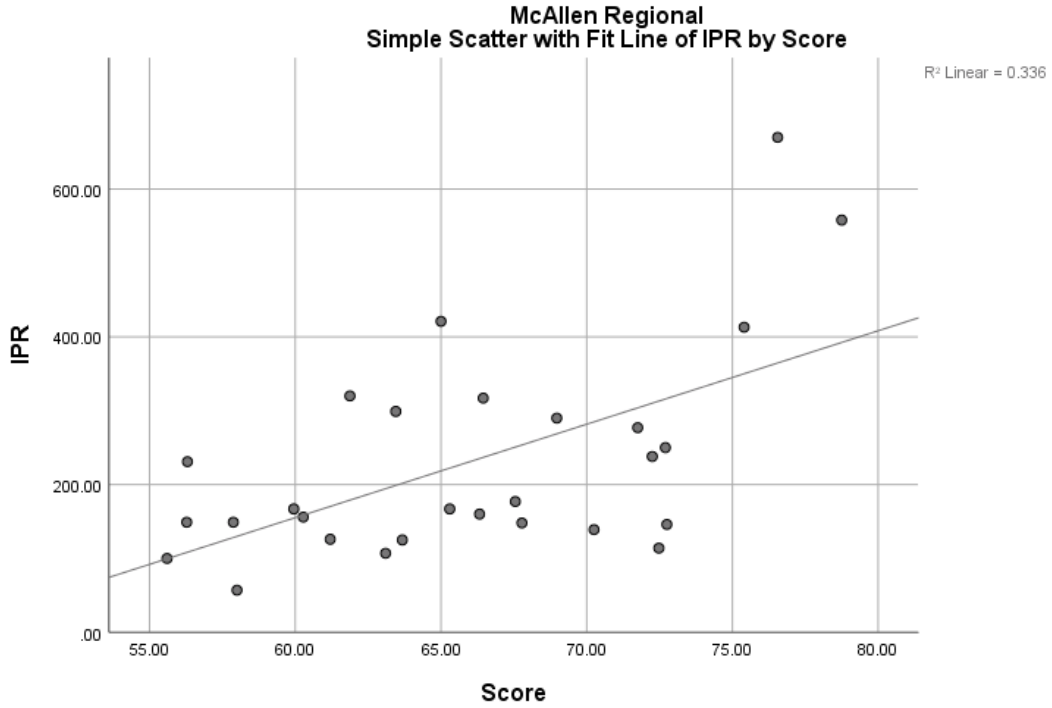
JACKSONVILLE REGIONAL



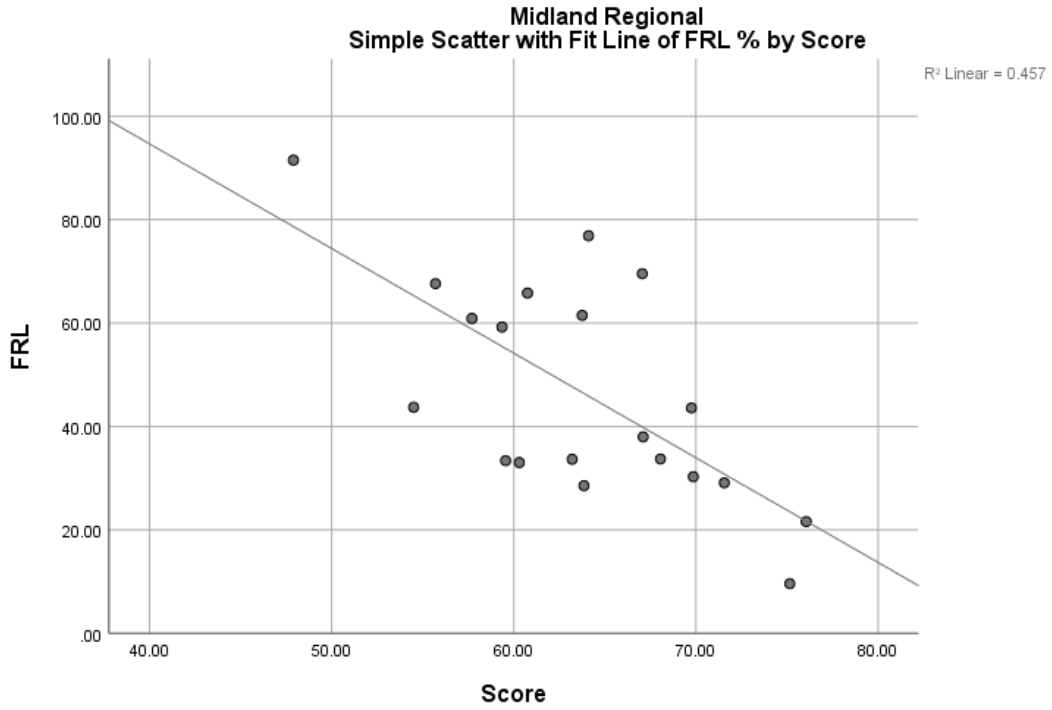


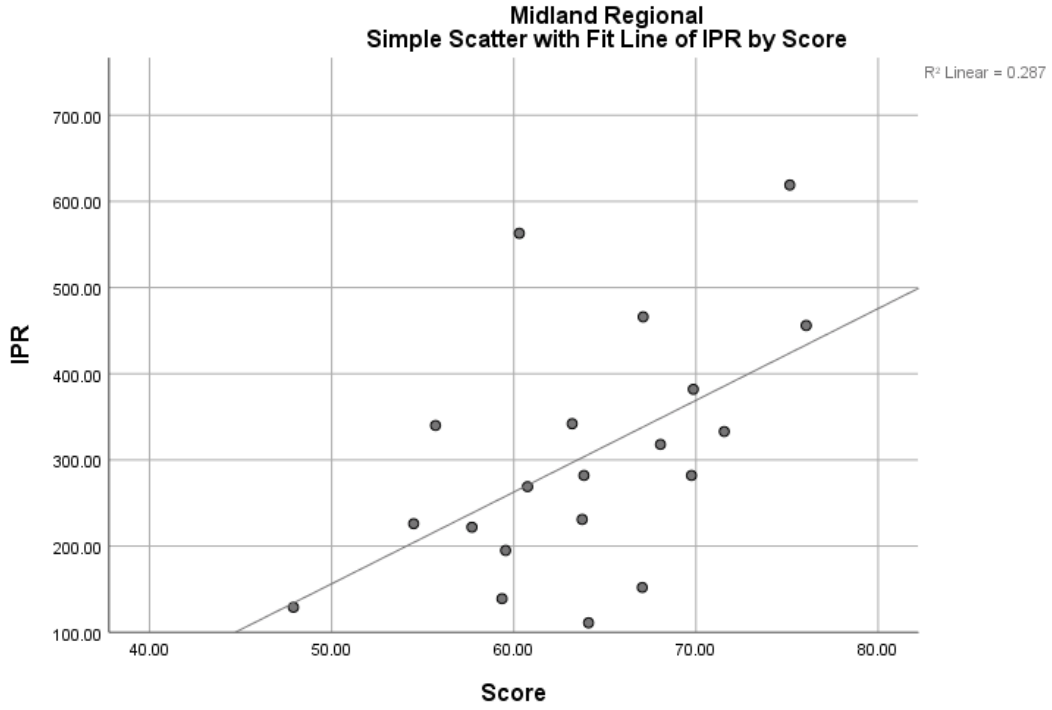
MCALLEN REGIONAL



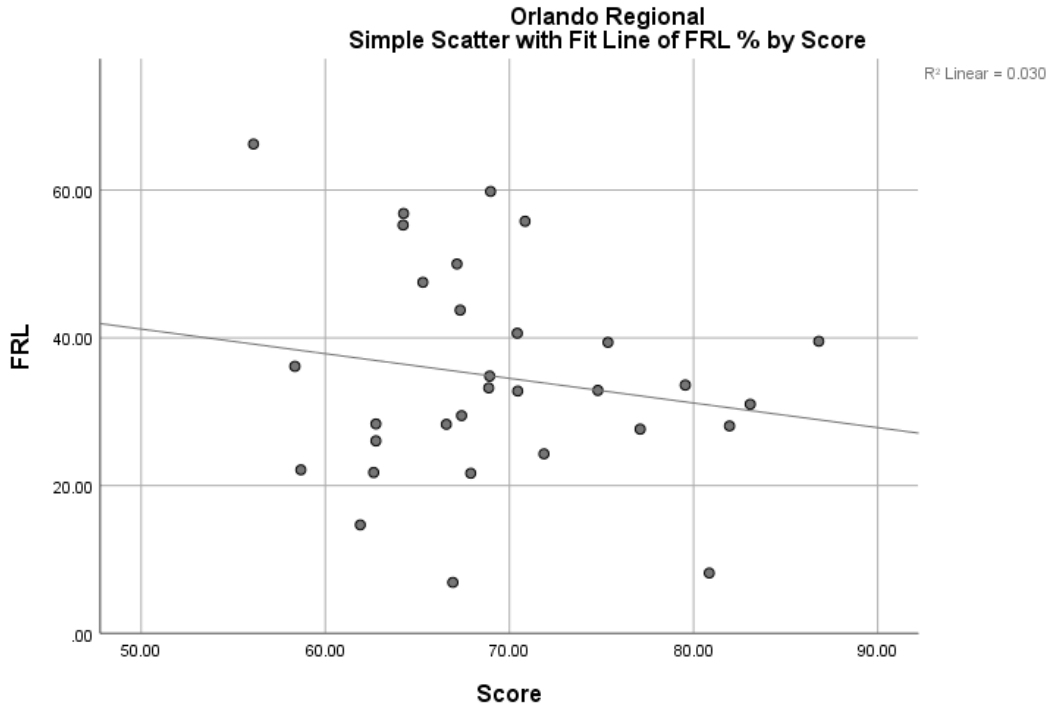


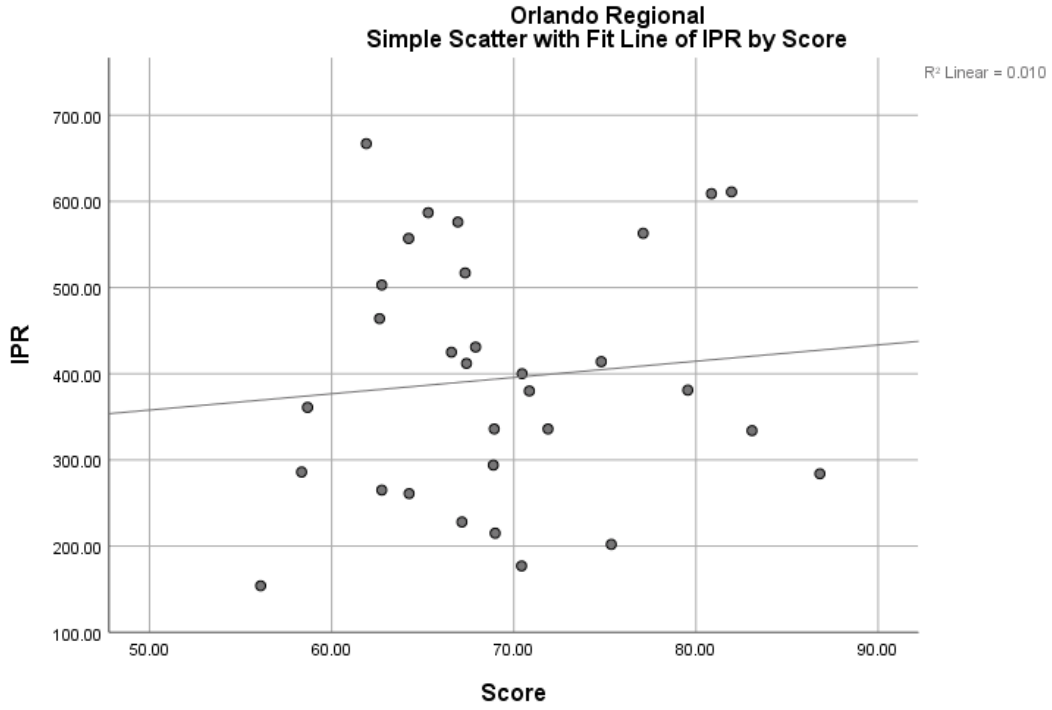
MIDLAND REGIONAL



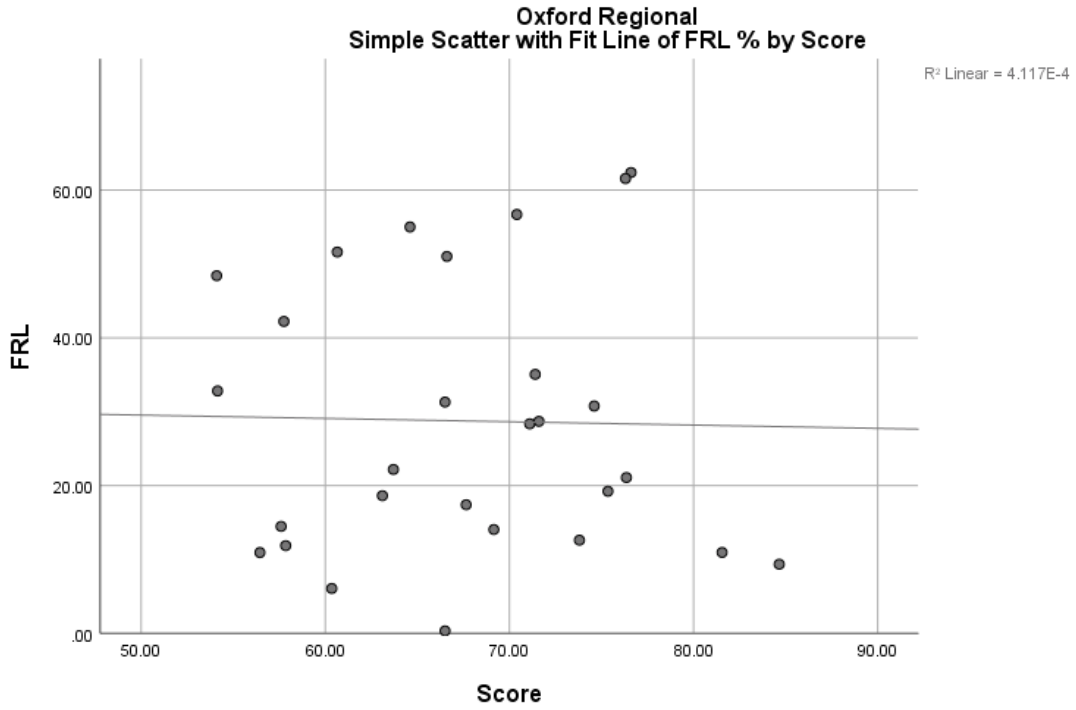


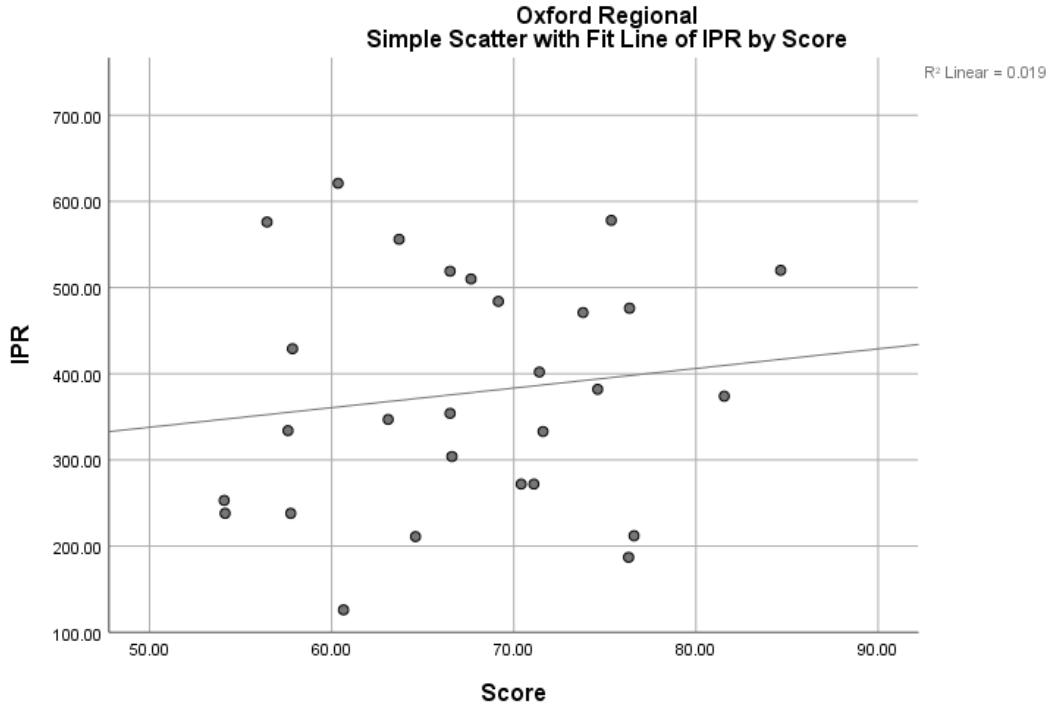
ORLANDO REGIONAL



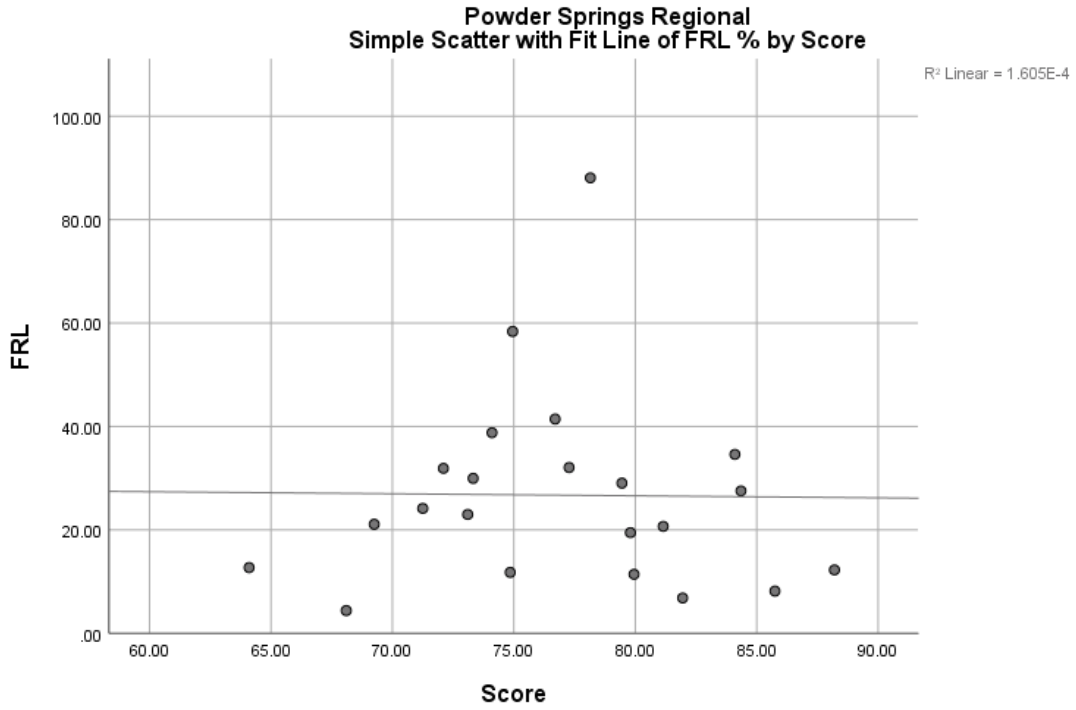


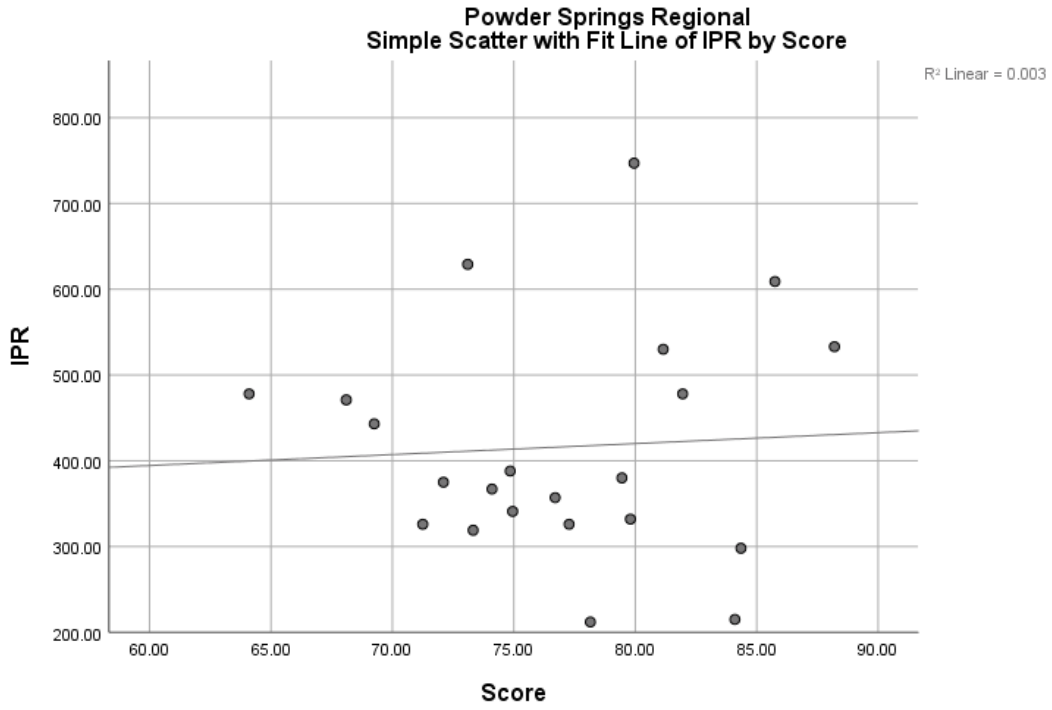
OXFORD REGIONAL



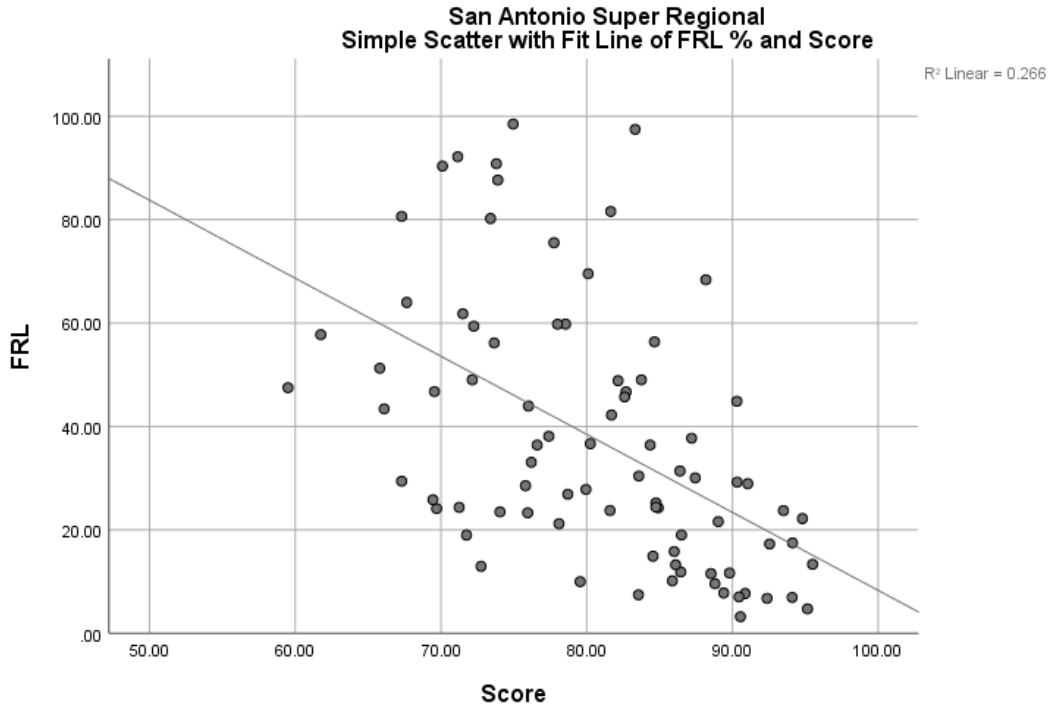


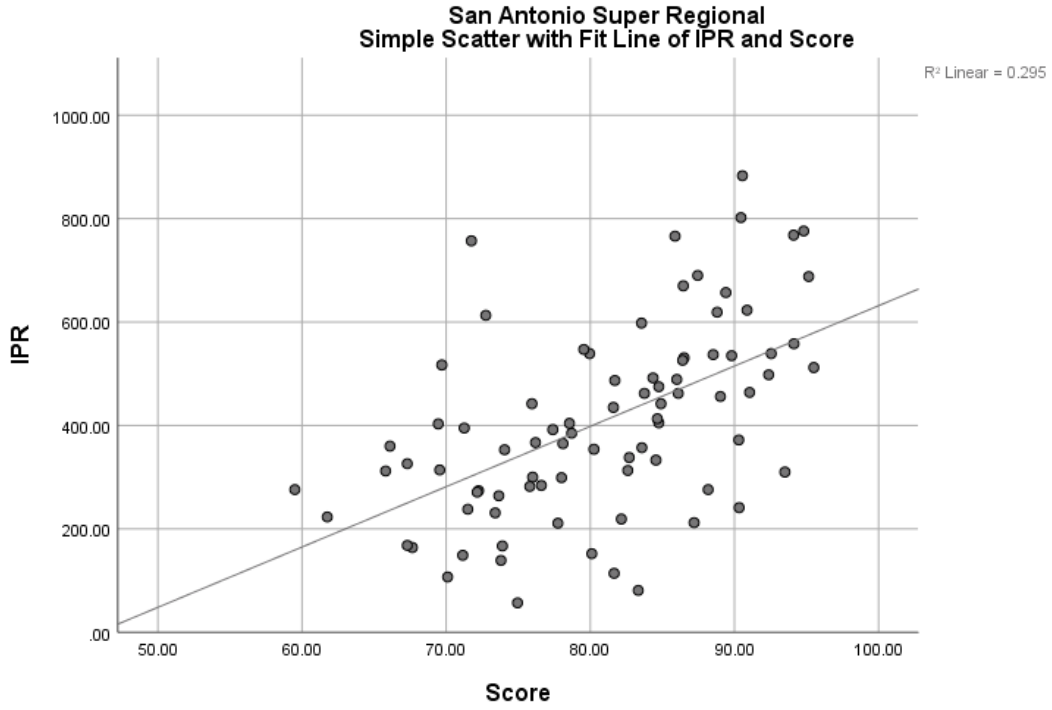
POWDER SPRINGS REGIONAL





SAN ANTONIO SUPER REGIONAL





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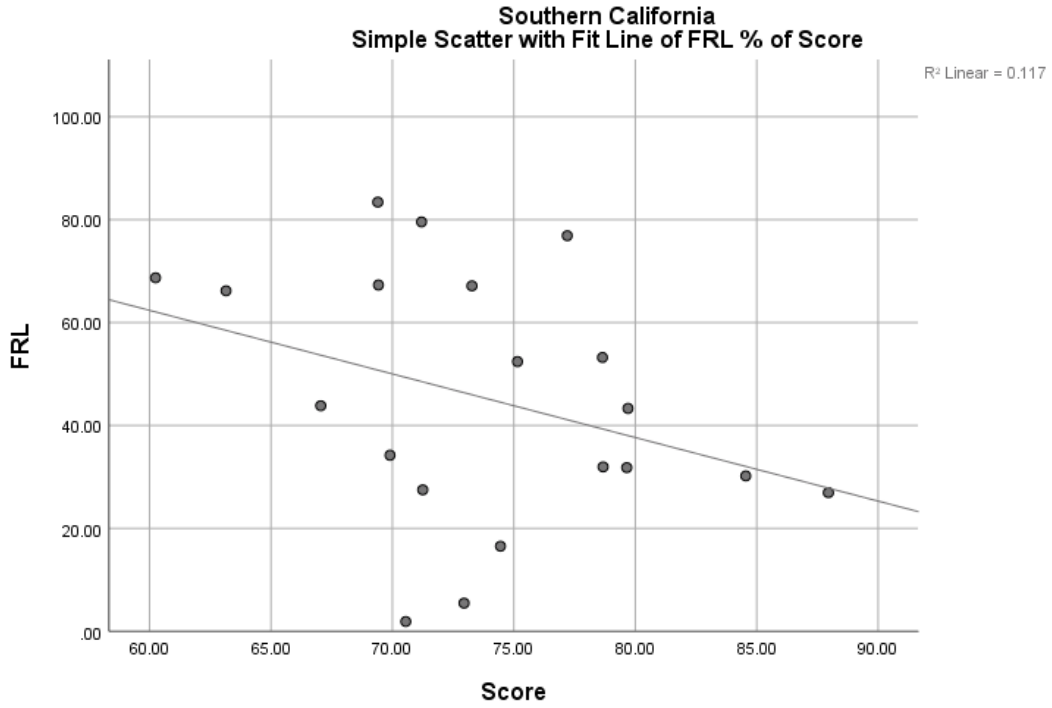
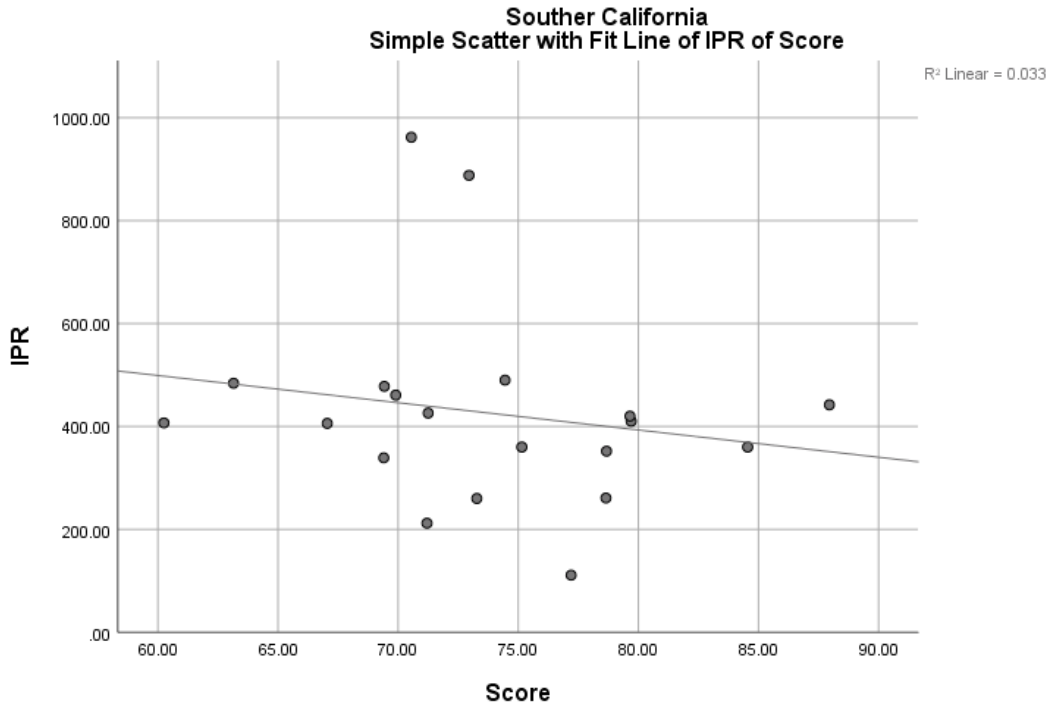
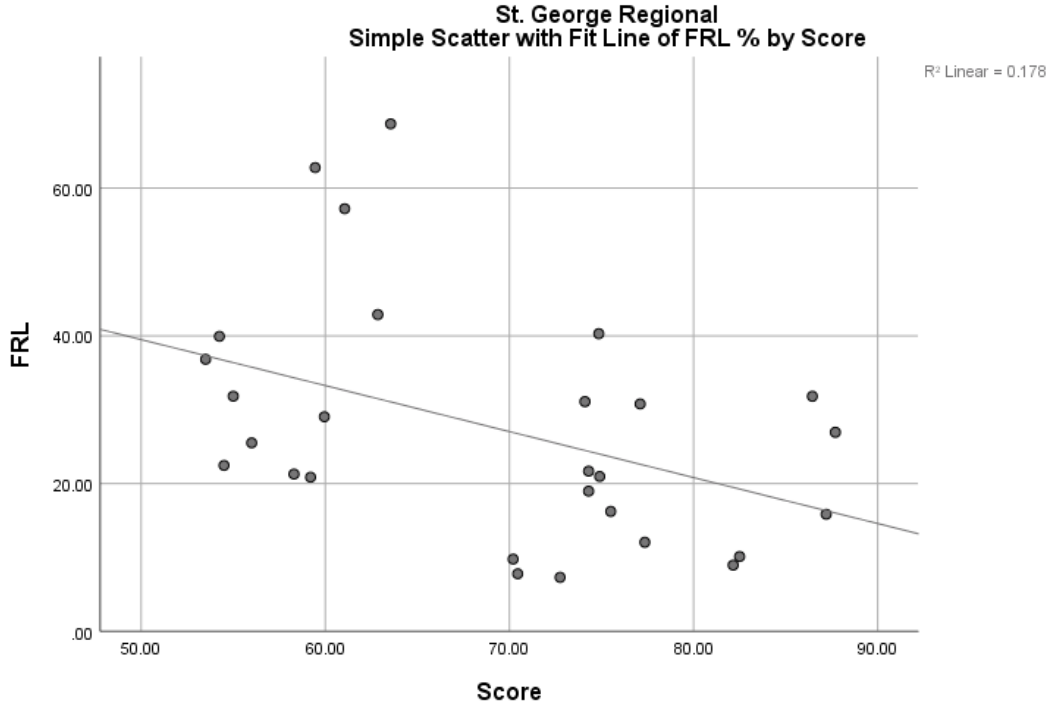
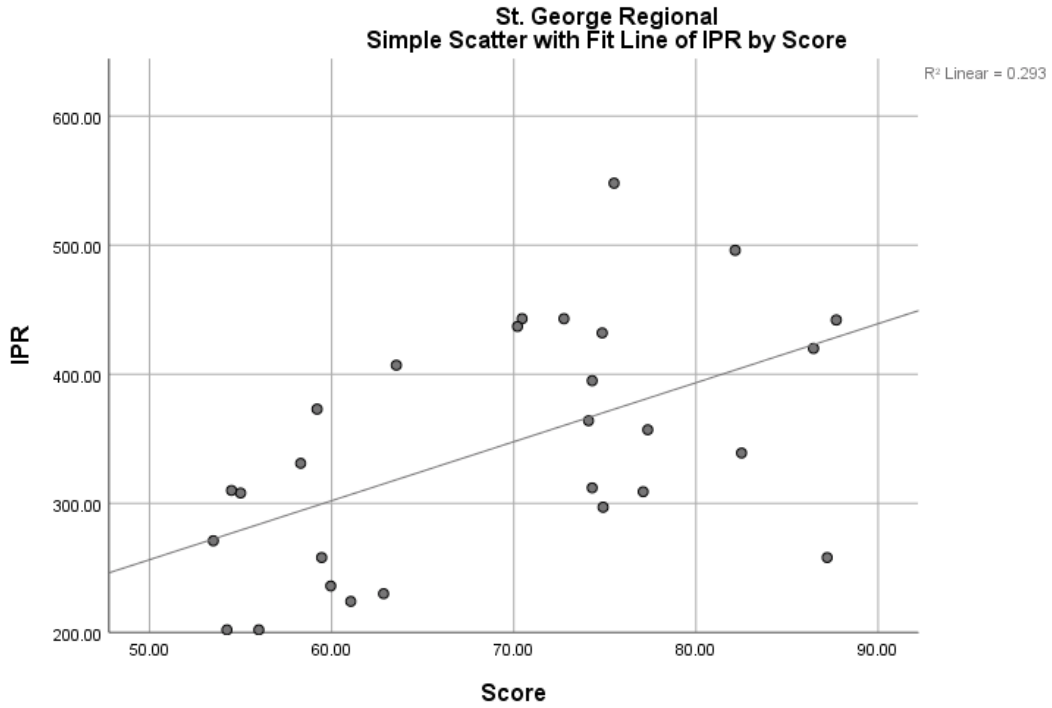


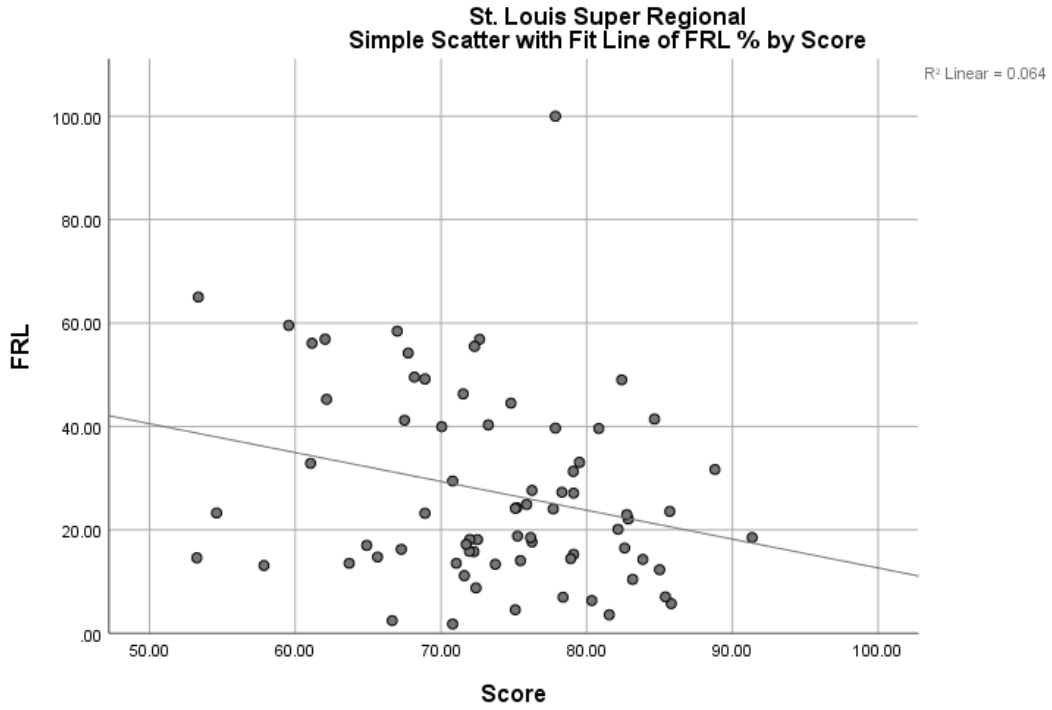


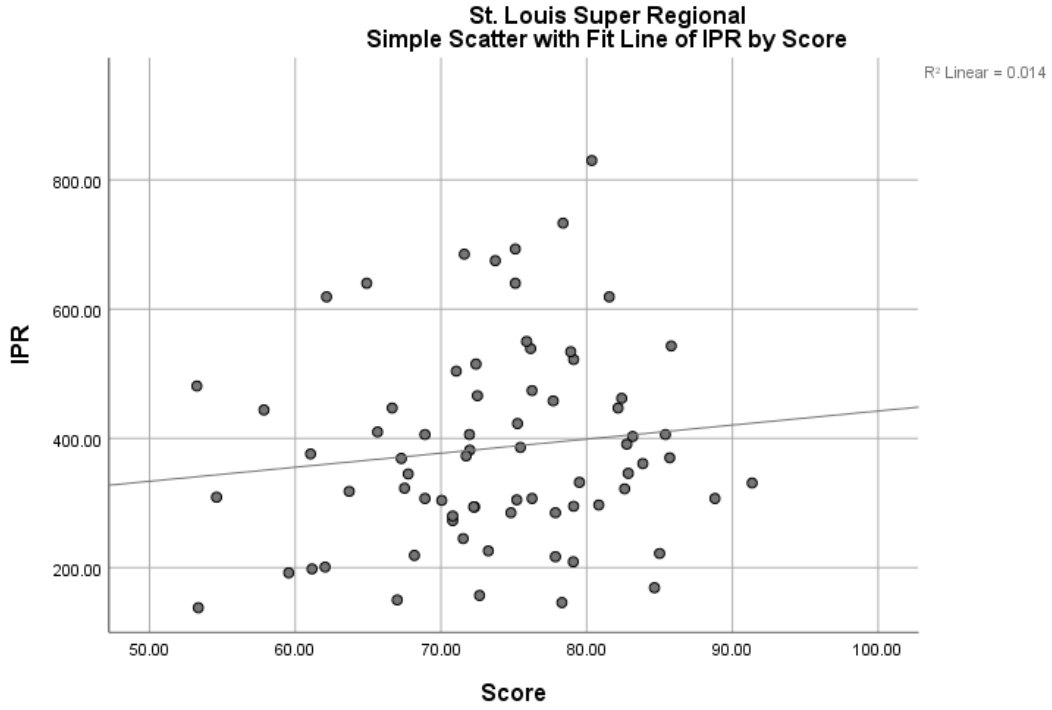
ST. GEORGE REGIONAL





ST. LOUIS SUPER REGIONAL





APPENDIX G

LIST OF PARTICIPATING HIGH SCHOOLS AT THE 2018 BANDS OF AMERICA COMPETITIONS WITH INCOME-TO-POVERTY RATIO, FREE-REDUCED LUNCH, AND ETHNICITY DEMOGRAPHIC PERCENTAGES

* denotes private school

School/State	IPR	FRL %	American Indian/Native %	Asian %	Black %	Hispanic %	Hawaiian/Pacific %	White %	Two or More %
A.D. Nease HS, FL	576	6.89%	0.15%	7.76%	4.60%	10.35%	0.38%	73.82%	2.93%
Ada HS, OH	281	65.59%	0.00%	1.25%	1.00%	2.74%	0.00%	92.27%	2.74%
Adair County HS, KY	225	63.45%	0.00%	0.13%	1.65%	3.17%	0.00%	92.39%	2.66%
Aledo HS, TX	547	9.99%	0.68%	0.83%	1.59%	12.11%	0.08%	82.06%	2.65%
Allatoona HS, GA	373	16.75%	0.17%	3.29%	19.41%	10.05%	0.17%	63.26%	3.64%
Alvin HS, TX	264	56.15%	0.32%	1.55%	3.43%	54.64%	0.00%	37.82%	2.24%
American Fork HS, UT	258	15.85%	0.17%	0.69%	0.78%	8.55%	0.56%	86.41%	2.82%
Angola HS, IN	306	36.82%	0.11%	0.79%	0.56%	10.81%	0.34%	84.68%	2.59%
Arbor View HS, NV	364	31.09%	0.60%	5.35%	13.94%	23.62%	1.51%	47.40%	7.56%
Arcadia HS, CA	371	26.26%	0.06%	68.97%	2.28%	14.11%	0.06%	13.38%	1.14%
Archbishop Alter HS, OH*	-	-	-	-	-	-	-	-	-
Ardrey Kell HS, NC	637	9.14%	0.06%	20.51%	11.28%	9.53%	0.15%	55.63%	2.84%
Arlington HS, NY	565	24.93%	0.03%	4.60%	7.95%	13.88%	0.07%	71.16%	2.30%
Arroyo HS, CA	339	83.40%	0.10%	26.86%	0.15%	69.73%	0.15%	3.03%	0.00%
Atholton HS, MD	726	8.05%	0.00%	19.22%	24.27%	8.64%	0.00%	21.61%	6.18%
Avon HS, IN	370	27.44%	0.19%	4.62%	14.09%	9.50%	0.00%	66.43%	5.13%
Avon HS, OH	547	9.68%	0.00%	2.49%	2.49%	5.65%	0.00%	84.82%	4.55%
Ayala HS, CA	442	26.94%	0.15%	34.05%	3.79%	37.81%	0.22%	21.22%	2.77%
Azle HS, TX	284	36.40%	0.38%	0.44%	1.54%	21.05%	0.00%	73.68%	2.91%
Bassett HS, VA	212	88.09%	0.18%	0.18%	14.77%	13.61%	0.00%	64.91%	6.36%
Batavia HS, IL	373	17.20%	0.05%	2.94%	3.35%	10.66%	0.00%	79.97%	2.99%
Battlefield HS, VA	690	11.08%	0.30%	11.64%	9.33%	13.16%	0.03%	57.85%	7.68%
Bayward Rustin HS, PA	697	12.97%	0.00%	6.10%	4.79%	4.71%	0.39%	82.93%	1.08%
Beavercreek HS, OH	471	12.61%	0.06%	7.10%	3.58%	3.58%	0.06%	81.11%	4.52%
Beech Grove HS, IN	216	57.84%	0.00%	0.85%	11.85%	10.57%	0.00%	69.05%	7.58%
Beechwood HS, KY	643	10.97%	0.77%	2.63%	0.00%	5.26%	0.00%	89.18%	2.16%
Bel Air HS, TX	111	76.88%	0.05%	0.15%	0.66%	97.24%	0.05%	1.69%	0.15%
Bellbrook HS, OH	519	0.33%	0.11%	2.08%	3.83%	5.14%	0.00%	85.01%	3.83%
Belleville East HS, IL	285	44.50%	0.08%	1.09%	40.12%	4.68%	0.17%	46.26%	7.56%
Bellevue East HS, NE	285	39.68%	1.42%	1.89%	9.85%	13.50%	0.34%	68.96%	4.05%
Bellevue West HS, NE	295	27.11%	0.65%	2.37%	10.62%	12.99%	0.36%	68.92%	4.09%
Ben Davis HS, IN	268	75.15%	0.15%	0.80%	36.43%	29.17%	0.12%	27.94%	5.38%
Bentonville HS, AR	322	16.49%	1.24%	4.87%	2.42%	9.99%	0.49%	77.60%	3.40%
Bentonville West HS, AR	458	24.04%	1.52%	4.60%	4.60%	14.75%	0.35%	70.25%	3.94%
Berryhill HS, OK	318	13.53%	7.25%	0.00%	0.00%	4.83%	0.00%	62.08%	25.85%
Big Spring HS, TX	222	60.90%	0.18%	0.46%	6.35%	66.70%	0.00%	23.64%	2.67%
Bingham HS, UT	437	9.77%	0.04%	2.90%	0.89%	9.04%	2.82%	80.03%	4.29%
Birdville HS, TX	466	37.99%	0.48%	2.79%	9.15%	30.86%	0.29%	53.11%	3.32%
Bishop Fenwick HS, OH*	-	-	-	-	-	-	-	-	-
Blackfoot HS, ID	202	39.93%	9.42%	0.61%	0.26%	23.80%	0.00%	63.38%	2.53%
Blackhawk HS, PA	388	19.86%	0.14%	0.00%	1.24%	2.21%	0.00%	93.66%	2.76%

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Bloomington HS, IL	294	55.20%	0.13%	2.41%	23.94%	13.88%	0.20%	50.30%	9.12%
Blue Springs HS, MO	307	31.68%	0.53%	2.24%	11.90%	7.83%	0.94%	71.18%	5.38%
Blue Springs South HS, MO	391	22.96%	0.40%	2.67%	11.58%	6.73%	0.20%	73.63%	4.80%
Blue Valley Southwest HS, KS	693	4.55%	0.00%	5.92%	1.91%	4.10%	0.00%	84.06%	3.92%
Blue Valley West HS, KS	830	6.34%	0.44%	14.87%	2.45%	4.39%	0.06%	72.84%	4.96%
Boiling Springs HS, SC	323	36.48%	1.02%	4.67%	14.63%	9.56%	0.28%	65.79%	4.04%
Booker HS, FL	154	66.23%	0.16%	1.01%	27.63%	36.26%	0.00%	29.49%	5.45%
Bourbon County HS, KY	272	56.70%	0.00%	0.74%	3.60%	11.17%	0.00%	82.51%	1.99%
Braden River HS, FL	336	34.82%	0.34%	3.88%	8.30%	23.08%	0.20%	61.35%	2.85%
Brandon Valley HS, SD	424	13.01%	0.36%	1.69%	2.58%	2.94%	0.09%	89.48%	2.85%
Brazoswood HS, TX	250	41.18%	0.53%	2.71%	5.58%	47.05%	0.00%	42.08%	2.05%
Brick Memorial HS, NJ	433	25.24%	0.13%	2.16%	7.89%	10.93%	0.07%	77.67%	1.01%
Bridgeland HS, TX	731	13.97%	0.42%	8.02%	10.78%	20.21%	0.19%	56.77%	3.61%
Bridgewater Raritan HS, NJ	721	10.65%	0.00%	25.36%	2.79%	17.09%	0.57%	53.02%	1.17%
Broken Arrow HS, OK	331	18.50%	7.31%	3.41%	6.50%	13.01%	0.21%	60.72%	8.84%
Brownsburg HS, IN	363	23.84%	0.11%	2.83%	12.61%	6.02%	0.11%	73.61%	4.71%
Bryant HS, AR	307	27.63%	0.33%	2.36%	17.98%	12.34%	0.04%	65.36%	1.55%
Buchanan HS, CA	511	30.12%	0.51%	14.38%	2.68%	28.98%	0.22%	50.18%	3.04%
Buchholz HS, FL	265	28.35%	0.13%	6.78%	19.86%	12.25%	0.09%	55.25%	5.64%
Byron Nelson HS, TX	537	12.36%	0.56%	5.40%	7.84%	18.37%	0.40%	65.19%	2.24%
Byron P. Steele II HS, TX	365	21.19%	0.24%	2.28%	18.34%	38.77%	0.36%	33.40%	6.61%
Cabell Midland HS, WV	326	31.58%	0.11%	0.74%	0.90%	1.11%	0.00%	94.81%	2.33%
Calallen HS, TX	360	43.40%	0.51%	0.94%	1.45%	57.28%	0.09%	38.55%	1.19%
Camdenton HS, MO	219	48.86%	0.53%	1.14%	1.82%	5.69%	0.15%	88.24%	2.43%
Campbellsville HS, KY	126	59.18%	0.00%	1.70%	11.22%	3.74%	0.00%	75.51%	7.82%
Cape Fear HS, NC	228	50.00%	3.67%	1.04%	26.07%	10.37%	0.41%	51.24%	7.19%
Carlisle HS, OH	315	25.78%	0.00%	1.33%	0.22%	2.22%	0.00%	94.44%	1.78%
Carmel HS, IN	520	9.35%	0.09%	12.88%	3.63%	3.67%	0.36%	73.34%	6.02%
Carroll HS, IN	356	17.95%	0.29%	4.06%	2.45%	4.02%	0.00%	85.36%	3.81%
Carroll HS, OH	347	18.63%	0.18%	1.05%	1.93%	0.35%	0.00%	95.08%	1.41%
Carroll Senior HS, TX	940	0.89%	0.22%	12.97%	1.79%	9.84%	0.15%	71.31%	3.73%
Cary Senior HS, NC	320	29.08%	0.52%	5.60%	17.05%	26.06%	0.17%	46.52%	4.07%
Casey County HS, KY	210	61.38%	0.15%	0.15%	0.31%	5.08%	0.00%	92.31%	2.00%
Castle HS, IN	495	19.64%	0.05%	3.54%	2.28%	2.88%	0.00%	86.49%	4.71%
Cedar Park HS, TX	537	11.53%	0.43%	6.92%	3.12%	19.56%	0.10%	65.93%	3.94%
Cedar Rapids Jefferson HS, IA	219	49.54%	0.00%	1.11%	20.51%	8.40%	1.17%	62.76%	5.99%
Cedar Ridge HS, TX	241	29.24%	0.44%	6.65%	13.22%	37.99%	0.22%	37.60%	3.89%
Celina HS, TX	532	18.72%	1.42%	0.95%	4.15%	23.10%	0.12%	66.11%	4.38%
Center Grove HS, IN	494	18.72%	0.08%	4.36%	1.71%	4.80%	0.08%	85.84%	3.09%
Centerville HS, OH	374	10.95%	0.04%	9.49%	6.96%	3.18%	0.11%	75.67%	4.57%

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Central Crossing HS, OH	279	44.70%	0.06%	2.69%	15.80%	12.58%	0.00%	63.66%	5.21%
Central Hardin HS, KY	229	41.82%	0.42%	1.10%	3.68%	4.26%	0.26%	87.11%	3.16%
Chantilly HS, VA	545	16.17%	0.10%	36.08%	6.64%	13.34%	0.03%	39.22%	4.58%
Chesapeake HS, OH	235	45.07%	0.00%	1.07%	0.80%	1.33%	0.00%	93.33%	3.47%
Christian Academy of Louisville, KY*	-	-	-	-	-	-	-	-	-
Churchill Fulshear HS, TX	757	18.99%	0.35%	7.44%	19.60%	24.15%	0.09%	44.97%	3.41%
Cinco Ranch HS, TX	663	19.04%	0.25%	15.92%	8.29%	28.31%	0.06%	43.44%	3.72%
Claudia Taylor Johnson HS, TX	558	17.48%	0.32%	7.84%	6.01%	42.76%	0.19%	38.15%	4.74%
Clear Brook HS, TX	442	24.27%	0.31%	20.06%	11.07%	35.16%	0.13%	28.96%	4.30%
Clear Springs HS, TX	448	13.89%	0.18%	8.74%	8.35%	27.78%	0.21%	50.69%	4.05%
Cleveland HS, NC	336	24.29%	0.34%	0.97%	17.37%	14.17%	0.11%	61.83%	5.20%
Clinton HS, MS	357	41.44%	0.17%	4.78%	57.86%	2.09%	0.17%	34.75%	0.09%
Clinton-Massie HS, OH	405	20.00%	0.00%	1.11%	0.37%	1.67%	0.00%	95.37%	1.48%
Clover HS, SC	335	23.26%	0.42%	1.63%	10.31%	6.24%	0.04%	77.12%	4.23%
Clovis HS, NM	169	41.44%	0.13%	1.25%	6.49%	63.08%	0.39%	26.16%	2.49%
Clovis West HS, CA	432	40.29%	0.50%	10.60%	4.96%	42.77%	0.25%	38.21%	2.73%
Colerain HS, OH	353	41.55%	0.05%	3.90%	27.46%	3.79%	0.11%	56.88%	7.80%
College Park HS, TX	531	19.00%	0.64%	9.08%	8.06%	26.57%	0.32%	52.25%	3.07%
Collierville HS, TN	733	6.96%	0.22%	10.42%	18.61%	5.84%	0.00%	62.32%	2.56%
Collinsville HS, IL	345	54.20%	0.21%	0.42%	13.01%	20.83%	0.00%	62.22%	3.25%
Columbus North HS, IN	323	33.40%	0.19%	6.45%	2.57%	17.06%	0.00%	70.19%	3.44%
Concordia Lutheran HS, IN*	-	-	-	-	-	-	-	-	-
Conroe HS, TX	249	58.67%	0.39%	1.93%	10.58%	55.37%	0.12%	29.99%	1.61%
Cooper City HS, FL	412	29.47%	0.30%	5.81%	8.29%	33.70%	0.09%	48.44%	3.37%
Coppell HS, TX	619	9.59%	0.27%	44.69%	5.14%	13.98%	0.00%	33.18%	2.75%
Copper Hills HS, UT	373	20.86%	0.25%	1.63%	1.34%	21.95%	1.88%	68.82%	4.13%
Coronado HS, TX	231	61.49%	0.47%	1.22%	12.54%	52.50%	0.05%	30.98%	2.25%
Covina HS, CA	407	68.70%	0.33%	9.93%	2.75%	77.71%	0.00%	7.93%	1.34%
Cuero HS, TX	276	47.50%	0.16%	0.63%	11.09%	40.16%	0.47%	44.53%	2.97%
Cy-Fair HS, TX	436	35.92%	0.41%	9.61%	12.83%	34.44%	0.09%	39.96%	2.65%
Cypress Bay HS, FL	667	14.68%	0.25%	6.02%	3.73%	59.50%	0.04%	28.58%	1.88%
Cypress Creek HS, FL	202	39.39%	0.71%	8.40%	13.24%	65.06%	0.39%	11.13%	1.07%
Danbury HS, CT	326	59.14%	0.16%	7.29%	8.13%	46.82%	0.00%	34.93%	2.62%
Danville Community HS, IN	303	24.91%	0.00%	1.00%	2.12%	1.49%	0.00%	91.16%	4.11%
Danville HS, IL	138	65.03%	0.21%	1.33%	37.08%	9.76%	0.14%	44.17%	7.30%
Davenport Central HS, IA	157	56.86%	0.27%	1.49%	22.49%	14.74%	0.00%	51.22%	9.78%
Davis HS, UT	339	10.12%	0.19%	1.20%	0.96%	4.34%	0.24%	91.62%	1.45%
Decatur Central HS, IN	212	62.38%	0.33%	0.92%	14.85%	13.50%	0.11%	66.40%	3.90%
Decatur HS, GA	478	12.71%	0.14%	3.57%	26.10%	5.63%	0.21%	59.07%	5.29%
Del Rio HS, TX	152	69.54%	0.08%	0.31%	0.66%	93.43%	0.04%	5.25%	0.23%

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Desert Vista HS, AZ	496	8.96%	1.24%	7.62%	5.20%	19.81%	0.23%	60.66%	5.24%
DeSoto Central HS, MS	380	29.04%	0.11%	4.14%	35.17%	2.38%	0.00%	55.53%	2.61%
Dobyns-Bennett HS, TN	205	29.05%	0.17%	2.89%	7.44%	4.51%	0.00%	81.23%	3.72%
Dorman HS, SC	357	47.07%	0.43%	3.63%	28.87%	16.52%	0.00%	46.37%	4.18%
Douglas MacArthur HS, TX	271	49.03%	0.17%	1.85%	9.35%	60.61%	0.13%	25.19%	2.70%
Dripping Springs HS, TX	406	7.05%	0.56%	2.35%	0.82%	18.79%	0.05%	73.54%	3.88%
Dublin Coffman HS, OH	693	15.15%	0.10%	16.03%	6.34%	5.93%	0.05%	65.67%	5.88%
Duncan U. Fletcher HS, FL	503	26.05%	0.28%	1.77%	13.51%	8.34%	0.42%	70.78%	4.89%
Duncanville HS, TX	278	70.96%	0.32%	1.31%	41.79%	52.12%	0.12%	2.88%	1.47%
Earl Warren HS, TX	487	42.22%	0.03%	1.92%	7.99%	74.65%	0.19%	12.48%	2.73%
East Central HS, IN	319	19.74%	0.16%	0.32%	0.32%	1.62%	0.00%	95.21%	2.27%
East Clinton HS, OH	253	48.41%	0.00%	0.86%	0.58%	2.88%	0.00%	93.08%	2.59%
East Coweta HS, GA	326	32.06%	0.53%	3.22%	25.05%	10.86%	0.00%	55.92%	4.41%
East Peoria Community HS, IL	406	49.18%	0.41%	1.03%	2.57%	5.95%	0.10%	85.01%	4.83%
East River HS, FL	261	56.83%	0.34%	4.45%	11.89%	41.56%	0.20%	39.35%	2.20%
East View HS, TX	314	46.75%	0.24%	1.49%	4.78%	54.03%	0.12%	35.22%	4.12%
Eastern HS, KY	382	30.77%	0.00%	5.21%	21.52%	7.35%	0.15%	62.76%	3.02%
Economedes HS, TX	149	94.50%	0.00%	0.04%	0.04%	99.36%	0.00%	0.41%	0.15%
Eden Prairie HS, MN	652	20.09%	0.34%	12.22%	12.72%	7.94%	0.13%	62.17%	4.44%
Edgewood HS, IN	223	32.72%	0.00%	1.05%	0.52%	2.88%	0.26%	90.71%	4.45%
Edinburg HS, TX	290	88.35%	0.04%	0.08%	0.12%	98.66%	0.00%	0.91%	0.20%
Edinburg North HS, TX	167	87.66%	0.07%	0.29%	0.15%	97.59%	0.00%	1.72%	0.18%
Elizabeth HS, NJ	172	70.40%	0.00%	5.64%	9.72%	72.57%	0.09%	11.89%	0.00%
Estacado Early College HS, TX	129	91.51%	0.13%	0.00%	48.54%	46.95%	0.00%	2.39%	1.99%
Etiwanda HS, CA	410	43.31%	0.31%	11.66%	15.03%	49.26%	0.54%	18.55%	4.65%
Everman HS, TX	198	87.29%	0.30%	0.47%	38.79%	56.12%	0.12%	3.37%	0.83%
F.J. Reitz HS, IN	205	39.23%	0.00%	1.44%	4.08%	2.19%	0.00%	86.09%	6.05%
Fairborn HS, OH	330	39.66%	0.19%	2.01%	10.15%	3.74%	0.57%	75.00%	8.33%
Fairfield HS, OH	256	43.40%	0.18%	5.01%	18.97%	10.34%	0.04%	60.09%	5.37%
Fairfield Jr. Sr HS, IN	367	23.34%	0.26%	0.65%	1.56%	5.74%	0.00%	90.22%	1.43%
Faith Lutheran HS, NV*	-	-	-	-	-	-	-	-	-
Farmington HS, UT	443	7.30%	0.20%	0.78%	0.59%	3.84%	0.33%	92.12%	2.15%
Farragut HS, TN	477	4.23%	0.21%	8.29%	2.56%	5.89%	0.21%	79.71%	3.13%
Father Ryan HS, TN*	-	-	-	-	-	-	-	-	-
Fayetteville HS, AR	209	31.31%	0.50%	3.56%	10.19%	12.90%	0.46%	67.42%	4.96%
Firestone HS, OH	345	92.62%	0.00%	1.96%	46.27%	4.01%	0.16%	40.61%	6.99%
Fishers HS, IN	446	16.76%	0.20%	6.13%	7.67%	7.75%	0.03%	72.81%	5.39%
Flanagan HS, FL	557	55.26%	0.16%	3.97%	33.03%	47.76%	0.12%	11.83%	3.14%
Flower Mound HS, TX	688	4.73%	0.39%	18.98%	2.68%	11.81%	0.06%	63.18%	2.90%
Floyd Central HS, IN	424	17.02%	0.61%	2.31%	1.10%	3.42%	0.00%	90.52%	1.98%

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Foothill HS, NV	352	31.95%	0.77%	3.86%	5.81%	23.71%	1.07%	57.72%	7.06%
Forest Park Jr./Sr. HS, IN	304	19.93%	0.00%	0.70%	0.35%	3.85%	0.00%	93.18%	1.75%
Forestview HS, NC	356	32.81%	0.52%	1.75%	20.24%	11.78%	0.00%	61.52%	4.19%
Forney HS, TX	414	18.40%	0.60%	1.92%	9.60%	25.61%	0.00%	59.96%	2.32%
Fort Mill HS, SC	242	11.22%	0.08%	3.30%	8.68%	6.44%	0.00%	78.11%	3.39%
Fort Zumwalt East HS, MO	447	2.45%	0.00%	0.14%	0.61%	0.49%	0.00%	10.49%	0.46%
Fort Zumwalt North HS, MO	447	20.12%	0.00%	1.11%	5.05%	4.00%	0.00%	86.11%	3.74%
Fort Zumwalt West HS, MO	406	15.84%	0.00%	3.54%	5.44%	5.02%	0.00%	81.41%	4.49%
Francis Howeell North HS, MO	466	18.12%	0.18%	5.10%	10.32%	5.76%	0.12%	74.27%	4.20%
Francis Howell Central HS, MO	410	14.75%	0.16%	2.59%	7.40%	3.19%	0.00%	83.58%	3.08%
Francis Howell HS, MO	515	8.78%	0.16%	3.86%	5.89%	2.95%	0.05%	84.79%	2.25%
Franklin Central HS, IN	402	35.05%	0.07%	5.29%	7.48%	8.66%	0.00%	72.44%	6.00%
Franklin HS, TN	383	2.53%	0.17%	4.38%	2.42%	6.63%	0.00%	83.26%	3.15%
Fred J. Page HS, TN	730	1.57%	0.09%	3.74%	2.79%	3.83%	0.00%	86.51%	2.96%
Frenship HS, TX	563	33.02%	0.37%	3.21%	3.21%	40.18%	0.15%	49.83%	3.06%
Friendswood HS, TX	598	7.44%	0.38%	6.86%	1.95%	17.49%	0.29%	70.45%	2.57%
Gahr HS, CA	360	52.41%	0.47%	26.62%	15.26%	47.33%	0.62%	7.58%	2.13%
Gainesville HS, FL	294	33.21%	0.26%	5.93%	30.99%	15.78%	0.00%	40.41%	6.62%
Gateway HS, PA	335	40.26%	0.09%	7.68%	24.72%	3.75%	0.66%	57.96%	5.15%
George Ranch HS, TX	517	24.12%	0.26%	10.99%	24.53%	25.50%	0.11%	36.35%	2.24%
George Rogers Clark HS, KY	350	48.23%	0.13%	0.63%	5.57%	5.95%	0.06%	85.00%	2.66%
Gladys Porter HS, TX	100	95.74%	0.00%	0.00%	0.05%	99.35%	0.00%	0.60%	0.00%
Godwin Heights HS, MI	171	86.96%	0.00%	1.95%	22.94%	52.32%	0.15%	15.74%	6.90%
Good Pasture Christian School, TN*	-	-	-	-	-	-	-	-	-
Goshen HS, IN	297	55.12%	0.21%	1.44%	1.75%	53.42%	0.00%	39.69%	3.50%
Governor Thomas Johnson HS, MD	362	35.23%	0.18%	3.93%	22.72%	30.30%	0.23%	36.99%	5.64%
Grain Valley HS, MO	346	22.09%	0.30%	0.91%	2.59%	8.38%	0.15%	82.41%	5.18%
Granbury HS, TX	282	43.58%	0.55%	0.75%	1.55%	24.74%	0.15%	69.92%	2.35%
Green Canyon HS, UT	312	21.68%	0.37%	0.97%	0.67%	8.72%	0.52%	87.33%	1.42%
Green Hope HS, NC	828	7.72%	0.14%	31.91%	7.97%	6.21%	0.25%	50.11%	3.41%
Greendale HS, WI	378	20.63%	0.90%	5.75%	2.37%	12.18%	0.23%	75.76%	2.82%
Greenfield Central HS, IN	286	28.36%	0.28%	0.96%	0.55%	2.75%	0.00%	92.91%	2.55%
Greenon Jr./Sr. HS, OH	429	52.97%	0.25%	0.99%	0.99%	1.73%	0.25%	91.58%	4.21%
Greenwood Community HS, IN	302	35.75%	0.24%	2.87%	2.39%	7.88%	0.00%	81.53%	5.10%
Haltom HS, TX	276	68.38%	0.48%	7.66%	8.77%	58.86%	0.07%	21.92%	2.23%
Hamilton HS, OH	218	40.08%	0.15%	0.73%	12.35%	14.77%	0.35%	67.78%	3.87%
Hamilton Southeastern HS, IN	484	14.05%	0.12%	6.78%	8.46%	6.23%	0.00%	73.75%	4.61%
Hardin Valley Academy, TN	446	10.29%	0.39%	2.39%	7.51%	9.17%	0.20%	76.54%	3.80%
Harrison HS, GA	609	8.16%	0.30%	2.79%	13.45%	5.79%	0.00%	75.10%	2.58%
Hebron HS, TX	776	22.19%	0.30%	27.05%	12.47%	19.81%	0.08%	36.76%	3.52%

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Henry Clay HS, KY	467	38.93%	0.37%	5.94%	20.07%	9.64%	0.05%	59.85%	4.07%
Herbert Hoover HS, CA	478	67.29%	0.19%	12.77%	2.18%	22.68%	0.19%	60.87%	1.12%
Hernando HS, MS	402	28.28%	0.00%	1.34%	13.43%	5.13%	0.16%	78.12%	1.82%
Herscher HS, IL	309	23.26%	0.00%	0.39%	0.58%	2.33%	0.00%	95.35%	1.36%
Hidalgo Early College HS, TX	139	90.81%	0.00%	0.00%	0.00%	99.91%	0.00%	0.09%	0.00%
Highland HS, ID	308	31.83%	4.89%	1.46%	0.57%	9.15%	1.21%	80.88%	1.84%
Hillgrove HS, GA	530	20.68%	0.21%	3.17%	34.97%	10.42%	0.04%	46.69%	4.50%
Hilliard Bradley HS, OH	556	22.18%	0.18%	6.17%	9.96%	6.94%	0.00%	72.72%	4.03%
Hobbs H.S., NM	195	33.38%	0.36%	0.36%	4.67%	71.18%	0.10%	23.18%	0.15%
Hollister HS, MO	201	56.88%	0.81%	0.61%	1.01%	8.70%	0.00%	86.23%	2.43%
Holly Springs HS, NC	388	11.78%	0.19%	2.64%	9.47%	8.76%	0.24%	74.80%	3.91%
Homestead HS, IN	413	14.44%	0.29%	4.58%	4.95%	5.45%	0.00%	80.78%	3.92%
Homestead HS, CA	758	14.47%	0.00%	44.87%	0.82%	15.63%	0.21%	29.65%	8.78%
Hoover HS, OH	401	12.95%	0.00%	1.46%	2.32%	1.53%	0.00%	91.83%	2.86%
Hoover HS, AL	629	22.98%	0.03%	6.68%	27.81%	6.93%	0.10%	53.73%	4.72%
Hopkinsville HS, KY	222	61.08%	0.46%	0.93%	32.72%	7.41%	0.19%	53.94%	4.36%
Hutto HS, TX	354	36.68%	0.19%	1.24%	13.73%	43.42%	0.29%	36.63%	4.50%
Independence HS, IA	268	31.47%	0.00%	0.86%	1.00%	2.00%	0.00%	94.28%	1.86%
Indian Hill HS, OH	730	0.47%	0.00%	10.02%	3.76%	3.44%	0.00%	78.87%	3.91%
J.P. Taravella HS, FL	380	55.78%	0.32%	3.64%	36.76%	32.31%	0.16%	22.92%	3.89%
Jack Britt HS, NC	351	35.99%	0.93%	4.73%	31.62%	15.32%	0.51%	37.58%	9.31%
Jack C. Hays HS, TX	492	36.40%	0.13%	1.35%	2.09%	57.24%	0.00%	37.44%	1.75%
Jackson County Comprehensive HS, GA	319	29.97%	0.16%	2.85%	4.80%	12.87%	0.16%	76.06%	3.09%
James Bowie HS, TX	535	11.66%	0.03%	5.61%	3.01%	30.81%	0.10%	55.64%	4.79%
James E. Taylor HS, TX	405	67.72%	0.28%	17.16%	8.04%	25.94%	0.28%	44.66%	3.64%
James F. Byrnes HS, SC	215	34.60%	0.11%	2.62%	18.91%	10.41%	0.05%	63.32%	4.58%
James Madison HS, TX	313	45.72%	0.18%	1.86%	7.40%	63.59%	0.15%	23.93%	2.89%
James Madison HS, VA	786	9.93%	0.09%	14.16%	1.89%	11.96%	0.09%	64.67%	7.15%
James Martin HS, TX	334	31.51%	0.52%	8.53%	16.07%	21.86%	0.09%	49.75%	3.18%
James Martin HS, TX	81	97.46%	0.00%	0.00%	0.10%	99.55%	0.00%	0.35%	0.00%
James Pace Early College HS, TX	160	91.99%	0.00%	0.14%	0.05%	99.14%	0.05%	0.62%	0.00%
James W. Robinson Secondary School, VA	651	10.63%	0.24%	13.31%	6.29%	14.77%	0.08%	58.72%	6.60%
Jefferson City HS, MO	245	46.30%	0.28%	1.27%	18.61%	6.85%	0.16%	66.50%	6.34%
Jeffersonville HS, IN	201	52.04%	0.29%	1.33%	19.95%	23.14%	0.00%	55.58%	9.48%
Jenison HS, MI	373	26.82%	0.07%	3.78%	1.14%	6.06%	0.07%	84.88%	3.99%
Jenks HS, OK	222	12.30%	6.17%	12.50%	7.42%	13.64%	0.20%	52.37%	7.70%
Jennings County HS, IN	206	48.63%	0.17%	0.00%	0.00%	4.74%	0.00%	92.68%	2.33%
John B. Alexander HS, TX	413	56.37%	0.00%	0.70%	0.21%	98.16%	0.00%	0.90%	0.03%
John Hardin HS, KY	304	51.02%	0.36%	2.39%	24.01%	9.44%	0.48%	55.44%	7.89%
John M. Harlan HS, TX	326	29.42%	0.13%	3.06%	10.26%	58.45%	0.70%	23.31%	4.10%
John Overton HS, TN	674	37.40%	0.10%	10.08%	19.03%	38.63%	0.15%	31.28%	0.72%

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John P. Stevens HS, NJ	810	6.51%	0.12%	77.67%	6.47%	4.17%	0.12%	10.91%	0.56%
John Paul Stevens HS, TX	386	50.14%	0.04%	1.27%	8.45%	79.26%	0.21%	8.70%	2.08%
Juan Diego Catholic HS, UT*	-	-	-	-	-	-	-	-	-
Juaren-Lincoln HS, TX	57	98.48%	0.00%	0.00%	0.00%	99.92%	0.00%	0.08%	0.00%
Jupiter Community HS, FL	425	28.29%	0.54%	2.23%	4.01%	26.03%	0.03%	64.42%	2.74%
Katy HS, TX	401	30.94%	0.30%	4.89%	8.97%	35.86%	0.21%	47.05%	2.72%
Kell HS, GA	345	31.59%	0.26%	2.56%	20.25%	16.84%	0.26%	54.33%	5.50%
Keller Central HS, TX	475	25.23%	0.55%	10.15%	9.45%	24.32%	0.59%	49.78%	5.16%
Keller HS, TX	498	6.76%	0.55%	6.30%	3.48%	13.35%	0.16%	72.23%	3.93%
Kennesaw Mountain HS, GA	298	27.54%	0.21%	8.21%	27.17%	17.54%	0.16%	42.81%	3.90%
Kent City HS, MI	253	47.69%	0.00%	0.87%	0.00%	16.47%	0.00%	80.35%	2.31%
Kettering Fairmont HS, OH	332	33.06%	0.09%	1.12%	6.32%	4.26%	0.13%	82.42%	5.67%
Kickapoo HS, MO	146	27.29%	0.58%	3.82%	4.93%	5.72%	0.37%	82.62%	1.96%
Kiski Area HS, PA	304	26.84%	0.18%	0.35%	5.14%	0.89%	0.00%	93.36%	0.09%
Klein Cain HS, TX	296	33.71%	0.26%	9.08%	12.27%	37.62%	0.09%	38.18%	2.50%
Krum HS, TX	298	28.37%	0.48%	0.63%	1.74%	26.78%	0.16%	68.30%	1.90%
L.D. Bell HS, TX	372	44.87%	0.73%	7.03%	14.91%	31.21%	0.91%	40.78%	4.44%
La Cueva HS, NM	548	16.23%	1.70%	10.33%	1.08%	37.34%	0.00%	45.06%	4.48%
Lafayette HS, MO	685	11.14%	0.11%	8.02%	10.63%	2.95%	0.00%	76.56%	1.73%
Lafayette HS, LA	297	39.61%	0.36%	5.08%	34.03%	8.23%	0.05%	50.94%	1.27%
Lafayette Jefferson HS, IN	238	62.14%	0.39%	0.87%	15.12%	29.71%	0.05%	49.15%	4.65%
Lake Central HS, IN	476	21.08%	0.57%	3.35%	7.09%	14.71%	0.00%	71.38%	2.90%
Lake Hamilton HS, AR	244	47.29%	0.10%	0.70%	3.82%	11.04%	0.20%	77.51%	6.53%
Lake Orion HS, MI	490	19.65%	0.21%	3.18%	3.44%	7.65%	0.04%	81.51%	3.96%
Lake Park HS, IL	522	15.27%	0.32%	8.52%	5.51%	19.47%	0.28%	63.60%	2.30%
Lake Travis HS, TX	766	10.15%	0.16%	5.92%	1.46%	20.33%	0.16%	67.31%	4.67%
Lakeland HS, MI	664	19.82%	0.73%	0.66%	1.54%	5.27%	0.07%	90.64%	1.10%
Lakewood Ranch HS, FL	464	21.77%	0.12%	2.99%	4.67%	15.29%	0.08%	74.29%	2.54%
Lakota East HS, OH	482	14.71%	0.04%	6.86%	10.50%	5.84%	0.08%	71.98%	4.70%
Lakota West HS, OH	578	19.23%	0.12%	6.69%	13.83%	7.66%	0.12%	66.77%	4.80%
Laquey HS, MO	207	63.22%	0.00%	0.57%	0.00%	17.06%	0.00%	91.38%	4.02%
Larry A. Ryle HS, KY	592	26.29%	0.05%	3.46%	4.11%	8.81%	0.00%	80.72%	2.85%
LaRue County HS, KY	211	55.01%	0.73%	0.87%	3.05%	6.24%	0.29%	85.63%	3.19%
Las Vegas HS, NV	258	62.77%	0.43%	4.51%	9.06%	72.15%	0.89%	10.02%	2.95%
Laurens District 55 HS, SC	278	100.00%	0.00%	0.07%	28.40%	11.18%	0.20%	57.79%	2.37%
Lawrence Township, IN	267	60.81%	0.04%	1.34%	48.61%	21.07%	10.00%	22.52%	6.31%
Leander HS, TX	310	23.73%	0.09%	4.04%	6.08%	30.42%	0.19%	54.48%	4.69%
Lebanon HS, OH	334	14.47%	0.18%	1.16%	1.70%	5.78%	0.00%	88.15%	3.04%
Leeds HS, AL	237	44.42%	0.21%	1.47%	20.84%	14.32%	0.21%	61.89%	1.05%
Legacy of Educational Excellence HS, TX	164	63.98%	0.15%	1.77%	4.96%	78.28%	0.04%	13.61%	1.19%

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Lehman HS, TX	299	59.77%	0.11%	1.10%	4.99%	74.86%	0.08%	17.28%	1.59%
Lemont HS, IL	429	11.87%	0.00%	4.88%	1.02%	11.00%	0.00%	81.14%	1.97%
Lewis Cass HS, IN	294	32.80%	0.00%	0.68%	0.91%	7.29%	0.00%	89.52%	1.59%
Lewisville HS, TX	278	61.03%	0.18%	8.60%	19.09%	50.76%	0.02%	18.54%	2.81%
Liberty HS, TX	726	10.77%	0.00%	34.55%	11.23%	9.76%	0.10%	41.46%	2.49%
Licking Heights HS, OH	324	38.62%	0.00%	6.80%	28.80%	4.28%	0.00%	51.72%	8.40%
Limestone Community HS, IL	323	41.21%	0.21%	0.74%	10.59%	3.92%	0.00%	77.54%	6.89%
Lincoln HS, SD	437	31.10%	5.03%	2.78%	10.74%	6.88%	0.05%	70.65%	3.86%
Lincoln-Way HS, IL	543	5.75%	0.00%	3.24%	7.26%	10.29%	0.04%	76.07%	3.10%
Lindbergh HS, MO	386	14.05%	0.09%	4.44%	2.20%	4.26%	0.00%	85.31%	3.71%
Little Cypress-Mauriceville HS, TX	282	31.02%	0.61%	1.94%	6.63%	10.00%	0.10%	78.27%	2.45%
Live Oak HS, CA	773	33.42%	0.26%	6.72%	1.89%	52.89%	0.09%	34.37%	3.79%
Lockport Township HS, IL	434	15.86%	0.27%	2.08%	5.59%	19.06%	0.08%	70.72%	2.21%
Logan Elm HS, OH	336	31.75%	0.00%	0.18%	0.53%	0.70%	0.00%	98.07%	0.53%
Lone Peak HS, UT	443	7.78%	0.16%	1.03%	0.79%	4.48%	0.63%	89.21%	3.69%
Lone Star HS, TX	590	16.70%	0.29%	13.83%	19.19%	19.71%	0.19%	43.54%	3.25%
Lopez Early College HS, TX	125	94.04%	0.00%	0.00%	0.05%	99.85%	0.00%	0.10%	0.00%
Los Alamitos HS, CA	490	16.54%	0.10%	15.27%	3.44%	25.85%	0.51%	48.84%	5.99%
Los Osos HS, CA	461	34.21%	0.49%	20.12%	7.14%	35.88%	0.49%	33.75%	2.13%
Louis D. Brandeis HS, TX	353	23.48%	0.07%	8.69%	4.69%	55.61%	0.32%	27.66%	2.96%
Loveland HS, OH	576	10.93%	0.07%	1.17%	1.10%	2.89%	0.21%	91.75%	2.82%
Lubbock HS, TX	139	59.23%	0.21%	5.88%	4.47%	60.74%	0.05%	26.52%	2.13%
Lubbock-Cooper HS, TX	282	28.55%	0.06%	1.40%	2.01%	36.21%	0.12%	58.00%	2.19%
Lugoff-Elgin HS, SC	353	37.91%	0.43%	0.67%	20.45%	5.70%	0.12%	67.61%	5.02%
Lynbrook HS, CA	888	5.48%	0.00%	84.04%	0.37%	3.51%	0.00%	7.13%	4.89%
Magnolia HS, TX	439	27.88%	0.25%	1.65%	3.09%	27.18%	0.00%	65.44%	2.39%
Mahomet-Seymour HS, IL	382	18.14%	0.00%	2.24%	1.07%	4.70%	0.00%	87.19%	4.70%
Marcus HS, TX	623	7.70%	0.28%	8.01%	3.82%	13.30%	0.06%	70.90%	3.63%
Marian Catholic HS, IL*	-	-	-	-	-	-	-	-	-
Marshall HS, MN	305	35.32%	0.00%	9.63%	8.56%	13.67%	0.00%	65.64%	2.26%
Mauldin HS, SC	326	24.15%	0.13%	3.38%	21.11%	9.36%	0.04%	60.90%	5.09%
McAllen HS, TX	167	63.20%	0.09%	1.30%	0.22%	93.02%	0.04%	4.94%	0.39%
McAllen Memorial HS, TX	126	65.81%	0.09%	1.37%	0.32%	93.51%	0.00%	4.43%	0.27%
McEachern HS, GA	341	58.37%	0.13%	1.05%	68.37%	18.33%	0.04%	8.45%	3.64%
McGavock HS, TN	278	40.49%	0.31%	2.44%	38.66%	17.93%	0.17%	38.92%	1.57%
McKinney Boyd HS, TX	532	18.17%	0.64%	5.26%	10.13%	18.88%	0.25%	63.06%	1.80%
McKinney HS, TX	274	33.77%	0.67%	4.99%	16.57%	32.22%	0.24%	42.65%	2.67%
McNeil HS, TX	395	24.35%	0.49%	20.01%	12.79%	26.15%	0.11%	37.30%	3.25%
Meade County HS, KY	186	47.40%	0.39%	0.72%	1.30%	3.13%	0.33%	91.34%	2.80%
Metamora Township HS, IL	369	16.25%	0.00%	0.90%	1.20%	2.51%	0.00%	91.47%	3.91%

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Miamisburg HS, OH	333	28.70%	0.19%	2.23%	7.53%	2.36%	0.06%	84.06%	3.57%
Midland HS, TX	342	33.66%	0.17%	0.80%	7.40%	63.21%	0.00%	26.98%	1.44%
Midland Lee HS, TX	382	30.29%	0.35%	2.84%	8.30%	61.23%	0.00%	25.96%	1.31%
Milford HS, OH	332	15.90%	0.00%	1.54%	1.59%	2.88%	0.05%	90.53%	3.40%
Mill Creek HS, GA	332	19.46%	0.19%	8.71%	19.00%	14.72%	0.11%	53.26%	4.02%
Milton HS, GA	747	11.41%	0.04%	11.70%	10.18%	12.80%	0.04%	61.68%	3.55%
Milton-Union HS, OH	282	99.32%	0.23%	0.45%	0.23%	0.90%	0.00%	96.38%	1.81%
Mission HS, TX	107	90.35%	0.00%	0.09%	0.09%	98.95%	0.00%	0.87%	0.00%
Mission Hills HS, CA	406	43.83%	0.46%	9.63%	3.20%	53.39%	0.84%	32.44%	0.00%
Monrovia HS, IN	292	32.40%	0.00%	0.19%	0.93%	2.42%	0.00%	95.16%	1.12%
Monterey HS, TX	340	67.62%	0.37%	0.75%	13.45%	58.86%	0.05%	24.51%	2.01%
Montezuma-Cortez HS, CO	230	42.88%	25.79%	0.45%	0.45%	18.89%	0.15%	51.27%	2.85%
Monticello HS, IL	307	23.22%	0.00%	0.00%	1.69%	1.50%	0.19%	95.88%	0.00%
Moon Area HS, PA	385	17.27%	0.08%	3.94%	4.61%	5.70%	0.08%	80.89%	4.69%
Mooresville HS, NC	331	28.73%	0.21%	1.69%	15.60%	10.23%	0.26%	68.05%	3.95%
Morton HS, IL	361	14.29%	0.00%	1.88%	1.77%	3.34%	0.00%	90.41%	2.61%
Mountain Crest HS, UT	202	25.51%	0.35%	0.43%	0.57%	10.84%	0.78%	86.04%	0.99%
Murray HS, KY	328	42.62%	0.00%	5.49%	8.65%	5.49%	0.00%	75.11%	5.27%
Murrieta Valley HS, CA	426	27.49%	0.35%	5.99%	3.41%	30.86%	0.67%	53.17%	5.54%
Mustang HS, OK	291	13.30%	5.28%	5.19%	4.48%	12.71%	0.31%	64.25%	7.77%
Naperville Central HS, IL	675	13.35%	0.15%	16.15%	4.05%	8.31%	0.18%	67.34%	3.82%
Naperville North HS, IL	701	15.36%	0.30%	19.25%	4.67%	11.40%	0.00%	60.15%	4.19%
Nation Ford HS, SC	388	16.53%	0.23%	4.00%	13.31%	9.63%	0.09%	68.71%	4.04%
Neosho HS, MO	198	56.09%	3.30%	1.34%	1.18%	14.14%	5.34%	70.62%	4.08%
New Berlin West HS, WI	481	14.59%	0.28%	5.72%	2.22%	6.83%	0.09%	83.29%	1.57%
New Braunfels HS, TX	385	26.90%	0.28%	1.42%	2.94%	41.90%	0.06%	52.15%	1.25%
New Castle HS, IN	221	50.05%	0.00%	0.31%	1.54%	3.70%	0.00%	90.54%	3.80%
New Philadelphia HS, OH	223	35.03%	0.00%	1.24%	1.37%	9.69%	0.12%	83.98%	3.60%
Newberry HS, FL	286	36.14%	0.31%	0.61%	18.68%	10.41%	0.15%	61.87%	7.96%
Nikki Rowe HS, TX	231	65.48%	0.05%	1.45%	0.42%	95.09%	0.05%	2.71%	0.23%
Ninety-Six HS, SC	220	44.22%	0.67%	0.67%	19.11%	2.00%	0.00%	76.44%	1.11%
Nixa HS, MO	305	24.31%	0.51%	0.86%	0.80%	3.49%	0.00%	89.02%	5.32%
Nordonia HS, OH	442	14.84%	0.25%	3.85%	12.54%	1.72%	0.00%	77.46%	4.18%
Normal HS, IL	550	24.91%	0.33%	9.67%	10.99%	8.54%	0.14%	65.75%	4.58%
North Cobb HS, GA	367	38.79%	0.36%	5.28%	36.97%	18.63%	0.11%	34.15%	4.50%
North East HS, PA	313	36.99%	0.39%	0.39%	0.58%	3.08%	0.00%	93.45%	2.12%
North Hardin HS, KY	203	55.90%	0.25%	2.28%	26.46%	9.07%	1.52%	51.65%	8.76%
North Wood HS, IN	257	23.43%	0.00%	1.55%	1.99%	8.18%	0.00%	84.20%	3.98%
Northeastern HS, OH	269	28.05%	0.00%	0.49%	0.49%	0.98%	0.00%	96.10%	1.95%
Northmont HS, OH	354	31.30%	0.07%	1.69%	24.66%	2.03%	0.14%	66.26%	5.15%

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Northwest Guilford HS, NC	525	11.49%	0.14%	6.03%	7.49%	6.87%	0.05%	75.80%	3.63%
Northwest HS, MO	376	32.87%	0.22%	0.77%	0.99%	2.81%	0.00%	93.11%	2.10%
Norton HS, OH	333	29.01%	0.00%	0.92%	2.98%	0.80%	0.00%	92.20%	3.10%
Norwell HS, IN	304	26.50%	0.38%	1.50%	0.88%	3.38%	0.00%	91.13%	2.63%
Norwin HS, PA	352	19.42%	0.30%	2.06%	1.21%	0.73%	0.00%	93.93%	1.76%
Oak Ridge HS, TX	690	30.06%	0.44%	3.30%	12.28%	31.11%	0.41%	49.43%	3.03%
Oakville HS, MO	423	18.80%	0.24%	3.60%	7.20%	2.81%	0.06%	83.46%	2.56%
Obra D. Tompkins HS, TX	714	8.00%	0.21%	22.85%	8.53%	24.48%	0.29%	41.25%	2.37%
Odem HS, TX	223	57.75%	0.00%	0.00%	0.70%	86.27%	0.00%	13.03%	0.00%
Odessa HS, TX	226	43.71%	0.34%	0.52%	2.36%	86.10%	0.13%	10.05%	0.49%
O'Fallon Township HS, IL	370	23.57%	0.12%	1.96%	19.33%	5.62%	0.12%	64.76%	8.08%
Ogden HS, UT	224	57.21%	0.98%	0.90%	2.30%	48.11%	0.25%	44.92%	2.54%
Ola HS, GA	363	23.37%	0.36%	0.85%	22.52%	5.80%	0.18%	67.63%	2.66%
Olathe East HS, KS	640	24.17%	0.47%	4.99%	9.72%	12.56%	0.00%	67.37%	4.83%
Olathe North HS, KS	226	40.30%	0.19%	5.65%	9.84%	30.27%	0.00%	49.15%	4.85%
Olympia HS, FL	587	47.52%	0.49%	8.05%	26.30%	29.91%	0.43%	32.58%	2.24%
Omaha Burke HS, NE	619	45.25%	0.68%	3.96%	23.73%	16.64%	0.34%	49.20%	5.45%
Orchard Park HS, NY	593	12.37%	0.07%	1.88%	1.01%	1.61%	0.20%	94.76%	0.47%
Orleeans Jr/Sr HS, IN	224	54.40%	0.00%	0.00%	0.00%	0.00%	0.00%	98.40%	0.80%
Oviedo HS, FL	400	32.79%	0.00%	3.32%	8.96%	20.43%	0.28%	63.80%	3.20%
Owasso HS, OK	403	10.43%	12.32%	2.93%	5.55%	10.77%	0.07%	61.56%	6.80%
Owen Valley HS, IN	256	44.68%	0.53%	1.60%	0.53%	0.80%	0.00%	94.28%	2.26%
Ozark HS, MO	273	29.44%	1.07%	1.07%	0.84%	4.42%	0.00%	88.33%	4.20%
Paetow HS, TX	312	51.26%	0.43%	6.10%	22.54%	50.18%	0.14%	18.88%	1.72%
Palm Beach Central HS, FL	517	43.75%	0.52%	4.31%	18.60%	37.81%	0.07%	35.86%	2.84%
Palm Harbor University HS, FL	361	22.13%	0.12%	6.02%	2.01%	11.14%	0.04%	77.52%	3.15%
Palmview HS, TX	156	93.34%	0.05%	0.00%	0.00%	99.22%	0.00%	0.73%	0.00%
Panther Creek HS, NC	592	7.46%	0.14%	32.86%	10.21%	6.48%	0.07%	45.99%	4.25%
Paragould HS, AR	217	29.39%	0.21%	0.64%	6.18%	5.64%	2.02%	84.35%	0.96%
Park Vista HS, FL	334	31.01%	0.42%	4.46%	14.48%	23.08%	0.10%	54.35%	3.10%
Parkway Central HS, MO	640	17.00%	0.24%	14.62%	14.94%	5.38%	0.00%	60.00%	4.82%
Parkway South HS, MO	380	17.00%	0.18%	9.07%	9.67%	5.37%	0.00%	71.00%	4.71%
Pearland HS, TX	526	31.39%	0.75%	5.64%	13.89%	36.86%	0.13%	40.03%	2.71%
Pecos HS, TX	269	65.80%	0.14%	0.57%	1.29%	90.66%	0.00%	7.33%	0.00%
Pelham HS, AL	375	31.89%	0.20%	2.46%	12.89%	29.82%	0.00%	51.87%	2.76%
Pendleton Heights HS, IN	413	28.78%	0.07%	0.80%	2.31%	1.52%	0.00%	91.90%	3.33%
Penn HS, IN	309	20.31%	0.43%	5.63%	9.36%	6.72%	0.19%	73.31%	4.37%
Permian HS, TX	318	33.72%	0.50%	1.57%	6.10%	64.53%	0.34%	25.91%	1.05%
Pflugerville HS, TX	338	46.70%	0.44%	7.58%	18.22%	48.35%	0.05%	21.87%	3.50%
Phoenizville Area HS, PA	411	26.26%	0.09%	3.81%	6.76%	12.22%	0.26%	74.61%	2.25%

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Pickerington North HS, OH	528	24.51%	0.24%	4.07%	21.91%	5.83%	0.06%	61.95%	5.95%
Pioneer HS, TX	238	61.80%	0.00%	0.51%	0.38%	92.71%	0.13%	5.89%	0.38%
Piqua HS, OH	337	39.78%	0.22%	0.65%	3.12%	2.04%	0.22%	86.02%	7.74%
Plainfield HS, IN	429	23.36%	0.00%	3.35%	3.52%	4.75%	0.00%	84.80%	3.46%
Plainfield North HS, IL	534	14.43%	0.39%	9.24%	7.17%	13.23%	0.21%	66.02%	3.74%
Plano East Senior High, TX	539	27.82%	0.20%	30.57%	11.72%	26.02%	0.03%	28.60%	2.85%
Plymouth-Canton Educational Park, MI	477	17.78%	0.33%	15.86%	8.96%	4.29%	0.13%	67.12%	3.32%
Poteet HS, TX	289	57.57%	0.61%	4.63%	28.31%	42.77%	0.06%	21.27%	2.35%
Prospect HS, IL	478	6.83%	0.14%	7.35%	1.13%	13.01%	0.19%	74.93%	3.25%
Prosper HS, TX	657	7.80%	0.32%	6.93%	9.88%	12.35%	0.06%	65.07%	5.39%
Pulaski County HS, KY	250	58.85%	0.00%	0.83%	0.33%	4.24%	0.00%	93.27%	1.33%
Ravenwood HS, TN	850	0.84%	0.00%	13.24%	5.59%	4.95%	0.00%	72.43%	3.66%
Reeths-Puffer HS, MI	275	40.28%	0.17%	1.22%	5.67%	3.31%	0.09%	87.36%	2.18%
Revere HS, OH	552	7.14%	0.00%	5.88%	0.92%	0.12%	0.00%	88.36%	3.57%
Richland HS, TX	326	44.65%	0.38%	4.68%	9.74%	33.30%	0.28%	48.63%	2.98%
Rick Reedy HS, TX	793	4.83%	0.64%	24.16%	6.05%	11.15%	0.05%	54.12%	3.82%
Ridgeline HS, UT	310	22.46%	0.25%	0.57%	0.38%	8.14%	0.50%	88.45%	1.70%
Rio Grande City HS, TX	177	80.31%	0.00%	0.39%	0.00%	99.55%	0.00%	0.06%	0.00%
River Bluff HS, SC	476	15.79%	0.15%	6.01%	7.87%	6.60%	0.00%	76.04%	2.89%
River Ridge HS, GA	443	21.09%	0.11%	3.37%	9.10%	19.83%	0.00%	64.02%	3.58%
Robert E. Hendrickson HS, TX	464	28.94%	0.29%	7.42%	16.97%	35.82%	0.17%	33.44%	5.88%
Robert Vela HS, TX	421	69.25%	0.00%	0.85%	0.59%	95.77%	0.00%	2.58%	0.21%
Robinson HS, TX	403	25.83%	0.14%	0.56%	4.03%	27.08%	0.00%	64.72%	3.47%
Rock Bridge HS, MO	396	22.68%	0.30%	7.46%	11.47%	6.06%	0.00%	69.30%	5.36%
Rock Hill HS, SC	262	40.32%	2.51%	2.16%	28.69%	12.14%	0.10%	50.65%	3.76%
Rock Island HS, IL	150	58.43%	0.31%	5.96%	30.85%	13.35%	0.19%	45.89%	3.45%
Rockford HS, MI	407	13.73%	0.05%	2.83%	0.44%	4.85%	0.00%	87.41%	4.41%
Rockwood Summit HS, MO	539	18.50%	0.15%	4.60%	11.05%	2.76%	0.00%	79.43%	1.92%
Roma HS, TX	114	81.59%	0.00%	0.00%	0.00%	99.88%	0.00%	0.12%	0.00%
Romeoville HS, IL	252	57.73%	0.16%	4.39%	12.52%	45.91%	0.21%	33.87%	2.94%
Ronald Reagan HS, TX	512	13.35%	0.20%	8.31%	3.81%	43.14%	0.11%	40.45%	3.98%
Roosevelt HS, SD	259	30.49%	3.95%	3.00%	7.65%	10.86%	0.04%	71.59%	2.91%
Rosemount HS, MN	464	14.71%	0.33%	6.63%	7.13%	6.26%	0.12%	76.25%	3.27%
Round Rock HS, TX	462	13.25%	0.40%	12.80%	5.68%	24.91%	0.29%	52.90%	3.03%
Rouse HS, TX	489	15.82%	0.36%	4.98%	4.44%	24.41%	0.30%	61.20%	4.32%
Russell County HS, KY	187	61.57%	0.24%	0.36%	1.19%	4.27%	0.00%	93.36%	0.59%
Russell HS, KY	341	38.86%	0.00%	1.51%	0.30%	0.60%	0.00%	95.78%	1.81%
Saginaw HS, TX	300	43.96%	0.42%	6.63%	14.32%	40.67%	0.21%	33.83%	3.92%
Saint James School, AL*	-	-	-	-	-	-	-	-	-
San Benito HS, TX	146	84.99%	0.00%	0.05%	0.09%	99.06%	0.00%	0.61%	0.19%

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San Marcos HS, CA	420	31.81%	0.73%	11.02%	3.08%	38.64%	0.70%	45.74%	0.09%
Sandra Day O'Connor HS, TX	442	23.31%	0.03%	2.03%	3.69%	58.94%	0.15%	32.13%	3.04%
Saratoga HS, CA	962	1.90%	0.00%	61.63%	0.36%	3.72%	0.22%	24.65%	9.41%
Savanna HS, CA	212	79.55%	0.11%	10.95%	2.47%	78.05%	0.32%	6.71%	1.40%
Scotch Plains-Fanwood HS, NJ	569	5.97%	0.00%	6.86%	10.10%	9.40%	0.00%	69.76%	3.75%
Seminole HS, FL	414	32.88%	0.21%	2.38%	3.81%	11.05%	0.05%	78.75%	3.75%
Sequoyah HS, TN	513	25.68%	0.10%	0.63%	0.63%	7.86%	0.00%	88.78%	1.99%
Seven Lakes HS, TX	670	11.86%	0.30%	28.03%	6.91%	24.30%	0.11%	37.49%	2.85%
Seymour HS, TN	169	14.71%	0.26%	1.03%	1.03%	2.45%	0.13%	93.16%	1.94%
Sharyland HS, TX	317	58.83%	0.00%	2.31%	0.71%	93.38%	0.00%	3.40%	0.19%
Sherman HS, TX	132	54.99%	0.90%	2.87%	12.47%	40.55%	0.00%	37.90%	5.31%
Siegel HS, TN	373	16.14%	0.00%	2.54%	14.95%	8.58%	0.06%	71.05%	2.77%
Signal Mountain HS, TN	471	4.39%	0.08%	2.62%	1.62%	3.86%	0.15%	89.51%	2.08%
Sky View HS, UT	236	29.05%	0.29%	0.44%	1.03%	10.56%	0.00%	86.28%	1.39%
Skyridge HS, UT	357	12.05%	0.41%	1.13%	0.65%	8.08%	1.78%	81.17%	3.36%
Smithson Valley HS, TX	613	12.95%	0.35%	1.93%	2.53%	36.54%	0.04%	54.93%	3.69%
Sount Point HS, OH	252	99.24%	0.00%	0.25%	5.81%	0.76%	0.00%	85.86%	7.32%
South County HS, VA	678	18.13%	0.09%	18.17%	20.30%	15.68%	0.22%	40.07%	5.46%
South Oldham HS, KY	510	17.40%	0.15%	3.05%	3.19%	4.35%	0.00%	86.73%	2.54%
Southwest HS, TX	231	80.21%	0.15%	3.15%	39.66%	41.68%	0.07%	12.89%	2.40%
Southwestern HS, KY	267	65.11%	0.16%	1.17%	1.09%	4.12%	0.00%	92.31%	1.17%
Sparkman HS, AL	563	27.64%	4.42%	2.07%	31.67%	4.31%	0.28%	55.57%	1.68%
Spring HS, TX	404	59.80%	0.70%	2.21%	37.11%	42.24%	0.28%	15.66%	1.79%
Springboro HS, OH	604	4.37%	0.00%	3.49%	1.57%	1.18%	0.00%	91.11%	2.65%
Spring-Ford HS, PA	307	13.34%	0.12%	7.49%	4.62%	3.50%	0.00%	79.93%	4.34%
St. Edward HS, OH*	-	-	-	-	-	-	-	-	-
Stansbury HS, UT	331	21.28%	0.38%	0.92%	1.19%	12.02%	0.87%	83.43%	1.14%
Stephen F. Austin HS, TX	333	30.09%	0.41%	42.82%	17.50%	16.86%	0.00%	20.00%	2.41%
Stoneman Douglas HS, FL	611	28.07%	0.24%	7.27%	10.84%	25.22%	0.06%	53.25%	3.12%
Summerville HS, SC	177	40.62%	0.58%	0.90%	26.87%	6.35%	0.22%	59.73%	5.35%
Summit HS, CA	484	66.17%	0.00%	6.77%	8.81%	74.90%	0.20%	7.89%	1.40%
Talawanda HS, OH	398	26.65%	0.00%	2.30%	1.46%	1.88%	0.10%	90.91%	3.34%
Tarpon Springs HS, FL	284	39.53%	0.36%	2.25%	9.01%	14.61%	0.00%	69.84%	3.92%
Terre Haute North Vigo HS, IN	200	41.07%	0.17%	0.56%	4.63%	3.56%	0.00%	84.24%	6.84%
Terre Haute South Vigo HS, IN	185	39.76%	0.12%	3.87%	7.50%	3.52%	0.00%	76.46%	8.42%
The Ann Richards School of Young Women Leaders, TX*	-	-	-	-	-	-	-	-	-
The Colony HS, TX	454	39.25%	0.49%	6.95%	13.81%	36.24%	0.20%	38.46%	3.85%
The King's Academy, CA*	-	-	-	-	-	-	-	-	-
The Olentangy HS, OH	621	6.07%	0.07%	10.56%	4.83%	2.55%	0.07%	78.19%	3.73%
The Woodlands HS, TX	802	7.04%	0.23%	6.61%	3.27%	24.60%	0.18%	62.07%	3.04%

School/State	IPR	FRL %	American Indian/Native %	Asian %	Black %	Hispanic %	Hawaiian/Pacific %	White %	Two or More %
Thomas Jefferson HS for Science and Technology, VA	663	1.85%	0.00%	70.24%	1.85%	2.41%	0.00%	20.55%	4.94%
Thousand Oaks HS, CA	428	25.01%	0.53%	6.41%	1.00%	30.80%	0.24%	56.10%	4.93%
Timber Creek HS, TX	456	21.60%	0.65%	7.27%	9.58%	22.86%	0.18%	55.30%	4.16%
Timber Creek HS, FL	381	33.60%	0.06%	6.13%	8.92%	39.70%	0.29%	41.11%	3.80%
Timberland HS, MO	504	13.53%	0.23%	1.48%	6.94%	4.21%	0.06%	84.59%	2.44%
Timpview HS, UT	309	30.78%	0.83%	3.18%	1.11%	18.64%	3.83%	69.31%	3.09%
Tippecanoe HS, OH	261	15.09%	0.00%	1.02%	0.51%	2.81%	0.00%	93.73%	1.92%
Tom Glenn HS, TX	367	33.08%	0.19%	1.95%	6.55%	36.99%	0.50%	49.91%	3.91%
Trinity HS, TX	231	49.13%	0.58%	10.92%	22.42%	29.35%	3.02%	29.19%	4.53%
Troy Athens HS, MI	512	17.27%	0.07%	19.95%	5.30%	4.32%	0.00%	67.17%	3.20%
Troy HS, OH	238	32.81%	0.08%	2.50%	5.08%	2.91%	0.17%	84.43%	4.83%
Troy HS, OH	238	32.81%	0.08%	2.50%	5.08%	2.91%	0.17%	84.43%	4.83%
Trumbull HS, CT	675	17.30%	0.29%	7.65%	5.28%	11.31%	0.00%	74.24%	1.24%
Uintah HS, UT	271	36.82%	4.95%	0.73%	0.28%	8.88%	0.17%	83.31%	1.69%
Union City HS, TN	216	28.44%	0.00%	0.00%	33.11%	10.89%	0.00%	55.56%	0.00%
Union HS, OK	184	20.35%	4.91%	7.53%	15.68%	31.84%	0.12%	32.13%	7.79%
United HS, TX	277	60.18%	0.05%	0.48%	0.12%	98.34%	0.05%	0.90%	0.07%
University HS, FL	215	59.81%	0.32%	7.78%	11.69%	57.03%	0.14%	20.57%	2.47%
University HS, IL	280	1.79%	0.00%	7.64%	5.37%	6.34%	0.16%	74.80%	5.53%
Upland HS, CA	261	53.21%	0.47%	8.08%	8.61%	55.74%	0.59%	24.44%	2.07%
Urbana HS, MD	601	5.92%	0.39%	13.41%	7.15%	11.23%	0.06%	62.68%	5.03%
Valley Christian HS, CA*	-	-	-	-	-	-	-	-	-
Valley View HS, TX	149	92.17%	0.00%	0.00%	0.00%	99.83%	0.00%	0.17%	0.00%
Vandegrift HS, TX	768	6.94%	0.33%	11.07%	2.55%	16.54%	0.11%	65.08%	4.32%
Veterans Memorial HS, TX	370	47.19%	0.15%	2.55%	16.65%	54.39%	0.00%	23.03%	3.23%
Veterans Memorial HS, TX	168	80.62%	0.11%	0.22%	0.16%	98.14%	0.00%	1.37%	0.00%
Victor HS, Ny	517	19.83%	0.43%	3.51%	3.36%	6.37%	0.07%	83.39%	2.86%
Victor J. Andrew HS, IL	474	17.66%	0.09%	5.74%	4.65%	12.69%	0.00%	74.39%	2.44%
Vincennes Lincoln HS, IN	321	52.17%	0.00%	1.09%	1.90%	4.76%	0.00%	88.04%	4.08%
Vista Murrieta HS, CA	360	30.19%	0.14%	12.18%	7.63%	35.68%	0.70%	35.88%	7.79%
Vista Ridge HS, TX	539	17.28%	0.21%	12.37%	5.45%	24.45%	0.21%	53.44%	3.86%
Wagner HS, TX	211	75.53%	0.33%	1.68%	28.83%	57.09%	0.51%	9.31%	2.25%
Wakeland HS, TX	849	5.09%	0.24%	9.11%	5.67%	12.21%	0.10%	70.16%	2.52%
Walled Lake Central HS, MI	464	26.04%	0.19%	5.79%	10.75%	4.21%	0.00%	76.86%	2.20%
Waller HS, TX	274	59.39%	0.29%	0.64%	9.98%	53.34%	0.00%	33.14%	2.61%
Walnut Hills HS, OH	149	15.89%	0.07%	4.64%	25.44%	3.39%	0.07%	59.41%	6.99%
Walter E. Stebbins HS, OH	126	51.62%	0.17%	2.65%	8.89%	4.87%	0.00%	76.92%	6.50%
Walton HS, GA	619	3.58%	0.11%	20.41%	6.07%	6.00%	0.07%	65.03%	2.31%

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Wando HS, SC	533	12.26%	0.05%	1.97%	10.52%	3.01%	0.08%	81.85%	2.53%
Warren HS, CA	260	67.12%	0.25%	2.59%	2.92%	89.20%	0.17%	4.43%	0.42%
Washington Township HS, NJ	471	16.03%	0.00%	5.60%	8.11%	4.88%	0.00%	79.44%	1.88%
Waxahachie HS, TX	244	44.18%	0.68%	0.47%	15.83%	34.32%	0.25%	46.04%	2.41%
Webster HS, NY	436	22.89%	0.22%	3.48%	4.37%	7.33%	0.07%	83.19%	1.33%
Weiss HS, TX	462	49.02%	0.14%	6.15%	15.04%	49.75%	0.29%	24.44%	4.19%
Wentzville Holt HS, MO	294	15.79%	0.17%	1.60%	8.12%	4.75%	0.00%	81.41%	3.95%
Wentzville Liberty HS, MO	444	13.11%	0.29%	2.72%	5.89%	6.48%	0.07%	82.40%	2.14%
Wesleyan School, GA*	-	-	-	-	-	-	-	-	-
West Harrison HS, MS	288	57.74%	0.18%	1.81%	30.50%	2.53%	0.00%	62.62%	2.26%
West Orange HS, NJ	689	44.81%	0.00%	5.90%	43.25%	28.99%	0.28%	19.22%	2.36%
West Salem HS, OR	427	33.10%	1.09%	2.25%	1.61%	20.44%	0.75%	66.95%	6.91%
Western HS, IN	399	24.47%	0.24%	1.41%	4.24%	3.41%	0.00%	86.82%	3.76%
Westfield HS, TX	148	57.28%	1.57%	4.33%	47.47%	42.47%	0.17%	3.39%	0.59%
Westfield HS, NJ	900	2.95%	0.00%	7.72%	2.57%	6.17%	0.00%	82.90%	0.59%
Westlake HS, TX	883	3.21%	0.32%	13.46%	0.72%	12.52%	0.04%	69.05%	3.90%
Westlake HS, UT	297	20.96%	0.31%	0.49%	0.80%	10.23%	1.14%	83.02%	4.01%
Westwood HS, TX	333	14.91%	0.36%	34.40%	3.63%	17.05%	0.07%	39.99%	4.50%
Wheaton Warrenville South HS, IL	726	23.63%	0.21%	5.27%	4.65%	20.42%	0.00%	64.74%	4.71%
White Knoll HS, SC	260	40.97%	0.31%	0.98%	20.84%	9.80%	0.15%	63.19%	4.72%
Willard HS, MO	304	39.95%	0.61%	1.15%	3.13%	4.28%	0.00%	89.30%	1.53%
William B. Travis HS, TX	505	29.38%	0.30%	25.16%	25.05%	20.87%	0.23%	24.59%	3.80%
William H. Taft HS, TX	392	38.11%	0.04%	3.23%	9.41%	65.81%	0.20%	17.60%	3.71%
William Hentry Harrison HS, IN	523	23.85%	0.35%	2.48%	4.35%	11.17%	0.00%	77.51%	4.14%
William Mason HS, OH	527	7.43%	0.11%	21.22%	3.93%	4.22%	0.23%	65.79%	4.50%
William S. Hart HS, CA	121	38.64%	0.00%	6.00%	1.53%	50.45%	0.14%	38.59%	3.20%
Williams Field HS, AZ	395	18.97%	0.97%	4.81%	6.00%	21.19%	0.65%	62.27%	4.11%
Williamstown HS, KY	238	42.22%	0.00%	0.89%	0.00%	0.44%	0.00%	97.33%	1.33%
Willis HS, TX	320	54.26%	0.33%	0.72%	7.80%	36.46%	0.05%	51.39%	3.25%
Willow Springs HS, MO	192	59.55%	1.24%	0.74%	0.99%	0.99%	0.00%	95.53%	0.50%
Wilmington HS, OH	207	47.96%	0.12%	0.84%	3.13%	3.13%	0.00%	84.38%	8.41%
Windermere HS, FL	431	21.66%	0.33%	6.44%	6.94%	36.23%	0.24%	47.65%	2.18%
Winston Churchill HS, TX	212	37.73%	0.46%	2.27%	4.88%	58.02%	0.04%	31.82%	2.51%
Woodford County HS, KY	193	38.40%	0.08%	1.72%	4.15%	15.44%	0.00%	74.45%	4.15%
Worthington Kilbourne HS, OH	658	18.15%	0.00%	5.22%	6.23%	7.32%	0.00%	73.99%	7.24%
Wylie East HS, TX	333	29.10%	0.62%	5.42%	12.38%	27.30%	0.21%	50.83%	3.25%
Wylie HS, TX	435	23.75%	0.31%	13.08%	15.98%	20.11%	0.11%	46.85%	3.56%
York Comprehensive HS, SC	252	44.61%	1.05%	0.86%	16.78%	8.16%	0.00%	70.20%	2.96%
Zionsville Community HS, IN	756	6.54%	0.24%	4.99%	2.13%	4.60%	0.00%	83.78%	4.26%