Statistical Analysis of 2018 ACS Data for South Central Elementary

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Is South Central Elementary School an Appropriate Location for the Boones Creek Classroom?

Southcentral elementary school is located in the southwestern portion of Washington County in the census block 619.02. This census tract also includes West View Head Start and is bordering the Greene County tract containing Chuckey Head Start. The proximity of these classrooms raises concerns on if there will be enough students in that area for these classroom slots. This is the review of the available data for the possibility of locating this classroom at Southcentral Elementary.

Using 2018 American Community Survey Census data, the tracts for all current Head Start locations in Washington County and the tract containing the Chuckey classroom in Greene County were examined. Tables are included for South Central individually as well as plots of several metrics for all classrooms. The tract containing South Central was compared statistically in metrics relevant to Head Start and tested at a 95% level of significance. The results of these statistically tests are summarized below.

When compared directly with Boones Creek, South Central had a significantly higher percentage of racially white citizens (99.5% vs 95.5%) and significantly lower percentages of the population that spoke English as a second language (ESL) (\sim 0% vs 6.3%). South Central also had significantly fewer households with a computer and broadband internet subscription. The unemployment rate for South Central was significantly higher (7.3% vs. 2.5%) than Boones Creek for the 2013-2018 time frame the ACS measures. The median income for South Central was significantly lower (\$39,078 vs \$54,288) than Boones Creek.

When compared with Chuckey (which is in Greene County, thus has a different total population contained in the tract so absolute counts are not relevant), South Central was only significantly different in two areas: it was had a lower percentage of households receiving cash public assistance (1.5% vs 5.4%) and it had a lower total population median age (41.1 vs 46.4).

When compared with Children First and Dunbar, South Central scored significantly lower in all major categories that Head Start uses for eligibility. This speaks to the overwhelming need for Head Start classrooms in the Children First and Dunbar census tracts (and thus why there are 5 classrooms in these areas) and should not reflected negatively on South Centrals need for a Head Start.

When compared with Lake Terrace, South Central had significantly lower ESL households (~0% vs 8.7%), significantly lower households with broadband internet access (72.1% vs 83.8%), and significantly higher percentage of the population that is racially white (99.5% vs 97%).

When compared with Harmony, South Central had significantly lower median age (41.1 vs 44.5), significantly higher percentage of families below the poverty line (9.7% vs 2.4%), significantly higher percentage of households on SNAP (18.2% vs 7.4%), significantly lower median income (\$39,078 vs \$55,848) and significantly fewer households with broadband internet (72.1 vs 83).

When compared with Grandview, South Central had significantly lower percentage ESL ($\sim 0\%$ vs 2.1%), significantly higher aggregate unemployment rate from 2013-2018 (7.3% vs 2.9%), significantly lower median income (\$39,078 vs \$50,354), and significantly lower median age (41.1 vs 45.3).

Finally, when compared with South Side, South Central had significantly lower percentage ESL (~0% vs 4.6%),

Table 1: South Central Profile 2018

Measure	Head Start Location	Census Tract	Count	Margin of Error	Percent	Percent Margin of Error
Grandparent living in household and responsible for children under 1	South Central	Census Tract 619.01, Washington County, Tennessee	0.0	17.0	0.0	25.8
Grandparent living in household and responsible for children 1-2 years old	South Central	Census Tract 619.01, Washington County, Tennessee	46.0	57.0	40.0	36.8
Grandparent living in household and responsible for children 3-4 years olds	South Central	Census Tract 619.01, Washington County, Tennessee	16.0	24.0	13.9	22.7
Children enrolled in preschool or nursery school	South Central	Census Tract 619.01, Washington County, Tennessee	46.0	47.0	2.9	3.2
Citizens with a Disability	South Central	Census Tract 619.01, Washington County, Tennessee	1704.0	395.0	23.7	5.3
Population ESL	South Central	Census Tract 619.01, Washington County, Tennessee	1.0	2.0	0.0	0.1
Households with a Computer	South Central	Census Tract 619.01, Washington County, Tennessee	2393.0	256.0	82.7	6.7
Households with Broadband internet	South Central	Census Tract 619.01, Washington County, Tennessee	2087.0	227.0	72.1	7.0
Unemployment Rate	South Central	Census Tract 619.01, Washington County, Tennessee	NA	NA	7.3	3.4
Median Income	South Central	Census Tract 619.01, Washington County, Tennessee	39078.0	8259.0	NA	NA
Total Households with Cash Public Assistance	South Central	Census Tract 619.01, Washington County, Tennessee	43.0	43.0	1.5	1.5
Total Households with SNAP	South Central	Census Tract 619.01, Washington County, Tennessee	528.0	192.0	18.2	6.7
Percentage of all families below poverty line	South Central	Census Tract 619.01, Washington County, Tennessee	NA	NA	9.7	5.1
Percentage of all families below poverty line with children under 5	South Central	Census Tract 619.01, Washington County, Tennessee	NA	NA	0.0	40.4
Total Population	South Central	Census Tract 619.01, Washington County, Tennessee	7197.0	626.0	7197.0	NA
Population Age under 5	South Central	Census Tract 619.01, Washington County, Tennessee	306.0	149.0	4.3	2.0
Median Age	South Central	Census Tract 619.01, Washington County, Tennessee	41.1	2.9	NA	NA
Population Racially White	South Central	Census Tract 619.01, Washington County, Tennessee	7159.0	626.0	99.5	0.6

significantly lower percentage of households with a both a computer and broadband internet, a significantly higher median age (41.1 vs 32.3), and significantly higher population that is racially white (99.5% vs 85.9%).

Summary

In summary, the census tract containing South Central is most similar to the tract containing the Chuckey Head Start classroom in Greene County. It tends to be higher in metrics concerning poverty than all but the two highest need tracts in Washington county, but less racially diverse. When compared with the old Boones Creek location, it has significantly fewer ESL families, but also has significantly less income. The under 5 years of age population is similar across all tracts (excluding Children First and Dunbar) and factoring in the Head Start waitlist in this area in 2019-2020 filling student slots should not be an issue, as long as students from Greene County can/will attend this new classroom. With this caveat, the 2018 ACS data supports the placement of a Head Start Classroom at South Central Elementary.

Percent of Population under 5 Years Old









