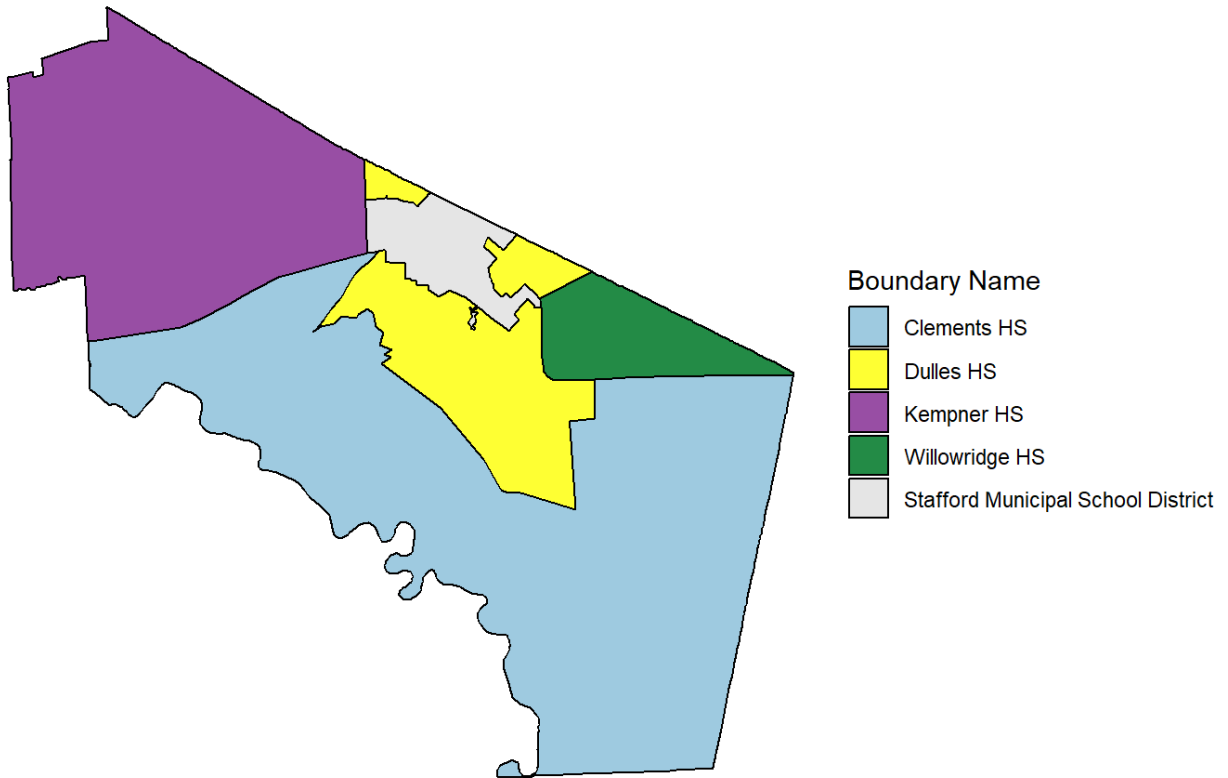


Appendix

Figure A1

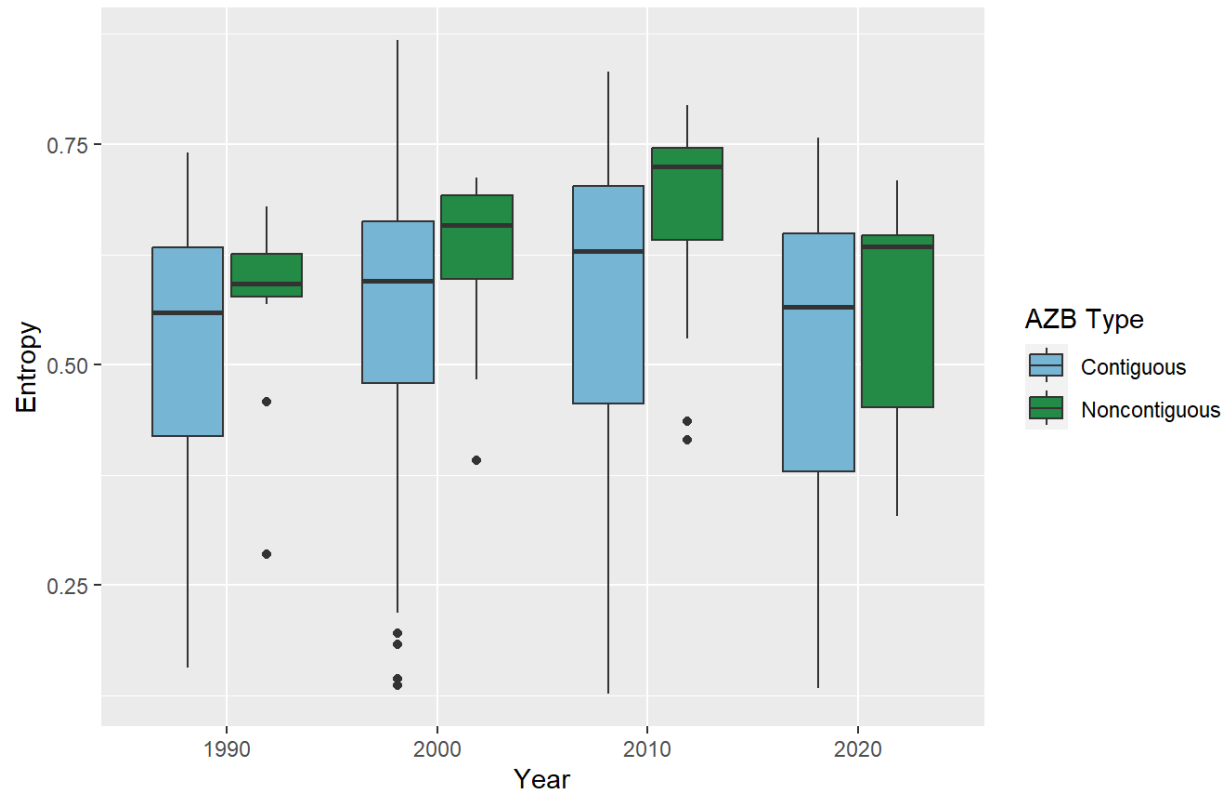
Example of a noncontiguous AZB in Fort Bend ISD, 1990



Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A2

Boxplot of school-level entropy scores in Tucson USD, by AZB type and year



Notes: Median school-level entropies for schools with contiguous and schools with noncontiguous AZBs were statistically significantly different in 2010, at $p < 0.05$ according to Welch two sample t -test. They are not statistically significantly different at any other time points.

Table A1*Interracial exposure rates in Tucson USD by racial group and AZB type*

	Contiguous				Noncontiguous			
	1989-1990	1999-2000	2009-2010	2019-2020	1989-1990	1999-2000	2009-2010	2019-2020
Am. Ind./AL Nat. to Am. Ind./AL Nat.	15.0	18.9	16.2	9.7	2.3	3.3	3.8	4.6
Am. Ind./AL Nat. to Asian	1.1	1.2	1.6	0.9	2.3	2.2	2.8	1.1
Am. Ind./AL Nat. to Black	3.9	4.7	5.1	4.0	6.5	6.6	9.5	6.1
Am. Ind./AL Nat. to Hispanic	44.6	52.5	60.6	72.2	35.7	50.0	57.8	71.7
Am. Ind./AL Nat. to White	35.3	22.7	16.6	10.6	53.3	37.9	26.0	13.4
Asian to Am. Ind./AL Nat.	1.9	2.1	3.1	2.3	1.3	2.3	2.8	1.8
Asian to Asian	3.1	3.7	4.0	2.2	3.7	3.7	4.1	2.9
Asian to Black	7.5	8.6	8.9	8.4	6.1	7.3	11.2	9.5
Asian to Hispanic	25.0	30.7	43.4	55.2	24.5	38.4	48.3	57.8
Asian to White	62.4	54.9	40.6	26.4	64.4	48.3	33.6	23.0
Black to Am. Ind./AL Nat.	2.2	2.9	3.5	2.3	1.6	2.7	2.9	2.1
Black to Asian	2.6	3.1	3.1	1.8	2.6	2.8	3.4	2.0
Black to Black	8.4	9.1	10.2	11.7	6.6	7.7	12.1	11.2
Black to Hispanic	30.2	37.4	49.6	55.8	30.2	42.1	51.0	58.3
Black to White	56.5	47.4	33.7	23.1	58.9	44.8	30.7	21.7
Hispanic to Am. Ind./AL Nat.	4.0	5.0	5.0	3.9	2.0	3.1	3.4	3.3
Hispanic to Asian	1.4	1.7	1.8	1.1	2.3	2.3	2.8	1.6
Hispanic to Black	4.7	5.7	6.0	5.2	6.7	6.6	10.0	7.7
Hispanic to Hispanic	54.0	59.1	67.4	71.3	36.2	50.8	57.1	65.9
Hispanic to White	35.9	28.4	19.7	15.2	52.9	37.2	26.7	17.6
White to Am. Ind./AL Nat.	2.1	2.2	2.8	2.0	1.3	2.6	2.8	1.9
White to Asian	2.2	3.1	3.4	1.9	2.8	3.1	3.6	2.0
White to Black	5.9	7.3	8.2	7.4	5.9	7.5	10.9	9.2
White to Hispanic	23.9	28.7	39.5	52.0	24.2	39.8	48.4	56.5
White to White	65.8	58.8	46.1	30.9	65.7	47.0	34.3	24.9
White to Non-White	34.2	41.2	53.9	69.1	34.3	53.0	65.7	75.1
Non-White to White	39.5	31.3	21.6	16.4	54.7	38.6	27.6	18.4

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Table A2

Percent of students in Tucson USD attending racially concentrated or identifiable schools by racial group and school AZB type

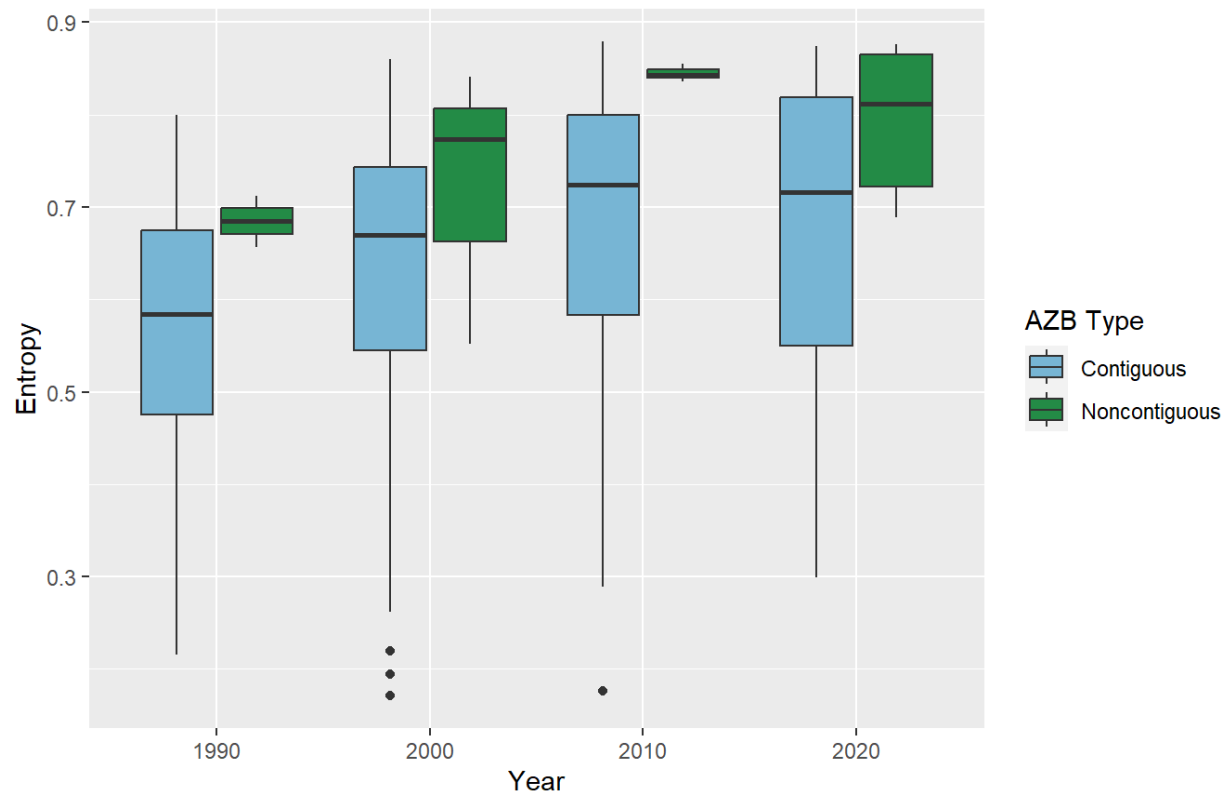
	AZB Type	1989-1990	1999-2000	2009-2010	2019-2020
Concentrated					
Hispanic	Noncontiguous	8.8	20.0	24.5	46.3
Hispanic	Contiguous	34.9	38.2	55.5	55.0
White	Noncontiguous	69.8	0.0	0.0	0.0
White	Contiguous	70.1	37.2	12.2	0.0
Identifiable					
Am. Indian/Alaska Native	Contiguous	25.6	37.5	19.8	8.5
Hispanic	Noncontiguous	13.2	20.0	0.0	0.0
Hispanic	Contiguous	44.3	47.4	43.0	19.1
White	Noncontiguous	15.1	4.0	0.0	0.0
White	Contiguous	35.1	42.0	39.6	23.4

Note: Combinations of racial groups/AZB types not included here do not have concentrated or identifiable schools in any of the years studied. Concentrated schools are those with greater than or equal to 70% of its student body belonging to the same group. Identifiable schools are those with compositions that differ by more than +/- 25 percentage points from the district's overall composition.

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A3

Boxplot of school-level entropy scores in Fort Bend ISD, by AZB type and year



Notes: Median school-level entropies for schools with contiguous and schools with noncontiguous AZBs are not statistically significantly different at any time point, as measured by a Welch's two-sample t -test, given the low number of schools with noncontiguous AZBs.

Table A3*Interracial exposure rates in Fort Bend ISD by racial group and AZB type*

	Contiguous				Noncontiguous			
	1989-1990	1999-2000	2009-2010	2019-2020	1989-1990	1999-2000	2009-2010	2019-2020
Asian to Asian	13.5	22.9	35.1	41.5	11.9	26.5	29.5	44.8
Asian to Black	16.3	13.0	19.0	18.6	11.2	20.3	23.5	13.9
Asian to Hispanic	13.1	12.7	16.8	18.3	17.2	14.0	15.7	15.8
Asian to White	57.1	51.3	28.8	17.3	59.7	39.2	31.0	21.5
Black to Asian	4.9	6.7	12.8	16.8	9.8	18.2	27.4	35.8
Black to Black	61.7	52.3	45.9	38.8	13.0	32.2	26.5	19.0
Black to Hispanic	14.0	20.0	27.3	29.9	15.1	23.3	16.9	20.4
Black to White	19.3	20.9	13.8	11.1	61.9	26.0	29.0	21.1
Hispanic to Asian	8.6	10.6	14.6	17.1	11.5	17.7	27.9	36.5
Hispanic to Black	31.0	32.3	35.1	30.9	11.6	32.9	25.7	18.3
Hispanic to Hispanic	19.4	26.9	35.2	36.8	16.8	23.8	16.6	20.0
Hispanic to White	40.9	30.0	14.9	11.9	60.1	25.3	29.5	21.5
White to Asian	11.4	18.5	28.1	28.8	10.5	26.7	29.4	40.7
White to Black	13.0	14.5	19.9	20.4	12.5	19.7	23.6	15.5
White to Hispanic	12.4	12.9	16.7	21.1	15.8	13.6	15.7	17.7
White to White	63.1	53.9	35.0	25.2	61.2	40.0	31.0	22.0
White to Non-White	36.9	46.1	65.0	74.8	38.8	60.0	69.0	78.0
Non-White to White	31.3	30.9	18.3	13.6	60.6	30.4	30.0	21.4

Note: We do not report American Indian/Alaska Native students' exposure to other groups because FBISD has so few American Indian/Alaska Native students.

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Table A4

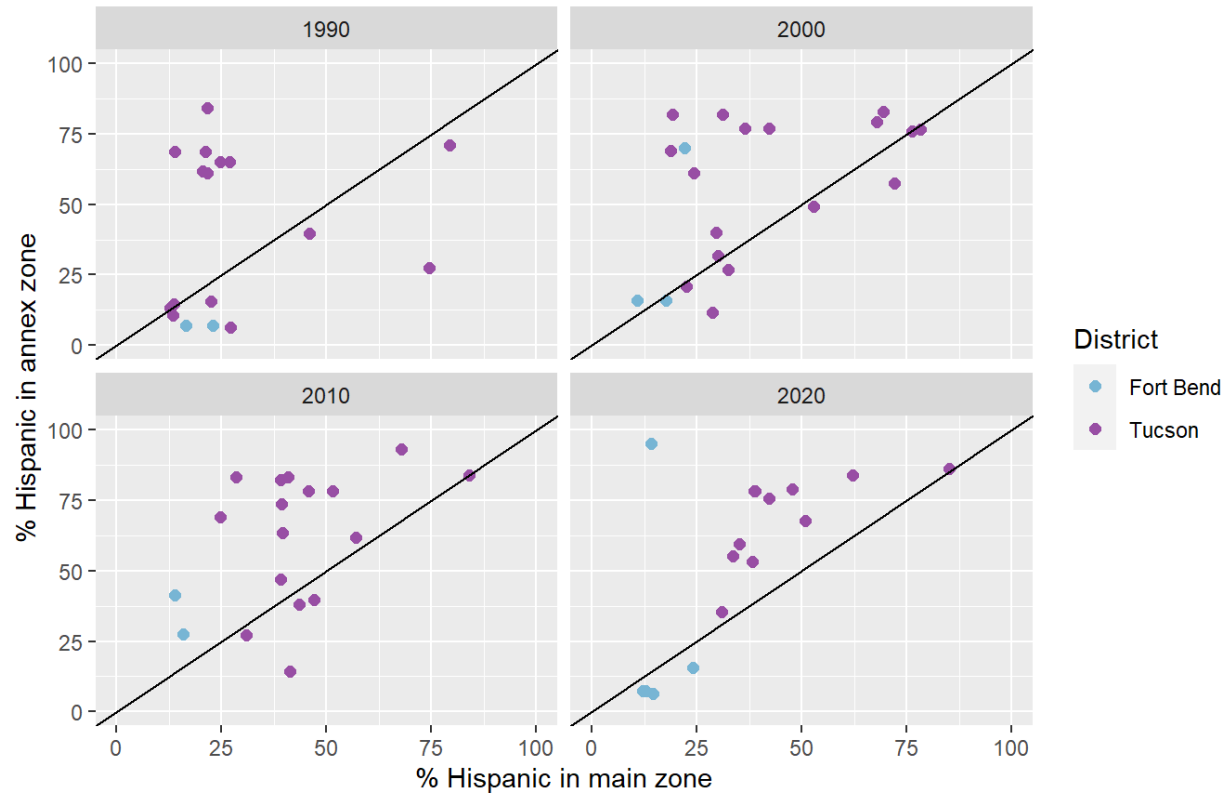
Percent of students in Fort Bend ISD attending racially concentrated or identifiable schools by racial group and school AZB type

AZB Type		1989-1990	1999-2000	2009-2010	2019-2020
Concentrated					
Asian	Contiguous	0.0	0.0	0.0	6.8
Black	Contiguous	61.7	35.4	16.6	5.9
Hispanic	Contiguous	0.0	0.0	3.6	3.2
White	Contiguous	33.3	8.3	2.9	0.0
Identifiable					
Asian	Noncontiguous	0.0	0.0	0.0	28.4
Asian	Contiguous	0.0	0.0	19.9	33.3
Black	Noncontiguous	0.0	34.6	0.0	0.0
Black	Contiguous	68.0	52.3	31.6	29.1
Hispanic	Contiguous	5.8	23.2	23.8	27.1
White	Noncontiguous	0.0	1.1	0.0	0.0
White	Contiguous	30.8	18.5	10.9	12.3

Note: Combinations of racial groups/AZB types not included here do not have concentrated or identifiable schools in any of the years studied. Concentrated schools are those with greater than or equal to 70% of its student body belonging to the same group. Identifiable schools are those with compositions that differ by more than +/- 25 percentage points from the district's overall composition.

Figure A4

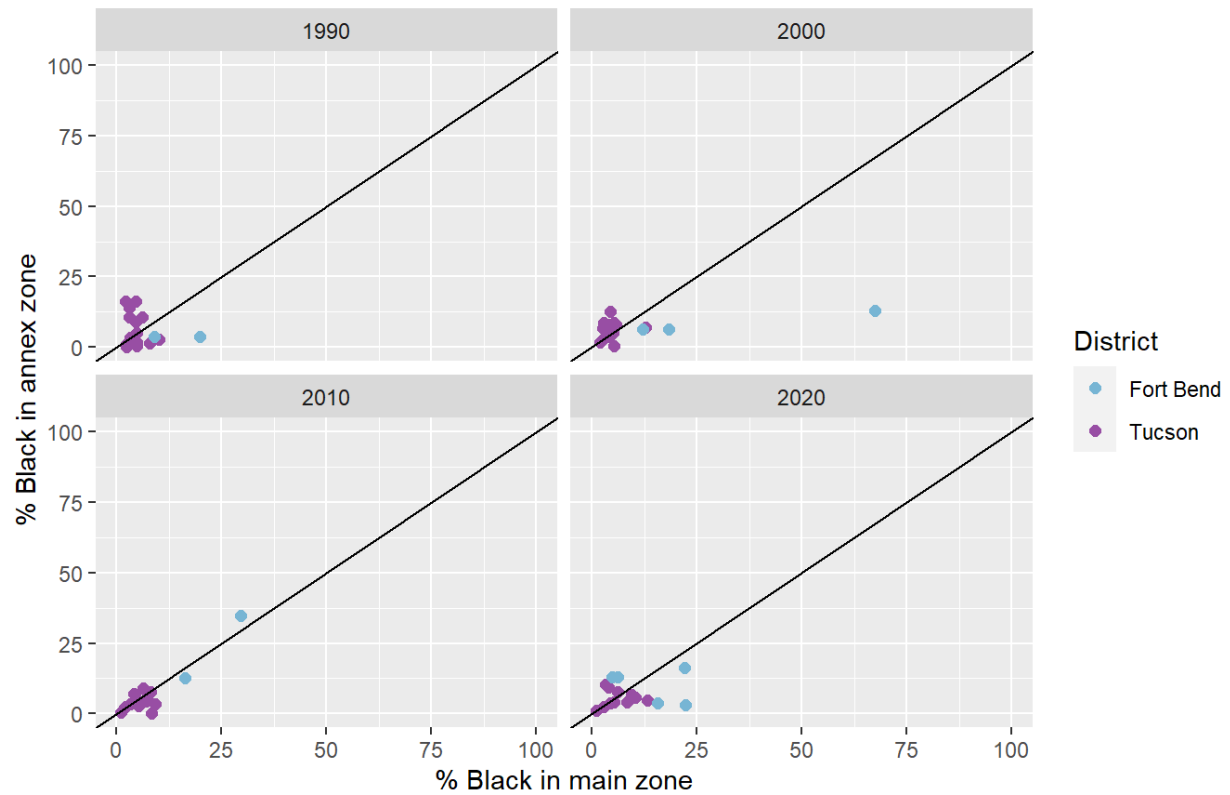
Percent of main and annex zone populations comprised of Hispanic youth, by district and year



Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A5

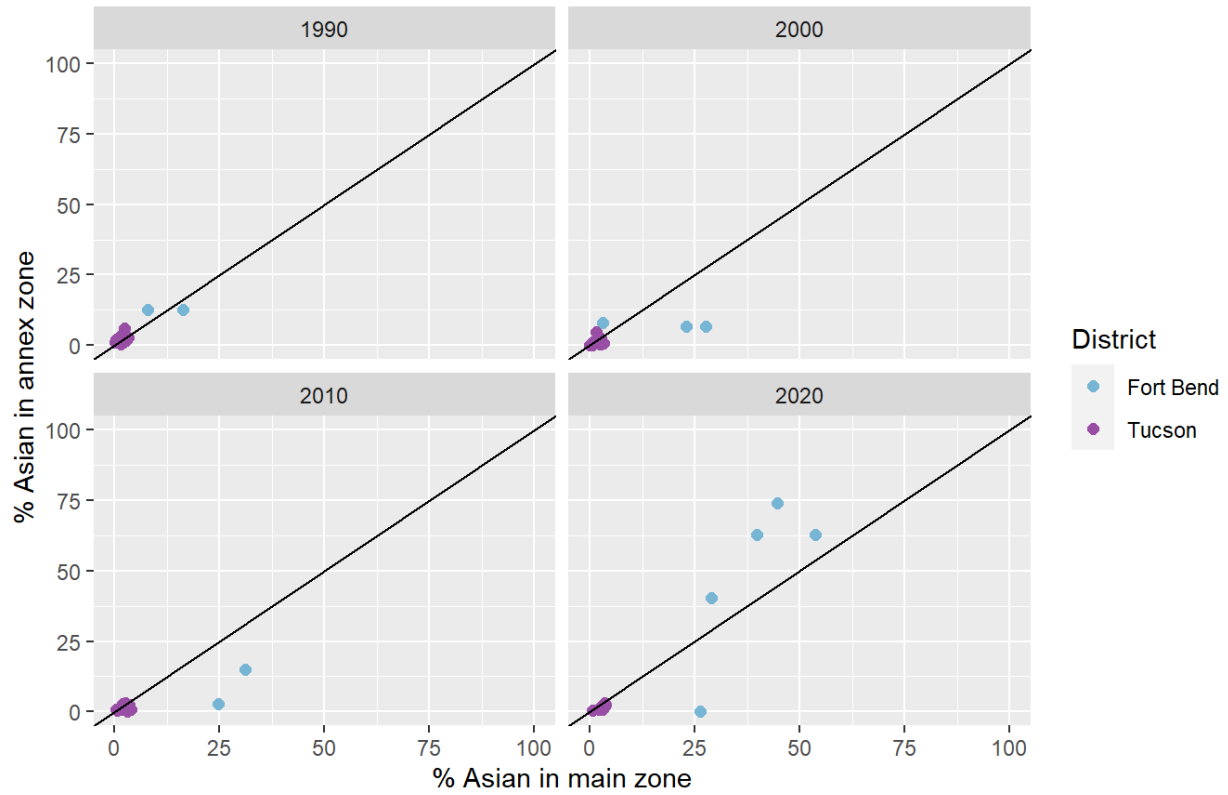
Percent of main and annex zone populations comprised of Black youth, by district and year



Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A6

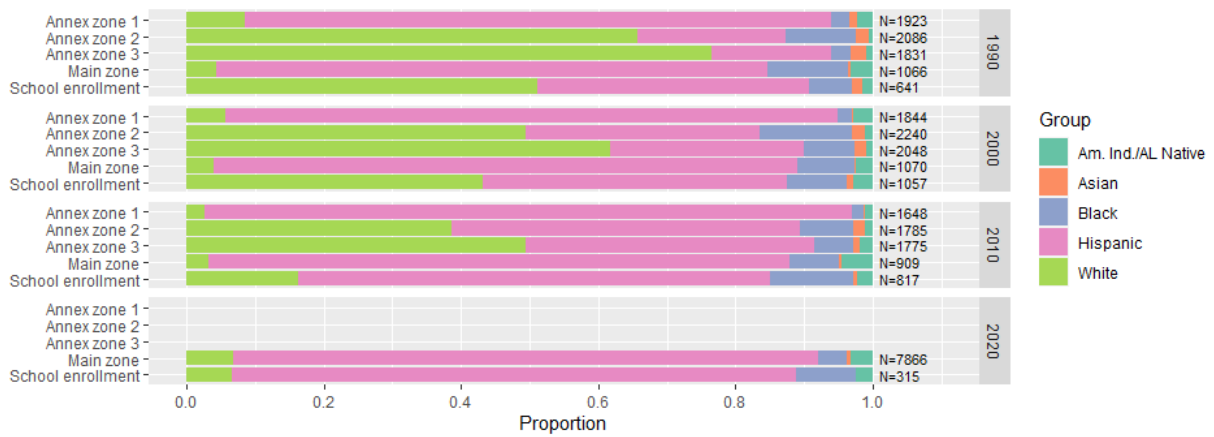
Percent of main and annex zone populations comprised of Asian youth, by district and year



Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A7

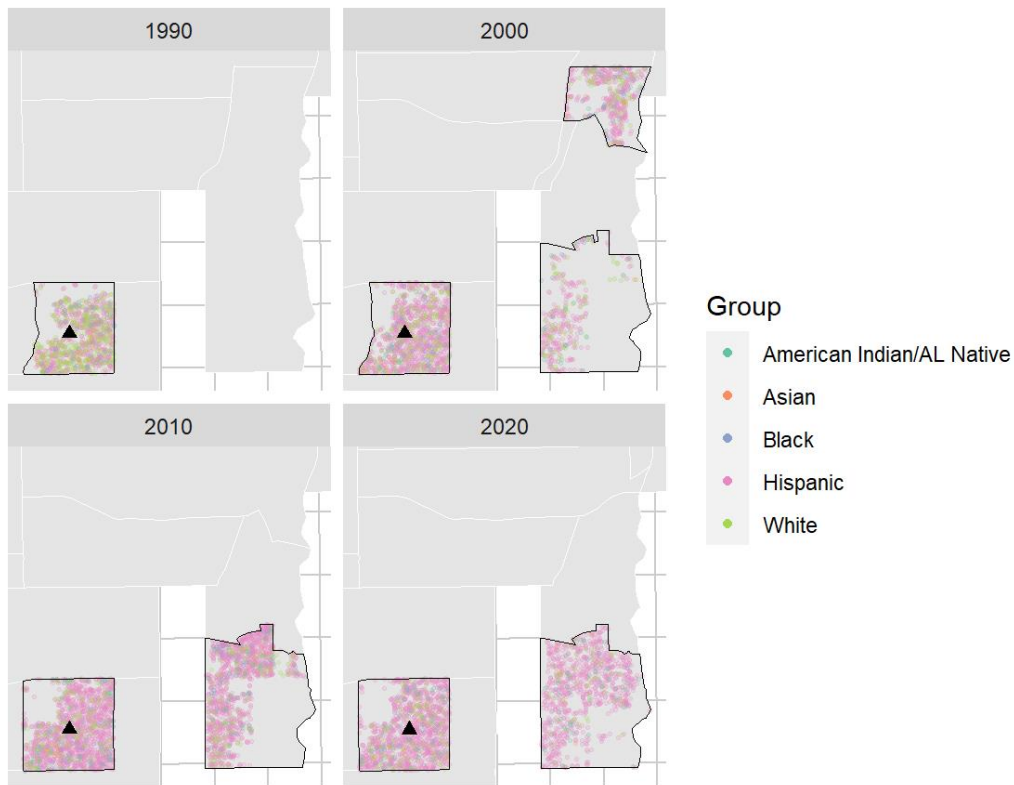
Composition of Utterback Middle School (TUSD) attendance zones and school enrollment, by year



Note: Numeric labels indicate the total under age 18 population living in attendance zones and the total enrollment in the school.

Figure A8

Composition of the youth population residing within the Miller Elementary School AZB, 1990 to 2020

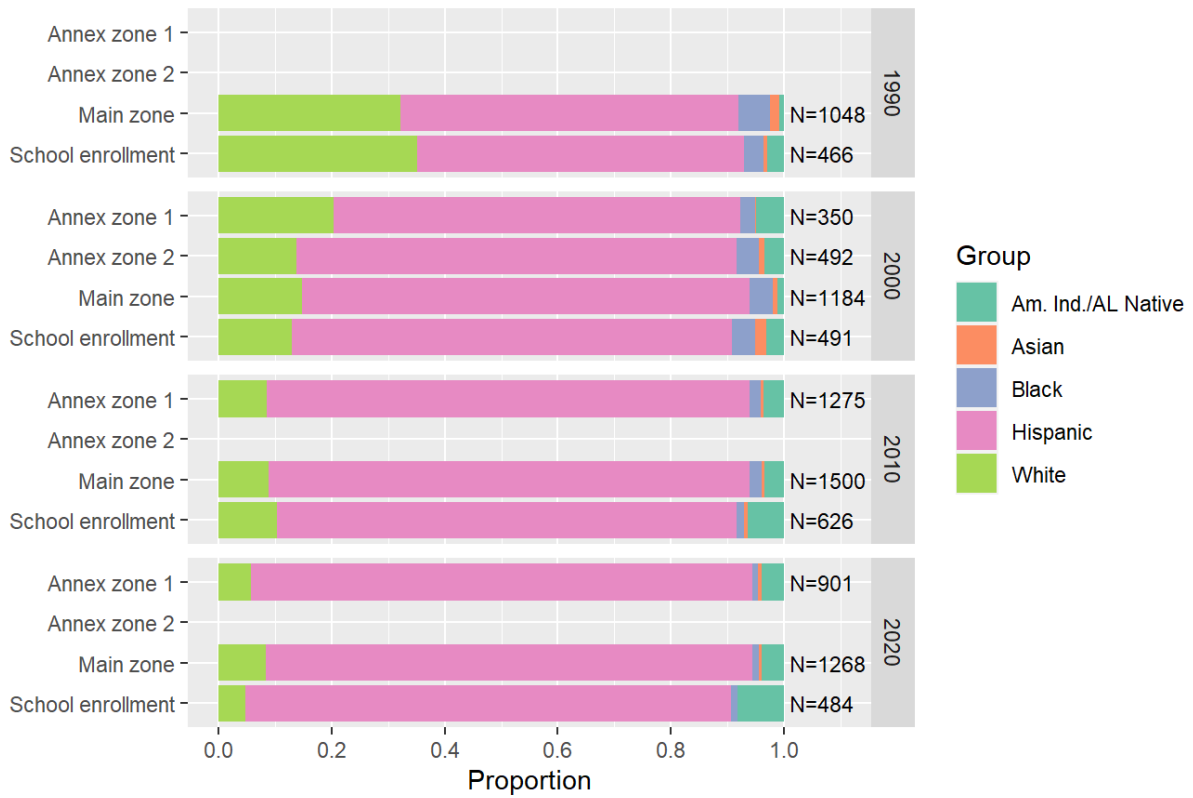


Note: Each dot represents four residents under age 18. Dots are placed randomly within developed parts of the main and annex zones and do not represent actual addresses. School location is denoted by the black triangle. The main zone is classified as the zone containing the school location. In 2000, 2010, and 2020, we classify the southeast zone as annex 1. In 2000, we classify the northeast zone as annex 2.

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A9

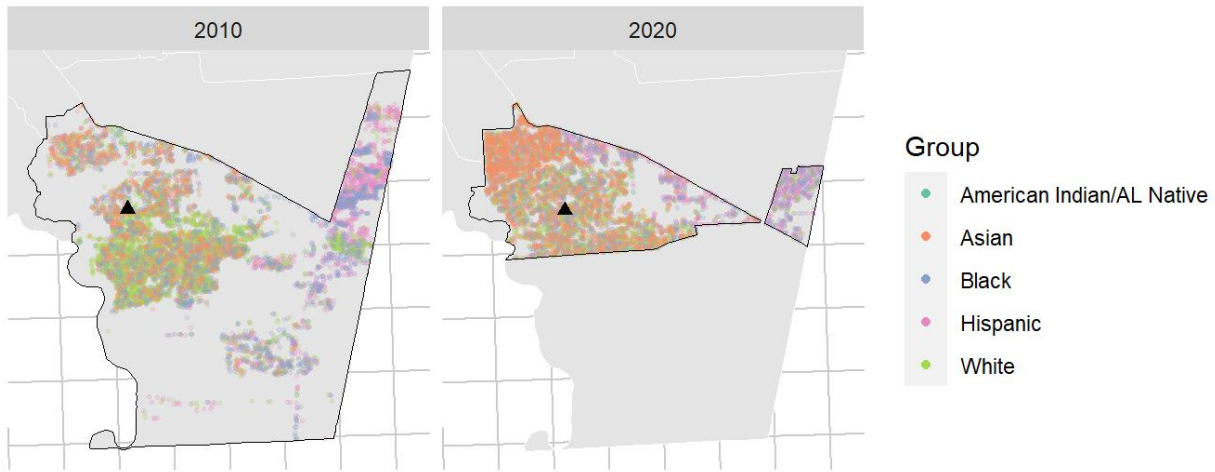
Composition of Miller Elementary School (TUSD) attendance zones and school enrollment, by year



Note: Numeric labels indicate the total under age 18 population living in attendance zones and the total enrollment in the school.

Figure A10

Composition of the youth population residing within Billy Baines Middle School AZB, 2010-2020

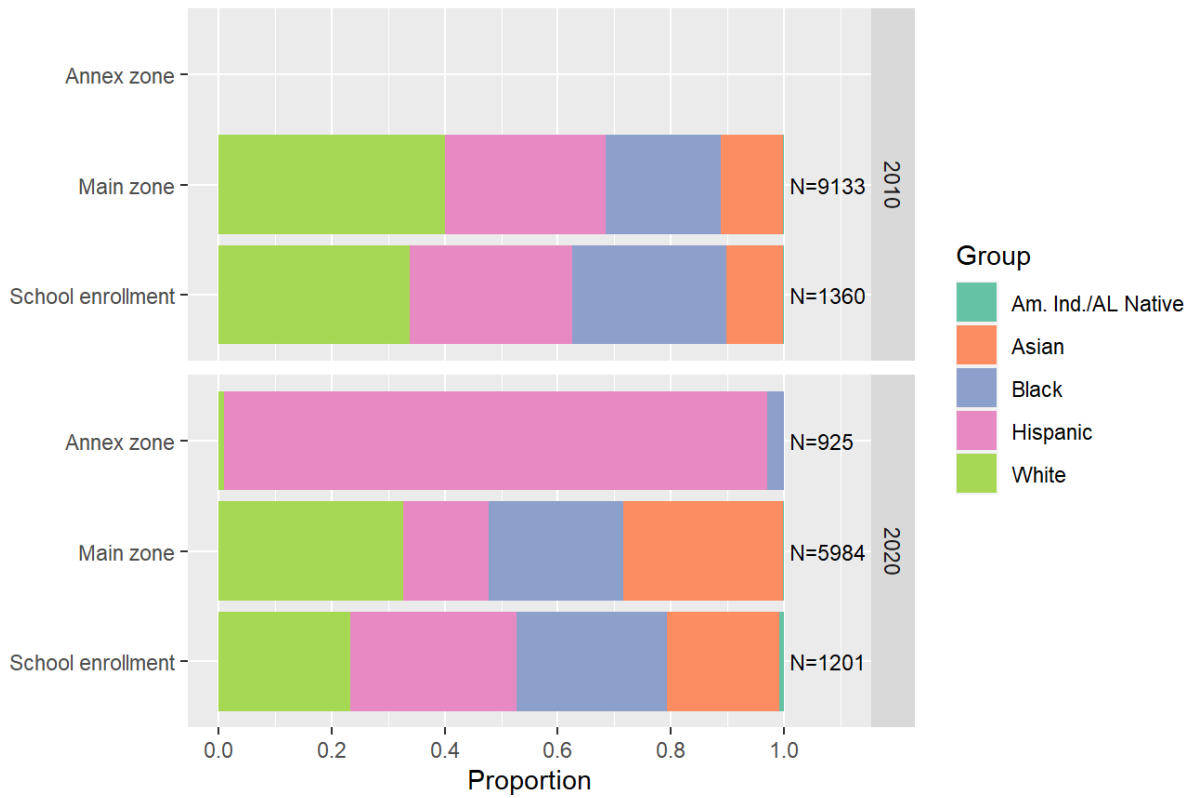


Note: Each dot represents four residents under age 18. Dots are placed randomly within developed parts of the main and annex zones and do not represent actual addresses. School location is denoted by the black triangle. The main zone is classified as the zone containing the school location. In 2020, we classify the eastern zone as the annex zone.

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A11

Composition of Billy Baines Middle School (FBISD) attendance zones and school enrollment, by year



Note: Numeric labels indicate the total under age 18 population living in attendance zones and the total enrollment in the school.

Figure A12

Composition of the youth population residing within EA Jones Elementary School (FBISD) AZB, 1990-2020

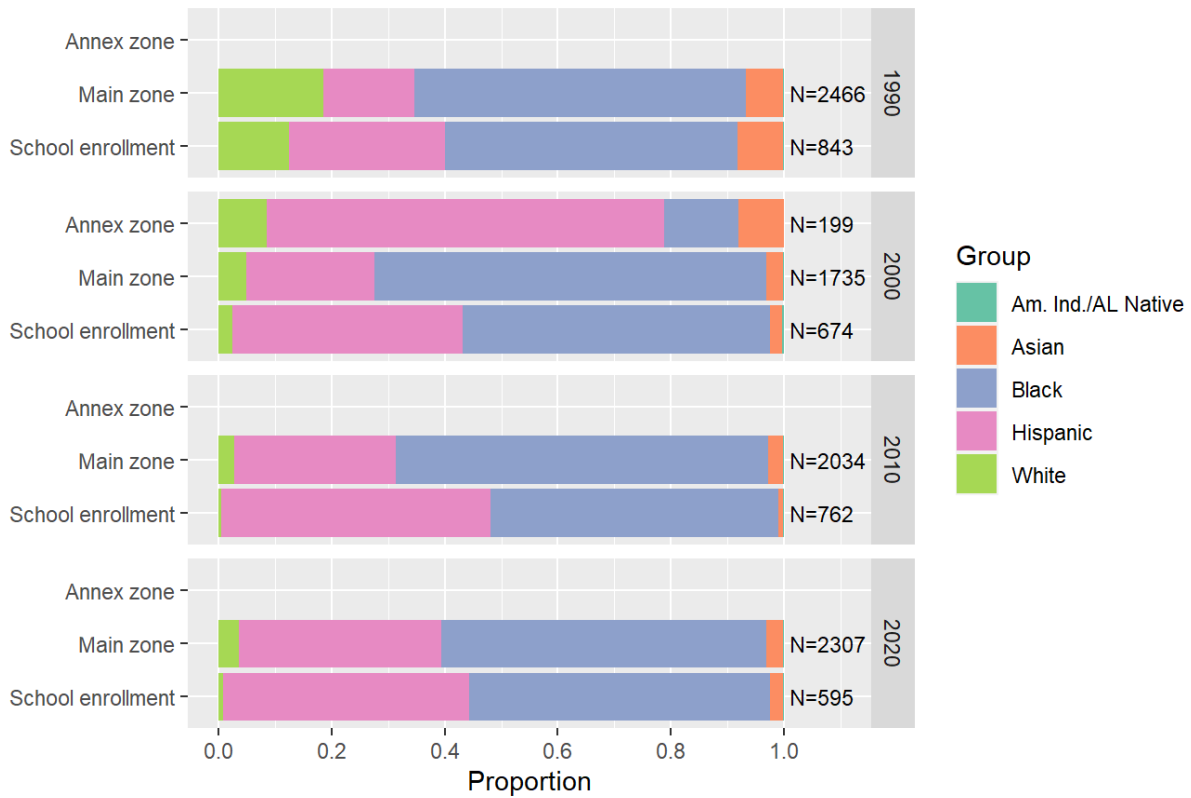


Note: Each dot represents four residents under age 18. Dots are placed randomly within developed parts of the main and annex zones and do not represent actual addresses. School location is denoted by the black triangle. The main zone is classified as the zone containing the school location. In 2000, we classify the smaller zone to the west as the annex zone.

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>

Figure A13

Composition of EA Jones Elementary School (FBISD) attendance zones and school enrollment, by year



Note: Numeric labels indicate the total under age 18 population living in attendance zones and the total enrollment in the school.

Citation: Asson, S., Buck, R. K., Bodenschatz, H., Frankenberg, E., & Fowler, C. S. (2024). The role of noncontiguous attendance zones in shaping school populations: A case study of Tucson, Arizona and Fort Bend, Texas. *Education Policy Analysis Archives*, 32(42). <https://doi.org/10.14507/epaa.32.8302>