



# How Zoning Promotes Inequality in Education: The Case of the Buffalo Area (Appendix 1)

SEPTEMBER 20, 2023

**Appendix 1: Comparison of Neighborhoods in the City of Buffalo to East Aurora: Key Indicators**

<b>Indicator</b>	<b>City of Buffalo, Elmwood–Bidwell</b>	<b>City of Buffalo, MLK Park</b>	<b>East Aurora</b>
<b>Land Use:</b>			
Population density, 1,000 people/square mile, 2020	9.44	6.82	2.39
Share of lot area with existing structure in residential use, 2021	50.5%	37.9%	72.5%
Share of lot area with single-family residence as existing structure, 2021	14.8%	14.2%	67.3%
Share of lot area with a two- to three-family structure or apartment building as existing structure, 2021	35.2%	22.9%	3.5%
Share of lot area, vacant land for residential use, 2021	1.0%	19.1%	5.6%
Housing units authorized by new building permits, 2014–2021 <sup>1</sup>	229	51	17
Single-family housing units authorized by new building permits, 2014–2021	3	1	17
<b>Demographics:</b>			
Population size, 2020	16,513	4,685	5,998
Growth of population, 2010–2020	1.2%	24.3%	-3.8%
Share of population Hispanic, 2021	9.4%	12.5%	1.9%
Share of population non-Hispanic Black, 2021	15.6%	70.4%	0.7%
Share of population non-Hispanic Asian, 2021	3.2%	12.2%	0.5%
Share of population non-Hispanic white, 2021	68.2%	1.5%	94.9%
Share of population aged 65 years old or above, 2021	12.9%	16.2%	26.1%
Share of population foreign born, 2021	8.3% <sup>2</sup>	11.8% <sup>3</sup>	2.2%
Median household income, 2021	\$66,882	\$24,643	\$88,286
Poverty rate, 2021	20.8% <sup>4</sup>	28.5% <sup>5</sup>	2.8%
Unemployment rate, 2021	4.8% <sup>6</sup>	13.8% <sup>7</sup>	3.7%

<sup>1</sup> The indicators for two neighborhoods in the City of Buffalo rely on two data sources: a multi-family development dataset we requested from the City of Buffalo with the year the permit was issued, and a few single- and two-family new building developments that we identified from the permit data through Open Data Buffalo Portal (<https://data.buffalony.gov/>). The village-level data comes from the Building and Zoning Office of the Town of Aurora/Village of East Aurora.

<sup>2</sup> The indicator is aggregated from the Census Tract level to the neighborhood level due to data availability. If not noted, other demographic indicators for the two neighborhoods in the City of Buffalo are aggregated from the Census Block Group level American Community Survey estimates.

<sup>3</sup> Same as footnote 2.

<sup>4</sup> Same as footnote 2.

<sup>5</sup> Same as footnote 2.

<sup>6</sup> Same as footnote 2.

<sup>7</sup> Same as footnote 2.

Population aged 25 years old or above without a high school diploma, 2021	8.0%	20.3%	2.9%
Population aged 25 years old or above with a bachelor's degree or above, 2021	56.6%	17.4%	53.5%
Share of occupied housing units occupied by renter, 2021	56.5%	57.0%	26.9%
Median single-family housing price, 2021	\$436,750	\$65,000	\$320,000
<b>School Characteristics:</b>			
Share of students performing at grade level in English, 2019 <sup>8</sup>	25.4%	16.1%	45.0%
Share of students performing at grade level in Math, 2019 <sup>9</sup>	17.5%	13.1%	54.5%
Four-year high school graduation rates, 2021	81.0%	41.6%	98.1%
Share of students qualifying for FRPL, elementary schools, 2021	86.6%	88.2%	12.3%
Share of students qualifying for FRPL, secondary schools, 2021	92.4%	85.2%	10.9%
Student-teacher ratio, elementary schools, 2022	10.4	9.7	11.5
Student-teacher ratio, secondary schools, 2022	6.8	6.8	10.9
Teacher turnover rate, 2021 <sup>10</sup>	(not available)	(not available)	10.0%
Per pupil expenditure, 2020	\$13,963	\$14,629	\$11,775
Share of students who are Asian, elementary schools, 2022	29.9%	16.1%	0.3%
Share of students who are Black, elementary schools, 2022	43.2%	63.9%	0.0%
Share of students who are Hispanic, elementary schools, 2022	10.6%	6.8%	5.2%
Share of students who are white, elementary schools, 2022	13.2%	8.3%	94.3%
Share of students who are Asian, secondary schools, 2022	24.3%	10.6%	0.6%
Share of students who are Black, secondary schools, 2022	35.6%	59.3%	0.5%
Share of students who are Hispanic, secondary schools, 2022	31.5%	17.6%	2.9%
Share of students who are white, secondary schools, 2022	8.6%	9.2%	93.8%
Share of teachers in their first or second year of teaching, 2017	14.5%	20.6%	13.3%

<sup>8</sup> Data for 2021 is available, but was during pandemic.

<sup>9</sup> Same as footnote 8.

<sup>10</sup> The New York State Education Department teacher turnover data points have a high missing rate at the school level. Therefore, we were not able to aggregate the turnover rate from the school level in the two neighborhoods in the City of Buffalo. The East Aurora data point comes from the school district level reported data.

Indicator	Methodology
<b>Land Use:</b>	
Population density, 1,000 people/square mile, 2020	Population density is calculated by dividing a geographic area's population by its land area and is reported in thousands of people per square mile. The U.S. Census Bureau advises that American Community Survey (ACS) population estimates should be compared with caution across years.
Share of lot area with existing structure in residential use, 2021	Percent of lot area of parcels with residential structure.
Share of lot area with single-family residence as existing structure, 2021	Percent of lot area of parcels with one family dwellings constructed for year-round occupancy (adequate insulation, heating, etc.).
Share of lot area with a two to three family structure or apartment building as existing structure, 2021	Percent of lot area of parcels with two or three family dwellings constructed for year-round occupancy, or apartments.
Share of lot area, vacant land for residential use, 2021	Percent of lot area of parcels that are vacant land for residential use.
<b>Demographics:</b>	<i>Most of the demographics in indicators used 2017–2021 ACS 5-year estimates because the localities have a small population size, and 1-year estimates are not available or have large margin of errors. However, the population size used Decennial Census 2020 data because the information is available.</i>
Share of population Hispanic, 2021	This indicator measures the percentage of the total population made up of each of the following racial/ethnic groups: Asian (non-Hispanic), Black (non-Hispanic), Hispanic (of any race), and white (non-Hispanic). The percentages of the four groups may not add up to 100 because people of other races or two or more races are not displayed.
Share of population non-Hispanic Asian, 2021	(Same as above)
Share of population non-Hispanic Black, 2021	(Same as above)
Share of population non-Hispanic White, 2021	(Same as above)
Share of population aged 65 years old or above, 2021	This indicator measures residents aged 65 years or older as a percentage of the entire population in a given geographic area.
Share of population foreign-born, 2021	This indicator measures the share of the population that is foreign-born. Foreign-born includes all those born outside the United States or Puerto Rico, regardless of whether they currently are United States citizens. Children born abroad to parents who are U.S. citizens are not counted as foreign-born.

Median household income, 2021	Household income is the total income of all members of a household aged 15 years or older. The U.S. Census Bureau advises against comparing income data between the Decennial Census and the ACS due to differences in question construction and sampling, so we urge caution when comparing this indicator over time, particularly at the neighborhood level. Scarsdale median household income is top coded in the ACS data.
Poverty rate, 2021	This indicator measures the number of people below the poverty threshold divided by the number of people for whom poverty status was determined. Poverty status is determined by the U.S. Census Bureau based on household size, composition, the number of children under 18 years of age, and individual or family income. The U.S. Census Bureau advises that ACS poverty data should be compared with caution across years.
Unemployment rate, 2021	This indicator measures the number of people aged 16 years and older in the civilian labor force who are unemployed, divided by the total number of people aged 16 years and older in the civilian labor force. People are considered to be unemployed if they meet the following criteria: they have not worked during the week of the survey; they have been looking for a job during the previous four weeks; and they were available to begin work. The U.S. Census Bureau advises using caution when comparing the 2000 Census unemployment rate to the ACS figures because of differences in question construction and sampling.
Population aged 25 years old or above without a high school diploma, 2021	This indicator measures the population aged 25 years old or above who have not graduated from high school and have not received a GED, as a percentage of the entire population in a given geographic area.
Population aged 25 years old or above with a bachelor's degree or above, 2021	This indicator measures the population aged 25 years old or above who have a bachelor's degree or above, as a percentage of the entire population in a given geographic area.
Median single-family housing sale price, 2021	The median sales price for single-family properties, in 2021 dollars. Price adjusted using the Consumer Price Index from the Bureau of Labor Statistics.
<b>School Characteristics:</b>	
Share of students performing at grade level in English, 2019	These indicators report the percentage of fourth-grade students performing at or above grade level (termed “proficient”) in English language arts and math. For each locality, we aggregate the proficiency rates from each school that students in the locality could attend. For this indicator, school years are labeled according to the calendar year in which the school year ends. For example, 2019 corresponds to the 2018–2019 school year.
Share of students performing at grade level in math, 2019	(Same above)

Share of students qualifying for FRPL, 2021	Percent of students with families who have qualified for free or reduced-price lunch.
Four-year high school graduation rates, 2021	Percent of Class of 2021 students entering the ninth grade in the 2017–2018 school year who graduated within four years.
Teacher turnover rate, 2021	The rate at which teachers exited schools in the school year 2020–2021.
Per pupil expenditure, 2020	The aggregate current expenditures of all local educational agencies divided by the total number of children in average daily attendance for whom such agencies provided free public education. Converted to 2021 dollars.