



**Mohammed Choudhury**  
State Superintendent of Schools

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**TO:** Members of the State Board of Education  
**FROM:** Mohammed Choudhury  
**DATE:** September 28, 2021  
**SUBJECT:** Blueprint Deep Dive: Neighborhood Indicators of Poverty

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**PURPOSE:**

To provide an update on the progress towards developing a neighborhood indicator of poverty in the Blueprint for Maryland's Future.

**EXECUTIVE SUMMARY:**

The Blueprint for Maryland's Future requires the Maryland State Department of Education to conduct a study on neighborhood indicators of poverty with an interim report due November 1, 2021 to the Maryland General Assembly and the Accountability Implementation Board (AIB), and a final report due October 1, 2022 to the AIB.

The presentation to the Board will highlight the efforts underway to collect more comprehensive and meaningful data, and the progress the Maryland State Department of Education has made in developing a neighborhood indicator of poverty.

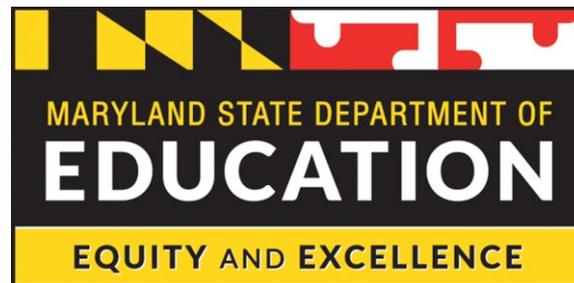
Information presented will include the following topics:

- Background on Poverty, Limitations of Data and Concentration of Poverty;
- Maryland's Timeline and Progress towards a Neighborhood Indicator of Poverty; and
- Exploring Neighborhood Indicators of Poverty.

Additionally, at the Maryland State board meeting a case study of the use and impact of neighborhood indicators of poverty in Texas will be presented.

**ACTION:**

No action is necessary; for discussion only.



# Blueprint Deep Dive: Neighborhood Indicators of Poverty

Maryland State Department of Education  
September 28, 2021

# The Blueprint for Maryland's Future



**NOVEMBER 1, 2021**

The Department shall submit an interim report to the **General Assembly, and the Accountability and Implementation Board.**

**OCTOBER 1, 2022**

The Department shall submit a report to the **Accountability and Implementation Board** on incorporating neighborhood indicators of poverty to determine a school's eligibility for the compensatory education program and the concentration of poverty grant based on the study.

The progress on **analyzing neighborhood indicators of poverty.**

**The study shall evaluate:**

1. The **American Community Survey data** available across geographic areas in the Small Area Income and Poverty Estimates Program to provide school district poverty estimates; and
2. The **Area Deprivation Index** developed by the University of Wisconsin – Madison to rank neighborhoods by socioeconomic status disadvantage.

The fiscal year for which **Medicaid data** can be incorporated into the direct certification of students eligible for the compensatory education program.

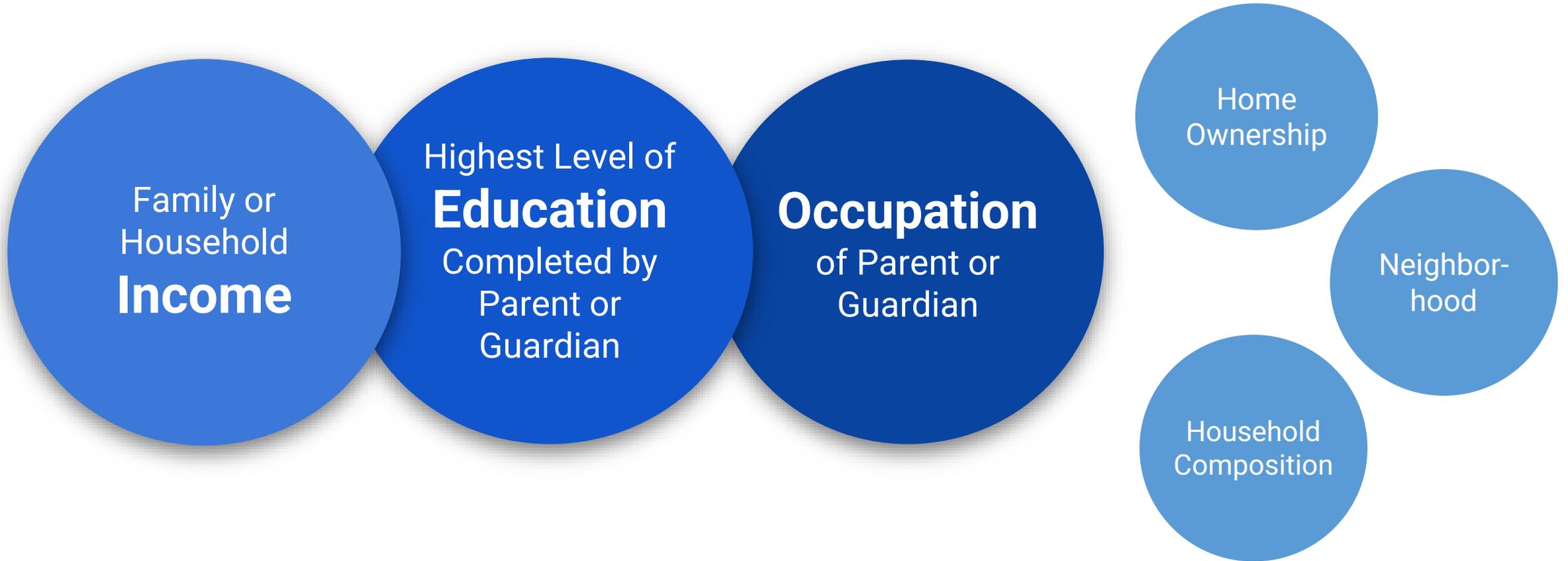
The plan for developing and using the **State alternative income eligibility form** to determine eligibility for the compensatory education program.

- Background on Poverty, Limitations of Data and Concentration of Poverty
- Maryland's Timeline and Progress Towards a Neighborhood Indicator of Poverty
- Exploring Neighborhood Indicators of Poverty
- Case Study: Texas

# Multiple Factors Impact Poverty

**Poverty is "the extent to which an individual does without resources."**

(Payne, R. K. (2005). *A framework for understanding poverty*. Aha! Process.)



# Why does measuring poverty matter?



Understanding the socioeconomic conditions of local communities allows policymakers and practitioners to:

- **allocate financial, instructional, and support resources** to groups of people (e.g., students, schools, and communities);
- identify individuals who are eligible to participate in a range of **supplemental programs and services** or otherwise receive public benefits;
- understand potential socioeconomic differences when **comparing educational conditions** across students, schools, and school systems; and
- **report on the effectiveness** of schools, programs, and services for a wide range of student groups.

Differences in demographic and economic conditions are often associated with differences in educational opportunities and outcomes.

# How is poverty measured in education?



The count of students eligible for a free or reduced price meal under USDA's **National School Lunch Program (NSLP)** is the most commonly used measure of poverty in education.

<b>Pros (Core Conditions Met)</b>	<b>Cons (Limitations and Data Quality Issues)</b>
<ul style="list-style-type: none"><li>• Universal participation and criteria</li><li>• Regularly updated</li><li>• Stable infrastructure with long history and well funded</li><li>• Accessible and widely available</li></ul>	<ul style="list-style-type: none"><li>• Binary measure capturing little variation in <b>household income</b> (Domina et al., 2018)</li><li>• Measure is of <b>an individual at a point-in-time</b> and not a neighborhood measure.</li><li>• Participation rates are <b>not constant across grades</b> (Harwell &amp; LeBeau, 2010)</li><li>• <b>Systemic differences</b> in participation</li><li>• Community Eligibility Provision <b>limits availability of student level data</b></li><li>• Eligibility of students relies on household forms and/or direct certification</li></ul>

# Both Poverty and Place Matter



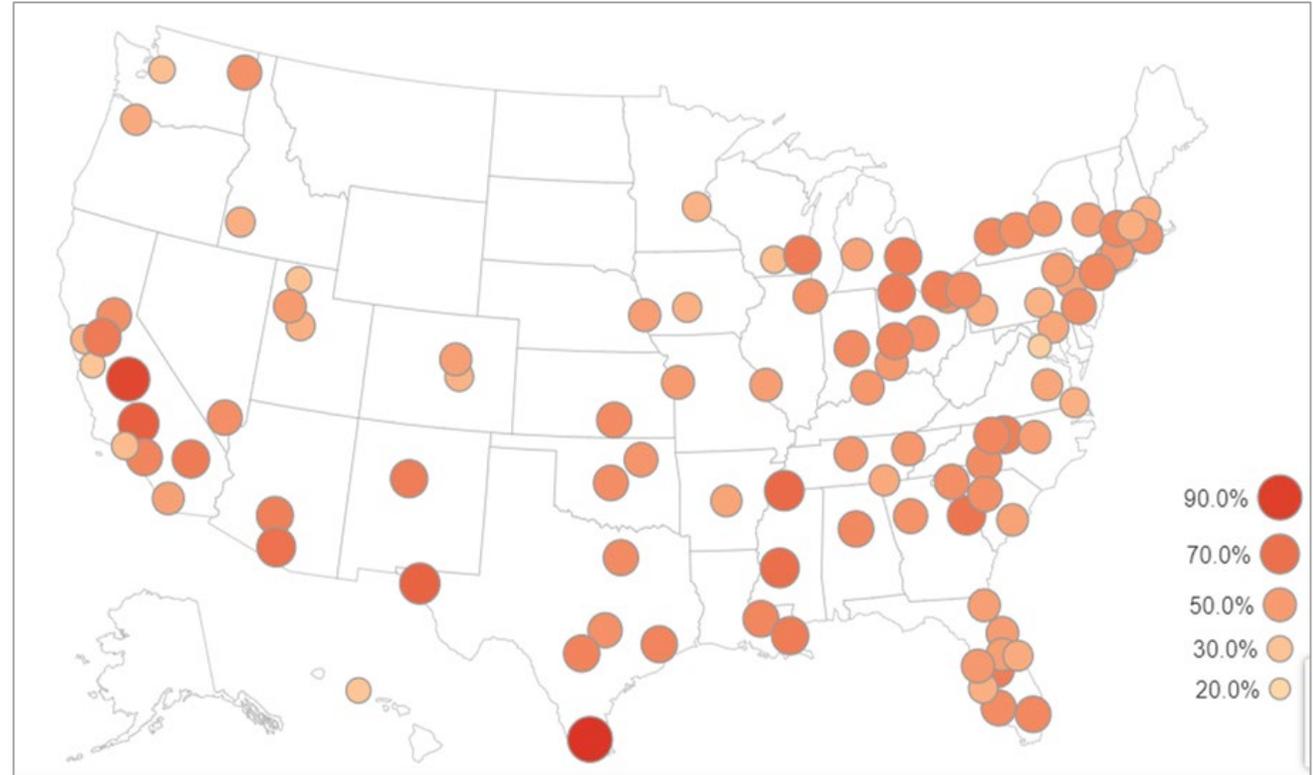
- The **socioeconomic composition of school influences students' educational outcomes** above and beyond their own family background, prior achievement, race, gender, and levels of effort or motivation (Mickelson, 2018).
- The many barriers imposed by living in a poor neighborhood make it much **harder for residents to move up the economic ladder** and their chances of doing so only diminish the longer they live in such neighborhoods.(Chetty et al., 2014).
- **Moving to a lower poverty neighborhood at a young age** increases college attendance and earnings (Chetty et al., 2016).
- While racial segregation within a district is a very strong **predictor of achievement gaps**, school poverty - not racial composition of schools - accounts for this effect (Reardon, 2019).
- **Low-poverty schools are 22 times more likely to reach consistently high academic achievement compared with high-poverty schools** (Harris, 2007).

# Concentration of Poverty

Concentration of poverty is different than a measure of poverty at the individual or family level.

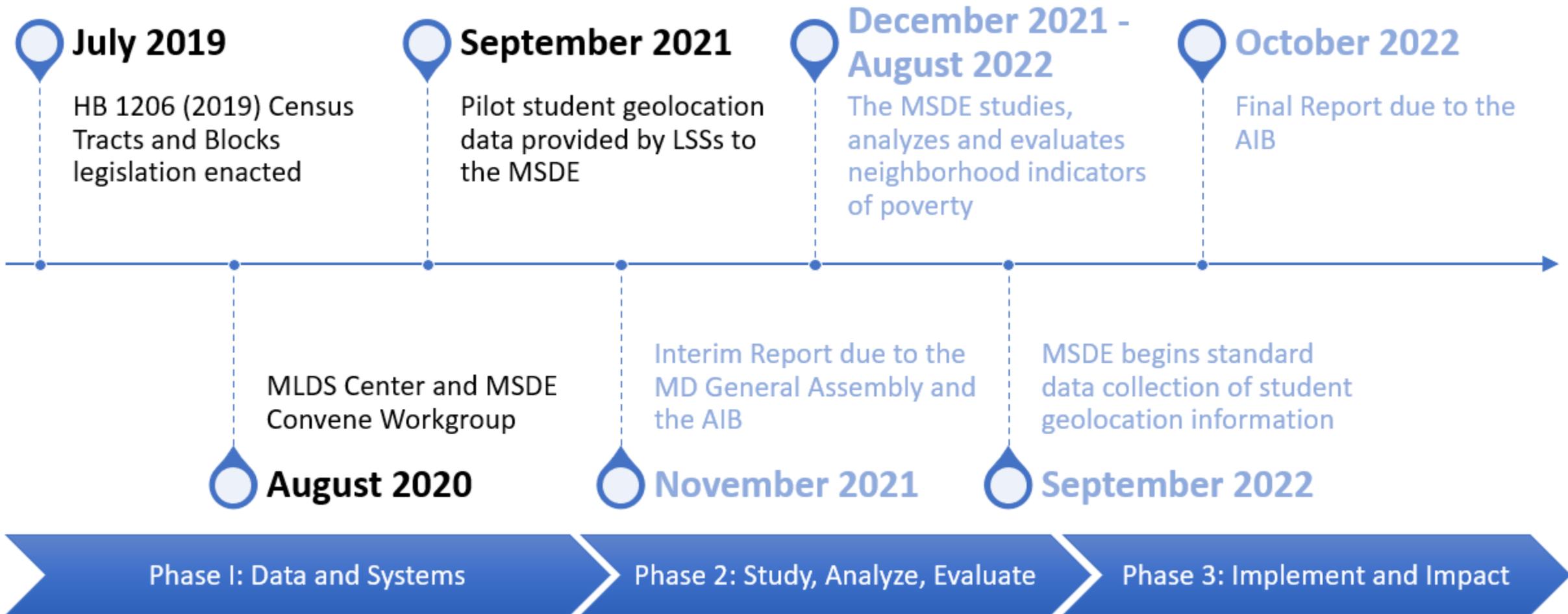
**The concentration of poverty is a measure of the percentage of poor residents in an area.**

Poor families in a neighborhood with a high concentration of poverty have a **double disadvantage** (Jargowsky, 2015).



Share of the poor population living in a neighborhood with a 20%+ poverty rate

# Progress Towards a Neighborhood Indicator of Poverty



## **The Maryland Longitudinal Data System Center**

- Required to develop a protocol for a county board to convert a student's home address and geolocation information into Census tract and block numbers.

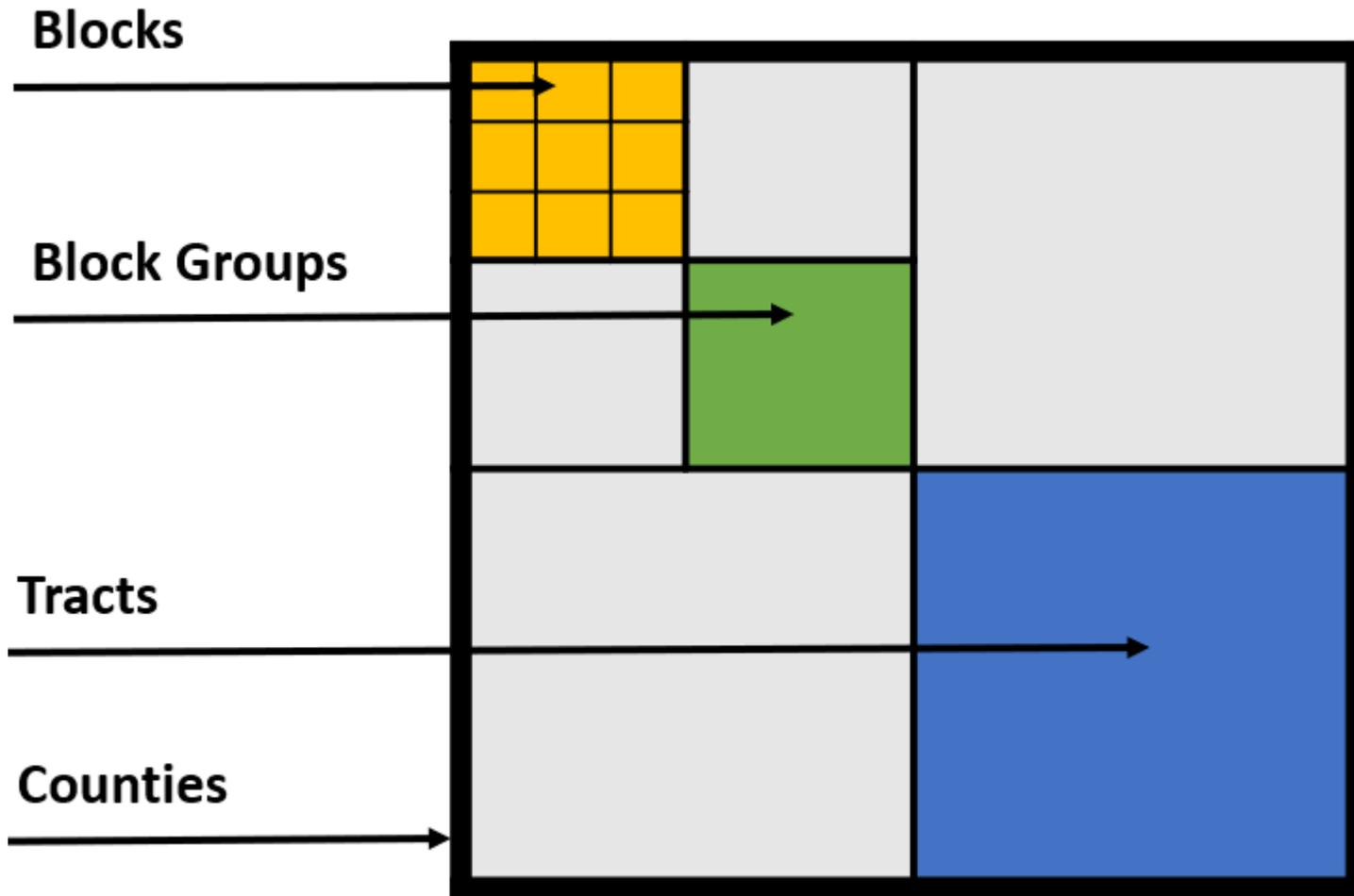
## **Local School Systems**

- Required to convert student addresses into Census tract and block numbers.

## **Maryland State Department of Education**

- Required to collect Census tract and block numbers from Local System, and to provide the collected Census tract and block numbers to the MLDS Center.

# HB 1206 (2019) - Census Tracts and Blocks



What are  
Census Tracts  
and Blocks?

# HB 1206 (2019) - Census Tracts and Blocks



## MLDS Center with MSDE Convenes Workgroup

August 2020 -  
Present

- 4 local school systems
- Explored similar work across the nation



## Protocol and Utility Development

December 2020 - Present

- Protocol and utility developed
- LSSs convert address and geolocation information into census tract and block numbers.



## Workgroup Members Conduct Pilot

April 2021 -  
September 2021

- Workgroup members pilot the utility and convert student addresses.

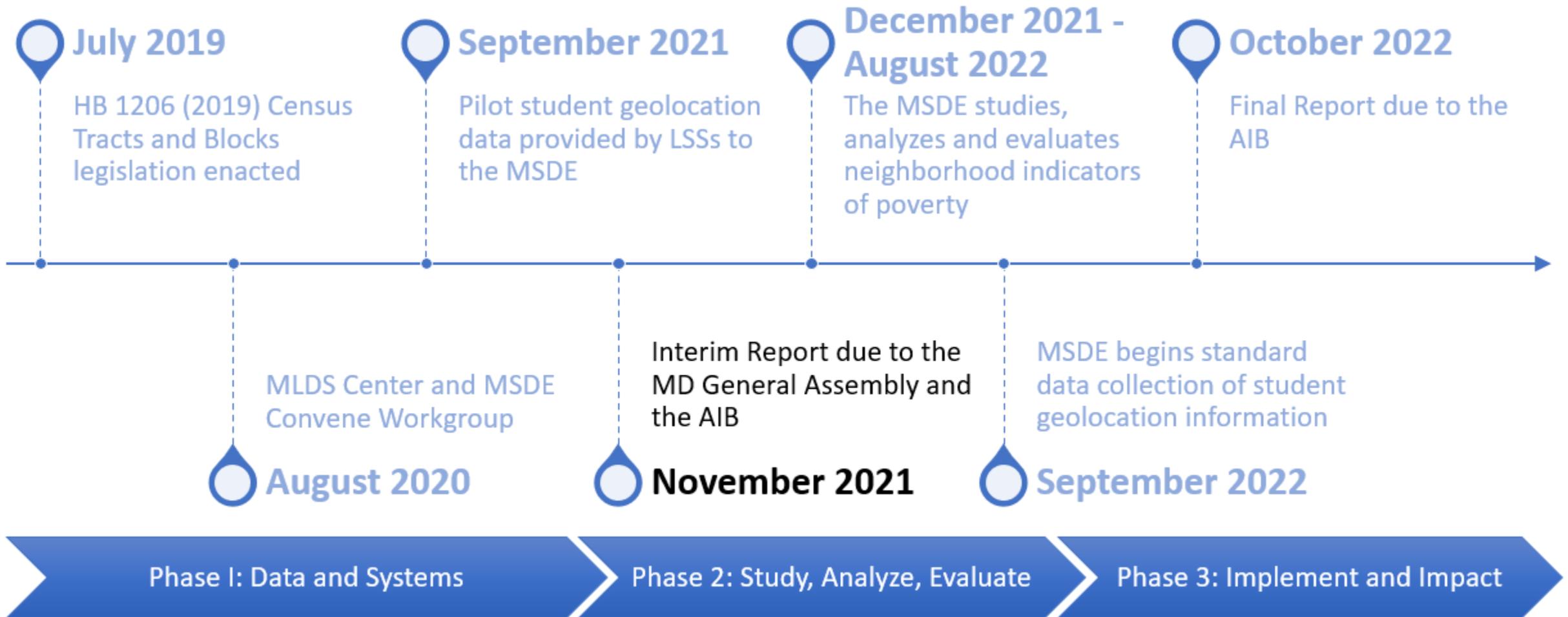


## Closure of Pilot and Workgroup

October 2021 -  
September 2022

- Pilot student data provided to the MSDE
- MLDS Center finalizes Protocol and Utility

# Progress Towards a Neighborhood Indicator of Poverty

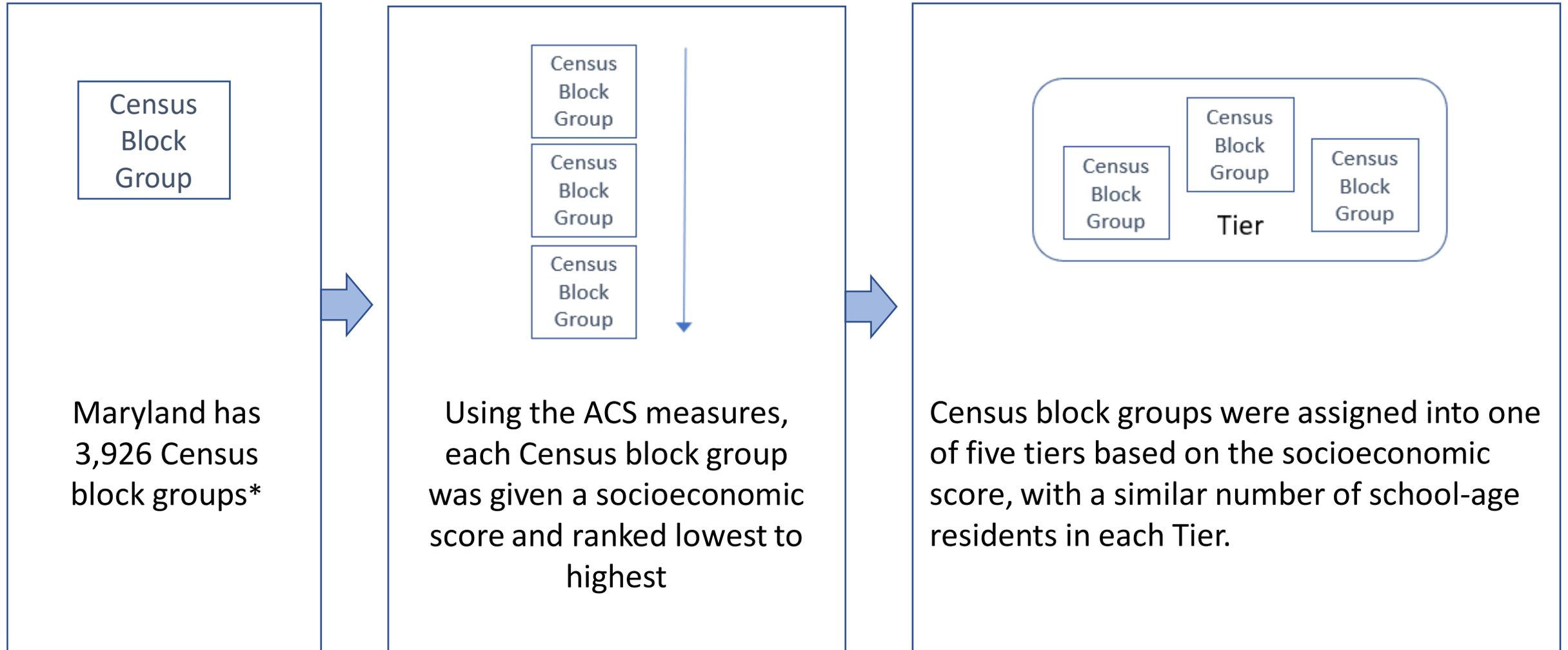


# Maryland Blueprint Interim Report - Highlights



The progress on 	Update
<p>Analyzing <b>neighborhood indicators of poverty</b></p> <ol style="list-style-type: none"> <li>1. The US Census American Community Survey</li> <li>2. The Area Deprivation Index developed by the University of Wisconsin</li> </ol>	<p>Using the American Community Survey (ACS), Census block groups have been categorized and a socioeconomic score calculated based on a composite index of:</p> <ul style="list-style-type: none"> <li>• median household income;</li> <li>• adult education level;</li> <li>• home ownership; and</li> <li>• household composition.</li> </ul>
<p><b>Incorporating Medicaid data</b> into the direct certification of students eligible for the compensatory education program</p>	<p>MSDE is applying for participation in the USDA Medicaid Demonstration Project for the 2023 school year. Applications for that time period are due September 30, 2021 and, if approved, MSDE will implement the program July 1, 2022.</p>
<p>Developing and using the <b>State alternative income eligibility form</b> to determine eligibility for the compensatory education program</p>	<p>No Alternate Form has been developed by the State.</p>

# Maryland's Exploration of a Neighborhood Poverty Indicator



\*208 block groups (5%) were missing one or more of the selected ACS measures.

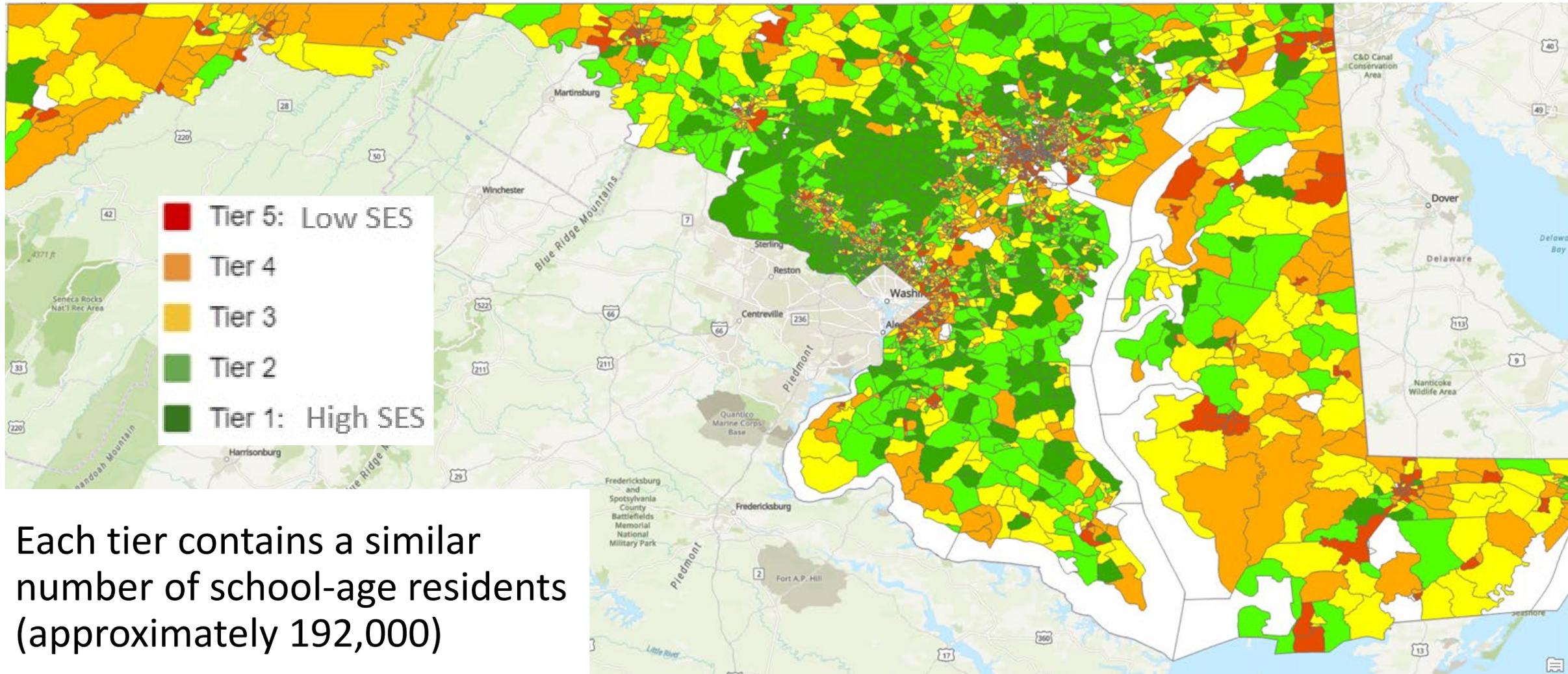
# Maryland's Exploration of a Neighborhood Poverty Indicator



Tier*	Median household income	Home ownership (%)	Single Parent Households (%)	Educational Level <small>20 = Less than HS 100 = advanced degree</small>	Block Groups (N)	Block Groups (%)
Tier 1	\$158,811	95.0%	7.1%	73.9	650	17.5%
Tier 2	\$113,177	87.3%	15.2%	66.0	705	19.0%
Tier 3	\$88,817	76.7%	25.5%	62.0	770	20.7%
Tier 4	\$69,699	58.7%	38.3%	59.2	793	21.3%
Tier 5	\$46,843	34.6%	69.7%	52.3	800	21.5%

\*Tier 5 is considered high poverty/low socioeconomic score and Tier 1 is low poverty/high socioeconomic score.

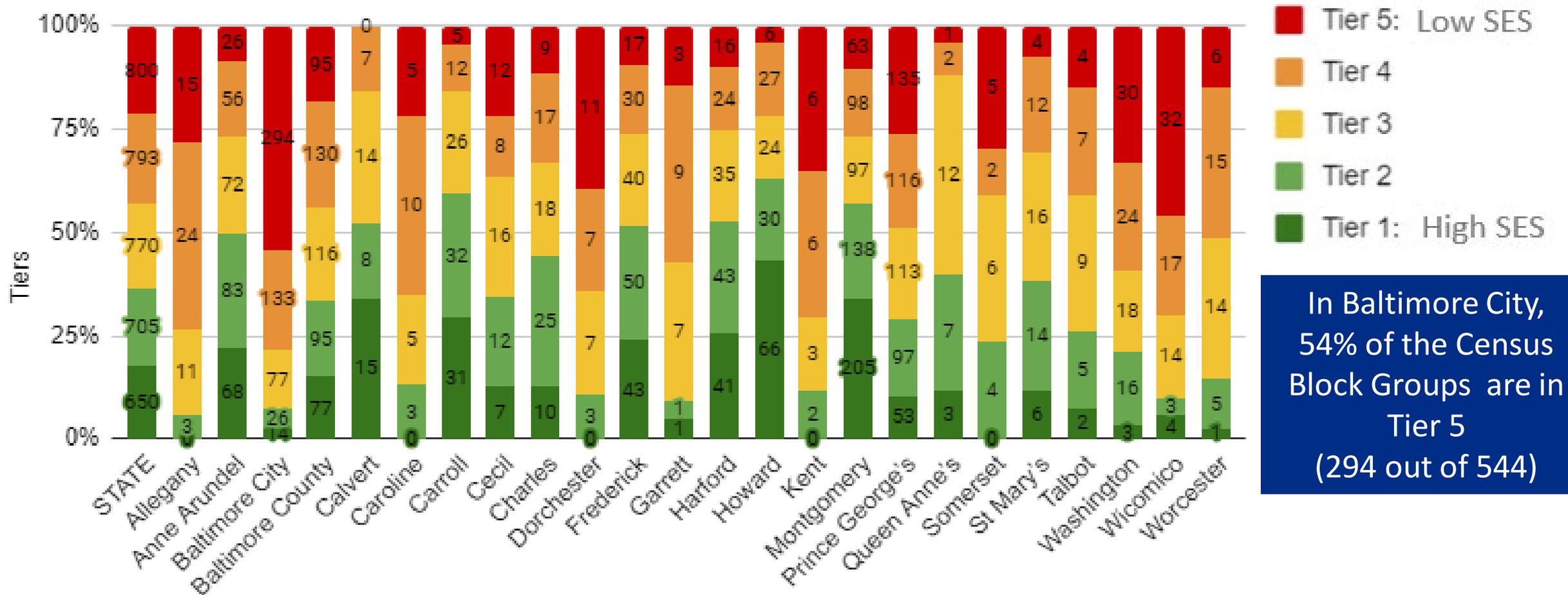
# Maryland's Exploration of a Neighborhood Poverty Indicator



Each tier contains a similar number of school-age residents (approximately 192,000)

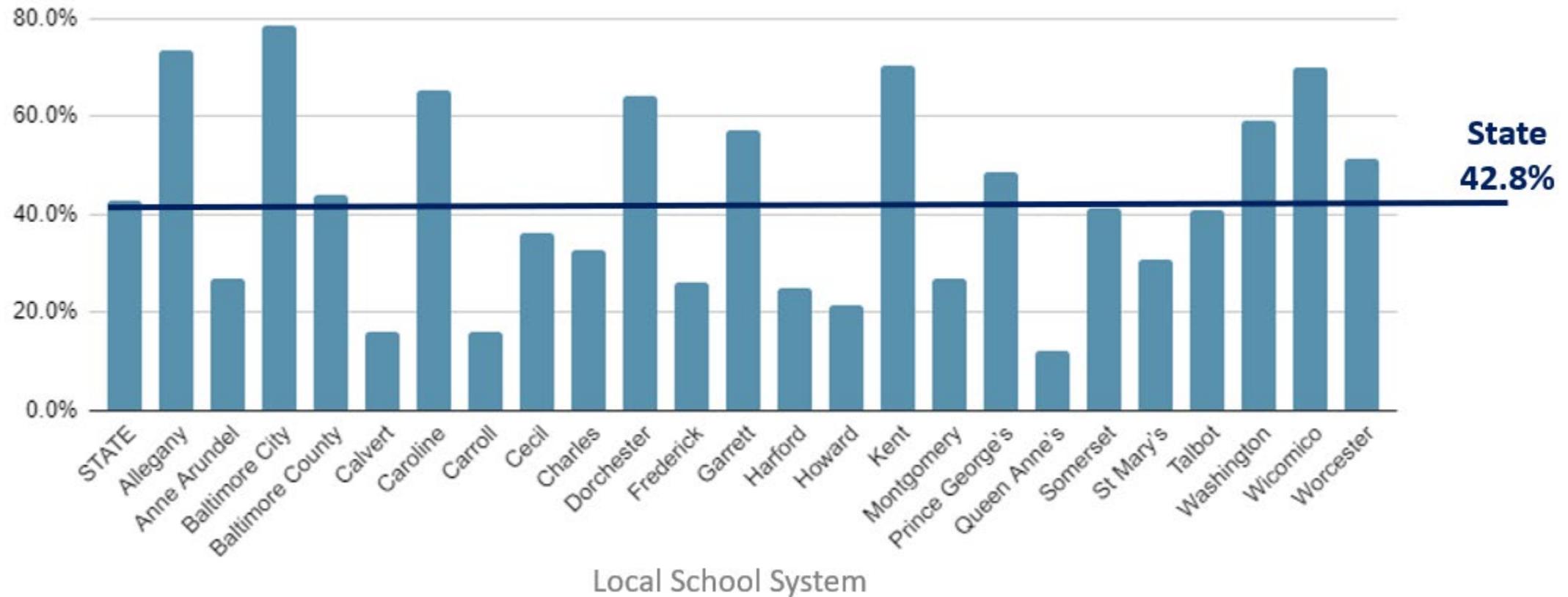
# Maryland's Exploration of a Neighborhood Poverty Indicator

## Socioeconomic Tiers by Local School System



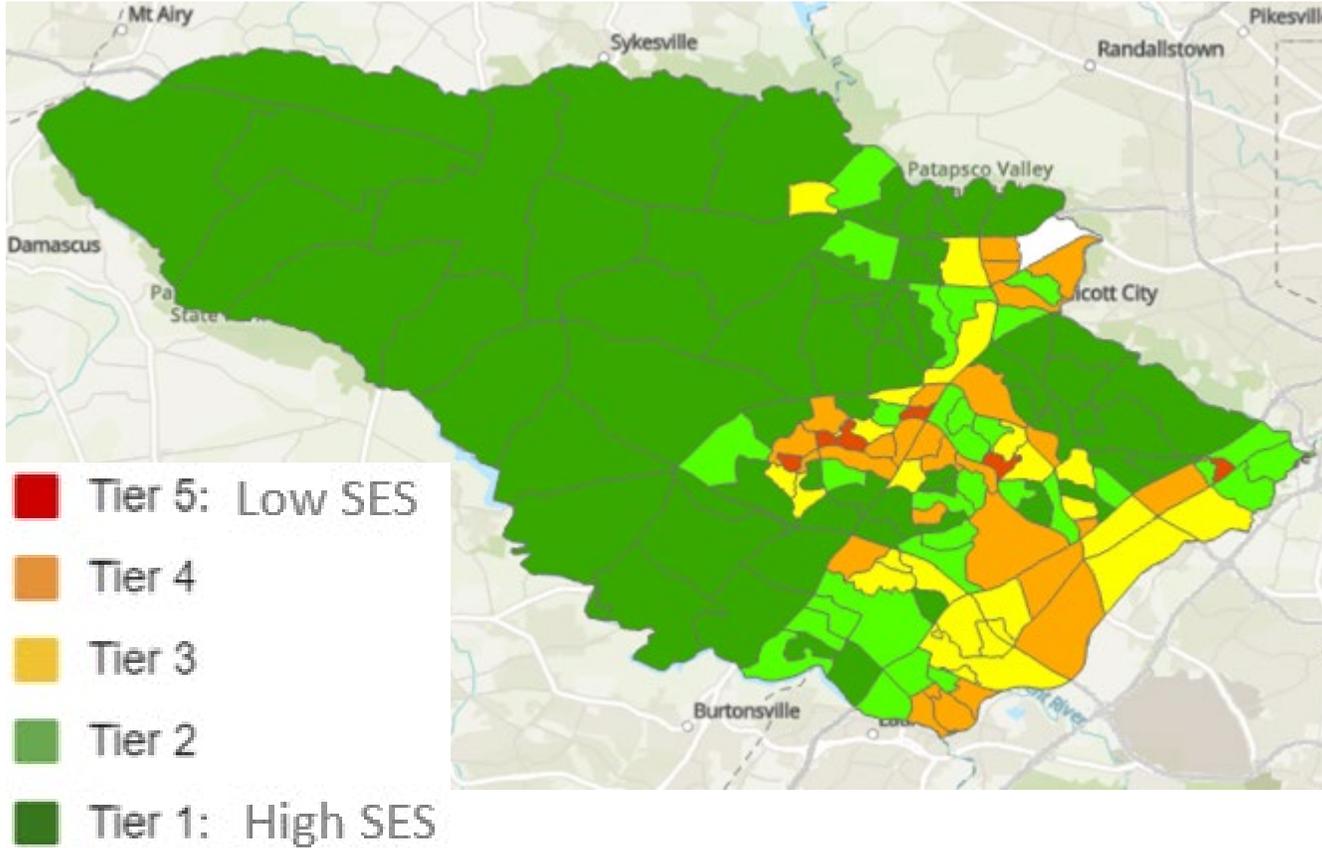
# Maryland's Exploration of a Neighborhood Poverty Indicator

## Percent Tier 4 and Tier 5 in Local School Systems

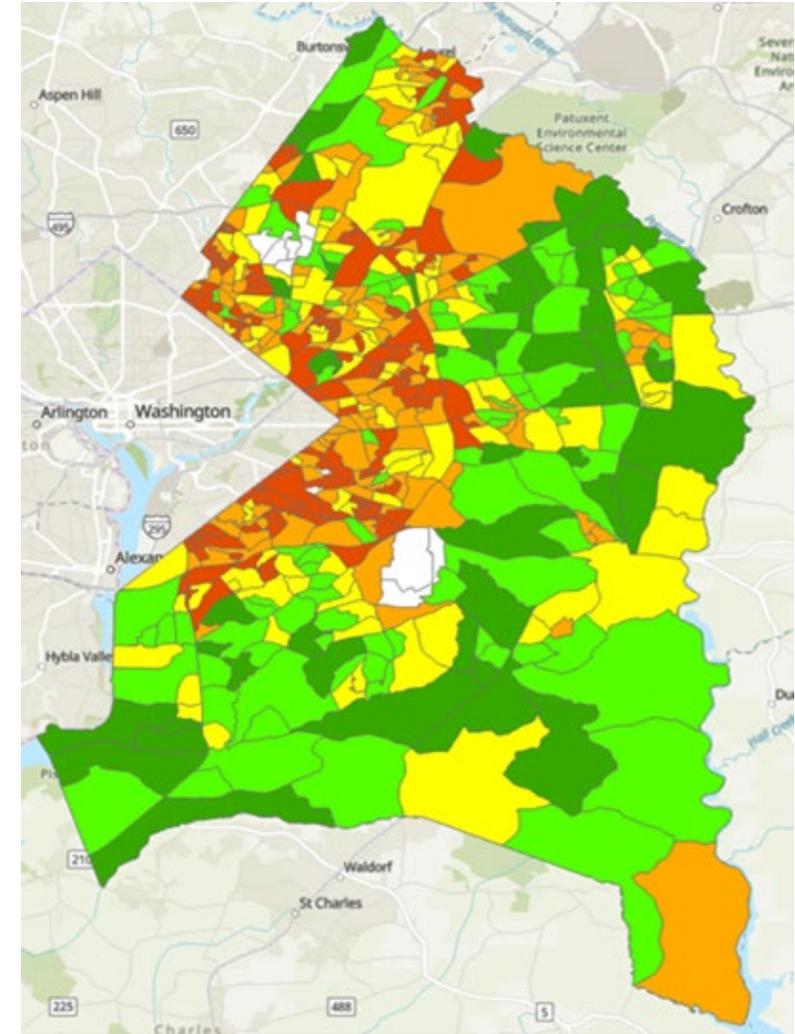


# Maryland's Exploration of a Neighborhood Poverty Indicator

## Howard County



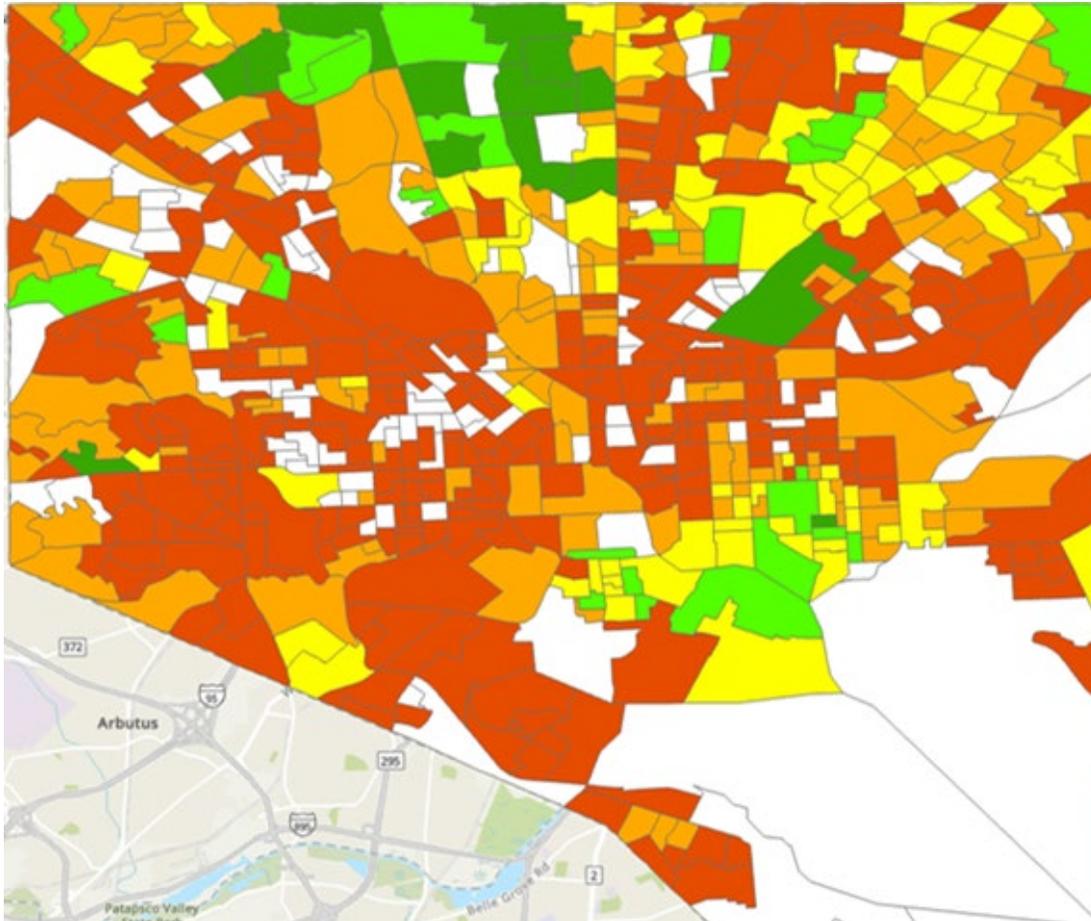
## Prince George's County



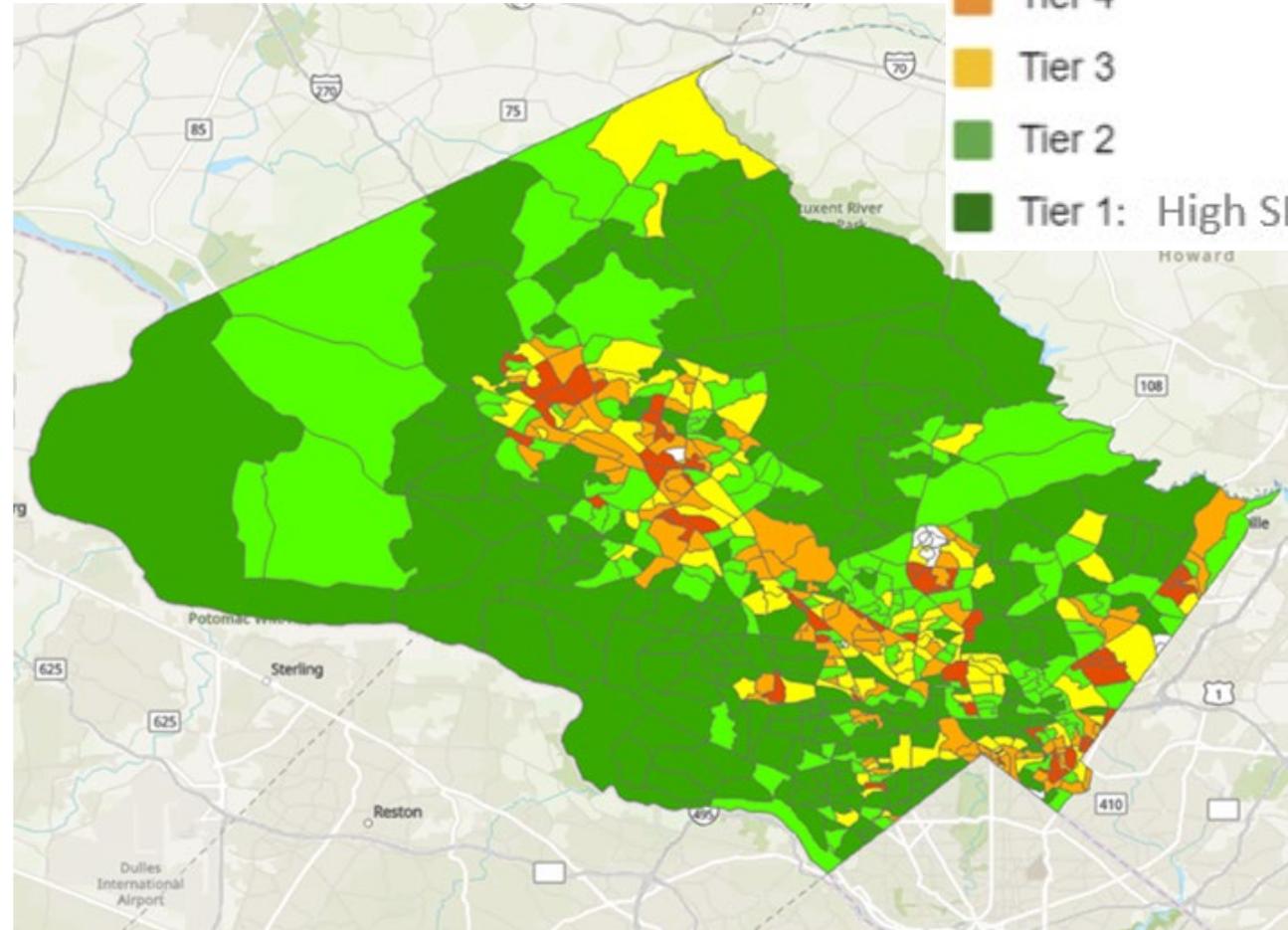
# Maryland's Exploration of a Neighborhood Poverty Indicator



## Baltimore City



## Montgomery County



- Tier 5: Low SES
- Tier 4
- Tier 3
- Tier 2
- Tier 1: High SES

# Future Explorations

## Pilot

Data from pilot provided to MSDE

## Use

School composite created

## Analyze

Analyze within school variance

## Compare

Compare school composite to other school student groups (FARMS, Econ. Dis.)

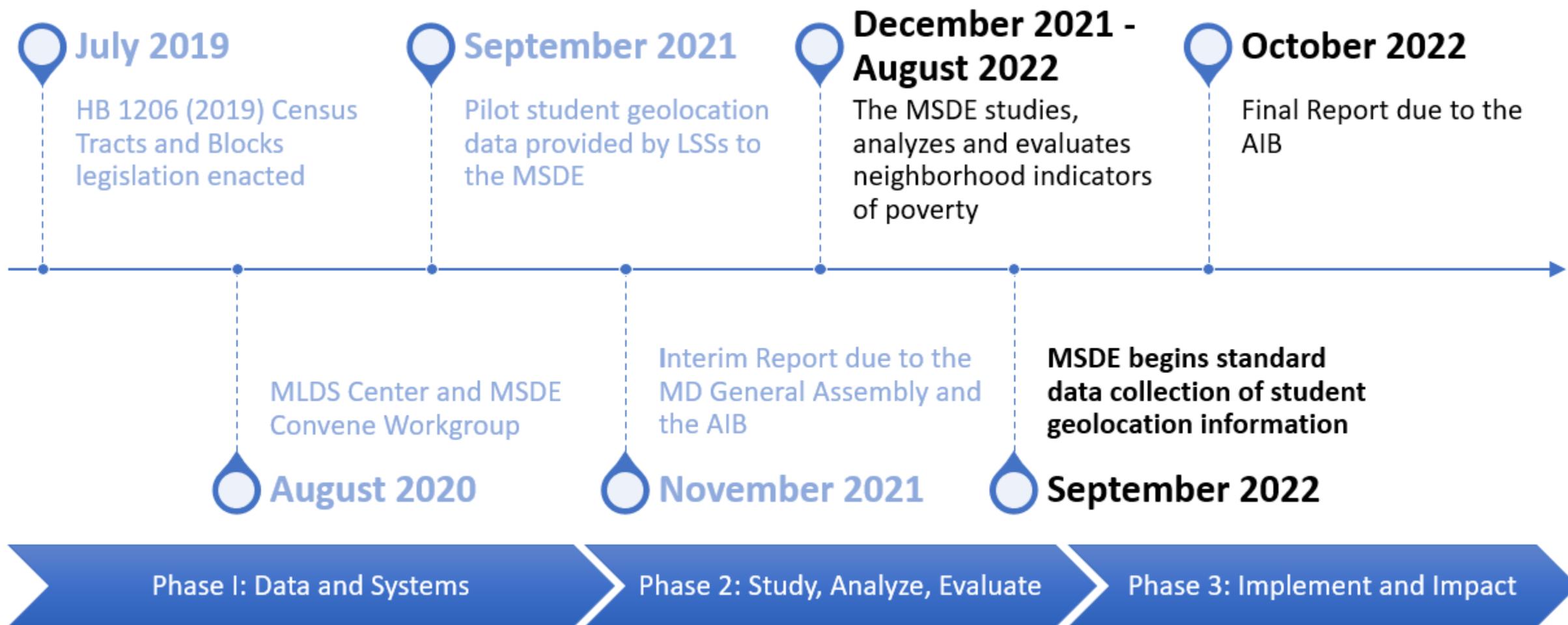
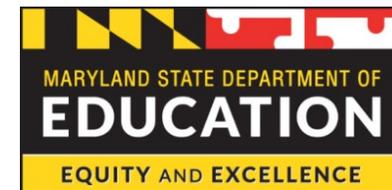
## Investigate

Investigate how school composite correlates with achievement

## Engage

Engage stakeholders for additional feedback

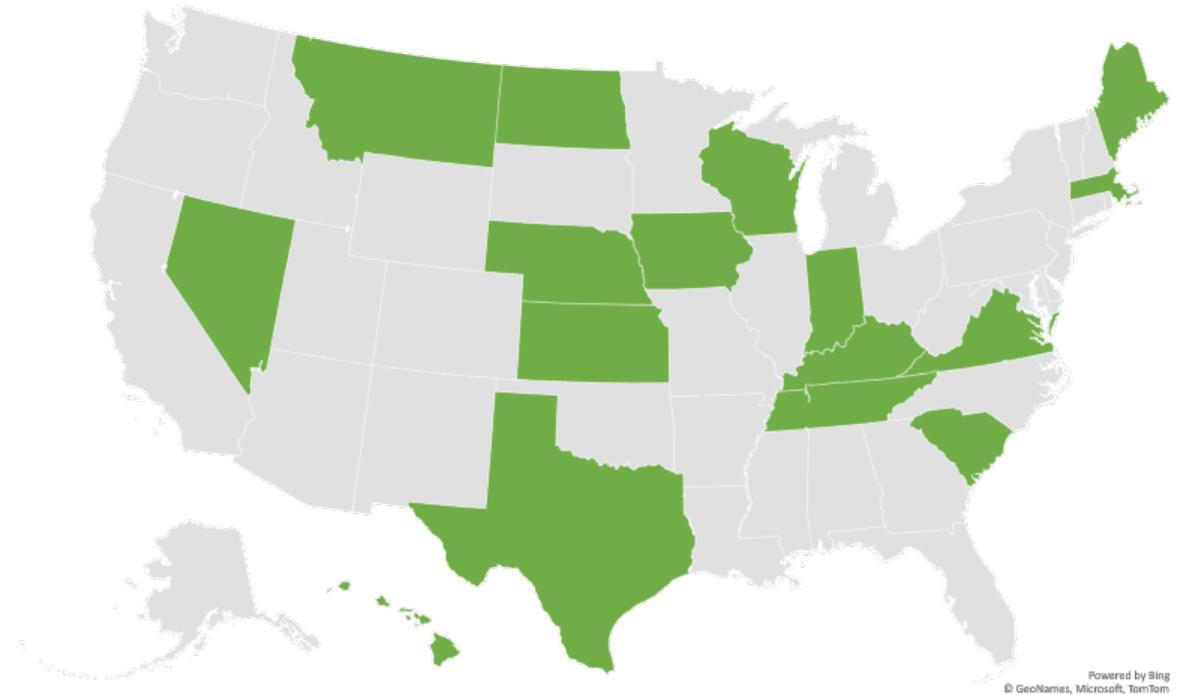
# Progress Towards a Neighborhood Indicator of Poverty



# National Exploration of a Neighborhood Poverty Indicator

With the support of the National Center on Education Statistics (NCES) and the Institute of Education Sciences (IES) participating states will combine information, including geolocation of students, to summarize existing and proposed poverty measures.

Sixteen states are participating in the project to evaluate the value of supplementing poverty measures.



## New Mexico's Family Income Index Act signed into law April 2021

- Census data used to identify household income of every NM public school student.
- Calculated each school's Family Income Index, or the **percentage of students in families with the lowest incomes.**
- Allocated \$15 million to 108 schools, with awards ranging from \$20,000 to \$434,174, to **fight concentrated poverty in schools.**

### Funding must be used for:

- ✓ reading and math interventions,
- ✓ hiring school counselors and social workers,
- ✓ creating family information and resource centers,
- ✓ adopting culturally and linguistically diverse classroom texts,
- ✓ offering innovative professional learning opportunities, or
- ✓ after-school enrichment.

## Texas House Bill 3 passed in July 2019

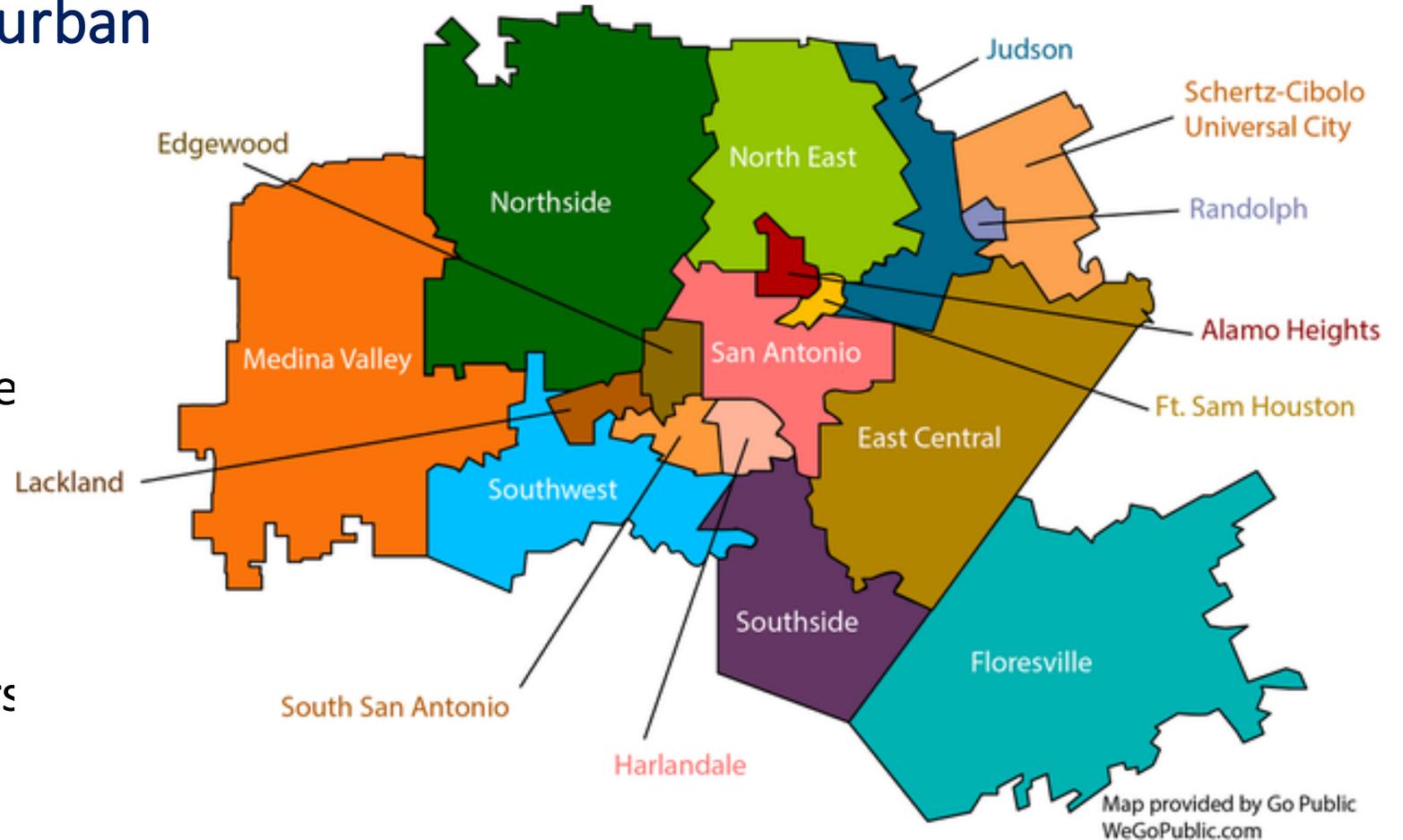
- Established the Texas Education Agency Statewide Socioeconomic Tier Model for Texas School-Age Residents.
- Census block groups **are tiered by income and household characteristics** using ACS data.
- Students are designated as **economically disadvantaged by the Census block group** where their home/residence is located.
- Increased **compensatory education funding for students in lower socioeconomic tiers.**
- Created the Teacher Incentive Allotment, a **statewide career ladder initiative to recruit, retain, and reward highly impactful teachers to teach in rural and high needs schools.**

# Case Study: Texas

## San Antonio ISD

### San Antonio ISD is the main urban core district in Bexar County

- The district has about 49,000 students in 90+ campuses
- 92% students qualifying for Free or Reduced Lunch
- 93% Hispanic Students
- 6% Black Students
- 19% English Language Learners
- 12% Special Education



# Texas (TEA) Socioeconomic Tiers 2020-2021

## San Antonio ISD District Boundaries

### Block Assignments

321 Census Block Groups categorized into five levels based on:

- Median Household Income
- Home Ownership rate
- Single Parent Households
- Adult Education Levels

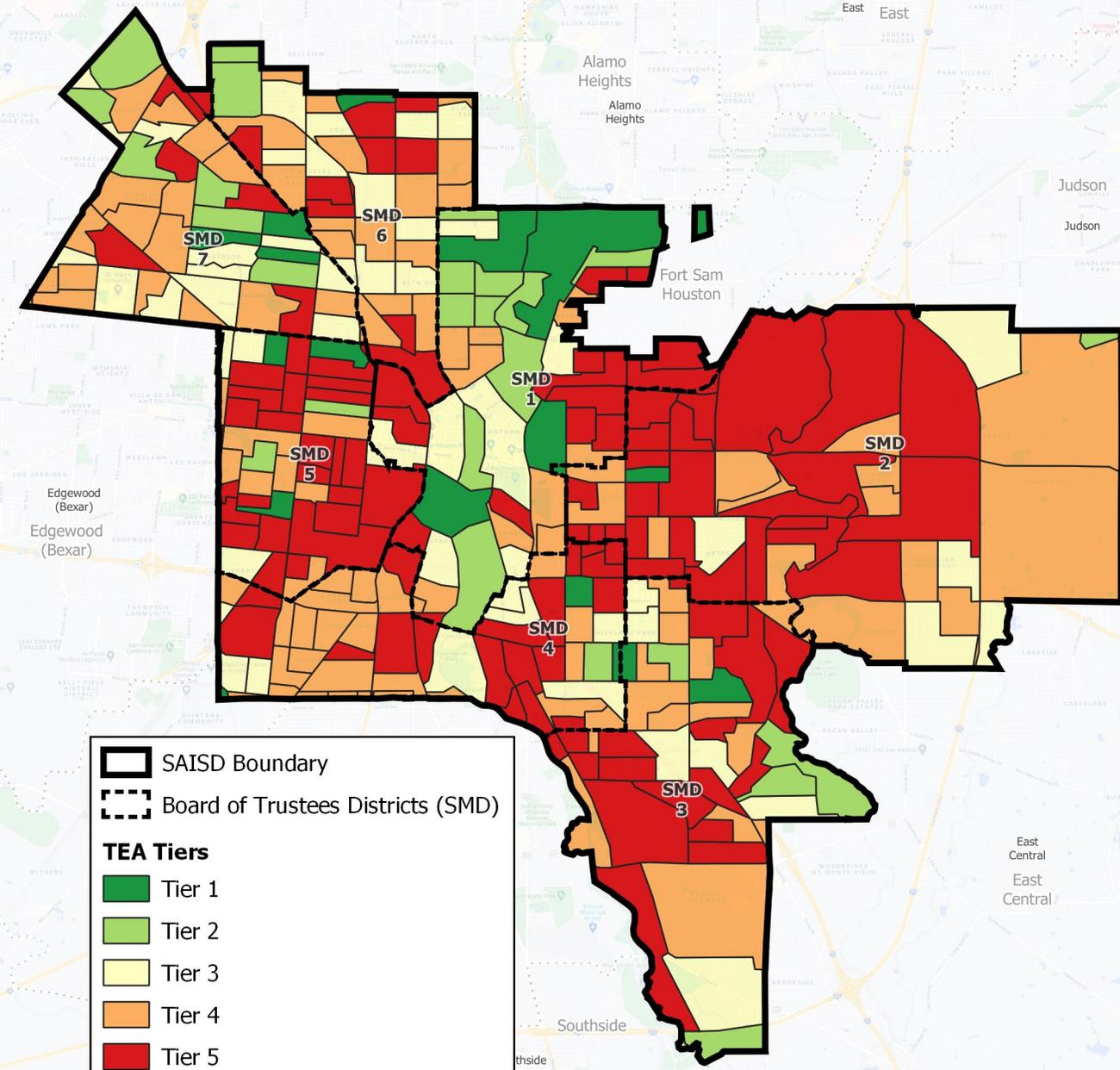
An equal number of school-aged children reside in each of the five colored blocks

### Federal Income Criteria for Family of Four

Poverty Level:	\$26,500
Reduced Lunch Program:	\$48,470
Free Lunch Program:	\$34,060

SAISD	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Econ. Disadv. Students	1,923	4,521	10,499	17,297	26,022
Median Income	\$115,651	\$57,349	\$47,961	\$35,936	\$26,728
Percent Single Parent Households	17%	24%	34%	45%	56%
Percent Home Ownership	75%	64%	62%	56%	41%
Education Score	71%	58%	51%	45%	40%
Total SES Score	3.01	2.22	1.68	1.15	0.65

Texas	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Econ. Disadv. Students	642,317	642,533	642,740	642,481	584,077
Median Income	\$102,627	\$61,172	\$49,108	\$39,185	\$28,873
Percent Single Parent Households	13%	24%	33%	42%	56%
Percent Home Ownership	83%	68%	60%	49%	32%
Education Score	66%	56%	51%	46%	41%
Total SES Score	3.15	2.25	1.70	1.19	0.64



SAISD Boundary  
 Board of Trustees Districts (SMD)

**TEA Tiers**

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5

## Dallas ISD

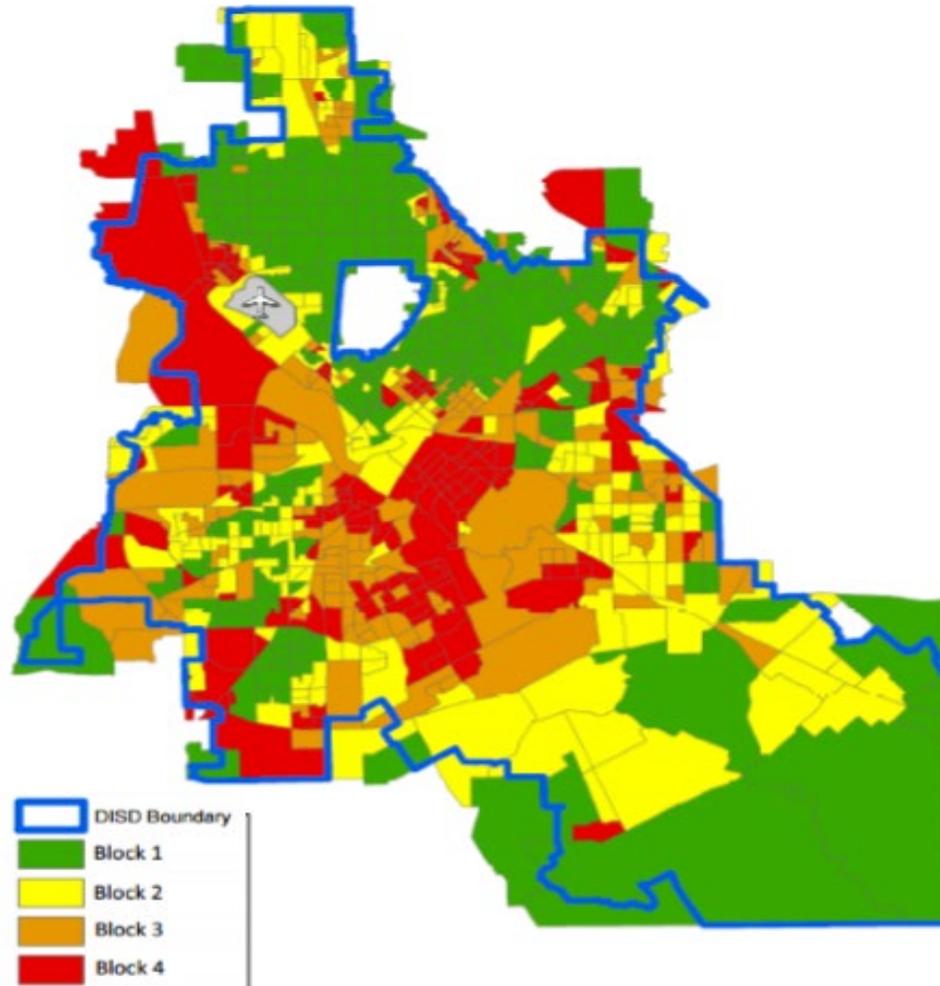
### SOCIOECONOMIC BLOCKS

808 Census Blocks

Equal number of  
students in each Block

Blocks based on:

- Median Income
- Single-Parent
- Home Ownership
- Adult Education



SES Block	Median Household Income
Block 1	\$71,473
Block 2	\$40,228
Block 3	\$29,823
Block 4	\$22,955

# Case Study: Texas Compensatory Education Funding

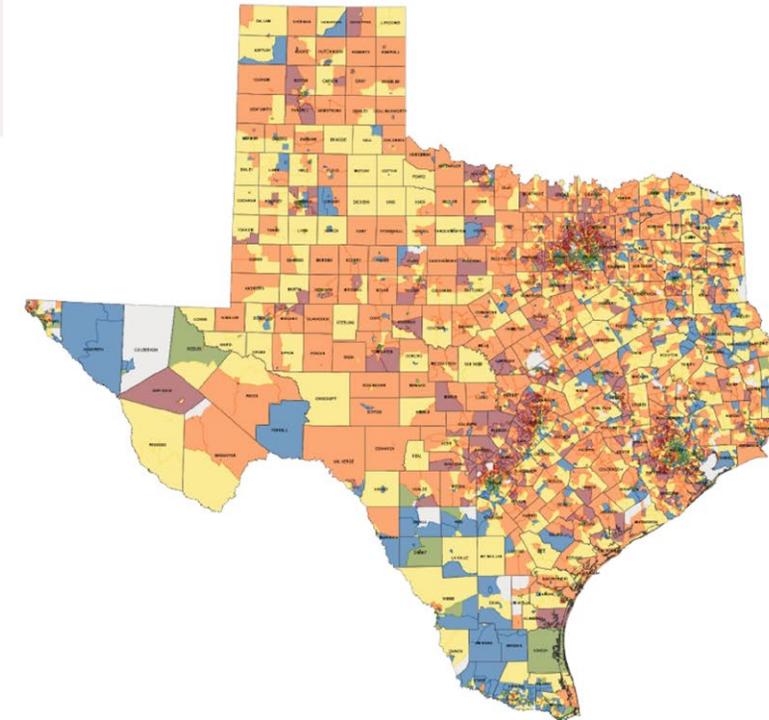
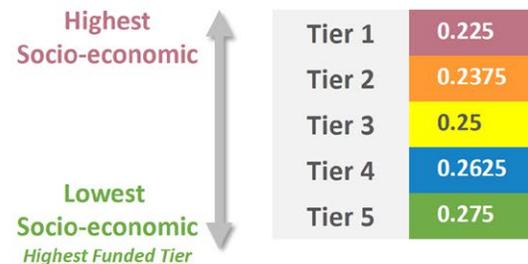
## Percentage of Census Blocks by Poverty Tier for SAISD and Surrounding Districts

	Tier 5	Tier 4	Tier 3	Tier 2	Tier 1
<b>San Antonio ISD</b>	<b>50%</b>	<b>32%</b>	<b>13%</b>	<b>4%</b>	<b>1%</b>
Edgewood	75%	21%	4%	0%	0%
Harlandale	44%	46%	10%	0%	0%
South San Antonio	37%	46%	12%	5%	0%
<b>Northeast</b>	<b>13%</b>	<b>21%</b>	<b>19%</b>	<b>24%</b>	<b>24%</b>
<b>Alamo Heights</b>	<b>13%</b>	<b>8%</b>	<b>20%</b>	<b>20%</b>	<b>40%</b>
<b>Northside</b>	<b>12%</b>	<b>20%</b>	<b>18%</b>	<b>27%</b>	<b>22%</b>
Judson	12%	16%	30%	29%	13%
East Central	5%	23%	39%	27%	7%

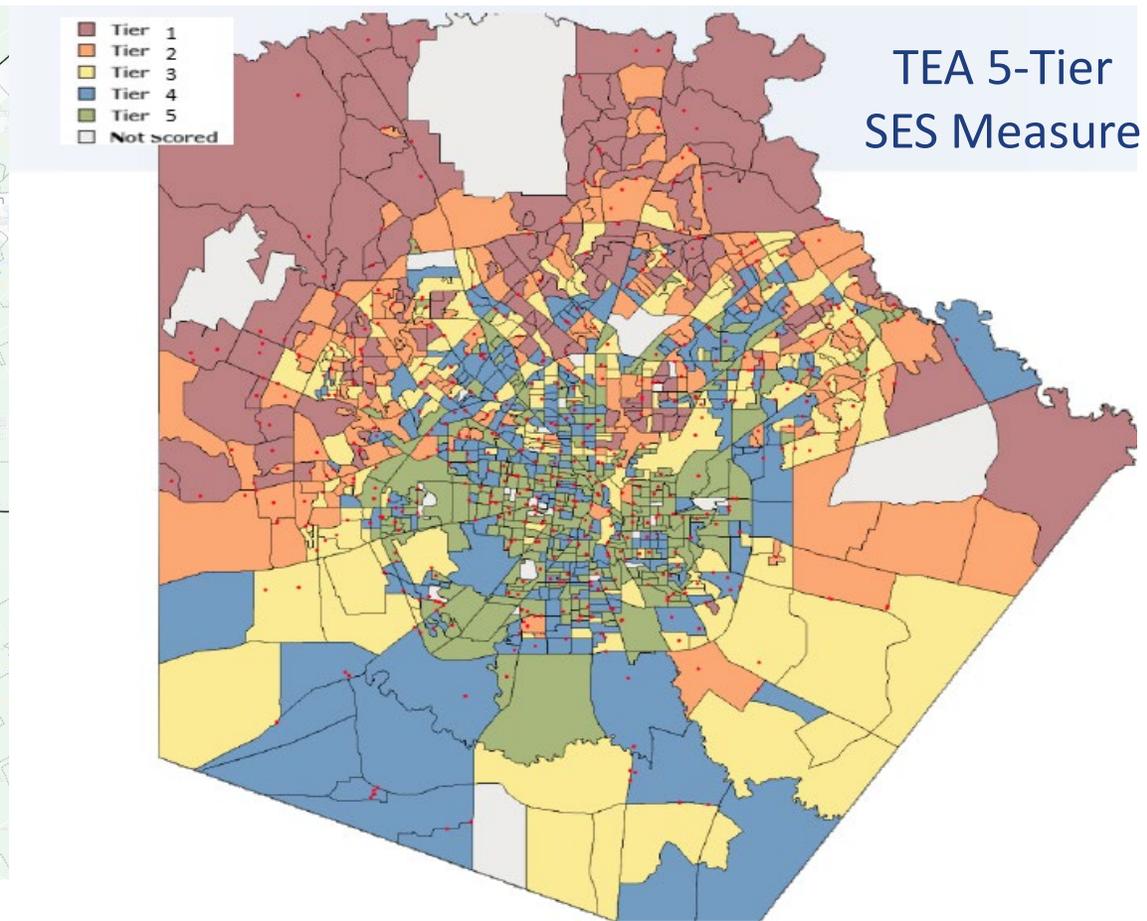
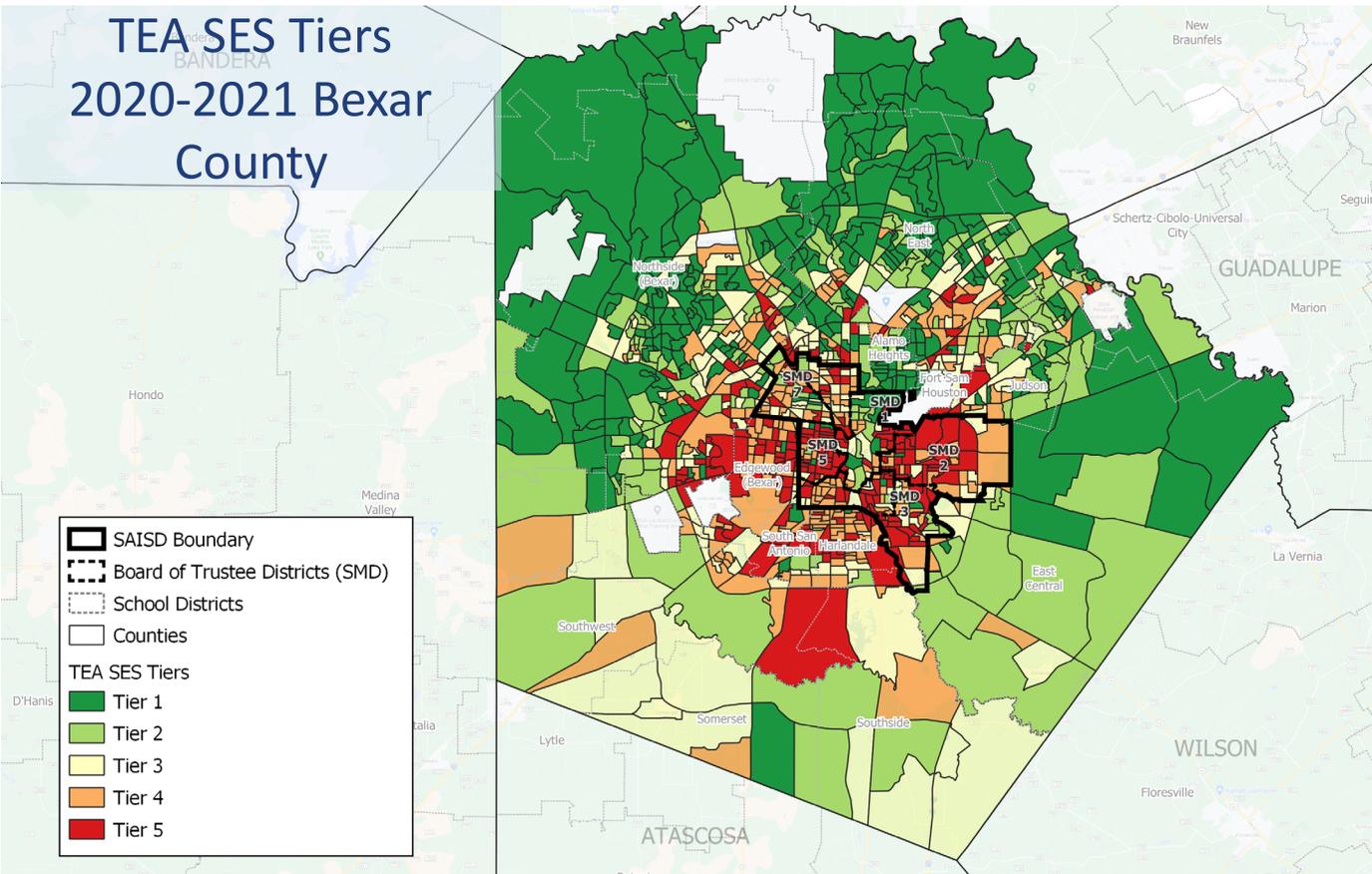
## Poverty Tier Distribution Based on Current TEA Projections

### TEA Census Tiers

**Key Point:** Students are funded if they are identified as eligible for a free or reduced lunch. But the **level of funding for each student is based on the tier of the student's home address census block group.**



# Case Study: Texas Teacher Incentive Allotment



**San Antonio ISD | Office of Innovation**  
Socioeconomic Blocks are calculated from the neighborhood's median income, percentage of single-parent homes, percentage of family home ownership, and level of adult education. Data Sources: US Census Bureau: 2018 American Community Survey 5-year Estimates; October 2020 Fall PEIMS.

Updated 01/15/2021

Districts receive \$3,000 - \$32,000 per teacher depending on designation level, school's socioeconomic status, and school's location (urban vs rural).

# Case Study: Texas Master Teacher Initiative



## Master Teacher Initiative

### Quicklinks

[Master Teacher Home](#)

[Master Teacher Initiative \(MTI\) 1.0](#)

[Master Teacher Initiative \(MTI\) 2.0 and Beyond](#)

[Master Teacher Initiative \(MTI\) 2.0 and Beyond SharePoint Site](#)

[National Board Certification](#)

### About the Master Teacher Initiative (MTI) 2.0 and Beyond

MTI 2.0 and Beyond is a proposed multi-measure teacher designation system that will incorporate domains and metrics that collectively define excellent teaching based on SAISD's values for teacher development and performance. It is an evolution of MTI 1.0 that will meet the state's rigorous requirements under the House Bill 3 Teacher Incentive Allotment (TIA). As part of this bill, the legislature and TEA have committed to supporting districts with initiatives that recognize excellent teaching on the condition that local initiatives meet rigorous state requirements. SAISD is applying to secure TIA funding and pending approval, SAISD will begin to designate teachers in the 2020-21 school year under MTI 2.0 and Beyond.

- [Eligibility](#)
- [Timeline](#)
- [FAQs & Resources](#)
- [Contact Us](#)

Teachers do not need to apply for MTI 2.0 and Beyond. Under MTI 2.0, teachers of STAAR/EOC-tested subjects are eligible for a designation, starting in the 2020-21 school year. By the 2022-23 school year, the system will evolve into MTI 3.0, and all teachers across all grade levels and subjects will be eligible to earn a designation.

When TEA publishes the SES Multiplier values, SAISD will finalize the School Funding Categories and associated payouts. The State will recalculate the SES Multiplier for each school based on student enrollment each year, and SAISD will also update its School Funding Categories annually.

**Preliminary** School Funding Categories and associated payouts by designation level are shown below.

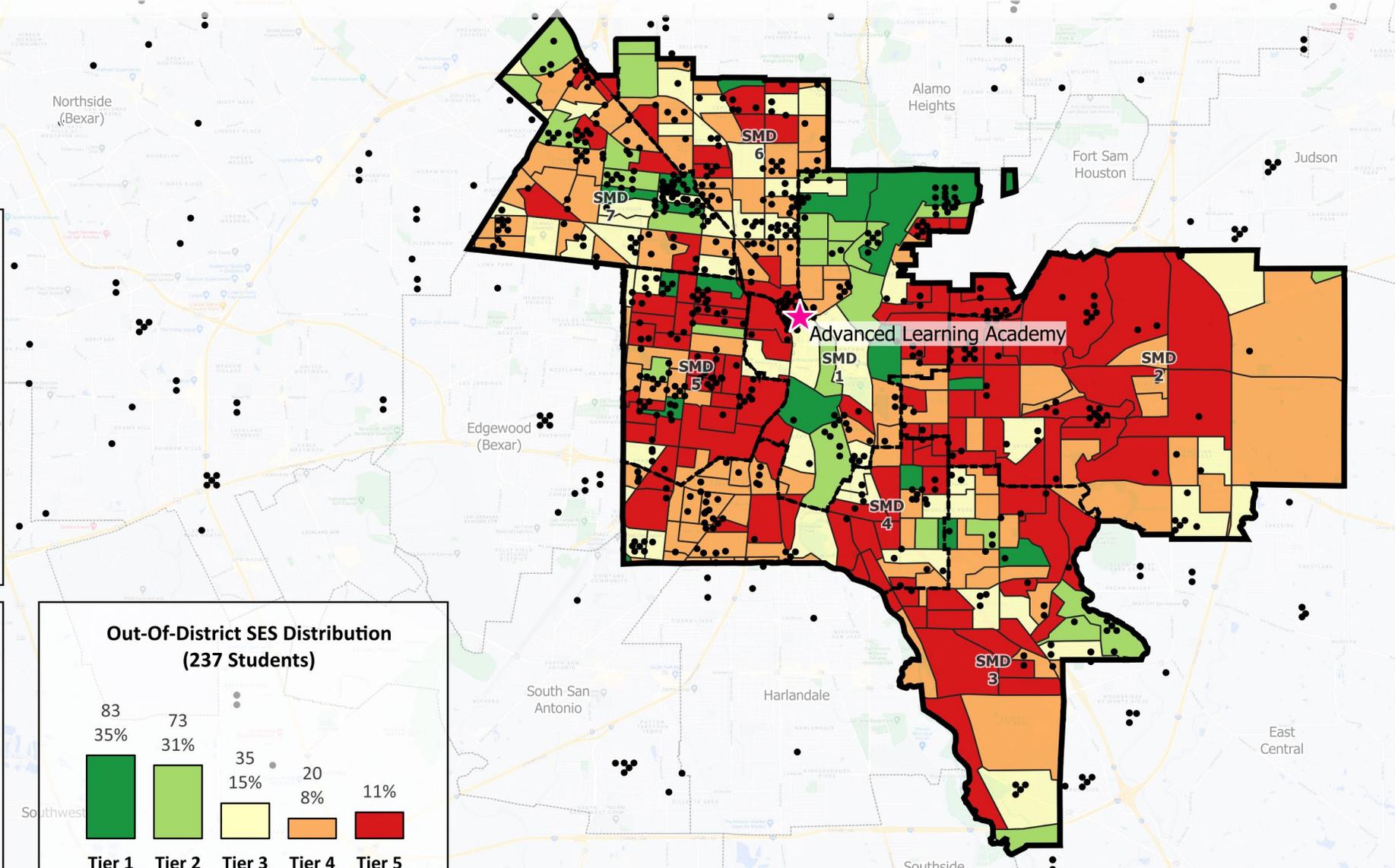
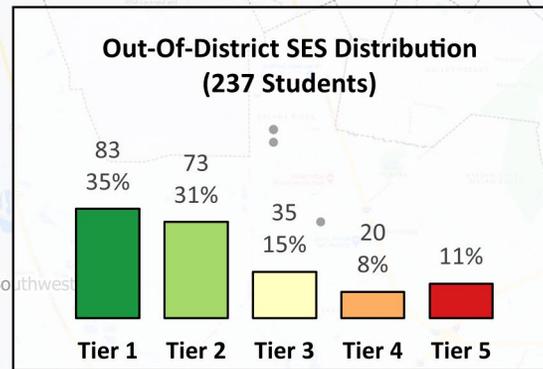
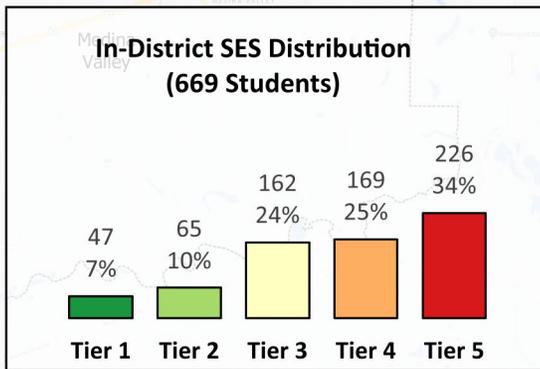
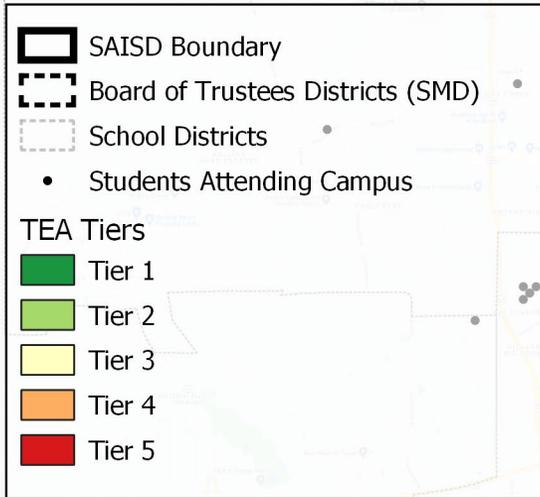
School Funding Category	State SES Multiplier	# Schools	Payout Per Teacher		
			Recognized	Exemplary	Master
A (Highest SES)	0.0-2.7	25	\$5,000	\$10,000	\$18,500
B	2.8-3.1	25	\$6,000	\$12,500	\$22,500
C	3.2-3.4	24	\$6,500	\$13,500	\$24,500
D (Lowest SES)	3.5-5.0	25	\$7,000	\$14,500	\$26,500

*This table reflects the gross payout amount for each designation level. Standard employee deductions will apply. SAISD's budget for TIA also accounts for standard employer benefit costs and taxes, not shown here.*



- **Measure teacher effectiveness:** MTI uses multiple measures of teacher performance, including observation and assessment data, to measure teacher effectiveness and holistically evaluate a teacher's performance.
- **Support teacher development:** Teacher observation and student assessment data enable school and district leaders to support teachers at all levels in their growth and professional development.
- **Recognize, reward, recruit, and retain highly effective teachers:** SAISD recognizes highly effective teaching by designating high performing teachers and financially rewarding them. This, in turn, enables the district to recruit and retain effective teachers, especially within our highest need communities and schools.
- **Accelerating student achievement:** the ultimate goal of the MTI is to accelerate student achievement and prepare SAISD students for a lifetime of success.

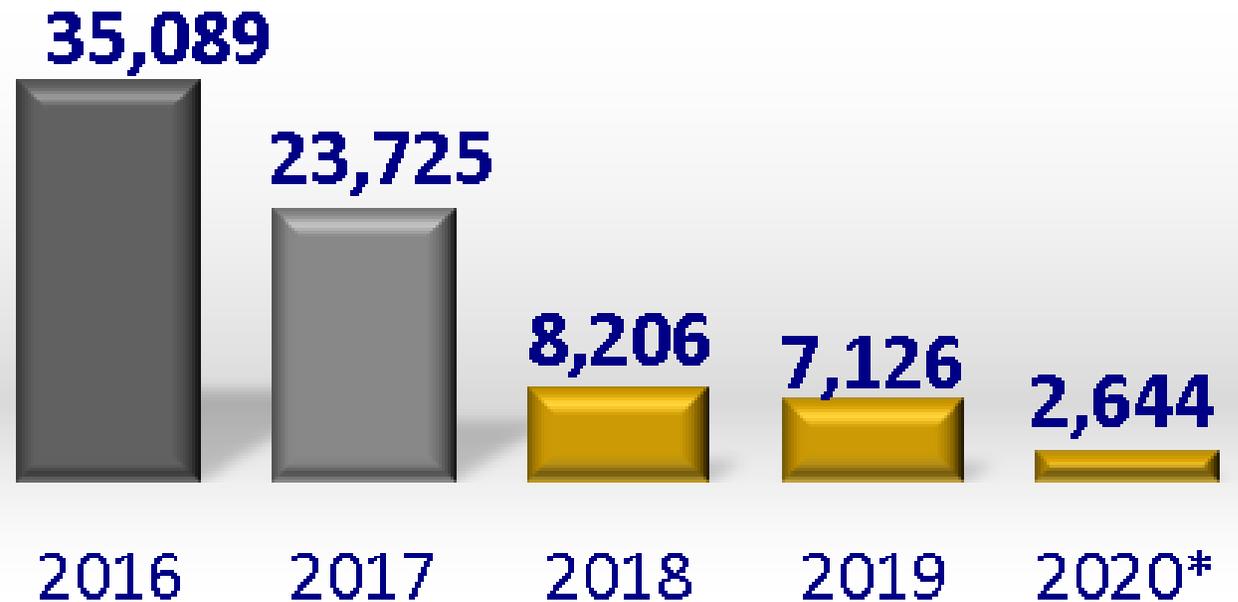
# 2020-21 Texas (TEA) Socioeconomic Tier Distribution Advanced Learning Academy Students



# Case Study: Texas

- Since 2017, the district has **tripled the number of A- and B-rated campuses.**
- Recognized in 2019 as **one of the fastest-improving districts in the state.** In almost every grade level, the district either met or outperformed statewide student achievement gains over the past two school years.
- The percentage of **students graduating college-ready rose from 10 percent in 2015 to 68 percent with more than half of all graduates now attending 4-year colleges and universities.**

In the last 5 years SAISD has **DECREASED** the number of students attending low performing schools by about **93%**



# Case Study: Texas

**2016**

<b>SAISD Rating: F</b>		
Student Achievement	58	F
Progress A: Growth	59	F
Progress B: Relative	65	D
Closing the Gap	51	F
Overall = <b>59</b>		

**2017**

<b>SAISD Rating: D</b>		
Student Achievement	61	D
Progress A: Growth	58	F
Progress B: Relative	70	C
Closing the Gap	63	D
Overall = <b>68</b>		

**2018**

<b>SAISD Rating: C</b>		
Student Achievement	64	D
Progress A: Growth	70	C
Progress B: Relative	75	C
Closing the Gap	72	C
Overall = <b>74</b>		

**2019**

<b>SAISD Rating: B</b>		
Student Achievement	73	C
Progress A: Growth	70	C
Progress B: Relative	87	B
Closing the Gap	73	C
Overall = <b>83</b>		

# Progress Towards a Neighborhood Indicator of Poverty

