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BILL:	House Bill (HB) 1211	**DATE:**	March 14, 2023
SUBJECT:	Education - Compensatory Education - Maryland Neighborhood Tier System Calculation	**COMMITTEE:**	Appropriations
POSITION:	Support with Amendments		
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Explanation

The Maryland State Department of Education **(MSDE) respectfully submits this testimony in support of House Bill (HB) 1211 – Education - Compensatory Education - Maryland Neighborhood Tier System Calculation, with amendments**. HB 1211 operationalizes the recommendations of the Maryland State Department of Education (MSDE) in its October 2022 Update Report to the Blueprint Report on Neighborhood Indicators of Poverty.[1] The proposed amendments, detailed in the last section of this testimony, incorporate the final set of recommendations from that report.

The impact of poverty and socioeconomic status on student achievement, educational attainment, and other educational outcomes has long been a concern for educators and policymakers. Recognizing this, State aid formulas, including the Blueprint for Maryland's Future formula, often use available economic data to focus resource allocation to help mitigate the effects of poverty on students. These policies risk falling short if the data used to identify students in circumstances of poverty fail to properly identify the number of eligible students and the concentrated poverty in which students reside. The socioeconomic status of a student's parents or guardians is the strongest predictor of academic achievement and educational attainment but the concentration of poverty within a neighborhood in which an individual resides has an additional negative effect. In other words, both poverty and place matter.

The proposed legislation directly addresses this policy area through the establishment of Maryland Neighborhood Tiers (MNT) in the identification of students eligible for compensatory education aid and increases Concentration of Poverty aid for Concentration of Poverty Per-Pupil Grants based on the depth and concentrated poverty of students in a given school.

These policies ensure students in circumstances of poverty and segregation in urban and rural areas have the adequate resources and the teachers they need to be successful and set the Blueprint for Maryland's Future up for success. Maryland must give its highest-need children a fighting chance. The best way to do so is to make sure we know who these children are, provide the funding they need, and get them the best educators in our workforce. It is time for action and this bill can get Maryland over the finish line.

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[1] https://blueprint.marylandpublicschools.org/wp-content/uploads/sites/20/2022/11/2022-Neighborhood-Indicators-of-Poverty-Report-1.pdf

Issues with Existing Poverty Measures

In Maryland, the Blueprint formula currently allows for three ways to measure student poverty: free- and reduced-price meal eligibility, the number of students identified in a school's or district's most recent community eligibility provision collection, or the students identified through direct certification.[2] The Concentration of Poverty portion of Blueprint formula accounts for poverty concentration at the school-level using existing measures of poverty only. However, the research is clear – residential poverty concentration matters, and the Blueprint formula does not adequately capture the nuances necessary to allocate resources that reflect depths of poverty and concentration of poverty in Maryland's neighborhoods. Concentrated, residential poverty is inextricably linked with educational outcomes:

- Economic mobility varies substantially by geography across the United States; areas with less residential segregation by race and income and less income inequality had higher rates of economic mobility.[3]
- Neighborhood poverty was found to be the most important factor explaining a lack of economic mobility among African American children, more so than parental education, employment, or marital status. The outcomes of better off children raised in areas of concentrated poverty were also negatively affected by their neighborhood.[4]
- Children whose families moved to a higher income neighborhood have better outcomes, including higher earnings and college attendance rates, and the magnitude of the improvement increases with the amount of time they spend growing up in the new neighborhood.[5] Specifically, moving out of a neighborhood with low economic mobility into a neighborhood with higher mobility increases lifetime earnings for low-income children by an average $200,000.[6] Low-income boys who grew up in Baltimore earn approximately 25 percent less as adults compared to similar low-income boys who were born in the city but moved as small children to an average income neighborhood.[7]

Given the negative effects of concentrated poverty in schools, policymakers have instituted school integration programs in various school districts, including here in Maryland. For example:

- In Montgomery County, Maryland, the nation's oldest inclusionary zoning program allows the local housing authority to purchase a third of homes as federally funded public housing, permitting low-income families to live in higher-income neighborhoods and their children to attend schools in which a majority of students do not live in poverty. Research on the effects of this housing policy found that elementary school students that lived in public housing and attended their district's most advantaged schools outperformed similar students that attended the least advantaged schools. The achievement gap between students who lived in public housing and non-poor students in the district was reduced by half in math and by a third in reading.[8]

Further, while poverty is "the extent to which an individual does without resources," the current prevailing indicator of poverty, FARMs eligibility, reflects the availability of only one resource – household income.[9][10] Instead of relying on

[2] Eligible students are identified based on participation in programs such as the Temporary Assistance for Needy Families (TANF), which in Maryland is known as Temporary Cash Assistance (TCA), Supplemental Nutrition Assistance Program (SNAP), and Medicaid. Students in Foster Care and students experiencing homelessness are also directly certified.
[3] Chetty, R., Hendren, N., Kline, P., & Saez, E. (2014). Where is the land of opportunity? The geography of intergenerational mobility in the United States. *The Quarterly Journal of Economics, 129*(4), 1553-1623.
[4] Sharkey, P. (2009). Neighborhoods and the Black-White mobility gap. Washington, D.C. The Economic Mobility Project, The Pew Charitable Trusts.
[5] Chetty, R. & Hendren, N. (2018). The impacts of neighborhoods on intergenerational mobility I: Childhood exposure effects. *The Quarterly Journal of Economics, 133*(3), 1107-1162.
[6] https://www.npr.org/2018/10/01/649701669/the-american-dream-is-harder-to-find-in-some-neighborhoods
[7] https://www.nytimes.com/2015/05/04/upshot/an-atlas-of-upward-mobility-shows-paths-out-of-poverty.html
[8] Schwart, H. (2012). Housing policy is school policy: Economically integrative housing promotes academic success in Montgomery County, Maryland. The Century Foundation, New York, NY.
[9] Payne, 2005
[10] National Forum on Education Statistics, 2015

income as the only measure of poverty, incorporating other measures of socioeconomic status and identifying concentrations of poverty will create a more equitable and accurate identification of students and schools in need.

The socioeconomic composition of a school influences students' educational outcomes above and beyond the students' own family background, prior achievement, race, gender, and levels of effort or motivation.[11] In fact, one study found low-poverty schools were 22 times more likely to consistently display high academic achievement than high-poverty schools.[12]

Maryland Neighborhood Tiers

The Maryland Neighborhood Tiers (MNT) system is designed to recognize poverty based on neighborhood indicators of poverty. Specifically, Maryland Neighborhood Tiers assign specific socioeconomic status scores and tiers to each neighborhood, defined by the Census block group.

Informed by national examples, academic research, and rigorous analysis of neighborhood indicator data sources, MSDE developed a process to utilize American Community Survey (ACS) measures to develop a methodology that assigns a "Maryland Neighborhood Tiers (MNT)" to each Census block group. MSDE's research included a detailed investigation of existing and emerging methodologies used to create socioeconomic scores and tiers. The foundation of these models is the use of Census block groups to identify neighborhoods and the use of ACS measures to identify multiple dimensions of socioeconomic status for each block group.

The MNT system builds on the approach used by Texas that focuses on four neighborhood factors, as measured by the ACS. These four measures represent distinct elements of poverty that are used in existing methodologies and are correlated with student achievement.[13] The following four ACS metrics across each Census block group in Maryland are included in the Maryland Neighborhood Tiers model:

- median household income
- adult education level
- home ownership
- household composition (single parent household status)

Each Census block group in Maryland is classified into one of five MNT tiers (1 to 5) so that each tier contains about one-fifth of all school-age residents. This means that each tier does not consist of the same number of Census block groups. Statewide, 16.2% of block groups fall in Tier 1, 19.1% in Tier 2, 20.5% in Tier 3, 21.9% in Tier 4, and 22.3% in Tier 5.

Maryland Neighborhood Tiers in Action

After the development of the Maryland Neighborhood Tiers (MNT) as described above, MSDE then developed different a methodological approache to use the MNTs to provide to equitably allocate Compensatory Education and Concentration of Poverty funding.

MSDE assigns all students to their Maryland Neighborhood Tier (Tier 1 to Tier 5) and further subcategorizes students based on whether or not those students are economically-disadvantaged. Currently, Compensatory Education and Concentration of Poverty funding amounts are based on the number of eligible students. Both funding amounts are based on one count of eligible students per school – the number is not differentiated in any way. MSDE explored financial formulas that follow this same schema, as well as financial formulas that differentiate the funding amount each student can generate based on the student's MNT.

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[11] Mickelson, 2018
[12] Harris, 2007
[13] (Davis-Kean, 2005) (Ghimire, 2021) (Milne, Myers, Rosenthal, & Ginsburg, 1986) (Pong, 1997).

Table 1: Categories for Calculating MNT Funding Weights

	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Not Economically disadvantaged	Category 1	Category 2	Category 3	Category 4	Category 5
Economically disadvantaged	Category 6	Category 7	Category 8	Category 9	Category 10

MSDE incorporates a weighted full-time equivalent (FTE) student count that reflects differentiated need by Tier. A student's FTE rate is determined by which MNT they live in. For example, students who are identified as economically disadvantaged and reside in Tiers with more concentrated poverty can generate 130% of the current per-pupil amount. Benchmarking against standard practice, the per-pupil amounts could be adjusted from 60% of the current per-pupil amount up to 140% of the current per-pupil amount. These differences reflect the construction of similar weight distributions used in other State- and District-level weighted-student formulas from across the country.[14]

To operationalize this, students in each Tier generate a different relative weight of the per-pupil funding amount. All economically-disadvantaged students, as well as non-economically-disadvantaged students living in Tiers 3, 4, or 5, are eligible for Compensatory Education per-pupil funding in the proposed bill. Non-economically-disadvantaged students in Tiers 3, 4, and 5 generate Compensatory Education funding under this formula based on the Concentration of Poverty of the student's neighborhood as well as the probability that many of these students are eligible to be identified as economically disadvantaged but have not been identified as such due to data collection difficulties. Students in Tier 5 have a greater need than students in Tier 1, so they generate a relatively higher funding amount. Additionally, students who are identified as economically disadvantaged and live in a low socioeconomic status (SES) neighborhood have a double disadvantage, so they generate a greater funding amount. The funding amounts and relative weights compared to the current per-pupil funding amount are available in Table 2 below for each of the 10 combinations of the 5 tiers and the economically disadvantaged or not economically disadvantaged status.

Table 2: Per-Pupil Amount Relative Weights and Dollar Amounts

|	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Not economically disadvantaged	0% $0	0% $0	60% $4,437	70% $5,177	80% $5,916
Economically disadvantaged	90% $6,656	100% $7,396	110% $8,135	120% $8,875	130% $9,615

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[14] See, for example:

Chambers, J. G., Levin, J. D., & Shambaugh, L. (2010). Exploring weighted student formulas as a policy for improving equity for distributing resources to schools: A case study of two California school districts. Economics of Education Review, 29(2), 283–300;

Chingos, M. M., & Blagg, K. (2017). Do Poor Kids Get Their Fair Share of School Funding?

Of, U. S. D., & Education, Office of Planning, Evaluation and Policy Development, P. and P. S. S. (2019). Districts' Use of Weighted Student Funding Systems to Increase School Autonomy and Equity: Findings From a National Study Volume 1-Final Report (Vol. 1). Washington, DC.

Case studies are helpful in illustrating the impact of the proposed legislation and highlight the need for legislative action. For example, even though Lakeland Elementary/Middle School and Francis Scott Key Elementary/Middle School in Baltimore City enroll similar proportions of economically disadvantaged students, Figure 1 demonstrates that Francis Scott Key enrolls many more students in Tier 5 than Lakeland. Currently, the Blueprint formula is not sensitive to these differences.

Figure 1: Maryland Neighborhood Tier Case Study
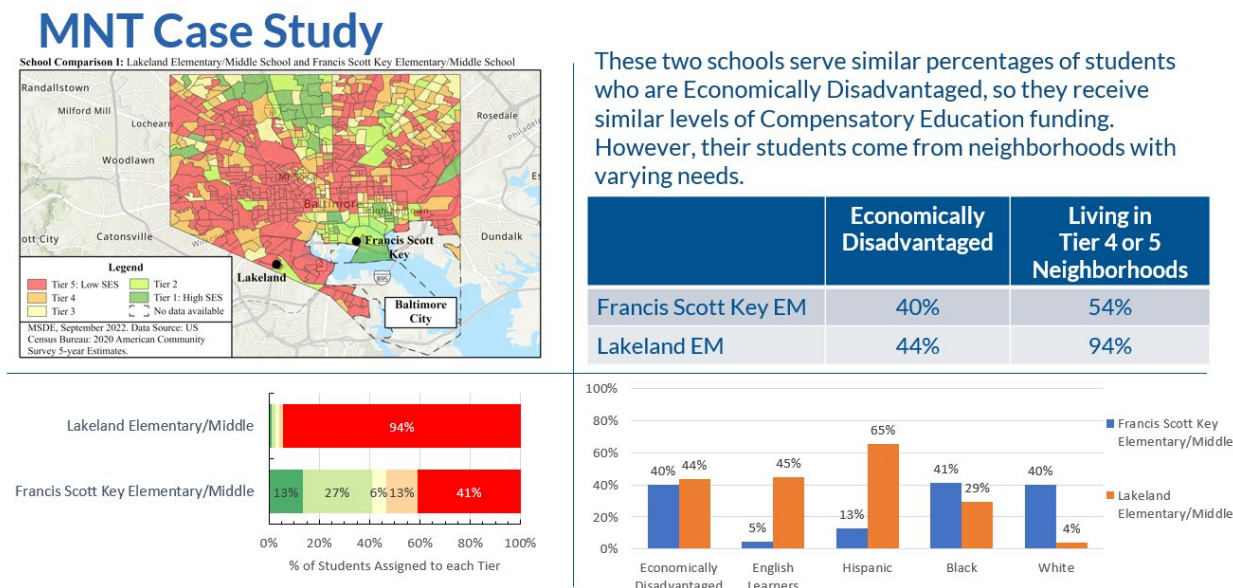
Proposed Amendment: Incentivizing the Strongest Teachers to Teach in Maryland's Highest Need Schools

MSDE respectfully asks for your consideration of a MSDE-proposed amendment, one included in the model bill of the Neighborhood Indicators of Poverty report and one that leverages the MNT system to, optional to local education agencies and done with local bargaining units, incet Maryland's strongest teachers to teach in Maryland's highest-need schools: the Teacher Designation System (TDS).

Maryland's current educator workforce is disproportionately white and does not, on average, reflect the demographic composition of Maryland's students. This challenge poses barriers to the success and empowerment of black and brown children who, the research tells us again and again, perform better when having access to a teacher who mirrors their background. Indeed, the story of homogeneity in the teaching workforce is, in part, the story of persistent segregation and persistent barriers to building generational wealth. Long-standing compensation structures and student debt have made wealth-building a challenge for teachers, creating a barrier for those without generational wealth to enter the profession. How can education break the cycle of wealth inequality if black and brown children from circumstances of poverty do not see economic opportunity and mobility in the teaching profession? Increasing the diversity of the educator workforce requires a commitment to compensate the highest-quality teachers on par with their colleagues in other professions. The teacher designation system allows high-quality teachers to be well paid and creates a strong enough incentive to channel and retain those teachers into the State's highest-need schools. The system does not conflict with any proposed pipeline initiatives in other bills proposed this session and the TDS amendment would address the inequitable assignment and allocation of existing, high-quality teachers in the State.

The Compensatory Education and Concentration of Poverty resources allocated through the Blueprint formula using MNT methodology are only part of a larger, comprehensive strategy necessary to increase educational attainment for students

attending schools that enroll high proportions of students living in concentrated poverty. Children in these settings also require access to the highest-quality educator workforce.[15] The Teacher Designation System component of the Maryland Neighborhood Tiers and Teacher Designation Allotment Act accomplishes this goal.

The three-level system in the proposed amendment allows for local education agencies to create criteria for a graduated teacher identification system in conjunction with their local bargaining units. These designation levels will identify the highest-quality teachers in Maryland and provide salary incentive bands for each of the three levels (recognized, exemplary, and master teachers) a local education agency adopts, if they so choose, and for which MSDE and its research partner validates and approves.

Systems like those in the proposed Maryland Neighborhood Tiers and Teacher Designation Allotment Act are long-documented in driving success. Evaluations of the federal Teacher Incentive Fund, for example, provide the clearest evidence to date that these systems:

1. impact teacher distribution – the labor market responds to the incentives. Data indicate that teachers move to schools where incentives are available. Data also indicate increased retention and reduced turnover for these teachers in high-needs schools;[16] and

2. impact student achievement – individual and meta-analysis indicate that the policies crafted in the Maryland Neighborhood Tiers and Teacher Designation Allotment Act improve student reading and student math scores, particularly in elementary schools.[17][18]

Existing precedence in Texas and Ohio (the "Ohio Teacher Incentive Fund") further supports the likely success of the proposed Teacher Designation System. Results suggest that strong incentives can carry impacts in areas of highest concentrated poverty. In Texas cities, for example, "teachers who live and teach in the cities are subject to higher costs of living and thus more likely to respond to an initiative that promises significant salary increases."[19] An important but notable failing of teacher incentive programs occurs when the incentive is too small to generate the intended result. This bill fills the gap: teachers who become a "master" teacher in the TDS and teach in an economically and/or racially segregated urban or rural school can earn up to $32,000 annually in salary incentives. The bill mitigates fiscal impact in three ways: creating a locally bargained, three-level designation system with the highest salary amounts open only to those meeting the program's rigorous criteria; adjusting potential salary increases based on the poverty rate and Maryland Neighborhood Tier information for a given school such that only teachers in the highest concentrated poverty schools access the full amount; and making the program optional for school districts. For example, Texas, which implements a program like the one designed in this bill, has more than 320,000 teachers (four times the amount in Maryland). According to the Texas Education Agency, "during the 2021-22 school year, approximately $55.5 million was distributed towards teacher compensation for more than six thousand Recognized, Exemplary, or Master designated teachers" (the three-levels of the Texas Education Agency's system).[20] The comparable annual fiscal impact in Maryland would be $13.9 million. The bill also provides a $1,000,000 annual appropriation to allow MSDE to establish and administer the program, including the use of an independent, best-in-class, technical assistance university partner. This is essential given the cohort-based method required to administer a well-constructed teacher incentivization policy.

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[15] Stronge, J.H. (2010). Effective teachers = student achievement : what the research says, Larchmont, NY : Eye on Education

[16] See, for example: https://files.eric.ed.gov/fulltext/ED568702.pdf

[17] See, for example: https://www.mathematica.org/publications/promoting-educator-effectiveness-the-effects-of-two-key-strategies

[18] See also: Pham, L. D., Nguyen, T. D., and Springer, M. G. (2020). Teacher Merit Pay: A Meta-Analysis. Am. Educ. Res. J. 58, 527–566. doi:10.3102/0002831220905580

[19] Lee, Jaehoon & Strong, Michael & Hamman, Doug & Zeng, Yifang. (2021). Measuring Teacher Buy-in for the Texas Pay-for-Performance Program. Frontiers in Education. 6. 729821. 10.3389/feduc.2021.729821.

[20] https://tea.texas.gov/about-tea/news-and-multimedia/news-releases/news-2022/tea-approves-1600-new-teachers-for-teacher-incentive-allotment-designation#:~:text=Since%202019%2C%20TIA%20has%20allocated,Exemplary%2C%20or%20Master%20designated%20teachers.

Taken together, the TDS embedded in this amendment coupled with Blueprint formula Compensatory Education and Concentration of Poverty resource distribution aligned more closely to student need ensure that students in circumstances of concentrated poverty have the resources and the teachers they need to be successful. A strong Maryland future requires strong Maryland teachers and well-resourced schools for students who need the most support. The Maryland Neighborhood Tiers and Teacher Designation System is that pathway.

As illustrated above, the proper identification of student need, concentrated poverty, and depths of poverty are essential to aligning Blueprint resources to schools in keeping with the intent envisioned by the Blueprint for Maryland's Future. **MSDE encourages the Assembly to see the Blueprint through and respectfully urges a favorable report on House Bill 1211 from the Committee and requests consideration of the proposed amendment**. Please contact Justin Dayhoff at 410-767-0439 or justin.dayhoff@maryland.gov for any additional information.