

EDUCATION FUNDING STUDY RELEASE EVENT

How can we update our school funding system to support all students—while maintaining the strengths of the current system?

December 12, 2023



Preparing our students for a lifetime of success

**WELCOME TO
DELAWARE TECHNICAL
COMMUNITY COLLEGE!**

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STUDENT SUCCESS 2025 RECOMMENDS:



1. Allocating funding to respond to individual student needs
2. Updating our system so funds follow students
3. Allowing students to take courses across schools, online and in higher education
4. Increasing equity and flexibility
5. Building more transparent and efficient systems

OUR JOURNEY SO FAR



DORRELL GREEN

*Superintendent, Red
Clay Consolidated
School District*



WHAT HAVE WE LEARNED

SO FAR?

We learned that funding—when targeted at student needs and invested in effective ways—**can have a big impact on student performance and long term outcomes.**



Delaware's **Opportunity Funding** allocates **\$616 per student, or roughly 3-9%** on top of the average spending. Most other states allocate a weight of **between 25-50%** on top of base funding for the same student groups.

WHY IS IT IMPORTANT TO FOCUS ON FUNDING LOW-INCOME, SPECIAL NEEDS, AND MULTILINGUAL POPULATIONS?

Policy Impacts Related to Increased Spending



Increased
per-pupil
spending

=



A positive effect on educational attainment



Increases in long-term earnings



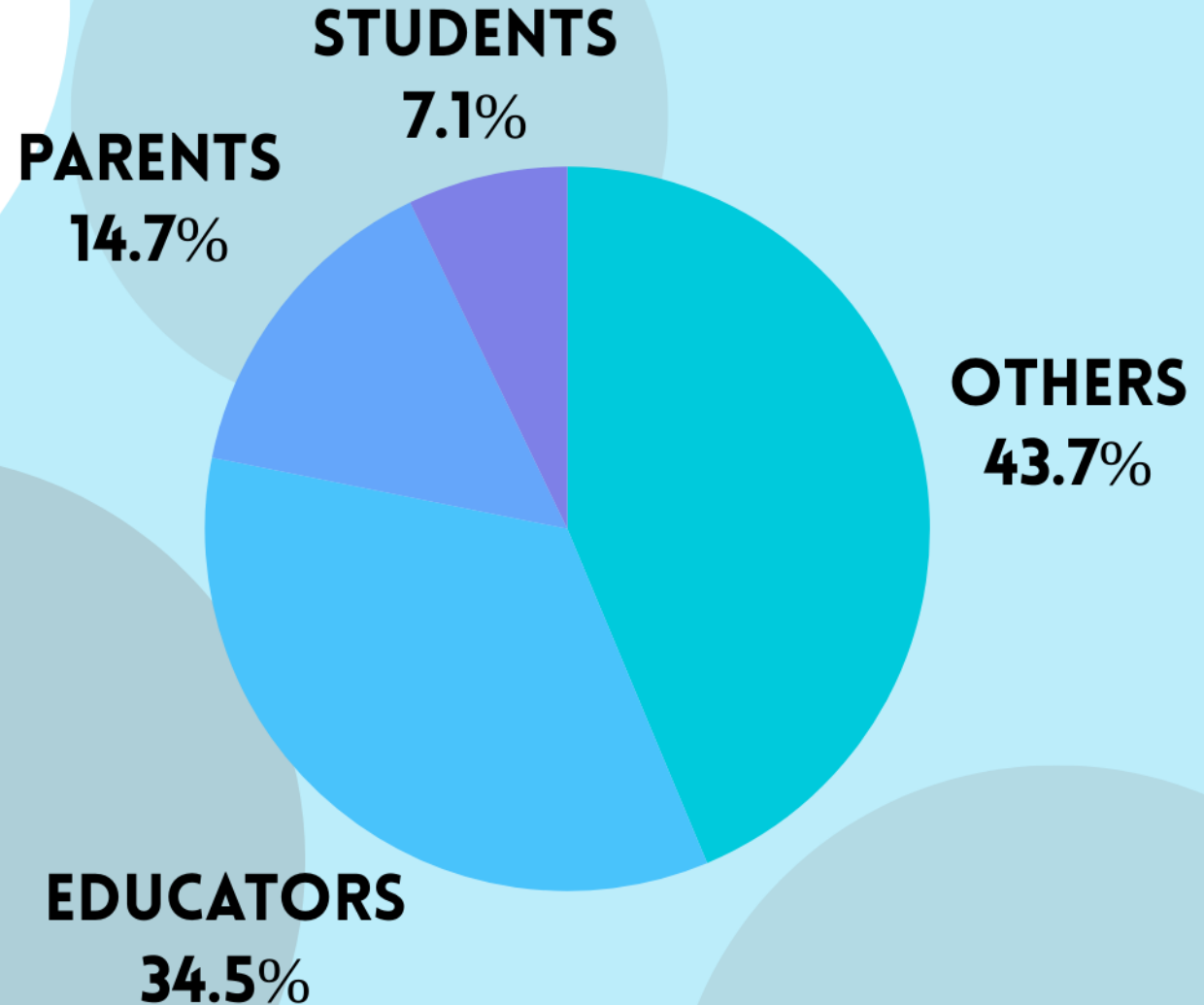
Increases in total years in school



Increases test scores

HEARING FROM OUR AUDIENCE

WHO IS IN THE ROOM TODAY?



MARK HOLODICK

*Delaware Secretary
of Education*



DREW ATCHISON

*Senior Researcher,
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Assessment of Delaware Public School Funding

Study Overview and Results

Drew Atchison

Vision Coalition – Education Funding Study Release Event, December 2023

Study Overview

Independent Assessment of Delaware Public School Funding

- Study was a requirement from a 2020 legal settlement between plaintiffs and the state.
- July 2022, AIR was hired to conduct a comprehensive assessment of Delaware's current public education funding system and provide recommendations for improvement.
- Our charge, as outlined in the request for proposals:
 - Conduct comparative analysis to other states
 - Fully research and understand existing funding structure
 - Evaluate revenue and spending in a variety of ways to highlight existing disparities
 - Present recommendations for future improvements that may result in improved funding equity with a focus on improving outcomes for all students – including recommended funding levels.

Emphasis of The Study

- **Adequacy**

- Are current funding/spending levels sufficient to meet the state's educational goals?
- How should funding be distributed across districts and schools to provide equal educational opportunity?

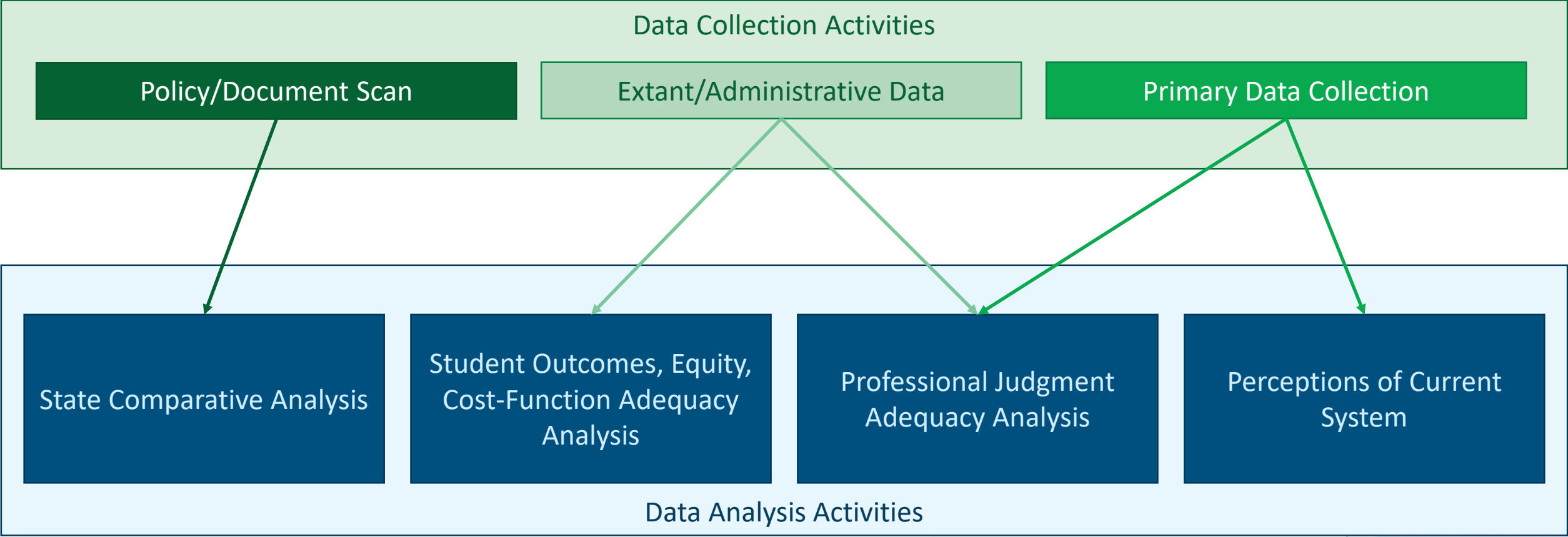
- **Equity and Wealth Neutrality**

- How is existing school funding/spending distributed with respect to student needs (e.g., low-income status, English learner status, disability status)?
- To what extent are school funding levels dependent on local revenue capacity?

- **Transparency, Flexibility, and Stability**

- Are funding mechanisms easy to understand and are funding amounts easily calculable?
- Is funding provided in a way that allows districts and schools flexibility in how to use it?
- Are funding amounts stable over time and predictable, allowing for long-term planning?

Overview of Main Data Collection and Analysis Activities



Types of Adequacy Analyses

- **Professional Judgment**
 - Expert educators specify resources (e.g., staff and other nonpersonnel) necessary to meet outcome goals for hypothetical schools that vary in student need.
 - Asked experts to consider the following:
 - » Goals
 - » Evidence
 - » Efficient
 - » Realistic
 - Determine the cost of those resources how they vary with respect to student need.
- **Cost-Function (Education Cost Model)**
 - Use statistical models to estimate relationships between outcomes and spending, accounting for variation in student needs and school contexts.

Education Funding Systems

Overview and Comparative Analysis

Delaware's Unit System

- A resource-based system that converts student enrollment into “units.”
 - Division I – teacher positions
 - Division II – nonpersonnel and utilities
 - Division III – equalization
- Student to unit ratios vary according to:
 - Grade level
 - Disability status
 - Vocational education
- Numerous supplemental formulas provide additional units (e.g., mental health units and academic excellence units), positions (e.g., principals, assistant principals, school nurses, administrative assistants, etc.), or funding allocations (e.g., Opportunity Funding).
- Actual funding provided for units and other staffing positions is based on state salary schedules that account for years of experience and educational attainment

Comparing to Other States

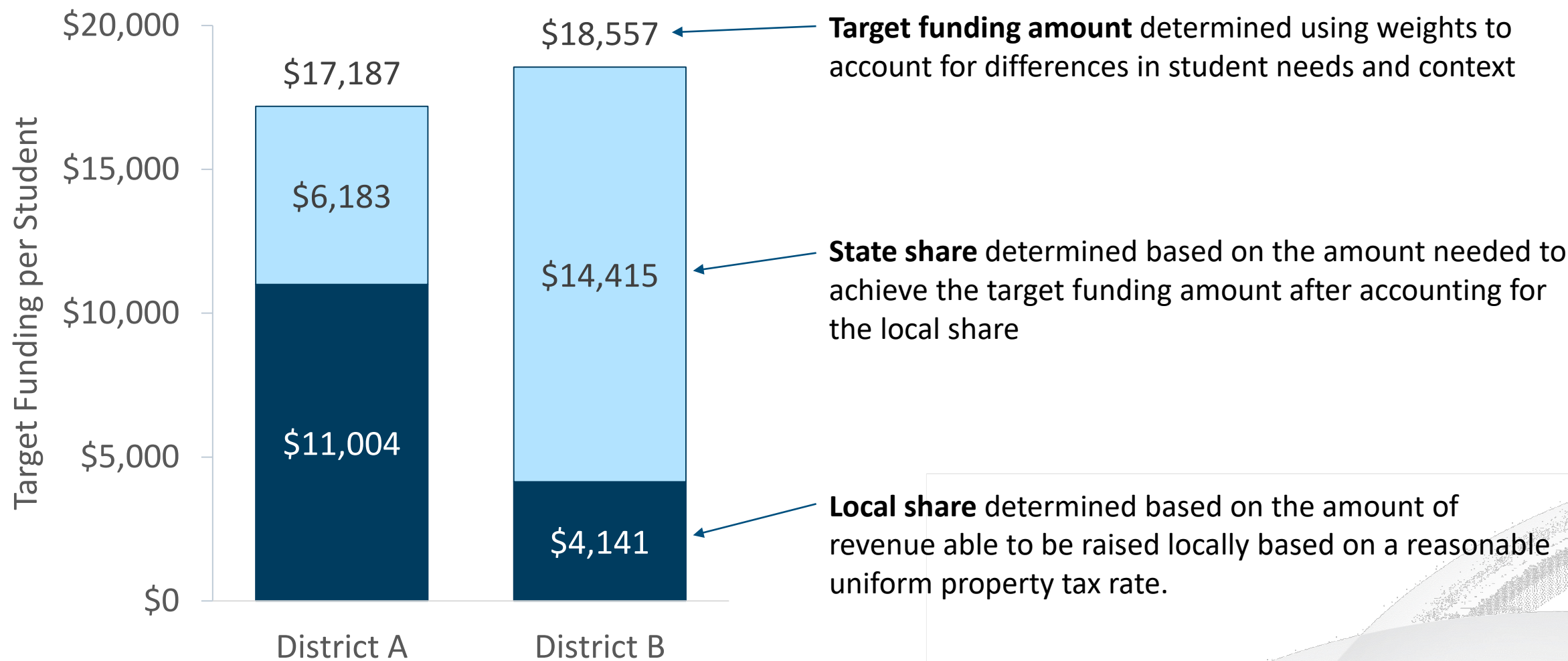
- Delaware is one of few states that operate a resource-based allocation formula. Most states use funding systems that allocate dollars to districts, typically through a base funding amount and weights.

Number of States that Use Weights for Funding Adjustments

29	39	37
Students with Disabilities	Economic Disadvantage	English Learners



Weighted Student (Foundation) Formula – Approach Used in Many Other States



Comparing to Other States

- All neighboring states use some form of a foundation formula to calculate target costs and calculate a local share accounting for local capacity – Maryland, New Jersey, Pennsylvania, Virginia.
- Maryland and New Jersey operate standard weighted student formulas
 - Maryland uses single weights for economic disadvantage, students with disabilities, and English learners, multiplied by the base amount.
 - New Jersey uses multiple economic disadvantage weights differentiated based on concentration as well as an EL weight. The base amount is differentiated by grade level.
 - » New Jersey funds students with disabilities outside of the main formula.
- Virginia uses a resource-based formula, like Delaware, to determine target funding amounts.
 - Key difference – resources are converted to dollars based on statewide average salaries and dollars are provided to districts.

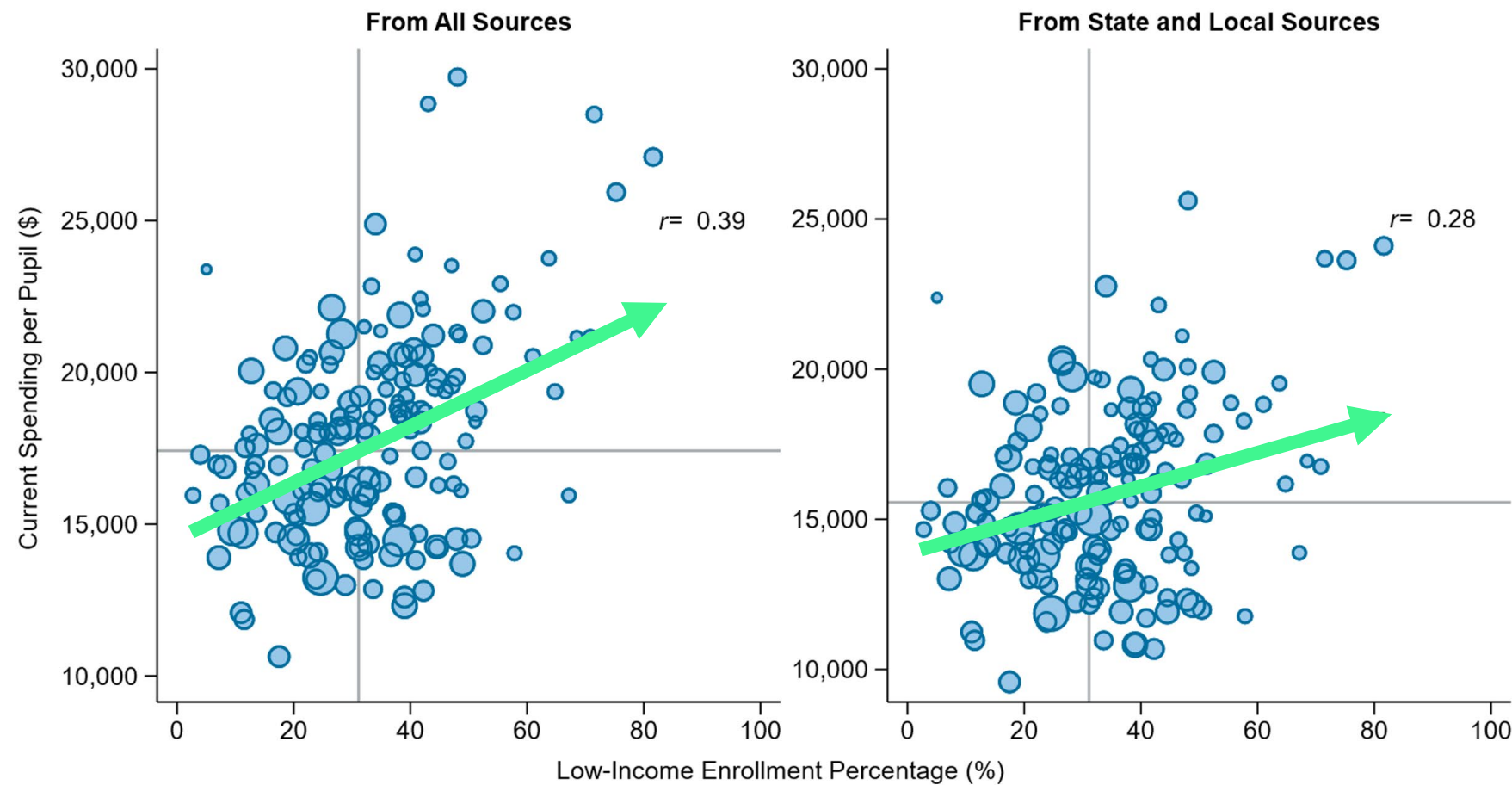
System Characteristics

Evaluating the Properties of Delaware's School Funding System

Equity

Adjusting for cost differences and fiscal capacity

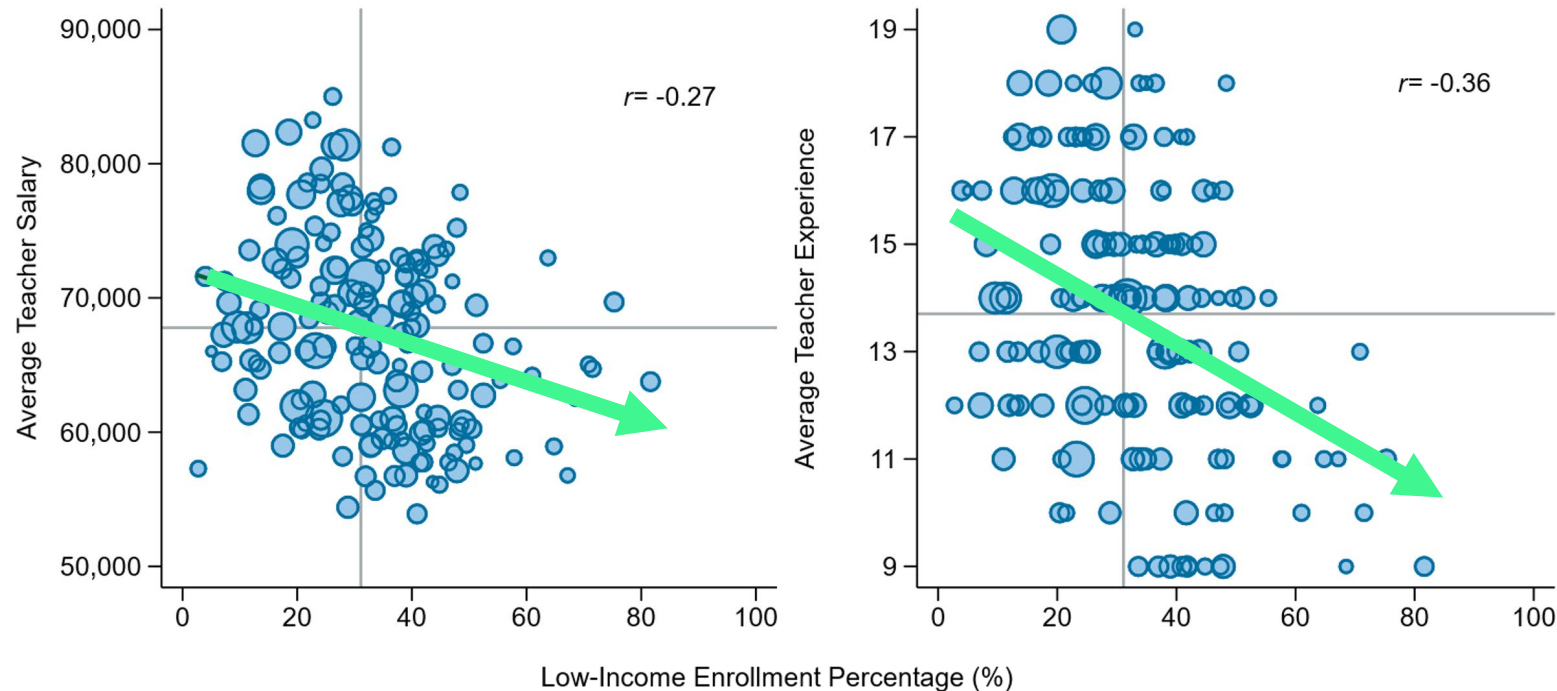
Marginally more is spent on schools serving higher proportions of low-income students.



This positive relationship is largely achieved through higher spending for SWDs and a positive correlation between the percentage of students who are SWDs and low-income.

Note: Data from 2022. Exhibit 13 in main report.

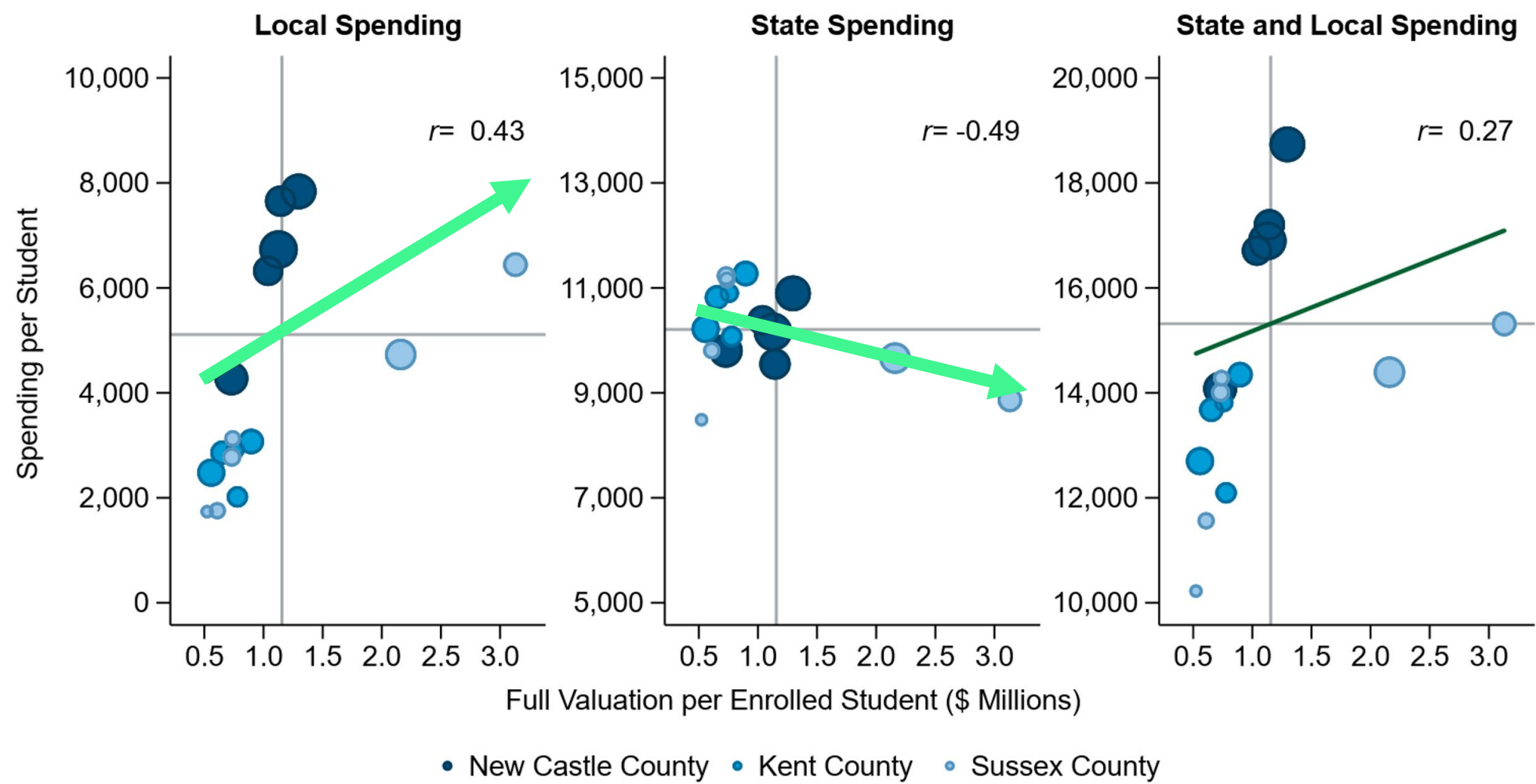
One barrier to improved equity is the clear negative relationship between teacher experience and the percentage of low-income students in schools, which results in lower average salaries in schools with high percentages of low-income students.



After accounting for other school characteristics, those with higher percentages of low-income students spend less on teacher salaries per student, particularly from state and local funding.

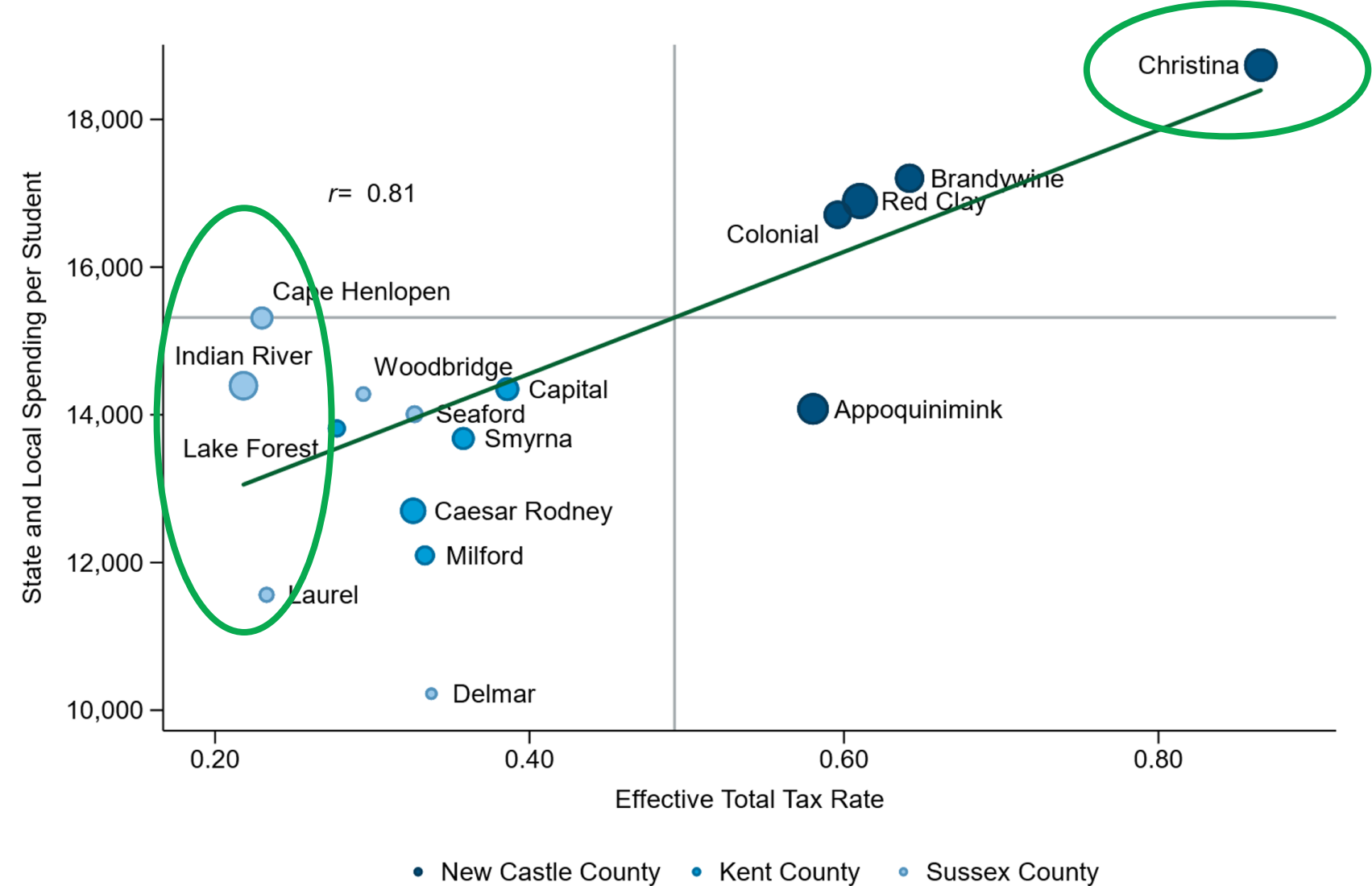
Note: Data from 2022. Exhibit 16 in main report.

Districts with more property wealth per student spend more per student from local sources. Adjustments to state funding are not sufficient to account for differences in local funding.



Note: Data from 2022. Exhibit 20 in main report.

Property tax rates vary widely across the state. Some districts achieve higher spending levels per student at similar or lower tax rates than others.



For a home of equivalent value, a taxpayer in Christina pays 4X more in taxes as homeowners in Cape Henlopen, Indian River, or Laurel.

Despite higher student needs and an equivalent tax rate, Laurel spends almost \$4,000 less per student than Cape Henlopen

Note: Data from 2022. Exhibit B10 in technical appendix.

Equalization funding has not been updated for over a decade and was described by district administrators as “broken,” “flawed,” and “outdated.”

We're not able to pay our teachers as hefty a salary as other districts who have a better source [of local revenue]. The real estate property values are much higher, they have more property in their district that they can tax. So, we're at a disadvantage. We're also in an economically depressed area, in addition to that. You mentioned the equalization formula; that's been frozen since 2009. It's outdated; it's not functioning correctly. So that's where, when you want to talk about equity and funding, I mean, that's the heart of it right there—there is no equity in the funding anymore.

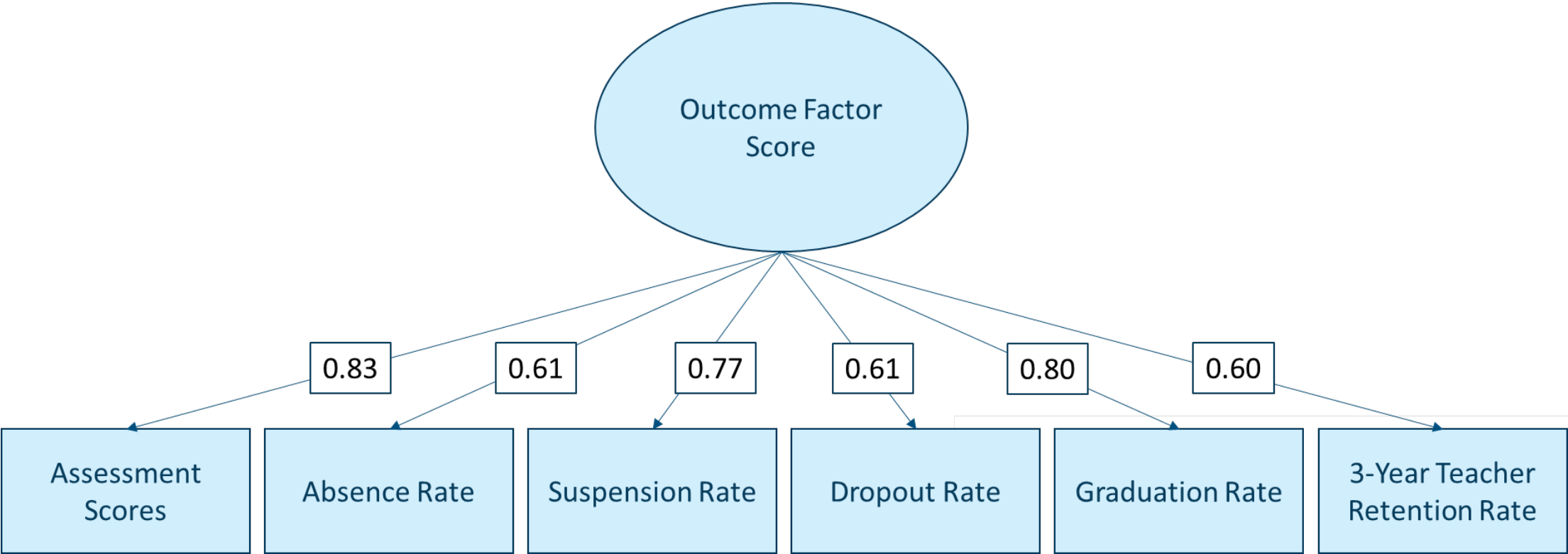
– District administrator

Questions

Student Outcomes

Meeting outcome goals and providing equal opportunity

Developed an outcome factor score that accounts for a variety of outcomes beyond test scores



Note: Exhibit 23 in main report.

Average performance in Delaware is not adequate

Schools performing near the average:

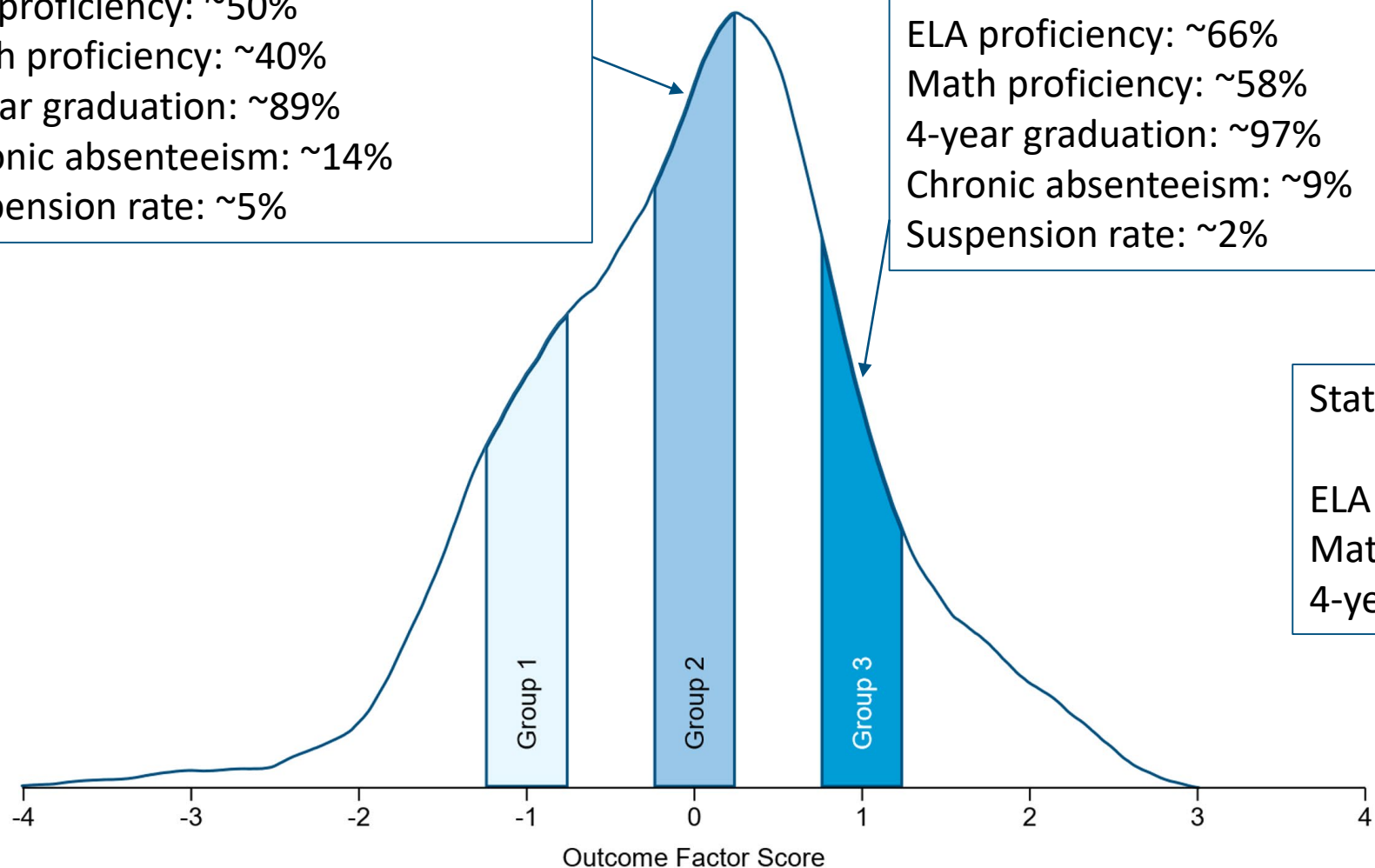
ELA proficiency: ~50%
Math proficiency: ~40%
4-year graduation: ~89%
Chronic absenteeism: ~14%
Suspension rate: ~5%

Schools performing 1 SD above average:

ELA proficiency: ~66%
Math proficiency: ~58%
4-year graduation: ~97%
Chronic absenteeism: ~9%
Suspension rate: ~2%

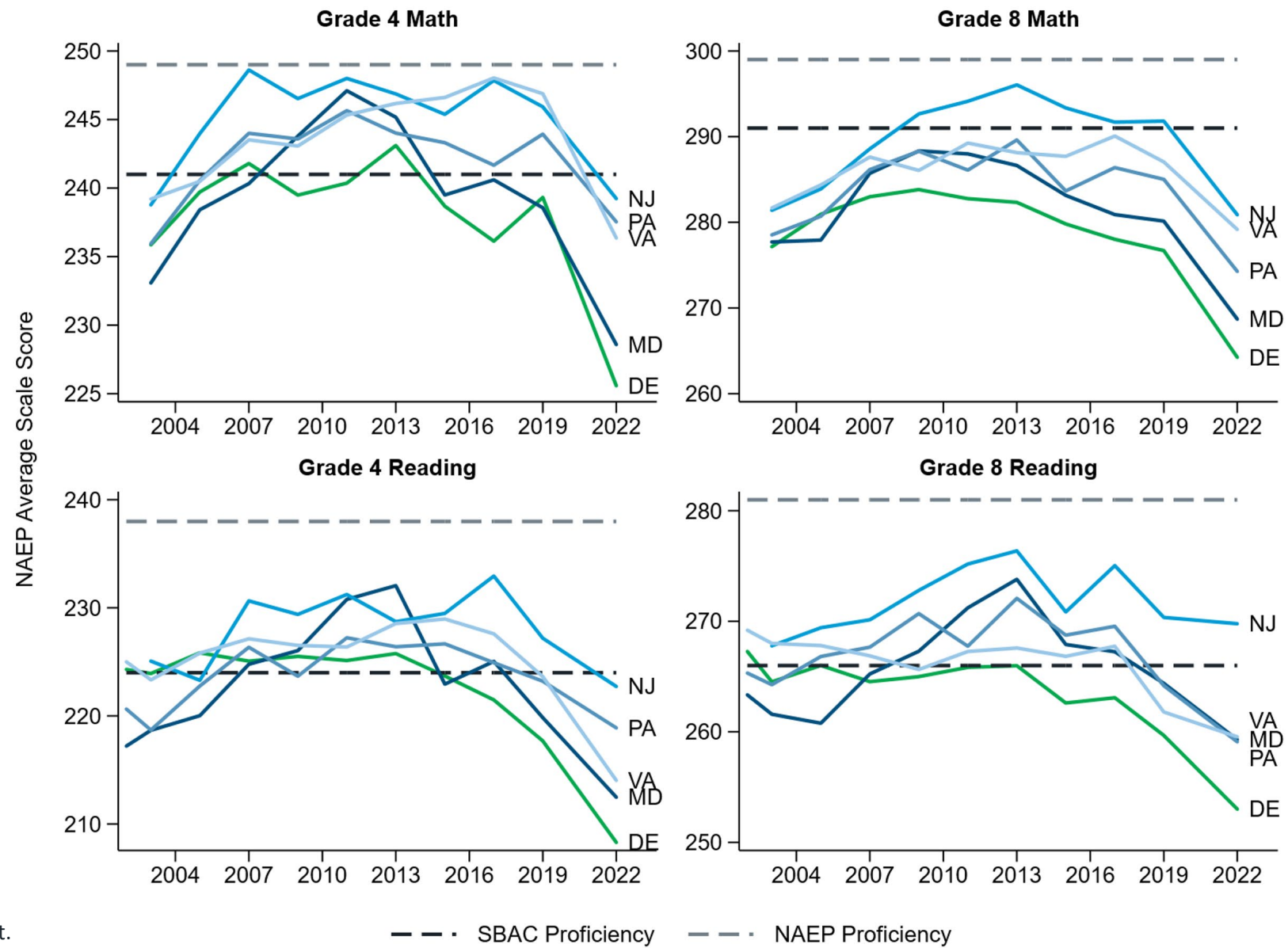
Stated 2030 goals in ESSA plan:

ELA proficiency: ~76%
Math proficiency: ~70%
4-year graduation: ~92%



Note: Data from 2015 to 2022. Exhibit 43 in main report.

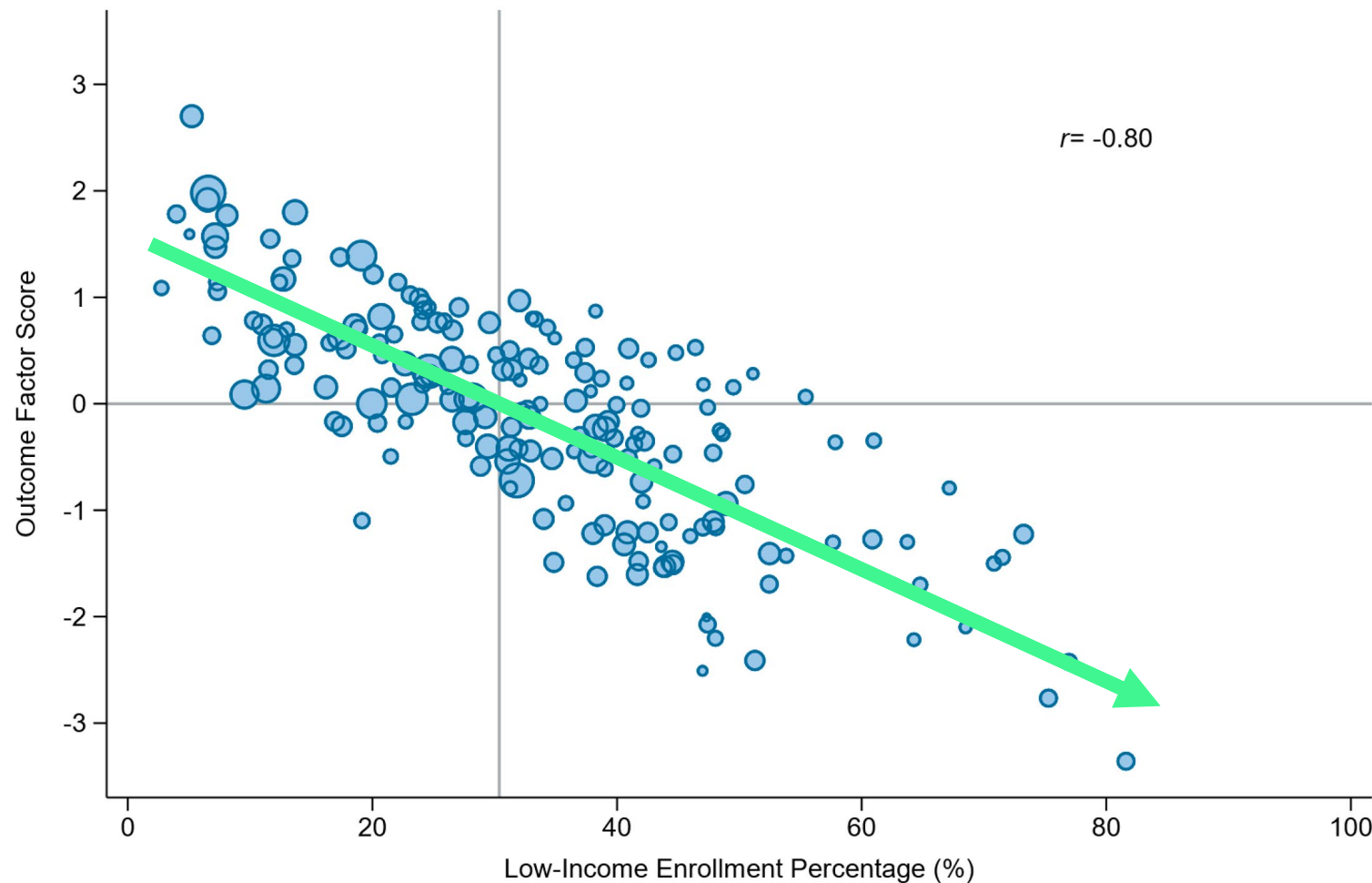
Delaware's performance on NAEP lags neighboring states and is in decline



Note: Exhibit 9 in main report.



Student outcomes are systematically lower in schools with higher percentages of low-income students



Schools with higher percentages of SWDs and ELs also tend to have lower outcomes.

Note: Data from 2022. Exhibit 9 in main report.

Adequacy

How much should be invested in education and how should it be distributed across schools and districts?

Estimated Adequacy using Education Cost Model and Professional Judgment Approaches

	Education Cost Model	Professional Judgment
Basis of results:	Relationship between outcomes and spending, accounting for other contextual factors, found in administrative data	Knowledge and experience of Delaware’s expert educators
Target outcome goal:	Measurable outcomes in administrative data – 1 SD above current average	State’s stated outcome goals, content standards, and instructional program requirements based on Delaware School Success Framework (DSSF)

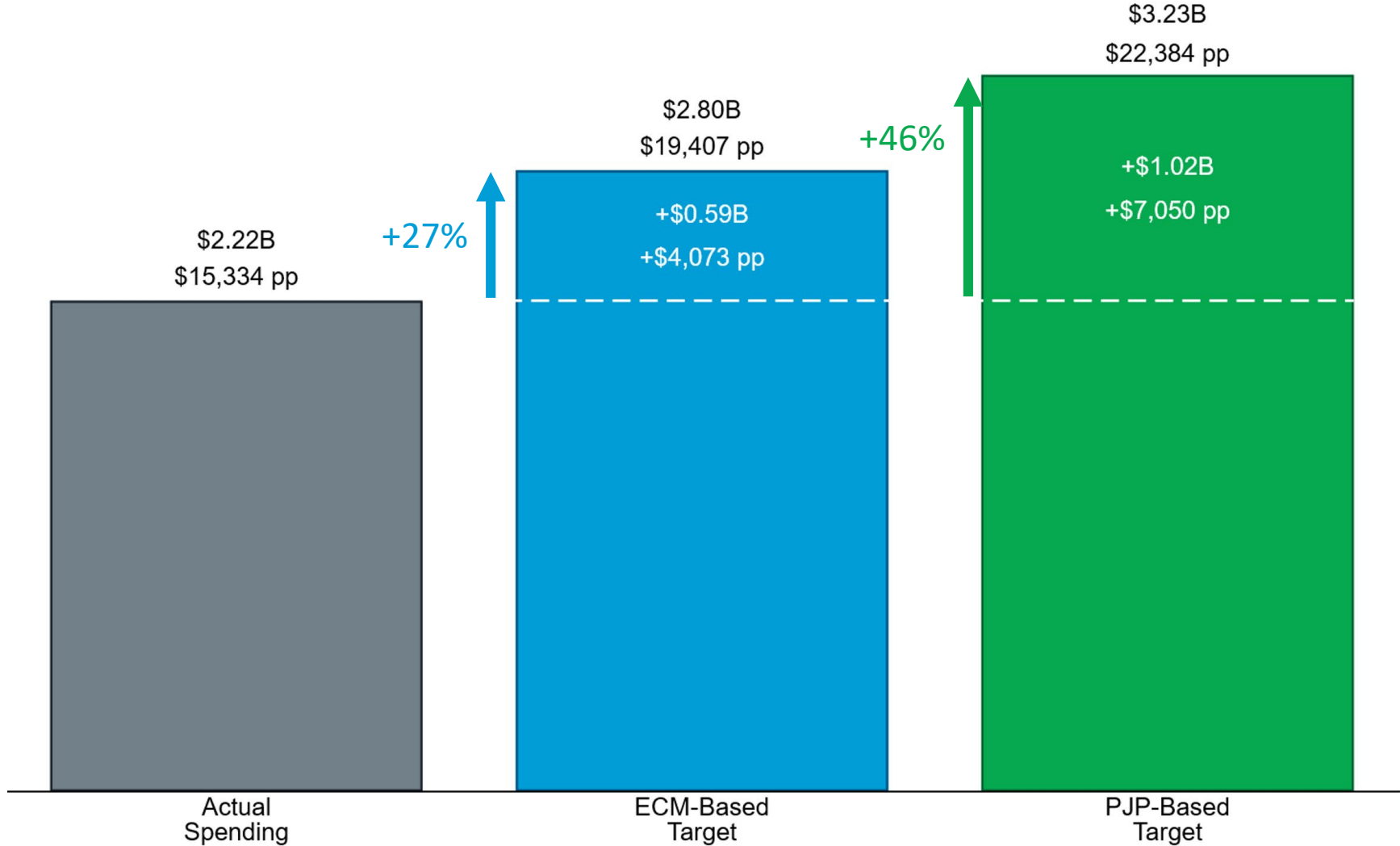
Key findings and conclusions are consistent across approaches



Developed models describing how much funding should be allocated to each school to provide equal opportunity in meeting outcome goals

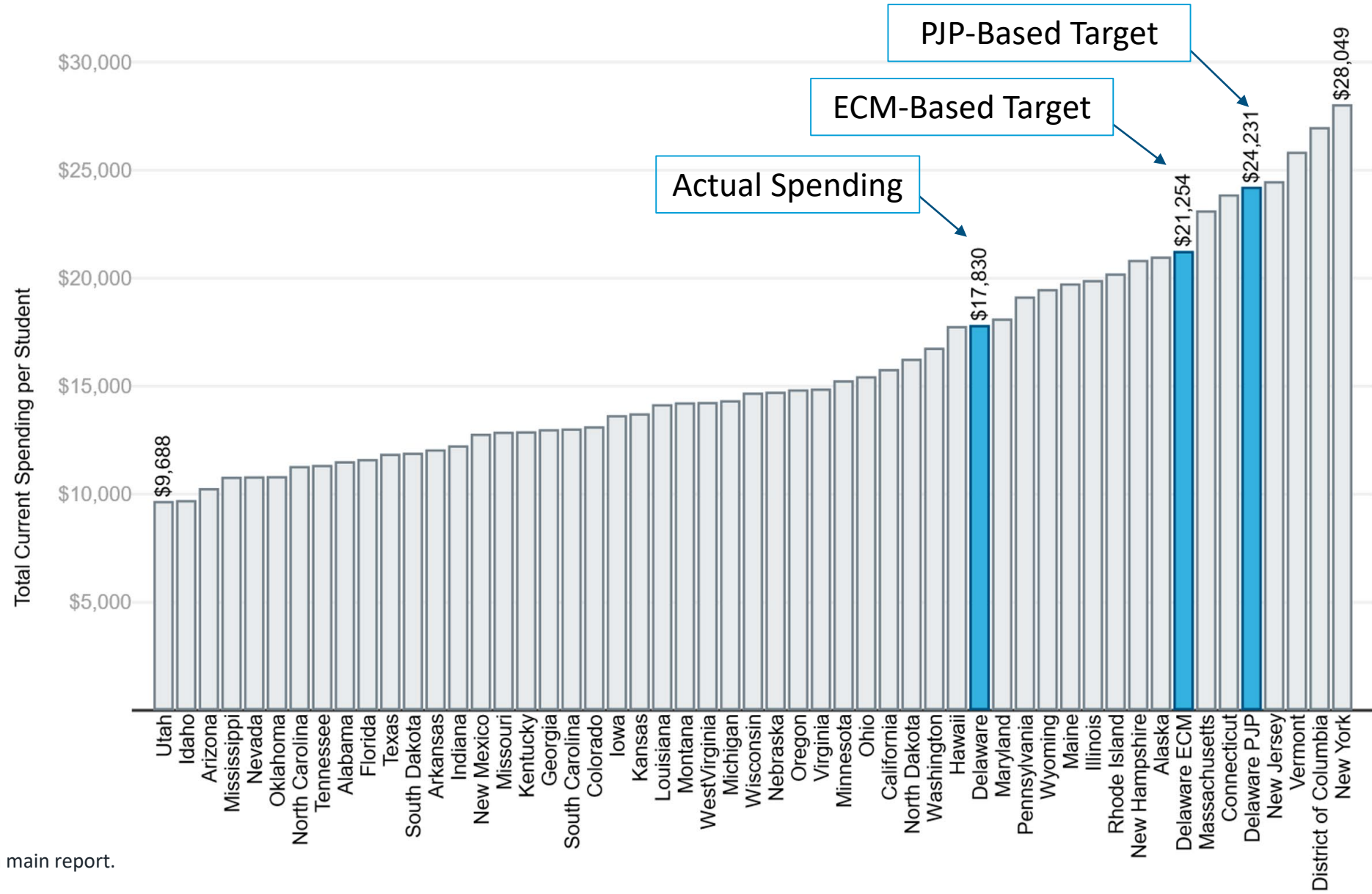
- **Weights** – the relative differential funding for various categories of student needs and other school contextual factors.
 - Multiplicative weights are centered on 1.
- **Effective weights** – adjusted weights accounting for the proportion of students for which a given weight applies.
 - E.g., a low-income weight of 1.81 for a school where 31% of students are low-income results in an effective weight of 1.20 whereas a school where 70% of students are low-income would have an effective weight of 1.51.
- **Base** – the per-pupil funding amount for a school with no students for which the weight categories apply.
- **Target funding** – The amount of funding required to meet outcome goals and provide equal opportunity, defined as the base multiplied by all effective weights.

The Education Cost Model and Professional Judgment Panel adequacy analyses suggest a need to spend an additional \$590 million (27%) to \$1 billion (46%) on public education to meet the state’s educational goals.



Note: Data from 2022. Exhibit 67 in main report.

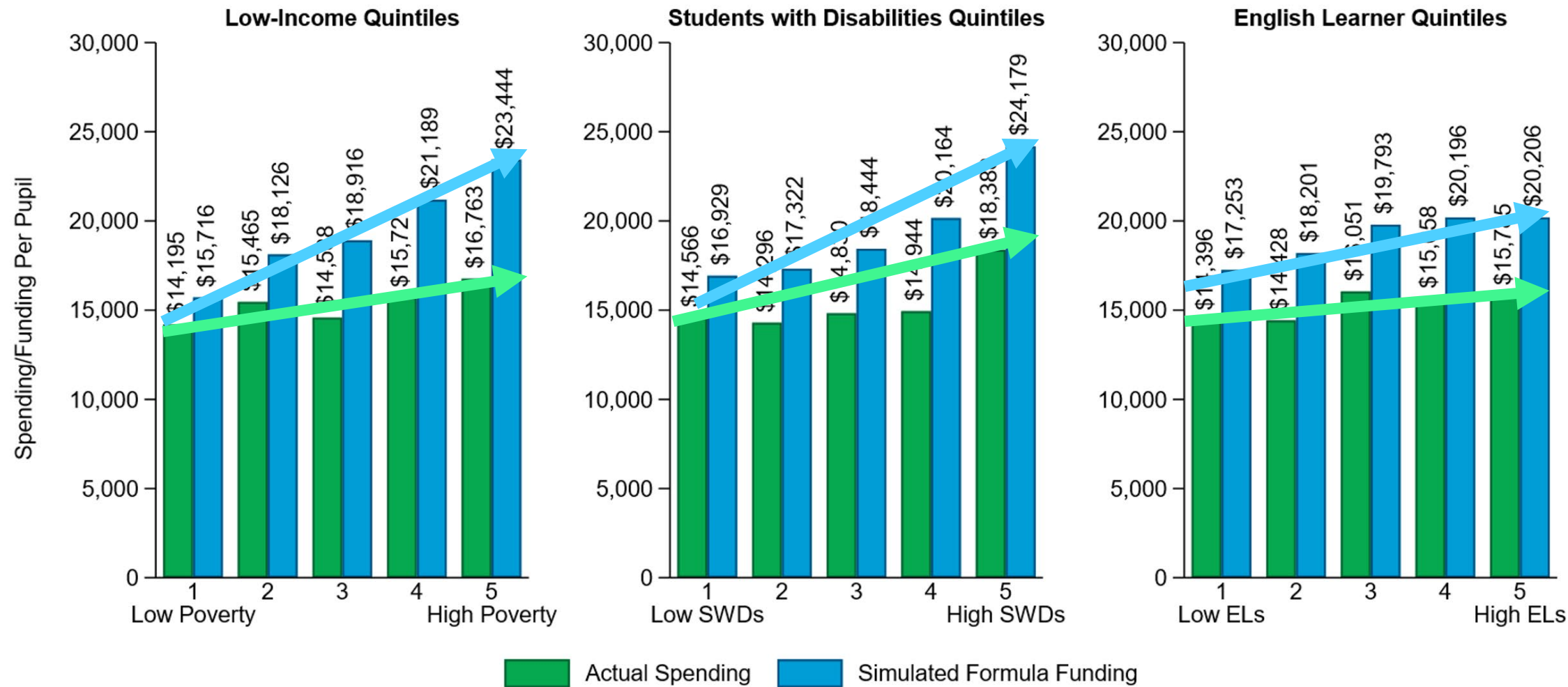
The amounts suggested by the two adequacy analyses are attainable. Several states already spend at rates higher than what was suggested by the analyses.



Note: Exhibit 78 in main report.



Both the ECM and PJP adequacy analyses suggest a need to distribute funding more strongly based on student need.



Note: Results from ECM analysis. Data from 2022. Exhibit 53 in main report. Exhibit 64 in the main report shows the comparable results for the PJP analysis.

Questions

Transparency

Is the formula understandable and straightforward? Does it avoid unnecessary complexity?

District and charter leaders describe the teacher unit formula – often thought of as the main formula – as easy to understand. However, they recognize that the many different components mean that getting a clear comprehensive picture of total funding is difficult.

I think the challenge is, there's so many different components to our unit count system. When you're looking at additional [funds], whether that would be through Opportunity Funds or other kind of weighted funding that's been allocated, equalization, to explain that to people is... I mean, it's tough.
– District superintendent

Charter leaders had concerns about the transparency of the local cost per pupil – the share of local revenue that charter schools receive from school districts for the students from those districts that attend their schools.

There has to be more transparency in what districts are excluding. I think this is partially a human capacity issue, because it's a lot of data...They just exclude categories and there's just not oversight of what is categorized in a district. There's no uniformity, so what happens in one district is completely different than [what] happens in another. I'll be clear that in the charter world, it's the same way. How we might code something might be different than the way somebody codes something 10 miles from me.

– Charter school leader

Units are not readily converted into dollars.

- The price of units for each staff member varies based on experience and education level.
 - Certain schools and districts have disproportionately more experienced and highly educated staff, resulting in different actual funding amounts.
 - Differences in actual funding is not apparent from the formula and understanding this requires deep understanding of state salary schedules and detailed data on staff qualifications.

Predictability and Stability

Can school leaders count on receiving a certain level of resources from year to year and does the system allow policymakers to develop the long-term planning necessary to allocate resources properly

District and charter leaders widely noted that a key strength of the unit system is its predictability and stability

I think the formula right now, the advantage of it is, it provides a lot of stability in terms of what we can expect going into next year. We know what the ratios are... we know pretty much how many positions we'll probably end up getting. There's always some tweaking that can go on with the system in terms of, we need to adjust these ratios or those ratios based on as kids enter... for this or that or whatever. But it's a fairly reliable foundation that allows us to plan and get a good bead on fiscally what we can project going into the next year to make sure we're meeting the needs of the kids.

– District superintendent

Although the main formula was described as stable, some of the other components of the funding were described by district and charter leaders less favorably in terms of their stability.

- Funding components allocated to certain schools based on certain **eligibility requirements** (e.g., Opportunity Funding for mental health and reading supports).
- **Opportunity Funding** amounts per pupil will go down in numbers of EL and low-income students increase statewide, meaning that funding amounts could change over time even though their needs are constant.
- **Local revenue** is not predictable or stable due to referendum requirements. District administrators described the referendum process as costly and risky.
- **Local cost from districts to charter schools** varies considerably from district to district and can vary from year to year.

Flexibility

Can resources be used flexibly to address specific circumstances and conditions that are unique to a given school or district?

As a resource-based system that provides positions, the implication is that districts and schools should use the positions for which they were allocated

District administrators noted the additional inflexibility that comes with many of the allocations that occur outside of the unit system.

And that's the thing, because when you talk about flexibility, if you want to fix this and provide flexibility, one of the answers has to be, the legislature has to stop passing bills that set up funding sources that can only be spent on three things. That's why we are where we are—because we've got all these little pockets of money. Safety and security money, minor [capital], technology. There is no flexibility on those little sources [of funding].

— District administrator

Questions

Recommendations

Recommendations

1. Increase investment in Delaware's public education

- Delaware's current average levels of student performance do not meet the state's goals and are below those of comparison states.
- The two adequacy analyses indicated a need to increase state and local funding by 27% to 46%.

Recommendations

1. Increase investment in Delaware's public education
2. Distribute more resources according to student need

- **Schools with higher percentages of low-income student have systematically lower outcomes in the state.**
- **Both adequacy analyses indicate a need to more strongly differentiate resources according to student needs – for low-income students, ELs, and SWDs.**
- **Planned levels of Opportunity Funding do not provide enough funding per low-income or English learner to meet the needs of those students.**

Recommendations

1. Increase investment in Delaware's public education
2. Distribute more resources according to student need
3. Improve funding transparency

- The presence of many formulas that allocate different resources and pots of money along with the uncertain translation of a unit into a funding amount creates a system in which understanding the sum of resources and funding that flow to schools and districts difficult, if not impossible, for most.
- Increased transparency will bring more people to the table and allow for families, community members, and other stakeholders to be more effective advocates.

Recommendations

1. Increase investment in Delaware's public education
2. Distribute more resources according to student need
3. Improve funding transparency
4. Allow for more flexibility in how districts use resources

- In most state funding systems, dollars are allocated to districts largely as **general funding, which districts can then decide how to use.**
- **Delaware's unit system allocates positions with the expectation that positions are used how they are allocated.**
- **Flexibility, in theory, should result in more efficient use of resources that better meet the varied needs of students across schools and districts, under the notion that those working directly with students are most aware of their needs and how to address them.**

Recommendations

1. Increase investment in Delaware's public education
 2. Distribute more resources according to student need
 3. Improve funding transparency
 4. Allow for more flexibility in how districts use resources
 5. Account for local capacity and address tax inequity
- In large part, Delaware's state funding system allocates state resources in a way that is independent of the ability of districts to raise revenue locally.
 - Equalization funding is outdated and insufficient.
 - Many states account for differences in local capacity by using foundation formulas that first calculate target funding levels and then determine the local share. The local share is often defined as the amount districts should be able to raise locally through a reasonable tax rate, that would be constant across districts.

Recommendations

1. Increase investment in Delaware's public education
 2. Distribute more resources according to student need
 3. Improve funding transparency
 4. Allow for more flexibility in how districts use resources
 5. Account for local capacity and address tax inequity
 6. Regularly reassess property values
- **Because assessed property values are outdated and perceived to be inaccurate, they undermine trust in any approach attempting to address differences in local capacity.**
 - **The fact that assessed property does not increase over time also strains the ability of local revenue to keep up with increased costs. This means that tax rates must continually increase – exacerbating issues related to the referendum requirement.**

Recommendations

1. Increase investment in Delaware's public education
 2. Distribute more resources according to student need
 3. Improve funding transparency
 4. Allow for more flexibility in how districts use resources
 5. Account for local capacity and address tax inequity
 6. Regularly reassess property values
 7. Simplify the calculation of local share provided to charter schools
- **Charter school leaders perceive the current system of calculating the local share to lack transparency and be excessively variable from year-to-year and across districts.**
 - **A formula based on local revenue would be simpler and more consistent from year-to-year.**
 - **Creating a foundation formula where funding targets are based on state and local revenue would reduce the impact of varying local revenue across districts and time, since state revenue would fill in the remaining gap.**

Recommendations

1. Increase investment in Delaware's public education
2. Distribute more resources according to student need
3. Improve funding transparency
4. Allow for more flexibility in how districts use resources
5. Account for local capacity and address tax inequity
6. Regularly reassess property values
7. Simplify the calculation of local share provided to charter schools
8. Implement a weighted student funding (or foundation) state funding formula

Our recommendations would most easily be implemented through a foundation formula that uses student weights to distribute dollars to districts:

- **Dollars can be easily distributed according to student need**
- **Funding is distributed transparently through easy calculations**
- **Funds can be used flexibly**
- **Differences in local capacity can be easily incorporated**
- **The formula can be applied consistently to both districts and charter schools**

Conclusion

- We recognize that many of our recommendations have been stated previously in other studies of Delaware's education system.
- Our analyses place the strengths and weaknesses of Delaware's current system in a new light.
- During this study we:
 - Compared Delaware's system to other states nationally
 - Examined student outcomes to understand the extent to which the state is meeting the needs of all students
 - Investigated issues of equity through various methods that consider both equity for students and taxpayers
 - Conducted rigorous analyses of adequacy that approach the estimation in different ways
 - Included the voice and perspective of education leaders from all of Delaware's school districts and most of Delaware's charter schools
- Our hope is that the analyses can be used by Delawareans to create a more equitable and adequate funding system in service to all of Delaware's children

Questions

ASSESSMENT OF DELAWARE PUBLIC SCHOOL FUNDING

DREW ATCHISON

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Additional Slides

Developed models describing how much funding should be allocated to each school to provide equal opportunity in meeting outcome goals

Weight categories	Weight	Student proportion	Effective weight
Student needs			
Low-income proportion	1.81	0.31	$1.81^{0.31} = 1.20$
Students with disabilities proportion	3.34	0.19	1.26
Students with complex disabilities proportion	3.75	0.015	1.02
English learner proportion	1.15	0.11	1.02
Programming/grade range			
Vocational/technical units proportion	4.56	0.09	1.15
High school enrollment proportion	1.04	1	1.04
Population density			
2,000 to <5,000	1.06	1	1.06
School enrollment			
<300	1.29	0	1.00
300 to <450	1.12	0	1.00
450 to <600	1.07	0	1.00
600 to <800	1.04	0	1.00
Geographic cost (CWIFT)	1.38	0.143	1.05
Needs index (product of all effective weights)			2.07
Per-pupil funding (base × needs index)		$\$10,074 \times 2.07 =$	$\$20,870$

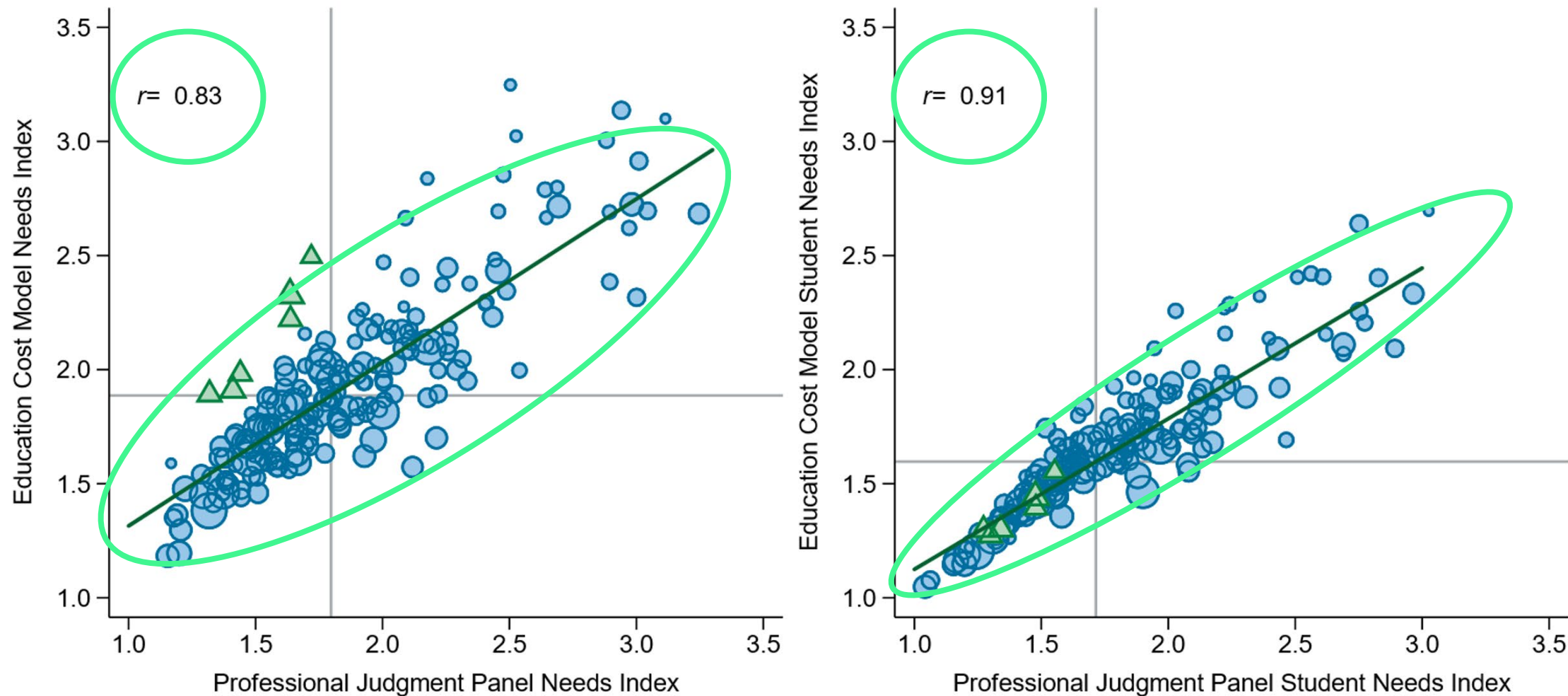
Note: Exhibit 51 in main report.

Compared models to actual state and local spending

Weight variables and base	Actual State and Local Spending	ECM Value	PJP Value
Student needs			
Low-income proportion	0.98	1.81	1.54
Disabilities proportion	2.02	3.34	2.70
Complex disabilities proportion	3.95	3.75	—
Intensive and complex disabilities proportion	9.32	9.32	9.32
English learner proportion	1.07	1.15	1.78
Programming/grade range			
Vocational/technical units proportion	6.01	4.56	—
Middle school enrollment proportion	0.98	0.99	0.91
High school enrollment proportion	0.97	1.04	1.03
School enrollment			
<300	1.30	1.29	1.05
301 to 449	1.18	1.12	1.03
450 to 599	1.10	1.07	1.03
600 to 799	1.03	1.04	1.02
Population density			
300 to 799	0.99	1.03	—
800 to 1,999	1.08	1.05	—
2,000 to 4,999	1.13	1.06	—
>=5,000	1.15	1.08	—
Geographic cost (Comparable Wage Index for Teachers)	2.40	1.38	1.63
Base	\$10,385	\$10,074	\$11,996

Note: Based on Exhibit 66 in main report and Exhibit E8 in technical appendix.

The student needs adjustments suggested by the ECM and PJP analyses are remarkably consistent, with the PJP-based needs adjustments being slightly stronger.



Note: Exhibit 70 in main report.



QUESTIONS?
ASK THE EXPERT

MARGIE LOPEZ WAITE

*Chief Executive
Officer, Las Américas
ASPIRA Academy*



EXIT SURVEY

PLEASE HELP INFORM
OUR FUTURE EFFORTS

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