

Assessment of Delaware Public School Funding – Findings from the Professional Judgment Panel Analysis

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Agenda

- Study Overview
- Methodology
- Results



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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:
 - Fully research and understand existing funding structure
 - Conduct comparative analysis to other states
 - 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.
- Report was delivered in December 2023.

Study Emphasis

- **Adequacy**

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

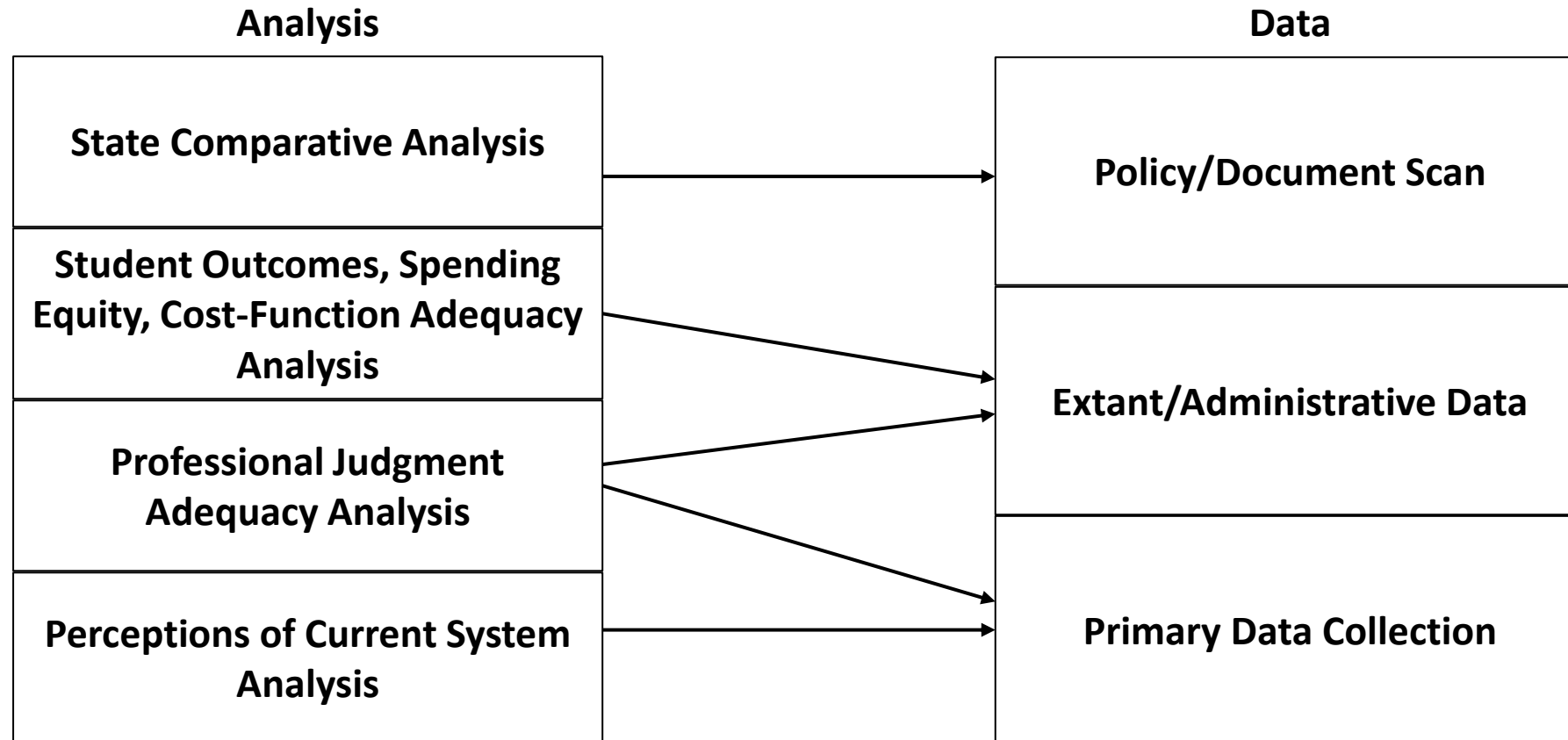
- **Equity and Wealth Neutrality**

- 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 Analyses and Data Collection Activities





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Methodology

Approaches to Determining Adequate Cost

- **Outcome-Oriented Approach**

- Education Cost Function: Use existing data on student outcomes and education spending to determine the appropriate level of spending to meet specified outcomes for schools with different levels of student needs learning in different locations.

- **Input-Oriented Approach**

- Professional Judgement Panel: Expert educators specify resources necessary to meet outcome goals for hypothetical schools that vary with respect to student need and context (school size, locale, etc.).
- Evidence-Based: Rely on research evidence to determine resources necessary to meet outcome goals.
- Determine the cost of resources identified using Professional Judgment Panel or Evidence-Based approaches.

Adequacy Analysis – Education Cost Function

- Top-down approach using actual data to measure relationships between spending, student outcomes, and factors affecting the spending level required to produce outcomes.
- Estimated cost function used to predict how much spending is needed to support an equal opportunity for all students to reach a specific performance level.
- Costs account for different types of students learning in different environments.

$$\textit{Spending Per Pupil} = f(\textit{Outcomes, Needs, Enrollment Size, Remoteness, Price Levels, Efficiency})$$

- Used to develop adequate cost projections for individual schools/districts and inform funding policy (i.e., develop weighted funding formula).
- Aggregate district cost projections to calculate overall statewide cost to inform state funding allocation.

Adequacy Analysis – Professional Judgment

- Bottom-up approach using hypothesized relationships between programmatic resources and spending to determine cost of an adequate education.
- Cost estimates based on resource specifications deemed necessary to allow students an opportunity to achieve targeted outcomes defined in a *goals statement*.
- Resources specified by expert practitioners for typical schools defined by levels of student needs (economic disadvantage, English learners, disabled students), schooling level, and size.
- Information used to develop adequate cost projections for individual schools/districts and inform funding policy (i.e., develop funding formulas).
- Aggregate district cost projections to calculate overall statewide cost to inform necessary state funding appropriation.

Adequacy Analysis – Considering Complimentary Costing-Out Approaches

- The different costing-out approaches each have specific strengths and should be viewed as complimentary.
- Leveraging both approaches provides the most comprehensive cost analysis.

Education Cost Function Strengths

- Grounded in data on actual spending, outcomes, and cost factors
- Empirical relationship between spending and outcomes
- Makes use of a full range of factors influencing cost found across the state
- Generates measure of efficiency

Professional Judgment Strengths

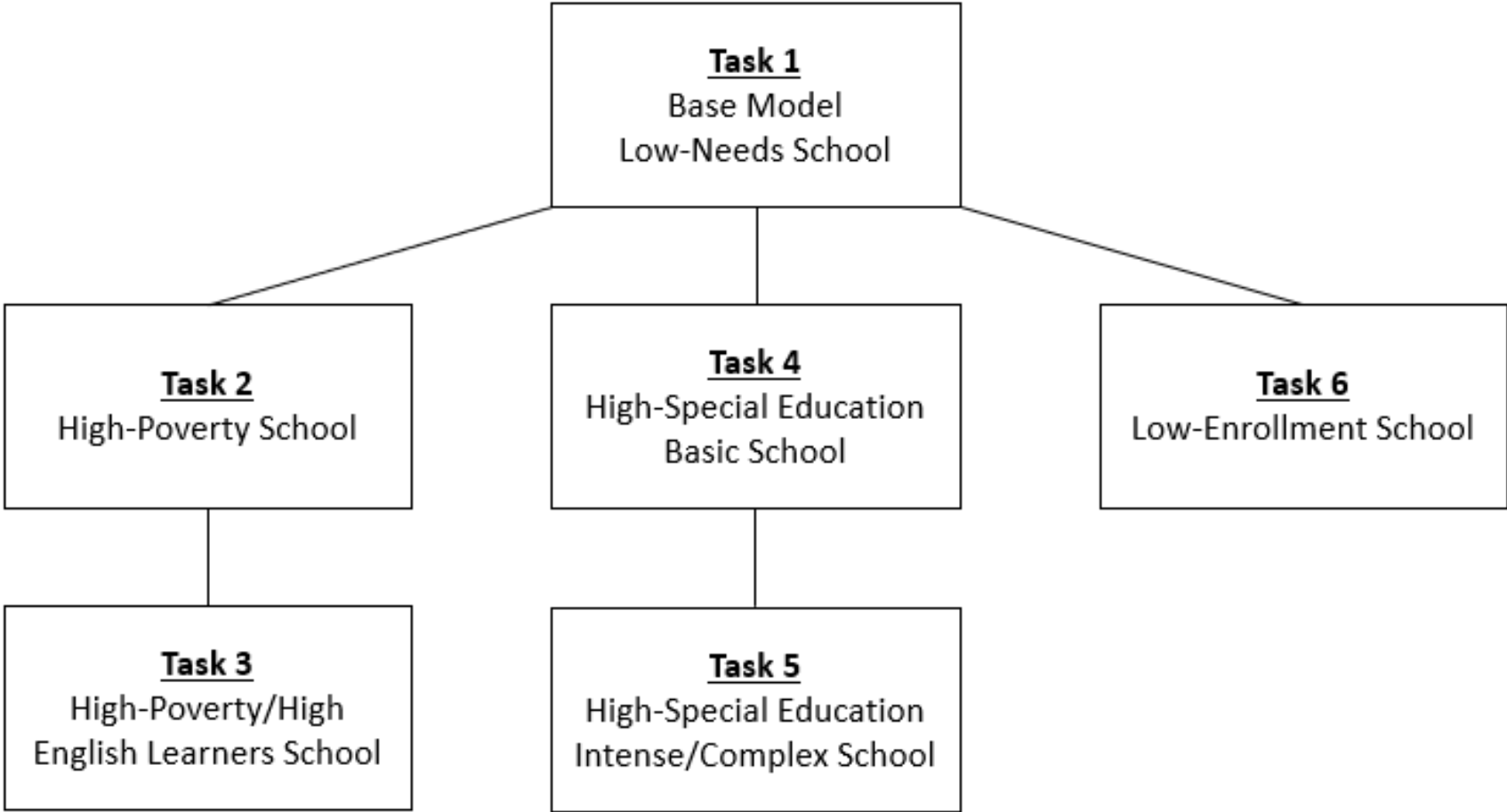
- Can accommodate a wide range of outcomes
- Provides rich program documentation showing how combinations of resources could be used to produce outcomes
- Can involve broad public stakeholder involvement to obtain input on outcomes and programming that are most important

- AIR conducted both types of analysis for Delaware study.
- Our focus today is to describe the **Professional Judgment** portion of the study.

Professional Judgment Components

- Goals Statement – Defines the student outcomes that public schools should produce.
 - Based on Delaware School Success Framework (DSSF), content standards, and instructional program requirements. (Technical Appendix F, Pages 97-103)
- Professional Judgment Panels – Groups of expert educators from across the state who develop programs for a series of schools that vary by student needs, schooling level and size.
 - Panels are comprehensive with respect to role including principals, teachers, English language learner and special education specialists, a school business official and a superintendent.
 - Six panels convened (two from each county) in three-day workshops.
 - Panels developed the following information for 18 hypothetical school tasks:
 - » Design Document: Detailed narrative description of the school programmatic components (programming for different student populations, extended day/year programs, extracurricular activities, administration, etc.)
 - » Resource Specifications: Personnel and non-personnel necessary to support program design at a minimum cost.

Professional Judgment School Tasks



Professional Judgment Panel Materials and Guidelines

- Panels were provided the following information.
 - Instructions describing the PJP process.
 - Research briefs on effective practices for rural, at-risk, English learner, and special education student populations, and a practitioner brief on effective school leadership.
 - Staffing profiles for typical low-needs elementary, middle and high schools.
- Panelists consistently reminded of the following “GEER” guidelines when working on school tasks:
 - **Goals:** Program designs must be capable of offering all students an opportunity to reach goals.
 - **Evidence:** Their work should be informed by research or anecdotal evidence.
 - **Efficient:** Resources should be specified in a way that minimizes costs.
 - **Realistic:** Program designs should be developed so that they could be realistically implemented if sufficient funding were available.



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Results

Key Themes From PJP School Program Designs

- Classroom Conditions
- Teacher Professional Learning
- School Staffing Resources
- Universal Prekindergarten

Classroom Conditions

- Panels felt that meeting grade-specific class size targets viewed as essential for supporting student academic growth with suggested sizes as follows:

Grade Level	Class Size Target
Kindergarten	14
Grades 1 to 2	16
Grades 3 to 5	18
Grades 6 to 8	21
Grades 9 to 12	25

Targets were seen as necessary for building positive classroom relationships and responding to the academic needs of individual students.

- Current practices for serving special education students does not support academic needs with a general overreliance on:
 - Dual certification of single classroom teachers.
 - Floating special education teachers across departmentalized classes.

Teacher Professional Learning

- Panels detailed a need for ongoing professional learning on the following topics:
 - In-classroom support for implementing high-quality instructional materials
 - Science of reading
 - Social-emotional learning
 - Trauma-informed instruction
 - Restorative practices
- Called for an increase in time devoted professional learning during the school day:
 - Enhance teacher collaboration.
 - Work with instructional support staff to overcome implementation challenges.
 - Support deeper learning.
- Program designs incorporated professional learning in different ways:
 - One panel suggested two districtwide professional learning days per month.
 - Another specified having half-day instruction once a week to accommodate professional learning, planning, and collaboration.

School Staffing Resources

- Program designs called for several different types of instructional and pupil support staff:
 - Resident technology staff in each school rather than deployed from the district office to avoid interruptions in classroom instruction and to support teachers in using assistive technology for students with disabilities.
 - Need at least one full-time nurse in all buildings and more in schools where the number of students with disabilities is high to cover both general student health issues and screenings of students with disabilities.
 - Employ full-time permanent as opposed to contracted staff to serve students with disabilities (e.g., occupational therapists, speech language pathologists, and school psychologists).

School Staffing Resources (continued)

- Program designs called for several different types of instructional and pupil support staff:
 - Full-time special education coordinators needed to schedule and facilitate Individualized Education Program (IEP) and 504 meetings, write IEP and 504 reports, and oversee student progress monitoring.
 - A dedicated multi-tiered systems of support (MTSS) coordinator in each school to develop and facilitate MTSS across all domains (e.g., academic supports, attendance and intervention monitoring, family and student engagement, social-emotional learning, and positive behavioral intervention supports).
 - A family liaison who is familiar with the community and ideally conversant in languages spoken by students' families should be placed in every school to coordinate and foster communication.

School Staffing Resources (continued)

- Program designs called for several different types of instructional and pupil support staff:
 - Transition coordinators needed to support moves from middle to high school, high school to postgraduation careers and/or postsecondary education, and from homebound to full-time education.
 - Caseloads of staff should follow best practices reported by professional organizations as follows:

Staff Type	Caseload	Professional Organization/Source
School Psychologist	500 : 1	National Association of School Psychologists (2021)
School Counselor	250 : 1	American School Counselor Association (2023)
Social Worker	250 : 1	National Association of Social Workers (2012)

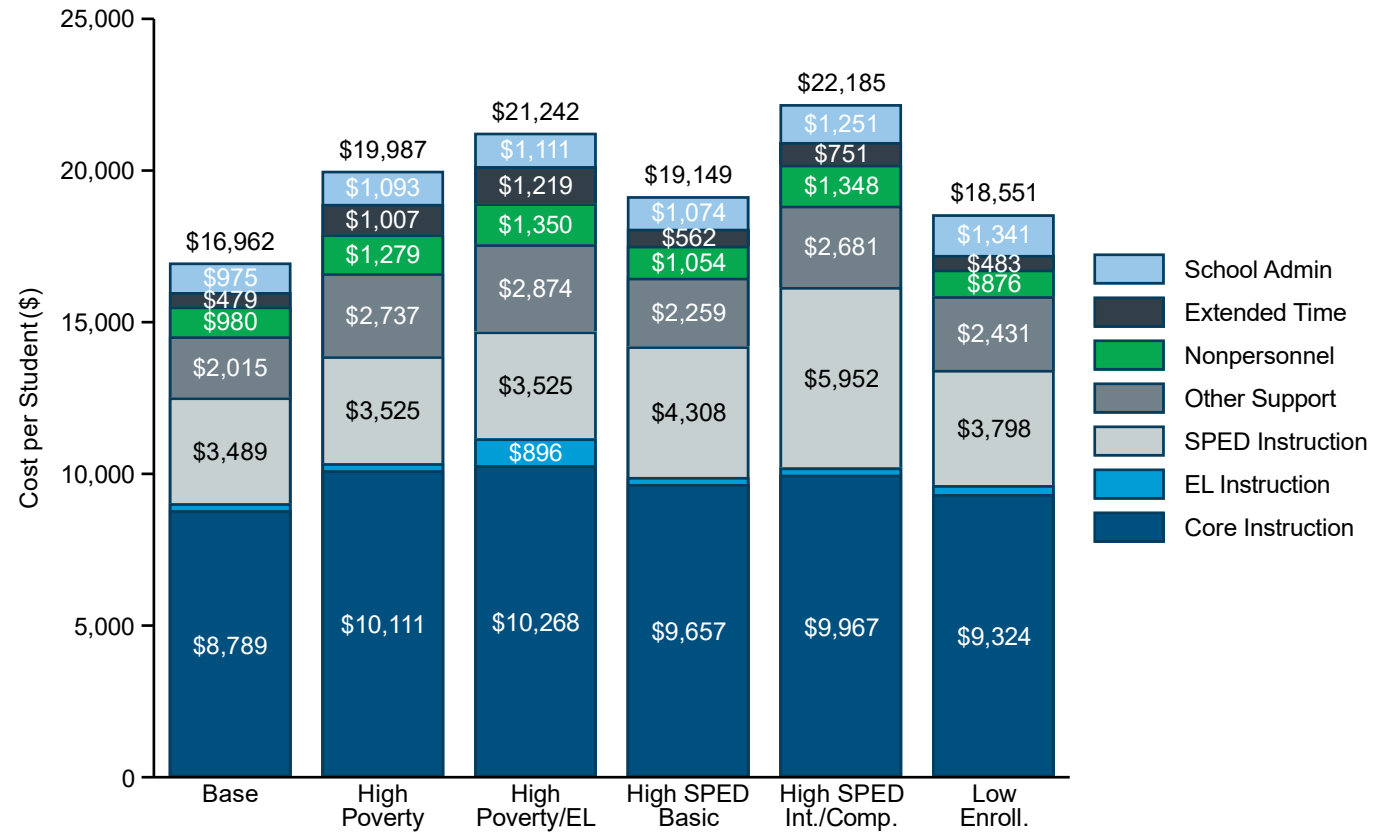
Universal Prekindergarten

- Universal prekindergarten was commonly listed as a necessary component of the panel program designs:
 - Four of the six panels included universal prekindergarten.
 - Justification was that prekindergarten would support K-12 education by minimizing gaps in school readiness for students entering elementary school.
 - Determining the cost of providing prekindergarten was outside of the scope of this work and not taken into account.

Report Locations of Detailed Descriptions of School Program Designs by Task

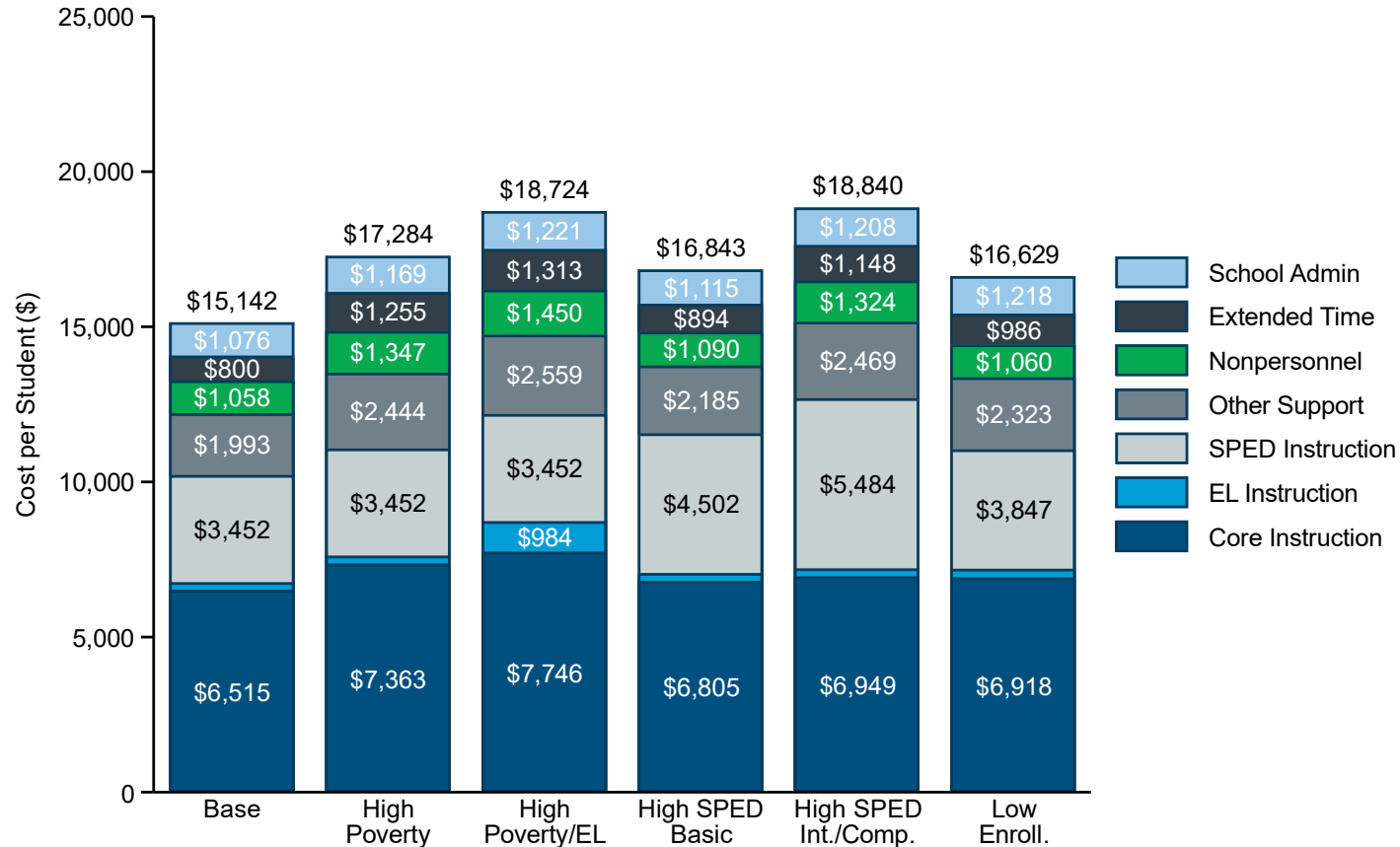
- Elementary School – Main report, pages 129-133
- Middle School – Main report, pages 133-137
- High School – Main report, pages 137-140

Average Adequate Cost for Elementary Schools Across School Tasks Broken Out by Component



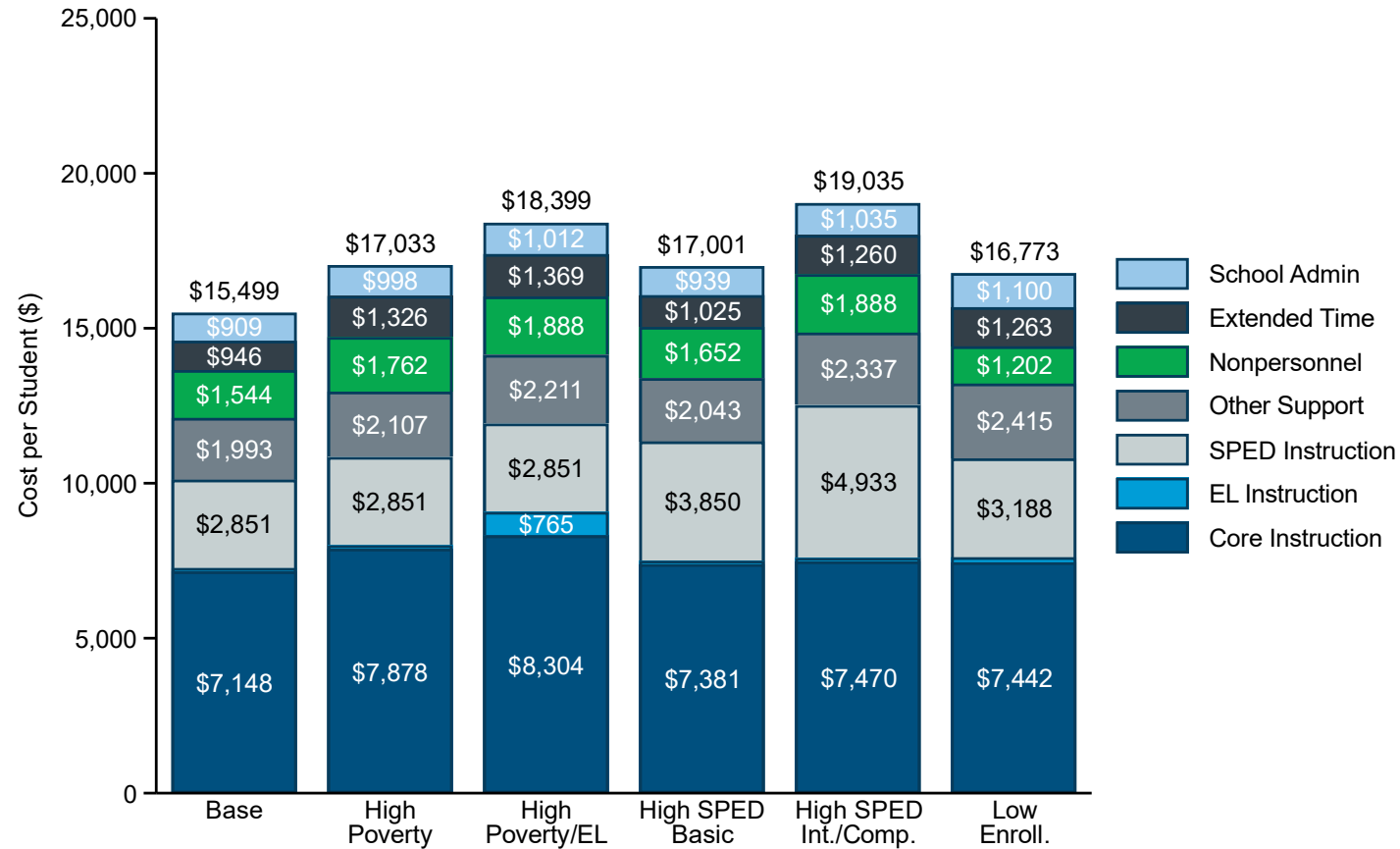
Note. EL = English learner; SPED = special education. Unlabeled bar segments are less than \$300 per student.

Average Adequate Cost for Middle Schools Across School Tasks Broken Out by Component



Note. EL = English learner; SPED = special education. Unlabeled bar segments are less than \$300 per student.

Average Adequate Cost for High Schools Across School Tasks Broken Out by Component

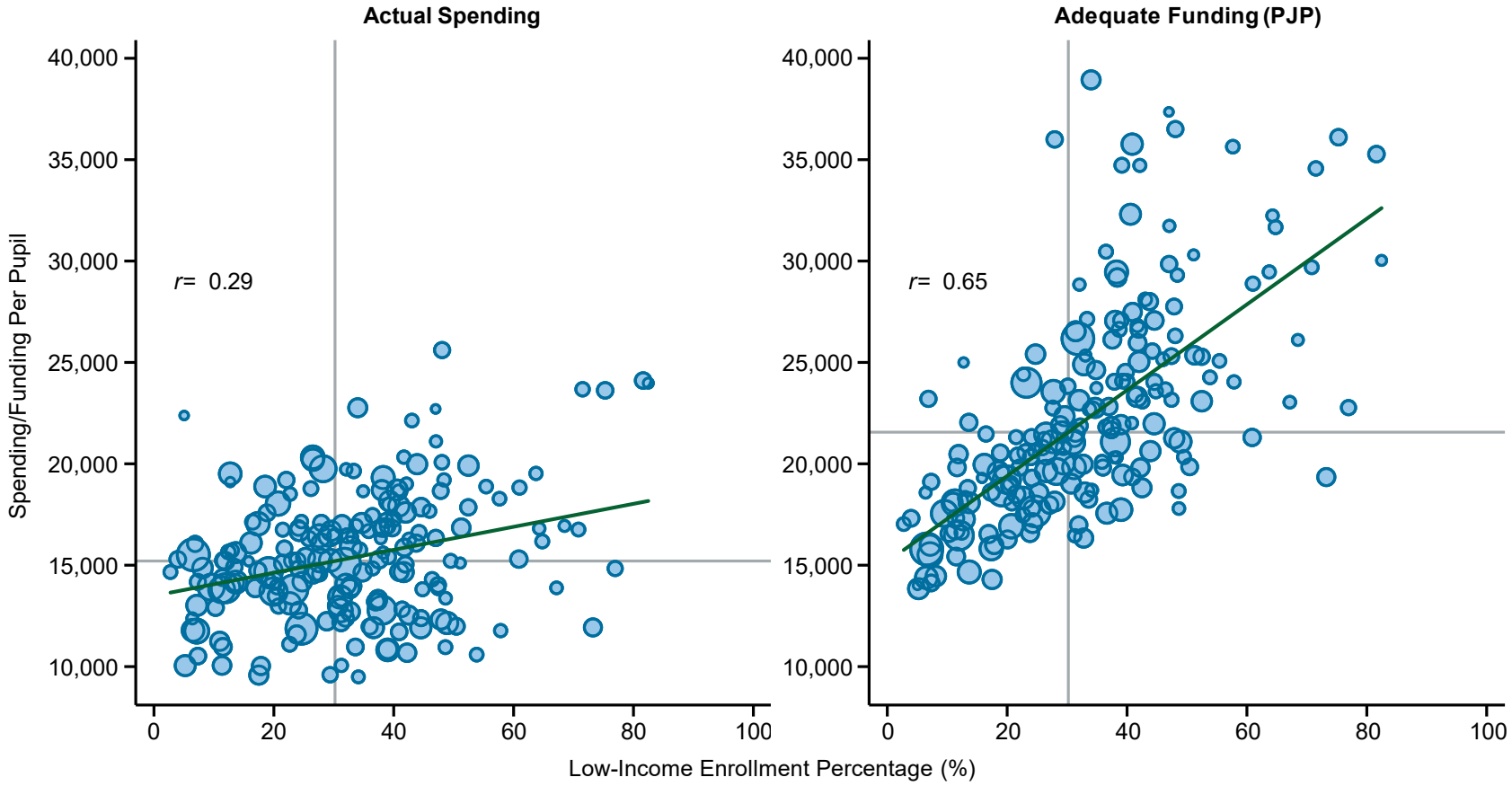


Note. EL = English learner; SPED = special education. Unlabeled bar segments are less than \$300 per student.

Using the PJP Results to Project Adequate Cost Statewide and Compare to Actual Spending

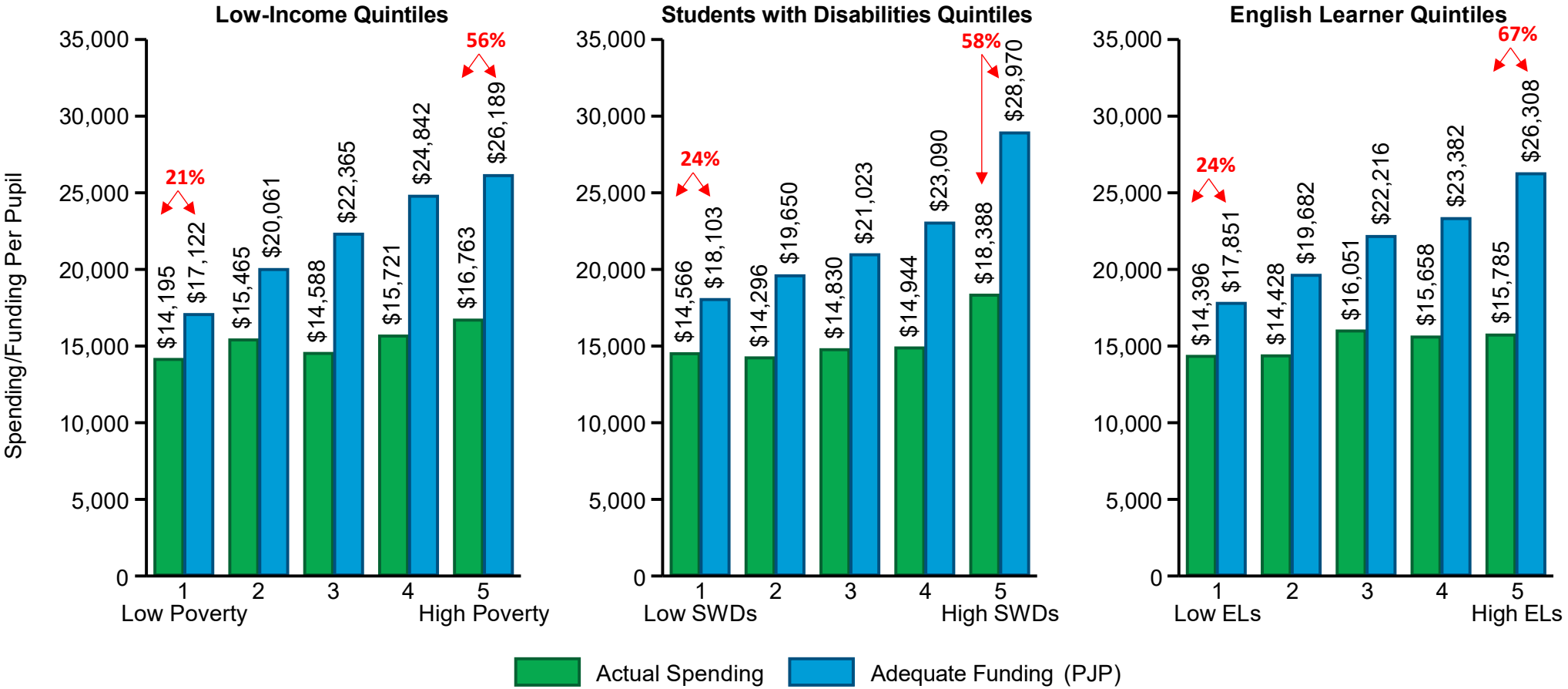
- Step 1 – Estimate school-level regression model using per-pupil costs calculated from panel resource specifications and school task demographics.
- Step 2 – Use model to project adequate school-level per-pupil costs for all schools in state.
- Step 3 – Estimate district overhead spending for:
 - Central Administration
 - Maintenance and Operations
 - Student Transportation
 - Food Services
- Step 4 – Add district overhead spending to school-level projections.
- Step 5 – Subtract federal revenues from actual and projected adequate spending and compare.

Comparing Actual State and Local Spending and PJP Adequate Funding Across Low-Income Enrollment Percentages (2022)



Note. The gray lines show statewide averages of both variables. The enrollment-weighted correlation coefficient is represented by r . This analysis omits six schools where more than 50% of students have disabilities.

Comparing Actual State and Local Spending and PJP Adequate Funding Across Student-Need Quintiles (2022)



Note. This analysis omits six schools where more than 50% of students have disabilities.

Report Links

- Main Report – https://education.delaware.gov/wp-content/uploads/2023/12/23-22933_1_Delaware_Full_Report-FMT-ed103023-Version-2.pdf
- Executive Summary – https://education.delaware.gov/wp-content/uploads/2023/12/Delaware_Executive_Summary-FMT-102723.pdf
- Technical Appendices – https://education.delaware.gov/wp-content/uploads/2023/12/Delaware_Appendices-combined-102723.pdf

References

- American School Counselor Association. (2023). School counselor roles and ratios.
<https://www.schoolcounselor.org/About-School-Counseling/School-Counselor-Roles-Ratios>
- National Association of School Psychologists. (2021). Shortage of school psychologists.
<https://www.nasponline.org/research-and-policy/policy-priorities/critical-policy-issues/shortage-of-school-psychologists>
- National Association of Social Workers. (2012). NASW standards for school social work services.
<https://www.socialworkers.org/LinkClick.aspx?fileticket=1Ze4-9-Os7E%3D&portalid=0>



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