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In for a Dollar: A Descriptive Look at How North Carolina Traditional School Districts Have Planned and Used COVID-19 Emergency Funding

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In this brief, we descriptively analyze patterns of allocation, spending, and intended investments of money provided to school districts in North Carolina by the Elementary and Secondary School Emergency Relief (ESSER) funds. We examine the variation in overall allocations and expenditures as well as the priorities and particular goods and services included in spending plans. We also look at variation across districts with different characteristics. We find that: (1) there is substantial variation across districts in the amount of per pupil ESSER funding allocated, with greater funding allocated to high poverty, small, and rural districts; (2) rates and patterns of spending are broadly similar across all types of districts; and (3) high poverty districts' investments placed more focus on funding for tangible goods—particularly in facilities and HVAC improvements—while still investing heavily in academic recovery. These findings can help policymakers and researchers better understand the impact of ESSER funding on schools and districts during and after the COVID-19 pandemic.

Introduction

Through COVID-19 emergency relief legislation,¹ the federal government provided an influx of funding intended to support schools across the country as they coped with stay-at-home orders, remote learning, reopening safely, and the impact of lost opportunities to learn. Of the \$259.8 billion included in the Elementary and Secondary School Emergency Relief (ESSER) funds across three congressional acts, 90 percent of the funding was designated to be passed to Public School Units (PSU), which include traditional school districts and charter schools. These local ESSER awards created a unique opportunity for

local decision making around the use of substantial new funds. So far, knowledge about the use and impacts of this large federal investment is limited. A few researchers have used national data to examine the ways in which districts have allocated ESSER III or ARP ESSER funds included in the American Rescue Plan Act of 2021 (ARP).² However, these analyses are limited by only covering one of the three ESSER allocations, and it is unclear if the districts included in these studies constitute a sufficiently representative sample of U.S. school districts.

¹ The CARES Act of March 2020 included \$34.25 billion in Elementary and Secondary School Emergency Relief (ESSER) funding—commonly called ESSER I. The Coronavirus Response and Relief Supplemental Appropriations Act (CRRSA) of 2021 included \$87.79 billion of additional ESSER funding—commonly called ESSER II. The American Rescue Plan Act of 2021 (ARP) included \$137.76 billion in ESSER funding—commonly called ESSER III or ARP ESSER. Of the \$259.8 billion provided by Congress for education-related pandemic relief, approximately \$5.58 billion was awarded to North Carolina.

² The data services firm Burbio compiled a database comprised of ESSER III application information gathered from more than 5000 districts and charter organizations, representing roughly 75% of public school students across the country. For analyses of these data, see 'For More on This Topic' below.

This study adds to our knowledge by looking at ESSER allocations and spending plans across all three ESSER allocations and across all traditional public school districts in the state of North Carolina. In doing so, we seek to answer the following three questions: (1) How has ESSER money been allocated to and spent by districts? (2) How did districts prioritize ESSER investments across pandemic-related needs? (3) What were the most common resources and services for districts to include in ESSER spending plans? This descriptive data will inform researchers and policymakers as they begin to think about the impact of these emergency educational investments and the needs of districts and schools as these funds phase out.

Background

This study combines three sets of data that are publicly available or provided by the North Carolina Department of Public Instruction (NCDPI). The first data set includes allotment and expenditures for each ESSER fund for all 115 traditional school districts in North Carolina. We use average daily membership data to transform total allocation and expenditures into per pupil figures for comparability across districts. In addition, we use data on district characteristics, including district size, poverty level, and urbanicity. Using these two data sets, we describe the mean and distribution across districts of ESSER allocations and expenditures across districts during the 2019–20 to 2021–22 school years. We also use these data to examine the differences in mean allocations and expenditures by district characteristics.

The final data source is a set of spending codes and amounts created from spending plans submitted by traditional public school districts in North Carolina to NCDPI for ESSER I, ESSER II, and ESSER III funds. These spending plans detailed the pandemic-related allowable use categories that districts planned to fund using ESSER allocations, a description of the implementation plan for each strategy, the amount allotted to each strategy³ (only applicable to ESSER II and III), and a proposed timeline for implementation.⁴ To transform written spending plans to a data set for quantitative analysis, we created three categories of variables: (1) a set of indicators for whether the district indicated any spending within each allowable use category defined by the authorizing legislation for the funds; (2) per pupil spending planned within each allowable use category; and (3) indicators for the inclusion of specific

functional categories (e.g. frequently mentioned resources and services) within the spending plans for each district. The first two categories were drawn directly from the application structure. The functional categories⁵ were coded by members of the research team using a common codebook and tests of inter-rater reliability to place each planned expenditure into a defined category of the most frequently cited resources and services where they planned to spend funds. This data was used to examine the percent of districts planning to spend funding on each allowable use, the average per pupil spending planned at the district level within each allowable use, and the percent of districts including specific resources and services in their spending plans. We also examined differences in spending plans by district characteristics.

How has ESSER money been allocated to and spent by districts?

Figure 1 displays the distribution of district per pupil allocations for each of the three ESSER funds and combined across all ESSER funding. The average district per pupil allocation was \$299 for ESSER I, \$1,830 for ESSER II, \$4,092 for ESSER III, and \$5,423 combined across all three allocations.⁶ The horizontal line in the figure represents the average pre-pandemic (2018–19) annual per pupil expenditures in the state. Comparing ESSER funding to this annual spending level shows that local ESSER funding is equivalent to approximately 0.7 years' worth of extra educational support for students in North Carolina. **Figure 1** also illustrates the substantial variation in the size of district per pupil allocations. The largest district allocation was over \$16,000 per pupil, while the smallest allocation was approximately \$1,200 per pupil. While this range includes some outliers, focusing on less extreme variation still shows that districts at the 75th percentile received about 67% more funding per pupil in combined ESSER funding than districts at the 25th percentile (\$6,439 vs \$3,836). This illustrates that the magnitude of funding was substantially different across the three funds and across districts in the state. When thinking about the impact of ESSER funding, ESSER III funding is likely to have had greater impacts than the earlier funding allocations. In addition, the influx of ESSER funds substantially altered overall expenditure patterns in some districts more than in others.

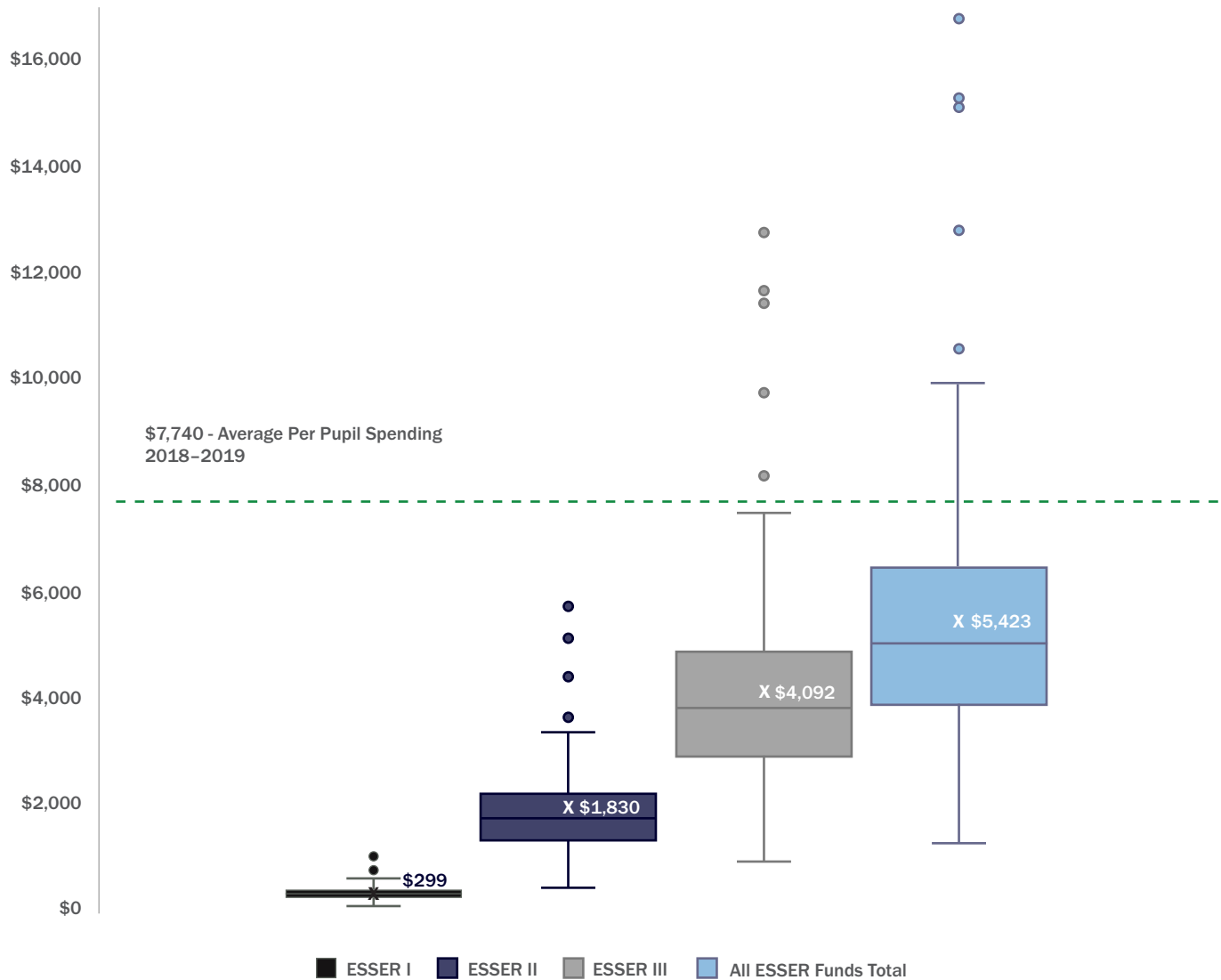
³ Data on funding amounts by purpose were not available for ESSER I.

⁴ The application used by the North Carolina Department of Public Instruction (NCDPI) varied slightly between ESSER I, ESSER II, and ESSER III. These applications describe the intended allotments rather than completed expenditures, thus the dollar amounts reported are subject to change.

⁵ The codebook for functional categories was based on the structure developed by Burbio and modified to best match the data from NC districts. See about.burbio.com/school-budget-tracker#ESSER_III_spending_categories.

⁶ These district level per pupil average allocations differ from a statewide average. These figures represent per pupil allocations in the average district where each district is weighted equally, whereas statewide averages give each individual student equal weight. In other words, larger districts are more heavily represented in statewide averages relative to smaller districts.

Figure 1. Distribution of District Per Pupil Allocations of ESSER Funds



Note: This figure shows the distribution of district per pupil funding allocations by ESSER fund and overall. Per pupil funding was calculated by dividing the district level allocation by the number of students enrolled in district schools in the 2019–20 school year.

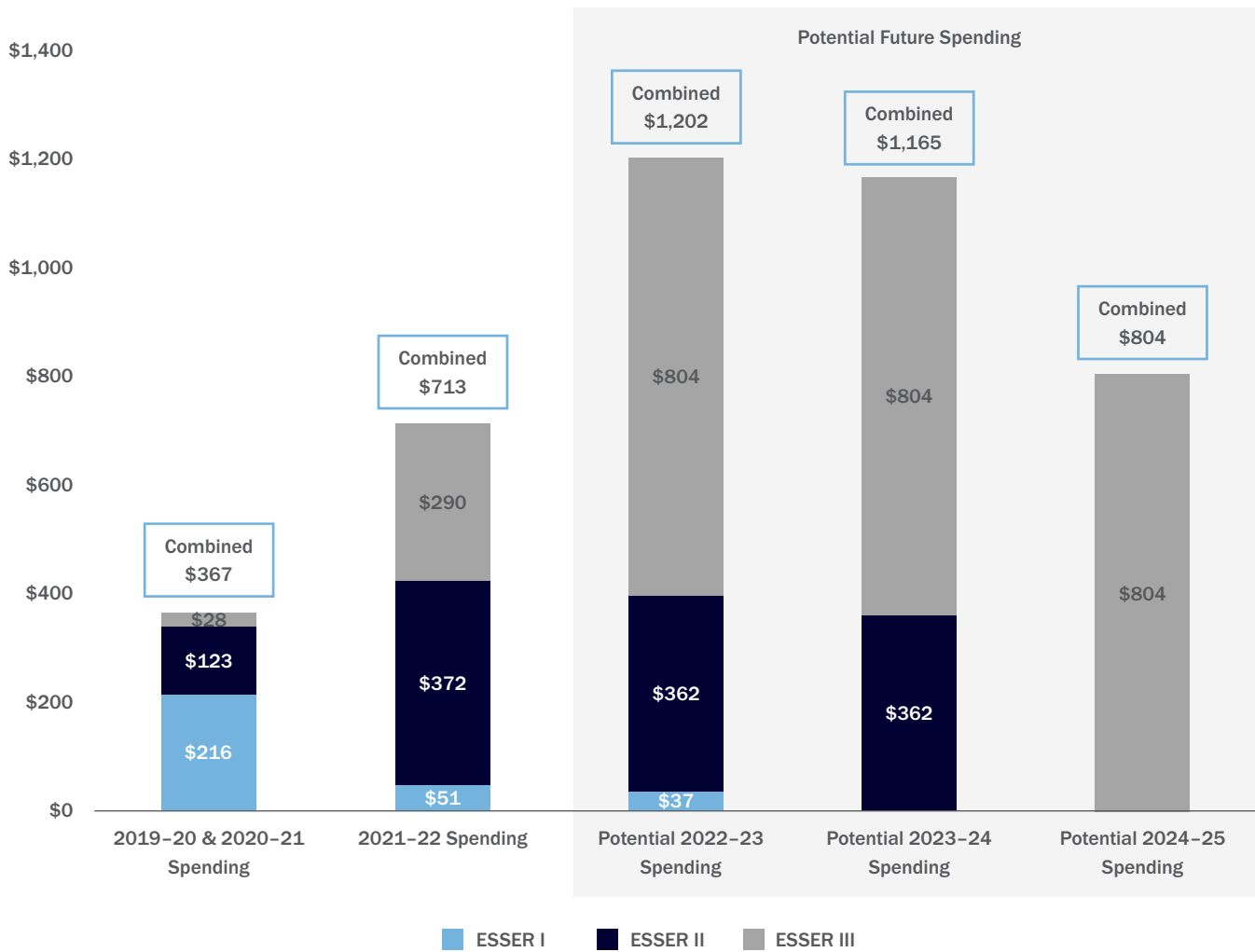
Districts were given several years to spend each allocation of ESSER funds.⁷ **Figure 2** shows the average per pupil ESSER expenditures by year for each of the three ESSER funds for the 2019–20, 2020–21, and 2021–22 school year.⁸ It also shows potential future per pupil allocations in the 2022–23, 2023–24, and 2024–25 if the remaining funds were allocated equally across the eligible years for each funding stream. Spending increased significantly from \$367 per pupil across the 2019–20 and 2020–21 school years to \$713 in the 2021–22 school year. However, over \$4,000 per pupil remained at the end of the 2021–22 school year,

nearly all from ESSER II and ESSER III. This means that, on average, per pupil ESSER allocations for the 2022–23 to 2024–25 school years will exceed the per pupil ESSER expenditures in the years prior to the pandemic. This pattern likely reflects the timing of the availability of funds (ESSER II and III funds were not available to districts until near the end of the 2020–21 school year, at the earliest) as well as the practical limitations to immediately spending significant additional funding. Thus, the full impact of ESSER funding in supporting recovery for students and educators will not be seen in the initial years of spending.

⁷ ESSER I funding became available to districts in North Carolina in May 2020 and must be obligated or spent by September 2022. ESSER II funding became available in April 2021 and must be obligated or spent by September 2023. ESSER III funding became available in May 2021 and must be obligated or spent by September 2024. Note that obligated funds can be spent up to 90 days after the final date or longer if allowed by federal regulations.

⁸ ESSER funding only became available at the very end of the 2019–20 school year, so we combine the 2019–20 and 2020–21 school years. An average of \$8 per pupil was spent in the 2019–20 fiscal year.

Figure 2. Average Per Pupil Expenditures by Year and Potential Future Spending



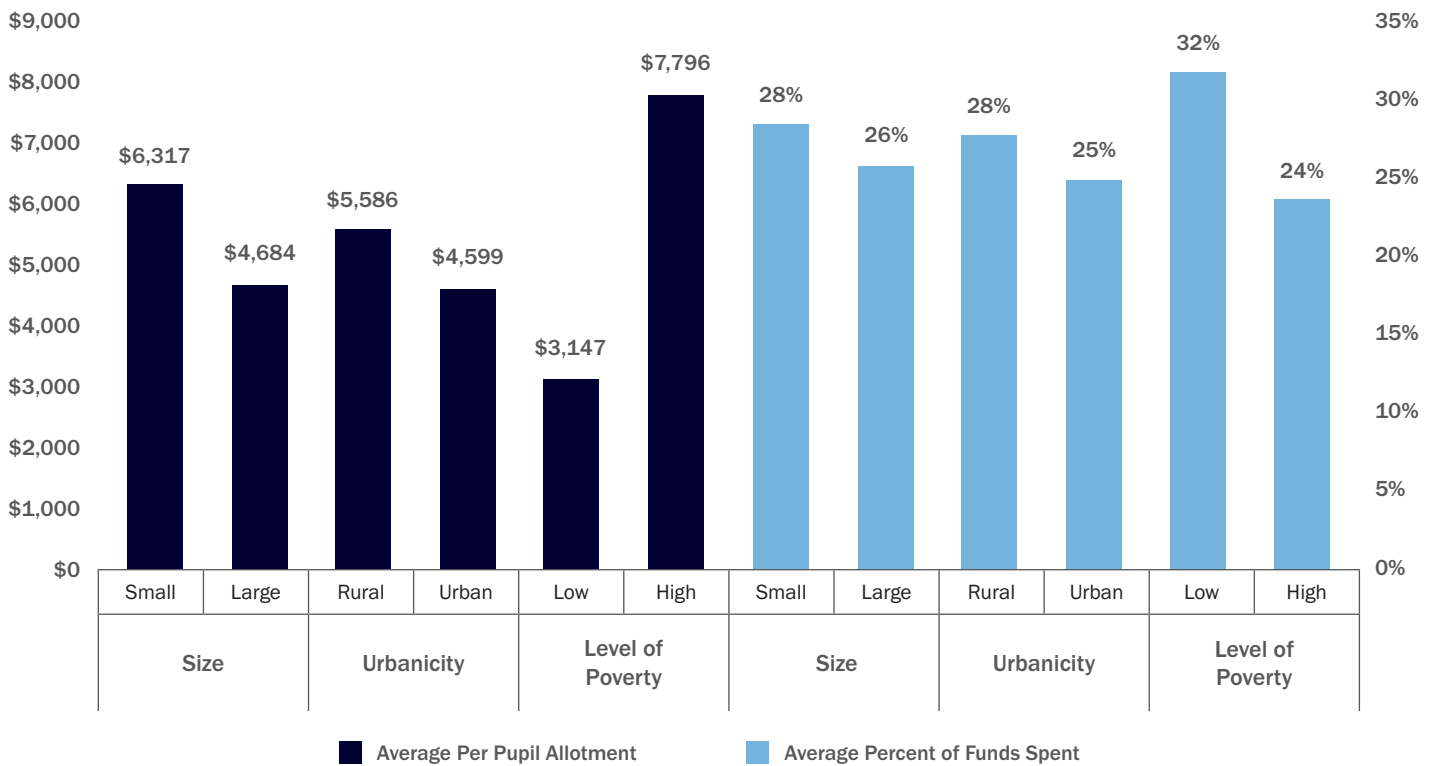
Note: This figure shows the average per pupil expenditures by school year for each local ESSER funding allocation for the 2019-20, 2020-21, and 2021-22 school years, as well as projected spending if remaining funds are spent equally across the remaining allowable years.

Figure 3 shows how ESSER funding allocations (left) and spending (right) have varied across school districts with different characteristics. Per pupil ESSER funding allocations were greater for small districts compared to large districts, for rural districts compared to urban districts, and for high poverty districts compared to low poverty districts.⁹ High poverty schools received the highest per pupil levels of ESSER funding. These differences reflect the funding formulas used to determine allocation amount, which prioritized funding for low income students as well as rural

and small school districts. Turning to spending, the percentage of funds spent by the end of the 2021-22 school year ranged from 24 percent on average for high poverty districts to 32 percent for low poverty districts. This relatively small range of proportions spent suggests that district characteristics were not strong predictors of which districts spent their money the most rapidly. Rather, all types of districts ended the 2021-22 school year with a large share of unspent funds.

⁹ Small districts are defined as districts with enrollments less than 5,000 and large districts are defined as districts with enrollments greater than 15,000. Rural and urban districts are categorized according to locale codes with rural and town districts comprising the rural category while urban and suburban districts comprise the urban category. Low-poverty school districts are those in which less than 25% percent of students are classified as low-income. High-poverty school districts are those in which greater than 75% percent of students are classified as low-income.

Figure 3. Average Per Pupil Allocations of ESSER Funds and Percent of Funds Spent through 2021–22



Note: This figure shows per pupil district allocations and percent of total allocations spent by district characteristics, including size, urbanicity, and level of poverty.

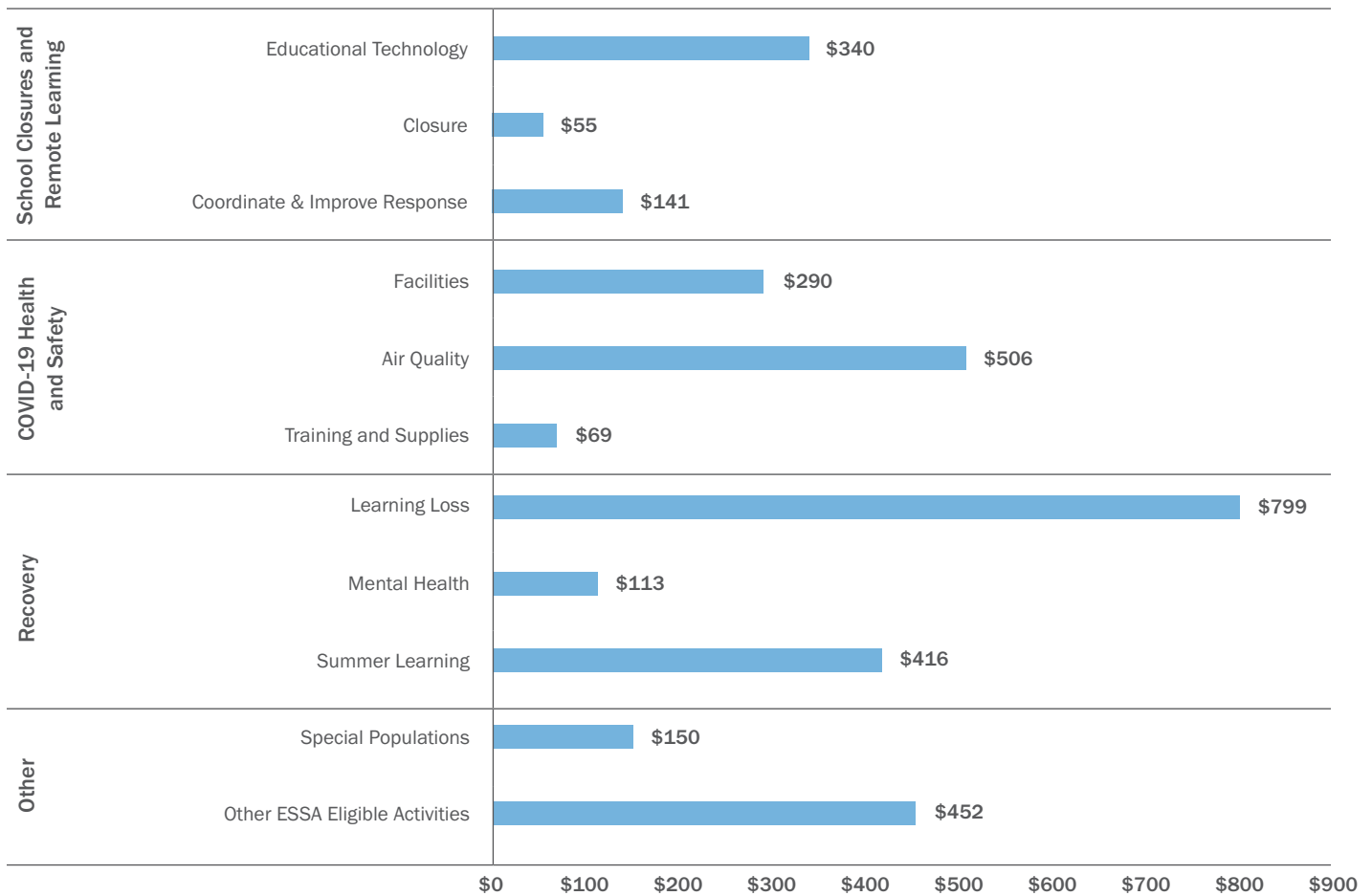
How did districts prioritize ESSER investments across pandemic-related needs?

Figure 4 shows how districts prioritized spending across allowable use categories of needs in the plans they submitted for ESSER II and ESSER III spending. We group allowable use categories into broad categories of pandemic-needs—COVID-19 Health and Safety; School Closures and Remote Learning; Recovery; Special Populations; and Other. The highest level of planned per pupil expenditures of any single category was Learning Loss at \$799 per pupil. The prioritization of this category was largely driven by the ESSER III legislation that requires at least 20 percent of funds be allocated to learning loss. Substantial funding (\$416 per pupil) was also allocated for

Summer Learning in the group of Recovery-related needs, and less Recovery-related funding (\$113 per pupil) was allocated to mental health needs. Among COVID-19 Health and Safety related needs, Air Quality was prioritized with the most funding (\$506 per pupil) followed by Facilities (\$209 per pupil). Less funding was allocated to Training and Supplies, although it is worth noting that these expense categories were used more frequently in ESSER I, for which we do not have data on per pupil expenditures by category.¹⁰ Education Technology received the largest planned allocations (\$340 per pupil) among needs related to School Closures and Remote Learning with less funding planned for Coordinating or Improving Response (\$131). Like Training and Supplies, the Closure category was more commonly used in ESSER I. These plans suggest that districts prioritized academic recovery and durable health and safety improvements for ESSER II and ESSER III spending.

¹⁰ See Appendix Table A for detail on allowable use categories by funding source.

Figure 4. Per Pupil Spending Plan by Allowable Use Categories for ESSER II and ESSER III

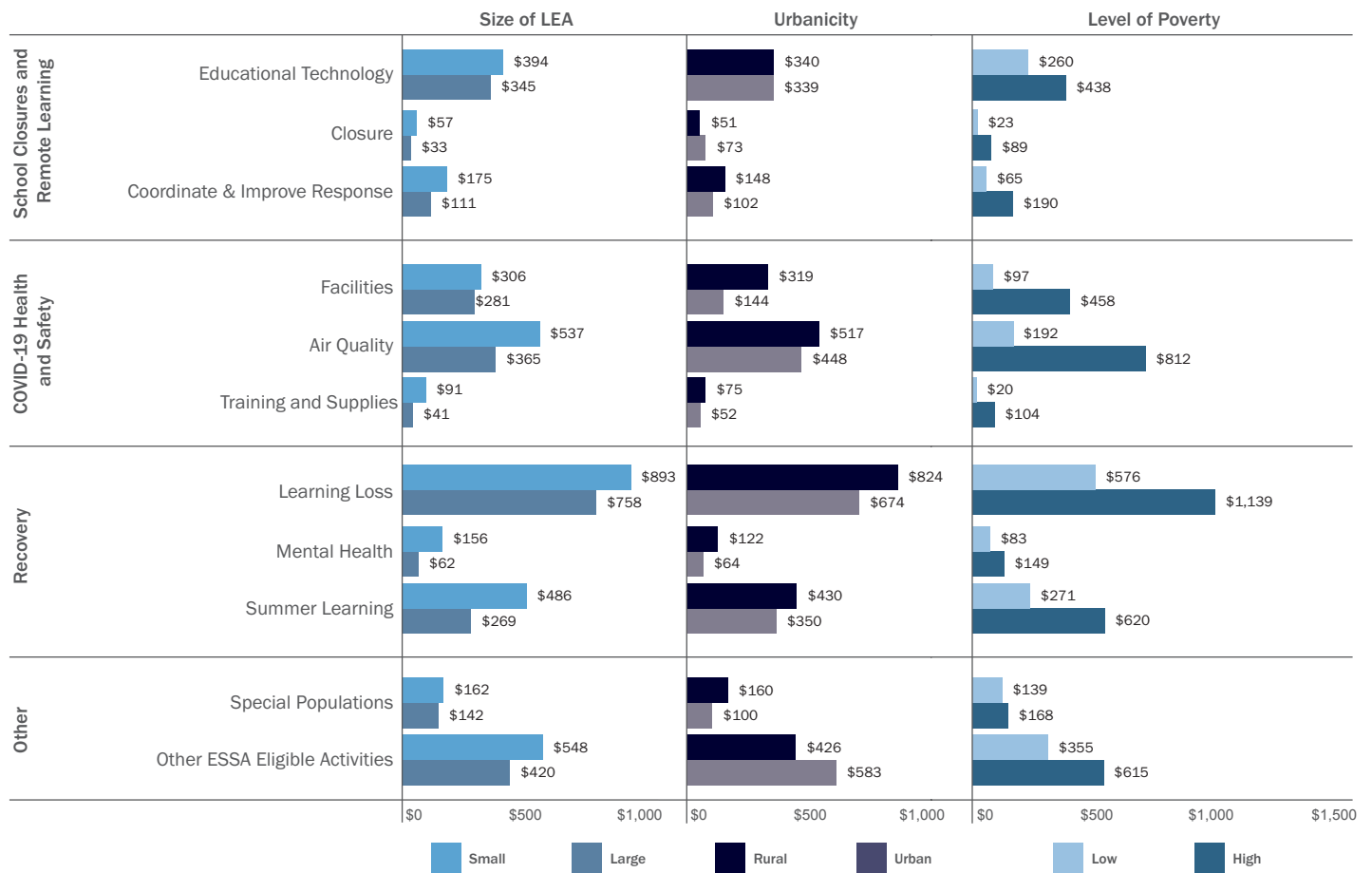


Note: This figure shows the average per pupil allocations by allowable use category indicated in district spending plans for ESSER II and ESSER III.

Figure 5 shows districts’ planned allocations across allowable use spending categories and groups of pandemic-related needs by district characteristics, including size (left), urbanicity (middle), and poverty level (right). Across all groups, most districts planned funding patterns were similar, with differences driven more by the overall size of allocations than by differing priorities. However, a few notable distinctions do stand out. High poverty schools intended to spend proportionately more on categories related to COVID-19 Health and Safety, including Facilities, Air Quality, and Training and Supplies.

They also planned to spend more proportionally on Closures, Coordinating/Improving Response, and Summer Learning. Small districts planned to spend proportionately more on Summer Learning and Air Quality than large districts. They also planned to spend proportionately more on Mental Health, but less on Educational Technology and Special Populations. Urban districts planned to spend more proportionately on Educational Technology, Closures, and on expenses that fell into the Other category.

Figure 5. Per Pupil Spending by Allowable Use Categories for ESSER II and ESSER III by District Characteristics



Note: This figure shows average planned per pupil spending in allowable use categories by district characteristics, including size, urbanicity, and poverty level.

What were the most common resources and services for districts to include in ESSER spending plans?

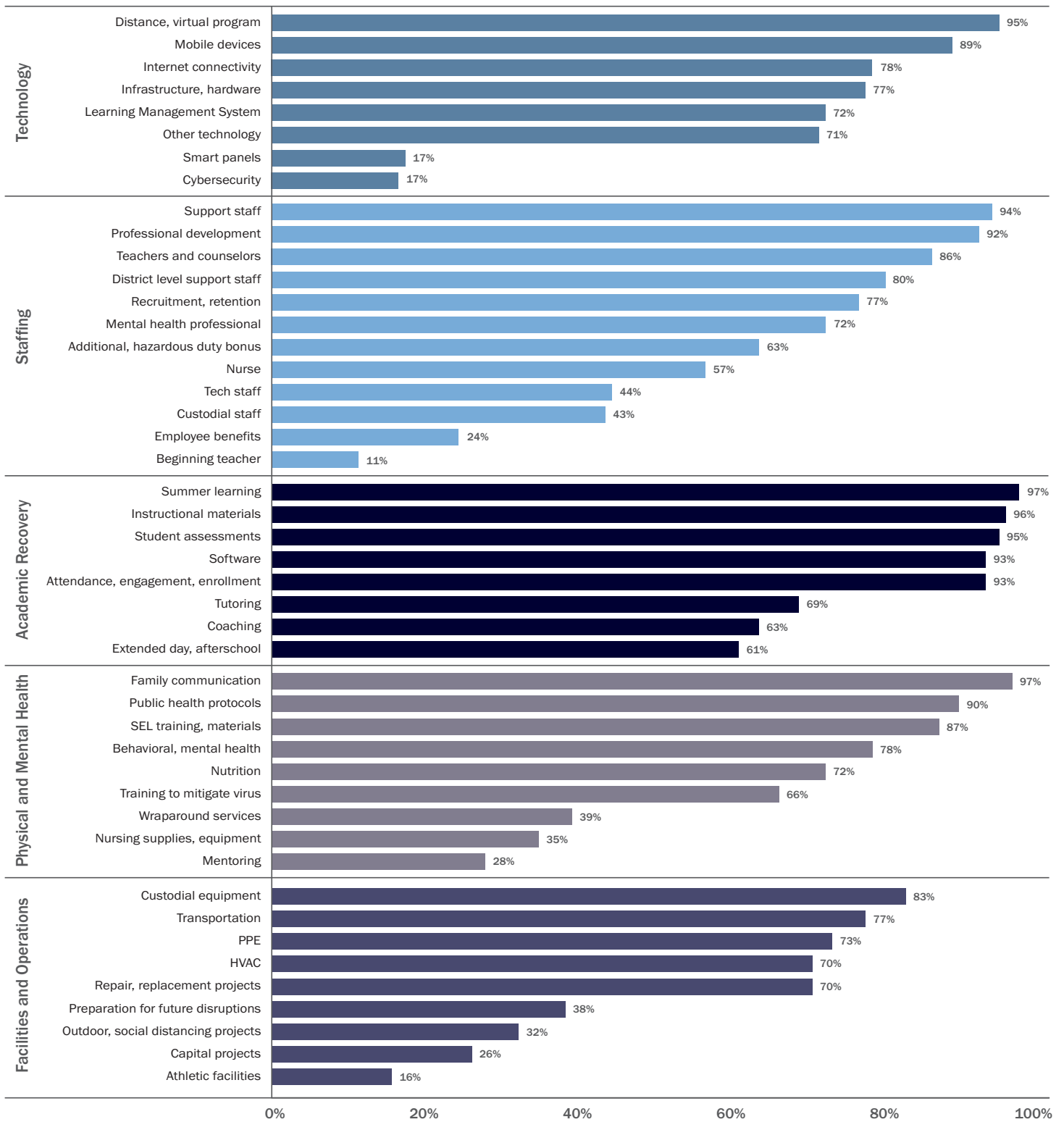
Figure 6 shows the percentage of districts that included specific resources and services in their ESSER spending plans. The resources and services are grouped into five broad categories: Technology, Staffing, Academic Recovery, Physical and Mental Health, and Facilities and Operations. Some key resources were included by nearly every district in their ESSER plans; these include Technology resources—distance or virtual programs and mobile devices—as well as common resources for Academic Recovery—summer learning, instructional materials, software, student assessments, and support for attendance, engagement, and enrollment. Under the Staffing category, investments in support staff and professional development were nearly universal.

We also examined differences in resources and services included in plans by district characteristics.¹¹ While many expenditure plans were similar across all types of districts, a few key

differences stand out. Among Technology resources, small, rural, and high poverty districts were more likely to include infrastructure and hardware in their plans. Conversely, large and urban districts were more likely to include tutoring services in their plans for academic recovery. Urban districts were also more likely to include behavioral and mental health services. Low poverty districts were less likely to include spending on nutrition, while high poverty and small districts were less likely to include wrap around services. Nearly all districts included additional staff positions in their plans, but there was variation in which types of positions were prioritized. Small and high poverty districts were more likely to include administrative support staff and less likely to include teachers or counselors. Large and urban districts were more likely to include custodial staff. Large districts were also more likely to include mental health positions, while urban districts were less likely than other districts to include nurses. The inclusion of Facilities and Operations investments also varied between different types of districts. High poverty and urban districts were more likely to include HVAC systems in their plans. Urban districts were also more likely to include repairs and replacement.

¹¹ See Appendix Table B

Figure 6. Percent of Districts with Planned Spending on Common Resources and Services



Note: This figure shows the percentage of districts that included each specific resource or service in their ESSER spending plans across all three ESSER funds.

Discussion

The funds provided by the three ESSER allocations represent an unprecedented level of federal assistance to education, and most of these funds were passed through to districts. This study seeks to increase our understanding of how these funds are and have been used to support students, educators, and schools as they recover from and adapt to the changes brought on by the COVID-19 pandemic. We examined the allocation, spending, and planned use of funds across all 115 traditional public school districts in North Carolina. From this descriptive analysis, several key findings emerge.

First, all ESSER funds combined provide on average nearly \$5500 per pupil in North Carolina, a substantial increase relative to typical per pupil expenditures in North Carolina. The absolute and relative size of these investments compared to typical expenditures varies significantly across districts, with substantial differences between small and large districts, rural and urban districts, and, particularly, high and low poverty districts. High poverty districts received approximately two and a half times as much funding per pupil as low poverty districts.

Second, while allocations of funding vary substantially, patterns of spending are characterized more by similarity than by differences. Across all types of districts, on average districts spent between a quarter and half of ESSER funds by the end of the 2021–22 school year, leaving two-thirds of the funds remaining to be spent during the 2022–23, 2023–24, and 2024–25 school years. This sizable proportion of remaining funds raises concerns about whether districts will be able to spend their remaining funds in ways that best support recovery in the time remaining.

Finally, spending priorities—regardless of district size, urbanicity, or level of poverty—tended to center around addressing lost opportunities to learn and other recovery efforts, including addressing COVID-19 health and safety needs. While similar in many regards, a few key differences in spending priorities emerge between high and low priority districts. All districts invested heavily in academic recovery and reengagement. High poverty districts focused more heavily on tangible resources including facilities, HVAC, and infrastructure and hardware compared to low poverty districts which invested proportionately more in services such as mental health services, tutoring, and wrap around supports. These differences may reflect the greater availability of ESSER funding for high poverty districts and less need for ESSER funding to provide tangible goods in low poverty districts due to existing resources.

This analysis can help inform policymakers as they make decisions regarding extensions of the current ESSER funding, provide recommendations and support to districts in spending remaining funds, and make additional investments in areas not fully supported by ESSER funding. In addition, this analysis of ESSER spending patterns can inform research to better understand how particular resources and services impacted the outcomes and well-being of students, educators, and schools going forward.

For More on this Topic

DiMarco, B., & Jordan, P. W. (2022, July 8). *Financial trends in local schools' covid-aid spending*. FutureEd. live-fe-future-ed.pantheonsite.io/financial-trends-in-local-schools-covid-aid-spending

Jordan, P. W., & DiMarco, B. (2022, September 27). *How district poverty levels influence covid-relief spending*. FutureEd. live-fe-future-ed.pantheonsite.io/how-district-poverty-levels-influence-covid-relief-spending

McCourt School of Public Policy: Georgetown University. (2022, June 7). *How local educators plan to spend billions in federal covid aid*. FutureEd. Retrieved October 26, 2022, from future-ed.org/local-covid-relief-spending

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North Carolina Department of Public Instruction. (June, 2022). *Allotment and expenditure data visualization*. bi.nc.gov/t/DPIFinancialBusinessServices/views/COVID19AllotmentExpendituresandDetailedExpenditures

Appendix

Table A. Percent of Districts Planning Expenditures across Allowable Use Categories by ESSER Fund

Categories		ESSER I	ESSER II	ESSER III
COVID-19 Health and Safety	Facilities	-	53.91%	55.65%
	Air Quality	-	66.09%	68.70%
	Training and Supplies	74.35%	34.78%	33.48%
School Closures and Remote Learning	Educational Technology	89.57%	75.65%	84.35%
	Closure	80.87%	34.78%	34.78%
	Coordinate & Improve Response	48.70%	36.81%	37.83%
Recovery	Learning Loss	-	79.13%	97.39%
	Mental Health	52.17%	55.65%	71.30%
	Summer Learning	49.57%	84.35%	72.17%
Other	Special Populations	68.70%	54.78%	67.83%
	Other ESSA Eligible Activities	43.48%	79.13%	90.43%

Note: This table displays the percentage of districts indicating planned expenditures within each allowable use category across each of the three ESSER funds. Allowable use categories vary slightly between ESSER I and ESSER II and III.

Table B. Percent of Districts with Planned Spending on Common Resources and Services, by District Characteristics

Categories		Size (%)		Urbanicity (%)		Level of Poverty (%)	
		Small	Large	Rural	Urban	Low	High
Technology	Mobile devices	86.27	86.96	87.50	94.74	82.14	93.10
	Infrastructure, hardware	86.27	65.22	79.17	68.42	71.43	82.76
	Internet connectivity	82.35	73.91	78.13	78.95	78.57	82.76
	Distance, virtual program	92.16	95.65	93.75	100	96.43	89.66
	Smart panels	13.73	17.39	19.79	5.26	17.86	24.14
	Learning Management System	76.47	69.57	72.92	68.42	64.29	65.52
	Cybersecurity	11.76	17.39	15.63	21.05	10.71	10.34
	Other tech	66.67	78.26	73.96	57.89	64.29	68.97
Staffing	Teachers and counselors	78.43	91.30	86.46	84.21	92.86	68.97
	Professional development	90.20	100	92.71	89.47	85.71	100
	Mental health professional	62.75	78.26	71.88	73.68	71.43	68.97
	Employee benefits	25.49	26.09	22.92	31.58	25.00	27.59
	Nurse	50.98	60.87	59.38	42.11	57.14	55.17
	Support staff	94.12	91.30	92.71	100	89.29	89.66
	Recruitment, retention	74.51	82.61	73.96	89.47	75.00	79.31
	Custodial staff	39.22	65.22	40.63	57.89	46.43	37.93
	Tech staff	43.14	47.83	42.71	52.63	39.29	41.38
	Additional, hazardous duty bonus	66.67	65.22	64.58	57.89	57.14	68.97
	Admin support staff	82.35	73.91	80.21	78.95	67.86	86.21
	Beginning teacher	11.76	13.04	11.46	10.53	7.14	17.24
Academic Recovery	Summer learning	96.08	100	96.88	100	92.86	100
	Software	92.16	91.30	93.75	89.47	92.86	93.10
	Instructional materials	96.08	86.96	95.83	94.74	100	96.55
	Extended day, afterschool	54.90	56.52	60.42	63.16	60.71	55.17
	Student assessments	96.08	91.30	95.83	89.47	100	96.55
	Tutoring	64.71	82.61	66.67	78.95	60.71	68.97
	Coaching	64.71	65.22	60.42	78.95	60.71	62.07
	Attendance, engagement, enrollment	94.12	86.96	92.71	94.74	92.86	93.10

Categories		Size (%)		Urbanicity (%)		Level of Poverty (%)	
		Small	Large	Rural	Urban	Low	High
Physical and Mental Health	SEL training, materials	86.27	82.61	86.46	89.47	78.57	93.10
	Family communication	96.08	95.65	95.83	100	92.86	96.55
	Behavioral, mental health	76.47	82.61	76.04	89.47	78.57	75.86
	Public health protocols	88.24	86.96	89.58	89.47	78.57	93.10
	Mentoring	25.49	30.43	27.08	31.58	28.57	34.48
	Nutrition	72.55	65.22	72.92	68.42	42.86	75.86
	Wraparound services	31.37	47.83	37.50	47.37	39.29	27.59
	Nursing supplies, equipment	31.37	43.48	31.25	52.63	25.00	34.48
	Training to mitigate virus	66.67	56.52	64.58	73.68	71.43	86.21
Facilities and Operations	HVAC	70.59	69.57	68.75	78.95	57.14	89.66
	PPE	80.39	69.57	70.83	84.21	60.71	82.76
	Repair, replacement projects	70.59	65.22	68.75	78.95	64.29	72.41
	Transportation	72.55	78.26	80.21	63.16	75.00	79.31
	Custodial equipment	86.27	69.57	83.33	78.95	64.29	93.10
	Outdoor, social distancing projects	35.29	39.13	32.29	31.58	25.00	34.48
	Capital projects	19.61	43.48	23.96	36.84	28.57	20.69
	Preparation for future disruptions	39.22	47.83	37.50	42.11	42.86	44.83
	Athletic facilities	17.65	21.74	17.71	5.26	14.29	13.79

Note: This table displays the percentage of districts indicating planned expenditures within each category of goods or services across each of the three ESSER funds.



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