Classroom Shortage and the 2026 School Building Program: 32,419 Planned Classrooms Set Against the 2023 Shortage in 47,659 Philippine Public Schools

Mark Anthony Llego

NASH Reviewer, Philippines

NASH Reviewer Research Report No. 2 · Version 1.0 · November 2026

DOI: https://doi.org/10.5281/zenodo.24622264

Suggested citation: Llego, M. A. (2026). *Classroom shortage and the 2026 School Building Program: 32,419 planned classrooms set against the 2023 shortage in 47,659 Philippine public schools* (NASH Reviewer Research Report No. 2). NASH Reviewer. https://doi.org/10.5281/zenodo.24622264

© 2026 Mark Anthony Llego. This report is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0). NASH Reviewer is not affiliated with the Department of Education (DepEd) or the Second Congressional Commission on Education (EDCOM II).

Abstract

The Philippine Department of Education computed a shortage of 165,443 classrooms in public schools in 2023. This report sets that shortage, school by school, against the 32,419 classrooms of the School Building Program (SBP) 2026 masterlist, both published on the EDCOM II classroom construction dashboard and cleaned by NASH Reviewer. The shortage was at 25,823 of 47,659 schools, and half of it at 2,254 schools (4.7%); 78.6% of its Theil index relative to learners lay between schools in the same division. Half of the SBP classrooms (16,305) belonged to the third Public-Private Partnership for School Infrastructure Project, still for bidding. Of all 32,419, 53.0% fell within the receiving school's own shortage, 22.5% went beyond it, 23.0% went to schools with no shortage and 1.6% to schools not in the shortage table. Only 13.3% of schools with a shortage received any classroom, and 148,276 classrooms of the shortage stayed unmet, against the dashboard's netted figure of 133,024. With schools ranked by shortage, the concentration index of SBP classrooms was 0.43 (95% interval 0.36 to 0.50), against 0.80 for the shortage itself. Fifth-class municipalities were less often on the list than first-class ones (56.9% against 91.2%), but with enrollment, shortage rate and region held equal, no income class differed clearly. Last Mile Schools had slightly higher adjusted odds of an allocation (odds ratio 1.24). The plan leaned toward need, but loosely, and judging it calls for each school's own shortage rather than regional totals.

Keywords: classroom shortage; School Building Program; school infrastructure; PSIP III; Philippines; concentration index; Theil index; Last Mile Schools

1. Introduction

In 2023 the Department of Education (DepEd) computed a shortage of 165,443 classrooms in public schools. The Second Congressional Commission on Education (EDCOM II) describes it as "an estimated backlog of 165,443 classrooms for decongestion, replacement, and repair" and estimates that the backlog, with classrooms due for condemnation and classrooms totally damaged by calamities, will reach 219,000 by 2028 (Second Congressional Commission on Education [EDCOM II], 2026b, pp. 25, 448). Its National Education Plan targets 40,000 classrooms by 2028, 18.3% of that deficit (EDCOM II, 2026b, p. 448). When the classrooms funded cover a fraction of the need, the choice of schools decides whose shortage is met first.

EDCOM II's classroom construction dashboard set DepEd's 2023 shortage school by school beside the School Building Program (SBP) 2026 masterlist, enrollment and class shifts, and school facilities (EDCOM II, 2026a). The masterlist names the classrooms planned for 2026: lines funded under the General Appropriations Act (GAA)

2026, and lines of the third Public-Private Partnership for School Infrastructure Project (PSIP III). Comparing the plan with the shortage by city and municipality, EDCOM II reported that only 45.2% of the 332 local government units (LGUs) with the largest estimated shortages were also among the top recipients of planned classrooms, and that 55% of fifth-class municipalities received allocations against 91% of first-class ones (EDCOM II, 2026d).

This report sets the shortage and the plan side by side for every school. It asks four questions: where the 2023 shortage was, among regions, divisions and schools; how the SBP 2026 classrooms divided between funded lines and PSIP III; how many of the planned classrooms went to schools that were short, judged against each school's own shortage; and whether allocation differed by the income class of the municipality and for Last Mile Schools once size, need and region were held equal.

2. Data and methods

2.1 Data

The data are the five tables embedded in EDCOM II's classroom construction dashboard (EDCOM II, 2026a), a workbook with two dashboards, School Level Classroom Construction and LGU Breakdown: DepEd's classroom shortage for 2023 (47,662 rows), the SBP 2026 masterlist (5,652 lines), enrollment and class shifts for School Year (SY) 2024–2025 (47,972 rows), school facilities for 2023 (60,167 rows, all sectors) and school coordinates for SY 2022–2023 (47,689 rows). NASH Reviewer extracted the tables from the dashboard's workbook unchanged and cleaned them (Llego, 2026). Old school IDs were mapped to the current ones (360 schools), two merged schools were combined, garbled text was repaired, impossible coordinates were emptied and region labels were made consistent. Every changed value is listed in a cleaning log of 31,415 entries, and the build passes 19 checks, among them that the dashboard's totals come out unchanged: 165,442.67 classrooms short at 25,823 schools, and 32,419 SBP classrooms, 16,114 of them funded, for a coverage of 19.6%. The cleaned school table holds 48,131 public schools, every source joined on the current school ID, and a city and municipality table sums them for 1,642 LGUs.

Regions follow DepEd's, with the Negros Island Region (NIR) as its own region and Sulu counted in Region IX: Sulu's schools division moved from the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) to DepEd Region IX on October 20, 2026, after every source had been compiled, which places 2,173 classrooms of shortage in Region IX rather than BARMM (Llego, 2026). EDCOM II's final report charts the same 2023 shortage by region and gives its source as the National School Building Inventory 2023, as submitted by DepEd's Education Facilities Division as of June 30, 2023 (EDCOM II, 2026b, p. 179).

The sources span four years: coordinates from SY 2022–2023, the shortage and facilities from 2023, enrollment and shifts from SY 2024–2025, and allocations from 2026, with PSIP III construction expected from March 2027 to July 2028. The analysis of the shortage covers the 47,659 schools in the 2023 shortage table once old IDs were mapped and merged schools combined; rates per learner use the 47,524 of them with learners in SY 2024–2025 (22,429,992 learners).

2.2 Measures

A school's shortage is DepEd's computed figure: its kindergarten to Grade 10 (K to 10) shortage plus its senior high school (SHS) shortage. Excess rooms are never netted against it, at the same school or elsewhere. Where K to 10 and SHS classes share a room, DepEd splits the room between them, so the shortage is fractional at 3,097 schools and the national total, 165,442.67, is rounded here to 165,443. The shortage per 1,000 learners is a group's total shortage divided by its total SY 2024–2025 enrollment, times 1,000: a ratio of sums over schools with learners, not an average of school rates.

SBP classrooms are the masterlist's classroom count, including prefabricated Learning Continuity Spaces, as the dashboard counts them. A line is funded when it carries a GAA 2026 year; PSIP III lines carry neither a GAA year nor a budget. Lines are grouped by implementer: the Department of Public Works and Highways (DPWH); LGUs (provinces, cities and municipalities); DepEd's own Learning Continuity Space and Last Mile School lines; and PSIP III. Coverage is SBP classrooms divided by the shortage, the dashboard's measure.

The school-by-school partition sets each school's SBP classrooms against its own shortage. At a school in the shortage table, the classrooms within the shortage are the smaller of its SBP classrooms and its shortage, and any excess at a school with a shortage is beyond it. Classrooms at schools with no shortage and at schools not in the table are counted apart, and the four parts add up to the 32,419. Where a school's classrooms exceed its shortage and come from several lines, the excess is shared among the lines in proportion to their classrooms. The shortage met within schools is the sum of the classrooms within each school's shortage, divided by the national shortage; the unmet shortage is the national shortage minus that sum.

2.3 Analysis

Concentration across schools was measured with a Lorenz curve (Lorenz, 1905), the Gini coefficient (Gini, 1912) and the shares of the shortage held by the 1%, 5% and 10% of schools with the largest shortages. Because a large school needs more rooms than a small one, the shortage was also set against learners with Theil's T index (Theil, 1967): the sum over schools of $s \ln(s/w)$, where s is a school's share of the national shortage and w its share of national learners. The index splits exactly across nested levels, so it was divided into a part between the 18 regions, a part between the 229 divisions within regions and a part between schools within divisions.

Targeting was measured with a concentration curve and index (Wagstaff et al., 1991). Schools were ranked by their 2023 shortage, tied schools sharing their average rank, and the index was computed as twice the covariance between a school's SBP classrooms and its fractional rank, divided by the mean SBP classrooms per school (Kakwani et al., 1997). The index is 0 when classrooms take no account of the shortage, and it equals the shortage's own Gini coefficient when classrooms are in exact proportion to each school's shortage. Its 95% interval is the middle 95% of 500 cluster-bootstrap estimates in which whole divisions were drawn with replacement (Efron & Tibshirani, 1993), since schools in a division share an office and their allocations are likely planned together. The same index was computed for each implementing group's own classrooms.

The share of schools receiving any SBP classroom was computed for seven bands of shortage, with Wilson score intervals (Wilson, 1927). A logistic regression (Hosmer et al., 2013) then estimated the odds that a school received any SBP classroom from its shortage band (no shortage as the reference), the base-2 logarithm of its enrollment, Last Mile School status, urban location, two or more class shifts in SY 2024–2025, and region fixed effects, which compare schools only within their region. It covers the 47,495 schools in 229 divisions with learners and an urban or rural label, with standard errors clustered by division (Cameron & Miller, 2015). For the 1,642 cities and municipalities, Spearman's rank correlation (Spearman, 1904) between the shortage and SBP classrooms carries a 95% interval from 1,000 bootstrap samples of LGUs, and EDCOM II's comparison of the 332 LGUs with the largest shortages and the 332 with the most planned classrooms was repeated.

Allocation by income class was compared among municipalities, with the class recorded in DepEd's 2023 shortage table; first class has the highest average annual income and fifth class the lowest. Shares carry Wilson intervals, and the Cochran–Armitage test (Cochran, 1954; Armitage, 1955), with the classes scored 0 to 4, tested for a linear trend. A logistic regression estimated the odds of any SBP classroom from income class (first class as the reference), the shortage per 1,000 learners, the base-2 logarithm of enrollment and region fixed effects, with standard errors clustered by province. NCR and Region V (108 municipalities) were left out of it, because every municipality in them received classrooms and a region with no differences inside it adds nothing to a comparison within regions; the model covers 1,377 municipalities. Predicted probabilities keep each municipality's region, set its class to each class in turn and set its shortage rate and enrollment to the medians.

Last Mile Schools, as flagged in the 2023 shortage table, and schools running two or more shifts were compared with other schools by risk ratios with log-scale intervals (Katz et al., 1978). For Last Mile Schools, two logistic regressions with division-clustered errors estimated the odds of any SBP classroom: one with Last Mile status alone, and one adding the logarithm of one plus the shortage, the base-2 logarithm of enrollment, urban location and region fixed effects.

The masterlist holds 103 PSIP III lines that copy an earlier line in every column, carrying 1,554 classrooms. With no project ID, a second identical building cannot be told apart from a double entry, so the lines were kept, and the partition and the concentration index were recomputed without them. The analysis was done in Python with pandas, NumPy, SciPy and statsmodels, and the charts drawn with Matplotlib; bootstrap samples use a fixed seed (20261028), and figures are rounded half up. Because the data cover nearly every public school, an interval shows how firmly a result holds across divisions or schools, not the error of a sample survey.

3. Results

3.1 The 2023 shortage and its concentration

The shortage was 165,443 classrooms at 25,823 of the 47,659 schools (54.2%): 147,660 classrooms (89.3%) in K to 10 and 17,783 in SHS. Against the 22,429,992 learners enrolled in SY 2024–2025, it came to 7.4 classrooms per 1,000 learners, or one classroom for every 135.9 learners.

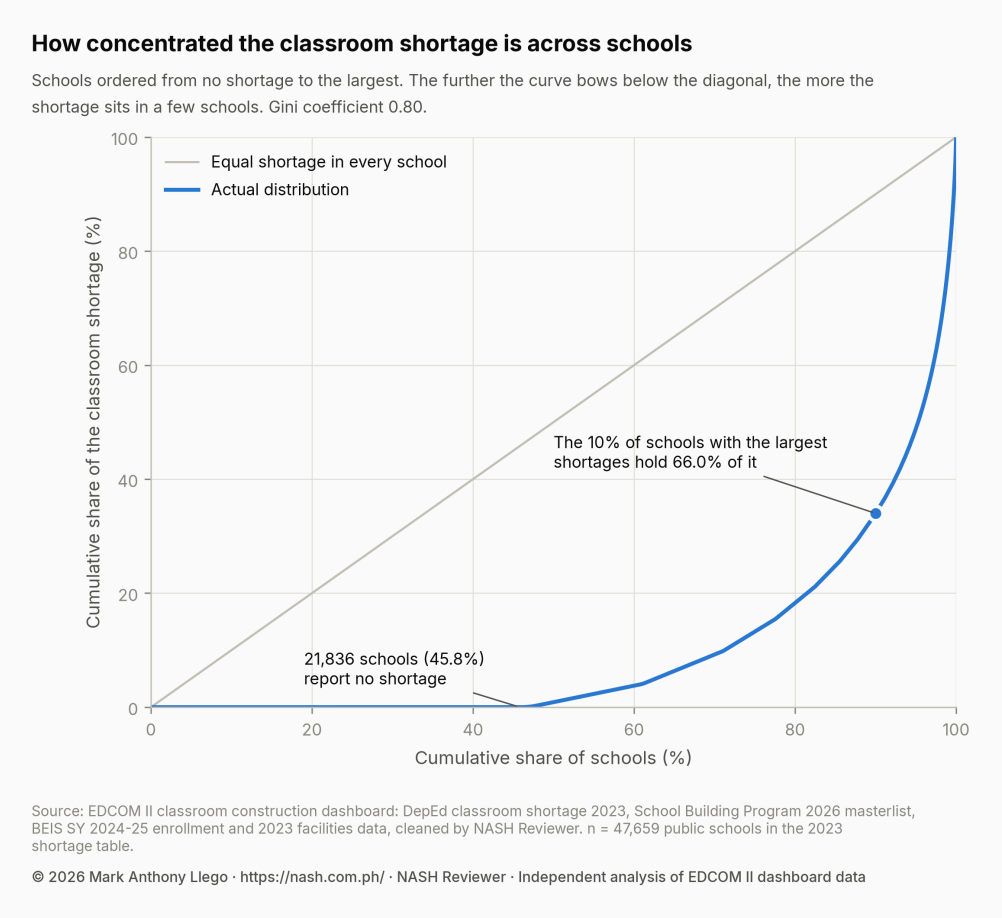

Figure 1. Lorenz curve of the 2023 classroom shortage across the 47,659 public schools in the shortage table, ordered from no shortage to the largest, against the diagonal of an equal shortage in every school.

Most schools with a shortage were short by a few rooms. Among the 25,823, the median shortage was 3.0 classrooms, the 90th percentile 13.0 and the 99th percentile 65.0; the largest, 319 classrooms, was at Batasan Hills National High School in Quezon City. The large shortages carried most of the total. The 1% of schools with the

largest shortages (477 schools) held 22.6% of it, the top 5% (2,383 schools) held 51.2% and the top 10% (4,766 schools) held 66.0%. Half of the national shortage was at 2,254 schools, 4.7% of the schools in the shortage table (Figure 1). The Gini coefficient across all schools was 0.80, and among the 25,823 schools with a shortage it was still 0.63.

Measured against learners, the Theil index of the shortage was 0.671. Differences between regions made up 0.081 of it (12.1%), differences between divisions in the same region 0.063 (9.3%) and differences between schools in the same division 0.528 (78.6%). If every school had its own division's shortage per learner, the index would fall by 78.6%. Urban schools were short more often than rural ones (67.2% of 10,919 against 50.3% of 36,576), had a higher rate (8.4 against 6.1 classrooms per 1,000 learners) and held 60.2% of the national shortage.

By region, the rate ranged from 14.3 classrooms per 1,000 learners in BARMM to 2.9 in Region I, a ratio of 5.0 to 1, with NCR (12.2) and Region IV-A (10.1) next to BARMM (Table 1). Counted in classrooms, the order changed. Region IV-A had the largest shortage, 31,010 classrooms (18.7% of the national total), then NCR with 24,866 (15.0%) and Region III with 13,119 (7.9%), whose rate of 5.5 was below the national rate; the three held 41.7% of the shortage.

Table 1. Classroom shortage in 2023 and SBP 2026 classrooms by region, from the highest to the lowest shortage per 1,000 learners

Region	Schools	Schools with a shortage	Classroom shortage	Share of national shortage	Shortage per 1,000 learners	SBP 2026 classrooms	Share of SBP classrooms	Coverage
BARMM	2,150	87.0%	11,064	6.7%	14.3	197	0.6%	1.8%
NCR	827	80.4%	24,866	15.0%	12.2	4,584	14.1%	18.4%
Region IV-A	3,552	63.2%	31,010	18.7%	10.1	6,470	20.0%	20.9%
Region X	2,521	71.4%	10,333	6.2%	9.1	1,082	3.3%	10.5%
Region IX	2,985	60.2%	8,826	5.3%	8.2	634	2.0%	7.2%
Region XII	2,139	70.7%	8,281	5.0%	8.0	494	1.5%	6.0%
Region VII	2,782	58.0%	10,857	6.6%	7.8	929	2.9%	8.6%
Region XI	2,206	58.2%	8,532	5.2%	7.2	583	1.8%	6.8%
CAR	1,844	48.3%	2,301	1.4%	6.7	1,133	3.5%	49.2%
CARAGA	2,096	58.2%	4,410	2.7%	6.4	542	1.7%	12.3%
MIMAROPA	2,377	52.5%	4,777	2.9%	6.0	1,696	5.2%	35.5%
Region III	3,705	49.5%	13,119	7.9%	5.5	4,103	12.7%	31.3%
Region VIII	4,188	49.6%	5,990	3.6%	5.4	940	2.9%	15.7%
Region V	3,852	51.5%	7,415	4.5%	4.9	2,370	7.3%	32.0%
NIR	2,211	48.8%	4,579	2.8%	4.2	782	2.4%	17.1%
Region VI	2,829	33.1%	3,522	2.1%	3.5	806	2.5%	22.9%
Region II	2,535	35.6%	2,501	1.5%	3.2	1,977	6.1%	79.0%
Region I	2,860	30.3%	3,061	1.9%	2.9	3,097	9.6%	101.2%
Philippines	**47,659**	**54.2%**	**165,443**		**7.4**	**32,419**		**19.6%**

Note. Shortage per 1,000 learners divides the 2023 shortage by SY 2024–2025 enrollment. Coverage = SBP 2026 classrooms ÷ 2023 shortage, counting every line. Sulu is counted in Region IX. Data: EDCOM II classroom construction dashboard, cleaned by NASH Reviewer (Llego, 2026).

3.2 The SBP 2026 masterlist: funded lines and PSIP III

The masterlist named 32,419 classrooms on 5,652 lines at 5,231 schools. Of these, 16,114 classrooms (49.7%) on 4,378 lines were funded under the GAA 2026, with budgets totaling PHP 55.47 billion. The other 16,305 (50.3%), on 1,274 lines at 1,094 schools, belonged to PSIP III, still for bidding and with no budget. The whole list equaled 19.6% of the 2023 shortage, and the funded lines alone 9.7%.

Among the funded lines, LGUs implemented 8,665 classrooms (26.7% of the list: provinces 4,319, cities 2,869 and municipalities 1,477), DPWH 6,142 (18.9%) and DepEd 1,307 (4.0%), of which 805 were in Learning Continuity Spaces and 502 in Last Mile School buildings (Table 3). PSIP III lines were large, with a median of 10.0 classrooms against 4.0 for DPWH lines and 3.0 for provincial and municipal lines.

PSIP III lines were in eight regions only: NCR, CAR, Regions I, II, III and IV-A, MIMAROPA and Region V. Coverage varied widely across regions (Table 1). Region I received 3,097 classrooms against a shortage of 3,061 (coverage 101.2%), 1,995 of them under PSIP III, and held 9.6% of the SBP classrooms against 1.9% of the shortage. Every Mindanao region was below the national coverage of 19.6%, from 12.3% in CARAGA to 1.8% in BARMM, which held 6.7% of the shortage and 0.6% of the classrooms.

3.3 Do the classrooms go where the shortage is?

Set against each receiving school's own 2023 shortage, the 32,419 SBP classrooms fell into four parts (Table 2). Of them, 17,166 (53.0%) were within the shortage of the school that received them, 7,284 (22.5%) went beyond it, 7,457 (23.0%) went to schools that reported no shortage, and 512 (1.6%) went to schools not in the 2023 shortage table. Of the 5,224 schools with at least one classroom counted, 3,430 had a 2023 shortage, 1,708 had none and 86 were not in the shortage table, and 1,417 of the 3,430 received more classrooms than their shortage. The 3,430 were 13.3% of the 25,823 schools with a shortage, and they held 21.6% of the shortage.

Counted school by school, the classrooms within each school's shortage met 10.4% of the 2023 shortage, and 148,276 classrooms of it remained unmet. The dashboard's coverage of 19.6% and its "Remaining Unfunded" figure of 133,024 set all SBP classrooms against the national shortage, so that a classroom beyond one school's shortage offsets another school's need.

Table 2. Where the 32,419 SBP 2026 classrooms land, set against each receiving school's 2023 shortage

SBP 2026 classrooms	Classrooms	Share
Within the receiving school's 2023 shortage	17,166	53.0%
Beyond the receiving school's shortage	7,284	22.5%
At schools with no 2023 shortage	7,457	23.0%
At schools not in the 2023 shortage table	512	1.6%
All SBP 2026 classrooms	**32,419**	

Note. Against the 2023 shortage of 165,443 classrooms, the classrooms within each school's shortage meet 10.4% and leave 148,276 unmet; the dashboard's coverage (19.6%) and "Remaining Unfunded" figure (133,024) count all 32,419 against the national total. Data: as in Table 1.

Ranked from the largest 2023 shortage to none, the top 10% of schools held 66.0% of the shortage and received 45.5% of the 31,907 SBP classrooms at schools in the shortage table, and schools with any shortage received 76.6% of them (Figure 2). The concentration index of SBP classrooms was 0.43 (95% interval 0.36 to 0.50). Classrooms shared in exact proportion to each school's shortage would score 0.80, the shortage's own index, and classrooms blind to the shortage would score 0: the SBP classrooms were 54.0% as concentrated among high-shortage schools as the shortage itself.

The implementing groups differed (Table 3). PSIP III lines followed the shortage most closely, with an index of 0.61 (0.54 to 0.67), and placed 15.7% of their classrooms at schools with no shortage; being large, they also placed 27.6% beyond the receiving school's shortage, the most of any group. DPWH (0.27) and LGU lines (0.26) were less concentrated, with 29.7% and 30.4% of their classrooms at schools with no shortage. DepEd's own lines scored 0.09 (0.03 to 0.14). They are prefabricated Learning Continuity Spaces and buildings for Last Mile Schools, which EDCOM II describes as built in geographically isolated, disadvantaged and conflict-affected areas and hardship posts (EDCOM II, 2026b, p. 448). Remoteness is not what the 2023 shortage counts.

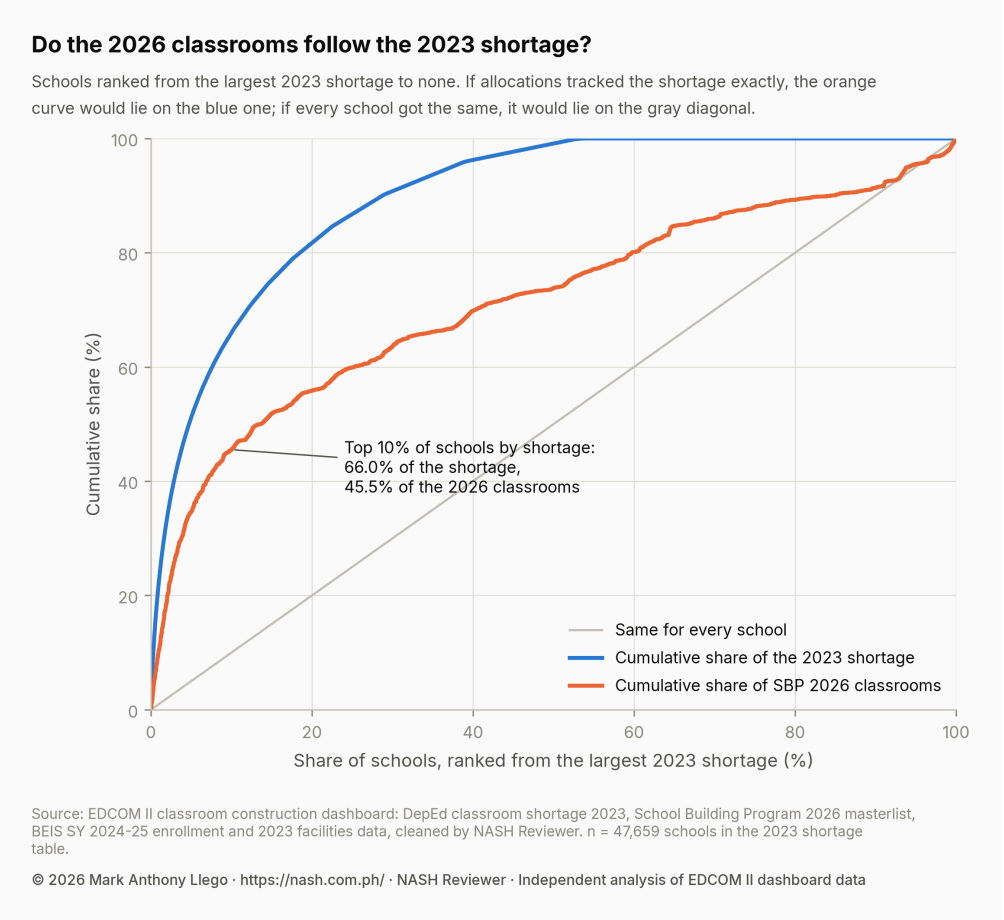

Figure 2. Cumulative share of the 2023 classroom shortage and of the 31,907 SBP 2026 classrooms at schools in the shortage table, with the 47,659 schools in the table ranked from the largest shortage to none.

Table 3. SBP 2026 classrooms by implementing group: where they land against the receiving school's 2023 shortage, and their concentration index

Implementing group	Lines	Classrooms	Share of SBP classrooms	Within the school's shortage	Beyond it	At schools with no shortage	Concentration index (95% interval)
DPWH	1,361	6,142	18.9%	49.4%	18.2%	29.7%	0.27 (0.19 to 0.35)
LGU (provinces, cities, municipalities)	2,049	8,665	26.7%	49.3%	17.9%	30.4%	0.26 (0.21 to 0.32)
DepEd (Learning Continuity Spaces, Last Mile Schools)	968	1,307	4.0%	54.9%	9.3%	34.1%	0.09 (0.03 to 0.14)
PSIP III (for bidding)	1,274	16,305	50.3%	56.1%	27.6%	15.7%	0.61 (0.54 to 0.67)
All lines	**5,652**	**32,419**		**53.0%**	**22.5%**	**23.0%**	**0.43 (0.36 to 0.50)**

Note. DPWH, LGU and DepEd lines are funded under the GAA 2026. The three location shares are of the group's classrooms; the rest are at schools not in the 2023 shortage table. Where a school's classrooms exceed its shortage, the excess is shared among its lines in proportion to their classrooms. The concentration index ranks schools by their 2023 shortage; for the shortage itself it is 0.80. Intervals from 500 bootstrap samples of whole divisions. Data: as in Table 1.

The share of schools with any SBP classroom rose with every band of shortage, from 7.8% of schools with none to 14.3% of those short by over 5 to 10 classrooms, 21.9% of those short by over 10 to 20 and 29.2% of those short by more than 20 (Figure 3). Even in the top band, only 455 of 1,560 schools received any classroom.

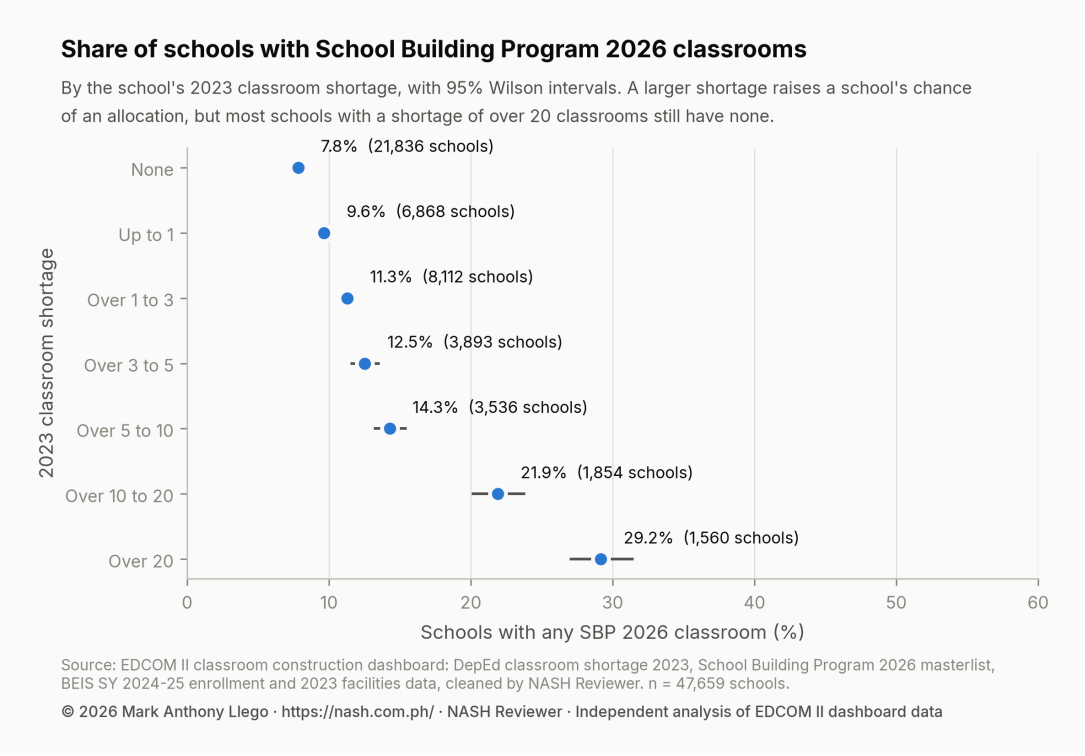

Figure 3. Share of schools with any SBP 2026 classroom, by the school's 2023 classroom shortage, with 95% Wilson intervals.

With enrollment, Last Mile School status, urban location, class shifts and region held equal, the odds of an allocation rose with the shortage band (Table 4). Schools short by up to one classroom had 1.44 times the odds of schools with no shortage in the same region; the odds ratio rose to 2.86 for schools short by over 10 to 20 classrooms and stayed at 2.87 for those short by more than 20. Each doubling of enrollment multiplied the odds by 1.27. Last Mile Schools (1.24), schools on two or more shifts (1.20) and urban schools (0.87) differed less, with intervals that came close to 1.

Table 4. Logistic regression of whether a school has any SBP 2026 classroom

Term	Odds ratio (95% interval)	p-value
Shortage up to 1 (vs none)	1.44 (1.28 to 1.62)	p < 0.001
Shortage over 1 to 3 (vs none)	1.78 (1.56 to 2.03)	p < 0.001
Shortage over 3 to 5 (vs none)	2.06 (1.71 to 2.48)	p < 0.001
Shortage over 5 to 10 (vs none)	2.21 (1.82 to 2.68)	p < 0.001
Shortage over 10 to 20 (vs none)	2.86 (2.37 to 3.44)	p < 0.001
Shortage over 20 (vs none)	2.87 (2.24 to 3.68)	p < 0.001
Learners (per doubling of enrollment)	1.27 (1.22 to 1.32)	p < 0.001
Last Mile School	1.24 (1.04 to 1.47)	p = 0.016
Urban school	0.87 (0.77 to 0.98)	p = 0.024
Runs two or more shifts	1.20 (1.01 to 1.43)	p = 0.038

Note. 47,495 schools in 229 divisions; region fixed effects; standard errors clustered by division. Shortage bands are the 2023 shortage in classrooms. Data: as in Table 1.

Among the 1,642 cities and municipalities, the Spearman rank correlation between the 2023 shortage and SBP classrooms was 0.34 (95% interval 0.29 to 0.38). Of the 332 with the largest shortages, 147 (44.3%) were among the 332 with the most SBP classrooms, close to EDCOM II's 45.2%, and the three Cavite municipalities EDCOM II named matched exactly: Maragondon received 272 classrooms against a shortage of 64, Tanza 448 against 869 and Naic 356 against 631 (EDCOM II, 2026d). In all, 273 cities and municipalities received no SBP classroom although they held 13,613 classrooms of shortage; four of the five with the largest such shortages were in

BARMM, led by Datu Odin Sinsuat in Maguindanao del Norte (363 classrooms). At the other end, 183 received more classrooms than their shortage, 3,101 classrooms beyond it in total. Quezon City, with the largest shortage of any city or municipality (5,507 classrooms), received 398.

Dropping the 103 duplicate PSIP III lines changed little: 16,483 of the remaining 30,865 classrooms (53.4%) fell within the receiving school's shortage, against 53.0%, and the concentration index was 0.41, against 0.43.

3.4 LGU income class

Of the 1,642 cities and municipalities, 1,485 were municipalities, 149 were cities and 8 were municipalities of BARMM's Special Geographic Area, which have no income class. Nearly every city received classrooms (99.3%), against 82.2% of municipalities, so the comparison by income class covers municipalities. The share with any SBP classroom fell from 91.2% of the 694 first-class municipalities to 56.9% of the 65 fifth-class ones (Table 5), close to EDCOM II's 91% and 55% (EDCOM II, 2026d). The Cochran–Armitage test found a steady downward trend across the five classes ($z = -9.25$, $p < 0.001$). None of the eight Special Geographic Area municipalities received a classroom, though they held a shortage of 502 classrooms.

Income class tracked size. The median first-class municipality had 12,624 learners in 32 public schools, and the median fifth-class municipality 1,979 learners in 10. Relative to learners, the shortage was about equal across the classes: 6.5 classrooms per 1,000 learners in first class, 6.6 in fifth and 6.2 to 6.4 in between.

Table 5. Municipalities with any SBP 2026 classroom by income class, with size, shortage rate and adjusted odds ratios

Income class	Municipalities	With any SBP classroom	Share (95% interval)	Median learners	Median schools	Shortage per 1,000 learners	Adjusted odds ratio (95% interval)
1st class	694	633	91.2% (88.9% to 93.1%)	12,624	32	6.5	1 (reference)
2nd class	246	196	79.7% (74.2% to 84.2%)	7,583	24	6.2	1.01 (0.55 to 1.86)
3rd class	237	179	75.5% (69.7% to 80.6%)	5,661	20	6.4	1.08 (0.61 to 1.89)
4th class	243	176	72.4% (66.5% to 77.7%)	3,680	15	6.4	1.66 (0.74 to 3.69)
5th class	65	37	56.9% (44.8% to 68.2%)	1,979	10	6.6	2.13 (0.72 to 6.33)

Note. Shares carry 95% Wilson intervals. Adjusted odds ratios from a logistic regression on 1,377 municipalities (NCR and Region V left out) with the shortage per 1,000 learners (odds ratio 1.03, 0.98 to 1.08), the base-2 logarithm of enrollment (2.87, 2.05 to 4.02) and region fixed effects; standard errors clustered by province. Cities and the Special Geographic Area are left out. Data: as in Table 1.

With the shortage rate, enrollment and region held equal, no class differed clearly from first class: the odds ratios for second to fifth class were 1.01, 1.08, 1.66 and 2.13, and every interval included 1. Each doubling of enrollment multiplied the odds by 2.87 (2.05 to 4.02), while a higher shortage rate did not clearly raise them (1.03, 0.98 to 1.08). For a municipality of median size and shortage rate (7,268 learners and 5.0 classrooms short per 1,000), the predicted probability of an allocation ran from 82.3% in first class to 89.0% in fifth. Without the region terms, the odds ratio for fifth class was 0.55 (95% interval 0.25 to 1.18, $p = 0.126$), lower but not clearly so, which is consistent with fifth-class municipalities being more often in regions where fewer municipalities received classrooms. BARMM stood apart, with 21 of its 97 municipalities (21.6%) on the list, but leaving it out narrowed the gap only slightly: 93.0% of first-class against 60.7% of fifth-class municipalities.

Counted in classrooms rather than municipalities, each class received a similar share of its shortage: SBP classrooms equaled 20.4% of the 2023 shortage in first-class municipalities, 21.3%, 17.8% and 20.8% in the middle classes, and 18.5% in fifth class (Figure 4). Counted school by school, the shortage met was highest in first class, 10.9%, against 6.2% to 7.9% in the other classes. PSIP III made up 54.5% of the SBP classrooms in first-class cities and municipalities and 2.5% in fifth-class ones, where LGU-implemented lines made up 63.7%.

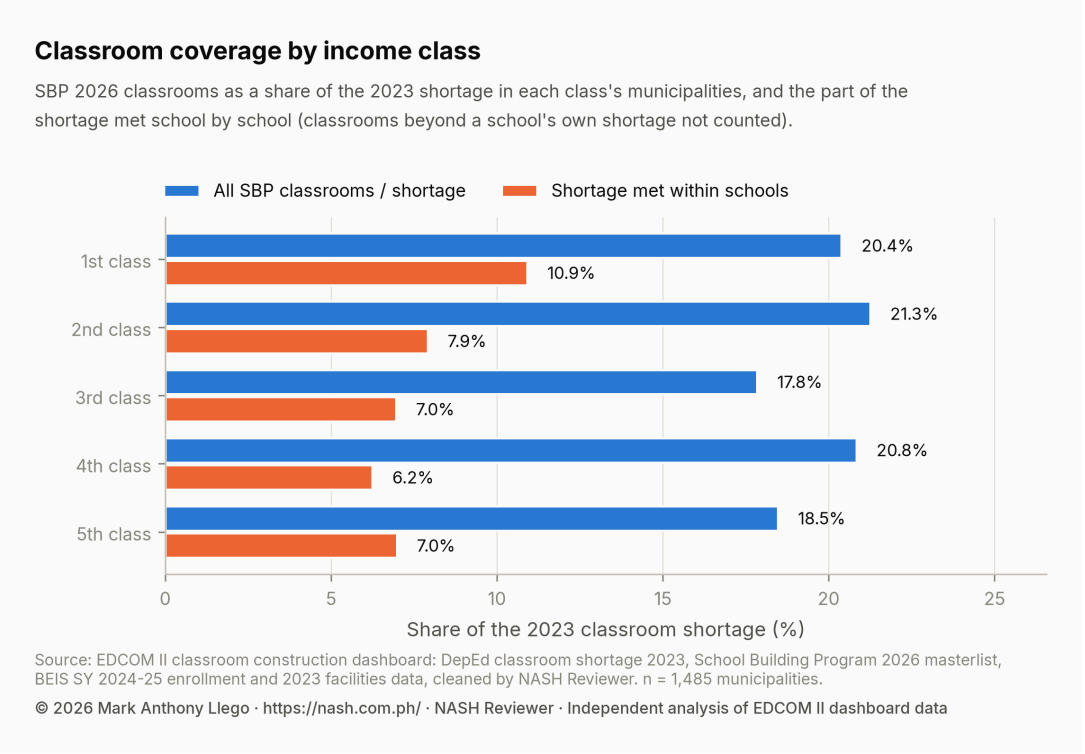

Figure 4. SBP 2026 classrooms as a share of the 2023 classroom shortage in the municipalities of each income class, and the share of the shortage met within schools, counting no classroom beyond a school's own shortage.

3.5 Last Mile Schools

Of the 47,659 schools in the shortage table, 8,820 (18.5%) were flagged as Last Mile Schools. They enrolled 1,477,131 learners (6.6% of the total), and the median one had 94 learners, against 267 at other schools. They were more likely to have a shortage (61.5% against 52.5%; risk ratio 1.17, 95% interval 1.15 to 1.19) and to hold classes in makeshift rooms (35.8% against 27.5%; risk ratio 1.30, 1.26 to 1.35), and their shortage was larger for their size: 10.3 classrooms per 1,000 learners, against 7.2 at other schools (Figure 5). Their rooms were less crowded, with a median of 21.0 learners per classroom against 27.1, and 0.7% ran two or more shifts, against 5.1%.

Counted simply, Last Mile Schools were less likely to be on the list: 9.9% received any SBP classroom, against 11.0% of other schools (risk ratio 0.90, 0.84 to 0.96). With Last Mile status alone in a model with division-clustered errors, the odds ratio was 0.89 (0.75 to 1.05, p = 0.160). With the shortage, enrollment, urban location and region held equal, it was 1.24 (1.04 to 1.47, p = 0.016), the same value as in the model of Table 4. Small schools with small shortages were the least often on the list, and Last Mile Schools were mostly small schools. Their 2,364 SBP classrooms equaled 15.5% of their shortage, against 19.7% at other schools, and 4,793 Last Mile Schools with a shortage, short 13,152 classrooms between them, received none. Of the SBP classrooms at Last Mile Schools, 43 (1.8%) were PSIP III's. The flag barely covers BARMM, where 20 schools (0.9%) carry it.

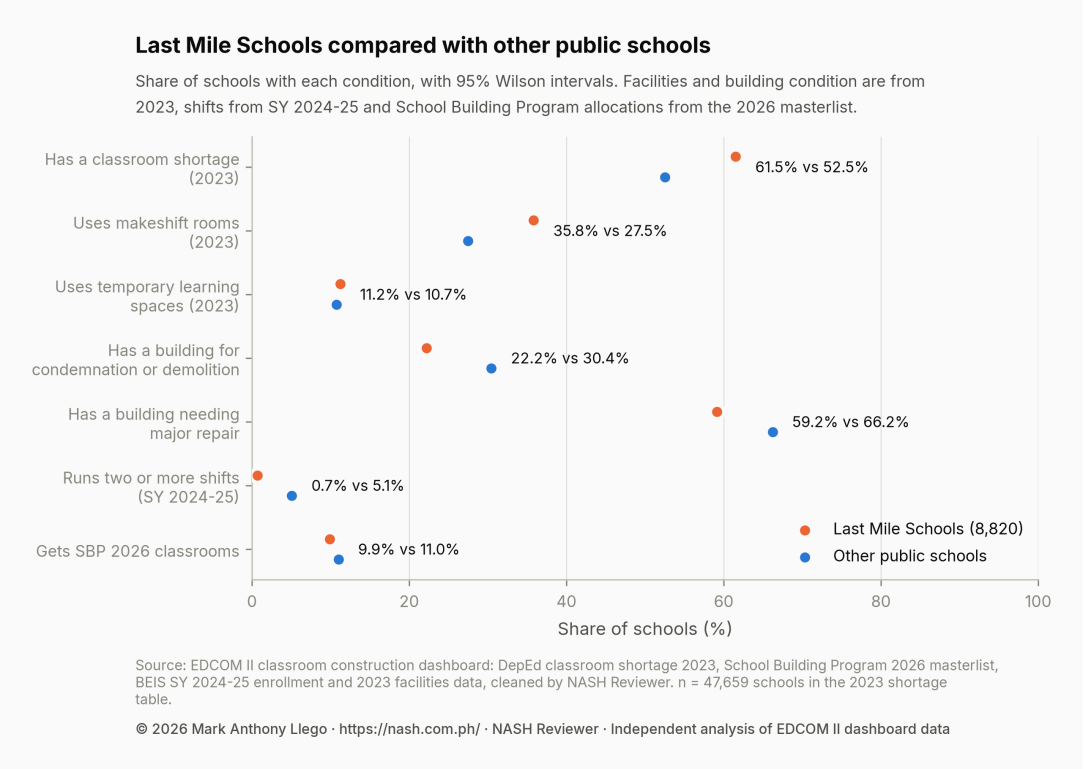

Figure 5. Share of Last Mile Schools and of other public schools with each condition, with 95% Wilson intervals. Facilities and building condition are from 2023, shifts from SY 2024–2025 and allocations from the SBP 2026 masterlist.

3.6 Schools on shifts

In SY 2024–2025, 2,041 public schools (4.3% of the 47,972 in the enrollment table) held classes in two or more shifts at some level, 30 of them in three, and they enrolled 4,596,527 learners (20.4%). NCR had 515 of them, 62.2% of its schools. The median school on shifts had 55.0 learners per instructional classroom, against 25.5 in single-session schools. Of the 2,021 shift schools in the shortage table, 93.0% had a shortage, with a median of 20.0 classrooms, and together they held 33.7% of the shortage at the schools in both tables. They were 2.59 times as likely as other schools to receive any SBP classroom (26.2% against 10.1%; 95% interval 2.40 to 2.80), yet 1,491 of them received none, with 38,384 classrooms of shortage between them.

4. Discussion

Read region by region, the 2023 shortage looks like a problem of BARMM, NCR and Region IV-A. Read school by school, it is concentrated in a few thousand schools: 2,254 held half of it, and 78.6% of its uneven spread relative to learners lay between schools under the same division office. A regional or division total says little about which schools are short, and a regional coverage figure says little about whether the classrooms reach them.

The same holds for the plan. The list equaled 19.6% of the national shortage, but counted against each receiving school's own shortage it met 10.4%, because 15,253 of its classrooms went beyond the receiving school's shortage, to schools with none, or to schools not in the shortage table. Allocation leaned toward need, since the share of schools with an allocation rose with every band of shortage, but loosely: the classrooms were 54.0% as concentrated among high-shortage schools as the shortage itself, and fewer than a third of the schools short by more than 20 classrooms received any. The 4,766 schools with the largest shortages held 66.0% of the shortage and received 44.8% of all 32,419 classrooms, while 7,457 classrooms went to schools that reported none.

A classroom at a school with no 2023 shortage is not misplaced by that fact alone. The 2023 figure does not include the 51,222 classrooms projected for condemnation by 2028 or the 2,335 totally damaged by calamities, which EDCOM II counts in its 219,000 (EDCOM II, 2026b, p. 448). DepEd's own lines, with the lowest index,

are built for needs the shortage does not measure, and land, site readiness and other funding shape where any line can go. What the partition shows is which lines need a reason other than the 2023 shortage; the school-level data allow that check line by line. The list is also a plan. Half of its classrooms are PSIP III lines still for bidding, and at the Senate Committee on Finance's briefing on DepEd's proposed FY 2027 budget on October 16, 2026, PHP 1.87 billion of the PHP 21.45 billion for 6,000 DPWH-led classrooms, covering 533 classrooms, had reached the award or near-award stage (EDCOM II, 2026d).

The income-class gap that EDCOM II reported appears in the data, but it follows the size of the municipality and its region more than its income. A municipality counts as receiving classrooms when any of its schools is on the list, and the median fifth-class municipality has 10 public schools against 32 in first class. Counted in classrooms, every class received a similar share of its shortage. Income class mattered most for the channel: PSIP III, half of the national list, reached fifth-class municipalities hardly at all, and LGU-implemented lines carried most of their classrooms. EDCOM II's commissioners have proposed a nationwide counterpart program with "fourth and fifth class municipalities receiving higher national support" (EDCOM II, 2026b, p. 182); in fifth-class municipalities, LGU-implemented lines already carry 63.7% of SBP classrooms.

BARMM shows the widest gap between the shortage and the plan: 6.7% of the shortage, 0.6% of the classrooms, and four of the five cities and municipalities with the largest shortages and no classroom. Section 13 of Republic Act No. 11054, the Bangsamoro Organic Law, provides that national programs and projects such as the School Building Program "shall continue to be funded by the National Government" (as quoted in EDCOM II, 2026b, p. 382). The masterlist cannot show classrooms that the Bangsamoro government builds with its own funds, and the data cannot say why so few lines reach the region.

5. Limitations

The sources span 2022 to 2026. Rates divide SY 2024–2025 learners by the 2023 shortage, and a 2026 plan is set against a 2023 count, so rooms built or lost in between are not reflected. The shortage is DepEd's computed figure; the data hold each school's result, not the norms and inputs behind it, so it cannot be recomputed or audited from them. EDCOM II has reported a newer national backlog of 147,347 classrooms as of September 2025 (EDCOM II, 2026c), which has no school-level breakdown. The masterlist is a plan, not a list of contracts or buildings, and its PSIP III lines are still for bidding. Its 103 PSIP III lines that copy earlier lines were kept; Section 3.3 gives the main results without them. Classrooms built with other funds may not appear in the masterlist.

The unmet shortage of 148,276 classrooms is a school-by-school count and should not be compared with the dashboard's "Remaining Unfunded" figure of 133,024, which nets classrooms beyond one school's shortage against another school's need and counts PSIP III classrooms as allocated. The 86 schools with SBP classrooms but no shortage record are left out of the concentration index and the school-level model. City and municipality results depend on how schools are placed in LGUs, which may differ from EDCOM II's matching. The Last Mile School flag is the 2023 table's, and it barely covers BARMM. All results are associations. The models adjust only for the terms named in Section 2.3; land, site readiness, earlier projects and other funding, which may weigh in allocation, are not in the data. With 65 fifth-class municipalities, "no clear difference" by income class means that none was detected, not that none exists.

Data availability

The cleaned school table, the SBP 2026 masterlist lines, the city and municipality table, the unchanged extract of the dashboard's five tables, the data dictionary and the cleaning log are free to download from NASH Reviewer at https://nash.com.ph/edcom-classroom-data, and are recorded at https://doi.org/10.5281/zenodo.24622262. The

figures computed for this report, with the data behind each chart, are in the release's analysis_tables.zip. In research and teaching the files may be analyzed and the results published with a citation; republishing the files needs written permission. The original dashboard is EDCOM II's (EDCOM II, 2026a).

Funding and competing interests

This work received no funding. The author runs NASH Reviewer, a review service for the National Assessment for School Heads, and has no affiliation with DepEd or EDCOM II.

References

Armitage, P. (1955). Tests for linear trends in proportions and frequencies. *Biometrics, 11*(3), 375–386. https://doi.org/10.2307/3001775

Cameron, A. C., & Miller, D. L. (2015). A practitioner's guide to cluster-robust inference. *Journal of Human Resources, 50*(2), 317–372. https://doi.org/10.3368/jhr.50.2.317

Cochran, W. G. (1954). Some methods for strengthening the common χ^2 tests. *Biometrics, 10*(4), 417–451. https://doi.org/10.2307/3001616

Efron, B., & Tibshirani, R. J. (1993). *An introduction to the bootstrap*. Chapman & Hall.

Gini, C. (1912). *Variabilità e mutabilità*. Tipografia di Paolo Cuppini.

Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (3rd ed.). Wiley. https://doi.org/10.1002/9781118548387

Kakwani, N., Wagstaff, A., & van Doorslaer, E. (1997). Socioeconomic inequalities in health: Measurement, computation, and statistical inference. *Journal of Econometrics, 77*(1), 87–103. https://doi.org/10.1016/S0304-4076(96)01807-6

Katz, D., Baptista, J., Azen, S. P., & Pike, M. C. (1978). Obtaining confidence intervals for the risk ratio in cohort studies. *Biometrics, 34*(3), 469–474. https://doi.org/10.2307/2530610

Llego, M. A. (2026). *EDCOM II classroom construction dashboard data, cleaned* (Version 1.1) [Data set]. NASH Reviewer. https://doi.org/10.5281/zenodo.24622262

Lorenz, M. O. (1905). Methods of measuring the concentration of wealth. *Publications of the American Statistical Association, 9*(70), 209–219. https://doi.org/10.1080/15225437.1905.10503443

Second Congressional Commission on Education. (2026a). *Classroom construction dashboard: School level classroom construction and LGU breakdown* [Tableau workbook].

Second Congressional Commission on Education. (2026b). *Turning point: A decade of necessary reform (2026–2035), EDCOM II final report*. https://edcom2.gov.ph/media/2026/01/EDCOM-II-Y03-for-web-012626_final.pdf

Second Congressional Commission on Education. (2026c, September 23). *Congress ratifies measure expanding voucher system to cover Kinder to Grade 6* [Press release]. https://edcom2.gov.ph/congress-ratifies-measure-expanding-voucher-system-to-cover-kinder-to-grade-6/

Second Congressional Commission on Education. (2026d, October 20). *Put classrooms where they're needed most, EDCOM 2 tells DepEd* [Press release]. https://edcom2.gov.ph/put-classrooms-where-theyre-needed-most-edcom-2-tells-deped/

Spearman, C. (1904). The proof and measurement of association between two things. *The American Journal of Psychology, 15*(1), 72–101. https://doi.org/10.2307/1412159

Theil, H. (1967). *Economics and information theory*. North-Holland.

Wagstaff, A., Paci, P., & van Doorslaer, E. (1991). On the measurement of inequalities in health. *Social Science & Medicine, 33*(5), 545–557. https://doi.org/10.1016/0277-9536(91)90212-U

Wilson, E. B. (1927). Probable inference, the law of succession, and statistical inference. *Journal of the American Statistical Association, 22*(158), 209–212. https://doi.org/10.1080/01621459.1927.10502953