

Western MA Per Pupil Expenditure Report

Executive Summary

This document contains only the Executive Summary. Full report available at: [View full report on GitHub](#).

"What gets measured gets managed — even when it's pointless to measure and manage it, and even if it harms the purpose of the organisation to do so"

— V. F. Ridgway, 'Dysfunctional Consequences of Performance Measurements', 1956

"By the time it can be captured in numbers, it's too late."

— Peter Drucker, 'The Effective Executive', 1967

Draft Status: As of **February 05, 2026**, this report has been reviewed by the ARPS Budget & Audit Subcommittee and the Fiscal Sustainability Subcommittee chair, and shared with the chairs of the Leverett School Committee, Finance Committee, and Selectboard. Contact the author: Tim Shores at shorest@arps.org.

How to use this report

The report is organized from broad regional patterns down to district-level details. As a descriptive report, it makes no forecasts and offers no recommendations. One way to use it would be as a companion to discussions that depend on meaningful cost comparisons. You could read straight through to build understanding from high-level trends to selected district details. Or you could use this **quick-start guide** to answer specific questions:

- How does my school district spending compare to Western MA baselines?
- How does Chapter 70 aid compare?
- How does required and actual net school spending compare?
- How have these categories of spending and aid grown over time in comparison with Western MA baselines?

Quick-start guide:

1. Review the cohort comparison tables at the end of the Executive Summary.
2. Review the **Scatterplot of enrollment vs. per-pupil expenditure** in Section 1 to see how all districts are grouped.
3. Locate your district in **Section 3** for detailed comparison of expenses, enrollment, Chapter 70 aid, and net school spending compared to the cohort.

Understanding Per-Pupil Expenditure in Context

Per-pupil expenditure (PPE) provides a flawed lens for understanding school budgets. While this single metric obscures the complexity of school systems — shaped by student needs, facility requirements, governance structures, and historical commitments — it remains an accessible standard for state reporting and public discussion. We might as well try to understand it in full. This report examines PPE patterns across Western Massachusetts districts, organizing them into enrollment-based cohorts to identify trends and provide context for budget deliberations.

The Challenge of Interpretation

In February 2025, an Amherst Town Councilor asked why regional school spending was "increasing faster than the town's revenue, especially given the significant long-term reduction in the number of students we teach."¹ This question reflects a common assumption or hope that school budgets should track with municipal revenue and scale proportionally with enrollment. However, evidence of school budget trends suggests different dynamics at work.

Schools are not like factories, nonprofit organizations or hospitals. Schools are like schools, and we expect to fund and operate them like schools. As a social service, education is fundamentally labor-intensive. National data shows school districts dedicate 80% of budgets to staff and benefits — salaries, health insurance, and retirement contributions — double the 35-40% typical in other organizations.² These costs respond to regional and sectoral labor markets rather than local tax revenues, with the cost of education service historically rising faster than general inflation.³ Fixed and semi-fixed costs — staffing minimums, transportation contracts, facility operations, utilities, debt service, insurance, legal — cannot be reduced proportionally with enrollment. Students eligible for special education have a right to services regardless of overall enrollment, with costs driven by individual needs rather than district size. Charter school transfers result in a net loss of state aid to tuition payments and often concentrate

higher-need student populations in the traditional schools.

Approach

This report takes the position that before we set out to understand why we spend so much on schools, we should ask two key questions: What has our budget growth rate been, and what was our starting point? Understanding whether education costs have grown predictably or exceptionally is a question we can answer by looking at data collected by the Commonwealth. This report breaks down PPE and compares expenses by category, state aid, and local contributions across enrollment-based district cohorts. These groupings allow comparison of districts facing similar scale challenges. The goal is to support informed deliberation about education funding within the broader context of regional economic conditions and policy decisions.

Key Finding: Today's high PPE driven by legacy of high PPE and net spending above required spending — not declining enrollment

Analysis of spending patterns in Amherst-Pelham, Amherst, Leverett, Pelham, and Shutesbury reveals an important pattern: per-pupil expenditure in these districts has grown 3-6% from 2009-2024, rates that are comparable to or lower than their Western Massachusetts peers. Current high PPE and net school spending (NSS) is the result of normal growth from a high starting point. In 2009, these districts already maintained PPE significantly above regional averages. With normal growth rates applied to above-average baselines, spending will remain above average. Understanding this shifts the conversation from 'why are costs so high?' to 'how do we manage the school system that we've inherited at 3-6% annual growth?'

Implications

This finding should shift our focus from addressing perceived runaway costs to addressing the change in local fiscal effort to fund our schools. Fiscal effort measures a community's local tax burden for schools relative to its capacity to pay. The Commonwealth calculates this as each district's required local contribution divided by its combined property values and resident income — a community spending 5% of its wealth shows lower effort than one spending 10%, regardless of absolute dollar amounts.

Two districts with identical PPE amounts and growth may differ significantly in their tax bases. This difference will show up in fiscal effort calculations. This is an objective measure of property value and income used to calculate state aid, but effort is also subjective. If fiscal effort becomes too much for local taxpayers, communities face a hard choice. In this scenario, school committees must identify educational needs and purposeful spending within available resources, but their principal concern will remain with the best interests of the district and the students. Leadership on deciding available resources falls to appropriating bodies and, ultimately, to voters.

In the end, we are likely to find that our structural funding challenges will persist until the Commonwealth finds the courage to deliver policy changes that no region, town or school district can achieve alone.

For a good start on how to advocate for meaningful change, see the [July 2022 report A Sustainable Future for Rural Schools](#), the steadfast work of the champions at [Rural Schools MA](#), and the Amherst-Pelham Regional School Committee's [Fiscal Sustainability Subcommittee October 2025 report](#).⁴

References

1. [Amherst Indy, "Letter: Correcting Councilor Ryan on the Regional School Budget"](https://www.amherstindy.org/2025/02/07/letter-correcting-councilor-ryan-on-the-regional-school-budget/)
<https://www.amherstindy.org/2025/02/07/letter-correcting-councilor-ryan-on-the-regional-school-budget/>
2. [American Association of School Administrators, "School Budgets 101"](https://www.aasa.org/docs/default-source/resources/reports/school-budgets-101.pdf)
<https://www.aasa.org/docs/default-source/resources/reports/school-budgets-101.pdf>
3. [Where's the Money Gone? Changes in the Level and Composition of Education Spending \(1995\)](https://www.epi.org/publication/books_where_money_gone/) and [Inflation and the Measurement of School Spending \(1996\)](https://nces.ed.gov/pubs97/97535/97535jx1.asp)
https://www.epi.org/publication/books_where_money_gone/
<https://nces.ed.gov/pubs97/97535/97535jx1.asp>
4. [Rep. Blais - Rural Schools](https://www.repblais.org/ruralschools), [Rural Schools Advocacy in Massachusetts](https://www.ruralschoolsma.org/), and [RSC FSS Report](https://go.boarddocs.com/ma/arps/Board.nsf/goto?open&id;=DMQPEL64432C).
<https://www.repblais.org/ruralschools>
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<https://go.boarddocs.com/ma/arps/Board.nsf/goto?open&id;=DMQPEL64432C>

All data in this report comes from the Massachusetts Department of Elementary and Secondary Education (DESE). See [Appendix A](#) for detailed source information (https://github.com/timshores/schools/blob/main/ppe_report/output/WMPPE%20Appendices.pdf).

Executive Summary (continued)

Total PPE comparison: Western MA enrollment cohorts and selected districts

Shading vs baseline: $|\Delta\$/\text{pupil}| \geq 5.0\%$, $|\Delta\text{CAGR}| \geq 0.5\text{pp}$

$$\text{CAGR} = (\text{End}/\text{Start})^{(1/\text{years})} - 1$$

Above baseline

Baseline

Below baseline

Table 1

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA (all, excl. Springfield)	\$12,234	+4.0%	+4.6%	+6.0%	\$22,065
Western MA Tiny (0-200 FTE)	\$14,738	+4.2%	+4.4%	+6.0%	\$27,504
Western MA Small (201-800 FTE)	\$12,523	+4.6%	+5.1%	+6.7%	\$24,622
Western MA Medium (801-1600 FTE)	\$13,032	+4.1%	+4.7%	+6.1%	\$23,785
Western MA Large (1601-10K FTE)	\$11,775	+3.9%	+4.5%	+5.9%	\$20,841
Outliers (Springfield)	\$14,608	+4.1%	+5.7%	+9.4%	\$26,615

Table 2

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA Medium (801-1600 FTE)	\$13,032	+4.1%	+4.7%	+6.1%	\$23,785
Amherst-Pelham Regional	\$16,211	+3.8%	+3.8%	+4.8%	\$28,233
Amherst	\$16,029	+4.6%	+4.7%	+5.7%	\$31,267

Table 3

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA Tiny (0-200 FTE)	\$14,738	+4.2%	+4.4%	+6.0%	\$27,504
Leverett	\$15,156	+2.5%	+0.5%	+2.0%	\$21,910
Pelham	\$14,733	+3.0%	+3.3%	+5.9%	\$23,040
Shutesbury	\$14,011	+4.4%	+5.3%	+5.0%	\$26,908

Table 1 compares PPE and cost growth of Western MA school district cohorts with the benchmark of all Western MA districts. **Tables 2 and 3** benchmark districts against their cohort averages.

Cohorts are organized by enrollment size. Grouping districts by enrollment size enables more meaningful cost comparisons—districts of similar size face similar challenges with administration, staffing, facilities, and program requirements. Detailed information about cohorts follow in **sections 1 and 2**. Detailed comparisons of individual districts to cohorts follow in **sections 2 and 3**.

Why the CAGR threshold is more sensitive

Small differences in growth rates compound over time. A 0.5pp difference may seem modest, but:

- \$20,000 PPE growing at 4.0% → \$36,019 after 15 years
- \$20,000 PPE growing at 4.5% → \$38,706 after 15 years
- Gap: \$2,687/pupil (7.5% more total growth)

For a 100-student district, that's \$268,700 in additional annual spending by year 15. The 0.5pp threshold helps identify districts on meaningfully different long-term trajectories.

Executive Summary (continued)

Chapter 70 Aid (per foundation pupil): Western MA enrollment cohorts and selected districts

Shading vs baseline: $|\Delta\$/pupil| \geq 5.0\%$, $|\Delta CAGR| \geq 0.5pp$

Above baseline

Baseline

$CAGR = (End/Start)^{(1/years)} - 1$

Below baseline

Table 4

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA (all, excl. Springfield)	\$5,253	+3.6%	+4.4%	+6.6%	\$8,919
Western MA Tiny (0-200 FTE)	\$3,339	+3.2%	+3.8%	+5.4%	\$5,331
Western MA Small (201-800 FTE)	\$3,868	+3.1%	+3.6%	+3.9%	\$6,079
Western MA Medium (801-1600 FTE)	\$5,209	+3.1%	+3.9%	+5.3%	\$8,185
Western MA Large (1601-10K FTE)	\$5,535	+3.7%	+4.6%	+7.0%	\$9,550
Outliers (Springfield)	\$9,305	+4.0%	+5.0%	+7.7%	\$16,866

Table 5

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA Medium (801-1600 FTE)	\$5,209	+3.1%	+3.9%	+5.3%	\$8,185
Amherst-Pelham Regional	\$5,488	+2.2%	+2.7%	+2.9%	\$7,658
Amherst	\$4,483	+1.9%	+2.2%	+1.6%	\$5,953

Table 6

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA Tiny (0-200 FTE)	\$3,339	+3.2%	+3.8%	+5.4%	\$5,331
Leverett	\$2,303	+3.6%	+5.4%	+6.7%	\$3,930
Pelham	\$2,743	+2.4%	+1.8%	+7.0%	\$3,941
Shutesbury	\$3,952	+2.6%	+2.7%	+1.8%	\$5,820

Tables 4-6 compare Chapter 70 aid (per foundation pupil) across Western MA school districts organized by enrollment size.

Note about enrollment denominators

Chapter 70 aid and net school spending calculations use foundation enrollment for per-pupil figures, while PPE totals and expense categories use in-district FTE enrollment. These metrics come from different DESE reporting touchpoints:

- **Foundation enrollment** (Chapter 70 profile): All students residing in the district on October 1st of the prior year for whom the district is financially responsible.
- **In-district FTE** (End-of-year-report (EOYR)): Full-year enrollment calculated from total membership days for students either residing in the district, or choiced or tuitioned into the district.

This difference complicates direct comparison between Chapter 70 and expense analyses, but remains valid since each district uses the same denominator type within each metric. The comparison is not apples-to-oranges, but a picture of apples in the morning compared with a picture of apples in the evening. For more information, see the [DESE Researcher's Guide](https://www.doe.mass.edu/research/researchers.html): <https://www.doe.mass.edu/research/researchers.html>

Executive Summary (continued)

Actual NSS above Required NSS (per foundation pupil): Western MA enrollment cohorts and selected districts

Shading vs baseline: $|\Delta\$/pupil| \geq 5.0\%$, $|\Delta CAGR| \geq 0.5pp$

Above baseline

Baseline

$CAGR = (End/Start)^{(1/years)} - 1$

Below baseline

Table 7

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA (all, excl. Springfield)	\$1,345	+5.9%	+8.1%	+2.6%	\$3,161
Western MA Tiny (0-200 FTE)	\$4,580	+6.7%	+7.4%	+4.6%	\$12,057
Western MA Small (201-800 FTE)	\$2,164	+7.4%	+9.7%	+6.0%	\$6,291
Western MA Medium (801-1600 FTE)	\$2,119	+4.0%	+8.7%	+2.8%	\$3,838
Western MA Large (1601-10K FTE)	\$900	+6.5%	+7.7%	+1.5%	\$2,329
Outliers (Springfield)	-\$150	-59.7%	-50.0%	+23.6%	-\$0

Table 8

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA Medium (801-1600 FTE)	\$2,119	+4.0%	+8.7%	+2.8%	\$3,838
Amherst-Pelham Regional	\$3,407	+3.9%	+4.7%	+2.5%	\$6,059
Amherst	\$6,169	+4.0%	+5.5%	+2.4%	\$11,078

Table 9

Cohort/District	2009 \$/pupil	CAGR 15y	CAGR 10y	CAGR 5y	2024 \$/pupil
Western MA Tiny (0-200 FTE)	\$4,580	+6.7%	+7.4%	+4.6%	\$12,057
Leverett	\$7,014	+3.0%	+3.6%	-0.7%	\$10,957
Pelham	\$7,694	+6.7%	+7.1%	+12.6%	\$20,252
Shutesbury	\$4,331	+6.0%	+3.8%	+0.9%	\$10,450

Tables 7-9 compare Actual NSS above Required NSS (per foundation pupil) - showing local funding effort beyond state requirements.