

FISCAL SUSTAINABILITY AND COST PRESSURE ANALYSIS

GMRSD, PVRSD, and the Projected GRRSD

How Enrollment Decline Drives Cost Pressure — and Why Regionalization Provides Relief

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Key Finding

At 107 high school students, PVRSD's secondary program has reached near-total cost rigidity. Elementary cuts do not relieve this pressure. Increasing the enrollment base is the only way to move the high school out of its fiscal crisis zone.

How to Read These Charts

Each chart shows the relationship between enrollment and cost pressure - the financial stress a grade level experiences as enrollment declines. Fixed costs (teachers, graduation requirements, facilities, administration) do not shrink proportionally with enrollment. When enrollment falls, each remaining student bears a larger share of the same fixed costs.

Zone	Cost Pressure (β)	Risk Level	What It Means
GREEN	-0.20 to -0.40	Sustainable	Costs manageable. Programs and services financially stable. Budget responds to enrollment changes without crisis.
YELLOW	-0.40 to -0.60	Approaching Threshold	Elevated pressure. Per-pupil costs rising faster than enrollment declines. Action warranted before reaching crisis.
ORANGE	-0.60 to -0.80	High Pressure	Significant cost rigidity. Many fixed costs cannot be cut. Programs at risk. Each additional enrollment loss has outsized impact.
RED	-0.80 or worse	Critical	Near-total cost rigidity. Fixed costs dominate. Further enrollment losses trigger severe per-pupil cost increases. Structural crisis.

The β (beta) coefficient is the enrollment elasticity of per-pupil cost: it measures how much per-pupil cost rises for each 1% decline in enrollment. Estimated from 19 years of DESE financial and enrollment data (FY2008–2026).

The charts display a logarithmic cost curve - the mathematical shape that best describes how per-pupil costs respond to enrollment. The steep left-hand portion near zero is the danger zone: small enrollment losses there produce large cost increases. Moving a dot to the right - increasing enrollment - moves it to the flatter, more sustainable portion of the curve.

PVRSD — Pioneer Valley Regional School District

Total FY2026 enrollment: 557 students (plus 3 Special Programs). Schools: Bernardston Elementary, Northfield Elementary, and Pioneer Valley Regional School (Grades 7–12).

NOTE: BES enrollment appears stable but reflects students absorbed from the closed Pearl E. Rhodes/Leyden Elementary School (closed 2019). NES enrollment decline reflects both demographic loss and the departure of Warwick students when Warwick reopened its elementary school in 2023. Organic enrollment decline at both schools is steeper than headcount numbers suggest.

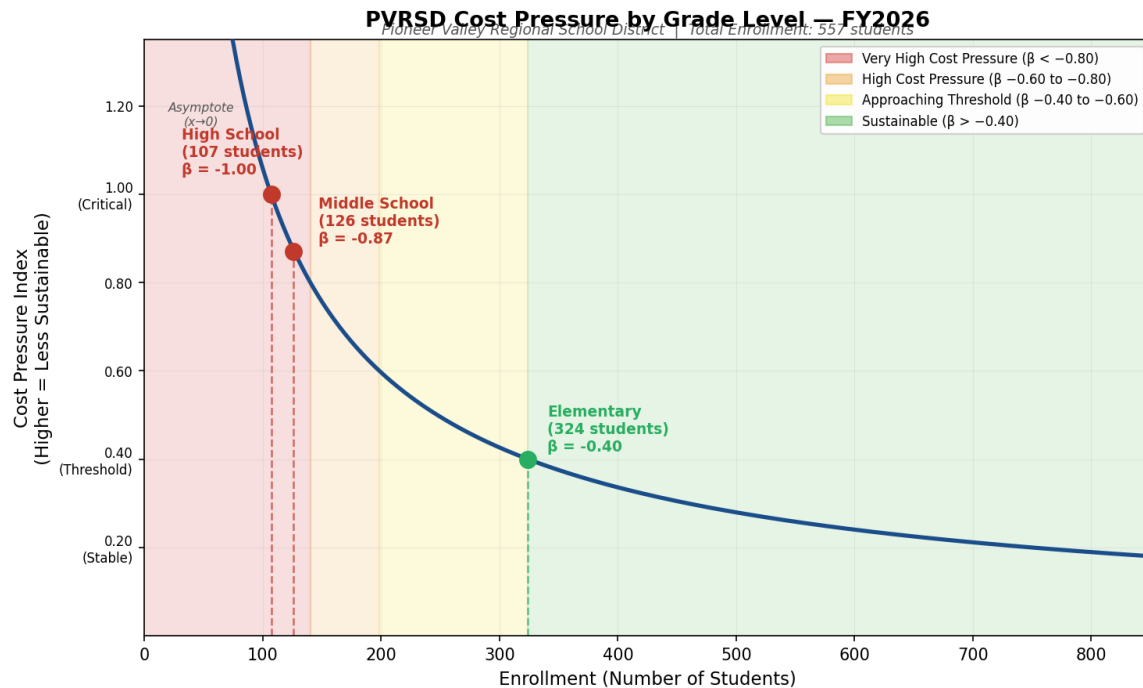


Figure 1. PVRSD cost pressure by grade level. The high school (107 students) is in the critical red zone. The middle school (126 students) is in the very high cost pressure red zone. Elementary (324 students) approaches the threshold.

Table 1. PVRSD FY2026 cost pressure by level.

Level	Enroll.	β	Risk	Interpretation
Elementary (BES + NES)	324	-0.40	Approaching	Moderate pressure but rising. Budget being compressed while enrollment declines, partly due to school consolidation transfers masking true organic decline.
Middle School (PVRSD Gr 7–8)	126	-0.87	Very High	Significant rigidity. Subject specialization begins in grades 7–8; programs cannot be easily reduced.
High School (PVRSD Gr 9–12)	107	-1.00	● CRITICAL	Near-total cost rigidity. Graduation requirements, specialist teachers, athletics — all irreducible fixed costs regardless of how few students attend.
PVRSD Total	557	-1.23	Critical	Total district PPE rose 38.7% in 4 years. Budget structurally unsustainable without fundamental restructuring or enrollment growth.

GMRSD — Gill-Montague Regional School District

Total FY2026 enrollment: 839 students. Schools: Gill Elementary, Hillcrest Elementary, Sheffield Elementary, Great Falls Middle School (Grades 6-8), and Turners Falls High School (Grades 9-12).

GMRSD is in a substantially better fiscal position than PVRSD - the direct benefit of serving more students across its fixed cost base. However, the district has seen a 49% enrollment decline from its 1998 peak of 1,635 students and faces continued demographic headwinds. The high school is approaching the threshold zone.

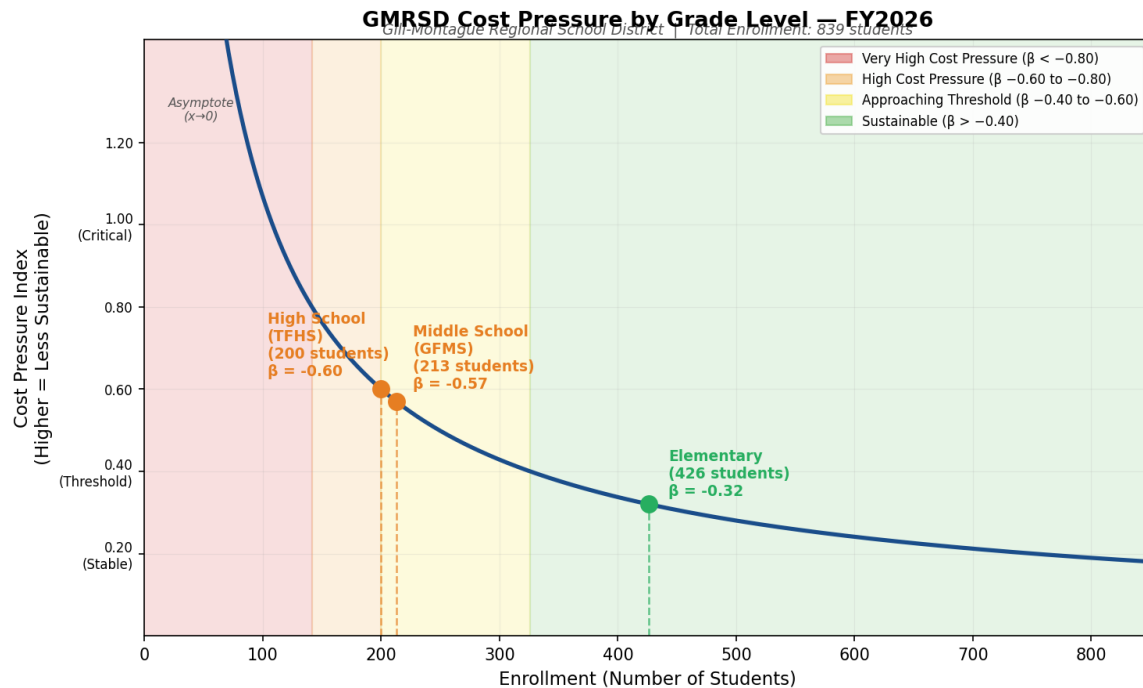


Figure 2. GMRSD cost pressure by grade level. Elementary is in the sustainable zone; middle and high school are approaching the threshold — a trajectory that will worsen with continued enrollment decline.

Level	Enroll.	β	Risk	Interpretation
Elementary (Gill/Hillcrest/Sheffield)	426	-0.32	Sustainable	Manageable costs. Elementary benefits from enrollment scale but is subject to continued demographic decline in the region.
Middle School (Great Falls, Gr 6–8)	213	-0.57	Approaching	Approaching threshold. Cost pressure will increase as regional demographics continue to contract.
High School (Turners Falls, Gr 9–12)	199	-0.60	Approaching	Approaching the threshold zone. If enrollment continues to decline, TFHS will enter the high-pressure zone within a few years without intervention.
GMRSD Total	839	-0.60	Approaching	Manageable currently, but the trend is downward. 49% enrollment decline from 1998 peak. Inaction will lead to the same crisis PVRSD faces today.

Table 2. GMRSD FY2026 cost pressure by level.

GRRSD — The Regionalized Solution

Combining PVRSD and GMRSD into a single regional district (GRRSD) would pool approximately 1,396 students. The effect on cost pressure is immediate and dramatic - every grade level moves from the stressed or critical zone into the sustainable green zone.

This result does not depend on assumptions about administrative savings or program restructuring. It is the direct mathematical consequence of spreading fixed costs across a larger enrollment base. More students sharing the same costs means lower cost per student - economies of scale.

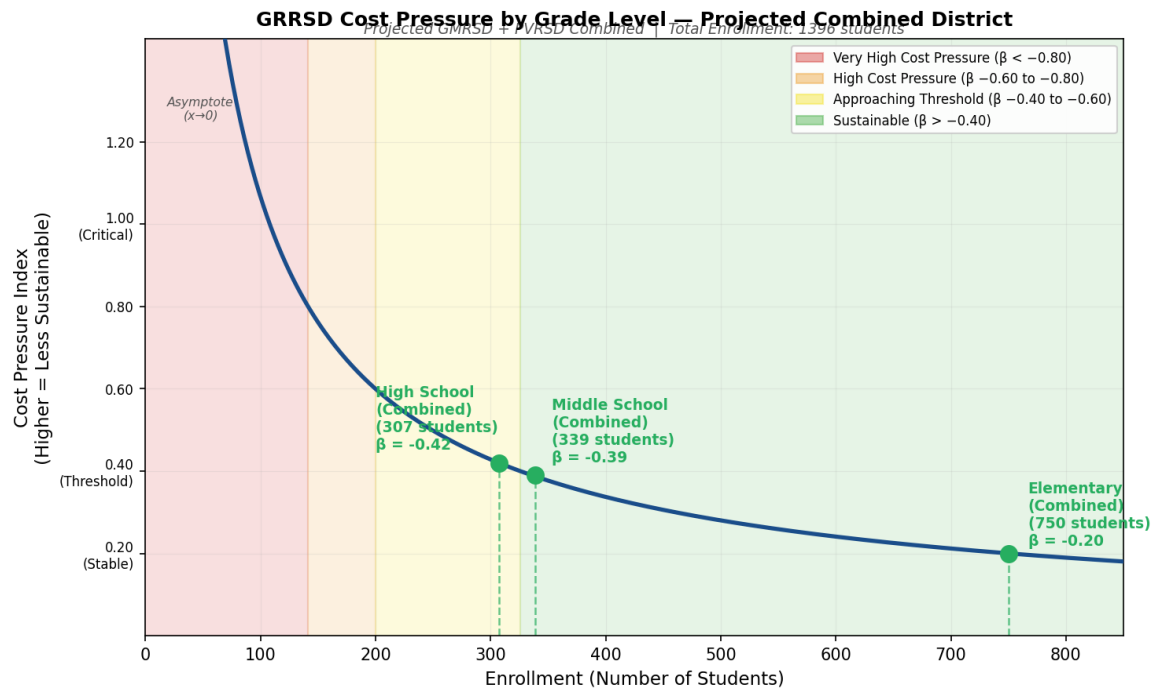


Figure 3. GRRSD projected cost pressure by grade level. All three levels are in the sustainable green zone. This is a fundamentally transformed fiscal situation — no grade level is a failure point.

Level	Enroll.	β	Risk	Interpretation
Elementary (Combined)	750	-0.20	✓ Very Stable	Highly efficient. Elementary costs stable and potentially declining in real terms. Maximum program flexibility.
Middle School (Combined)	339	-0.39	✓ Sustainable	Fully efficient. A 339-student middle school supports a comprehensive Grades 6–8 curriculum with appropriate staffing and elective programs.
High School (Combined)	307	-0.42	✓ Sustainable	Above the sustainability threshold. A 307-student high school offers full graduation requirements, electives, athletics, and extracurriculars — without fiscal crisis.
GRRSD Total	~1,396	-0.25	✓ Very Stable	A fully sustainable, resilient district. Risk is balanced across the system. No single level is a fiscal failure point. This is a diversified school system.

Table 3. GRRSD projected cost pressure by level. Enrollment: PVRSD FY2026 + GMRSD FY2026 combined.

The High School: Before and After Regionalization

No single data point illustrates the case for regionalization more powerfully than the high school comparison. PVRSD's high school at 107 students is on the steep cliff of the cost curve in the zone where cost rigidity is nearly total. Combining it with GMRSD's high school (199 students) creates a 307-student high school firmly in the sustainable zone.

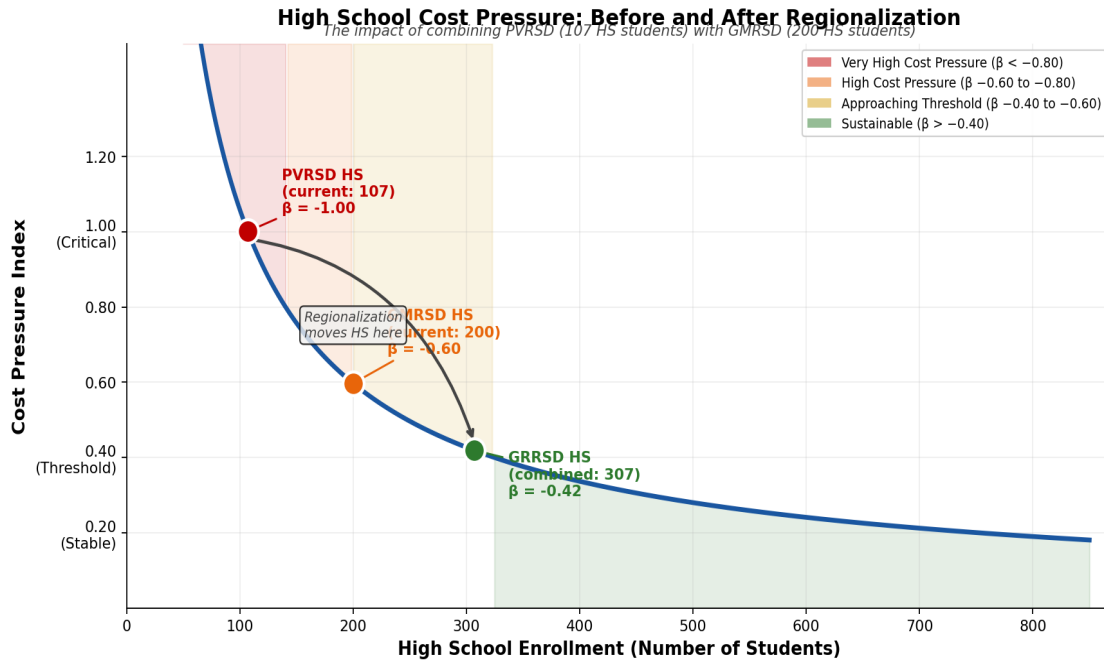


Figure 4. High school cost pressure before and after regionalization. PVRSD HS (107 students, critical zone) and GMRSD HS (199 students, approaching zone) combine to produce a 307-student high school in the fully sustainable zone.

Scenario	HS Enrollment	Cost Pressure (β)	Zone	Outcome
PVRSD alone	107	-1.00	 Critical	Near-total cost rigidity. Every student lost triggers severe per-pupil cost increases. Graduation requirements, specialist teachers, and athletics cannot be eliminated.
GMRSD alone	199	-0.60	 Approaching	Elevated and worsening. If enrollment continues declining, TFHS will enter the critical zone within a few years without intervention.
GRRSD Combined	307	-0.42	 Sustainable	Above the sustainability threshold. A combined high school of 307 students supports full programming, appropriate staffing, and balanced fiscal risk.

Table 4. High school cost pressure: current vs. regionalized.

Why Elementary Cuts Cannot Fix the High School Problem

When superintendents face escalating secondary costs they cannot control, budget pressure falls on programs they can control — the elementary schools. This pattern is visible in PVRSD's budget data and represents a structural trap that elementary cuts cannot escape.

The Crowding-Out Effect: Secondary Rigidity Squeezes Elementary

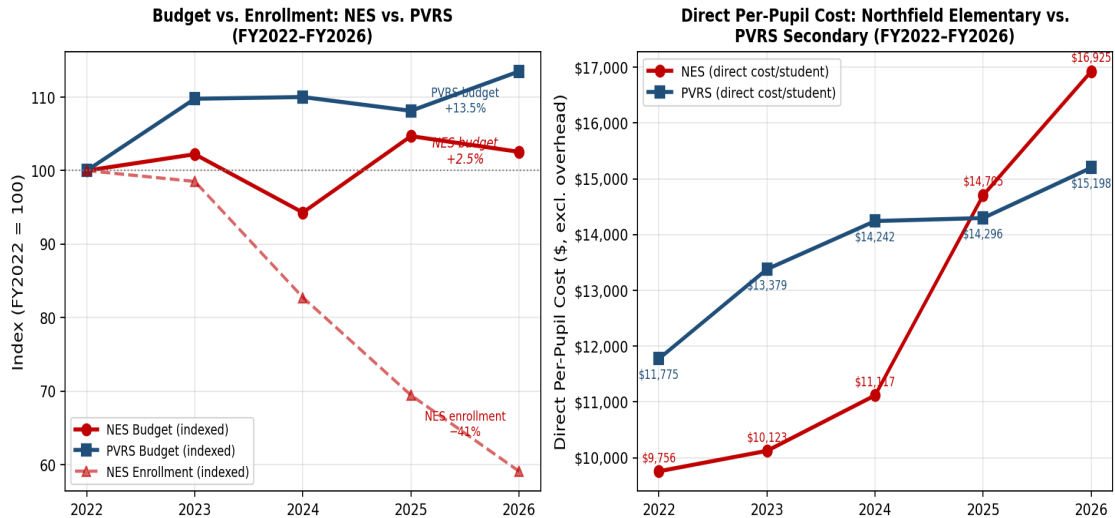


Figure 5. Left: NES budget grew only 2.5% (FY2022–2026) while enrollment fell 41%, while the secondary budget grew 13.5% despite declining enrollment. Right: Direct per-pupil costs at NES are rising sharply — not from investment, but from enrollment collapse while the budget is held flat.

School / Category	Budget Δ	Enrollment Δ	PPE Δ	Interpretation
BES — Bernardston Elementary	+14.3%	+7.9%*	+5.9%	Apparent stability — enrollment increase reflects absorbed Pearl Rhodes/Leyden students, not organic growth.
NES — Northfield Elementary	+2.5%	-40.9%**	+73.5%	Budget held nearly flat in nominal terms — real cuts. Enrollment collapsed partly due to Warwick reopening. District sacrificing elementary investment to preserve secondary.
PVRS — Secondary (Gr 7–12)	+13.5%	-12.1%	+29.1%	Secondary costs rising despite enrollment decline. Fixed costs dominate — cannot be meaningfully cut without eliminating required programming.
District Administration	+22.0%	—	—	Overhead growing fastest — completely enrollment-independent. Cannot be reduced by cutting student programs.
PVRSD Total District	+17.6%	-15.2%	+38.7%	Total PPE rose 38.7% in 4 years despite enrollment decline. Budget structurally unsustainable.

Table 5. PVRSD budget vs. enrollment changes by category, FY2022–2026. *BES reflects school consolidation, not organic growth. **NES reflects demographic loss plus Warwick school reopening.

Policy Lesson

For low-enrollment districts with small high schools: cost reductions at the elementary level reduce cost pressure at that level (lower part of the curve) but do nothing to address cost pressure at the high school level. The high school sits on a completely different, and far steeper, portion of the same curve.

This is true in both nominal and real (inflation-adjusted) terms. Inflation did not create PVRSD's secondary cost rigidity; it is structural. Cutting elementary programs is not a solution; it is a symptom of a structural problem that only regional scale can solve.

The only path to high school fiscal sustainability is increasing enrollment, and the most meaningful path available to these districts is regionalization. Relying on choice-in and -out with an overall shrinking pool of students to draw from creates winners and losers in enrollment. Creating a larger educational community will increase enrollment and spread future costs over a larger tax base. This approach maximizes cost(taxes)-benefit (student opportunities). The structural problem of declining enrollment cannot be addressed through a (Ch. 70) budgetary solution alone. Sending more funds to schools suffering from inefficient scale (fixed rigid costs) will increase PPE with little benefits being realized. Now that almost all school districts in Massachusetts are experiencing declining enrollment, Ch. 70 reform is necessary as it was designed with stable or increasing enrollment as a baseline assumption, but it will only be meaningful if the state shifts from a district-centric lens to a more regional lens to increase economies of scale in both educational programming (benefits) and public spending/resource allocation.

Summary: A Resilient, Diversified School System

The table below presents the complete picture. Regionalization transforms every grade level — from a system with one critical failure point and two stressed levels, to a system where all three levels are in the sustainable green zone.

Grade Level	PVRSD Students	PVRSD β / Risk	GMRSD Students	GMRSD β / Risk	GRRSD Students	GRRSD β	GRRSD Risk
Elementary	324	-0.40 / Approaching	426	-0.32 / Sustainable	750	-0.20	✓ Sustainable
Middle School	126	-0.87 / High	213	-0.57 / Approaching	339	-0.39	✓ Sustainable
High School	107	-1.00 / Critical	199	-0.60 / Approaching	307	-0.42	✓ Sustainable
TOTAL	557	-1.23 / Critical	839	-0.60 / Approaching	~1,396	-0.25	✓ Sustainable

Table 6. Complete cost pressure comparison. All GRRSD levels are in the sustainable green zone.

This is a diversified, resilient school system.

- Elementary → Very stable. Highest flexibility. Programs can grow and diversify with scale.
- Middle School → Stable. Appropriate staffing ratios. Full curriculum achievable.
- High School → Stable. Graduation requirements met. Electives, athletics, and programs fully supported.

Instead of one critical failure point forcing cuts throughout the entire system, GRRSD presents a balanced fiscal structure where no single level threatens the whole. This is the fundamental promise of regionalization for PVRSD and GMRSD's students, families, and taxpayers.