



Virginia Department of Planning and Budget **Economic Impact Analysis**

8 VAC 20-23 Licensure Regulations for School Personnel
Department of Education
Town Hall Action/Stage: 6997/11158 Fast-Track
June 29, 2026

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia (Code) and Executive Order 19. The analysis presented below represents DPB's best estimate of the potential economic impacts as of the date of this analysis.¹

Summary of the Proposed Amendments to Regulation

Pursuant to Chapter 552 of the 2025 *Acts of the Assembly* (Chapter 552), the Board of Education (Board) proposes to amend the requirements to earn the Algebra I add-on endorsement.

Background

Under the current regulation in order to earn the add-on endorsement to teach Algebra I, the individual must have:

1. Earned a baccalaureate degree from an accredited institution and hold a license issued by the Virginia Board of Education with a teaching endorsement in a teaching area; and
2. Either:
 - a. Completed an approved teacher preparation program in Algebra I; or
 - b. Completed 24 semester hours that include coursework in each of the following areas: (1) Elementary functions, introductory college algebra, and trigonometry; (2) Linear algebra; (3) Calculus; (4) Euclidean geometry; (5) Probability and statistics; (6) Discrete mathematics; (7) Mathematical modeling; and (8) Methods of teaching algebra.

¹ See Code § 2.2-4007.04 (A).

Chapter 552 in part directs the Board to:

- (i) eliminate the requirements that candidates complete coursework in calculus, Euclidian geometry, probability and statistics, and discrete mathematics and (ii) permit candidates to receive a passing score on the Praxis Algebra I (5162) add-on endorsement exam in lieu of the requirements that candidates complete coursework in elementary functions, introductory college algebra, trigonometry, and linear algebra.

The coursework that would be removed by the legislation is more advanced than the content covered in Algebra I and is not directly necessary to understand or teach the Algebra I curriculum. In this action the Board proposes to make those specific changes to the regulation. Since these changes remove half of the eight required courses through the 2(b) option, the Board also proposes to reduce the required number of completed semester hours from 24 to 12.

Consequently, “8 VAC 20-23-440 Mathematics – algebra I (add-on endorsement)” would become the following:

Endorsement requirements. The candidate shall have:

1. Earned a baccalaureate degree from an accredited institution and hold a license issued by the Virginia Board of Education with a teaching endorsement in a teaching area; and
2. Either:
 - a. Completed an approved teacher preparation program in Algebra I; or
 - b. Completed 12 semester hours that include coursework in each of the following areas: (1) Elementary functions, introductory college algebra, and trigonometry; (2) Linear algebra; (3) Mathematical modeling; and (4) Methods of teaching algebra.
3. A candidate may use a passing score on the Praxis Algebra I add-on endorsement exam in lieu of the requirements that the candidate complete coursework in elementary functions, introductory college algebra, trigonometry, and linear algebra.

Estimated Benefits and Costs

The *Appropriation Act* requires the Department of Education (DOE) to report annually to the General Assembly on the critical teaching shortage areas in Virginia. For the 2026-2027 school year, DOE lists Mathematics Grades 6-12 (including Algebra I) among the critical

teaching shortage areas.² Removing some of the current requirements to earn an Algebra I add-on endorsement may be beneficial in that it would likely enable more teachers to qualify to teach in an area with a critical shortage. It would also reduce the time and dollar cost for those who wish to qualify but do not meet all of the requirements.

According to DOE, the average cost per undergraduate credit hour for in-state and out-of-state students are \$1,053 and \$1,339 in fees, respectively. Thus, reducing the required number of completed semester hours by 12 for option 2(b) could save up to approximately \$12,636 and \$16,068 in fees for in-state and out-of-state students, respectively. Additionally, individuals seeking the Algebra I add-on endorsement could also save the time it would have taken to complete the courses that would no longer be required.

Chapter 552 removed four of the eight mandated courses, but did not specify that the required number of completed semester hours be commensurately reduced. The Board's proposal to reduce the required number of completed semester hours from 24 to 12 may moderately reduce demand for courses by individuals seeking an Algebra I add-on endorsement. Thus, some colleges and universities may receive moderately reduced revenue.

Businesses and Other Entities Affected

The proposed amendments may affect individuals interested in earning the Algebra I add-on endorsement, all 132 public school divisions in Virginia, the 36 approved education programs at colleges and universities in the Commonwealth, and potentially other colleges and universities that offer courses in mathematics. School divisions with a severe shortage of qualified Algebra I instructors would be particularly affected.

The Code requires DPB to assess whether an adverse impact may result from the proposed regulation.³ An adverse impact is indicated if there is any increase in net cost or reduction in net benefit for any entity, even if the benefits exceed the costs for all entities combined.⁴ As described above, the Board's proposal to reduce the required number of

² See <https://www.doe.virginia.gov/home/showpublisheddocument/77302/639144542113700000>.

³ See Code § 2.2-4007.04 (D).

⁴ Statute does not define "adverse impact," state whether only Virginia entities should be considered, nor indicate whether an adverse impact results from regulatory requirements mandated by legislation. As a result, DPB has adopted a definition of adverse impact that assesses changes in net costs and benefits for each affected Virginia entity that directly results from discretionary changes to the regulation.

completed semester hours from 24 to 12 may result in some colleges and universities receiving moderately reduced revenue. Thus, an adverse impact is indicated.

Small Businesses⁵ Affected:⁶

Types and Estimated Number of Small Businesses Affected

Twenty-two of the 36 colleges and universities in the Commonwealth that have approved education programs are private. Most would likely qualify as small businesses.

Costs and Other Effects

Some small private colleges and universities may receive moderately reduced revenue as described above.

Alternative Method that Minimizes Adverse Impact

There are no clear alternative methods that both reduce adverse impact and meet the intended policy goals.

Localities⁷ Affected⁸

The proposed amendments may particularly benefit localities that have a severe shortage of teachers qualified to teach Algebra I. The proposed amendments do not introduce costs for local governments.

Projected Impact on Employment

The proposed amendments are not likely to substantively affect total employment.

Effects on the Use and Value of Private Property

As described above, some small private colleges and universities may receive moderately reduced revenue. The proposed amendments do not affect real estate development costs.

⁵ Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as “a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.”

⁶ See Code § 2.2-4007.04 (A.2). and Code § 2.2-4007.1 (C).

⁷ “Locality” can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

⁸ Code § 2.2-4007.04 defines “particularly affected” as bearing disproportionate material impact.