State of Virginia Teacher Shortage Areas

for

2004-2005 School Year

Alternate Methodology for Determining Critical Teaching Shortage Areas in Virginia

The 2004 General Assembly enacted legislation, **Appropriation Act Item 141B**, directing local school boards to annually survey their respective divisions to identify critical shortages of teachers and administrative personnel by subject matter, and to report such critical shortages to the Superintendent of Public Instruction and the Virginia Retirement System. The Department of Education is required to report on the critical teaching shortage areas in Virginia by January 1, 2005. In response to this requirement, data were obtained from an instructional survey to determine qualifications for teachers and administrators sent by the Department of Education to each of Virginia's school division superintendents in December 2003. Information requested on the survey was based on school data reports as of October 1, 2003. The Department contracted with Research Dimensions, Inc. (RDI), a Richmond-based organization, to analyze the results of the survey. Each of the 132 school divisions in the commonwealth responded to the survey. Designation of critical shortage areas is based on these responses.

In Virginia, "critical shortage" may be defined in two ways: (1) shortages by subject matter as designated from the top 10 academic disciplines identified in an annual survey of school divisions; or, (2) a school personnel vacancy for which a school division receives three or fewer qualified candidates for the position. Endorsement areas were ranked according to the most severe academic teaching shortage areas. The ranking is based on an aggregation of the endorsement areas in special education, foreign languages, and six to eight middle grades. The endorsement areas in career and technical education were not aggregated. A total of 38 administrative and teaching areas were taken into account to determine the top 10 critical teaching shortage area assignments.

Data analyses include calculated rankings for both total Full Time Equivalents (FTEs) of unendorsed teachers and administrators and the percentage of these unendorsed FTEs. Rankings were totaled and the resulting sum ranked to determine subject area shortages. This approach reflects both the absolute shortage as well as the relative shortage of each endorsement area. By using this approach, the priority is reduced for those endorsement areas with a very high percentage of unendorsed teachers, but also with very few FTEs (e.g., American Sign Language PreK-12 with 72% unendorsed, but only 38 FTEs). Each of the 10 "most critical" shortage areas has more than 500 FTEs.

2004-2005 Top 10 Critical Shortage Teaching Areas in Virginia

Based on the alternate methodology used in Virginia to determine critical shortage teaching areas, the 2004-2005 top 10 critical shortage areas are:

- 1. Science (earth science);
- 2. Special Education (order of priority needs: learning disabilities; mental retardation; emotional disturbance; severe profound disabilities; early childhood special education; hearing impairment; visual impairment; and speech and language disorders);
- 3. Career and Technical Education (<u>order of critical shortages</u> -- trade and industrial education; technology education; business education; work and family studies; and health occupations education);
- 4. Mathematics;
- 5. English as a Second Language;
- 6. Middle School (6-8);
- 7. Foreign Language (Spanish PreK-12);
- 8. Computer Science;
- 9. History and Social Sciences; and
- 10. Reading Specialist