

# Virginia Board of Education Agenda Item



**Agenda Item:** F

**Date:** March 22, 2012

<b>Title</b>	Report on Longitudinal Data - Increasing Virginia's Capacity to Understand Students' Pathways to Success in College and the Work Force		
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**Purpose of Presentation:**

For information only. No action required.

**Previous Review or Action:**

No previous review or action.

**Action Requested:**

Other. Specify below:

Accept the report.

**Alignment with Board of Education Goals: Please indicate (X) all that apply:**

	Goal 1: Expanded Opportunities to Learn
X	Goal 2: Accountability of Student Learning
	Goal 3: Nurturing Young Learners
	Goal 4: Strong Literacy and Mathematics Skills
	Goal 5: Highly Qualified and Effective Teachers and Administrators
	Goal 6: Sound Policies for Student Success
	Goal 7: Safe and Secure Schools
	Other Priority or Initiative. Specify:

**Background Information and Statutory Authority:**

In 2010, the Virginia Department of Education (VDOE) earned a \$17.5 million grant from the U.S. Department of Education to enhance the state's longitudinal data system (LDS). The grant work is focused on several major components, including:

- 1) Providing Virginia with a statewide longitudinal data system that complies with requirements of the State Fiscal Stabilization Fund (SFSF) program of the American Recovery and Reinvestment Act of 2009, and the America Competes Act.
- 2) Developing the capacity to merge de-identified data across state agencies while protecting individuals' privacy.
- 3) Conducting a needs-based competitive grant program to improve data systems in school divisions.
- 4) Enhancing high schools' ability to use electronic transcripts to colleges and universities across

the country, and, to fund four Virginia Institutions of Higher Education to update their data systems to consume transcript data electronically.

- 5) Enhancing the teacher licensure data system to capture the teacher's route to licensure.
- 6) Developing publically accessible business intelligence tools to improve data transparency.
- 7) Conducting an "Apps Challenge" to create innovative uses for Virginia's LDS data.

### **Summary of Important Issues:**

Longitudinal data on Virginia's PreK-12 students is made possible by the institutionalization of a unique identifier for each student that persists with the student throughout his/her PreK-12 career in public schools. Virginia established the statewide longitudinal data system in part to meet the data collection and reporting requirements of the *Elementary and Secondary Education Act* (ESEA). As the data collection tools were being established, state leaders recognized the critical role the state should play to ensure that all of our school systems that have not invested in local data warehouses had secure access to current and historical student-level data in ways that would directly impact instruction at the local level. Virginia's solution to meet that need is the Educational Information Management System (EIMS) managed by the Department of Education. EIMS leverages the data collected for reporting requirements to provide rich decision support tools to Virginia school division personnel. An expansion of the system, funded by a 2007 \$6.05 million grant, included developing the capability to send transcripts to institutions of higher education electronically, supported school divisions in addressing data quality through comprehensive training, and provided additional data types in the data warehouse.

A subsequent grant (\$17.5 million) in 2010 carried the requirement that Virginia would meet all of the data collection and reporting requirements of the State Fiscal Stabilization Fund (SFSF). The requirements included developing a mechanism to connect students with their teachers and collection of student-level transcript information, providing teachers with estimates of student growth, and providing postsecondary enrollment and achievement reports. Virginia met all of these requirements by the deadline of January 31, 2012.

The 2010 grant program capitalizes on the wealth of longitudinal data that exists in PreK-12, higher education, and the work force. Working together, the Department of Education, the State Council of Higher Education for Virginia, the Virginia Community College System, and the Virginia Employment Commission are developing a secure mechanism for linking de-identified student data across agencies so that students can be studied as they progress to higher education and the work force. Other features of the grant program include a needs-based competitive grants program that funds improvements to school division data systems, funding for three institutions of higher education and all 23 community colleges to accept the electronic transcript, and Web-based tools that improve data transparency.

On January 31, 2012, Virginia published reports that met the final SFSF data collection and reporting requirements. These reports provide data about students' postsecondary experience by securely linking high school graduation data to higher education data.

Virginia's **Postsecondary Enrollment** report was established to meet SFSF indicator (C)(11). This report provides data on students' enrollment in institutions of higher education (IHE) within 16 months of high school graduation. VDOE used data purchased from the National Student Clearinghouse to meet this requirement. The state report for the high school graduates of 2011 is provided in Attachment A. The public can create reports for high schools, school divisions, and the state by visiting: [https://p1pe.doe.virginia.gov/postsec\\_public/postsec.do?dowhat=LOAD\\_REPORT\\_C11](https://p1pe.doe.virginia.gov/postsec_public/postsec.do?dowhat=LOAD_REPORT_C11).

Virginia's **Postsecondary Achievement** report was established to meet SFSF indicator (C)(12). The

report provides information on the number and percentage of students who enroll in a Virginia public IHE and earn at least one year's worth of college credit within two years of enrollment. VDOE, working collaboratively with SCHEV, used a double de-identification method to merge data from high school graduates with college enrollment and course completion records to meet this requirement. The state report for the high school graduates of 2008 is provided in Attachment B. The public can create reports for high schools, school divisions, and the state by visiting [https://p1pe.doe.virginia.gov/postsec\\_public/postsec.do?dowhat=LOAD\\_REPORT\\_C12](https://p1pe.doe.virginia.gov/postsec_public/postsec.do?dowhat=LOAD_REPORT_C12).

The data for Virginia's Postsecondary Education Reports rely on records that were merged via secure systems that maintain student privacy. The reports provide useful information to guide program and policy decisions, and represent the best estimates currently available. More information about these reports is available in VDOE's Frequently Asked Questions documents, Attachment C, and on the Web at:

- Frequently asked questions about Virginia's postsecondary enrollment report: [http://www.doe.virginia.gov/school\\_finance/arra/stabilization/reported\\_data/assurance\\_c/faq\\_c1\\_1.pdf](http://www.doe.virginia.gov/school_finance/arra/stabilization/reported_data/assurance_c/faq_c1_1.pdf).
- Frequently asked questions about Virginia's postsecondary achievement report: [http://www.doe.virginia.gov/school\\_finance/arra/stabilization/reported\\_data/assurance\\_c/faq\\_c1\\_2.pdf](http://www.doe.virginia.gov/school_finance/arra/stabilization/reported_data/assurance_c/faq_c1_2.pdf).

**Impact on Fiscal and Human Resources:**

Virginia's 2010 grant award supports all new work in this area. Additional resources will be needed to sustain the work beyond the life of the grant.

**Timetable for Further Review/Action:**

None.

**Superintendent's Recommendation:**

The Superintendent of Public Instruction recommends that the Board accept the report for informational purposes.

Virginia Department Of Education  
State Fiscal Stabilization Fund Indicator (C)(11) Report

2010-2011 FGI cohort year (students entering high school in 2007-2008)

Graduation Rate Type: Four Year Rate

Division: ALL, School: ALL

Subgroup	Total number of students in the cohort earning a federally recognized high school diploma	Students who enrolled in any Institution of Higher Education (IHE) within 16 months of earning a federally recognized high school diploma		Students who enrolled in a 4-year public Institution of Higher Education (IHE) within 16 months of earning a federally recognized high school diploma		Students who enrolled in a 4-year private Institution of Higher Education (IHE) within 16 months of earning a federally recognized high school diploma		Students who enrolled in a 2-year Institution of Higher Education (IHE) within 16 months of earning a federally recognized high school diploma.	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Students	80025	49739	62	24043	30	7551	9	18145	23
Female	40945	27030	66	13170	32	4253	10	9607	23
Male	39080	22709	58	10873	28	3298	8	8538	22
American Indian	285	163	57	74	26	22	8	67	24
Asian	4718	3574	76	2225	47	354	8	995	21
Black	18628	10089	54	4011	22	1934	10	4144	22
Hispanic	6257	3141	50	1184	19	367	6	1590	25
Native Hawaiian	105	60	57	29	28	10	10	21	20
White	47404	31013	65	15667	33	4621	10	10725	23
2 or More	2593	1681	65	851	33	242	9	588	23
Economically Disadvantaged	20547	9453	46	2757	13	1373	7	5323	26
Limited English Proficient Students	4228	2086	49	712	17	160	4	1214	29
Students with Disabilities	5499	2328	42	476	9	311	6	1541	28

NOTES:< = A group below state definition for personally identifiable results.

- = no data available for that group

This report provides the best available estimates about college enrollment according to the National Student Clearinghouse. For more information, see the answers to Frequently Asked Questions about this report at: [http://www.doe.virginia.gov/school\\_finance/arra/stabilization/reported\\_data/assurance\\_c/faq\\_c11.pdf](http://www.doe.virginia.gov/school_finance/arra/stabilization/reported_data/assurance_c/faq_c11.pdf).

Students who attended schools that do not participate in NSC are not included in the number or percent of students enrolled in an IHE.

Federally recognized high school diplomas include Standard, Advanced Studies, or International Baccalaureate (IB) diplomas.

Most subgroups are based on students' most recent status.

## Virginia Department Of Education

Attachment B

## State Fiscal Stabilization Fund Indicator (C)(12) Report

2007-2008 FGI cohort year (students entering high school in 2004-2005)

Graduation Rate Type: Four Year Rate

Division: ALL, School: ALL

SUBGROUP	Students that earned a federally recognized diploma and enrolled in a public Institution of Higher Education (IHE) in Virginia.								
	Total number of students in cohort who graduated from high school with a federally recognized diploma and enrolled in a public IHE in Virginia within 16 months of graduation	Dual enrollment credits included in total count of credits earned				Dual enrollment credits excluded in total count of credits earned			
		Number	Number	Percent	Number	Percent	Number	Percent	Number
All Students	31579	21102	67	395	1	20852	66	385	1
Female	17443	12047	69	188	1	11906	68	178	1
Male	14136	9055	64	207	1	8946	63	207	1
American Indian	74	51	69	2	3	51	69	2	3
Asian	2160	1737	80	36	2	1733	80	36	2
Black	5600	2946	53	82	1	2911	52	81	1
Hispanic	1181	673	57	31	3	668	57	31	3
Native Hawaiian	34	23	68	1	3	23	68	1	3
White	22140	15396	70	237	1	15191	69	228	1
Economically Disadvantaged	3812	1879	49	52	1	1837	48	50	1
Limited English Proficient Students	1245	831	67	27	2	829	67	27	2
Students with Disabilities	1467	580	40	27	2	570	39	25	2

Notes: < refers to a group below state definition for personally identifiable results.

- = no data available for that group

According to the State Council of Higher Education for Virginia (SCHEV), credits from remedial courses do not count towards a college degree and are to be excluded from the total number of credits earned.

According to the State Council of Higher Education for Virginia (SCHEV), 30 units is the equivalent of one year of college credit.

Federally recognized diplomas include Standard, Advanced Studies, and International Baccalaureate (IB) diplomas.

This report provides the best available estimates about postsecondary credits earned and is based on unofficial transcript data linked between VDOE and the State Council of Higher Education for Virginia (SCHEV).

For more information, see the answers to Frequently Asked Questions about this report at: [http://www.doe.virginia.gov/school\\_finance/arra/stabilization/reported\\_data/assurance\\_c/faq\\_c12.pdf](http://www.doe.virginia.gov/school_finance/arra/stabilization/reported_data/assurance_c/faq_c12.pdf)

# Frequently Asked Questions: Postsecondary Enrollment Reports State Fiscal Stabilization Fund Indicator (c)(11)

1. Why did the Virginia Department of Education (VDOE) develop postsecondary enrollment reports?
  - ❖ Postsecondary enrollment reports satisfy a federal reporting requirement for State Fiscal Stabilization Fund (SFSF) indicator (c)(11). In applying for funding under the SFSF program of the American Recovery and Reinvestment Act of 2009, Virginia (as the grantee) assured the United States Department of Education (USED) of compliance with all of the requirements for accountability, transparency and reporting. One requirement of the SFSF program was to report information on high school graduates' postsecondary enrollment outcomes.
2. What information do postsecondary enrollment reports provide about Virginia high school graduates?
  - ❖ Postsecondary enrollment reports show the number and percent of Virginia high school graduates who enrolled in an Institution of Higher Education (IHE) within sixteen months of graduating high school. Reports are available at the state, school division and school level for all students and by student subgroups.
3. Which graduates are included in postsecondary enrollment reports?
  - ❖ As required by USED, postsecondary enrollment reports include **only** Virginia graduates as defined for Virginia's Federal Graduation Indicator (FGI).
    - The FGI is calculated by following a group of students who started the ninth grade in the same school year; **and**
    - Includes students who earned Virginia's standard or advanced studies diplomas only; students who earned other Virginia Board of Education approved diplomas are not counted as graduates in the FGI.
    - Virginia is reporting postsecondary enrollment based on cohorts of graduates. Students reported as graduating within four, five and six years of first entering ninth grade are included in the postsecondary enrollment reports.

4. How did VDOE acquire data to produce postsecondary enrollment reports?
  - ❖ VDOE has entered into a data-sharing agreement with the National Student Clearinghouse (NSC) in order to produce the best available estimates of students' postsecondary enrollment outcomes.
  
5. What is the National Student Clearinghouse (NSC)?
  - ❖ The is a nonprofit organization with extensive experience matching college enrollment data with high school graduation data.
  - ❖ For more than fifteen years, NSC has worked with IHE to collect student enrollment data while also maintaining the confidentiality and privacy of student records in full compliance with the Family Educational Rights and Privacy Act (FERPA).
  - ❖ Currently, the National Student Clearinghouse's database contains student enrollment records provided to the Clearinghouse every 30-45 days by more than 3,300 participating postsecondary institutions, which enroll 93% of all U.S. higher education students.
  - ❖ For more information please go to: <http://studentclearinghouse.org>
  
6. How does the National Student Clearinghouse match data from VDOE with postsecondary enrollment data?
  - ❖ The National Student Clearinghouse uses a proprietary algorithm (plus internal staff review) to compare records from VDOE against their national database of student-level postsecondary enrollment records.
  
7. Are the data accurate counts and percentages of Virginia graduates' postsecondary enrollment outcomes in Institutions of Higher Education nationwide?
  - ❖ The data represent the best available estimates at this time. There is currently no definitive source of all postsecondary enrollment records by state, school division or school.
  - ❖ VDOE and external researchers have determined that the best available estimates contained in the postsecondary enrollment reports are likely underestimates of the actual number of students who meet these requirements, but capture at least 88 percent of Virginia's public high school graduates' postsecondary enrollments (see Holian & Moker, 2011<sup>1</sup>).

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<sup>1</sup> Holian, L., and Moker, C. (2011). *Estimating college enrollment rates for Virginia public high school graduates*. (Issues & Answers Report, REL 2011–No. 104). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Appalachia. Retrieved from [http://ies.ed.gov/ncee/edlabs/regions/appalachia/pdf/REL\\_2011104.pdf](http://ies.ed.gov/ncee/edlabs/regions/appalachia/pdf/REL_2011104.pdf).

8. What are some of the reasons for the underestimates in the postsecondary enrollment reports?

- ❖ Some postsecondary institutions do not participate in the National Student Clearinghouse. As a result, Virginia graduates who attended these postsecondary institutions cannot be identified as enrolling in an IHE. All but four Virginia IHE participate in services offered by the National Student Clearinghouse.
- ❖ The National Student Clearinghouse uses an algorithm (and internal staff review) to match students from VDOE to students in their database. The quality of the match rate often depends upon the quality of data submitted by VDOE and the quality of data submitted to NSC by the participating postsecondary institutions. In some cases due to data error, students' high school and postsecondary records are not matched and therefore students IHE attendance status could be misidentified.
- ❖ Under FERPA, students may instruct their postsecondary institutions to withhold information from any agency or nonprofit organization requesting student directory information, which is the information released from the Clearinghouse. As a result, a small number of Virginia graduates who attended an IHE but requested that information not be shared would not be identified as enrolled in an IHE.

9. How often will the postsecondary enrollment reports be updated?

- ❖ The postsecondary enrollment reports will be updated annually as more data become available, typically once in the fall and once in the spring.

10. Where can I find more information about the IHE that participate in the National Student Clearinghouse?

- ❖ For a complete list of the IHE that participate in the National Student Clearinghouse visit:  
<http://www.studentclearinghouse.org/colleges/coreserv/docs/CoreParticipants.xls>.

11. Where can I find more information about the State Fiscal Stabilization Fund (SFSF) program?

- ❖ For more information about the State Fiscal Stabilization Fund program please go to:  
[http://www.doe.virginia.gov/school\\_finance/arra/stabilization/index.shtml](http://www.doe.virginia.gov/school_finance/arra/stabilization/index.shtml).

**Institutions of Higher Education (IHE) In Virginia That Do Not Submit Student Enrollment Data to the National Student Clearinghouse (NSC)**

Institution Type	Federal Graduation Indicator (FGI) Year			
	2007-2008	2008-2009	2009-2010	2010-2011
Four-Year Public IHE	All Virginia four-year public IHE submit student enrollment data to the NSC.			
Four-Year Private IHE	1. Appalachian School of Law 2. Christendom College 3. Institute for the Psychological Sciences 4. Mary Baldwin College 5. Saint Paul's College	1. Appalachian School of Law 2. Christendom College 3. Institute for the Psychological Sciences 4. Mary Baldwin College 5. Saint Paul's College	1. Appalachian School of Law 2. Christendom College 3. Institute for the Psychological Sciences 4. Mary Baldwin College 5. Saint Paul's College	1. Appalachian School of Law 2. Christendom College 3. Institute for the Psychological Sciences 4. Mary Baldwin College
Two-Year Public IHE	1. Eastern Shore Community College 2. Richard Bland College	1. Richard Bland College	All Virginia two-year public IHE submit student enrollment data to NSC.	
Private For Profit IHE	Limited NSC data are available for students who enroll in private for-profit and/or vocational IHE in Virginia.			
Religious Degree Conferring IHE	Limited NSC data are available for students who enroll in private IHE in Virginia whose primary purpose is to confer religious degrees.			

# Frequently Asked Questions: Postsecondary Achievement Reports State Fiscal Stabilization Fund Indicator (c)(12)

1. Why did the Virginia Department of Education (VDOE) develop Postsecondary Achievement reports?
  - ❖ Postsecondary achievement reports satisfy a federal reporting requirement for State Fiscal Stabilization Fund (SFSF) indicator (c)(12). In applying for funding under the SFSF Program of the American Recovery and Reinvestment Act of 2009, Virginia (as the grantee) assured the United States Department of Education (USED) of compliance with all of the requirements for accountability, transparency, and reporting. One requirement of the SFSF program was to report information on high school graduates' postsecondary achievement outcomes after enrolling in public Institutions of Higher Education (IHE) in Virginia.
2. What information do postsecondary achievement reports provide about Virginia high school graduates who enrolled in a public IHE in Virginia?
  - ❖ Postsecondary achievement reports show the number and percent of Virginia high school graduates who enrolled in a Virginia public IHE within sixteen months of graduating high school **and** completed one year of college credit (applicable to a degree) within two years of their postsecondary enrollment date. Reports are available at the state, school division, and school level for all students and by student subgroups.
3. Which graduates are included in postsecondary achievement reports?
  - ❖ As required by the USED, postsecondary achievement reports include only Virginia graduates as defined for Virginia's Federal Graduation Indicator (FGI) who also enrolled in a public IHE in Virginia.
    - The FGI is calculated by following a group of students who started the ninth grade in the same school year; **and**
    - Includes students who earned Virginia's standard or advanced studies diplomas only; students who earned other Virginia Board of Education-approved diplomas are not counted as graduates in the FGI.

- Virginia is reporting postsecondary achievement based on cohorts of graduates. Students reported as graduating within four, five and six years of first entering ninth grade are included in the postsecondary achievement reports.
4. Which colleges and universities are included in the classification of a Virginia public IHE?
    - ❖ For a complete list of colleges and universities that meet the definition of a Virginia public IHE, please refer to guidance from the State Council of Higher Education for Virginia (SCHEV) available at:  
<http://www.schev.edu/students/PublicCollegeList.asp>.
  5. How did VDOE acquire data to produce postsecondary achievement reports?
    - ❖ VDOE entered into a data-sharing agreement with SCHEV to produce the best available estimates of postsecondary achievement outcomes for Virginia graduates who enrolled in a Virginia public IHE.
  6. What is SCHEV?
    - ❖ SCHEV is the Commonwealth's coordinating body for higher education.
    - ❖ As part of their responsibilities, SCHEV collects postsecondary enrollment and postsecondary achievement data from colleges and universities in Virginia while also maintaining the confidentiality of student records in compliance with the Family Educational Rights and Privacy Act (FERPA) and state privacy laws.
    - ❖ Currently, SCHEV collects postsecondary enrollment and postsecondary achievement data from all of Virginia's public IHEs.
    - ❖ For more information please go to <http://schev.edu>
  7. How many credits equate to one year of college credit in a public IHE?
    - ❖ Thirty (30) units equates to one year of college credit.
  8. Did the summation of college credits earned originate from transcript-level records that included credits earned from passing Advanced Placement (AP) courses in high school?
    - ❖ No. The calculations were based on identifying all the college courses a student passed in a two year time frame and adding the credits earned towards a degree for passing those courses. SCHEV and VDOE do not have access to students' official transcript data.

9. Were credits earned for passing developmental education courses included in the final summation of credits earned?

- ❖ No. Passing grades in developmental education courses are not applicable towards a degree and were excluded from the total amount of credits earned.

10. Were credits earned for passing dual enrollment courses while students were still in high school included in the final summation of credits earned?

- ❖ Yes. Postsecondary achievement reports show results with and without the dual enrollment credits included in the calculation.

11. The postsecondary achievement report has a column that states, "Credits earned could not be determined due to the presence of missing grades." What does this mean?

- ❖ In some records, public IHE did not submit final course grades to SCHEV. Some of these missing grades would impact the determination of whether or not a student earned 30 or more credits within two years of enrolling in college.
- ❖ The postsecondary achievement reports document the percentage of students for whom insufficient data were available to make a final determination about whether they met the criteria.

12. Are the data accurate counts and percentages of Virginia graduates postsecondary achievement in public Institutions of Higher Education in Virginia?

- ❖ The data represent the best available estimates at this time.
- ❖ VDOE and SCHEV have determined that the best available estimates in the postsecondary achievement reports are likely underestimates of the actual numbers of students who meet these requirements. The percentages are consistent with other available estimates of students' enrollment and achievement in the first year of college.
- ❖ Both VDOE and SCHEV have independently concluded these reports identify no less than 85 percent of all Virginia graduates who enrolled in public IHE within sixteen months of high school graduation.

13. How often will the postsecondary achievement reports be updated?

- ❖ The data in the reports will be updated annually.

14. Why is there a long time-lag between the year students graduated from high school and the availability of a postsecondary achievement report?

- ❖ The following factors lead to the long time-lag between students' high school graduation year and the availability of the postsecondary achievement reports:
  - The federal reporting requirements include three years of data since high school graduation—up to one year for students to enroll in college and two years for students to have the opportunity to earn one-year's worth of college credits.
  - It takes additional time for SCHEV to collect the course enrollment and grades from Virginia's public IHEs that are used to produce the reports
  - The data linking and validation process is currently conducted manually, which takes additional time. In the future, this process is expected to be automated, that may reduce time to report production.

15. How did VDOE and SCHEV link data to produce postsecondary achievement reports in a secure manner?

- ❖ VDOE and SCHEV use different unique identifiers in their existing databases—VDOE uses the State Testing Identifier (STI) and SCHEV uses students' social security numbers (SSN). Using the STI and SSN, VDOE and SCHEV entered into a two-step encryption process to protect individual student identities during the data linking process. The encryption process ensures that VDOE and SCHEV do not share actual unique IDs (e.g., STI and SSN) or other personal information with the other agency. However, the process provides a mechanism to link the datasets, validate the merge process, and create the postsecondary achievement reports to meet the SFSF indicator (c)(12) requirements.

16. Where can I find more information about the State Fiscal Stabilization Fund program?

- ❖ For more information about the State Fiscal Stabilization Fund program visit: [http://www.doe.virginia.gov/school\\_finance/arra/stabilization/index.shtml](http://www.doe.virginia.gov/school_finance/arra/stabilization/index.shtml).