

# The Third Wave of Longitudinal Data Systems: Data Partnerships

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The Data Quality Campaign is a national, collaborative effort to encourage and support state policymakers to improve the collection, availability and use of high-quality education data and to implement state longitudinal data systems to improve student achievement. The campaign aims to provide tools and resources that will assist state development of quality longitudinal data systems, while also providing a national forum for reducing duplication of effort and promoting greater coordination and consensus among the organizations focusing on improving data quality, access and use.

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#### Introduction

States have made dramatic progress in the past few years in implementing longitudinal data systems (LDS) to improve student achievement. These systems collect and house student educational data that make it easy for policymakers and practitioners to access and use it for reporting, policymaking and decision making. So much has happened in states in a short period of time (just 2-3 years); now, some of these systems are entering their "third wave" of development and use. The first wave has been designing and implementing systems that include important student-level data (see sidebar) that can be individually or collectively analyzed for decision and policymaking. The second wave has been increasing the *range of students* included in the aligned data systems in a state — moving from K-12 to P-20 data systems. The third wave — emerging now in some states — is expanding *the number of linked data* sets used to inform policy — that is, linking these systems to other data bases, such as social services, financial information, and human resource data and expanding the *number of users* by encouraging *data partnerships*.

The Data Quality Campaign (DQC) is a strong national advocate for longitudinal data systems and encourages states to include "ten essential elements" to optimize these systems for educational decisionmaking (see the side bar for the ten essential elements). According to the recent 2007 DQC survey:<sup>2</sup>

- Four states (Arkansas, Delaware, Florida, and Utah) report having a state data system that includes all ten essential elements of a longitudinal data system.
- 47 states have five or more of the ten essential elements.
- Almost every state has unique student identifiers for every student; collects student enrollment, demographic and program participation information; and can calculate student-level graduation and dropout data.
- 36 states have built or are planning to build data warehouses using Web-based data analysis and reporting tools that make these data accessible and user friendly.

The capacity of state data systems to collect, analyze and provide useful data to inform policymaker and educator decisions has dramatically increased since 2005 when the DQC first surveyed states about the capacity of their data systems. However, unless this data is analyzed deeply and used widely to help improve student achievement and outcomes, there will be little need to build robust longitudinal data systems. Some states have begun to work with other entities to make full use of this data, as described in the following sections.

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<sup>&</sup>lt;sup>1</sup> Data Quality Campaign. *The Data Quality Campaign at Year Two: Update on 2007 Survey Results*. (Austin, TX: Author). 2007.

<sup>&</sup>lt;sup>2</sup> IBID.

## Ten Essential Elements of a Robust Longitudinal Data System<sup>3</sup>

- 1. A unique student identifier that connects student data across key databases across years.
- 2. Student-level enrollment, demographic and program participation information.
- 3. The ability to match individual students' test records from year to year to measure academic growth.
- 4. Information on untested students and the reasons they were not tested.
- 5. A teacher identifier system with the ability to match teachers to students.
- Student-level transcript information, including information on courses completed and grades earned.
- 7. Student-level college readiness test scores.
- 8. Student-level graduation and dropout data.
- 9. The ability to match student records between the P-12 and postsecondary systems.
- 10. A state audit system assessing data quality, validity and reliability

#### The First Wave – Putting the Ten Essential Elements in Place

Robust student- and teacher-level longitudinal data systems include data for each of the ten essential elements from pre-kindergarten through grade 12. These data elements should be collected and shared in a way to assure that *all* students meet high standards by the time they complete high school. Educators and policymakers are increasingly recognizing the need for better information to improve schools. When states collect the most relevant data and are able to link individual student records over time, they can answer questions that are at the core of educational effectiveness. Some of these include:

- How well are students in schools and districts meeting AYP based on student subgroups? Which schools and students are improving over time?
- Which schools and programs add the most value to student learning?
- Which schools are consistently high performing so their best practices can be studied?
- Which teacher preparation programs are most effective in training teachers to help students meet high standards?
- What are the best educational predictors by 10<sup>th</sup> grade of college and workforce readiness to allow enough time to ensure all students are fully prepared high school graduates?

#### The Second Wave – Including Postsecondary Data

The second wave links the data in the P-12 system with student-level data in postsecondary data systems in order to provide insight into students' entire education experience — from pre-kindergarten through higher education (P-20).<sup>4</sup> In this wave (still

<sup>&</sup>lt;sup>3</sup> Data Quality Campaign. *Creating a Longitudinal Data System: Using Data To Improve Student Achievement.* (Austin, TX: Author) 2006.

<sup>&</sup>lt;sup>4</sup> Peter Ewell and Marianne Boeke *Critical Connections: Linking States' Unit Record Systems to Track Student Progress.* (Boulder, CO: National Center for Higher Education Management Systems). January 2007.

underway in most states) academic records of individual students in P-12 and postsecondary data systems are linked to ensure continuous feedback and improvement. As education systems become increasingly aligned — through standards, assessments and other measures — providing information about successful transitions and "leaks" in the education pipeline serve as college-readiness indicators. By including higher education data, policymakers can answer questions such as:

- What high school performance indicators (e.g., enrollment in rigorous courses or performance on state tests) are the best predictors of students' success in college or the workplace?
- What percentage of high school graduates needs remedial courses in college?
- Which teacher preparation programs produce the graduates whose students have the strongest academic growth?
- How many high school completers enroll in a postsecondary institution within the year following graduation?
- How are recent high school graduates performing in their postsecondary studies?

#### The Third Wave – Data Partnerships and Linking Data across Agencies

Now emerging as the third wave is an increased recognition of the need to share education data with others in order to better serve students and understand program effectiveness. As a result of a significant increase in the number of people, agencies and institutions asking to use longitudinal educational data, many state education agencies (SEAs) are forming data partnerships with other entities. *Data partnerships are agreements between the state agency that manage the longitudinal data system and third parties that use the data to answer their own policy and improvement questions*. This often involves other agencies that match their data to the data in the state's education longitudinal data system.

To understand more about these partnerships, the DQC surveyed data directors in seven states (see Appendix A) to learn how these partnerships are formed, what and how data are combined, how data are shared, for what purposes and what the future possibilities are for continued and expanded partnerships. The partners are typically other state agencies, university researchers or other organizations. Partnerships often arise because agencies are not adequately staffed to do the work themselves.

The purpose of data partnerships vary by state, but they all have the same desired outcome of using data to inform decisions to improve learning and achievement for all students.

#### **Partnership Data Uses**

The linked datasets that emerge as a result of these partnership agreements often lead to an increase in efficiency and better coordination of services and management for both partners. In the states surveyed, partnerships expanded the research capacity of the state education agency and added valuable information to streamline the administration of services. For example, states can:

- Evaluate their programs;
- Look at outcomes;
- Understand how their programs interact with other agency and entity programs;
- Study health, human service, education, employment and law enforcement issues; and
- Partner in the development of customized software applications.

<u>Virginia.</u> The Virginia SEA has partnerships with Virginia Commonwealth University, Southern Virginia Higher Ed Center, Joint Legislative Audit and Review Commission, W.E. Upjohn Institute for Employment Research, National Student Clearinghouse; CNA Corp; and the University of Virginia. Most of these partnerships focus on program evaluation such as studying the impact of math specialists on student achievement and assessing the impact of a preschool program on at-risk children. Other studies analyzed data on the post-high school activities of students served by limited English proficiency programs and another merged literacy screening data with state assessment data to assess how literacy skills are associated with third grade performance.

Michigan. With the help of a U.S. Department of Agriculture grant, the Michigan Department of Education (MDE), in coordination with the Center for Educational Performance and Information (CEPI) and the Department of Information Technology, has created a means to directly certify students for supplemental nutritional services based on family eligibility for food stamps. The Department of Human Services provides MDE a file of families that are eligible for food stamps. This file is then compared with student data from school districts to identify eligible students that can be directly certified without additional application procedures.

Arkansas. The Arkansas SEA has a longstanding partnership with the National Offices of Research, Measurement, and Evaluation Systems (NORMES) at the University of Arkansas to expand their capacity to report student and school achievement results. State student assessment data reside at NORMES which undertakes AYP calculations, developing school and district report cards, and reporting NAEP results—all available on their Web site. NORMES also conducts research and evaluation studies for the SEA and the Legislature. When grade inflation became a concern in Arkansas, NORMES took the ACT student results and compared them with student's composite student grade point averages. Grade inflation indices were calculated to predict the percent of students who might need a remediation course in college.

In addition to their agreement with the university, the SEA has a long-standing partnership with the Arkansas Department of Health and Human Services to simplify the free and reduced lunch eligibility and the Medicaid application process. Within the past two years, Arkansas has made contract agreements with higher education institutions to track K-12 students through college and with the state's Workforce Services Department to track students from K-12 into employment.

South Carolina. A model interagency data sharing system has been created by the South Carolina Budget and Control Board, Office of Research and Statistics. This system began by integrating program data from the Department of Health and Human Services to build an interagency case management system for Medicaid recipients. Now nine major state agencies are involved in sharing data. By joining forces with these agencies, the SEA will be able to analyze state student assessment scores related to diagnoses such as asthma, autism, diabetes, and heart disease and drugs such as antidepressants, anticonsultants, and anti-psychotic agents. With further data from juvenile justice, food stamps, and foster care, additional analyses can also be conducted for students who are served by these agencies.

<u>Florida.</u> Florida has a 25 year history of inter-agency partnerships. One of their first agreements was with the Department of Labor to follow their K-12 vocational education students after training and into the workforce. Since that time, the SEA has made formal data-partnering agreements with several other state and federal agencies including children and families, welfare, corrections, unemployment, higher education and the military. Agreements with these agencies and others are handled by the Division of Accountability, Research and Measurement. Data from other agencies are transferred to the SEA, where the matches are made. Florida's data includes social security numbers which they consider a key to success in matching student records to non-education data.

The Florida Education and Training Placement Information Program (FETPIP) collects data from more than ten sources (e.g., K-12, vocational center, public and private colleges and universities, federal programs, welfare transition, and corrections releases). Selected data are merged to create files and then merged with another set of linked files (e.g. incarcerations, post-secondary enrollment, military, out-of-state employment, federal government and public assistance) to create performance and accountability reports, a workforce funding formula and Florida CHOICES counseling information. Florida CHOICES is the state career information delivery system and includes assessments for interests, aptitudes, skills, and values. Accountability reports for management of student usage are retrievable from the professional tools section of CHOICES.

The DQC published an issue brief<sup>5</sup> that focused on linking education and social services data. Representatives from Florida, Utah and San Diego County described their efforts to link educational and social services data in order to better serve students who live in foster care. The two biggest obstacles were concerns and/or confusion about protecting student privacy and complying with the Family Educational Rights and Privacy Act (FERPA) and the technology involved in sharing data across two different systems. The need to share data was evident in the face of policymaker questions:

- What happens to children in foster care after they 'age out' of the system?
- What is the impact of student mobility on student achievement for children and youth in foster care?

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<sup>&</sup>lt;sup>5</sup> Smith, Straub, Myslewicz and Laird. *Linking Education and Social Services Data to Improve Child Welfare*. (Austin, TX: Casey Family Programs and Data Quality Campaign) October 2007.

• What types of placements minimize school changes and improve academic performance?

What wasn't evident was who to involve in the data sharing conversations, who had the authority to make the sharing occur, and how was FERPA to be interpreted in terms of sharing data. Although the surveyed states have found ways to establish data partnerships with other entities, most states still have concerns about and/or lack the necessary policies to facilitate the sharing of student-level data with other state agencies and researchers.

#### **Ongoing Partnership Agreements**

The Virginia SEA, through contracts, memoranda of agreement (MOA) and a restricted data use agreement (see Appendix B), has established several formal partnerships. The restricted use data agreement can be executed only when a contract or MOA with the SEA is in place. This agreement requires a description of the research/analysis project, a data protection security plan and affidavits of non-disclosure by those who have access to the data. The restricted data use agreement in Virginia was developed to address issues related to the release of personally-identifiable or confidential information to third parties. Under Virginia's Freedom of Information Act (FOIA), non-restricted use data must be shared with requesting entities.

Florida uses a base agreement with legal requirements and a provision for amendments or attachments. Their interagency agreements extend for two years, then may be renewed for another two years, then must be renegotiated. As the basic agreement, the Florida SEA uses the "Computer Matching and Privacy Protection Act of 1988," an amendment to PL88-503 This agreement has a template for data matching, is clear, and has formats and timeframes.

The Sunshine Connections portal is a partnership between the Florida SEA and the Microsoft Corporation to develop a Web-based teacher tool over a five year period. Agreements include services and perpetual licenses and the eventual transfer of the system to the Florida SEA. It will provide teachers, school leaders and parents with upto-date, relevant data to better individualize teaching and learning and ultimately improve student achievement. The tool will link teachers to student data, curricular materials, and colleagues in ways that support everyday classroom activities. Florida is expanding the Sunshine Connections application to include the deployment of Business Intelligence (BI) or reporting and analysis tools. This will broaden the audience to include postsecondary staff and state policy and decision-makers. The BI portions of Sunshine Connections will be the primary delivery mechanism of state-level data.

#### **Handling Data Requests**

All of the surveyed states have well established and documented procedures for accepting and handling data requests. The majority of states have standard, legally binding contracts that are approved by the state attorney general. Data agreements include

requirements for data security (including FERPA regulations<sup>6</sup>), data ownership, a common identifier, data definitions, data cycles, and data accuracy. Virginia uses their agreement only for restricted use data. In Indiana, the use of agreements depends on the entity asking for the data.

Michigan's review process handles each request on an individual basis. The Center for Educational Performance and Information (CEPI) uses the Michigan Education Information System (MEIS) <a href="Human Subjects Review Application">Human Subjects Review Application</a> for evaluating research requests. Michigan researchers sign security agreements once their human subjects review request has been approved.

Florida has a security and access policy with an accompanying request template. A part of the SEA's evaluation process considers whether or not the data request can be used to help evaluate existing policy. This facilitates a partnership between the requestor and the Department to leverage the data housed at the state and the expertise of the requestor to do the analysis and research of the data.

Minnesota has an informal policy to determine if and how requests are answered. The data administration team within the division of information technology manages all data inquiries and ensures their accuracy and consistency. Requests are prioritized with a typical two to three week turnaround policy. Media requests are first directed to the communications division for review and approval. The data sets are prepared by the information technology division and media requests are then sent back to the communications division for further review and then sent to the requester. Other non-media requested data sets may be reviewed by either the data compliance division for privacy issues or the appropriate program area before being sent on to requestor. It is required to provide the data in the form in which it is maintained (with no student level data); other formats or configurations are considered, with the decision made based on the time required and staff availability.

Surveyed states found it advantageous to consistently assign data requests to specific offices and staff to ensure coordination and accuracy. States keep request logs to track all requests, identify similarities among requests and releases, including a way to identify the current status of the request. The completed data request is reviewed for accuracy before it is sent back to the requester.

Most states don't charge for fulfilling data requests, although both Virginia and Minnesota have options for doing so.

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<sup>&</sup>lt;sup>6</sup> Arthur Coleman, Scott Palmer, Steven Winnick. *State Longitudinal Data Systems and Student Privacy Protections Under the Family Educational Rights and Privacy Act.* (Washington, DC: Holland & Knight Partners) November 2006.

## Making More Data Readily Available While Creating New Partnerships

All states reported significant increases in data requests over the past several years. Some states are putting more data on the Web so requesters can undertake their own analyses. States are also creating "standard" reports for the requests they receive most frequently.

While many SEA's have or are developing sophisticated Web sites, NCLB has prompted every state to have school and district report cards on their Web sites. Many SEA Web sites include ad-hoc reporting features and business intelligence tools that allow users to develop custom reports. Florida and other states are looking into creating a restricted access portal to their data warehouse for data users. This will allow direct access by approved users to a limited dataset, and increase timely access to needed data.

In Indiana, the SEA staff consults with their counterparts in higher education, workforce, and several other state agencies about the possibility of sharing data to help inform policymaking in each entity.

Michigan has some community-based programs that could benefit from some of the longitudinal and geographical analyses the SEA performs and efforts are underway to make the information available to them. The MDE is also considering a research collaborative with several Michigan research universities. Discussions are scheduled for the spring of 2008.

As states expand their data systems and ability to create more informative subsets of data, the U.S. Department of Education (USED) is enhancing and fine-tuning their data system. In 2003, the USED started working with states to reduce the data collection burden on SEAs and districts by creating standard data element definitions, reporting requirements across program areas, and data collection cycles and processes. They are building a data warehouse and their own reporting and analysis tools (Ed*Facts*) that different divisions within USED will access and use. More recently, the Council of Chief State School Officers, with support from the Bill & Melinda Gates Foundation, has launched the State Education Data Center (SEDC) — accessible via <a href="https://www.SchoolDataDirect.org">www.SchoolDataDirect.org</a> — which collects annual aggregate datasets from states, and in the near future from Ed*Facts*, and makes these datasets available to researchers and other organizations who analyze school and district data. These national repositories do not include student-level data, but do serve as a model for how to collect and share data for widespread use.

#### Summary

The interviews conducted in leading states identify the strong potential of data partnerships – both to expand the use of state education data, but also to link data in ways that provide even greater utility for program evaluation, program administration and decision making. Well-articulated agreements, that take into account legal issues and create a shared understanding of the data and its analyses lead to productive and long

standing data partnerships within states. Frequently requested information, when placed on a state Web site or can be accessed through a data warehouse portal increases the number of data users. When data across agencies can be linked to individual students and even their families, the power and utility of longitudinal data systems can be realized.

Besides a change in data systems, the call for collecting and using student- and teacher-level longitudinal data is generating a complimentary change in the culture of the state education agency. Historically, SEAs have largely been a conduit of data and information sharing between local education agencies and state and federal entities. Most SEAs still do not have research and evaluation divisions in-house, so they are unable to analyze the data and evaluate program effectiveness. Their mission has not been one to help schools and districts improve; rather, the focus of SEAs has largely been on compliance measures and accountability. This history accounts for much of the trepidation on the part of local education agencies about sharing student-level data with SEAs in many states.

While Texas has had a student-level data system for almost 20 years, most states have only implemented one within the past three years. As they have designed their new systems, states are correctly asking how the data can and will be used. Many also realize that they do not have the skill set in-house to properly or thoroughly analyze the data to help improve student achievement and school effectiveness, so some are looking to outside entities (e.g., universities, other state agencies, non-profit research organizations) to help with data analysis. All states are struggling with the issue of student privacy and FERPA interpretations.

Many states are building data warehouses that provide role-based access to student data. For example, a teacher can see student-specific historical and performance data on only his or her current students, and a principal can see the data only for students enrolled in his or her school and only aggregate data for students in other schools. Parents can see student-level data for their children, but only aggregate data for others in the class or school.

Researchers, however, need complete student-level data files in order to conduct thorough analyses and make appropriate interpretations of the findings. Some states, including Texas, have sent researchers data files with masked records for students in categories with less than five students in it. Masking data on public reports is necessary, but masking the files sent to researchers for analyses corrupts the analyses and interpretations. Student privacy is of paramount importance for all education stakeholders, but it should not be taken to such a level that it adversely affects the research necessary to ultimately understand and improve student outcomes.

Given the limited resources of most SEAs to fully utilize the robust data systems they are implementing, it is incumbent on SEAs to develop data partnerships with other entities. The biggest barriers to date — FERPA interpretations and technology — are not barriers to these partnerships; they should be only minor problems for which there are reasonable and feasible solutions. The bigger hurdle — again, not insurmountable — is changing the

culture in education from one of using data for compliance purposes to that of providing the information necessary to improve student achievement.

## Appendix A

## **Survey Participants**

Anne Brinson, Associate Superintendent, Educational Information Systems, Indiana Department of Education

Marta Burgin, Database Administrator, Data Management and Analysis, South Carolina Department of Education

Bethann Canada, Director of Educational Information Management, Virginia Department of Education

Ernie Huff, Systems Coordination Analyst II, Office of Data Administration and Reporting, Arkansas Department of Education

Jay Pfeiffer, Deputy Commissioner, Florida Department of Education

Margaret Ropp, Director, Center for Educational Performance and Information, Michigan Department of Education

Jeff Sellers, Assistant Deputy Commissioner, Florida Department of Education

Ted Vernon, Data Steward and EDEN coordinator, Information Technology Division, Minnesota Department of Education

## Appendix B

#### Virginia's Restricted Data Use Agreement

INSTRUCTIONS: Please submit an original-signature copy of this agreement; this will be countersigned and a copy returned to you.

The Restricted Use Data Agreement requires the completion of:

- 1. A description of the proposed research/analysis project (Section A)
- 2. A data protection security plan for the restricted-use data (Section B)
- 3. Affidavits of Non-Disclosure for each person who will have access to the data (Section C)

This agreement shall be reviewed by a committee appointed by VDOE. If approved, the committee shall direct the disclosure of the requested information under the terms of this Agreement. If disapproved, the committee shall provide specific information about the reasons for non-approval.

#### **Definitions:**

"Restricted-Use Data" shall mean personally identifiable information requiring specific procedures to protect confidentiality.

**"Public-Use Data"** shall mean data that contain no personally identifiable information requiring no specific procedures to protect confidentiality.

This Agreement is an attachment to and incorporated into Contract No. \_\_\_\_\_ between the Virginia

"Merging Restricted-Use data records with Public-Use data records" shall mean a file containing both Restricted-Use Data and Public-Use Data merged into one file. Such merged file shall be considered Restricted-Use Data. Merely deleting identifying fields from a "Restricted-Use Data" file *does not* create a "Public-Use Data" file. Disaggregations of "Restricted-Use Data", even without explicit identification fields, may result in a record where the identity of the subject could be reasonably inferred.

#### **Agreement:**

Department of Education (VDOE) and	(hereinafter "Contractor").
Purpose:	
VDOE administers programs that involve the collection and an VDOE carefully safeguards the security of such personally idea authorized personnel and purposes. Disclosure of such "Restrict control in accordance with federal and state laws and regulation."	ntifiable information restricting its use to cted-Use Data" is permitted only under strict
On behalf of the VDOE, the Contractor shall conduct analysis to "Restricted-Use Data" and shall comply with VDOE security roof "Restricted-Use Data".	
The VDOE shall provide to the Contractor a read-only file contspecified below:	taining personally identifiable information as

The Contractor shall comply with the terms of this Agreement. Any data provided by the VDOE shall remain the property of VDOE.

#### **Information Subject to this Agreement:**

All data files containing personally identifiable information provided by the VDOE or on behalf of the VDOE to the Contractor are subject to this Agreement. All information derived from those data, and data resulting from merges, matches, or other uses of the data with other data are subject to this Agreement and are referred to in this Agreement as "Restricted-Use Data".

Violations of this Agreement shall require the immediate return to VDOE or written verification of destruction of all restricted-use data. In addition, the Contractor will be barred from access to restricted-use data for five years from the date of the violation pursuant to relevant provisions of federal law. Should a violation occur, then the Contractor may be subject to provisions in Contract No. \_\_\_\_ related to debarment and/or findings of non-responsibility under Title 2.2-4359, *Code of Virginia* for any other contracts with the Department and/or the Commonwealth.

#### **Uses of the Data:**

The Contractor shall only use the restricted-use data in a manner and for a purpose consistent with the statistical purpose for which the data were supplied pursuant to the proposed research/analysis project described in Section A. A description of the proposed research/analysis project is attached and made a part of this Agreement.

#### **Individuals Who May Have Access to Restricted Data:**

Only individuals employed by the Contractor who have an approved Affidavit of Non-disclosure (Section C) shall have access to the restricted-use data. A list of the names, titles and authorization status of each of those individuals shall be made part of the security plan (Section A).

#### **Limitations on Disclosure:**

- 1. The Contractor shall not disclose the restricted-use data to any organization or to any persons other than those included in the security plan for which affidavits of non-disclosure have been completed.
- 2. The Contractor shall not make any publication or disclosure of restricted-use data provided under this agreement even if the individual identifiers have been removed.
- 3. Unless otherwise agreed to in Contract No.\_\_\_\_\_\_, all copyright and patent rights to all papers, reports, forms, materials, creations, or inventions created or developed in the performance of this contract shall become the sole property of the Commonwealth of Virginia. On request, the contractor shall promptly provide an acknowledgment or assignment in a tangible form satisfactory to the Commonwealth to evidence the Commonwealth's sole ownership of specifically identified intellectual property created or developed in the performance of the contract. The Contractor shall provide to VDOE all results analysis or other information developed using restricted-use data made available under this Agreement only in summary or statistical form so that the identity of individuals contained in the restricted-use data is not revealed. The VDOE shall make such reports available to the public in accordance with state public records laws. The Contractor shall provide VDOE with all published reports using findings from data provided through this Agreement in a form specified by the VDOE.

#### **Administrative Requirements:**

1. The Contractor shall provide a copy of this Agreement, together with the attached security plan to each employee of the Contractor who will have access to restricted-use data and shall require each of those employees to execute an Affidavit of Non-disclosure.

- 2. The Contractor shall ensure that each individual who executes an Affidavit of Non-disclosure reads and understands the materials provided to her or him before executing the Affidavit.
- 3. The Contractor shall not permit any individual specified in the security plan to have access to restricted-use data until items one and two of this subsection are fulfilled for that individual.
- 4. The Contractor shall promptly, after the execution of each affidavit, send the original affidavit to the designated VDOE representative keeping a copy as part of its security procedures.
- 5. The Contractor shall promptly notify the VDOE when an individual who has been authorized to have access to restricted-use data is no longer authorized to have access to those data.
- The Contractor shall notify the VDOE immediately upon receipt of any legal, or other demand for disclosure of restricted-use data.
- 7. The Contractor shall notify the VDOE immediately upon discovering any breach or suspected breach of this agreement, including breach of security or any disclosure of restricted-use data to unauthorized parties or agencies and provide the names of any individuals involved.
- 8. The Contractor shall permit representatives of the VDOE to make unannounced and unscheduled inspections of the Contractor's facilities to evaluate compliance with the terms of this agreement.
- 9. The Contractor shall maintain personnel policies that subject employees to disciplinary action, including termination for actions that violate the employee's Affidavit of Non-Disclosure, or cause a violation of this Restricted Data Use Agreement.

#### **Security Requirements:**

#### Maintenance of, and Access to, Restricted-use Data

- 1. The Contractor shall retain the original version of the restricted-use data supplied by VDOE at a single, secure location and shall make no copy or extract of the restricted-use data to anyone except those specifically authorized as above.
- The Contractor shall maintain restricted-use data in a space limited to access by authorized personnel.
- 3. The Contractor shall transport restricted-use data in a secure manner by authorized personnel.
- 4. The Contractor shall ensure that access to restricted-use data maintained in computer systems is controlled by password protection. If the workstation is part of a network, access to restricted-use data shall be controlled by login passwords *and* directory authorities.
- 5. The Contractor shall ensure that restricted-use data maintained in computer systems are not accessible via unauthorized networked computer systems.
- 6. The Contractor shall maintain all hard copy, personal computers with restricted-use data on hard disks, or other physical products containing personally identifiable information derived from restricted-use data in locked cabinets, file drawers, or other secure locations when not in use.
- 7. The Contractor shall ensure that all hard copy, tabulations, and reports are edited for any possible disclosures of restricted-use data.

#### **Retention and Disposition of Data**

- 1. The Contractor shall return to the VDOE the read only media of restricted-use data provided by the VDOE under this agreement when the statistical analysis that is the subject of this agreement has been completed or this agreement terminates, whichever occurs first.
- 2. At the time that the restricted-use data media is returned to the VDOE the Contractor shall destroy all physical or electronic files containing personally identifiable data.

#### **Compliance with Established Security Procedures**

The Contractor shall comply with the Data Protection Plan in Section D and made part of this Agreement.

#### **Processing of this Memorandum of Agreement**

- A. This Agreement shall be for the period mm/dd/yy until mm/dd/yy.
- B. This Agreement may be amended, extended or terminated by mutual written, signed, agreements between the parties.
- C. The VDOE may unilaterally terminate this Agreement for any breach of this Agreement by the Contractor or agents of the Contractor.

#### **Signatures**

Each party to this Agreement certify, by his/her signature, that:

- 1. The organization has the authority to undertake the commitments in this Agreement;
- 2. The Principal Project Officer has the authority to bind the organization to the provisions of this Memorandum of Agreement.

On behalf of:	
Contractor	
	Date:
Principal Project Officer	
The Virginia Department of Education	
	Date:

#### Section A: Description of the Proposed Research/Analysis Project

Restricted-use data is provided through a Restricted-Use Data Agreement limiting access only to specific organizations and specific personnel for specific purposes under specific security conditions. This section shall become part of the Agreement and will provide a description of how the restricted-use data will be used.

Organization:	
Name of the Principal Project Officer:	

#### **Description**

- I. What is the objective of the research or analysis?
- II. What statistical methods will be used?
- III. Why are personally identifiable records required?
- IV. How many individuals will have access to the restricted-use data and what are their positions?

#### Section B: Data Protection Plan for Restricted-Use Data

#### **System Identification**

Provide a brief description of the computer system and software that will be used to run the restricted-use data. Examples are provided below. A logical system diagram is required for all networked installations. Organizations are encouraged to attach additional documentation of their security policies and procedures.

#### example - Standalone Computer.

The restricted-use data (CD-ROM format) will be run at the licensed site on a standalone PC (a Pentium system running Windows XP). A modem is attached to the PC, but the software will not be enabled when the restricted-use data is on the machine. The restricted-use data is removed from the system each day after use and any residual data are purged by write-over software.

#### example - Standalone LAN.

The LAN consists of a NetWare operating system, running on a Pentium server. The system supports four workstations and a printer. There is no external connectivity to this system. SAS software is used to analyze the restricted-use data. There is no other sensitive data on the system.

#### example - Safe Workgroup within a LAN.

The LAN/WAN consists of NetWare running on a super-server with six additional servers--one communications server, one database server (for restricted-use data), and four print servers. The system supports 200 users within the VDOE. The restricted-use SAFE WORKGROUP is physically and logically configured to meet all requirements cited in the Security Procedures. Additionally, the SAFE WORK GROUP dedicated server is configured to run "packet signature", a digital signature feature that prevents packet forgery.

## Section C: AFFIDAVIT OF NON-DISCLOSURE

Name:	
Date:	
Organization:	<del></del>
Job Title:	
I,, do solemnly Department of Education Restricted-Use Data, I shall not	swear that when given access to Virginia
Use any individually personally identifiable information furnish purpose other than the statistical project specified in the attached have read and understand.	
Make any disclosure or publication whereby any individual courelated to any particular person.	ld be identified or the data furnished or
Permit anyone to examine individual records or files other than Use Data Agreement.	the individuals authorized in the Restricted-
Store any restricted-use data on any portable electronic computi sources.	ng device or other electronically retrievable
I understand that a violation of these terms may subject my emp may subject me to disciplinary action by my employer. Further personally liable for any violation.	
	[signature of affiant]
	[printed name of affiant]
	[address of affiant, line 1]
	[address of affiant, line 2]
Subscribed and sworn to before me, thisday of	[month], 20
[Notary Seal:]	
	[signature of Notary]
NOTARY PUBLIC: My comm	[printed name of Notary] ission expires:, 20