

North Carolina

Using Data to Navigate Education and Workforce Opportunities

Why is it important that agencies share data?

Agencies collect data for a variety of reasons. For example, K-12 schools collect data on students to assess their growth from year-to-year in subjects such as math and reading. Postsecondary institutions collect data on students to monitor their performance in courses and alert faculty and staff to students who might be at risk of academic dismissal. Some metrics require that data from multiple agencies be linked to provide the information. For example, many state policymakers want to know the percentage of high school graduates who enroll in postsecondary education. They also want to know how many high school and college graduates or workforce development program completers are employed at various points in time after they finish.



K-12 schools, postsecondary institutions and workforce agencies all share data between themselves to answer questions or produce reports.

What types of questions can we answer with shared data?

- What are the employment outcomes and earnings for people who complete postsecondary degrees or credentials?
- How many high school graduates enroll in postsecondary education in the fall following their graduation? How many are enrolled the following fall?
- What are the employment outcomes of recent high school graduates? How long after graduation do they find employment? In what industries are they most likely to be employed?
- Do students who take dual enrollment, Advanced Placement or International Baccalaureate courses complete their postsecondary credentials more quickly, or with fewer credits?
- What are geographic mobility patterns of students who complete a degree?

Foundational Concepts

Data sharing and linking occur between two or more organizations to allow analysis of data to answer questions an agency could not answer using data from their organization alone.

Data sharing of *individual* record-level data takes place using secure methods of file transfer. Data sharing of *aggregate data* can be as simple as making files available for download from an organization's website.

Data linking involves using technology such as an algorithm to match individual record-level data from one organization with the data from another organization. The linked data could be stored in a data system for ongoing use in answering questions or producing reports, or it might be linked temporarily for analysis or research and then destroyed.

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North Carolina Data Sharing Survey Highlights

To understand how states use and share data, SREB staff sent surveys to data managers in the K-12, post-secondary and workforce development agencies of each SREB state. The information below is based on the responses to those surveys.

Which agencies link data?

	K-12	2-Year Postsecondary	4-Year Postsecondary	Workforce
Pre-K or early childhood agency	✓			
K-12 education department	NA	✓	✓	
Career and technical education department		✓		✓
Public postsecondary system for two-year colleges	✓	NA	✓	✓
Public postsecondary system for four-year institutions	✓	✓	NA	✓
Independent colleges				
State financial aid agency or higher education assistance authority	✓	✓	✓	
Workforce development agency	✓	✓		NA
Department of labor	✓	✓	✓	✓
Department of corrections				✓

What necessary elements of data sharing exist in your state?

	K-12	2-Year Postsecondary	4-Year Postsecondary	Workforce
Collect unit record level data	✓	✓	✓	✓
Have a data sharing agreement with one or more agencies in your state	✓	✓	✓	✓
Share aggregated data with other agencies	✓	✓	✓	✓
Have a documented process for protecting the privacy and security of shared data	✓	✓	?	✓
Have a documented process for connecting and sharing data with other agencies	✓	✓	?	✓
Legislation on data privacy has influenced how or if you link data across agencies	✓	✓	?	✓

✓ Yes x No ? Don't know

Note: In a few states, two respondents from an agency completed the same survey. In these cases, the respondents represented different parts of the same organization (for example, K-12 and career and technical education representatives both completed the K-12 survey) or different organizations with similar programs (for example, a workforce development and a postsecondary system representative both completed the workforce survey). In cases where responses to the same question differed between these respondents, a response of “Don't know” took precedence over a response of “No” while a response of “Yes” took precedence over all other options.

Data Sharing Agreements

Data sharing agreements are necessary to maintain the privacy and security of data that are shared; however, protecting the privacy and security of data extends beyond data sharing agreements. For example, agencies must have a secure method of transferring data. The steps involved in protecting the privacy and security of data are central to data governance and should be communicated in policies and procedures. In some states, legislation protects the privacy and security of data.

The SREB survey asked respondents what policies or practices permit or encourage the linking of data between agencies in their state as well as those that discourage or prohibit data linking in their state.

Supports to Linking Data

K-12	2-Year Postsecondary	4-Year Postsecondary	Workforce
<ul style="list-style-type: none"> • Data sharing agreement or memorandum of understanding (MOU) • Funding for the linking of data across agencies in my state • Performance metric that requires linking data across agencies • State law • Administrative rule or regulation • State agency policies • Executive mandate 	<ul style="list-style-type: none"> • Data sharing agreement or MOU • Funding for the linking of data across agencies in my state • Performance metric that requires linking data across agencies • State law 	<ul style="list-style-type: none"> • Data sharing agreement or MOU 	<ul style="list-style-type: none"> • Data sharing agreement or MOU • Performance metric that requires linking data across agencies • State law • Administrative rule or regulation • State agency policies • Executive mandates • Legislative research, study or mandate

Obstacles to Linking Data

K-12	2-Year Postsecondary	4-Year Postsecondary	Workforce
<ul style="list-style-type: none"> • Data privacy or FERPA concerns • State law • Administrative rule or regulation 	<ul style="list-style-type: none"> • Data privacy or FERPA concerns • Lack of common identification numbers • Lack of agency staff with capacity to link data • Lack of data sharing agreement or MOU 	<ul style="list-style-type: none"> • Data privacy or FERPA concerns • Lack of common identification numbers • Lack of agency staff with capacity to link data 	<ul style="list-style-type: none"> • None listed or not applicable

Reasons for Connecting Data

	K-12	2-Year Postsecondary	4-Year Postsecondary	Workforce
Meet federal reporting requirements	✓	✓		✓
Meet state reporting mandates	✓	✓		✓
Improve student achievement/participant outcomes	✓	✓	✓	✓
Facilitate cross-agency collaboration	✓	✓	✓	✓
Decision making	✓	✓		✓
Policy making	✓	✓		✓
Conduct research	✓	✓		✓
Award financial aid				

Topics Analyzed Using Connected Data

K-12	2-Year Postsecondary	4-Year Postsecondary	Workforce
<ul style="list-style-type: none"> • High school graduation • College going or post-secondary enrollment in related field of study • College going or post-secondary enrollment in unrelated field of study • High school feedback • College readiness • Dual credit or enrollment • Equity, diversity and inclusion • Student mobility • Student learning • College retention, progression and graduation • Employment outcomes • Enrollment in job training program • Teacher effectiveness • Economic impact/jobs 	<ul style="list-style-type: none"> • College going or post-secondary enrollment in related field of study • College going or post-secondary enrollment in unrelated field of study • High school feedback • Dual credit or enrollment • Equity, diversity and inclusion • Student mobility • College retention, progression and graduation • Employment outcomes 	<ul style="list-style-type: none"> • Student mobility • College retention, progression and graduation • Employment outcomes 	<ul style="list-style-type: none"> • College going or post-secondary enrollment in related field of study • College going or post-secondary enrollment in unrelated field of study • Equity, diversity and inclusion • Enrollment in job training program • Program participant outcomes • Employment outcomes • Economic impact/jobs • Financial aid • Non-credit instructional activity • Performance measures • Commute (from home to job)

Not an exhaustive list of topics.

For more information about the Landscape of Data Sharing Survey, please contact Susan Lounsbury at Susan.Lounsbury@SREB.org or Ivy Colburn at Ivy.Colburn@SREB.org.