Data Matching in
the National School Lunch Program

**Approaches to Direct Certification
and Direct Verification:
Guide for State and Local Agencies**

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I.
Introduction

1.1. What Are Direct Certification and Direct Verification?

States and school districts can use direct certification and direct verification to help ensure that eligible children get free and reduced-price school meals through the National School Lunch Program (NSLP). *Direct certification* identifies children who are eligible for free meals because their households are approved for Food Stamp (FS), Temporary Assistance for Needy Families (TANF), or Food Distribution Program on Indian Reservations (FDPIR) benefits.[1] School districts can certify these "categorically eligible" children for NSLP benefits based on information provided by FS, TANF, or FDPIR administering agencies, thereby eliminating the need for households to submit an application for meal benefits. *Direct verification* uses information from FS, TANF, FDPIR, Medicaid, and the State Children's Health Insurance Program to verify NSLP applications without contacting households.

Direct certification can increase efficiency, lower costs, and improve program integrity by reducing paperwork and increasing the percentage of eligible students who are certified for free meals. Local education agencies (school districts) that use direct certification have fewer applications to process and smaller verification samples. FNS is currently studying whether data matching for *direct verification* leads to fewer applications requiring household verification and fewer households with NSLP benefits terminated because of nonresponse.

1.2. What Is the Purpose of This Guide?

This guide describes the "state of the art" in procedures for NSLP direct certification and direct verification. Different types of systems may be used for these purposes. This guide describes specific choices in designing these systems, and suggests methods of improving system efficiency and effectiveness. It is a resource for State and local agencies seeking to implement, expand, or improve systems for certifying and verifying children eligible for NSLP benefits.

In particular, this guide addresses methods of designing and improving data matching systems for direct certification and direct verification. We use "data matching" to refer to computerized methods of matching student records with records from other public programs to certify or verify NSLP eligibility. Data may be matched at the State or local level, and matches may be done in batches or interactively. Data matching eliminates paper-based application and verification processes, which are labor-intensive and subject to human error.

Since direct certification was authorized in 1989, there has been a steady increase in the use of data matching to identify school children eligible for NSLP benefits. The statewide student information systems mandated by the *No Child Left Behind Act of 2001* have made data matching much more feasible and popular.

In contrast to direct certification, data matching for NSLP direct verification is in its infancy. Prior to 2004, direct verification was used only to verify FS/TANF case numbers reported on NSLP applications. The *Child Nutrition and WIC Reauthorization Act of 2004 ("Reauthorization")* allowed direct verification of eligibility for children approved by income applications, using data from the FS, TANF, FDPIR, Medicaid, and other means-tested programs. Several States implemented direct verification using Medicaid data in SY2006–07. This guide provides an overview of the design issues and challenges for implementing direct verification of all types of NSLP applications (categorical and income-based).

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[1] TANF information can be used for direct certification of children only in States with TANF income eligibility criteria comparable to or more restrictive than those in effect on June 1, 1995 (P.L. 104-193).

1.3. How This Guide Is Organized

The guide has separate sections on direct certification and direct verification.

The direct certification section covers:

- the legislative authority for direct certification;
- the current prevalence and effectiveness of direct certification;
- the different methods of direct certification, and tradeoffs between different methods; and
- the ways that direct certification can be modified to improve efficiency and effectiveness.

The direct verification section covers:

- the legislative authority for direct verification;
- the extent to which State NSLP agencies currently use or are considering direct verification;
- the methods of implementing direct verification using FS, TANF, and Medicaid data; and
- key information about the feasibility of using Medicaid information for direct verification, including income eligibility levels and the availability of Medicaid data on household size and income.

1.4. Sources of Information

This guide summarizes the results of a study on *Data Matching in the National School Lunch Program*, conducted by Abt Associates Inc. for FNS. That study analyzed three types of data:

- Surveys of Child Nutrition Program Agencies, State Education Agencies, and State Medicaid Agencies in 50 States and the District of Columbia. These surveys provided information on the prevalence of practices during SY2004–05.
- Interviews with State and local agencies in six States during SY2005-06. These interviews provided detailed information about the use of data matching for direct certification and direct verification.[2]

- The SY2004–05 Verification Summary Reports (VSRs) for *public* school districts were used to estimate prevalence and effectiveness of direct certification.

This guide also draws on information about the implementation of direct verification in SY2006 from the *Direct Verification Pilot Study*, which began in June 2006.

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2 The six States participating in the in-depth interviews were Georgia, Kansas, Massachusetts, Oregon, Texas, and Wisconsin. In each State, interviews were conducted with staff of the State Child Nutrition Agency, State Education Agency information systems department, State Food Stamp Agency, and school food service departments of two public school districts.

2.
Direct
Certification

2.1. What Are the Key Facts About Direct Certification?

The Basics—Concepts and Methods

The *Child Nutrition and WIC Reauthorization Act of 1989* (PL 101-147) authorized direct certification to reduce the burden of school lunch applications for households and school districts, improve the accuracy of eligibility determinations, and increase the number of eligible children certified for benefits. *Reauthorization* mandated direct certification of all children in FS households, to be phased in over three years beginning with SY2006–07. The mandate applies to school districts with at least 25,000 students in SY2006–07; to those with at least 10,000 students in SY2007–08; and to all school districts in SY2008–09. Currently, many States face the challenge of providing an effective means of direct certification to meet the needs and technical capabilities of every school district.

Exhibit 1 describes the three primary methods of direct certification currently in use for children enrolled in FS/TANF. (Direct certification for children enrolled in FDPIR is managed at the local level and is not discussed in this guide.)

Every State uses data from the State Food Stamp Agency to directly certify students in some or all school districts; 36 States also use TANF data. In SY2004–05, State-level matching was used in 18 States, district-level matching was used in 22 States, and 11 States relied on the letter method (Exhibit 2). In SY2004–05, 10 States used "mixed methods" that were combinations of the three methods listed above: 5 States combined district-level matching and the letter method, with some districts using matching and some districts using letters; 2 States combined State-level matching and the letter method, with match results available to all districts and letters sent to unmatched FS/TANF children; and 3 States combined State- and district-level matching.

Exhibit 1—Methods of Direct Certification

1. **State-level matching —** State agency matches records of children enrolled in FS/TANF with student records obtained directly from school districts for this purpose or with student records obtained from a statewide student information system (SSIS). Match results are sent to school districts.

2. **District-level matching —** State agency provides school districts with records of children enrolled in FS/TANF and residing in the school district's geographic area. School districts match FS/TANF data with district enrollment through computerized or manual methods.

3. **Letter method —** State agency mails letters to households with children enrolled in FS or TANF. The household may use the letter in lieu of an NSLP application.

What's Happening? Trends in Direct Certification

Over the past ten years, there were three key trends in direct certification:

• The percent of public school districts using direct certification was constant at about 60 percent.

• State-level matching for direct certification became more common over time. It was used by 19 percent of school districts using direct certification in 1996, and 36 percent in 2004.

• The overall effectiveness of direct certification improved significantly. Among all students approved for free meals ("free-approved"), the percent directly certified increased from 18 percent in 2001 to 28 percent in 2004. In districts using direct certification, the percent directly certified increased from 59 percent in 2001 to 69 percent in 2004.

Exhibit 2 – Methods of Direct Certification By State, SY2004–05

Available Methods of Direct Certification
- ■ State-level matching (18)
- ■ District-level matching (22)
- □ Letter method (no matching) (11)
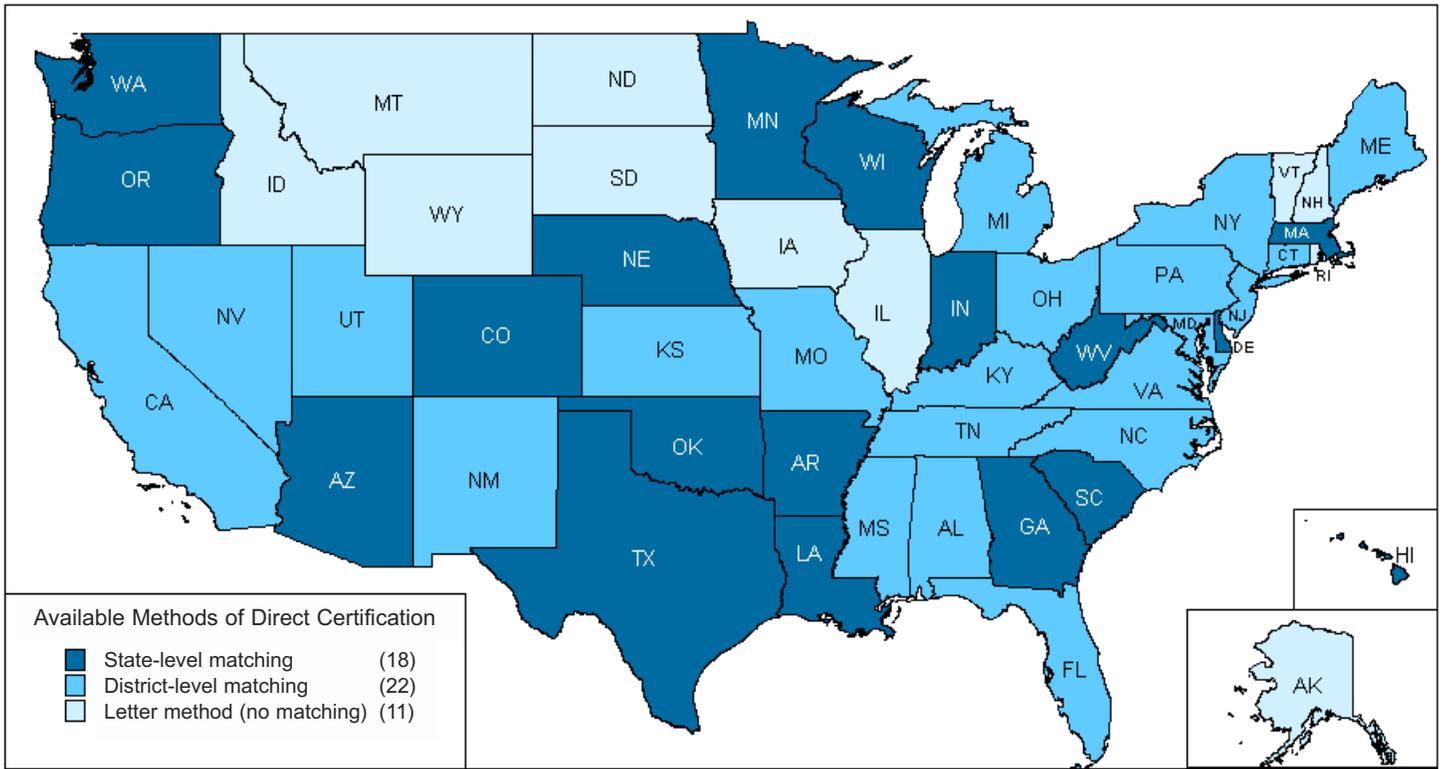
Notes:

Five States reported plans to implement State-level matching in SY2006–07 (California, North Carolina, Iowa, Kansas, and Wyoming).

States using mixed methods are categorized as State-level matching, if such matching is available. Three States combined State- and district-level matching. Massachusetts implemented a state-level match, but Boston and Springfield continued to use district-level matching in SY2004–05.

Oklahoma offers both State- and district-level matching, with 13 school districts using the State match and about 200 using district matching. Oregon provides State match results and also provides unmatched data for district-level matching. Five States offer district-level matching at school district option, with letters sent to FS/TANF households statewide: Connecticut, Kansas, Maine, New York, and Utah.

Results: Children Certified for Free Meals Without Applications

In SY2004–05, 6.7 million public school students were categorically approved for free meals based on FS/TANF information. About 60 percent of these children were directly certified, and the rest were certified by applications submitted with FS/TANF case numbers.[3] The percent of categorically approved students who were directly certified without application varied by method of direct certification (Exhibit 3):

- 59 percent in States using State-level matching,
- 63 percent in States using district-level matching, and
- 52 percent in States using the letter method.

In each of these categories, there were considerable differences among States in the effectiveness of direct certification (Exhibit 4). State-level matching directly certified over 90 percent of categorically approved students in Arizona, but only about 40 percent in Texas and Oklahoma.[4] District-level matching directly certified from 86 to 32 percent of categorically approved students, while the letter method directly certified from 72 to 37 percent.

Exhibit 3 – Directly Certified Students as a Percentage of Categorically Approved Students, By Method of Direct Certification: Public School Districts, SY2004–05
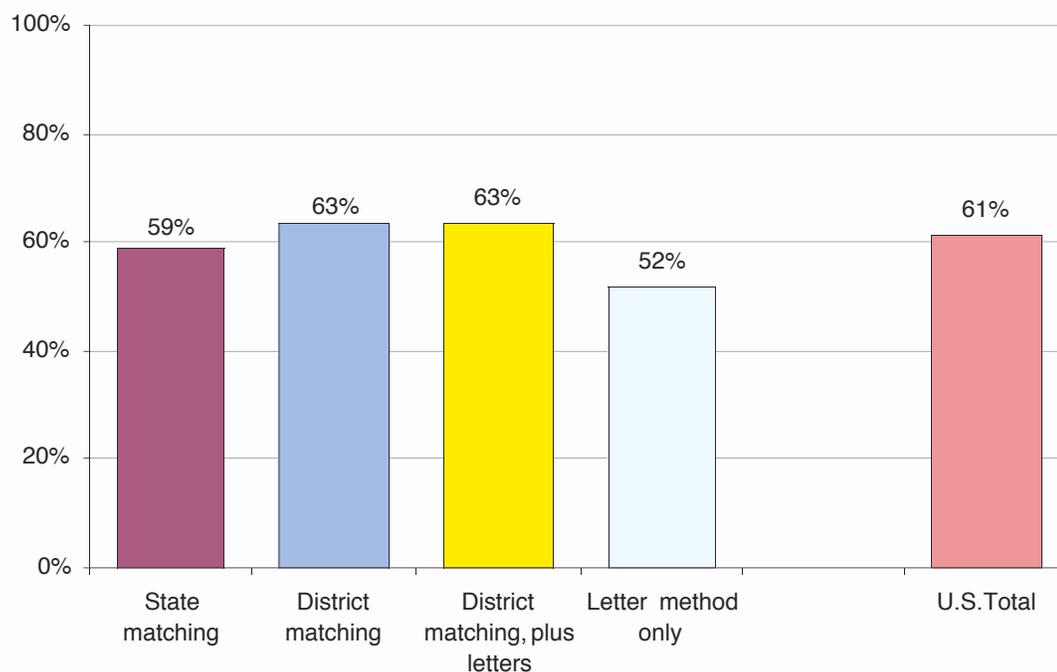
Notes:
The number of directly certified students is approximated by the number of students "not subject to verification." Categorically eligible students include those not subject to verification and those approved by applications containing an FS, TANF, or FDPIR case number.

Source:
USDA/FNS, Survey of State Child Nutrition Program Directors, 2005; SY2004–05 Verification Summary Report, excluding Hawaii, Massachusetts, North Carolina, and Rhode Island because data were not available or not usable.

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[3] At the district level, the estimated number of FS/TANF children approved for free meals is the sum of (a) children approved for free meals and not subject to verification, and (b) children approved for free meals by applications with FS, TANF, or FDPIR case numbers.

[4] In Oklahoma, 13 school districts use State-level matching and about 200 use district-level matching. However, in both Texas and Oklahoma about 30 percent of all NSLP-free students are in school districts that do not use direct certification.

Exhibit 4 – Directly Certified Students as a Percentage of Categorically Approved Students, By State, SY2004-05

* Oklahoma offers both State and district-level matching, at school district option; 13 school districts use the State match and about 200 use a district match.

Source:
Survey of State Child Nutrition Program Directors, 2005; SY 2004–05 Verification Summary Report excluding Hawaii, Massachusetts, North Carolina, and Rhode Island because data were not available or not usable.

State-level matching

State	Percentage
Arizona	95.2%
West Virginia	77.2%
South Carolina	74.7%
Delaware	72.9%
Arkansas	71.7%
Minnesota	68.8%
Colorado	67.8%
Washington	66.5%
Oregon	66.3%
Nebraska	65.4%
Georgia	63.0%
Louisiana	61.1%
Wisconsin	51.3%
Indiana	49.6%
Texas	40.9%
Oklahoma*	40.4%

District-level matching

State	Percentage
Nevada	86.2%
Virginia	80.3%
DC	79.1%
Tennessee	78.6%
Pennsylvania	77.6%
Maryland	74.4%
Missouri	69.7%
Florida	67.5%
California	62.1%
Michigan	61.9%
Kentucky	61.6%
New Mexico	61.6%
New Jersey	42.8%
Mississippi	41.0%
Alabama	38.4%
Ohio	31.7%

District matching, plus letters

State	Percentage
Kansas	80.8%
Maine	74.0%
Utah	68.1%
Connecticut	64.4%
New York	60.2%

Letter method only

State	Percentage
Vermont	71.6%
Wyoming	70.3%
North Dakota	66.4%
Idaho	65.8%
Iowa	61.8%
Alaska	61.6%
Montana	48.5%
Illinois	47.4%
South Dakota	37.7%
New Hampshire	37.0%

The Importance of District Participation in Direct Certification

Direct certification is more effective when more school districts use it. Where State-level matching is available, more districts directly certify students than where only district-level matching is available (68 percent versus 50 percent). (See Exhibit 5.[5]) The letter method has the highest rates of district participation: 85 percent when implemented with district-level matching and 79 percent for the letter method alone.

The letter method yields high rates of district participation because little effort is required from districts. If any FS/TANF household returns a direct certification letter, the district "participates." In contrast, when matching methods are used, districts must set up their own matches with FS/TANF data or process State match results. Fewer districts may participate because of the level of effort and the technical requirements.

Exhibit 5 – District Participation in Direct Certification By Available Method: Public School Districts, SY2004–05

Participation is measured only among districts with students "eligible" for direct certification. Districts with "eligible" students were identified as having categorically approved students or students "not subject to verification."

Sources: Survey of State Child Nutrition Directors, 2005; SY2004–05 Verification Summary Report, excluding Hawaii, Massachusetts, North Carolina, and Rhode Island because data were not available or not usable.

Legend: Districts without directly certified students; Districts with directly certified students

Method	Districts without directly certified students	Districts with directly certified students
State matching	32%	68%
District matching	50%	50%
Mixed methods	15%	85%
Letters	21%	79%

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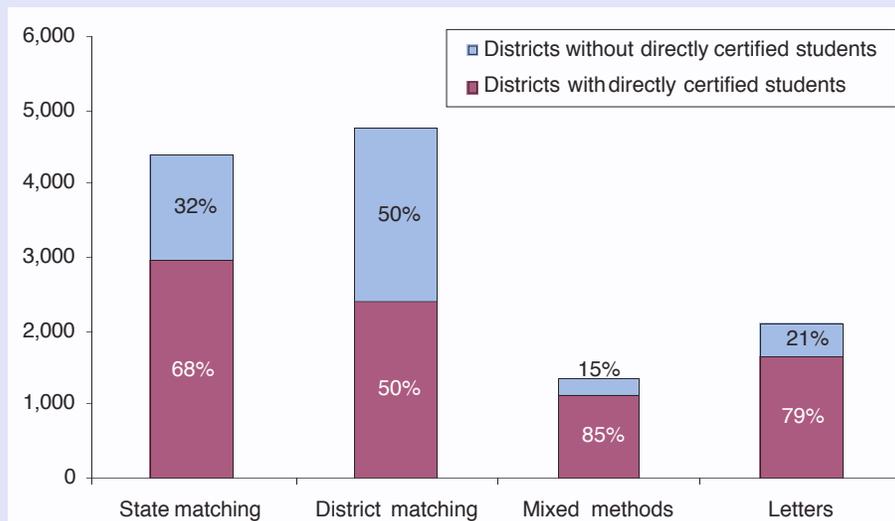
[5] Districts with no eligible students are not reflected in Exhibit 5. In SY2004–05, 3 percent of all public school districts had no students eligible for direct certification.

What Else Matters? Use of Data Matching and Other Factors

Matching methods can offer the highest rates of direct certification if widely implemented. This is because direct certification with data matching does not depend on households responding, whereas the letter method depends on household response. The top 15 States for direct certification effectiveness (Exhibit 6) include only two using the letter method—Vermont and Wyoming, ranked at numbers 14 and 15. The top four States have widespread use of matching methods, with over 85 percent of their districts participating in direct certification; these States directly certify between 80 and 95 percent of FS/TANF children approved for free meals.

For States using data matching, widespread use of direct certification contributes to high rates of effectiveness. However, States can fine-tune their direct certification systems and make them more effective by making changes such as:

- the timing of FS/TANF data used for direct certification (when are the data made available, and for what time period?);
- the source and timing of student records used for matching;
- the identifiers available for matching; and
- the ease with which school districts are able to process data received from the State.

The guide discusses these ways of fine-tuning direct certification after explaining the two basic choices:

- data matching versus the letter method for direct certification, and
- State-level versus district level matching.

As explained in the following sections, there is no "one size fits all" model for direct certification. Instead, each State needs to weigh the costs and benefits of the alternatives in light of its own situation.

Exhibit 6 - Top 15 States For Direct Certification Effectiveness, Color Coded by Method of Direct Certification

		Rates of Effectiveness	
State	Method	Percent of eligible students directly certified	Percent of public school districts using direct certification
1. Arizona	State-level	95	84
2. Nevada	District-level	86	87
3. Kansas	Mixed methods	81	91
4. Virginia	District-level	80	96
5. District of Columbia[a]	District-level	79	2
6. Tennessee	District-level	79	96
7. Pennsylvania	District-level	78	63
8. West Virginia	State-level	77	98
9. South Carolina	State-level	75	100
10. Maryland	District-level	74	100
11. Maine	Mixed methods	74	84
12. Delaware	State-level	73	82
13. Arkansas	State-level	72	98
14. Vermont	Letter	72	92
15. Wyoming	Letter	70	98

[a] Direct certification is used by the DC Public Schools, but not by charter schools in the district.

2.2. What Are the Trade-Offs Between Data Matching and the Letter Method?

The most basic choice for direct certification is whether to use data matching, the letter method, or a combination of the two. The letter method operates very effectively in some States. Where data matching is chosen, supplementing it with letters to unmatched FS/TANF children is a way to reach more eligible children.

A few States implemented data matching as their first and only approach to NSLP direct certification, but most States originally implemented the letter method and later adopted data matching when it became feasible. For States currently considering this switch, or an expansion of data matching to include more school districts, it is important to understand the advantages and disadvantages of data matching versus the letter method.

Pros and Cons of the Letter Method

The letter method has three advantages over data matching for NSLP direct certification:

- It is easy to implement;
- It requires few technology resources; and
- It ensures identification of all children enrolled in FS and TANF.

The letter method may require only a mail-merge program and the costs of printing and mailing letters. In theory, it enables every child enrolled in FS/TANF to be directly certified, because letters are sent to all FS/TANF children, and districts cannot "opt out." Some States achieve high rates of direct certification using the letter method: in Vermont and Wyoming, over 70 percent of categorically approved children are directly certified; in an additional four letter method States, over 60 percent of these children are directly certified. (The rates of direct certification in the remaining four letter method States are below 50 percent.)

In practice, the letter method fails to directly certify many eligible children, because the household doesn't receive the letter, receives the letter after completing an NSLP application, or simply fails to return the letter to the school. In *Illinois*, a study found that 4 percent of letters did not reach households because of invalid addresses, and fewer than half of eligible children were directly certified.[6] *Massachusetts* used the letter method for nearly 20 years, but the State adopted data matching after finding that only about 50 percent of letters were returned by households to schools. The letter method was far more effective in some school districts than in others: one district reported only 10 percent of letters returned, while districts conducting outreach achieved high rates of return.

Three types of improvements can make the letter method more effective:

- Improve the timing of when letters are mailed. If mailed too early, letters may be lost before the start of school; if too late, households may complete NSLP applications before receiving a letter.
- Communicate to households the importance of updating address information with the Food Stamp Agency so that letters are delivered to the correct address.
- Conduct outreach to encourage households to return letters.

Data Matching Compared With the Letter Method

In contrast to the letter method, data matching may require significant startup costs for States, school districts, or both, but may have ongoing cost advantages:

- For State agencies, the ongoing cost for processing and transferring data files is significantly less than the cost for printing and mailing letters.
- For school districts, the cost tradeoff depends on the number of categorically eligible students. The greater the number of direct certifications, the greater the cost advantage for data processing versus paper processing.

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[6] Bunch, Cowles, and Schuldt (2004).

Arizona reported that its investment in data matching would pay for itself at the State level after three years by eliminating the costs of mailing letters. Other States, however, reported that the cost of mailing letters is shifted from the State to school districts, because districts send notification letters to FS/TANF households with students directly certified by the computer match.

Several school districts reported significant labor savings after the letter method was replaced with data matching, although most were unable to attach a dollar figure to the advantage. With data matching, a district may spend anywhere from a few hours to several days identifying students for direct certification. Without data matching, a district with hundreds of categorically eligible students would spend many days receiving letters or applications, and entering eligibility information into its information system. The paper process requires more staff time over a longer calendar period during the critical months around the start of school.

With data matching, districts directly certify a larger percentage of eligible children than with the letter method, because data matching does not depend on household response. This advantage is strongest when the requirements for effective matching are met:

- Districts must have the capability and the resources to participate. The scope of this requirement depends on the design of the system and the role that districts play.
- The available data must allow the matching of a high percentage of eligible children.
- Match results must be available when districts need them–soon enough to complete direct certification before the start of school.

How To Weigh the Options?

When considering whether to adopt or expand data matching, States using the letter method should consider the following:

- How effective is the letter method? What percentage of FS/TANF children are directly certified in districts using this method?
- Can the State make the letter method more effective by improving the timing of the mailing, getting more accurate address information, or improving communications with FS/TANF households?
- Are the data, skills, and funds available to implement a data matching system that would be more cost-effective?

If a State chooses to keep the letter method and improve it, the State can monitor the effectiveness over time by analyzing data from verification summary reports (VSRs), focusing on the number of directly certified students as a percentage of all FS/TANF children approved for free meals. For States seeking to determine the type of data matching that would be most cost-effective, the key considerations are discussed in the following sections.

2.3. What Are the Trade-Offs Between State- and District-Level Matching?

The primary advantage of data matching is the efficiency of data exchange relative to paper processing. This advantage can be achieved with State- or district-level matching. State-level matching has become more prevalent; however, it is not currently feasible in all States, and it may not be the most effective method in some States. The advantages and disadvantages of each type of matching are summarized in Exhibit 7 and discussed in this section. First, we describe State- and district-level matching with examples from several States. Then we summarize the trade-offs.

How Does State-Level Matching Work?

In State-level data matching for direct certification, a State Agency matches FS/TANF records with student records. The State then "pushes" match results out to districts. In SY2004–05, 18 States used State-level matching, and their systems are summarized in Exhibit 8. Use of direct certification was not mandated in SY2004-05. Nonetheless, six States reported that State-level match results were used by all public school districts; in other States the use of State-level match results was less prevalent.[7]

Interviews in Arizona, Massachusetts, Texas, and Wisconsin provided detailed information about different ways of implementing State-level matching. The effectiveness of direct certification varies among these States as a result of two factors: how many districts participate, and how well the data matching works. These experiences are described in chronological order according to dates of implementation.

Texas implemented State-level matching for direct certification in SY1992–93. In June of each year, the State Education Agency matches student records from the statewide student information system, current as of the prior October, with the May caseload of FS/TANF children. A first round of matching is based on exact match of SSN, confirmed by a match on name, date of birth, and gender (two of three must match exactly). A second round of matching is based on name, date of birth, and gender. The second round provides an opportunity to match student records that are missing SSN or have an incorrect SSN. The two rounds of matching are combined and duplicate matches are resolved. The State reported that just under 60 percent of FS/TANF children are matched to student records. Match results are distributed to school

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Exhibit 7 – Advantages and Disadvantages of State- Versus District-Level Matching

State-Level Matching	District-Level Matching
Advantages: • Centralized process; same match algorithm statewide • Match is based on statewide data	*Advantages:* • District controls the process • Match is based on current student enrollment data from district information system
Disadvantages: • Accurate distribution of match results depends on timeliness of student records • Generally there is no "fallback" mechanism to directly certify unmatched FS/TANF children • Most States do not have private school students in the statewide student information system	*Disadvantages:* • Each district must develop a data matching system • Match procedures vary across districts • FS/TANF data are distributed based on geographic information that may be outdated
Main barrier to direct certification: • FS/TANF records may not be matched due to simplistic matching algorithms	*Main barrier to direct certification:* • Districts need IT capabilities

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7 The following States reported that all public school districts used the State-level system for direct certification: Arizona, Arkansas, Georgia, Oregon, South Carolina, and West Virginia. In these States, 93 percent of districts had directly certified students, compared with 59 percent of districts where State-level matching was not used statewide (Cole and Logan, 2006, Table C-3).

Exhibit 8 - State-Level Matching Systems in 18 States, SY2004–05

Who does the match?
- State Education Agency (SEA) (16 States)
- State Food Stamp Agency (2 States)

Source of student records
- Student enrollment from statewide student information system (SSIS), snapshot from prior school year (11 States)
- Real-time student records from State Student ID system (1 State)
- District student records uploaded for direct certification (5 States)
- School districts choose the source—SSIS or district upload (1 State)

Timing of FS/TANF data
- Real-time data/monthly match (3 States)
- May (3 States)
- June (4 States)
- July (6 States)

Key identifiers for primary match
- SSN only (6 States)
- SSN and other identifiers (6 States)
- Name and DOB only (4 States)
- Name, DOB, and other identifiers (2 States)

Wisconsin also implemented State-level matching for direct certification in SY1992–93. Wisconsin is one of two States where the State FS Agency manages the direct certification matching process using student records collected directly from school districts for this purpose. Two significant improvements were made in 2005: fully automating the process at the State level, and changing match criteria to increase the percentage of children directly certified. Automation requires all participating school districts to use electronic file transfer protocol (FTP) to submit student records for matching.[8] (Earlier, school districts used computer tape or disk to transfer data to the State FS Agency.) The file transfer initiates the matching process, using the most current FS/TANF data. Match results are available to school districts, for download via FTP, within 24 hours. School districts can request match results at any time, and they can also use the system for direct verification. The effectiveness of direct certification in Wisconsin was about average for State-level matching where district participation was optional: 51 percent of all FS/TANF children approved for free meals were directly certified in SY2004–2005. School district participation in direct certification was relatively low (36 percent), but the use of current student records provided high match rates for participating districts.

In SY2002–03, *Arizona* implemented an online system providing school districts with real-time access to FS/TANF data. School districts log in to the direct certification system, choose the source of student records for the match, and initiate the match. Districts may choose to receive match results based on student records from the statewide student information system from the prior school year, or an upload of current district records. The computer match is based on student name, date of birth, and either student SSN or mother's first name. The strengths of this system are: real-time FS/TANF data, a match based on SSN, and school district control over timing of the match and source of student records. These strengths resulted in direct certification of over 95 percent of all FS/TANF children approved for free meals in SY2004–05.

Massachusetts replaced the letter method of direct certification with a State-level match in SY2004–05 after piloting data matching in the Boston and Springfield school districts.[9] The State Education Agency (SEA) matches spring student enrollment records from the State's student information management system with the July caseload of FS/TANF children. The match is done in three rounds: first, based on exact

districts via the Child Nutrition Agency's web-based information system. In SY2004–05, 67 percent of public school districts had directly certified students, and about 40 percent of categorically approved students statewide were directly certified. The principal challenges for direct certification in Texas are improving the match rate and increasing school district participation so that a greater percentage of children matched by the State become directly certified.

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[8] FTP is a commonly used method for exchanging files over networks. To use FTP, school districts installed client software and completed an initial setup process.

[9] The direct certification pilot in Boston and Springfield (SY2002–03) was found to dramatically increase the number of children directly certified for free meals (by 193 percent in Boston and 60 percent in Springfield), and to increase overall enrollment in school meal programs (by 5.7 percent in Boston and 6.8 percent in Springfield) (Bunch, Cowles, and Schuldt, 2004).

match of full student name and date of birth, then by name and date of birth with month and day switched, and finally by a match of the first initial of the first name, full last name, date of birth, and city of residence. The three rounds of matching are sequential, with only unmatched records proceeding to the next round. Approximately 80 percent of FS/TANF children age 0–19 were matched to student enrollment records. Match results are provided to all public school districts via the SEA's secure website. The primary challenge during the first two years of operation was getting match results to school districts before the start of the school year. This delay probably discouraged some school districts from using match results. In SY2005–06, two-thirds of public school districts had directly certified students, and 69 percent of FS/TANF children approved for free meals were directly certified.

How Does District-Level Matching Work?

In States using district-level matching, school districts receive FS/TANF data (typically for children age 4 to 19) for computer or manual matching to their own student records. Each school district receives FS/TANF data for its geographic area (based on county or ZIP code on the FS/TANF record). In SY2004–05, 22 States used district-level matching. Examples from three States illustrate highly effective direct certification systems of this type.

Nevada achieved the highest rate of direct certification among States using district-level matching in SY2004–05: 86 percent of eligible students were directly certified. This success is likely due to the fact that Nevada has only 17 public school districts, and all are contiguous with county boundaries. (When districts are contiguous with counties it is easier to accurately distribute FS/TANF data.) All public districts in Nevada participate in direct certification. The largest two districts use computerized data matching. Other districts receive data files and hardcopy printouts, and use manual methods, due to the cost of computer software and/or a lack of perceived need for computerized data matching. District-level matching in Nevada is made easier by the fact that all school districts request student SSNs at enrollment (although they cannot require SSN disclosure), and SSNs are used for direct certification matching.

Tennessee is another State where district-level matching works well: 79 percent of categorically approved students were directly certified in SY2004–05. The State has relatively few districts, and most public school districts are county districts. All public school districts use computerized data matching for direct certification. School districts obtain FS/TANF data for their county through the SEA's secure website. Where county and city districts reside in the same county, both districts process the same countywide FS/TANF data. The State specifies match rules for districts to use in matching FS/TANF data to student enrollment data: the primary match is by SSN, and a secondary match is by student name, date of birth, and mother's name. Tennessee has a statewide student information system that might be used for State-level matching, but the State reported that local control of the matching process is preferred and works well.

Kansas directly certified 80 percent of eligible students in SY2004–05 using a combination of district-level matching and the letter method. District-level matching has been an option for Kansas school districts for over 10 years. Six school districts receive data files directly from the State Food Stamp Agency for district-level data matching, and all other school districts receive hard-copy printouts listing FS/TANF children in their counties. In addition, the State FS Agency mails letters to all FS/TANF households with children, statewide; these letters may be provided to districts in lieu of an NSLP application. School district boundaries are not contiguous with county boundaries, so many school districts choosing district-level matching must process data for multiple counties. The six school districts using data matching account for 27 percent of free-approved students; these districts directly certified 83 percent of their categorically approved students. The districts using data matching were characterized by the State as large districts with sophisticated information technology and enough categorically eligible children to justify the investment in data matching. They match data to student records based on student name and one other identifier from among date of birth, parent name, and address. (Some but not all school districts in Kansas collect student SSNs, and those that do may use this information for direct certification matching.) Aside from the six school districts using data matching, it appears that other districts use the printouts of FS/TANF data in different ways: for direct certification via manual lookups, for look-ups only when enrolling new students, or to keep as a backup for the letter method.

Tradeoffs of State- Versus District-Level Matching

State- and district-level matching are both effective methods of direct certification. Within a given State, however, the most effective and efficient method depends on answers to several questions:

Is State-Level Matching Feasible?
State-level matching requires a State-level database of students. Thus, a State must either:

• have a State student information system that can be used for direct certification, or

• collect data from school districts for this purpose (as in Wisconsin).

In addition, State-level matching requires people and technology to perform the match and distribute results. If these resources are not available in the State agency (in-house or by contract), then district-level matching and the letter method are the only options.

Is District-Level Matching Feasible?
District-level matching requires the State to parse FS/TANF data into district files. The feasibility of doing this depends on two considerations:

• **Are school districts contiguous with county borders so that FS/TANF data are easily distributed to the correct school districts?** If districts are not contiguous with counties, then ZIP codes can be used to distribute FS/TANF data, but a database mapping ZIP codes to school districts is needed. Also, county information in FS/TANF databases is likely to be more accurate than ZIP codes.

• **Does the NSLP include numerous public charter schools, private schools, and other education agencies that do not have a specified geographic service area?** It is often infeasible to select the appropriate FS/TANF records to send to such institutions. In order to meet the mandate for direct certification in all schools, a solution for these schools is needed.

The other key feasibility issue for district-level matching is: **do school districts have the capability, i.e., the people and technology that are needed?** This is most likely to be a concern for small districts, and it is increasingly important as the mandate for direct certification is implemented.

Which Method Uses More Current Student Data?
District-level matching uses current student records maintained by school districts. If the statewide student database is not frequently updated, State-level matching will exclude new students, and match results for transfer students will be sent to the wrong district. A State-level match using current student records collected from districts, as in Arizona and Wisconsin, will be comparable to district-level matching on this dimension.

Which Method Offers the Best Choices Among Student Identifiers?
Data matching is most effective when a single common identifier, such as SSN, is present in the data files being matched. In the absence of a single unique identifier, having more student identifiers may be helpful for two reasons. First, matches by name and date of birth will yield duplicate matches, and additional identifiers are helpful in confirming a match and resolving duplicates. Second, having more identifiers in the matched data gives school districts more options for bringing match results into their databases of free/reduced-price students.

When choosing between State-level and district-level student data for matching, these specific questions are important:

• **Are student SSNs widely available in the State-level data, district-level data, both, or neither?** The SSN is the only unique identifier that can be used to match FS/TANF and student records. Having SSNs in student data can make data matching both easier and more effective.

• **What other identifiers from district records are included in State student records and useful for matching?** If the SSN is not present, student name (first and last) and date of birth (DOB) are essential, and address or parent information can help to confirm matches.

• **Do State records include district student ID numbers?** This identifier can be especially helpful for importing match results into district information systems.

• **Do districts maintain State student identifiers in their student records?** The State student identifier can also be used to import match results into district information systems, if districts have this information and are able to use it for this purpose.

• **What quality controls assure that identifiers in State student records are as accurate as those in the source records at the district level?**

Based on these questions, a State can determine whether the identifiers in State student records are sufficient for effective State-level matching, or whether district-level data offer significantly better odds of accurate matches. As Wisconsin has demonstrated, districts can upload data tailored to State-level matching for direct certification, but the extra step to do this may be a barrier to district participation.

Which Method Yields the Better Match Rate?
In cases where State-level student records are as good as district records, State-level matching will yield a better match rate than district-level matching. This is because State-level matching involves a single match with the entire statewide files of student records and FS/TANF records; whereas district-level matching requires a parsing of FS/TANF data by geographic area, inevitably sending some FS/TANF data to the "wrong" district if students have transferred and have out-of-date FS/TANF address information. In addition, State-level matching is more effective because all possible matches for a given FS/TANF child can be identified, and the best match can be selected. With district-level matching, students with common names may be more likely to be mismatched because the "best match" is not in the district.

When district-level data are significantly more current or accurate, or have more key identifiers, then district-level matching will yield better match rates. States can offset the limitations of their State-level student data, however, if they supplement State-level matches with other mechanisms for direct certification. The next section of the guide describes these supplementary options.

Which Method Will More School Districts Use?
In general, more school districts use direct certification when the State performs the match. But several States have very high percentages of districts using district-level matching for direct certification. These States may have systems that are easier to use, or they may be more active in promoting direct certification.

Which Method is More Cost-Effective?
Numerous factors shape the potential effectiveness of State- and district-level matching for direct certification in a State. The final consideration is cost. The questions to consider in this regard are:

• **What existing systems can be used as a platform for data matching and distribution, and how much system modification is needed**? Key considerations are: capabilities of statewide student information systems, secure websites for exchanging data with school districts, school district data systems for student records and food service, and existing data matching processes.

• **Given the available data and platforms, which method of matching requires fewer resources to operate, taking into account State and district-level costs?** With State-level matching, one process identifies eligible students throughout the State. But this advantage hinges on the ability of districts to easily import State match results into their data systems. If a unique identifier is not available for the import, then districts must do data matching and the State-level match may not save them much effort

2.4. How Can States Fine-Tune Data Matching for Direct Certification?

This section discusses procedures that many States have used to improve rates of direct certification. One approach is increasing the accuracy and frequency of matching. Another approach is making the process easier for school districts.

How Can States Make Matches More Accurate?

The most common problem with direct certification is that all eligible children will not be identified. This typically happens because student records used for the match may not reflect current enrollment (this is a problem for State-level matching), or student records may lack adequate identifiers (such as a unique identifier).

Updating Student Records
Most State-level matching for direct certification is based on student records representing a snapshot from the prior school year. (See Exhibit 8.) These data do not include newly enrolled students: students from out of State, pre-school and kindergarten students who just entered school, and students transferring into the public school system from private schools. These data also do not reflect student transfers occurring after the "snapshot" was taken, so match results for transfer students may be sent to the wrong district.

The best solution to the problem of outdated student records is to use current records. *Arizona* gives school districts the option of uploading their current enrollment data for the direct certification match, in lieu of accepting matches based on a snapshot from the prior school year. *Oregon* uses real-time student records from its State student identifier system. This is the system that assigns State student IDs to newly enrolled students on an ongoing basis. And *Wisconsin* collects current student records directly from school districts for the direct certification match.

Addressing the Limitations of Identifiers
There are two common limitations of data used for direct certification matching. One is the lack of a unique identifier in the files being matched because many States do not have student SSNs in the statewide student information system. The second is that some identifiers used for matching are subject to variation—"name," for example, may appear differently in different files due to nicknames and other spelling variations. Some States have adopted strategies to overcome these limitations.

One way to improve State match rates is to **improve the matching algorithm**. *Indiana* improved its matching algorithm using the SOUNDEX phonetic algorithm for matching first names. SOUNDEX assigns codes to names with the same pronunciation so that they can be matched even if there are minor variations in spelling. The Indiana State-level match is based on student first and last names, date of birth, and county of residence. A first round of matching requires exact match on all identifiers, and a second round uses the SOUNDEX algorithm to match first names.

The other solution is to **supplement the State-level match** so that unmatched FS/TANF children can be directly certified:

- Massachusetts sends letters to FS/TANF children who are not matched to student records. These letters may be used in lieu of an NSLP application.
- Georgia and Oregon provide school districts with data files of unmatched FS/TANF children, which school districts can match by computer or manual methods.
- Oregon identifies unmatched FS/TANF children who are siblings of matched FS/TANF children, and provides these data to school districts.
- Arizona, Georgia, Indiana, and Washington provide school districts with access to online queries of FS/TANF data, to look up individual students who may be eligible for direct certification (e.g., based on sibling direct certification status, or status from last year).

Often States use multiple strategies to maximize direct certification. For example, *Oregon* uses the State student identifier database for direct certification, thereby minimizing the lag between enrollment updates at the district level and the availability of these data for direct certification matching. A weakness of the Oregon system is that the match relies on SSNs, while only about 50 percent of student records in the State student information system contain an SSN. Therefore the State supplements its primary match by providing two types of unmatched FS/TANF data to districts. First, all unmatched FS/TANF children with matched siblings are identified, and these unmatched records are added to the "matched" file.[10] The State also provides separate files of the remaining unmatched FS/TANF children (parsed by county) so that districts may attempt to directly certify these children.

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[10] The matched file contains records of FS/TANF children who were matched to student records, and thus a student ID is provided in the file sent to districts. The matched file also contains unmatched siblings age 4 to 19; these records do not contain a student ID and districts must process these records differently.

Georgia also uses multiple strategies to maximize rates of direct certification. The State provides school districts with State-level match results, data on unmatched FS/TANF children in their county, and access to online queries of FS/TANF data. The State-level match is done once each year in early summer, using student enrollment data housed at the State level and current as of the prior October, with the match based on students' SSNs. The State cannot match students without an SSN in the State database (about 10 percent of students), and students who entered school in the State after the prior October. School districts receive the State match results and two databases of unmatched FS/TANF children in their county: children of kindergarten and pre-kindergarten age, and children age 6–19. School districts can also supplement the match results by looking up new students and transfer students via an online query of real-time FS/TANF data.

Only 63 percent of eligible children in Georgia are directly certified. This is probably due to use of student records from the prior October and the extra effort required to use the unmatched data. (One large school district reported that about 25 percent of students on the matched list were no longer enrolled in its district.) Georgia State officials were unable to say how many school districts use the files of unmatched FS/TANF children and how many use the online query system. School districts reported that the online system is used selectively: when an application has a Medicaid number or EBT card number instead of an FS/TANF case number; to check whether siblings who were not matched are actually on FS or TANF; to check the status of children who were categorically eligible before and have not submitted an application; and to check the categorical eligibility of children who did not submit an NSLP application and failed to pay for meals.

How Can States Make Matches More Frequent?

In most States, direct certification matching takes place once per year before the start of the school year, using FS/TANF data from June or July. In SY2004–2005, four States provided school districts the option of obtaining monthly State-level match results based on updated FS/TANF data: *Arizona*, *Oregon*, *Wisconsin*, and *Washington*. In SY2005–06, *Mississippi* and *Tennessee* began providing FS/TANF data on a monthly basis for district-level matching.

Increasing the frequency of direct certification serves three goals:

1. providing direct certification for late student enrollees;
2. identifying children recently enrolled in FS/TANF and newly eligible for direct certification; and
3. providing updated data for verification.

All three goals are achieved if monthly matching uses both updated student records and updated FS/TANF data. This is the case with monthly district-level matching. In addition, the States currently providing monthly State-level matches each have a mechanism for obtaining updated student records. *Wisconsin's* direct certification match uses student records uploaded by districts; in *Arizona*, school districts can choose to upload district records for the match as an alternative to using State data; and *Oregon* and *Washington* use up-to-date student records from the State student identifier system.

Monthly matches are useful to school districts in the months preceding NSLP verification activities because flagging students for direct certification reduces the size of the verification sample (even if these students were already approved by application). However, school districts need a way to differentiate new matches from previous ones, otherwise the level of effort required to screen monthly matches may not be worth the benefit of a few additional direct certifications. School districts in *Washington* can choose to receive information about students who were matched between particular dates; thus students directly certified at the start of the school year will not appear on subsequent match lists.

How Can States Make the Process Easier for School Districts?

School districts are on the front line for direct certification-obtaining direct certification data from the State, processing the data, notifying households, and responding to household inquiries. State agencies have demonstrated ways to make these processes easier for school districts.

In most States, **data transfer procedures** for direct certification have evolved over time. Systems originally designed for disk/tape transfers or electronic mail have been replaced with electronic transfers via FTP or web upload/download. These electronic transfers save time and money for State and local agencies, and enable implementation of fully automated systems. *Arizona* and *Wisconsin* operate automated systems where school districts login to a secure site, initiate a direct certification match, and receive results within 24 hours. Automated systems allow school districts to schedule a direct certification match when and as often as they like.

Data processing is an area where many school districts report difficulties with direct certification. Ideally, State-level computer match results should be easily imported into a school district's food service database to update NSLP eligibility status. A simple import requires a unique identifier such as student ID. Problems arise when the file of State-level match results contains a State student ID, but the food service information system uses the district student ID. School districts solve this problem in one of three ways:

- Use a two-step process, first matching the State file to the district information system to obtain "district student ID," and then importing into the school food service system[11];

- Match the State file to the food service database using identifiers such as SSN, name, and date of birth[12]; or

- Print the State file and manually enter eligibility status into the food service database. (School districts with few directly certified students find this approach effective.)

Wisconsin provides a file format that includes a "filler" field so that school districts can include the district student ID, or other identifier, when uploading student records for the State match. This identifier is then used for processing match results.

Another problem reported by school districts is **the "sibling problem"**—when some but not all children in a household are directly certified. This is the source of most household inquiries regarding direct certification. When a household must complete a school meals application for children not directly certified, direct certification does not reduce paper-work. There are two reasons why some but not all children in a household are directly certified: there may be true differences in program eligibility, or the matching process may fail to detect a match (for example, due to differences in the way the name is spelled in the files being matched).

States have developed two methods of reducing the sibling problem. One method is to provide an online search tool that allows school districts to enter an FS/TANF case number and view a list of all children in the FS/TANF household. This allows the school district to check the status of siblings when some but not all are directly certified, and to respond to household inquiries. This method is available in *Arizona*, *Georgia*, *Indiana*, and *Washington*. The second solution, adopted by *Oregon* and discussed earlier, is to provide school districts with a list of "unmatched" FS/TANF children who are "siblings" of FS/TANF children matched to student records (FS/TANF "siblings" are identified by the FS/TANF case number). School districts directly certify unmatched siblings after verifying that they are enrolled in the district.

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[11] This approach requires the cooperation of information technology (IT) personnel outside the food service department.

[12] This match is typically performed outside the free/reduced-price eligibility system and often by the system vendor. This method introduces the possibility that all children matched by the State are not directly certified. This processing of State-level match results is essentially equivalent to district-level matching with FS/TANF data.

2.5. How Can School Districts Fine-Tune Data Matching for Direct Certification?

School districts reported several procedures for improving direct certification processing. These include: (a) checking for duplicate applications, (b) pre-processing State match results (discussed above), and (c) saving FS/TANF case numbers for next year's match.

Many school districts pre-check applications against a list of directly certified students so as to avoid unnecessary application processing.[13] "Duplicate" applications occur if households receive applications before they receive direct certification notices, or if they receive both and complete the application without understanding that it is not necessary. Most school districts send applications to all families, often as part of a packet of materials, and do not selectively withhold applications from households with directly certified students. If the district mails personalized applications to families, and if direct certification is timely, the district can remove from the mailing applications for households with directly certified children.

Pre-processing State-level match results (discussed previously) is necessary when a school district cannot import State-level direct certification match results into the food service infor-mation system based on a single unique identifier. This occurs most often when State match results contain the State student ID, but that ID is not used in food service operations.

The best solution, discussed previously, is to pre-process the data to add the district student ID to State match results. This solution often requires the cooperation of district information technology staff who are not directly involved in school lunch program operations.

Finally, in States using district-level matching, one way for school districts to reduce the work associated with data matching is to retain students' FS/TANF IDs in the district information system after a match is made so that matches requiring manual review do not require review in subsequent years. (The Boston Public Schools uses this approach.) For example, consider a district-level match of student records with FS/TANF data by name and date of birth. Some records will match exactly, some FS/TANF records may match to multiple student records (duplicates), and some records may be close matches (e.g., part of the name may match, but the full name does not match exactly). Districts must choose a level of effort for resolving duplicates and close matches. After resolving these matches in one year, they can save a database of student IDs and corresponding FS/TANF client IDs. The next year, a first round of matching student records to FS/TANF records could be based on the saved FS/TANF IDs. Thus, districts avoid resolving the same duplicates and close matches year after year.

2.6. Summary—Approaches to Data Matching for Direct Certification

This section provided many examples of different approaches to data matching for direct certification. Both State- and district-level matching achieve high rates of direct certification in some States. Where rates of direct certification show room for improvement, the following steps could be considered:

- Use the most current source of student records.
- Increase the frequency of direct certification by incorporating monthly updates of FS/TANF data into the direct certification process.

- Improve matching algorithms through use of SOUNDEX or other phonetic algorithms.
- Simplify the process for school districts to ensure that State-level match results are easily processed.
- Ensure that all FS/TANF children have an opportunity to be directly certified by providing multiple methods for school districts to access and use electronic data, or by using mixed methods such as data matching and letters.

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[13] When applications are scanned, this pre-check is unnecessary because the scanning program automatically detects if a child has been certified and identifies the application as a duplicate.

3.
Direct
Verification

3.1. What Are the Key Facts About Direct Verification?

The Basics—Concepts and Methods

Direct verification reduces the burden of verifying NSLP applications, both for households and school districts. Current regulations require school districts to verify a sample of approved applications on file as of October 1, and to complete verification by November 15. Most school districts must verify 3 percent of applications, selected first from "error-prone" applications with household income within $100 of the monthly income limit or $1200 of the annual income limit. (See Exhibit 9 for verification sample requirements.)

Exhibit 9 – NSLP Verification Requirements

Standard verification sample size:
3 percent of all approved applications as of October 1, selected from error-prone applications, up to a maximum of 3,000 applications.

School districts qualify for an alternative sample size if:
• The nonresponse rate for the preceding school year is less than 20 percent; or
• The school district has more than 20,000 children approved by application as of October 1, and the nonresponse rate for the preceding school year is at least 10 percent below the nonresponse rate for the second preceding school year.

Alternative sample size:
• *3,000/3 percent option*: 3 percent of approved applications selected at random from all approved applications as of October 1, up to a maximum of 3,000 applications; or
• *1,000/1 percent plus option*: 1 percent of all approved applications as of October 1, selected from error-prone applications, up to a maximum of 1,000 applications; plus 1/2 of 1 percent of applications approved based on an FS, TANF, or FDPIR case number as of October 1, up to a maximum of 500.

Direct verification uses existing records from other means-tested programs to verify selected applications without contacting households. Prior to *Reauthorization*, school districts could use FS/TANF records to verify FS/TANF case numbers provided on NSLP applications. At that time, such "categorical" applications were about 20 percent of verification samples.[14] Under the original and most common approach, school districts directly verified categorical applications by contacting local FS/TANF offices.

Reauthorization made two changes: FS/TANF records may now be used to verify applications approved on the basis of income ("income applications"), and additional means-tested programs may be used to verify NSLP eligibility. In particular, direct verification may now use records from the State Medicaid Program under Title XIX of the Social Security Act, and the State Children's Health Insurance Program (SCHIP). FNS guidance on implementation of direct verification is shown in Exhibit 10.

There are two basic approaches for direct verification:
• **Local office look-ups**. The school district sends a list of student names and FS/TANF case numbers from applications selected for verification to the local FS/TANF office via phone, fax, or e-mail. The local FS/TANF office staff looks up the case numbers and returns confirmation of program eligibility to the school district. Direct verification with Medicaid/SCHIP data might use a similar approach with districts sending student names (and other identifying information) to local offices.
• **Data matching or queries**. School districts obtain eligibility information through data matches or queries of electronic records from FS, TANF, Medicaid, or SCHIP.

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[14] Prior to Reauthorization, school districts could verify a random sample of 3 percent of all applications, or a focused sample of 1 percent of error-prone applications (with monthly income within $100 of the income eligibility limit), plus 0.5 percent of categorical applications.

Methods of direct verification often build on systems of direct certification. But direct verification differs from direct certification in several ways:
- The scale is much smaller (the NSLP verification sample rather than all students), so a high degree of automation is less critical.

- The district must complete direct verification within a shorter timeframe-within days after October 1 so that households not directly verified can be contacted for verification information on a timely basis.

- Medicaid and SCHIP data may be used, in addition to FS/TANF data.

- If State Medicaid/SCHIP income eligibility limits exceed 133 percent of the poverty level, Medicaid household size and income data are needed to verify NSLP eligibility.[15]

- Eligibility information for one child in the household directly verifies all children in the household. In contrast, direct certification requires evidence of FS/TANF eligibility for each child.

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[15] See FNS Policy Memo SP-32-2006, "Clarification of Direct Verification."

What's Happening? Trends in Direct Verification

In SY2004–05, most States reported that at least some school districts directly verified categorically eligible applications, but use of computerized data matching for direct verification was rare. (See Exhibit 11.)

• Out of 49 States responding, 43 reported that some LEAs directly verified categorical applications by contacting a local FS/TANF office, and this was the most common method of verifying categorical applications in 18 States.

• Only four States had an automated system for school districts to verify FS/TANF case numbers: Arizona, Georgia, Utah, and Wisconsin. Two additional States-Louisiana and West Virginia-provided data to school districts for district-level matching for direct verification.

Among the six States with systems for direct verification in SY2004–05, technology varied but the goal was the same – to provide school districts with the capability to quickly confirm FS/TANF case numbers reported on NSLP applications. School districts with direct look-up capability can complete direct verification without waiting for other agencies to provide results, and therefore have more time to contact households not verified by the look-up process.

In SY2005–06, 11 States reported plans to investigate options for direct verification with electronic records. Five States volunteered to participate in a USDA evaluation of direct verification using Medicaid/SCHIP data for SY2006–07: Indiana, Oregon, South Carolina, Tennessee, and Washington.

While experience with automated direct verification is limited, there are important lessons from the three early adopters (Arizona, Georgia, and Wisconsin) and the States participating in the direct verification evaluation. It is also possible to apply the lessons learned in data matching for direct certification, taking into account the different demands of verification.

This guide discusses the choices in creating or expanding a system of direct verification with electronic records. NSLP managers need to consider two key aspects of the process:
• What are the strengths and limitations of the available FS, TANF, Medicaid and SCHIP data?

• How can school districts use electronic records from these programs for direct verification?

Exhibit 11 - Methods of NSLP Verification of Categorical Applications
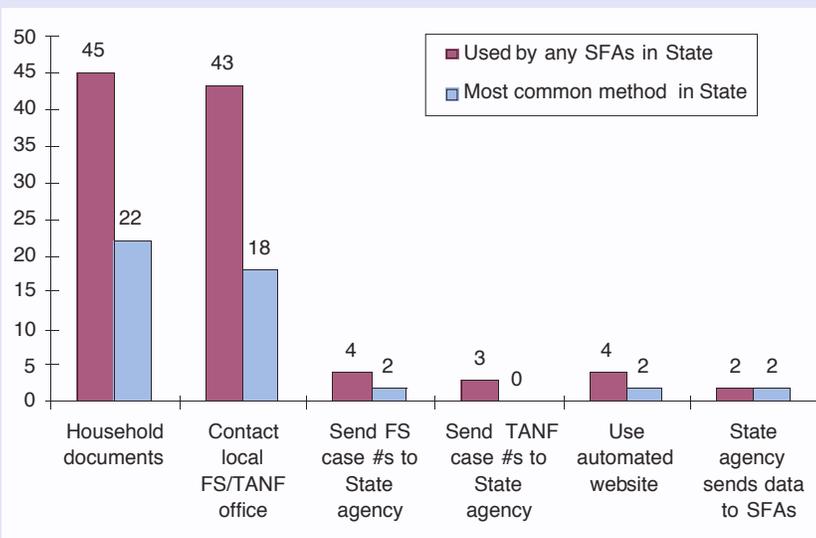
3.2. What Are the Strengths and Limitations of Available Data for Direct Verification?

FS and TANF Data: Easy To Use But With Limited Potential for Direct Verification

FS/TANF data have always been a source of information for direct verification of categorical applications. Since *Reauthorization*, school districts may also use FS/TANF data to verify income applications. All States have agreements that allow school districts access to these data. The likelihood of verifying NSLP applications with FS/TANF data is, however, limited. Verification samples contain mostly error-prone income applications; thus almost half (48 percent) of public districts had no categorical applications in their verification samples in SY2005–06. Some FS/TANF children may submit NSLP applications on the basis of income, but this may not occur often where direct certification is operating effectively.

Medicaid and SCHIP Data: Greater Potential and Challenges for Direct Verification

Medicaid and SCHIP data could potentially verify a significant number of NSLP income applications because, in most States, the income eligibility limit for Medicaid/SCHIP exceeds the limit for the Food Stamp Program. Currently, NSLP verification samples contain error-prone applications, defined as applications with monthly income within $100 of the eligibility limit. Thus, verification samples consist primarily of applications with household income at or near either 130 percent of poverty or 185 percent of poverty. States with the greatest potential to directly verify NSLP income applications are States with Medicaid/SCHIP income eligibility limits at or above 185 percent of poverty.

Income eligibility limits for Medicaid and SCHIP vary by State:

• For Title XIX Medicaid, the income eligibility limit for school-aged children is at or below 133 percent of the Federal poverty level in 26 States, above 133 and at or below 185 percent of the poverty level in 12 States, and above 185 percent of the poverty level in 13 States.

• The SCHIP income eligibility limit is above 133 and at or below 185 percent of the poverty level in 4 States, and above 185 percent of the poverty level in 32 States. (Remaining States do not have separate SCHIP programs.)

• Overall, 42 States have an income eligibility limit for Medicaid/SCHIP that exceeds 185 percent of the poverty level, the limit for reduced-price meals (Exhibit 12).

Exhibit 12 - Maximum Medicaid/SCHIP Income Eligibility Limit for School-Age Children[a]

a Tennessee enrollment under the Medicaid waiver (130% FPL) is frozen; the eligibility limit for new applicants is 100% FPL. Wisconsin BadgerCare (Medicaid expansion) enrolls children in families with income up to 185% FPL, but enrolled children remain eligible unless household income exceeds 200% FPL (HRS, 2005).

Sources: USDA/FNS, Survey of State Medicaid Agencies, 2005 and Ross and Cox (2005).

Maximum Medicaid/SCHIP Income Eligibility for Children

< 133% FPL	(1)
140-185% FPL	(8)
186-200% FPL	(28)
201-250% FPL	(7)
251-350% FPL	(7)
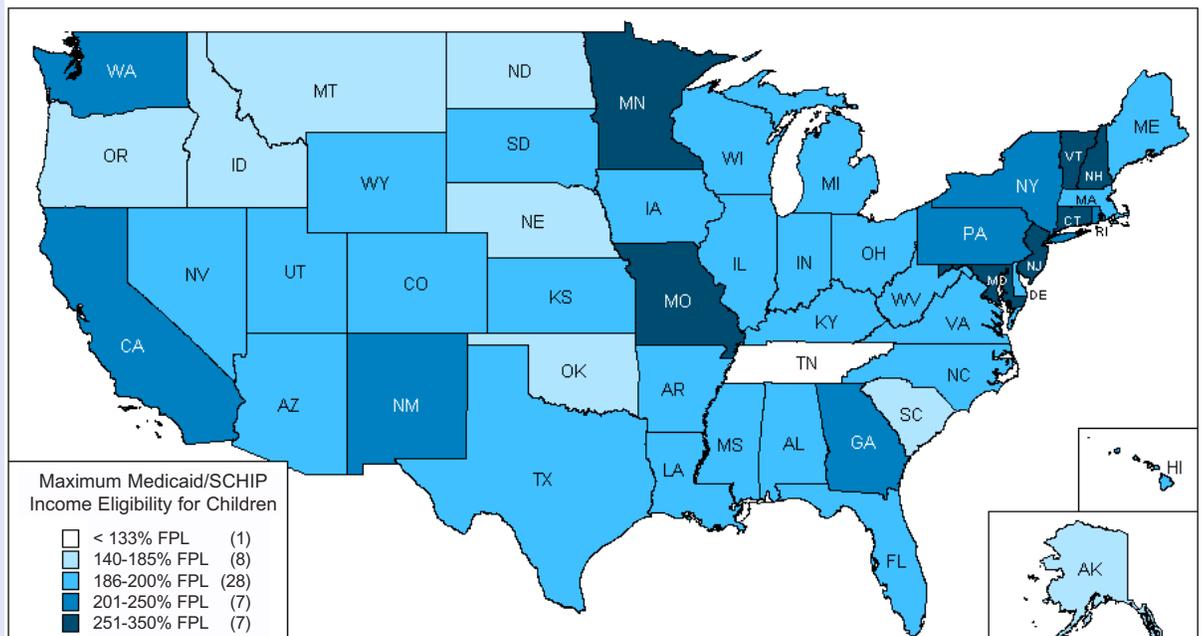
The income eligibility limits for Medicaid and SCHIP are key considerations in determining the potential usefulness of these data for NSLP verification. Another practical consideration is whether the Medicaid and SCHIP programs maintain statewide eligibility databases. Thirty-four States have maximum Medicaid/SCHIP income eligibility above 185 percent of poverty, and statewide Medicaid/SCHIP eligibility databases. An additional five States have statewide Medicaid/SCHIP databases and income eligibility between 133 and 185 percent of the Federal poverty guidelines. Thus, 39 States have the potential to verify free-approved NSLP applications and at least some reduced-price applications with statewide Medicaid data.

Challenges of Using Medicaid/SCHIP Data
While many States appear to have Medicaid/SCHIP data suitable for NSLP direct verification, some systems may require modification to provide necessary data. For example, some Medicaid/SCHIP information systems do not record family size and income, but only record the eligibility determination; other systems record but do not retain income information after eligibility is determined. In some States, eligibility data for Medicaid and SCHIP are in separate systems, and may be maintained by different organizations. Even if the Medicaid eligibility system has the necessary data, using it may require modifying certain data elements. For example, a single field containing family size may not exist, and may need to be created by counting persons associated with the family.

To use Medicaid/SCHIP data for direct verification, Child Nutrition Agencies must secure the active participation of the State Medicaid Agency. State Medicaid Agencies may be unaware of the provisions of *Reauthorization* that authorize release of Medicaid data for NSLP verification. In addition, Medicaid Agencies may be unable or reluctant to support NSLP verification because of competing priorities or limits on funds and staff.

The approach to direct verification must address the privacy concerns of the State Medicaid Agency. The law authorizes Medicaid Agencies to share information about family size, income, and program participation with school districts for NSLP verification. Medicaid Agencies may be concerned, however, about making this information available to a large number of school district personnel who are not involved in Medicaid program administration or service delivery.

Child Nutrition Agencies can address Medicaid privacy concerns by providing training to direct verification users on applicable privacy rules and penalties for disclosure. Another approach is to design the direct verification system to protect privacy. *Indiana* implemented direct verification with FS/TANF and Medicaid data in SY2006–07, and protected the confidentiality of data in two ways. First, school districts receive direct verification results that indicate the category of NSLP eligibility (free or reduced-price) but not the source of information verifying eligibility. Second, the direct verification system allows school districts to search by SSN, but the system does not display SSNs except in masked form with only the last 4 digits displayed.

3.3. How Can School Districts Use Electronic Records for Direct Verification With FS, TANF, and Medicaid Data?

Over the past three years, States have implemented direct verification with electronic records according to three basic models. These models parallel systems for direct certification.

District-Level Matching for Direct Verification

This method is similar to district-level matching for direct certification. School districts download a file of FS, TANF, and/or Medicaid eligibility data. They can either match these data with the verification sample or look up individual applicants. *Louisiana* and *West Virginia* used this method for verifying categorical applications in SY2004–05. In SY2006–07, *Oregon* and *Tennessee* provided files to school districts for direct verification with FS/TANF and Medicaid data.

State-Level Matching or Look-Up Systems

With this method, the State Education Agency receives data from means-tested programs and provides school districts access to these data. This method is like State-level matching for direct certification because the match of student information to FS/TANF/Medicaid data occurs on the SEA computer systems. The match may be done in batch mode (between data files) or through individual look-ups. Two States in the SY2006–07 direct verification evaluation used this method.

Indiana used some of the components of the State's direct certification system to implement direct verification. School districts can submit online queries to search the direct verification database of FS/TANF and Medicaid data. A search can be based on student name, county, and date of birth; or parent/guardian name, county, and parent/guardian SSN (SSN is optional). Indiana is planning to develop a batch matching process for SY2007–2008 so that large school districts can upload a file of their verification sample rather than searching on a case-by-case basis.

Washington used a State-level match to pre-process Medicaid data for direct verification. The Medicaid data were matched to student records from the statewide student information system. School districts participating in the evaluation received the matched data for their students. School districts could then look up their verification sample in the matched file, or they could match this file to their verification sample data. The initial pre-processing accomplished two objectives: it ensured that each Medicaid record was matched to the correct student record, and it allowed the SEA to distribute Medicaid data only to the district where the student was enrolled.

Direct Access to Means-Tested Program Data

In a small number of States, school districts can query statewide data maintained by the State FS/TANF and/or Medicaid programs. This model differs from the "State-level matching or look-ups" model because the State Education Agency is not involved in data exchange. Two States use different approaches to this method of direct verification.

Since the late 1990s, school districts in *Georgia* have had secure online access to query the State's FS/TANF eligibility determination system for direct certification and direct verification. To use the online system, school districts must sign a confidentiality agreement, obtain a user ID, install software for system access, and receive training. School districts can look up information in the system by client SSN or case number. Access to Medicaid information was enabled in SY2005–06.

Wisconsin implemented direct verification with FS/TANF in SY2005–06 using a system in which school districts upload a file of the verification sample to be matched by the State Food Stamp Agency. This State-level match operates exactly like Wisconsin's direct certification system. The State returns the verification sample file to the school district with results indicating which children are verified as eligible.

3.4. How Should States Choose a Method for Direct Verification?

When a State is considering its options for setting up or expanding direct verification with electronic records, there are three basic questions to consider, as discussed below.

Can Direct Verification Systems Be Built on Direct Certification Systems?

States and school districts can, in many cases, adapt their direct certification matching systems to build systems for direct verification.

- **District-level matching**. Where district-level matching is used for direct certification, States have processes for providing data files to school districts. The same processes can provide files for direct verification. School districts in these States have experience matching FS/TANF data to student data, and can apply this experience to matching with Medicaid/SCHIP data.
- **State-level matching**. Where State-level matching is used for direct certification, the same system can be used to match student records with FS/TANF and Medicaid data, and provide these data to school districts for direct verification. School districts can look up their verification sample in the data received from the State, or run a data match.

If direct verification is based on direct certification, as described above, a potential problem is that districts will be overwhelmed with data. Data on all Medicaid children enrolled in a district may be more than some school districts can handle or want to use, particularly with the small size of most verification samples.

Two variants of State-level matching systems for direct certification may be ideally suited for direct verification because they limit the amount of data distributed to districts. The first is a State-level matching system that supports online case-by-case queries. This system allows districts to look up their applications without being overwhelmed with large data files. The second variant is a State-level matching system that collects data files from districts for direct certification (as in *Arizona* and *Wisconsin*). This system can, with modification, allow school districts to upload their verification samples for a direct verification match.

What Is the Significance of the Scale and Timing of Verification?

The scale of direct verification is much smaller than direct certification. The average school district sampled 28 applications for verification in SY2004–05, and 80 percent of school districts sampled 27 or fewer applications. The largest verification samples are 3,000 applications. Therefore, systems of direct verification must accommodate school districts with both very small and large workloads.

One solution is a hybrid system allowing for both batch processing (for large districts) and interactive queries (for small districts). *Arizona's* direct verification system allows school districts to look up FS/TANF case numbers or enter a list of FS/TANF case numbers to be verified. This list can be copied and pasted from a file created in another application to avoid having to re-enter the data. As noted above, *Indiana* implemented direct verification via on-line case-by-case queries of FS/TANF and Medicaid data, and the State plans to add an option next year so that large districts can upload their verification sample for a batch match.

The timing of direct verification is critical to school districts, because the entire verification process must be completed within a six-week period. After attempting to directly verify applications, school districts need several weeks to follow up with households not directly verified. Most school districts interviewed for this study find it hard to achieve adequate response rates in six weeks. Thus, school districts need access to direct verification data no later than the start of October, and preferably sooner. Direct verification can begin before the verification sample is finalized, with a preliminary sample based on an estimate of the number of applications subject to verification.

What Are the Trade-Offs Among Direct Verification Methods?

There are several trade-offs among direct verification models in terms of scale, timing, initial development effort, and ongoing effort to conduct direct verification.

- Look-up systems are simple and quick to use for small samples. For large samples, a batch match of verification samples with program data is likely to be faster and more efficient.

- Look-up systems give users more flexibility to identify matches when there are errors in identifying data, but users need to have more oversight and training to assure consistent and accurate use of data.

- Pre-processing via a State-level match with student records offers a way to maximize the accuracy of matches, reducing both "misses" and "false hits." When considering this approach, States should consider the advantages and disadvantages of State-level matching vis-a-vis district-level matching, as discussed in Section 2.

- The ease and cost of developing a particular type of system depend on the types of systems available to serve as the basis or platform. The existing infrastructure may include: the Child Nutrition Agency's website, the direct certification system, the district portal for the statewide student information system or other SEA interface, or systems developed for districts to exchange data with Medicaid.

3.5. Summary of the Feasibility of Direct Verification

There are several examples of different approaches that States have implemented for direct verification. Widespread use of direct verification is still on the horizon, but evidence from State practices thus far leads to the following conclusions:

- Among the programs that may be used, Medicaid and SCHIP have the most potential for directly verifying NSLP applications. There are important challenges, however, such as obtaining the participation of State Medicaid Agencies and addressing Medicaid privacy concerns.

- Several technically feasible models for direct verification with means-tested program data have been demonstrated. These models build on pre-existing systems for direct certification or for looking up Medicaid eligibility.

- Effective approaches to direct verification must take into account the scale and timing of verification.

- There are important trade-offs among the models for direct verification, and each State should consider its circumstances and needs in choosing a model.

At present, there is no strong evidence on how well direct verification reduces the number of households contacted for verification or the number of households whose benefits are terminated due to nonresponse. There is also no evidence regarding differences in these measures among methods of direct verification. An evaluation of pilot projects now underway will provide answers on school district acceptance, operational feasibility, and effectiveness of direct verification with Medicaid.

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