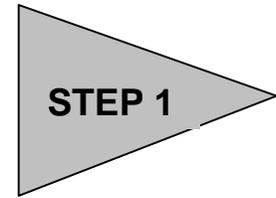


# Step 1: The Extract File

The first step in the NSLDS update process is for you to create the Database Extract file. This file is a mirror image of the school's database(s) at the time of the extract and must follow the record layout rules and format provided in the data dictionary (see Appendix A). Remember that the Extract file must be named extract.ff. Each school is responsible for determining how to create and creating the Database Extract file from its own records or database(s). The Database Extract file is subject to audit by ED.



## Creating the Database Extract File

The Database Extract file is created in a 300-byte record format that will contain three types of records:

1. Header record (as defined in Appendix A) must be the first record in the Database Extract file;
2. Detail records for each loan record; and
3. Past Period Change records (see page 3), which are used to amend previously-submitted event data stored in history.

### Header Record

The Header record is used for identification and tracking purposes. It contains your school code; the submittal, initial load, and submittal receive dates; the software version and release number; and the record type (the capital letter H must appear in position 48 of the header as the record type).

### Detail Records

A separate record must be created for each loan in your school's database(s). Thus, the Database Extract file will be an exact copy of the school's database(s). Each month you must submit all records in your database until one of the following events occur:

- A loan is closed and successfully reported to NSLDS with a Closed loan status, or
- The school receives a notice from ED that it has accepted an assigned loan.

When either of these events occurs, you should no longer extract that particular record when you create a Database Extract file. You should set your Extract procedures to extract only the loans that are either open or were closed on or after October 1, 1989. Once a closed loan is reported successfully to NSLDS it should no longer be extracted.

Example of closed loan:



#### School Requirements

You must create an Extract File once a month and no more than ten days prior to the scheduled submittal date as established by NSLDS. The file must be an exact mirror image of your database and should not be edited or changed. The Database Extract file is fully auditable, field by field, to your database.



#### Version and Release Number

The DataPrep software will automatically insert the version and release number so schools should leave this



#### Initial Population

When a data provider submits data to NSLDS the first time, the data is referred to as the Initial Population. During this submission, schools must provide NSLDS not only with all outstanding (open) loans, but also any loans that have

When a borrower makes the final payment on a Perkins loan, the school extracts the record, reporting the activity with a Loan Status Code of PF (Paid in Full), and includes it with the next submission. Assuming there are no errors in the record and the record is accepted by NSLDS, the school should no longer report on this loan and not include it in future extracts. Loans that were nullified because they were incorrectly reported and loans awarded but the borrower did not go through with the loan, should be set to CA.

## Standards and Conventions

The Database Extract file must contain all open loans in your database plus loans closed on or after October 1, 1989. Closed loans must be reported until the loan record is accepted by NSLDS (e.g., all error conditions are resolved). Once you create the Extract file, you cannot alter the Submittal file or any of the subsequent files created by DataPrep.

Your Database Extract file must be run through Extract Validation process using the DataPrep software provided. Using the Extract Error Reports generated by DataPrep you should try to correct the errors identified during this process in your database (not in the Database Extract file or the Submittal file) before the next Extract file is run.

All data must be submitted as 300 byte, fixed-length EBCDIC for mainframe, or ASCII for a computer running Windows 95 (or Windows 98 and NT), with no carriage return/line feed or any other character between records. For Windows users, if you have such characters or lines in your Database Extract file, you can leave them there because DataPrep will strip them out before creating a Submittal file.



### **Multiple Databases**

All data must be combined into a single Extract file, even if you have loan data stored in multiple databases or are reporting for several campuses or branches in the same extract.

## Extract File Attributes

In order for DataPrep to process your Extract file, the file must be created in the correct format and with fields populated as defined in Appendix B.

The following are general attributes for your Database Extract file.

- Character fields may contain letters, numbers, or blanks.
- Numeric fields must contain numbers only. Blanks, alpha, or other characters will cause errors.
- Date fields must contain eight digits, be valid dates, and appear in the format CCYYMMDD (e.g., 19990131), where:
  - CC = 2 digits for the century
  - YY = 2 digits for the year
  - MM = 2 digits for the month
  - DD = 2 digits for the day
- A valid date is any calendar date (invalid dates would be February 30, February 29 of a non-leap year, and September 31, for example).
- The default value of 00000000 may be used in certain specifically-identified fields.

All data (including identifiers) must be reported until the loan record passes all associated NSLDS edits. Verify that the changed data has been accepted in NSLDS by checking the Load Process Error Report for errors against that record.

The following types of fields use the described default values:

1. Character Fields—Must be filled with spaces.
2. Numeric Fields—Must be filled with zeros.
3. Date Fields—Must be filled with zeros.

All information must be reported (and changed) at the loan level. That is, the loan is the core information, and other data revolves around it. Therefore, if you report on three loans for the same student, and the loans were first reported with the wrong Student's Date of Birth (e.g., 19690222), then the New Date of Student's Birth (e.g., 19680222) must be updated for each of the three loans.

## Past Period Changes

In addition to records extracted from the school's loan database(s), the Database Extract file also accommodates Past Period Change records. These records correct reporting errors that are not related to the current loan data. Past Period Change records are used for two purposes:

1. To delete previously reported events that are reported in error (e.g., an event was reported for the wrong borrower)



### Negative Numbers

NSLDS does not handle negative numbers. If the outstanding balance on a loan becomes negative (i.e., a credit balance), you must report the balance as *one dollar* and keep the status open until you can set the balance to zero.

If you report the Amount of Outstanding Principal Balance as negative, NSLDS will read this as a



### Less than One Dollar

If a loan has a positive outstanding principal balance of less than one dollar, but not zero, you should report an amount of one dollar until the loan is closed.



### Past Period Changes

When developing the process to extract records from your school's database, be certain to include the ability to identify and create Past Period Change records in the Database Extract File. Past Period Change records

- To correct historical data that cannot be adjusted simply by correcting current data fields (e.g., a previously reported loan status that should have been reported with another value at the time it was originally reported)

Past Period Change records can be added at any location in the Database Extract file, and thus can be appended conveniently to the file after the extraction processing has concluded.

Past Period Change records are used to change events in the history prior to the current system value. See Figure 1 for a complete list of changes that can be made using PPC records.

Event	Data Element Event Key	Event Attributes
Cancellation	Old Date of Cancellation	New Date of Cancellation New Type of Cancellation New Amount of Cancellation
Deferment	Old Date Deferment Starts	New Date Deferment Starts New Date Deferment Stops New Type of Deferment
Disbursement	Old Date of Disbursement	New Date of Disbursement
Loan Status	Old Date of Loan Status	New Date of Loan Status New Code for Loan Status
School Servicer	Old Code for Servicer	New Code for Servicer New Date of Servicer Responsibility

*Figure 1, PPC Events, Keys, and Values*

## Changing Existing Records

### Changing Student and Loan Identifiers—Keys

Loan identifiers are the values contained in positions 1–47 of a record that uniquely identify a loan, distinguishing it from the millions of others stored in NSLDS. Although loan identifiers appear on both Detail and Past Period Change records, they are only modified via the Detail record.

Because the entire string of information contained in these fields is needed to singularly identify a loan, loan identifiers are processed as a block. Similarly, when changes are made to one identifier, the values in the rest of them must also be reconfirmed. To this end, a counterpart set of new identifiers is used.

When you update identifiers, you leave the existing values in the original identifier fields and use the counterpart new identifier fields (positions 50–96) to report changes. If you are changing an identifier, you must fill in *all* the new identifier fields, whether the values in them are new ones or ones that you have been reporting all along.



#### **New Loan, No Match**

For a new loan, if there is a match to an existing student's SSN but the first name and date of birth do not match under the NSLDS match criteria, the record will err out. An identifier conflict such as this needs to be resolved for the record to load on a successive submission. Therefore, it is critical that the data be correct when submitted so other providers can load their data for the student.

## Types of Identifiers

Within the loan identifiers for a loan exist two sets of information:

1. Student identifiers
2. Loan identifiers

## Fields and Loan Identifiers

<i>Field</i>	<i>Type of Identifier</i>
Code for Original School	Loan Identifier
Student's Social Security Number	Loan/Student Identifier
Date of Student's Birth	Loan/Student Identifier
Student's First Name	Loan/Student Identifier
Type of Loan/Other Aid	Loan Identifier
Date of First Disbursement	Loan Identifier

## Student Identifiers

Student Identifiers are used to make each student unique and to match data to an existing student on NSLDS. When a new record is sent to NSLDS, the load process checks to see if a student exists under the given Social Security Number (SSN). If no one exists under that SSN, a new student record is built using the student's name and DOB from the submitted loan record. The loan is then loaded under that student. For a new loan and an existing student under that SSN, the load process reviews the student's First Name and DOB to determine if the student on the submitted record is on NSLDS. If a match occurs, the load process continues. If a match is made on SSN but not on first name (FN) and date of birth (DOB) using the NSLDS match criteria, the record will reject as an identifier conflict error. Because of this, it is crucial that the data be correct when submitted. Incorrect name and DOB data submitted for a student could prevent other data providers from loading their data to NSLDS. Incorrect data should be corrected using the identifier change process for each loan record you provide for the student.

## Loan Identifiers

Loan Identifiers are used to make each loan unique on NLSDS. The load process determines whether a loan is new or a student is new to NSLDS. Once that determination is made, the load process checks to see if there is any record on NSLDS with the loan identifiers. If a loan exists for the submitted Original School Code, SSN, Loan Type, and Date of First Disbursement, the loan will be updated without regard to the student name and DOB data. If a loan does not exist with those four loan identifiers, the match criteria will check against the student name and DOB identifiers. Then if a match is found, the new loan record will be created for that student. But if a match is not found, a new student record is created. Therefore, all changes to the loan identifier fields must use the identifier change process.



### Importance of the Identifier Change Process

Changing loan identifiers without using the identifier process creates duplicate records. This corrupts the data integrity of NSLDS and can cause students to become incorrectly eligible for Title IV aid.



### Student Identifiers

- Student's Social Security Number
- Date of Student's Birth
- Student's First Name



### Loan Identifiers

- Code for Original School
- Student's Social Security Number
- Date of Student's Birth
- Student's First Name
- Type of Loan/Other Aid
- Date of First Disbursement

### How to Change Loan Identifier Data

**Assume you have been submitting the following information about a loan:**

- Code for Original School = 00876500
- Student's Social Security Number = 111223333
- Student's Date of Birth = 19600508
- Student's First Name = Robert
- Type of Loan/Other Aid = NU
- Date of First Disbursement = 19910903

**Then you discover that the Type of Loan/Other Aid code is incorrect. To update the erroneous identifier, submit the data exactly as shown above and, at the same time, also report the following values in these fields:**

- New Code for Original School = 00876500
- New Student's Social Security Number = 111223333
- New Student's Date of Birth = 19600508
- New Student's First Name = Robert
- New Type of Loan/Other Aid = PU (only item changed)
- New Date of First Disbursement = 19910903

**Note: Only the Type of Loan/Other Aid was changed. All other values were resubmitted as before.**

## Changing Identifiers to Multiple Records

When changing identifiers to multiple records, the old and new identifiers must both be populated for each record being changed. You should then review the Load Level Error file to see if the records erred out. If all of the records loaded, then all of the new identifiers should become the current identifiers on your system.

However, if not all of the records were updated, then you need to review the changes so that future submissions can be handled correctly. If any one of the loans loaded to NSLDS, then the new identifiers will become the current values on the database. This means that new first names and dates of birth will be present for all records on NSLDS. You should make certain that successive submissions of all loans, particularly those that erred out, reflect the changes to the new identifiers. So, if any record updates the database with new identifiers for first name or date of birth, then all records will reflect the new name or date of birth. And all future reporting of loans for that student should reflect the change created by the record that loaded/updated.



### **New Loan Identifiers**

- New Code for Original School
- New Student's Social Security Number
- New Date of Student's Birth
- New Student's First Name
- New Type of Loan
- New Date of First Disbursement

## Changing Non-Identifier Data—Values

A completely different set of rules applies when you change data elements that are not identifiers.

- As NSLDS processes your Submittal file, it determines whether the data element (or field) being modified is one for which history is kept. If it is not, you update NSLDS by submitting your change on a Detail record. Once the new information passes all the edits and verifications, it is integrated with the NSLDS database.
- If the data element you want to modify is one for which history *is* kept, you update NSLDS using a Detail record. Then NSLDS determines whether you are trying to change what is already the *current value*. If so, then once the new information passes all the edits and verifications, it is integrated with the NSLDS database.
- If the data element being modified *is* one that is stored in History and it is *not* the current value but one that belongs to a previous event (e.g., a disbursement), then you must submit the modification using a Past Period Change record.

## Determining whether Data Is Current or Historical

When data is first submitted to NSLDS, all your values are, of course, current values. When you then submit changed records, your data gets classified as either current or historical information.

1. First, NSLDS determines whether the changing data element that you have submitted is an element stored in history.
2. If the data element is *not* stored in history, it can be processed by NSLDS as part of the regular submittal cycle. No special rules apply, and so long as the changed data element passes verification, NSLDS will be updated with the new value. You don't have to do anything beyond normal submittal with the latest information.
3. If the changing data element *is* one for which NSLDS keeps history, NSLDS determines what other fields are linked to it through that event. For these fields, NSLDS edits the record from the submittal by comparing the element in the existing database.

In most cases the current value is updated and left as the new current value. A new event is created and the old one becomes an historical event. It is at this point that data changes from being current-value data to becoming historical data. This is part of what determines whether the data provider can change a data element during normal processing (with a Detail record), or must submit a Past Period Change record. See Appendix C for more information about submitting PPCs.

Historical events are edited using the key (or index) of the event, and the most important associated value(s), which together describe the event. The key is the



### Events

Events are treated as if they were linked because they give each other meaning. For example, Date of Loan Status must have an accompanying Code for Loan Status. Together they are a discrete occurrence—or event—called Change in Loan Status. An event may be classified either as a current event, prior event, or history.



### Old and New

When a PPC field name starts with the word Old (e.g., Old Date of Loan Status) you must report the exact value already contained in the field you are changing. When the PPC field name says New, (e.g., New Date of Loan Status) you report the new value you want that data element to contain.

most critical element and is usually the date of the event. Some events (e.g., Change in Enrollment Status) have a compound key, requiring more than one field to uniquely identify a specific event. See Appendix A for more information.

Only report the data you want to change. There is no need to fill all the Old/New fields.

## Checking History Online

The online report option provides historical data on a student's loan. The report (SCH06A) requests identifier information for the loan used to track the history data for a particular loan. This can be particularly helpful with Past Period Changes. For more information about checking history online, refer to the NSLDS Paperless Link User Guide, chapter 5. You can also access this information at <http://www.ifap.ed.gov>.

## Changing Event Dates

There are two important things to remember when making date changes with a Past Period Change:

1. You may not change the chronological order of events contained in history. Do not re-date an event so it predates one that occurred before it or postdates one that occurred after it.
2. You may not change the date of an event so that it equals the date of a pre-existing event. For example, if there is a loan status effective date of 3/1/98, you cannot correct another loan status effective date to 3/1/98.

## Changing Event Values

To change the value associated with an event, send NSLDS a Past Period Change record containing the loan identifiers, the event key (as stored in NSLDS), and the new value.

## Changing *Both* Value and Date

If *both* the date of the event and the associated data must be changed, send a Past Period Change record containing the loan identifiers, the event key matching the one stored in NSLDS, the new key, and the new value.

Existing on the database:

### *Loan Deferment*

<u>Start</u>	<u>Stop</u>	<u>Type</u>
01/01/98	01/15/98	FP
02/01/98	02/15/98	FP
03/01/98	03/15/98	FP
04/01/98	04/15/98	FP



### Changing History

If a record-level or load-level error occurs when you are submitting identifier changes, make sure you keep resubmitting them until the record does not err.

When data is submitted to NSLDS, the system first processes Detail records, then PPC records. For this reason, if you want to change historical information on a loan whose identifiers are also being modified at the same time, the PPC record must refer to the new identifiers, not the old ones.

Just because a record passes Extract Validation, doesn't mean NSLDS will automatically be updated. The update must also pass Load Level Validation and the processing rules that apply to history changes.

If you want to correct the 02/01/98 deferment to a starting date of 02/02/98 and the Type of Deferment from FP to FS, use the following Past Period Change:

<b>Loan Identifiers</b>	<b>Old Deferment Start Date</b>	<b>New Deferment Start Date</b>	<b>New Deferment End Date</b>	<b>New Deferment Type</b>
Loan XYZ	19980201	19980202	00000000	FS

*Figure 2, Past Period Change Example 1: Change to Both Value and Date*

The New Deferment End Date contained the default value 00000000 because the value wasn't being changed.

## Deleting Data with History

Although you cannot delete the last Change in Loan Status or the last Change in Enrollment Status event, other data with history can be deleted using a Past Period Change record. To delete an event, submit a Past Period Change record that contains the exact loan identifiers and event key stored in NSLDS, along with default values (given in the Past Period Change record layouts in Appendix C) in all the New fields. (Loan identifiers consist of all the information contained in positions 1–47 of the loan record.)

## Update Examples

The following is an example of a valid change of date in a Change in Loan Status event. (For simplicity, loan identifiers are represented here as Loan XYZ, but in fact, they consist of all the information contained in positions 1–47 of the loan record.)

### Key Date Change

In this example, the Loan Status date is changed from April 1, 1994, to March 1, 1995. Notice that it was not necessary to provide the Code for Loan Status (i.e., value) associated with the April 1, 1994, event because it was not changing.

Loan Identifiers	Old Date of Loan Status	New Date of Loan Status	New Code for Loan Status
Loan XYZ	19940401	19950301	BLANKS

*Figure 3, Past Period Change Example 2, Change to Key Date*

## Change in Value

In this example, the Code for Loan Status associated with the April 1, 1994 Loan Status is changed to RP, so the New Code for Loan Status will replace the former value for the event. Since the date of the event is not changing, it was not necessary to provide a New Date of Loan Status. Because it was the value of the event that was changing (as opposed to the key), it was not necessary to provide the former Code for Loan Status, only the new one.

Loan Identifiers	Old Date of Loan Status	New Date of Loan Status	New Code for Loan Status
Loan XYZ	19940401	ZEROES	RP

*Figure 4, Past Period Change Example 3, Change in Value*

## Changing Both Value and Date

If *both* the date of the event and the associated data must be changed, send a Past Period Change record containing the loan identifiers, the event key matching the one stored in NSLDS, the new key, and the new value. The following is an example of a change to both the date of the event and the value associated with it.

Loan Identifiers	Old Date of Loan Status	New Date of Loan Status	New Code for Loan Status
Loan XYZ	19940401	19950301	RP

*Figure 5, Past Period Change Example 4: Change in Key Date and Value*

In the above example, the date of the Loan Status event is changed from April 1, 1994 to March 1, 1995.

Once you have finished creating your Extract file, you are now ready to begin using DataPrep.