All schools must use the Common Record in XML format to submit Pell and TEACH Grants and/or Direct Loan (DL) origination and disbursement data to the COD System over the Student Aid Internet Gateway (SAIG).

Schools should refer to Volume II of this technical reference for record layouts and processes.

Schools that participate in School Testing can test with the structured test cases described in this guide and will receive Response files from COD.

Please note, all data used in this guide is for test purposes only. All Social Security Numbers, Dates of Birth, Names, and other Personally Identifiable Information is fake.

## Table of Contents

<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST DATA SENT FROM THE SCHOOLS TO THE COD SYSTEM</td>
<td>5</td>
</tr>
<tr>
<td>Common Record</td>
<td>5</td>
</tr>
<tr>
<td>Establishing a New Record</td>
<td>5</td>
</tr>
<tr>
<td>Establishing a Change Record</td>
<td>6</td>
</tr>
<tr>
<td>TEST DATA RECEIVED BY THE SCHOOLS FROM COD</td>
<td>7</td>
</tr>
<tr>
<td>Common Record Response</td>
<td>7</td>
</tr>
<tr>
<td>TEST EXECUTION</td>
<td>8</td>
</tr>
<tr>
<td>Common Record Manual Verification</td>
<td>8</td>
</tr>
<tr>
<td>Common Record Manual Verification Checklist</td>
<td>8</td>
</tr>
<tr>
<td>Structured Application Testing</td>
<td>8</td>
</tr>
<tr>
<td>Structured Application Testing Checklist</td>
<td>9</td>
</tr>
<tr>
<td>Test Student Profiles</td>
<td>10</td>
</tr>
<tr>
<td>Creating Unique Social Security Numbers</td>
<td>12</td>
</tr>
<tr>
<td>Student Profile Matrix</td>
<td>13</td>
</tr>
<tr>
<td>PREPARING THE TEST ENVIRONMENT</td>
<td>15</td>
</tr>
<tr>
<td>Setting System Defaults</td>
<td>15</td>
</tr>
<tr>
<td>First Test Cycle (First Submission)</td>
<td>16</td>
</tr>
<tr>
<td>Helpful Hints for Preparing Test Case Input Files and Receiving COD Responses</td>
<td>18</td>
</tr>
<tr>
<td>TEST CASES: STEP BY STEP</td>
<td>20</td>
</tr>
<tr>
<td>Case 1: Pell and TEACH Grants</td>
<td>20</td>
</tr>
<tr>
<td>Case 2: Parent PLUS Direct Loan and Pell Grant</td>
<td>21</td>
</tr>
<tr>
<td>Case 3: Pell Grant</td>
<td>23</td>
</tr>
<tr>
<td>Case 4: Unsubsidized, and PLUS Direct Loans and TEACH Grant</td>
<td>24</td>
</tr>
<tr>
<td>Case 5: Unsubsidized Direct Loan</td>
<td>27</td>
</tr>
<tr>
<td>Case 6: Subsidized and Unsubsidized Direct Loans</td>
<td>29</td>
</tr>
<tr>
<td>Case 7: Parent PLUS Direct Loan and TEACH Grants</td>
<td>31</td>
</tr>
</tbody>
</table>
Case 8: Pell Grant and Subsidized and Unsubsidized Direct Loans ..........33
Case 9: Pell and TEACH Grants, and Subsidized and Unsubsidized Direct
Loans........................................................................................................36
Prepare Document Block and Entity Block for Batch.........................39
Send Files to COD ...............................................................................40
Receive Responses from COD...............................................................40

SECOND TEST CYCLE (SECOND SUBMISSION)..............................41

TEST CASES: STEP BY STEP .........................................................42
Case 1: Pell and TEACH Grants..........................................................42
Case 2: Pell Grant and Parent PLUS Loan.........................................42
Case 3: Pell Grant................................................................................42
Case 4: TEACH Grant ........................................................................43
Case 5: Unsubsidized Direct Loan ......................................................43
Case 7: TEACH Grants.......................................................................44
Case 8: Subsidized and Unsubsidized Direct Loans .........................44
Case 9: Pell Grant and Unsubsidized Loan........................................44
Prepare Document Block and Entity Block for Batch.....................45
Send Files to COD ............................................................................46
Receive Responses from COD..............................................................46

WRAP-UP .........................................................................................47
Notification of Results ........................................................................47
Preparing School Database for Production .......................................47

ADDENDUM .........................................................................................48
Test Data Sent from the Schools to the COD System

This section provides an overview of the records schools send to COD during the School Testing process. Each type of record and its general functionality are described. General test conditions are also discussed.

Common Record

The Common Origination and Disbursement process utilizes one single record across programs for both originations and disbursements. Schools use the Common Record, which is comprised of common data elements, definitions, edits, and structure for Pell and TEACH grants and Direct Loan awards. Although the record has the same layout for all programs, not all data elements are required for each transmission or for each program. This record layout relies on a technology called Extensible Markup Language (XML) to encode documents into machine-readable code.

For School Testing the Common Record is submitted using the message class CRTESTIN.

Upon receiving a Common Record in XML format, the COD System performs an immediate check to determine if the Common Record is readable. If the Common Record is readable and complies with the XML schema, the COD System will process the file. Records that are not readable nor comply with the XML schema will be rejected with Edit 210.

After the COD System confirms the Common Record is readable and complies with the XML schema the COD System classifies the record to determine how it will be processed. The record is classified as either a new record or an update record.

Establishing a New Record

A new record establishes a new student, award or disbursement on the COD System. There are three types of new records:

- **New Student with a New Award** - If the student identifier does not match any previously submitted to the COD System the record is considered a new student. A student cannot be established on the COD database until an award is accepted for the student.

- **New Award** - If the student identifier matches a person already established on the COD System the system checks to determine if the award is already on file. If not, then the record is considered a new award.

- **New Disbursement** – If the person and award already exist on the COD System the system checks the disbursement number submitted for the award. If it is not already on file the system logs the disbursement as a new disbursement. There are two types of disbursement records:

School Testing for 2020-2021 will only involve the Common Record 4.0d schema. During the testing process schools can submit data for 2020-2021 awards. Testing concurrent award year processing in the 2019-2020 and earlier schemas will not be possible.
Actual Disbursement – Actual disbursement records contain a Disbursement Release Indicator = true

Anticipated Disbursement - Anticipated disbursement contain a Disbursement Release Indicator = false. These disbursements are not considered actual disbursements; therefore, they do not substantiate drawdowns to the school.

Establishing a Change Record

A change record performs an update to information or elements that were previously established on the COD System. There are two types of update records:

- Change Record – A change record performs an update to an award or disbursement data element that was previously established by a new record OR is used to change disbursement amounts or dates of an existing award or grant.

- Actual Disbursement Record - An Actual Disbursement record is submitted with a Disbursement Release Indicator = true for a disbursement record previously submitted as an anticipated disbursement. An actual disbursement signals to the COD System that the disbursement information is an actual disbursement. It substantiates cash already made available to the school.

After the Common Record is processed the COD System returns a Response to the school.

For School Testing the Response is returned using the message class CRTESTOP.

Testing with the predefined test data covers scenarios for nine students including:

- New Students with a New Award
- New Disbursements – Actual Disbursements
- New Disbursements – Anticipated Disbursements
- Change Records
- Actual Disbursement Records

The Common Record layout is provided in the Volume II, Section 3 – Common Record Layout of this technical reference.
Test Data Received by the Schools from COD

This section provides an overview of the different record types that are received by a school from COD during the test process.

Common Record Response

The Common Record Response is sent back to the school after processing is complete. Schools have the option of selecting either a standard or full Common Record Response. A full Response contains all the data elements that were in the original Common Record sent by the school and the rejected data elements and reason codes. A standard Response contains only the rejected data elements and error reason codes. It is recommended that full Responses be used during this testing process. Test Responses are sent using the message classes CRTESTOP.
Test Execution

In this section record profiles are provided for each test case. Use these test scripts in conjunction with the Volume II, Section 3 – Common Record Layout. Specific data are defined and step-by-step instructions for executing the test are provided. Below is a checklist of the major steps in the testing process.

Common Record Manual Verification

The purpose of the Common Record Manual Verification testing is to ensure that the school’s XML Common Record is well formed and properly structured according to the rules of the XML Common Record Schema. The COD team manually reviews a Common Record document sent by the school and assists the school in the identification of potential updates to their Common Record submissions. This testing does not validate the data submitted within the Common Record. For this phase of testing only two student records should be sent in the Common Record.

Common Record Manual Verification Checklist

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Schedule test dates with the COD School Relations Center for XML Common Record Manual Verification Testing (Phase I).</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Schools should use the test cases included in this document for the XML Common Record Manual Verification testing. This test data, after it has passed the XML structure verification, can be used in system testing and eliminate the need for the school to create more test data. <strong>DO NOT</strong> send real SSN, name, and/or address combinations. This is in respect to the Privacy Act of 1974.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Schools should e-mail Common Record data to COD School Relations Center. (E-mail address to be provided upon sign-up for testing).</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Schools will receive the results of the XML Common Record Manual Verification via e-mail. The results will include a list of errors and actions that need to be taken by the school to correct the data. It may also include a corrected file for the school to use as a reference for making corrections. Some potential errors are file size errors, missing tags and unused tags.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Repeat steps 2-4 until test data passes XML Common Record Manual Verification.</td>
<td></td>
</tr>
</tbody>
</table>

Please note that Structured Application Testing can begin only after successful completion of the Common Record Manual Verification Testing.

Structured Application Testing

The purpose of the Structured Application Testing is to ensure that schools can send, receive, and process batches of records using detailed input instructions with detailed expected results issued by COD. Schools use a test Institutional Student Information Record (ISIR) file supplied by COD that creates a test data set of students to use with the structured test cases. During this phase Schools send Common Record documents to COD and receive Common Record Response documents back from COD. This phase of testing is not all-inclusive; it is meant only to ensure schools can send, receive and process records with detailed expected results.

The submission of all test cases is not required in order to participate in Structured Testing. Schools are encouraged to use the test cases which
are supported by their software. The test cases are meant as a guide to submit records. Schools may submit programs within individual or combined batches. This is to allow schools the option of submitting several batches in a given test cycle due to software limitations or organizational setup.

**Structured Application Testing Checklist**

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prepare a test environment using a Test Destination Mailbox, Test message classes (CRTESTIN), School Entity ID, and specified COD forward system date.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Schedule test dates with the COD School Relations Center for Structured Application Testing (Phase II).</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Prepare the test data (received from COD) for Test Cycle 1 using the School Test Entity ID.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Send the test document to COD school testing SAIG test mailbox (TG75891).</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Once file has been sent verify that the file has been received via SAIG portal and notify COD School Relations Center that the file has been sent.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>If the file was not received by SAIG contact SAIG customer service at either (800) 330-5947 or <a href="mailto:CPSSAIG@ed.gov">CPSSAIG@ed.gov</a>.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>If Response is not received within two (2) hours contact COD School Relations Center for an update.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Receive notification from the COD School Relations Center that the Response are on the SAIG. Pull the Response into the school’s system.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Validate Response documents against the published expected.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Call the COD School Relations Center to confirm results before proceeding.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Repeat steps 4 through 8 for Test Cycle 2.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Receive notification from the COD School Relations Center that the testing cycle is complete.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>If a test environment was not used, reset the school's system defaults for production, and verify that the test data is deleted, or all test grants/loans are adjusted to $0. <strong>Note:</strong> If system is not reset to the defaults it may cause errors in the production data. Remember to change the school test environment system date back to the correct current date.</td>
<td></td>
</tr>
</tbody>
</table>
Test Student Profiles

Case #1: Student Testone applies for Pell & TEACH Grants
Student Testone is a second-year student (Student Level Code = 2) eligible for Pell (EFC = 0, but COA = 5,000) and two TEACH Grant awards. The first submission contains the Common Record person, award, and disbursement with Release Indicator = false for both the Pell Grant and the TEACH awards. The student is awarded a Pell Grant of $5,050 and TEACH awards for $4,000 [$3,764] each. The second submission contains a Release Record with a Disbursement Release Indicator = true for an actual disbursement.

Case #2: Student Testtwo applies for a Federal Pell Grant and a Parent PLUS Direct Loan
Student Testtwo is a second-year student (Student Level Code = 2) and is eligible for a Pell Grant (EFC = 3,400) and a PLUS loan. The first submission contains the Common Record person, awards, and disbursements. Disbursement data shall be established with a Disbursement Release Indicator = false for the Pell Grant, and Disbursement Release Indicator = true for the PLUS award. The student is awarded a Pell Grant of $2,995 and a PLUS loan of $6,600.

The second submission contains an adjustment to the award and disbursement amounts of each award/grant and changes the Disbursement Release Indicator to true for the Pell Grant.

Case #3: Student Testthree applies for a Federal Pell Grant
Student Testthree is an incoming first-year student (Student Level Code = 0) and is eligible for a Pell Grant (EFC = 0). The first submission contains the Common Record person, award, and disbursement data with a Disbursement Release Indicator = false. The student is awarded a Pell Grant of $6,345.

The second submission contains a Release Record with a Disbursement Release Indicator = true for an actual disbursement.

Case #4: Student Testfour applies for Unsubsidized and Grad PLUS Direct Loans and a TEACH Grant
Student Testfour is a first-year graduate professional (Student Level Code = 6 and Additional Eligibility Unsubsidized Indicator = true). The student is awarded an Unsubsidized Loan of $12,000, a Grad PLUS loan of $4,500, and a TEACH Grant of $4,000 [$3,764]. The first submission contains disbursement information with a Disbursement Release Indicator = true for the Unsubsidized and Grad PLUS awards, and Disbursement Release Indicator = false for the TEACH Grant.
The second submission contains a Release Record with a Disbursement Release Indicator = true for an actual disbursement for the TEACH Grant.

Case #5: Student Testfive applies for an Unsubsidized Direct Loan

Student Testfive is an undergraduate student (Student Level Code = 5) and is an eligible non-citizen for a Direct Unsubsidized Loan. The student is awarded a Direct Unsubsidized Loan for $3,500. The first submission contains disbursement information with a Disbursement Release Indicator = true.

The second submission for Unsubsidized DL includes a decrease in the award and disbursement amounts.

Case #6: Student Testsix applies for Subsidized and Unsubsidized Direct Loans

Student Testsix is a first-year student (Student Level Code = 1). The first and only submission contains the Common Record person, award, and disbursement data with a Disbursement Release Indicator = true for each award. The student is awarded a Direct Subsidized Loan for $2,000 and a Direct Unsubsidized Loan for $1,500.

Case #7: Student Testseven applies for a Parent PLUS Direct Loan and TEACH Grants

Student Testseven is a third-year student (Student Level Code = 3) with a Parent PLUS loan for $10,000 and two TEACH awards totaling $8,000 ($7,528). The first submission contains a Common Record with disbursement information and a Disbursement Release Indicator = true for the Parent PLUS loan, and a Disbursement Release Indicator = false for the TEACH grants.

The second submission includes a Release Record with a Disbursement Release Indicator = true for only the disbursements of each TEACH grant.

Case #8: Student Testeight applies for a Pell Grant, and Subsidized and Unsubsidized Direct Loans

Student Testeight is a fifth-year student (Student Level Code = 5) with an EFC of 2,000 and a DoD Match Flag of “Y” on CPS (nullifying the EFC and permitting the student the maximum annual award limit). The first submission contains the Common Record person, awards, and disbursement data with a Disbursement Release Indicator = false for the Subsidized and Unsubsidized awards, and a Disbursement Release Indicator = true for the Pell Grant. The student is awarded a Pell Grant of $6,345, a Direct Subsidized Loan for $3,500, and a Direct Unsubsidized loan for $3,000. Warning Edit 168 will be drawn for the Pell award.
The second submission includes a Release Record with a Disbursement Release Indicator = true for all Direct Subsidized and Unsubsidized disbursements.

**Case #9: Student Testnine applies for Pell and TEACH Grants, and Subsidized and Unsubsidized Direct Loans**

Student Testnine is a fourth-year student (Student Level Code = 4). The first submission contains the person, award and disbursements with a Disbursement Release Indicator = false for the Pell and a Disbursement Release Indicator = true for the Subsidized and Unsubsidized Direct Loans and TEACH Grant. The student is awarded — a Pell Grant of $6,345, a TEACH Grant of $4,000 [$3,764], a Direct Subsidized Loan for $5,500, and a Direct Unsubsidized Loan for $5,000.

The second submission includes the adjustment of changing the Pell Grant disbursements to Disbursement Release Indicator = true. It also includes the adjustment to $0 of the Direct Unsubsidized award amount and disbursements. Warning Edit 119 may occur for this submission and is acceptable.

**Creating Unique Social Security Numbers**

Because there are a large number of schools participating in Schools Test, COD provides test data that aids in the identification of its school and test cases. To do this the following two-point formula is used to generate a Social Security Number (SSN) for the school test data.

First Point: Five digits from the school’s OPE ID (positions 2 through 6) are used as the first five numbers of each SSN. For example, if a school OPE ID is 07777800 and the test data defines an SSN of ###-##-0001, the SSN would translate to 777-78-0001.

Second Point: The last digit of each student and borrower SSN indicates which Test Case that individual belongs to during Structured Testing. So going by the example above, Student 777-78-0001 belongs to Test Case 1.

Furthermore, other than the SSN, the data (Name, Date of Birth, Address, etc.) for each Student within each Test Case is the same. The 6th, 7th, and 8th digits of the SSN are merely used to differentiate one Student/Borrower from another. So continuing with the above example, Students 777-78-0001, 777-78-0011, 777-78-0021, 777-78-0031, and 777-78-0041 belong to Test Case 1 and their Names, Dates of Birth, Address, etc. are all the same. Only the SSN differentiates them.
## Student Profile Matrix

<table>
<thead>
<tr>
<th>Student Number</th>
<th>Award Type</th>
<th>Student SSN</th>
<th>First Submission</th>
<th>Second Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Send)</td>
<td>TEACH and PELL</td>
<td>###-###-0001</td>
<td>Pell and TEACH Common Record with Disbursement Release Indicator = false</td>
<td>Pell and TEACH Common Record with Disbursement Release Indicator = true</td>
</tr>
<tr>
<td>1 (Receive)</td>
<td>TEACH and PELL</td>
<td>###-###-0001</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td>2 (Send)</td>
<td>Pell and PLUS</td>
<td>###-###-0002</td>
<td>Pell Common Record with Disbursement Release Indicator = false PLUS Common Record with Actual Disbursements Disbursement Release Indicator = true</td>
<td>Pell Actual Disbursements Disbursement Release Indicator = true Adjustments to award and disbursement amounts</td>
</tr>
<tr>
<td>2 (Receive)</td>
<td>Pell and PLUS</td>
<td>###-###-0002</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td>3 (Send)</td>
<td>Pell</td>
<td>###-###-0003</td>
<td>Common Record with Disbursement Release Indicator = false</td>
<td>Common Record with Disbursement Release Indicator = true</td>
</tr>
<tr>
<td>3 (Receive)</td>
<td>Pell</td>
<td>###-###-0003</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td>4 (Send)</td>
<td>TEACH, and Direct Loans (PLUS &amp; Unsubsidized)</td>
<td>###-###-0004</td>
<td>Direct Loans (PLUS &amp; Unsubsidized) Common Record with Actual Disbursements Disbursement Release Indicator = true TEACH Common Record with Disbursement Release Indicator = false</td>
<td>TEACH Actual Disbursement with Disbursement Release Indicator = true</td>
</tr>
<tr>
<td>4 (Receive)</td>
<td>TEACH, and Direct Loans (PLUS &amp; Unsubsidized)</td>
<td>###-###-0004</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td>5 (Send)</td>
<td>Direct Loan (Unsubsidized)</td>
<td>###-###-0005</td>
<td>Common Record with Disbursement Release Indicator = true</td>
<td>Update award amount and disbursement amounts</td>
</tr>
<tr>
<td>5 (Receive)</td>
<td>Direct Loan (Unsubsidized)</td>
<td>###-###-0005</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td>6 (Send)</td>
<td>Direct Loans (Subsidized &amp; Unsubsidized)</td>
<td>###-###-0006</td>
<td>Common Record with Actual Disbursements Disbursement Release Indicator = true</td>
<td>N/A</td>
</tr>
<tr>
<td>6 (Receive)</td>
<td>Direct Loan (Subsidized &amp; Unsubsidized)</td>
<td>###-###-0006</td>
<td>Response</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Process</td>
<td>Format</td>
<td>Description</td>
<td>Activity</td>
</tr>
<tr>
<td>----</td>
<td>---------</td>
<td>--------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>7</strong>&lt;br&gt;(Send)</td>
<td>PLUS and TEACH</td>
<td>###-###-0007</td>
<td>PLUS Common Record with Disbursement Release Indicator = true&lt;br&gt;TEACH Common Record with Actual Disbursements, Disbursement Release Indicator = false</td>
<td><strong>DELETION</strong></td>
</tr>
<tr>
<td><strong>7</strong>&lt;br&gt;(Receive)</td>
<td>PLUS and TEACH</td>
<td>###-###-0007</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td><strong>8</strong>&lt;br&gt;(Send)</td>
<td>Pell &amp; Direct Loans (Subsidized &amp; Unsubsidized)</td>
<td>###-###-0008</td>
<td>Pell Common Record with Disbursement Release Indicator = true&lt;br&gt;Direct Loans (Subsidized &amp; Unsubsidized) Common Record with Actual Disbursements, Disbursement Release Indicator = false</td>
<td><strong>DELETION</strong></td>
</tr>
<tr>
<td><strong>8</strong>&lt;br&gt;(Receive)</td>
<td>Pell &amp; Direct Loans Subsidized &amp; Unsubsidized</td>
<td>###-###-0008</td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td><strong>9</strong>&lt;br&gt;(Send)</td>
<td>Pell &amp; TEACH &amp; Direct Loans (Subsidized &amp; Unsubsidized)</td>
<td>###-###-0009</td>
<td>TEACH Grant and Direct Loans (Subsidized &amp; Unsubsidized) Common Record with Actual Disbursements, Disbursement Release Indicator = true&lt;br&gt;Pell Common Record with Disbursement Release Indicator = false</td>
<td><strong>DELETION</strong></td>
</tr>
<tr>
<td><strong>9</strong>&lt;br&gt;(Receive)</td>
<td>Pell &amp; TEACH &amp; Direct Loans (Subsidized &amp; Unsubsidized)</td>
<td>###-###-0009</td>
<td>Response</td>
<td>Response</td>
</tr>
</tbody>
</table>
Preparing the Test Environment

It is necessary to define separate, independent regions for the school test and production data. Before proceeding with testing verify that the method defined is valid and that any test data created does not mix with live production data within the school’s environment. The school test environment must have the ability to modify the system processing date.

Setting System Defaults

For the Testing Process any defaults in a school’s system should be set as follows:

Entity ID
- Contact the COD School Relations Center for this information prior to testing.

For Pell
- Cost of Attendance = 9000 (unless a test case specifies otherwise)

For TEACH Grant
- Student Level Code = 0-7

For Direct Loan
- Promissory note prints on-site at school (PromissoryNoteCode = O)
- Subsidized/Unsubsidized Fee Percentage = 1.059
- PLUS Fee Percentage = 4.236
- Subsidized/Unsubsidized Interest Rebate Percentage = 0
- PLUS Interest Rebate Percentage = 0
- Loan Period Start Date = 2020-07-01
- Loan Period End Date = 2021-06-30
- Student’s Academic Year Start Date = 2020-07-01
- Student’s Academic Year End Date = 2021-06-30

For All Programs
- Student Eligibility Code is mandatory on all origination records starting in 2013-2014. They are optional on maintenance records.
- The Student Eligibility Codes listed in the Test Cases are valid examples based on the students provided to the schools. Schools may substitute a Student Eligibility Code of 1 with 2 and vice versa. Please keep in mind that Student Eligibility Code 1’s requires additional Student Eligibility Code fields to be submitted as well.
- Some software and 3rd party service providers have accounted for the impact of the Sequester on TEACH awards. In this document Sequester impacts will be reflected on TEACH award and

If a Subsidized/Unsubsidized loan is submitted with an earliest Disbursement Date on or after October 1, 2019 the corresponding Origination Fee Percent and Interest Rebate Percent must respectively be 1.059% and 0%.

The loan period start and end dates must be equal to or within the student’s academic year start and end dates.
disbursements amounts followed by sequester adjusted amounts in brackets. Example: Award Amount = $4000 [$3,764].

- The Program-Related Data Reporting directs schools to submit certain data to COD through the Common Record. To meet these requirements several existing fields were moved from the Award block to the Disbursement block. This impacts all programs (DL, Pell, TEACH). A summary of those changes is listed below.

Fields to be reported in the Disbursement block
<PublishedPgmLengthYears>
<PublishedPgmLengthMonths>
<PublishedPgmLengthWeeks>
<WeeksProgramsAcademicYear>
<SpecialPrograms>
<ProgramCredentialLevel>
<ProgramCIPCode>

The <EnrollmentStatus> field is required in the Disbursement block for all programs.

The valid values for the following tags will be updated from 0-999,999 to 0-99.999:
<PublishedPgmLengthYears>
<PublishedPgmLengthMonths>

 Modifications to existing edits are reflected in the 2020-2021 COD Technical Reference: Volume II, Section 4 - Edits.

It should also be noted that not all the relocated or new fields will be specified in the test cases step-by-step guide because some of the above fields can have multiple values that would be valid. Even for those fields that are listed schools are encouraged to use any valid values that would work with the test case.

**First Test Cycle (First Submission)**

In the first test cycle a school submits Common Records in XML format for up to nine students as well as Release Records for all Direct Loan (i.e., PLUS, Unsubsidized, and Subsidized) disbursements.

- One student with Pell and TEACH
- One student with Pell Grant and PLUS
- One student with Pell Grant
- One student with Direct Loan Unsubsidized, PLUS, and TEACH
- One student with Direct Loan Unsubsidized
- One student with Direct Loan Unsubsidized and Subsidized
- One student with PLUS Loan and TEACH
• One student with Pell Grant, Direct Loan Unsubsidized, and Subsidized

• One student with Pell Grant, TEACH Grant, Direct Loan Unsubsidized and Subsidized

Once the awards are in XML Common Record format create one file (batch) to be sent to COD:

**First Test Cycle to COD in XML Format**

<table>
<thead>
<tr>
<th>File Description</th>
<th>Message Class</th>
<th>Maximum Number of Students in Batch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Record Documents</td>
<td>CRTESTIN</td>
<td>9</td>
</tr>
</tbody>
</table>

COD processes the files, and the school receives two files from COD in return:

**First Test Cycle Responses from COD**

<table>
<thead>
<tr>
<th>File Description</th>
<th>Message Class</th>
<th>Maximum Number of Students in Batch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Record Responses</td>
<td>CRTESTOP</td>
<td>9</td>
</tr>
</tbody>
</table>
Helpful Hints for Preparing Test Case Input Files and Receiving COD Responses

When XML errors and rejection edits occur after an input file is entered into the COD system these errors typically result because the input file contains errors. Many of these errors can be avoided before an input file is submitted. Common input errors include (but not limited to):

- Extra spaces (blanks) contained in some places of the XML file. As a result, the system does not accept the file as having the correct XML format and rejects the file. An example is a blank line between the <Version> and <CommonRecord> lines. Also, spaces in certain parts of an XML file counts as a value when the file processes through the COD system.

- Personal Information of the Student and/or Borrower – Examples: Switching the SSN of Borrower and Student, incorrect SSN of Student/Borrower, Student/Borrower’s DOB, Student/Borrower’s Last Name, Student/Borrower’s Address Information (Address, City, State Province, and Postal Code lines), CPS Transaction Number, Student Level Code, and Citizenship Status Code.

- Award Information – Examples: Disbursement Amount (common error for this is Duplicate Adjustment Information), Disbursement Number, Disbursement Sequence Number, Interest Rebate Amount, Attendance Cost, Financial Award Amount, Award Year, Promissory Note Print Code, Payment Period Start Date, and Payment Period End Date.

- School Information – Examples: Attending/Reporting Routing ID.

- Direct Loans use DL Code (aka DL ID) and TEACH uses first six digits of OPE ID to construct the financial award ID for school.

- Remember that Test Cases are intended as a guide to submitting accurate records. Include only the test cases which are supported by your software. Keep as close to test cases as possible but include only eligible programs. For example, Test Case 8 includes a Pell Grant, DL Sub and DL Unsub. If the school is setup only for Pell include only that program. Schools may submit several submissions with only one program due to software limitations.

- An input file with an XML error will be rejected by the COD system with edit 210.

The system will process an input file with incorrect information (some examples of which are provided, above) and generate a variety of edits (depending on the number and degree of input errors) in its Response. Because an input file can contain a variety and combination of errors, it is not possible to list all possible edits occurring under all possible conditions.
Preparing the Test Environment

The following are the most common edits and/or combination of edits that can result from a Response if the above information is not correct in the input file:

Edits: 011, 012, 024, 034, 039, 056, 058, 060, 077, 078, 100, 117, 120, 121, 160, 210, 996 and 998

It should also be noted that some edits also have companion edits. This means that if an edit is generated, it can be followed by a second edit because it is directly related to the first edit. When the first edit is resolved, this will typically also resolve the companion edit. Because of the variety and combination of errors that can be processed from an input file, not all possible edits and their companion edits can be listed.

Edits can be triggered for more than one type of error. For instance, an Edit 996 can be triggered by a variety of input errors (e.g., an incorrect Student SSN, a school having an incorrect or incomplete Award Year Setup, or an incorrect Financial Award Amount entered for a student). A single edit like this can occur under such varied conditions, due to the nature of the errors contained in that particular XML file. Depending on the award year, a particular edit or combination of edits can also be generated, based on incorrect information being submitted in the input file.

Even when an input file is in the correct XML format and contains correct information, it is still possible for the file to generate edits. In many of these cases, these are expected edits. In some cases, these edits can also have companion edits generated. Examples of the most common edits include (but not limited to):

- Disbursement Release Indicator
- Disbursement Date
- Award Year Setup
- Document ID

For more detailed information on specific edits, Schools should refer to Volume II, Section 4 of this technical reference for Common Record Edits. This reference guide specifically defines the edits and the edit types. The reference also identifies conditions under which the edit occurs and provides solutions/actions for preventing these edits from reoccurring in the future.

NOTE: COD manages the test environment and the processing of input records. Any concerns regarding the environment or input record processing should be discussed with COD. CPS is responsible for the ISIR layout and COD manages ISIR generation for School Test only. Any concerns about the ISIR layout should be discussed with CPS and any concerns about ISIR generation should be discussed with COD. School Setup Information is managed by COD. If you generate an edit for your School Information, and you have verified that your School Information is correct, you should contact COD.
Test Cases: Step by Step

The following steps assist the schools in completing these submission tasks:

Case 1: Pell and TEACH Grants

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Originate and disburse a Pell and two TEACH awards for Student #1 with an SSN = ###-##-0001, where ###-## represents the second through sixth digits of the specified OPE ID. <strong>For example:</strong> If the specified OPE ID is 07777800, the SSN for this student is 777-78-0001.</td>
</tr>
<tr>
<td>2</td>
<td>Submit a Common Record containing the following information: <strong>Student:</strong> Person Information: Student’s Current SSN = ###-##-0001 Student’s Date of Birth = 1999-01-01 Student’s First Name = Student Student’s Middle Initial = P Student’s Last Name = TESTONE No eligible SSN, DOB and last name combination match on CPS</td>
</tr>
<tr>
<td>3</td>
<td><strong>Award Information:</strong> TEACH Complex Element Award Year = 2021 (2020-2021) CPS Transaction Number = 01 Award Amount = 4000 [3764] Student Level Code = 2 *Financial Award ID = 777780001H21####001 (where #### represents the first six digits of the OPE ID) Student Eligibility Code = 06 *Note: The Financial Award ID is only an example</td>
</tr>
<tr>
<td>4</td>
<td><strong>Disbursement Information:</strong> Disbursement Number = 01 Disbursement Amount = 4000 [3764] Disbursement Date = 2020-08-02 <strong>Disbursement Release Indicator = false</strong> Disbursement Sequence Number = 01 Enrollment School Code = ######## (denoting the eight digit OPE ID of the school the student is enrolled at) Enrollment Status = F Published Program Length Years/Months/Weeks = valid value Special Programs = valid value Program Credential Level = valid value Program CIP Code = valid value Program CIP Code Year = valid value</td>
</tr>
<tr>
<td>5</td>
<td><strong>Award Information:</strong> TEACH Complex Element Award Year = 2021 (2020-2021) CPS Transaction Number = 01 Award Amount = 4000 [3764] Student Level Code = 2 *Financial Award ID = 777780001H21####002 (where ###### represents the first six digits of the OPE ID) Student Eligibility Code = 06 *Note: The Financial Award ID is only an example.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Disbursement Information:</strong></td>
</tr>
</tbody>
</table>

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system. Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.
**Disbursement Information:**
- Disbursement Number = 01
- Disbursement Amount = 4000 [3764]
- Disbursement Date = 2020-08-02
- **Disbursement Release Indicator** = false
- Disbursement Sequence Number = 01
- Enrollment School Code = ######## (denoting the eight digit OPE ID of the school the student is enrolled at)
- **Enrollment Status** = F
- Published Program Length Years/Months/Weeks = valid value
- Special Programs = valid value
- Program Credential Level = valid value
- Program CIP Code = valid value
- Program CIP Code Year = valid value

**Award Information:**
- Pell Complex Element
- Award Year = 2021 (2020-2021)
- CPS Transaction Number = 01
- Award Amount = 5050
- Cost of Attendance = 5000
- Enrollment Date = 2020-07-01
- Student Eligibility Code = 06
- **Note:** Expected Family Contribution (EFC) is not submitted to COD as COD receives this data through an interface with CPS.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
</table>
| 10   | Originate and disburse a PLUS loan and a Pell Grant for Student #2 with an SSN = ###-##-0002, where ##### represents the second through six digit OPE ID of the student.  
**For example:** If the specified OPE ID is 077778002, the SSN for this student is 777-78-0002. |
| 11   | Submit a Common Record containing the following information:
  **Student:**
  Person Information:
  Student’s Current SSN = ###-##-0002
  Student’s Date of Birth = 1999-02-02
  Student’s First Name = Student
  Student’s Middle Initial = P
  Student’s Last Name = TESTTWO |
| 12   | **Award Information:** |

**Case 2: Parent PLUS Direct Loan and Pell Grant**
### Pell Complex Element
- **Award Year**: 2021 (2020-2021)
- **CPS Transaction Number**: 01
- **Award Amount**: 2995
- **Cost of Attendance**: 15,000
- **Enrollment Date**: 2020-07-01
- **Student Eligibility Code**: 02

**Note**: Expected Family Contribution (EFC) is not submitted to COD as COD receives this data through an interface with CPS.

### Disbursement Information:
- **Disbursement Number**: 01
- **Disbursement Amount**: 451
- **Disbursement Date**: 2020-08-02
- **Disbursement Release Indicator**: false
- **Disbursement Sequence Number**: 01
- **Enrollment School Code**: ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
- **Enrollment Status**: F
- **Published Program Length Years**: 4
- **Special Programs**: B
- **Program Credential Level**: 03
- **Program CIP Code**: valid value
- **Program CIP Code Year**: valid value

### Borrower:
- **Borrower SSN**: ###-##-2002
- **Borrower Date of Birth**: 1972-02-02
- **Borrower First Name**: Parent
- **Borrower Middle Initial**: S
- **Borrower Last Name**: TESTTWO
- **Address**: 2 Main Street
- **City**: Newark
- **State**: NJ
- **Zip or Postal Code**: 07112
- **Citizenship Status Code**: 1
- **Default Overpay Code**: N (No)

### Award Information:
- **Direct Loan Information**:
  - **Award Key**: 1
  - **Origination Fee Percentage**: 4.236
  - **Interest Rebate Percentage**: 0
  - **Disclosure Statement Print Indicator**: S (School Prints)
  - **Student Level Code**: 2
  - **Award Begin Date**: 2020-07-02
  - **Award End Date**: 2021-07-01
  - **Academic Year Begin Date**: 2020-07-02
  - **Academic Year End Date**: 2021-07-01
- **DL PLUS Complex Element**
  - **FinancialAwardYear**: 2021
  - **CPSTransactionNumber**: 01
  - **FinancialAwardAmount**: 6000
  - **DependencyStatusCode**: D
  - **Default Overpay Code**: N (No)
  - **Financial Award ID**: 777780002P21####001 (where #### represents the Direct Loan ID)
  - **FinancialAwardAmountRequested**: 6000
  - **Award Create Date**: 2020-07-02
  - **Student Eligibility Code**: 02

**Note**: The Financial Award ID is only an example

**Student #2 is dependent.**
16 **Disbursement Information:**
- Disbursement Number = 01
- Disbursement Amount = 6000
- Disbursement Date = 2020-07-03
- **Disbursement Release Indicator = true**
- Disbursement Sequence Number = 01
- Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
- First Disbursement Flag = true
- Disbursement Net Amount = 5745
- Disbursement Fee Amount = 254
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F
- **Published Program Length Years = 4**
- **Special Programs = B**
- **Program Credential Level = 03**
- **Program CIP Code = valid value**
- **Program CIP Code Year = valid value**

17 Save the record.

### Case 3: Pell Grant

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Originate and disburse a Pell Grant for Student #3 with an SSN = ####-##-0003, where #### represents the second through sixth digits of the specified OPE ID. <strong>For example:</strong> If the specified OPE ID is 07777800, the SSN for this student is 777-78-0003.</td>
</tr>
</tbody>
</table>
| 19   | Submit a Common Record containing the following information: **Student:**
- Person Information:
  - Student’s Current SSN = ####-##-0003
  - Student’s Date of Birth = 2001-03-03
  - Student’s First Name = Student
  - Student’s Middle Initial = P
  - Student’s Last Name = TESTTHREE |
| 20   | **Award Information:**
- Pell Complex Element
  - Award Year = 2021 (2020-2021)
  - CPS Transaction Number = 01
  - Award Amount = 6345
  - Cost of Attendance = 9000
  - Enrollment Date = 2020-07-01
  - Student Eligibility Code = 07
- **Note:** Expected Family Contribution (EFC) is not submitted to COD as COD receives this data through an interface with CPS. |
| 21   | **Disbursement Information:**
- Disbursement Number = 01
- Disbursement Amount = 3172
- Disbursement Date = 2020-08-02 |

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system.

Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.
Disbursement Release Indicator = false
Disbursement Sequence Number = 01
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
Enrollment Status = F
Published Program Length Years/Months/Weeks = valid value
Special Programs = valid value
Program Credential Level = valid value
Program CIP Code = valid value

Disbursement Number = 02
Disbursement Amount = 3173
Disbursement Date = 2020-12-03
Disbursement Release Indicator = false
Disbursement Sequence Number = 01
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
Enrollment Status = F
Published Program Length Years/Months/Weeks = valid value
Special Programs = valid value
Program Credential Level = valid value
Program CIP Code = valid value
Program CIP Code Year = valid value

22  Save the record.

Case 4: Unsubsidized, and PLUS Direct Loans and TEACH Grant

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
</table>
| 23   | Originate and disburse Unsubsidized and PLUS Direct Loans and a TEACH Grant for Student #4 with an SSN = ###-##-0004, where ###-## represents the second through sixth digits of the specified OPE ID.  
For example: If the specified OPE ID is 07777800, the SSN for this student is 777-78-0004. |
| 24   | Submit a Common Record containing the following information:  
**Student:**  
Person Information:  
Student’s Current SSN = ###-##-0004  
Student’s Date of Birth = 1995-04-04  
Student’s First Name = Student  
Student’s Middle Initial = S  
Student’s Last Name = TESTFOUR  
Address = 4 Main Street  
City = Newark  
State = NJ  
Zip or Postal Code = 07112  
Citizenship Status Code = 1  

**Borrower:**  
Borrower SSN = ###-##-0004  
Borrower Date of Birth = 1991-04-04  
Borrower First Name = Student  
Borrower Middle Initial = S  
Borrower Last Name = TESTFOUR  
Address = 4 Main Street  
City = Newark |
State = NJ
Zip or Postal Code = 07112
Citizenship Status Code = 1
Default Overpay Code = N (No)

26 Award Information:
   Direct Loan Information:
   Award Key = 1
   Origination Fee Percentage = 4.236
   Interest Rebate Percentage = 0
   Disclosure Statement Print Indicator = S (School Prints)
   Student Level Code = 6
   Award Begin Date = 2020-07-02
   Award End Date = 2021-07-01
   Academic Year Begin Date = 2020-07-02
   Academic Year End Date = 2021-07-01

   DL PLUS Complex Element
   FinancialAwardYear=2021
   CPSTransactionNumber=01
   FinancialAwardAmount=4500
   DependencyStatusCode=I
   Default Overpay Code = N (No)
   *Financial Award ID=777780004P21####001 (where
   #### represents the Direct Loan ID)
   FinancialAwardAmountRequested=4500
   Award Create Date = 2020-07-02
   Student Eligibility Code = 12
   Ability To Benefit Test Administrator Code = 01
   Ability To Benefit Test Code = 03
   Ability To Benefit Completion Date = yyyy-mm-dd, where the
   date value is less than or equal to Award Create Date
   *Note: The Financial Award ID is only an example
   Student #4 is independent.

27 Disbursement Information:
   Disbursement Number = 01
   Disbursement Amount = 4500
   Disbursement Date = 2020-07-03
   Disbursement Release Indicator = true
   Disbursement Sequence Number = 01
   Enrollment School Code = #######
   (denoting the eight
digit OPE ID of the school the student is enrolled at)
   First Disbursement Flag = true
   Disbursement Net Amount = 4310
   Disbursement Fee Amount = 190
   Interest Rebate Amount = 0
   Payment Period Start Date = valid date
   Enrollment Status = F
   Published Program Length Years = 2
   Special Programs = N
   Program Credential Level = 05
   Program CIP Code = valid value
   Program CIP Code Year = valid value

28 Award Information:
   Direct Loan Information:
   Award Key = 2
   Origination Fee Percentage = 1.059
   Interest Rebate Percentage = 0
   Disclosure Statement Print Indicator = S (School Prints)
   Student Level Code = 6
   Award Begin Date = 2020-07-02
### COD Test Cases

**Direct Loan Unsubsidized Complex Element**

- **Award Year**: 2021 (2020-2021)
- **CPS Transaction Number**: 01
- **Award Amount**: 12000
- **Award Number**: 001 (maps to the loan sequence #)
- **Dependency Status Code**: I
- **Default Overpay Code**: N (No)
- **Financial Award ID**: 777780004U210001 (where ###### represents the Direct Loan ID)
- **Award Create Date**: 2020-07-02

---

**HPPA Indicator**: true

**Additional Unsubsidized Eligibility Indicator**: false

- **Student Eligibility Code**: 12
- **Ability To Benefit Test Administrator Code**: 01
- **Ability To Benefit Test Code**: 03
- **Ability To Benefit Completion Date**: yyyy-mm-dd, where the date value is less than or equal to Award Create Date

*Note: The Financial Award ID is only an example*

---

#### 29 Disbursement Information:

- **Disbursement Number**: 01
- **Disbursement Amount**: 6000
- **Disbursement Date**: 2020-07-03

**Disbursement Release Indicator**: true

- **Disbursement Sequence Number**: 01
- **Enrollment School Code**: ###### (denoting the eight digit OPE ID of the school the student is enrolled at)
- **First Disbursement Flag**: true
- **Disbursement Net Amount**: 5937
- **Disbursement Fee Amount**: 63
- **Interest Rebate Amount**: 0

**Payment Period Start Date**: valid date

**Enrollment Status**: F

**Published Program Length Years**: 2

**Special Programs**: N

**Program Credential Level**: 05

**Program CIP Code**: valid value

**Program CIP Code Year**: valid value

---

- **Disbursement Number**: 02
- **Disbursement Amount**: 6000
- **Disbursement Date**: 2020-07-04

**Disbursement Release Indicator**: true

- **Disbursement Sequence Number**: 01
- **Enrollment School Code**: ###### (denoting the eight digit OPE ID of the school the student is enrolled at)
- **Disbursement Net Amount**: 5937
- **Disbursement Fee Amount**: 63
- **Interest Rebate Amount**: 0

**Payment Period Start Date**: valid date

**Enrollment Status**: F

**Published Program Length Years**: 2

**Special Programs**: N

**Program Credential Level**: 05

**Program CIP Code**: valid value

**Program CIP Code Year**: valid value

---

**Award Information:**

- **Award End Date**: 2021-07-01
- **Academic Year Begin Date**: 2020-07-02
- **Academic Year End Date**: 2021-07-01

---

29 Disbursement Information:

- **Disbursement Number**: 01
- **Disbursement Amount**: 6000
- **Disbursement Date**: 2020-07-03

**Disbursement Release Indicator**: true

- **Disbursement Sequence Number**: 01
- **Enrollment School Code**: ###### (denoting the eight digit OPE ID of the school the student is enrolled at)
- **First Disbursement Flag**: true
- **Disbursement Net Amount**: 5937
- **Disbursement Fee Amount**: 63
- **Interest Rebate Amount**: 0

**Payment Period Start Date**: valid date

**Enrollment Status**: F

**Published Program Length Years**: 2

**Special Programs**: N

**Program Credential Level**: 05

**Program CIP Code**: valid value

**Program CIP Code Year**: valid value

---

30 Award Information:
**TEACH Complex Element**
Award Year = 2021 (2020-2021)
CPS Transaction Number = 01
Award Amount = 4000 [3764]
Student Level Code = 6
*Financial Award ID = 777780004H21#########001 (where
# # # # represents the first six digits of the OPE ID)*
Student Eligibility Code = 12
Ability To Benefit Test Administrator Code = 01
Ability To Benefit Test Code = 03
Ability To Benefit Completion Date = yyyy-mm-dd, where
the date value is less than or equal to Award Create Date
*Note: The Financial Award ID is only an example*

### 31 Disbursement Information:
- Disbursement Number = 01
- Disbursement Amount = 4000 [3764]
- Disbursement Date = 2020-08-02
- **Disbursement Release Indicator = false**
- Disbursement Sequence Number = 01
- Enrollment School Code = ######## (denoting the eight
digit OPE ID of the school the student is enrolled at)
**Enrollment Status = F**
- Published Program Length Years = 2
- Special Programs = N
- Program Credential Level = 05
- Program CIP Code = valid value
- Program CIP Code Year = valid value

### 23 Save the record.

---

**Case 5: Unsubsidized Direct Loan**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Originate and disburse an Unsubsidized Loan for Student #5 with an SSN = ###-##-0005, where ###-## represents the second through sixth digits of the specified OPE ID. <strong>For example:</strong> If the specified OPE ID is 07777800, the SSN for this student is 777-78-0005.</td>
</tr>
</tbody>
</table>

| 34   | Submit a Common Record containing the following information: **Student:**
|      | Person Information:
|      | Student's Current SSN = ###-##-0005
|      | Student's Date of Birth = 1996-05-05
|      | Student's First Name = Student
|      | Student's Middle Initial = S
|      | Student's Last Name = TESTFIVE
|      | Citizenship Status Code = 2
|      | Address = 5 Main Street
|      | City = Newark
|      | State = NJ
|      | Zip or Postal Code = 07112

| 35   | **Award Information:**
|      | Direct Loan Information:
|      | Award Key = 1
|      | Origination Fee Percentage = 1.059
|      | Interest Rebate Percentage = 0
|      | Disclosure Statement Print Indicator = S (School Prints)
|      | Student Level Code = 5
|      | Award Begin Date = 2020-07-02

---

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system. Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.
<table>
<thead>
<tr>
<th>Award End Date = 2021-07-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Year Begin Date = 2020-07-02</td>
</tr>
<tr>
<td>Academic Year End Date = 2021-07-01</td>
</tr>
<tr>
<td>Direct Loan Unsubsidized Complex Element</td>
</tr>
<tr>
<td>Award Year = 2021 (2020-2021)</td>
</tr>
<tr>
<td>CPS Transaction Number = 01</td>
</tr>
<tr>
<td>Award Amount = 3500</td>
</tr>
<tr>
<td>Award Number = 001 (maps to the loan sequence #)</td>
</tr>
<tr>
<td>Dependency Status Code = D</td>
</tr>
<tr>
<td>Default Overpay Code = N (No)</td>
</tr>
</tbody>
</table>
| *Financial Award ID = 777780005U21########001 (where
| # represents the Direct Loan ID) |
| Award Create Date = 2020-07-02 |
| Additional Unsubsidized Eligibility Indicator= false |
| Student Eligibility Code = 04 |
| *Note: The Financial Award ID is only an example |

### Disbursement Information:

- Disbursement Number = 01
- Disbursement Amount = 1750
- Disbursement Date = 2020-07-03

**Disbursement Release Indicator = true**

- Disbursement Sequence Number = 01
- Enrollment School Code = ######## (denoting the eight digit OPE ID of the school the student is enrolled at)
- First Disbursement Flag = true
- Disbursement Net Amount = 1732
- Disbursement Fee Amount = 18
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 4**

**Special Programs = B**

**Program Credential Level = 03**

**Program CIP Code = valid value**

**Program CIP Code Year = valid value**

- Disbursement Number = 02
- Disbursement Amount = 1750
- Disbursement Date = 2020-07-03

**Disbursement Release Indicator = true**

- Disbursement Sequence Number = 01
- Enrollment School Code = ######## (denoting the eight digit OPE ID of the school the student is enrolled at)
- Disbursement Net Amount = 1732
- Disbursement Fee Amount = 18
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 4**

**Special Programs = B**

**Program Credential Level = 03**

**Program CIP Code = valid value**

**Program CIP Code Year = valid value**

36 Save the record.
# Case 6: Subsidized and Unsubsidized Direct Loans

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>Originate and disburse a Subsidized Loan and an Unsubsidized Loan for Student #6 with an SSN = ###-###-0006, where ###-### represents the second and sixth digits of the specified OPE ID. <strong>For example:</strong> If the specified OPE ID is 07777800, the SSN for this student is 777-78-0006.</td>
</tr>
<tr>
<td>39</td>
<td>Submit a Common Record containing the following information: <strong>Student:</strong> Person Information: Student's Current SSN = ###-###-0006 Student's Date of Birth = 2000-06-06 Student's First Name = Student Student's Middle Initial = S Student's Last Name = TESTSIX Address = 6 Main Street City = Fort Lauderdale State = FL Zip or Postal Code = 33301</td>
</tr>
<tr>
<td>40</td>
<td><strong>Award Information:</strong> <strong>Direct Loan Information:</strong> Award Key = 1 Origination Fee Percentage = 1.059 Interest Rebate Percentage = 0 Disclosure Statement Print Indicator = S (School Prints) Student Level Code = 1 Award Begin Date = 2020-07-02 Award End Date = 2021-07-01 Academic Year Begin Date = 2020-07-02 Academic Year End Date = 2021-07-01 Direct Loan Subsidized Complex Element Award Year = 2021 (2020-2021) CPS Transaction Number = 01 Award Amount = 2000 Financial Award Number = 001 (maps to the loan sequence #) Dependency Status Code = D Default Overpay Code = N (No) Financial Award ID = 777780006S21#####001 (where ##### represents the Direct Loan ID) Award Create Date = 2020-07-02 Student Eligibility Code = 02 *Note: The Financial Award ID is only an example</td>
</tr>
<tr>
<td>41</td>
<td><strong>Disbursement Information:</strong> Disbursement Number = 01 Disbursement Amount = 1000 Disbursement Date = 2020-07-03 <strong>Disbursement Release Indicator = true</strong> Disbursement Sequence Number = 01 Enrollment School Code = ###### (denoting the eight digit OPE ID of the school the student is enrolled at) First Disbursement Flag = true Disbursement Net Amount = 990 Disbursement Fee Amount = 10 Interest Rebate Amount = 0 Payment Period Start Date = valid date Enrollment Status = F <strong>Published Program Length Years = 4</strong> <strong>Special Programs = B</strong> <strong>Program Credential Level = 03</strong></td>
</tr>
</tbody>
</table>

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system. Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.
Program CIP Code = valid value
Program CIP Code Year = valid value

Disbursement Number = 02
Disbursement Amount = 1000
Disbursement Date = 2020-07-03
**Disbursement Release Indicator = true**
Disbursement Sequence Number = 01
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
Disbursement Net Amount = 990
Disbursement Fee Amount = 10
Interest Rebate Amount = 0
Payment Period Start Date = valid date
Enrollment Status = F
**Published Program Length Years = 4**
**Special Programs = B**
Program Credential Level = 03
Program CIP Code = valid value
Program CIP Code Year = valid value

**Direct Loan Unsubsidized Complex Element:**
Award Year = 2021 (2020-2021)
CPS Transaction Number = 01
Award Amount = 1500
Award Number = 001 (maps to the loan sequence #)
Dependency Status Code = D
Default Overpay Code = N (No)
*Financial Award ID = 77780006U21#######001 (where
####### represents the Direct Loan ID)*
Award Create Date = 2020-07-02
Additional Unsubsidized Eligibility Indicator = false
Student Eligibility Code = 02
*Note:* The financial award id is only an example.

**Disbursement Information:**
Disbursement Number = 01
Disbursement Amount = 750
Disbursement Date = 2020-07-03
**Disbursement Release Indicator = true**
Disbursement Sequence Number = 01
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
First Disbursement Flag = true
Disbursement Net Amount = 743
Disbursement Fee Amount = 7
Interest Rebate Amount = 0
Payment Period Start Date = valid date
Enrollment Status = F
**Published Program Length Years = 4**
**Special Programs = B**
Program Credential Level = 03
Program CIP Code = valid value
Program CIP Code Year = valid value

Disbursement Number = 02
Disbursement Amount = 750
Disbursement Date = 2020-07-03
**Disbursement Release Indicator = true**
Disbursement Sequence Number = 01
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
Disbursement Net Amount = 743
Disbursement Fee Amount = 7
Interest Rebate Amount = 0
Payment Period Start Date = valid date
Enrollment Status = F
Published Program Length Years = 4
Special Programs = B
Program Credential Level = 03
Program CIP Code = valid value
Program CIP Code Year = valid value

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Save the record.</td>
</tr>
</tbody>
</table>

**Case 7: Parent PLUS Direct Loan and TEACH Grants**

**Case 7: Parent PLUS Direct Loan and TEACH Grants**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Originate and disburse a PLUS Loan and two TEACH Grants for Student #7 with an SSN = ###-##-0007, where ###-## represents the second and sixth digits of the specified OPE ID. The Student #7's Parent Borrower SSN = ###-##-0707. <strong>For example:</strong> If the specified OPE ID is 07777800, the SSN for this student is 777-78-0007.</td>
</tr>
</tbody>
</table>
| 46   | Submit a Common Record containing the following information: **Student:**
|      | Person Information:
|      | Student's Current SSN = ###-###-0007
|      | Student's Date of Birth = 1998-07-07
|      | Student's First Name = Student
|      | Student's Middle Initial = S
|      | Student's Last Name = TESTSEVEN
|      | Address = 7 Main Street
|      | City = Fort Lauderdale
|      | State = FL
|      | Zip or Postal Code = 33301
|      | Citizenship Status Code = 1
|      | **Borrower:**
|      | Borrower SSN = ###-##-7007
|      | Borrower Date of Birth = 1977-07-07
|      | Borrower First Name = Parent
|      | Borrower Middle Initial = P
|      | Borrower Last Name = TESTSEVEN
|      | Address = 7 Main Street
|      | City = Fort Lauderdale
|      | State = FL
|      | Zip or Postal Code = 33301
|      | Citizenship Status Code = 1
|      | Default Overpay Code = N (No)
| 47   | **Award Information:**
|      | Direct Loan Information:
|      | Award Key = 1
|      | Origination Fee Percentage = 4.236
|      | Interest Rebate Percentage = 0
|      | Disclosure Statement Print Indicator = S (School Prints)
|      | Student Level Code = 3
|      | Award Begin Date = 2020-07-02
|      | Award End Date = 2021-07-01
|      | Academic Year Begin Date = 2020-07-02
|      | Academic Year End Date = 2021-07-01

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system.

Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.
<table>
<thead>
<tr>
<th>Page</th>
<th>Content</th>
</tr>
</thead>
</table>
| 49   | **Disbursement Information:**  
|      | Disbursement Number = 01  
|      | Disbursement Amount = 10000  
|      | Disbursement Date = 2020-07-03  
|      | **Disbursement Release Indicator = true**  
|      | Disbursement Sequence Number = 01  
|      | Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)  
|      | First Disbursement Flag = true  
|      | Disbursement Net Amount = 9577  
|      | Disbursement Fee Amount = 423  
|      | Interest Rebate Amount = 0  
|      | Payment Period Start Date = valid date  
|      | Enrollment Status = F  
|      | Published Program Length Years = 4  
|      | Special Programs = B  
|      | Program Credential Level = 03  
|      | Program CIP Code = valid value  
|      | Program CIP Code Year = valid value  

| 50   | **Award Information:**  
|      | TEACH Complex Element  
|      | Award Year = 2021 (2020-2021)  
|      | CPS Transaction Number = 01  
|      | Award Amount = 4000 [3764]  
|      | Student Level Code = 3  
|      | *Financial Award ID = 777780009H21#####001 (where ###### represents the first six digits of the OPE ID)  
|      | Student Eligibility Code = 06  
|      | *Note: The financial award id is only an example.  

| 51   | **Disbursement Information:**  
|      | Disbursement Number = 01  
|      | Disbursement Amount = 4000 [3764]  
|      | Disbursement Date = 2020-08-02  
|      | **Disbursement Release Indicator = false**  
|      | Disbursement Sequence Number = 01  
|      | Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)  
|      | Enrollment Status = F  
|      | Published Program Length Years = 4  
|      | Special Programs = B  
|      | Program Credential Level = 03  
|      | Program CIP Code = valid value  
|      | Program CIP Code Year = valid value  

| 52   | **Award Information:**  
|      | TEACH Complex Element  
|      | Award Year = 2021 (2020-2021)  
|      | CPS Transaction Number = 01  
|      | Award Amount = 4000 [3764]  

### Notes

- **COD Test Cases**
- **COD Technical Reference**
- **Volume V – School Testing Guide**
- **March 2020**
Student Level Code = 3  
*Financial Award ID = 777780009H21####0002 (where ###### represents the first six digits of the OPE ID)  
Student Eligibility Code = 06  
*Note: The financial award id is only an example.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
</table>
| 53   | **Disbursement Information:**  
|      | Disbursement Number = 01  
|      | Disbursement Amount = 4000 [3764]  
|      | Disbursement Date = 2020-08-02  
|      | **Disbursement Release Indicator = false**  
|      | Disbursement Sequence Number = 01  
|      | Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)  
|      | **Enrollment Status = F**  
|      | **Published Program Length Years = 4**  
|      | **Special Programs = B**  
|      | **Program Credential Level = 03**  
|      | **Program CIP Code = valid value**  
|      | Program CIP Code Year = valid value |
| 54   | Save the record. |

**Case 8: Pell Grant and Subsidized and Unsubsidized Direct Loans**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
</table>
| 55   | **Disbursement Information:**  
|      | Disbursement Number = 01  
|      | Disbursement Amount = 4000 [3764]  
|      | Disbursement Date = 2020-08-02  
|      | **Disbursement Release Indicator = false**  
|      | Disbursement Sequence Number = 01  
|      | Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)  
|      | **Enrollment Status = F**  
|      | **Published Program Length Years = 4**  
|      | **Special Programs = B**  
|      | **Program Credential Level = 03**  
|      | **Program CIP Code = valid value**  
|      | Program CIP Code Year = valid value |
| 56   | Submit a Common Record containing the following information:  
|      | **Student:**  
|      | Person Information:  
|      | Student’s Current SSN = ####-####-0008  
|      | Student’s Date of Birth = 1996-08-08  
|      | Student’s First Name = Student  
|      | Student’s Middle Initial = C  
|      | Student’s Last Name = TESTEIGHT  
|      | Address = 8 Main Street  
|      | City = San Francisco  
|      | State = CA  
|      | Zip or Postal Code = 94109 |
| 57   | **Award Information:**  
|      | Pell Complex Element  
|      | Award Year = 2021 (2020-2021)  
|      | CPS Transaction Number = 01  
|      | Award Amount = 6345  
|      | Cost of Attendance = 20,000  
|      | Enrollment Date = 2020-07-01  
|      | Student Eligibility Code = 02  
|      | **Note:** Expected Family Contribution (EFC) is not submitted to COD as COD receives this data through an interface with CPS.  
|      | Student has a DOD Match Flag value of ‘Y’, which allows the student to receive the lesser of the Maximum Pell Grant corresponding to the student’s enrollment status, or the COA. |

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system.  
Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.
<table>
<thead>
<tr>
<th>Disbursement Number = 01</th>
<th>Disbursement Amount = 6345</th>
<th>Disbursement Date = 2020-07-03</th>
<th><strong>Disbursement Release Indicator = true</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment School Code = ########</td>
<td>Enrollment Status = F</td>
<td>Published Program Length Years = 2</td>
<td>Special Programs = N</td>
</tr>
<tr>
<td>Program Credential Level = 03</td>
<td>Program CIP Code = valid value</td>
<td>Program CIP Code Year = valid value</td>
<td></td>
</tr>
</tbody>
</table>

59 **Award Information:**

- Direct Loan Information:
  - Award Key = 1
  - Origination Fee Percentage = 1.059
  - Interest Rebate Percentage = 0
  - Disclosure Statement Print Indicator = S (School Prints)
  - Student Level Code = 5
  - Award Begin Date = 2020-07-02
  - Award End Date = 2021-07-01
  - Academic Year Begin Date = 2020-07-02
  - Academic Year End Date = 2021-07-01

- Direct Loan Subsidized Complex Element
  - Award Year = 2021 (2020-2021)
  - CPS Transaction Number = 01
  - Award Amount = 3500
  - Award Number = 001 (maps to the loan sequence #)
  - Dependency Status Code = D
  - Default Overpay Code = N (No)

*Financial Award ID = 77778008S21########001 (where
#### represents the Direct Loan ID)

- Award Create Date = 2020-07-02
- Student Eligibility Code = 02
- **Note:** The financial award id is only an example

60 **Disbursement Information:**

- Disbursement Number = 01
- Disbursement Amount = 1750
- Disbursement Date = 2020-07-03

*Disbursement Release Indicator = false*

- Enrollment School Code = ########  (denoting the eight digit OPE ID of the school the student is enrolled at)
- First Disbursement Flag = true
- Disbursement Net Amount = 1732
- Disbursement Fee Amount = 18
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 2**

- Special Programs = N
- Program Credential Level = 03
- Program CIP Code = valid value

- Disbursement Number = 02
- Disbursement Amount = 1750
- Disbursement Date = 2020-08-03

*Disbursement Release Indicator = false*

- Disbursement Sequence Number = 01
Enrollment School Code = # ####### (denoting the eight digit OPE ID of the school the student is enrolled at)
Disbursement Net Amount = 1732
Disbursement Fee Amount = 18
Interest Rebate Amount = 0
Payment Period Start Date = valid date
Enrollment Status = F

**Published Program Length Years = 2**
**Special Programs = N**
**Program Credential Level = 03**
**Program CIP Code = valid value**
**Program CIP Code Year = valid value**

---

**Direct Loan Unsubsidized Complex Element**

- Award Year = 2021 (2020-2021)
- CPS Transaction Number = 01
- Award Amount = 3000
- Award Number = 001 (maps to the loan sequence #)
- Dependency Status Code = D
- Default Overpay Code = N (No)

*Financial Award ID = 777780008U21####001 (where #### represents the Direct Loan ID)*

- Award Create Date = 2020-07-02
- Additional Unsubsidized Eligibility Indicator = true
- Student Eligibility Code = 02
*Note: The financial award id is only an example.*

---

**Disbursement Information:**

- Disbursement Number = 01
- Disbursement Amount = 1500
- Disbursement Date = 2020-08-02
- **Disbursement Release Indicator = false**
- Disbursement Sequence Number = 01
- Enrollment School Code = # ####### (denoting the eight digit OPE ID of the school the student is enrolled at)

- First Disbursement Flag = true
- Disbursement Net Amount = 1485
- Disbursement Fee Amount = 15
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 2**
**Special Programs = N**
**Program Credential Level = 03**
**Program CIP Code = valid value**

---

- Disbursement Number = 02
- Disbursement Amount = 1500
- Disbursement Date = 2020-08-03
- **Disbursement Release Indicator = false**
- Disbursement Sequence Number = 01
- Enrollment School Code = # ####### (denoting the eight digit OPE ID of the school the student is enrolled at)

- Disbursement Net Amount = 1485
- Disbursement Fee Amount = 15
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 2**
**Special Programs = N**
**Program Credential Level = 03**
**Program CIP Code = valid value**
**Program CIP Code Year = valid value**
Save the record.

## Case 9: Pell and TEACH Grants, and Subsidized and Unsubsidized Direct Loans

If you have loaded the provided Test ISIR file some of the following data for this transmission may already be available in your system.

Verify the data in your system agrees with the test data outlined below adding or updating data to your system whenever necessary.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
</table>
| 64   | Originate and disburse a Pell Grant, a TEACH Grant, a Subsidized Loan and an Unsubsidized Loan for Student #9 with an SSN = ###-##-0009, where ###-## represents the second and sixth digits of the specified OPE ID.  
**For example:** If the specified OPE ID is 07777800, the SSN for this student is 777-78-0009. |
| 65   | Submit a Common Record containing the following information:  
**Student:**  
Person Information:  
Student’s Current SSN = ###-##-0009  
Student’s Date of Birth = 1997-09-09  
Student’s First Name = Student  
Student’s Middle Initial = C  
Student’s Last Name = TESTNINE  
Address = 9 Main Street  
City = San Francisco  
State = CA  
Zip or Postal Code = 94109  
**Award Information:**  
Pell Complex Element  
Award Year = 2021 (2020-2021)  
CPS Transaction Number = 01  
Award Amount = 6345  
Cost of Attendance = 9000  
Enrollment Date = 2020-07-01  
Student Eligibility Code = 04  
**Note:** Expected Family Contribution (EFC) is not submitted to COD as COD receives this data through an interface with CPS.  
**Disbursement Information:**  
Disbursement Number = 01  
Disbursement Amount = 6345  
Disbursement Date = 2020-08-02  
**Disbursement Release Indicator = false**  
Disbursement Sequence Number = 01  
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)  
**Enrollment Status = F**  
Published Program Length Years = 4  
Special Programs = B  
Program Credential Level = 03  
Program CIP Code = valid value |
### Award Information:

- **Direct Loan Information:**
  - Award Key = 1
  - Origination Fee Percentage = 1.059
  - Interest Rebate Percentage = 0
  - Disclosure Statement Print Indicator = S (School Prints)
  - Student Level Code = 4
  - Award Begin Date = 2020-07-02
  - Award End Date = 2021-07-01
  - Academic Year Begin Date = 2020-07-02
  - Academic Year End Date = 2021-07-01

Direct Loan Subsidized Complex Element
- Award Year = 2021 (2020-2021)
- CPS Transaction Number = 01
- Award Amount = 5500
- Award Number = 001 (maps to the loan sequence #)
- Dependency Status Code = D
- Default Overpay Code = N (No)
* Financial Award ID = 77778009S21#######001 (where
  ####### represents the Direct Loan ID)
  - Award Create Date = 2020-07-02
  - Student Eligibility Code = 04

* **Note:** The financial award id is only an example.

### Disbursement Information:

- Disbursement Number = 01
- Disbursement Amount = 2750
- Disbursement Date = 2020-07-03

**Disbursement Release Indicator = true**
- Disbursement Sequence Number = 01
- Enrollment School Code = ####### (denoting the eight digit
  OPE ID of the school the student is enrolled at)
- First Disbursement Flag = true
- Disbursement Net Amount = 2721
- Disbursement Fee Amount = 29
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 4**
- Special Programs = B
- Program Credential Level = 03
- Program CIP Code = valid value
- Program CIP Code Year = valid value

- Disbursement Number = 02
- Disbursement Amount = 2750
- Disbursement Date = 2020-07-03

**Disbursement Release Indicator = true**
- Disbursement Sequence Number = 01
- Enrollment School Code = ####### (denoting the eight digit
  OPE ID of the school the student is enrolled at)
- Disbursement Net Amount = 2721
- Disbursement Fee Amount = 29
- Interest Rebate Amount = 0
- Payment Period Start Date = valid date
- Enrollment Status = F

**Published Program Length Years = 4**
- Special Programs = B
- Program Credential Level = 03
- Program CIP Code = valid value
<table>
<thead>
<tr>
<th>Program CIP Code Year</th>
<th>valid value</th>
</tr>
</thead>
</table>
| 70                   | **Direct Loan Unsubsidized Complex Element**  
Award Year = 2021 (2020-2021)  
CPS Transaction Number = 01  
Award Amount = 5000  
Award Number = 001 (maps to the loan sequence #)  
Dependency Status Code = D  
Default Overpay Code = N (No)  
*Financial Award ID = 777780009U21(####)001 (where  
#### represents the Direct Loan ID)  
Award Create Date = 2020-07-02  
Additional Unsubsidized Eligibility Indicator = true  
Student Eligibility Code = 04  
*Note: The financial award id is only an example |
|                      | Disbursement Information:  
Disbursement Number = 01  
Disbursement Amount = 2500  
Disbursement Date = 2020-07-03  
**Disbursement Release Indicator = true**  
Disbursement Sequence Number = 01  
Enrollment School Code = ####### (denoting the eight digit  
OPE ID of the school the student is enrolled at)  
First Disbursement Flag = true  
Disbursement Net Amount = 2474  
Disbursement Fee Amount = 26  
Interest Rebate Amount = 0  
Payment Period Start Date = valid date  
Enrollment Status = F  
**Published Program Length Years = 4**  
**Special Programs = B**  
**Program Credential Level = 03**  
**Program CIP Code = valid value**  
**Program CIP Code Year = valid value**  
Disbursement Number = 02  
Disbursement Amount = 2500  
Disbursement Date = 2020-07-03  
**Disbursement Release Indicator = true**  
Disbursement Sequence Number = 01  
Enrollment School Code = ####### (denoting the eight digit  
OPE ID of the school the student is enrolled at)  
Disbursement Net Amount = 2474  
Disbursement Fee Amount = 26  
Interest Rebate Amount = 0  
Payment Period Start Date = valid date  
Enrollment Status = F  
**Published Program Length Years = 4**  
**Special Programs = B**  
**Program Credential Level = 03**  
**Program CIP Code = valid value**  
**Program CIP Code Year = valid value** |
| 72                   | **Award Information:**  
TEACH Complex Element  
Award Year = 2021 (2020-2021)  
CPS Transaction Number = 01  
Award Amount = 4000 [3764]  
Student Level Code = 4  
*Financial Award ID = 777780009H21(####)001 (where  
#### represents the first six digits of the OPE ID)  
Student Eligibility Code = 04 |
**Note:** The financial award ID is only an example

<table>
<thead>
<tr>
<th>73</th>
<th><strong>Disbursement Information:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disbursement Number = 01</td>
</tr>
<tr>
<td></td>
<td>Disbursement Amount = 4000 [3764]</td>
</tr>
<tr>
<td></td>
<td>Disbursement Date = 2020-07-03</td>
</tr>
<tr>
<td></td>
<td><strong>Disbursement Release Indicator = true</strong></td>
</tr>
<tr>
<td></td>
<td>Disbursement Sequence Number = 01</td>
</tr>
<tr>
<td></td>
<td>Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)</td>
</tr>
<tr>
<td></td>
<td><strong>Enrollment Status = F</strong></td>
</tr>
<tr>
<td></td>
<td>Published Program Length Years = 4</td>
</tr>
<tr>
<td></td>
<td>Special Programs = B</td>
</tr>
<tr>
<td></td>
<td>Program Credential Level = 03</td>
</tr>
<tr>
<td></td>
<td>Program CIP Code = valid value</td>
</tr>
<tr>
<td></td>
<td>Program CIP Code Year = valid value</td>
</tr>
</tbody>
</table>

74 Save the record.

### Prepare Document Block and Entity Block for Batch

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td><strong>Transmit the following Document tags with this batch to COD:</strong></td>
</tr>
<tr>
<td></td>
<td><code>&lt;TransmissionData&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;DocumentID&gt;</code>{(Date/Time stamp with Source Routing ID)}&lt;/DocumentID&gt;`</td>
</tr>
<tr>
<td></td>
<td><code>&lt;CreatedDateTime&gt;</code>{(CCYY-MM-DDTHH:mm:ss.ff)}&lt;/CreatedDateTime&gt;`</td>
</tr>
<tr>
<td></td>
<td><code>&lt;Source&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/School&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;RoutingID&gt;</code>99999999&lt;/RoutingID&gt;`</td>
</tr>
<tr>
<td></td>
<td><code>&lt;ThirdPartyServicer&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;RoutingID&gt;</code>99999999&lt;/RoutingID&gt;`</td>
</tr>
<tr>
<td></td>
<td><code>&lt;/ThirdPartyServicer&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Source&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Destination&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;COD&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;RoutingID&gt;</code>00000001&lt;/RoutingID&gt;`</td>
</tr>
<tr>
<td></td>
<td><code>&lt;/COD&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/Destination&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;FullResponseCode&gt;F&lt;/FullResponseCode&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;/TransmissionData&gt;</code></td>
</tr>
</tbody>
</table>

76 **Transmit the following Entity tags with this batch to COD:**

```xml
<ReportingSchool>
<RoutingID>
<ReportedFinancialSummary> (one for each type of award in the record)
<FinancialAwardType>
<FinancialAwardYear>
>TotalCount>
>TotalReportedAward>
>TotalReportedDisbursement>
</ReportedFinancialSummary>
```
## Send Files to COD

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>Prepare the Common Record in XML.</td>
</tr>
<tr>
<td>78</td>
<td>Transmit the batch to COD via the SAIG using the message class <code>CRTESTIN</code> and your Test Destination Mailbox.</td>
</tr>
<tr>
<td>79</td>
<td>COD processes the batch and the Response records are then placed on the SAIG to be retrieved.</td>
</tr>
</tbody>
</table>

## Receive Responses from COD

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>1. Import the Response into the school’s system. The message class is <code>CRTESTOP</code>.</td>
</tr>
<tr>
<td>81</td>
<td>2. Contact the COD School Relations Center to verify the results and the successful completion of the second test cycle.</td>
</tr>
</tbody>
</table>
Second Test Cycle (Second Submission)

In the second test cycle, a school performs the following steps:

- Submit updates to Student demographic data
- Submit updates and adjustments to award and disbursement amounts
- Submit Release Records for actual disbursements

**Second Test Cycle to COD in XML Format**

<table>
<thead>
<tr>
<th>File Description</th>
<th>Message Class</th>
<th>Maximum Number of Students in Batch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Record Documents</td>
<td>CRTESTIN</td>
<td>9</td>
</tr>
</tbody>
</table>

COD processes the files, and the school receives two files from COD in return:

**Second Test Cycle Responses from COD**

<table>
<thead>
<tr>
<th>File Description</th>
<th>Message Class</th>
<th>Maximum Number of Students in Batch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Record Responses</td>
<td>CRTESTOP</td>
<td>9</td>
</tr>
</tbody>
</table>
Test Cases: Step by Step

The following steps assist the schools in completing these submission tasks:

**Case 1: Pell and TEACH Grants**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retrieve Student #1 (###-##-0001).</td>
</tr>
</tbody>
</table>
| 2    | Re-submit all three awards with the correct Person Information:  
  | Student’s Current SSN = ###-##-0001  
  | Student’s Date of Birth = 1999-01-01  
  | Student’s Last Name = TESTONE |
| 3    | Update the Disbursement Information for Pell:  
  | Disbursement Number = 01  
  | Disbursement Sequence Number = 01  
  | Disbursement Date = 2020-07-03  
  | Disbursement Release Indicator = true |
| 4    | Before proceeding, make sure the record is saved. |

**Case 2: Pell Grant and Parent PLUS Loan**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Retrieve Student #2 (###-##-0002).</td>
</tr>
</tbody>
</table>
| 6    | Submit the Person Information:  
  | Student’s Current SSN = ###-##-0002  
  | Student’s Date of Birth = 1999-02-02  
  | Student’s Last Name = TESTTWO |
| 7    | Pell Disbursement Information to adjust the first disbursement:  
  | Disbursement Number = 01  
  | Disbursement Amount = 451  
  | Disbursement Date = 2020-07-03  
  | Disbursement Release Indicator = true  
  | Disbursement Sequence Number = 01 |
| 8    | PLUS Loan Disbursement Information to adjust the award amount and first disbursement:  
  | FinancialAwardAmount = 5500  
  | Disbursement Number = 01  
  | Disbursement Sequence Number = 02  
  | Disbursement Date = 2020-07-03  
  | Disbursement Amount = 5500  
  | Disbursement Release Indicator = true |
| 9    | Before proceeding, make sure the record is saved. |

**Case 3: Pell Grant**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Retrieve Student #3 (###-##-0003).</td>
</tr>
</tbody>
</table>
| 11   | Submit the Person Information:  
  | Student’s Current SSN = ###-##-0003  
  | Student’s Date of Birth = 2001-03-03  
  | Student’s Last Name = TESTTHREE |
### Case 4: TEACH Grant

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Retrieve Student #4 (###-##-0004).</td>
</tr>
</tbody>
</table>
| 15   | Submit the Person Information:  
|      |   - Student’s Current SSN = ###-##-0004  
|      |   - Student’s Date of Birth = 1995-04-04  
|      |   - Student’s Last Name = TESTFOUR |
| 16   | Update the Disbursement Information for the TEACH Grant:  
|      |   - Disbursement Number = 01  
|      |   - Disbursement Sequence Number = 01  
|      |   - Disbursement Date = 2020-07-03  
|      |   - Disbursement Release Indicator = true |
| 17   | Before proceeding, make sure the record is saved. |

### Case 5: Unsubsidized Direct Loan

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Retrieve the Common Record for student ###-##-0005.</td>
</tr>
</tbody>
</table>
| 19   | Submit the Person Information:  
|      |   - Student’s Current SSN = ###-##-0005  
|      |   - Student’s Date of Birth = 1996-05-05  
|      |   - Student’s Last Name = TESTFIVE |
| 20   | Update the Unsubsidized Award Amount:  
|      |   - From: 3500 To: 2800 |
| 21   | Update the Disbursement Information for Unsubsidized Loan:  
|      |   - Disbursement Number = 01  
|      |   - Disbursement Sequence Number = 02  
|      |   - Update Disbursement Amounts:  
|      |      - Disbursement Amount: From: 1750 To: 1400  
|      |      - Disbursement Fee Amount: From: 18 To: 14  
|      |      - Interest Rebate Amount: 0  
|      |      - Disbursement Net Amount: From: 1732 To: 1386  
|      |   - Disbursement Release Indicator = true |
| 22   | Update the Disbursement Information for Unsubsidized Loan:  
|      |   - Disbursement Number = 02  
|      |   - Disbursement Sequence Number = 02  
|      |   - Update Disbursement Amounts:  
|      |      - Disbursement Amount: From: 1750 To: 1400  
|      |      - Disbursement Fee Amount: From: 18 To: 14  
|      |      - Interest Rebate Amount: 0  
|      |      - Disbursement Net Amount: From: 1732 To: 1386  
|      |   - Disbursement Release Indicator = true |
| 23   | Before proceeding, make sure the record is saved. |
### Case 7: TEACH Grants

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Retrieve Student #7 (###-##-0007).</td>
</tr>
</tbody>
</table>
| 25   | Submit the Person Information:  
Student’s Current SSN = ###-##-0007  
Student’s Date of Birth = 1998-07-07  
Student’s Last Name = TESTSEVEN |
| 26   | Update the **Disbursement Information** for the two TEACH Grants:  
Disbursement Number = 01  
Disbursement Sequence Number = 01  
Disbursement Date = 2020-07-03  
**Disbursement Release Indicator = true** |
| 27   | Save the record. |

### Case 8: Subsidized and Unsubsidized Direct Loans

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Retrieve Student ###-##-0008.</td>
</tr>
</tbody>
</table>
| 29   | Submit the Person Information:  
Student’s Current SSN = ###-##-0008  
Student’s Date of Birth = 1996-08-08  
Student’s Last Name = TESTEIGHT |
| 30   | Update the **Disbursement Information** for Direct Loan Subsidized and Unsubsidized Loans:  
Disbursement Number = 01  
Disbursement Sequence Number = 01  
Disbursement Date = 2020-07-03  
**Disbursement Release Indicator = true**  
Disbursement Number = 02  
Disbursement Sequence Number = 01  
Enrollment School Code = ####### (denoting the eight digit OPE ID of the school the student is enrolled at)  
Disbursement Date = 2020-07-03  
**Disbursement Release Indicator = true** |
| 31   | Save the record. |

### Case 9: Pell Grant and Unsubsidized Loan

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Retrieve Student #9 (###-##-0009).</td>
</tr>
</tbody>
</table>
| 33   | Submit the Person Information:  
Student’s Current SSN = ###-##-0009  
Student’s Date of Birth = 1997-09-09  
Student’s Last Name = TESTNINE |
| 34   | Update the **Disbursement Information** for Pell Grant:  
Disbursement Number = 01  
Disbursement Sequence Number = 01  
Disbursement Date = 2020-07-03  
**Disbursement Release Indicator = true** |
| 35   | Update Award Amount for Unsubsidized Loan:  
From 5000 To 0 |
36. Update the **Disbursement Information** for Unsubsidized Loan:
- Disbursement Number = 01
- Disbursement Sequence Number = 02
- Disbursement Amount: From 2500 To 0
- Disbursement Net Amount: From 2474 To 0
- Disbursement Fee Amount: From 26 To 0
- Interest Rebate Amount: 0
- Disbursement Number = 02
- Disbursement Sequence Number = 02
- Disbursement Amount: From 2500 TO 0
- Disbursement Net Amount: From 2474 To 0
- Disbursement Fee Amount: From 26 To 0
- Interest Rebate Amount: 0

37. Save the record.

**Prepare Document Block and Entity Block for Batch**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
</table>
| 38   | Transmit the following Document tags with this batch to COD:  
<TransmissionData>  
<DocumentID>(Date/Time stamp with Source Routing ID)</DocumentID>  
<CreatedDateTime>(CCYY-MM-DDTHH:mm:ss.ff)</CreatedDateTime>  
</School>  
<RoutingID>99999999</RoutingID>  
</School>  

or  

<ThirdPartyServicer>  
<RoutingID>99999999</RoutingID>  
</ThirdPartyServicer>  
</School>  
</Destination>  
</COD>  
<RoutingID>00000001</RoutingID>  
</COD>  
</Destination>  
</FullResponseCode>F</FullResponseCode>  
</TransmissionData>  

39. Transmit the following Entity tags with this batch to COD:  
<ReportingSchool>  
<RoutingID>  
<ReportedFinancialSummary>(one for each type of award in the record)  
<FinancialAwardType>  
<FinancialAwardYear>  
>TotalCount>  
>TotalReportedAward>  
>TotalReportedDisbursement>
### Send Files to COD

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Prepare the Common Record in XML.</td>
</tr>
<tr>
<td>41</td>
<td>Transmit the batch to COD via the SAIG using the message class <code>CRTESTIN</code> and your Test Destination Mailbox.</td>
</tr>
<tr>
<td>42</td>
<td>COD processes the batch and the Response records are then placed on the SAIG to be retrieved.</td>
</tr>
</tbody>
</table>

### Receive Responses from COD

<table>
<thead>
<tr>
<th>Step</th>
<th>Action/Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>Import the Response into the school’s system. The message class is <code>CRTESTOP</code>.</td>
</tr>
<tr>
<td>44</td>
<td>Contact the COD School Relations Center to verify the results and the successful completion of the second test cycle.</td>
</tr>
</tbody>
</table>
Wrap-Up

This section describes the final steps associated with the testing process and provides some suggestions for the school during the conversion to a production status.

Notification of Results

The COD School Relations Center notifies the contact person at the participating school of the results of each test cycle. If problems are discovered, a retest is scheduled. The contact person should be available during the testing period to analyze problems, assist with, and coordinate any follow-up tests that may be required. Schools should contact the COD School Relations Center if test results are not received or communicated when expected.

Preparing School Database for Production

The school should clean out their system, by removing all test data, before sending production data.

- Warning: Ensure that the system date is changed back to the current date and that message classes and destinations have been changed from ‘test’ to ‘production’.

- Warning: All test data MUST be removed from a school’s system prior to beginning actual processing and before sending live production data to COD.

- Warning: Test Message Classes and the Test Destination Mailbox MAY NOT be used to process production data.

Production data is processed using the production message classes outlined in Volume II, Section 2 of this technical reference.
Addendum

This section describes updates to School Testing capabilities.

Environment: The School Test environment is a full test environment. This means the test environment may roll the date forward as is done in Production. This will not impact Phase I Manual Verification. But it will impact Phase II and III testing. Upon commencement of Phase II testing COD Schools Test, Current Processing Date (CPD), will be set to July 3rd, 2020. Once the real-world date catches up with this date the School Test Team will roll the date so that the School Test environment will match the real-world date.

Award Year 2020-2021:
The Award Year 2020-2021 will see an update to the Common Record Schema to 4.0d. There is one new optional tag, <EmailContactEffectiveDate> can be used in either Student Information and/or Borrower Information blocks. In addition, the <ProgramCIPCodeYear> field is being activated for all programs and is required for 2020-2021 and forward. Failure to have the tag will draw the updated edit 204 reject edit.

The CommonRecord tags in the step by step guide has been updated to reflect the new version. The ProgramCIPCodeYear has also been added to all the disbursement blocks in the step by step guide.

Finally, the new 4.0d Schema will include the Informed Borrowing fields in all Direct Loan Award Level Response blocks starting in award year 2020-2021 and going forward. (These fields are NOT part of the Common Record input files that Schools generate and send into COD.) Since all Direct Loan awards with actual disbursements will require the borrower to have completed the Informed Borrower process, the School Test Team will pre-load these acknowledgements for the Schools. Schools participating in Schools Testing will not need to take any action to account for the Informed Borrower requirements.

CIP Updates for 2020
There are updates being made to the CIP Codes starting in 2020. Over a hundred CIP codes are being updated, changed, or combined with other CIP Codes. A dozen CIP Codes are being removed completely. 497 all new CIP Codes are being added. It should be noted that the brand new CIP Codes can only be used for TEACH awards at this time. Details on CIP Codes can be found at: https://nces.ed.gov/ipeds/cipcode/default.aspx?y=55.

Program Related:
Prior to award processing, the COD Test Team submits an MPN for each Direct Loan award and an ATS for each TEACH grant. This circumvents any edits from the system requiring a linked note to allow actual disbursements. Program CIP Codes are not listed for any DL awards in the step-by-step guide. Schools may use any CIP Code that is valid in production for these tests.

Starting in Award Year 2013-2014 and going forward Student Eligibility Code elements become mandatory in origination submissions.
Beginning with Award Year 2012-2013 the Enrollment School Code element was required for sequence number 01 disbursements of all Direct Loan, Pell, and TEACH program originations. The value assigned to this element will indicate the OPE identifier of the school where the student is currently enrolled (i.e. attending school). For this reason the Enrollment School Code has been incorporated into Disbursement Sequence Number 01 blocks of each Origination (Test Cycle 1) record profile. This element may also be specified in maintenance records of accepted awards and grants, when desiring to change the Enrollment School Code.

The COD System began accepting all Direct Loan (i.e., Subsidized, Unsubsidized, Parent PLUS, Grad PLUS) Interest Rebate Percentages of zero (0) for Award Year 2012-2013, with actual disbursement dates of July 1, 2013 and forward.

Graduate and professional students will no longer be allowed to receive DL Subsidized awards with an Award Begin Date on or after 7/1/2012.

Sequestration:
Sequestration rules apply to different programs in different ways. The impact of the sequester was taken into account within the Pell Payment Schedule. Direct Loans were impacted by adjustments to the Origination Fee Percentages for Subsidized and Unsubsidized Loans to 1.059%. Both Grad and Parent PLUS Origination Fee percentages were changed to 4.236%. TEACH awards were impacted by sequestration. TEACH awards whose earliest disbursement date is on or after October 1st, 2019 must reduce the award amount by 5.90%. This reduction to the TEACH awards is not enforced by COD. It is enforced at school level. The test cases involving TEACH awards will show the usual award and disbursement amounts normally and then show the sequestration amounts in brackets (example Award = 4000 [3764]). More information on sequestration can be found at: https://ifap.ed.gov/eannouncements/053019FY20SequesterRequiredChangesTitleIVPrograms.html.