Texas State University System

Revenue Loss Calculations Following an Emergency Event

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Revenue Loss Calculations Following an Emergency Event

Policy: Each component will follow a consistent revenue loss calculation methodology established by the System’s Vice Chancellor for Finance.

Purpose: To establish a consistent System-wide revenue loss calculation methodology for use by each component after an emergency event (“Event”) occurs.

Procedures

1. System-wide Authority Structure

1.0 Chief Financial Officers of campuses impacted by an Event have responsibility for calculating revenue losses consistent with this policy.

1.1 Campus revenue loss calculations will be submitted to the Vice Chancellor for Finance for review and approval. Approval must be documented.

1.2 The Chief Financial Officers are responsible for complying with the retention policy established by the System for the revenue loss calculation records and supporting documentation.

1.3 The System Office for Finance will evaluate these procedures on an annual basis and as Events occur to ensure compliance legislative and other oversight requirements.

1.4 The System Office for Finance will coordinate training as soon as it is feasible after an Event to discuss these procedures and any modifications deemed necessary due to the specific circumstances of the Event.

2. Revenue Losses Overview

2.0 Introduction

Student withdrawals and estimated decreases in enrollment attributable to an Event will be the basis for determining actual and estimated revenue losses by TSUS institutions.

During and after an Event, the System Office will designate an Emergency Coordination Team to communicate and coordinate with the Governor’s Office (GO), the Legislative Budget Board (LBB), the Comptroller, the Texas Higher Education Coordinating Board (THECB), FEMA, State Office of Risk Management, and other entities as necessary, to ascertain the data and reporting requirements of those offices, and to communicate such requirements to TSUS institutions impacted by the Event. Each TSUS institution impacted by an Event will be responsible for ensuring that adequate documentation and records are maintained to support and substantiate financial and operational transactions related to the Event. Institutions must ensure there is a mechanism to identify and track Event-related student withdrawals, refunds, and credits.
2.1 Revenue Loss Category Definitions

The revenue losses incurred as a result of an Event fall into the following three categories:

a) **Actual lost revenue resulting from tuition and fees, housing, and food service contracts refunded to withdrawing students** –
   This category of lost revenue is comprised of:
   1) The actual amount of tuition and fees, housing, and food service contracts refunded to withdrawing students as the result of an Event. (In those cases where an institution does not refund monies and opts instead to grant a “credit” towards tuition and fees and/or housing/food services costs for attendance in a subsequent semester, then the actual lost revenue will be the amount of such credits.)
   2) Losses that occur because the timing of the event is such that students who have registered but not yet paid withdraw and do NOT make the anticipated payments.

b) **Estimated lost revenue from estimated enrollment decreases** -
   This category of lost revenue is comprised of the estimated amount of tuition and fees, housing, and food service contracts not received due to estimated decreases in enrollment in the immediate semester subsequent to the Event. (Note: the summer semesters are counted as one semester for the purpose of simplifying calculations presented in this policy.)

c) **Estimated Formula Funding Losses** -
   This category of lost revenue is comprised of the estimated reduction in formula funding that occurs due to estimated decreases in enrollment that occur in a base period of and/or following an Event.

2.2 Definitions

- The “Event Date” is the date of the Event.
- The “Event Duration” is the time period that will be used in calculating actual and estimated lost revenues. For the purposes of this policy, the “Event Duration” is assumed to be 2 semesters: the “Event Semester” and the “Immediate Subsequent Semester” (see definitions below). However, it is recognized that some events will be more catastrophic than others, and that some events could result in extended delays in restoring services. Additionally, a singular event in a region will not necessarily impact all campuses to the same degree. Therefore, the “Event Duration” will be determined, on an Event AND
campus-by-campus basis, by the Vice Chancellor for Finance in consultation with the Emergency Coordination Team described in Section 2.0.

- The “Census Date” is defined by the Texas Higher Coordinating Board as the date used for determining student enrollment to be reported in the CBM001 Student Report. Typically, the Census Date is the 12th Class Day for 16 week courses, and the 4th class day for each of the summer terms (six-week courses). The Census Date is relevant because if an Event occurs prior to the census date, reportable enrollment data within the Event Semester will most likely be impacted. For the purposes of this policy, examples of revenue loss calculations are presented in terms of “pre-census” and “post-census” dates.

- The “Event Semester” is typically the semester in which the Event occurs, and is the semester for which ACTUAL revenue losses will be calculated. In situations where an Event occurs after classes have concluded for the semester (example: the end of summer or the winter holidays), the Event Semester will “shift” to the next semester. Determination of the Event Semester will be confirmed and communicated by the Vice Chancellor for Finance to the applicable campus CFOs.

- The “Immediate Subsequent Semester” is typically the semester immediately following the Event Semester, and is one of two semesters used in calculating ESTIMATED revenue losses based upon estimated enrollment decreases. The other semester used in calculating estimated revenue losses based upon estimated enrollment decreases is the “Preceding Comparable Semester” (see below). Determination of the Immediate Subsequent Semester will be confirmed and communicated by the Vice Chancellor for Finance to the applicable campus CFOs.

- The “Preceding Comparable Semester” is one of two semesters that will be used in calculating ESTIMATED revenue losses based upon estimated enrollment decreases. The Preceding Comparable Semester is the preceding “like” semester of the Immediate Subsequent Semester: i.e., Fall to Fall, Spring to Spring, Summer to Summer. The other semester used in calculating estimated revenue losses based upon estimated enrollment decreases is the “Immediate Subsequent Semester” (see above). Preceding Comparable Semesters also come into play when formula funding losses are calculated. Determination of the Preceding Comparable Semester will be confirmed and communicated by the Vice Chancellor for Finance to the applicable campus CFOs.

- The “Formula Funding Semester” is any semester 1) impacted by an Event and 2) which falls within a base period for determining formula funding. The

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1 [http://www.thechb.state.tx.us/reports/PDF/1873.PDF?CFID=8111046&CFTOKEN=83846375](http://www.thechb.state.tx.us/reports/PDF/1873.PDF?CFID=8111046&CFTOKEN=83846375);
   [http://www.thechb.state.tx.us/reports/PDF/1877.PDF?CFID=8111046&CFTOKEN=83846375](http://www.thechb.state.tx.us/reports/PDF/1877.PDF?CFID=8111046&CFTOKEN=83846375)
classification of a semester as a Formula Funding Semester is further dependent upon the timing of the Event and whether or not the Event is pre-census or post-census.

- The “Overall Formula Funding Amount” is the total dollar amount of legislative appropriations attributable to Formula Funding as articulated in the General Appropriations Act (GAA). This amount includes, but is not limited to, the appropriated amounts for following line items listed in each institution’s respective bill pattern in the GAA: Operations Support, Teaching Experience Supplement, Formula Hold Harmless, Excellence Funding, E&G Space Support, Academic Education, and Vocational/Technical Education. This definition is subject to change depending on legislative initiatives/directives.
Examples of Events and the Related Revenue Loss Scenarios

1) Classes in Session, Pre-Census, Formula Funding Not Impacted

Date of Event: July 2011, Pre-Census. In this case, the Event Semester is Summer 2011; the Immediate Subsequent Semester is Fall 2011, and the Preceding Comparable Semester is Fall 2010. There is no Formula Funding impact.

FIGURE 1: Event in July 2011, Classes in Session, Pre-Census, Formula Funding Not Impacted

In this example the revenue losses that come into play are:

a) Actual revenue losses in the Event Semester (Summer 2011), under the assumptions that the majority of the students will have already enrolled and paid (or entered into a payment plan) and will withdraw seek a refund in (or shortly after) the Event Semester or that students who have enrolled and not yet paid (or entered into a payment plan) will withdraw and will NOT make the anticipated payments.

b) Estimated revenue losses related to enrollment decreases in the Immediate Subsequent Semester (Fall 2011). Enrollment decreases will be determined by calculating the difference in enrollment between the Immediate Subsequent Semester and the Preceding Comparable Semester (Fall 2010). See FIGURE 1 above.

Note: Even though the Preceding Comparable Semester is one that was used to determine Formula Funding calculations, at the time of the Event, the enrollment levels for determining Formula Funding had already been submitted to THECB, so Formula Funding is not affected.
2) Classes In Session, Post-Census, Formula Funding Not Impacted

Date of Event: July 2011, Post-Census. In this case, the Event Semester is Summer 2011; the Immediate Subsequent Semester is Fall 2011, and the Preceding Comparable Semester is Fall 2010.

Figure 2: Event in July 2011, Classes in Session, Post-Census, Formula Funding Not Impacted

In this example, the revenue losses that come into play are:

a) Actual revenue losses in the Event Semester (Summer 2011), under the assumptions that the majority of the students will have already enrolled and paid (or entered into a payment plan) and will withdraw/seek a refund in (or shortly after) the Event Semester or that students who have enrolled and not yet paid (or entered into a payment plan) will withdraw and will NOT make the anticipated payment.

b) Estimated revenue losses related to enrollment decreases in the Immediate Subsequent Semester (Fall 2011). Enrollment decreases will be determined by calculating the difference in enrollment between the Immediate Subsequent Semester and the Preceding Comparable Semester (Fall 2010). See FIGURE 2 above.

Note: Even though the Preceding Comparable Semester is one that was used to determine Formula Funding calculations, at the time of the Event, the enrollment levels for determining Formula Funding had already been submitted to THECB, so Formula Funding is not affected.
3) **Classes Not In Session, Formula Funding Not Impacted**

Date of Event: May 30th, 2011. In this case, classes for the semester have ended. Therefore, the **Event Semester** shifts to the next succeeding semester, which is Summer 2011. The **Immediate Subsequent Semester** is Fall 2011, and the **Preceding Comparable Semester** is Fall 2010.

![Figure 3: Event in May 30, 2011, Classes Not in Session, Formula Funding Not Impacted](image)

In this example, the revenue losses that come into play are:

a) **Actual** revenue losses in the **Event Semester** (Summer 2011), under the assumptions that the majority of the students will have already enrolled and paid (or entered into a payment plan) and will withdraw/seek a refund in (or shortly after) the Event or that students who have enrolled and not yet paid (or entered into a payment plan) will withdraw and will NOT make the anticipated payments.

b) **Estimated** revenue losses related to enrollment decreases in the **Immediate Subsequent Semester** (Fall 2011). Enrollment decreases will be determined by calculating the difference in enrollment between the **Immediate Subsequent Semester** and the **Preceding Comparable Semester** (Fall 2010).

Although the Event occurred in the last month of a base period used for Formula Funding, Formula Funding will not be impacted because the Event occurred post-census. See FIGURE 3 above.
4) Classes in Session, Pre-Census, Formula Funding Impacted

Date of Event: July 2010, Pre-Census. In this case, the Event Semester is Summer 2010; the Immediate Subsequent Semester is Fall 2010; the Preceding Comparable Semesters are Fall 2009 AND Summer 2009; and the Formula Funding Semesters are Summer 2010 and Fall 2010. There are two Preceding Comparable Semesters and Formula Funding Semesters due to the timing of the Event.

Figure 4: Event in July 2010, Pre-Census, Formula Funding Semesters Impacted

In this example, the revenue losses that come into play are:

a) Actual revenue losses in the Event Semester (Summer 2010), under the assumptions that the majority of the students will have already enrolled and paid (or entered into a payment plan) and will withdraw/seek a refund in (or shortly after) the Event Semester or that students who have enrolled and not yet paid (or entered into a payment plan) will withdraw and will NOT make the anticipated payments.

b) Estimated revenue losses related to enrollment decreases in the Immediate Subsequent Semester (Fall 2010). Enrollment decreases will be determined by calculating the difference
in enrollment between the **Immediate Subsequent Semester** (Fall 2010) and the **Preceding Comparable Semester** (Fall 2009).

c) **Estimated** revenue losses in the next biennium due to estimated losses in **Formula Funding** due to enrollment decreases in the **Event Semester** (Summer 2010) AND the **Immediate Subsequent Semester** (Fall 2010), both of which are base periods for Formula Funding. Because the event is pre-census, it is assumed that enrollment decreases will occur in both the Event Semester and the Immediate Subsequent Semester, both of which are base periods.

As noted earlier in this example, the **Formula Funding Semesters** are Summer 2010 and Fall 2010. These semesters occur in Fiscal Years 2010 and 2011, respectively. The fiscal years associated with the Formula Funding Semesters are used to determine which appropriation year should be used in calculating the estimated formula funding losses.
5) Classes in Session, Post-Census, Formula Funding Impacted

Date of Event: July 2010, Post-Census. In this case, the Event Semester is Summer 2010; the Immediate Subsequent Semester is Fall 2010; the Preceding Comparable Semester is Fall 2009; and the Formula Funding Semester is Fall 2010. There is only one Formula Funding Semester because the event occurred post-census.

**Figure 5: Event in July 2010, Post-Census, Formula Funding Impacted**

In this example, the revenue losses that come into play are:

a) **Actual** revenue losses in the Event Semester (Summer 2010), under the assumptions that the majority of the students will have already enrolled and paid (or entered into a payment plan) and will withdraw/seek a refund in (or shortly after) the Event Semester or that students who have enrolled and not yet paid (or entered into a payment plan) will withdraw and will NOT make the anticipated payments.

b) **Estimated** revenue losses related to enrollment decreases in the Immediate Subsequent Semester (Fall 2010). Enrollment decreases will be determined by calculating the difference
in enrollment between the **Immediate Subsequent Semester** (Fall 2010) and the **Preceding Comparable Semester** (Fall 2009).

c) Estimated revenue losses in the next biennium due to estimated losses in **Formula Funding** due to enrollment decreases in the **Immediate Subsequent Semester** (Fall 2010), which is a base period for Formula Funding. Although the Event Semester (Summer 2010) is also a base period for Formula Funding, the Event was Post-Census; therefore, the pre-Event enrollment count would have already been reported to the Texas Higher Education Coordinating Board.)

The **Formula Funding Semester** is Fall 2010. This semester occurs in Fiscal Year 2011; therefore, the **Overall Formula Funding** for FY 2011 will be used in calculating the estimated formula funding losses.
6) Classes Not In Session, Formula Funding Impacted

Date of Event: August 2010, post-census, post classes. In this example, the Event occurred after classes for the Summer Semester have ended, but prior to classes convening for the Fall Semester. Therefore, the Event Semester shifts to the next semester, which is Fall 2010. Because Fall 2010 is a base period used for formula funding, formula funding losses come into play, so it is also a Formula Funding Semester. The Immediate Subsequent Semester becomes Spring 2011, and since it likewise falls in a base period for formula funding purposes, it too is a Formula Funding Semester. Fall 2009 will be a Preceding Comparable Semester for calculating estimated formula funding losses. Spring 2010 will also be a Preceding Comparable Semester for purposes of estimating revenue losses related to estimated enrollment decreases and will also be used for purposes of estimating revenue losses related to estimated formula funding decreases.

Figure 6: Event in August 2010, Post Census, Post Classes, Formula Funding Impacted

In this example, the revenue losses that come into play are:
a) Actual revenue losses in the Event Semester (Fall 2010), under the assumptions that the majority of the students will have already enrolled and paid (or entered into a payment plan) and will withdraw/seek a refund in (or shortly after) the Event or that students who have enrolled and not yet paid (or entered into a payment plan) will withdraw and will NOT make the anticipated payments.

b) Estimated revenue losses related to enrollment decreases in the Immediate Subsequent Semester (Spring 2011). Enrollment decreases will be determined by calculating the difference in enrollment between the Immediate Subsequent Semester (Spring 2011) and the Preceding Comparable Semester (Spring 2010).

c) Estimated revenue losses in the next biennium due to estimated losses in Formula Funding due to enrollment decreases in the Immediate Subsequent Semester (Spring 2011), which is a base period for Formula Funding. In this case, the estimated decline in enrollment will be determined by comparing enrollment in Spring 2011 to the Preceding Comparable Semester, Spring 2010. (NOTE: Although the Event actually occurred in a base period (August 2010), the Event Date was post-census and post-classes; therefore, the base period enrollment count would have already been reported to the Texas Higher Education Coordinating Board.)

The Formula Funding Semesters are Fall 2010 and Spring 2011. These semesters occur in Fiscal Year 2011; therefore, the Overall Formula Funding for FY 2011 will be used in calculating the estimated formula funding losses.
3. Actual and Estimated Revenue Loss Calculation Methodologies Due to Student Withdrawals, Estimated Decreases in Enrollment, and Formula Funding Losses

3.1 Actual Revenue Losses: This section discusses the calculation of actual revenue losses in tuition and fees, housing, and food service contracts in the Event Semester based on amounts refunded or credited to withdrawing students and, where applicable due to the timing of the event, amounts anticipated to be received from students who have registered/enrolled but who have not paid or entered into payment plans and who withdraw prior to any payments being made. There are two components to this calculation:
   a) Tuition and fee losses and
   b) Housing and food service losses.

To determine the amount of tuition and fees and housing/food service contracts refunded or credited to withdrawing students:

- Obtain a list of student withdrawals.
- Determine which withdrawals are event-related.
- Obtain a report listing all refunds or credits issued to withdrawing students for the semester.
- Obtain a report listing student receivables for the event semester (to capture amounts owed by students who have registered/enrolled but who have not yet made payments).
- Calculate the dollar amount of the refunds and credits issued for the Event-related withdrawals.
- Calculate the amount of lost receivables for the Event-related withdrawals.
- Verify that the number of withdrawals in the report agrees to the withdrawals tracked in the student information system for the semester.
- Verify that the number of withdrawals in the report agrees to the withdrawals reported to THECB for the semester.
- Investigate and resolve differences.
- Retain copies of the report and all supporting documentation.
- Verify that supporting documentation ties back to accounting report.

3.2 Estimated Revenue Losses: This section discusses the calculation of estimated revenue losses in tuition and fees, housing, and food service contracts based on decreases in enrollment in the Immediate Subsequent Semester:

The lost revenue from enrollment decreases is the amount of tuition and fees, housing, and food service contracts not received as anticipated for the Immediate Subsequent Semester to the Event. There are two components to this calculation:
1) Estimated enrollment decreases between the **Immediate Subsequent Semester** and the **Preceding Comparable Semester(s)** applied to tuition and fees based on a stratified headcount (undergraduate, graduate, etc.) and

2) Estimated enrollment decreases applied to housing/food service contracts, based on the percentage of students who utilized such contracts in the **Preceding Comparable Semester(s)**.

The following data is needed in order to perform this calculation:

- Census data (enrollment head counts) for the **Immediate Subsequent Semester** (ISS)
- Census data (enrollment head counts) for the **Preceding Comparable Semester(s)** (PCS)
- Tuition and fee schedule for the **Immediate Subsequent Semester**, stratified (undergraduate/graduate)
- Tuition and fee schedule for the **Preceding Comparable Semester(s)**, stratified (undergraduate/graduate)
- The number of students who entered into housing and/or food services contracts in the **Immediate Subsequent Semester**
- The housing and food service contract rates (stratified) for the **Immediate Subsequent Semester**
- The number of students who entered into housing and/or food services contracts in the **Preceding Comparable Semester(s)**
- The housing and food service contract rates (stratified) for the **Preceding Comparable Semester(s)**

The formula to calculate estimated revenue losses for tuition and fees applicable to estimated decreases in enrollment is:

\[
\text{Revenue Loss} = \left( \text{Census Headcount (Stratified) in ISS} - \text{Census Headcount (Stratified) in PCS} \right) \times \text{Applicable Tuition and Fees (Stratified) for the ISS}
\]

The formulas to calculate estimated revenue losses for housing and food service contracts applicable to estimated declines in enrollment are:

\[
\text{Revenue Loss} = \left( \text{Headcount of Students with Housing Contracts (Stratified) in ISS} - \text{Headcount of Students with Housing Contracts (Stratified) in PCS} \right) \times \text{Applicable Housing Contract Rates (Stratified) for the ISS}
\]

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\[
\left( \text{Headcount of Students with Food Service Contracts (Stratified) in ISS} - \text{Headcount of Students with Food Service Contracts (Stratified) in PCS} \right) \times \text{Applicable Food Service Contract Rates (Stratified) for the ISS}
\]
3.3 Estimated Formula Funding Losses: This section discusses the calculation of estimated formula funding losses based on decreases in enrollment in the Immediate Subsequent Semester of a base period used to calculate formula funding.

For the purposes of this policy, the calculation for determining Formula Funding losses involves determining the percentage decrease in enrollment in the Formula Funding Semester(s) and applying the percentage to the amount of the Overall Formula Funding received in the Formula Funding Semester(s) applicable to the Event.

The following data is needed to perform this calculation:
- Census data (enrollment head counts) for the Formula Funding Semester(s) (Note: there may be two Formula Funding Semesters, depending on the timing of the Event.)
- Census data (enrollment head counts) for the Preceding Comparable Semester(s) (PCS)
- The Overall Formula Funding amount(s) for each fiscal year associated with the Formula Funding Semester(s).

\[
\left( \frac{\text{Census Headcount of Preceding Comparable Semester of the Formula Funding Semester} - \text{Census Headcount in Formula Funding Semester}}{\text{Census Headcount of Preceding Comparable Semester of the Formula Funding Semester}} \right) \times \text{Overall Formula Funding for the Fiscal Year in which the Formula Funding Semester Falls} \\
\times \text{Pro rate enrollment % for formula funding semester (43% Fall; 40% Spring; 17% Summer)}
\]
Example: For the purposes of this example, assume the following, utilizing the chart below:

1) **Event** occurs post census, Summer 2010
2) Enrollment in the **Immediate Subsequent Semester** is 1,200
3) Enrollment for the **Preceding Comparable Semester** was 1,500. The Preceding Comparable Semester is also a **Formula Funding Semester** because it is within the base period used for formula funding.
4) Amounts appropriated for FY 2011 per the General Appropriations Act were:
   a. Operations Support $5,000,000
   b. Teaching Experience Supplement $1,000
   c. Excellence Funding $1,000
   d. E&G Space Support $200,000

   ($5,202,000)

   (Fiscal Year 2011 is used because that is the fiscal year in which the **Immediate Subsequent Semester** falls.)

The formula to calculate estimated formula funding losses is:

$$((1,500-1,200)/1,500) \times (5,202,000 \times 43\%) = 0.20 \times 2,236,860 = 447,372$$
A separate calculation should be performed for each Formula Funding Semester impacted by an event. In performing the calculation:

- Utilizing a copy of the General Appropriations Act, sum the Formula Funding line items for each fiscal year associated with a Formula Funding Semester to obtain the Overall Formula Funding amount. Refer to Section 2.1 (Definitions) for more detail.
- Utilize census data submitted to THECB to determine enrollment levels for the PCS and the FFS.
- Retain copies of the report and all supporting documentation.
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Resources

Texas Legislative Budget Board
- General Appropriations Act for the 2010-11 Biennium
  [Link]
- Financing Higher Education in Texas, January 2009
  [Link]
- State Funding for General Academic Institutions of Higher Education, March 2007
  [Link]
- The Cost of Developmental Education In Texas, March 2007
  [Link]

Texas Higher Education Coordinating Board
- Overview on Biennium Funding for 2008-2009 Biennium
  [Link]
- Legislative Approved Funding Rates for the 2010-2011 Biennium
  [Link]
- Premier on Resource Planning
  [Link]
- Facilities Reporting Schedule
  [Link]

Texas Governor’s Hurricane Recovery
- [Link]

Texas Education Agency (2006)
- TEA 2006 Accountability Manual. [Link]

Texas Education Agency (2007)
- Secondary School Completion and Dropouts in Texas Public Schools 2005–06. [Link]
- What School District Administrators Should Know About the Educational Rights of Children Displaced by Disasters. [Link]

Education Foundation (2007)
- Education after Katrina: Time for a New Federal Response - [Link]

National Cooperative Education Statistics System