

**Report and Suggestions from IPEDS Technical Review Panel #26:  
Requirements of the Higher Education Opportunity Act:  
Multiyear Tuition Calculator and Net Price Calculator Template**

**SUMMARY:** The Technical Review Panel identified issues associated with the development of a multiyear tuition calculator and a net price calculator template necessary to meet the Higher Education Opportunity Act provisions. Comments from interested parties are due to Janice Kelly-Reid, IPEDS Project Director at RTI International, at [ipedstrpcomment@rti.org](mailto:ipedstrpcomment@rti.org) by March 31, 2009.

On January 27-28, 2009, RTI International, the contractor for the IPEDS web-based data collection system, convened a meeting of the IPEDS Technical Review Panel (TRP) in Washington, DC. The purpose of this meeting was to solicit input from the postsecondary community on the Higher Education Opportunity Act (HEOA) requirements for: (1) developing a multiyear tuition calculator for the College Navigator website, and (2) developing a template for a net price calculator to be posted on individual institutions' websites. The panel members included 58 individuals representing the federal government, state governments, institutions, data users, association representatives, and others.

### **Overview**

The HEOA, which was enacted on August 14, 2008, includes four key items related to net price of attendance and tuition and required fees. The provisions require the U.S. Department of Education to:

1. Report on the College Navigator website average institutional net price of attendance for first-time, full-time students who receive financial aid (this also forms the basis for transparency and accountability lists);
2. Report on the College Navigator website the institutional net price of attendance for Title IV aid recipients by income categories;
3. Develop a multiyear tuition and required fees calculator for undergraduate programs that will be added to the College Navigator website; and
4. Develop a template for a net price calculator to assist institutions in meeting the requirement to post on their website, within 2 years of development of the template (by approximately August 2011), a calculator that allows prospective students to calculate their estimated net price at the institution.

The January 27-28, 2009, IPEDS Technical Review Panel (#26) focused on the development of the two calculators needed to meet provisions 3 and 4. (Note: Another IPEDS Technical Review Panel meeting was previously held on October 28-29, 2008 to address the new data collection needed to meet reporting requirements associated with provisions 1 and 2. The summary of suggestions from that meeting is available here:

[https://edsurveys.rti.org/IPEDS\\_TRP/documents/TRP\\_25\\_20081028.pdf](https://edsurveys.rti.org/IPEDS_TRP/documents/TRP_25_20081028.pdf).)

## Multiyear Tuition Calculator

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### **Background**

HEOA provisions require the Department of Education to develop a multiyear tuition calculator that computes a forecast of the tuition and required fees that a student would expect to pay annually and cumulatively for normal time to completion. The stated purpose of the multiyear tuition calculator is to provide consumers with a way to “estimate the amount of tuition an individual may pay to attend an institution of higher education in future years.”<sup>1</sup> The calculator must be made available on the College Navigator website by August 14, 2009.

According to HEOA, the multiyear tuition calculator must:

- Allow the user to select an institution
- Calculate an estimate of tuition and fees for each year of the normal duration of the program of study and an estimate of the cumulative amount of tuition and fees (multiyear) to complete a program of study at the selected institution, based on the normal duration of a program
- Calculate the estimates using, as a base, the tuition and fees for the selected institution for the most recent academic year for which such data are reported
- Determine an estimated annual percentage change for each year for which the calculation is made, based on the annual percentage change in the selected institution’s tuition and fees for the most recent three-years for which such data are reported
- Allow the user to replace the *estimated* annual percentage change with an alternative annual percentage change of the user’s choosing
- Generate estimates of tuition and fees based on the tuition guarantee plan, if applicable at the institution selected
- Include the following disclaimers:
  - The output is only an estimate and not a guarantee of the actual amount the student may be charged; it is not binding on the Secretary, the institution of higher education, or the State; and it may change, subject to the availability of financial assistance, State appropriations, and other factors;
  - The student must complete the Free Application for Federal Student Aid (FAFSA) to be eligible for, and receive, an actual financial aid award that includes federal grant, loan, or work-study assistance. (Provide a link to the website of the Department that allows students to access the Free Application for Federal Student Aid.)

### **Discussion**

#### Data

IPEDS currently collects most of the data elements needed to compute the calculator outputs:

*Tuition and Required Fees.* IPEDS includes several variables related to the tuition and required fees charged by institutions, with a primary emphasis on published figures. For institutions that report by academic year, IPEDS includes information on the published annual tuition and required fees for first-time, full-time students for the three most recent academic years. This information is collected

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<sup>1</sup> Public Law 110-315 §132 (j)(1).

separately for in-district, in-state, and out-of-state students, when applicable. For institutions that report information by program, IPEDS includes information on the published tuition and required fees for the institution's largest program for the three most recent years, and it collects the tuition and required fees for the next five largest programs for the most recent year. Starting in 2009-10, IPEDS survey data collection will extend the price of attendance data collected to the four most recent academic years.

*Tuition Guarantee Programs.* Some institutions have established tuition guarantee programs to increase the predictability of charges in tuition and required fees for current and prospective students and their families. These guarantee programs typically freeze the tuition and required fees upon entry into a program so that students pay the same amount each year, regardless of changes in the published tuition and required fees for that institution. However, some programs freeze tuition but not required fees as part of their programs.

IPEDS includes a question regarding whether an institution offers tuition guarantee or tuition prepayment programs. Not currently collected is whether a tuition guarantee program applies to the tuition and fees being reported in the pricing section. This indicator will be added to the IC survey in 2009-10. In addition, since some programs guarantee tuition but not fees, beginning in 2009-10, the IPEDS IC survey will break out tuition and required fees separately in the price of attendance section.

#### Other Issues

There were a number of additional outstanding issues that the TRP members discussed in relation to the multi-year calculator. These issues and the related suggestions by the TRP are outlined in the table on the following page.

Issue	Suggestion by the TRP
Based on available IPEDS data, how should institutions reporting by program be handled differently than institutions that report on an academic year basis?	<ul style="list-style-type: none"> <li>• For program reporting institutions, provide information in the multiyear tuition calculator for the largest program only, for which institutions will report 4 years of pricing data.</li> <li>• Do not allow users of the multi-year tuition calculator to compare academic year reporting institutions to program reporting institutions and vice versa.</li> </ul>
How should nontraditional academic program lengths (e.g., 5-year preprofessional architecture, engineering programs) be handled?	<ul style="list-style-type: none"> <li>• Display a disclaimer as part of the output results that the calculated pricing information refers to the typical tuition and fees, and that tuition and fees may vary by program.</li> <li>• Allow institutions the option to include notes about these programs in the context boxes available on the IC forms.</li> </ul>
How many years out should the calculator forecast?	<ul style="list-style-type: none"> <li>• Focus the calculator for use by high school students, and restrict the start year for forecasts to a maximum of five years from current data available. For example, in 2009-10, allow start years of 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14. Extending forecasts beyond these years could provide highly inaccurate information to consumers.</li> </ul>
What additional steps, in addition to displaying the disclaimers required by HEOA, can be taken to avoid confusion or misleading information?	<ul style="list-style-type: none"> <li>• Provide context boxes on the IC survey forms for institutions to provide contextual information about the data and any special circumstances that may apply to the institution. Display this information in the multiyear tuition calculator.</li> <li>• Clearly note in the calculator that the estimates do not include other expenses such as room and board.</li> <li>• Clearly note that these estimates also do not account for financial aid.</li> <li>• Include a link to the institution’s website with a note to contact the institution for further information, although this is not specified in the HEOA.</li> </ul>

## Net Price Calculator

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### **Background**

According to the HEOA, the purpose of the net price calculator is,

“to help current and prospective students, families, and other consumers estimate the individual net price of an institution of higher education for a student. The calculator shall be developed in a manner that enables current and prospective students, families, and consumers to determine an estimate of a current or prospective student’s individual net price at a particular institution.”<sup>2</sup>

Starting in August 2011, each postsecondary institution must post a net price calculator on its web site that uses institutional data to provide estimated net price information customized to the characteristics of individual students. Institutions may use either a net price calculator developed by the U.S. Department of Education or one developed by the institution as long as the calculator they develop includes “at a minimum the same data elements” found in the U.S. Department of Education’s calculator. The law also states that:

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<sup>2</sup> P.L. 110-315, sec. 132 (h) (1).

“individual net price of an institution of higher education shall be calculated in the same manner as the net price of such institution is calculated under subsection (a)(3), except that the [price]<sup>3</sup> of attendance and the amount of need-based and merit-based aid available shall be calculated for the individual student as much as practicable.”<sup>4</sup>

Under the law, the net price calculator should calculate price using the following formula: price of attendance minus grant aid. However, the law allows for some modifications to the definition of those elements in order to better estimate net price for an individual student.

HEOA also requires that the calculator include a link to the U.S. Department of Education’s FAFSA website, and a “clear and conspicuous notice” stating that:

“The estimate does not represent a final determination, or actual award, of financial assistance; (ii) shall not be binding on the Secretary, the institution of higher education, or the State, and (iii) may change. Student must complete Free Application for Federal Student Aid described in section 483 in order to be eligible for, and receive, an actual financial aid award that includes Federal grant loan, or work-study assistance under title IV.”<sup>5</sup>

### ***Discussion***

The discussion at the meeting focused on what set data elements should be included in the Department’s template of a net price calculator. This would also establish the *minimum* set of elements that institutions would be required to include as inputs and outputs in the design of their own calculators. Institutions have the option to include additional elements if they are able and feel it would generate better estimates for users. They also have the option of changing the acceptable response values (e.g., providing institutionally specific ranges for income or asking about preferred on-campus housing option if the prices vary).

### Users

The calculator is intended to estimate net price for an individual student. The panel suggested that the Department template focus on estimates for **full-time undergraduate students**. Institutions that develop their own calculators could also include part-time and/or postbaccalaureate students.

### Inputs and Outputs: Minimum Data Elements for Calculators

In the Department template, the TRP suggested that users be asked eight questions that would be used to establish the student’s dependency status, cost of attendance, and an *approximated* expected family contribution (EFC). These user inputs are outlined in the table on the following page.

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<sup>3</sup> While HEOA uses the term “cost of attendance,” based on suggestions from the October TRP, NCES will use the term “price of attendance” to be consistent with the “net price” term and to avoid any confusion between the cost of providing the education and the price charged to students.

<sup>4</sup> P.L. 110-315, sec. 132 (h) (2).

<sup>5</sup> P.L. 110-315, sec. 132 (h) (4).

<b>User Inputs for Department Template [Minimum Input Data Elements for Institutionally Developed Calculators]</b>	
1. Age (those 24 and older do not receive questions 2 and 3)	
2. Marital status	
3. Number of children	
<b>Dependent</b>	<b>Independent</b>
4. Number in family	4. Number in family
5. Number in college	5. Number in college
6. Parent's income	6. Household income
7. Living status (as applicable at the institution; e.g., if campus does not have on-campus living options, it need not be included below): <ul style="list-style-type: none"> <li>• on-campus</li> <li>• off-campus with family</li> <li>• off-campus not with family</li> </ul>	
8. Residency status (as applicable at the institution; e.g., if campus does not charge in-district or in-state rates, it need not show this input) <ul style="list-style-type: none"> <li>• Eligible for in-state tuition</li> <li>• Eligible for in-district tuition</li> <li>• Eligible for out-of-state tuition</li> </ul>	

Based on these inputs, the calculator would generate the following output data elements:

<b>Calculator Outputs for Department Template [Minimum Output Data Elements for Institutionally Developed Calculators]</b>
1. Estimated total price of attendance: <ul style="list-style-type: none"> <li>a) Estimated tuition and fees</li> <li>b) Estimated Room and Board</li> <li>c) Estimated Books and Supplies</li> <li>d) Estimated Other Expenses (including personal expenses and transportation)</li> </ul>
2. Total estimated grant aid (includes both merit and need based aid)*
3. Estimated net price (price of attendance minus grant aid)*

\* The panel suggested that estimated grant aid and estimated net price be provided as a range (rounded to thousands), and that NCES provide guidance on the appropriate size of the range.

### Functionality of Department's Template

In addition to suggesting the minimum data elements to include as inputs and outputs in the calculator, the TRP also made suggestions regarding how the Department of Education's calculator should function in order to produce the outputs. Institutions that develop their own calculators can use this method, or develop their own approach in order to produce a more accurate and individualized estimate for the users.

First, the input data will be used in the following way:

User Inputs for Department Template		Purpose
1. Age		Used to estimate dependency status for use in EFC approximation*
2. Marital status		
3. Number of children		
<b>Dependent</b>	<b>Independent</b>	
4. Number in family	4. Number in family	Used for EFC approximation**
5. Number in college	5. Number in college	
6. Parent income	6. Household income	
7. Living status (as applicable at the institution; e.g., if campus does not have on-campus living options, it need not be included below): <ul style="list-style-type: none"> <li>• on-campus</li> <li>• off-campus with family</li> <li>• off-campus not with family</li> </ul>		Used to estimate cost of attendance
8. Residency status (as applicable at the institution; e.g., if campus does not charge in-district or in-state rates, it need not show this input) <ul style="list-style-type: none"> <li>• Eligible for in-state tuition</li> <li>• Eligible for in-district tuition</li> <li>• Eligible for out-of-state tuition</li> </ul>		

\* The Department will publish its decision structure for using these questions to determine dependency status as part of the documentation for the template to be made available in August 2009. Institutions that collect only these 8 input variables should use the Department's methodology for determining dependency.

\*\* The Department will publish its method for using these questions to determine an approximated EFC as part of the documentation for the template to be made available in August 2009. Institutions that collect only these 8 input variables should use the Department's methodology for determining EFC.

Using the data inputted by a student, the calculator will estimate the student's dependency status, approximate EFC, and price of attendance. It will then "look up" the average net price for a student meeting the same criteria in data tables. These "look-up tables" will function in the background of the net price calculator, and will not be visible to the calculator users.

**Note:** The net price calculator developed by the Department will not use IPEDS data or data collected by NCES. An institution that chooses to use the Department's template will need to populate the "look up" tables behind the calculator with its own data drawn from its own records/data system.

The following example will help illustrate how the Department's template will work.

### **Example: Student Using the Department Calculator Template on a Public 4-year Institution's Website**

Based on the user's inputs:

- Based on questions 1-3 the student is estimated to be dependent.
- Based on questions 4-6, his family's EFC is approximated to be \$16,300.
- Based on questions 7-8, the student is eligible for in-state tuition and plans to live at home with parents and commute to the institution.

Using these parameters, the calculator will "look up" an estimated price of attendance and grant aid using the tables below, and then use these data to output an estimated average net price.

The student's estimated price of attendance would be the number populating the grayed out cell below labeled **X**, The disaggregated components of the price of attendance would be corresponding

values in the same column:  $X_1$  (tuition and fees),  $X_2$  (room and board),  $X_3$  (books and supplies), and  $X_4$  (other expenses including transportation and personal expenses).

The student's estimated total grants (which includes both need and merit based grants) would be the number populating the cell labeled  $Y$  that is grayed out in the second table below, which has columns for the different factors affecting price of attendance and rows for the different levels of EFC.

Price of Attendance "Look Up" Table									
Price of attendance	In-district			In-state			Out-of-state		
	On campus	Off campus with parents	Off campus on own	On campus	Off campus with parents	Off campus on own	On campus	Off campus with parents	Off campus on own
Total	?	?	?	?	$X^*$	?	?	?	?
Tuition and required fees	?	?	?	?	$X_1$	?	?	?	?
Room and board	?	?	?	?	$X_2$	?	?	?	?
Books and supplies	?	?	?	?	$X_3$	?	?	?	?
Other (transportation, personal)	?	?	?	?	$X_4$	?	?	?	?

\* Where  $X = X_1 + X_2 + X_3 + X_4$

Total Grant Aid "Look Up" Table*									
EFC	In-district			In-state			Out-of-state		
	On campus	Off campus with parents	Off campus on own	On campus	Off campus with parents	Off campus on own	On campus	Off campus with parents	Off campus on own
\$0	?	?	?	?	?	?	?	?	?
\$1-1,000	?	?	?	?	?	?	?	?	?
\$1,000-2,500	?	?	?	?	?	?	?	?	?
\$2,501-5,000	?	?	?	?	?	?	?	?	?
\$5,001-10,000	?	?	?	?	?	?	?	?	?
\$10,001-15,000	?	?	?	?	?	?	?	?	?
\$15,001-20,000	?	?	?	?	$Y$	?	?	?	?
>\$20,000	?	?	?	?	?	?	?	?	?

\* Institutions will provide the data to populate the look up tables. Each cell in this table will contain the average total amount of grant aid (need and merit) for current students in the given EFC range (row) and living and residency status (column). Note that institutions may only have EFC information on their current students who filed FAFSA. Other students for which the institution does not have EFC data can be omitted or alternatively averaged in with the top EFC group (>\$20,000).

The resulting output for this example would be:

<b>Estimated Total Price of Attendance:</b>	<b>X</b>
Estimated Tuition and fees	$X_1$
Estimated Room and Board	$X_2$
Estimated Books and Supplies	$X_3$
Estimated Other Expenses (personal expenses, transportation, etc.)	$X_4$
<b>Estimated Total Grant Aid:</b>	<b>Y</b>
<hr/>	
<b>Estimated Net Price:</b>	<b>X — Y</b>



Institutions, in their own calculators, may include additional details in the output, such as showing the different elements of grant aid (need-based, merit). However, this is not required and will not be included in the Department's basic model. The Department's model will allow space for institutions to provide additional context notes. Institution may want to include in their display assumptions for the estimated price of attendance (e.g., range of credits, room and meal-plan type if on-campus, level of personal expenses) and other information that they think users of the calculator may find useful.

### Other Issues

The panel also discussed several other issues that may arise in development and use of the Department's net price calculator template. For example, how an institution using the template should handle missing data in the look up tables when the institution does not have students (and therefore data) with the same characteristics as the user, and how to handle small cell sizes as a result of the institution having very few students with the same characteristics as the user. Panelists suggested that NCES should include with the documentation for the calculator that is released in August 2009, information on how to handle these issues in a way that is useful to the consumer but also protective of current students' privacy.

The panel also suggested that the Department's template also include a prominent disclaimer indicating to the user that calculated net price is an estimate only and is not the guaranteed price, nor does it represent an award of financial assistance. The calculator should also prominently display the school year for which the net price is calculated. If an institution uses the Department's template, it will by definition be basing its estimated net price on prior-year data, but another institution may prefer to develop a calculator that takes into account anticipated policy changes (at the institutional, state and/or federal level) to more accurately net price for a future year, and it's important that students know for which year the estimated net price is being calculated in case they compare across institutions.

This template, with supporting documentation, is planned to be available for institutions to download and test for use on their own websites by August 2009. Institutions then will have two years to decide whether to use the Department's version or to develop one on its own that meets the minimum data elements for user inputs and calculator outputs.

### **Comments**

These suggestions will satisfy the requirements necessary to develop a multiyear tuition calculator and a net price calculator template. **We encourage interested parties to send any comments or concerns about the TRP suggestions to Janice Kelly-Reid, IPEDS Project Director, at [ipedsTRPcomment@rti.org](mailto:ipedsTRPcomment@rti.org).**