SUMMARY: The Technical Review Panel identified issues associated with the development of a State Higher Education Spending Chart 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 by July 20, 2009.

On April 21 and 22, 2009, RTI International, the contractor for the IPEDS web-based data collection system, convened a meeting of the IPEDS Technical Review Panel (TRP) in Bethesda, MD. The purpose of this meeting was to solicit input from the postsecondary community regarding the creation of a state higher education spending chart to be posted annually on College Navigator. The panel members included 40 individuals representing the federal government, state governments, institutions, data users, association representatives, and others.

Background
The HEOA, which was enacted on August 14, 2008, includes a requirement that the U.S. Department of Education include a state higher education spending chart on the College Navigator website. The requirement for the state spending chart is found in HEOA section 132, “Transparency in College Tuition for Consumers,” subsection (g). The full text reads as follows:

STATE HIGHER EDUCATION SPENDING CHART. The Secretary shall annually report on the College Navigator website, in charts for each State, comparisons of –

(1) the percentage change in spending by such State per full-time equivalent student at all public institutions of higher education in such State, for each of the five most recent preceding academic years;

(2) the percentage change in tuition and fees for such students for all public institutions of higher education in such State for each of the five most recent preceding academic years; and

(3) the percentage change in the total amount of need-based and merit-based aid provided by such State to full-time students enrolled in the public institutions of higher education in the State for each of the five most recent preceding academic years.

On April 21–22, 2009, the IPEDS Technical Review Panel (#27) met to discuss how the three items contained in the state higher education spending chart can be calculated using data currently collected by NCES in IPEDS.

Technical Discussion

State Spending Chart Item 1: Percentage Change in Spending by the State per FTE Student

(1) the percentage change in spending by such State per full-time equivalent student at all public institutions of higher education in such State, for each of the five most recent preceding academic years
Discussion

The TRP developed the formula below for state spending (the numerator) and full-time equivalent (FTE) enrollment (the denominator); changes in this measure could then be used to calculate the percentage change for each of the five most recent academic years for which data are available:

\[
\text{state spending per FTE} = \frac{\sum (\text{state appropriations} + \text{local appropriations})}{\sum \text{FTE}}
\]

State spending per FTE will be calculated by summing all state appropriations and local appropriations to all public institutions in the state then dividing by the sum of full-time equivalent undergraduate enrollment in all public institutions in the state. Local appropriations should be included because in some states, local governments provide funding to public institutions, especially to community colleges. If local appropriations are not included, panelists felt that funding to some community colleges would be understated.

Although additional data elements in the IPEDS Finance survey can be used to calculate a measure of state support, such as state operating grants and contracts and state non-operating grants, the TRP suggested that operating support (state and local appropriations) will provide the most accurate context for tuition increases, and that capital spending should not be included because it is typically funded by debt and varies greatly year to year.

NCES uses two methods for calculating FT:

- Fall Enrollment FTE: Calculated by multiplying the part-time headcount by a prescribed factor and adding this figure to the full-time headcount. This FTE is used in NCES’s Digest of Education Statistics to show trends in enrollment over time.

- 12-Month Enrollment FTE: Calculated using instructional activity by converting credit and/or contact hours into an indicator of full-time students. This FTE is used in conjunction with IPEDS Finance data, such as indicators for the IPEDS Data Feedback Report, because like the finance data, it accounts for an entire year of activity.

The panel suggested using the FTE based on instructional activity, as reported on the IPEDS 12-month enrollment (E12) component, Equivalencies have been established for one FTE based on credit or contact hour and type of institutional calendar.

The panel noted that the financial analyses of the State Higher Education Executive Officers (SHEEO) and the Southern Regional Education Board (SREB) use an FTE calculation based on instructional activity.

State Spending Chart Item 2: Percentage Change in In-State Tuition and Fees

(2) the percentage change in tuition and fees for such students for all public institutions of higher education in such State for each of the five most recent preceding academic years

Discussion

The text of this subsection indicates that the calculation should be made for students who are paying in-state tuition rates. The panel also noted that although not explicitly stated in the above subsection text, HEOA defines “tuition and fees” in subsection (a) as the rates for first-time, full-time undergraduate students. Thus, the panel suggested basing the calculation on the first-time, full-time
tuition and fee data collected in the IPEDS Institutional Characteristics Survey, Part D – Student Charges.

While IPEDS collects tuition and fees revenues in the IPEDS Finance Survey, the data do not differentiate between undergraduate and graduate students, resident and non-resident students, or full-time and part-time students. Thus, the calculation would not provide a measure of the change in what resident undergraduate students are charged over time.

Based on the tuition and fee data from the IC survey, the percentage change in tuition and fees will be calculated by summing the percentage change in tuition and fees at all public institutions in the state then dividing by the number of public institutions in the state. The measures will be calculated and then used to determine percentage changes for the five most recent academic years for which data are available.

The TRP panelists also raised the question of whether these tuition data should be weighted. There was extensive discussion of the advantages and disadvantages associated with weighting from the standpoints of both policy and consumer information. Panelists suggested that if a weighted average is to be incorporated, that undergraduate FTE be used to weight the tuition data. Comments are welcome regarding whether or not it is appropriate to calculate weighted averages for states.

**State Spending Chart Item 3: Percentage Change in the Total Amount of Need-Based Aid and Merit-Based Aid Provided by the State to Full-Time Students**

(3) the percentage change in the total amount of need-based and merit-based aid provided by such State to full-time students enrolled in the public institutions of higher education in the State for each of the five most recent preceding academic years.

**Discussion**

The IPEDS Student Financial Aid survey collects aid information on a recipient level for the number of first-time, full-time students receiving state and local grants and the average amount of aid they received. Based on the availability of data, the panel suggests using the percentage change of all first-time, full-time students rather than just “full-time,” as indicated in the text.

The panel was divided whether this item should be based on total state grant aid, or total state grant aid per student. Because the group could not decide on a single measure, it was suggested that the state spending chart include both. The following two formulas were suggested:

<table>
<thead>
<tr>
<th>Total aid, derived from Student Financial Aid survey data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>total amount of aid = Σ (state/local govt grants, avg amt of aid received) * (# receiving state/local aid)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total aid, per student, derived from Student Financial Aid survey data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>total amount of aid = Σ (state/local govt grants, avg amt of aid received) * (# receiving state/local aid) / Σ (# full-time, first-time degree/certificate seeking students)</td>
</tr>
</tbody>
</table>

The measures will be calculated and then used to determine percentage changes for the five most recent academic years for which data are available.
**Additional Discussion Items**

A number of additional items were discussed by group, regarding

**Excluding Program Reporters**

HEOA provisions of the state spending chart indicate that the percentage change must be calculated for “each of the five most recent academic years.” Most public institutions are on an academic year calendar, but some are not. Specifically, some institutions do not operate on a traditional academic year schedule and when reporting to IPEDS, they:

- Report tuition and fees for three years of tuition data on their current largest programs;
- Report a single year of tuition data on their next five largest programs; and,
- Do not always have the same largest programs from year to year.

These institutions are known as “program reporters” in IPEDS. Fortunately, there is a limited number of public sector program reporters and they have a very small percentage of total enrollment. Because of these characteristics and limitations on the tuition data available, the TRP suggested that these institutions would necessarily need to be excluded from the measure (#2), and for consistency across the three measures, should also be excluded from the state appropriations (#1) and financial aid measures (#3) as well.

**Disaggregating Data by Institutional Types**

The panel suggested that in addition to providing the overall percentage changes, NCES should consider disaggregating the measures for each state by institutional types. The panel recommended against using institutional level because then two-year institutions that offer a small number of bachelor’s degree programs but are predominately associate’s degree- and certificate-granting institutions would be grouped with four-year institutions that are primarily baccalaureate or above degree-granting institutions. Thus, the panel suggested grouping institutions into these categories:

1. primarily baccalaureate or above degree-granting public institutions;
2. other baccalaureate granting public institutions;
3. associate’s degree and certificate granting public institutions; and,
4. non-degree-granting public institutions (excluding program reporters).

**Comments**

These suggestions will satisfy the requirements necessary to develop the state higher education spending chart. **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.**