
Appendix 4.2: Cost study directions

The Nebraska Legislature has charged the Coordinating Commission with evaluating the weighting of courses used in the community college state aid allocation formula. The Commission is required to determine whether changes in the weighting of courses may be necessary to properly reflect the role and mission of the community colleges and the cost of providing courses.

The Commission believes the appropriate manner of determining the community colleges' costs to provide various courses is through a formal cost study. In consultation with the colleges, the Commission has developed a cost study with data to be compiled by each community college and submitted to the Commission. The study is based on general operational funds and includes both direct and indirect costs (see definitions). Some expenditures are not included in the cost study, such as auxiliary expenses, intercollegiate athletics, financial aid, dormitories and food service, self-sustaining activities (where students pay the cost-), and costs for avocational and recreational community service program courses that are not reimbursable.

Prior to designing the data gathering methods for the cost study, the Commission staff examined 16 state costing methods for funding formulas and distribution of state allocations. Several states have completed formal cost studies and applied them to a funding formula, while others utilize various means for determining an equitable distribution of state aid to community colleges. Ohio, Texas, Minnesota, and Illinois have elaborate cost studies that are updated annually. Michigan, Washington, Kansas, and Arkansas have completed cost studies and use the resulting data in several ways, including formulas to provide funding to their community colleges. South Carolina and Tennessee base their funding formula on performance criteria and have not done a cost study. The remaining states the Commission evaluated—Oregon, Colorado, Montana, New Mexico, Nevada, and Wisconsin—use a combination of cost factors, performance criteria, data elements, and inflation to construct a community college funding formula or state allocation vehicle.

The Commission's cost study design utilizes what we believe are the best aspects of several states' cost studies and is based on CIP (Classification of Instructional Programs) codes identified by the community colleges in their Nebraska Community Colleges Combined Course List (2008-09). All courses offered within a CIP code are analyzed to determine costs for offering those courses. The total of all course costs within a CIP is the CIP code cost. Most other states that use course costs in their formulas utilize a CIP code method of accounting for costs. It appears Nebraska's course weighing method in its funding formula is unique with regard to the allocation of state funds.

We are providing each college with a spreadsheet on which to report its data and analysis (attached). (Data is to be reported for each *college* rather than each *campus*.) Wherever possible, we have used categories common in the field. We will analyze the cost data you submit

Appendix 4.2 cont'd

and determine whether the current three course weightings are supported by the data and whether to recommend that changes should be made to the weighting portion of the formula.

Overview of unit cost study

Timeframe:

Please provide your data by September 21, 2009. Use audited end-of-year expenditures for the 2007-08 fiscal year (latest audited figures).

General guidelines:

The cost study for the fiscal year includes the summer session(s), the fall term, the winter term (if applicable), and the spring term. The fiscal year should include a full 12 months for the production of credit and non-credit hours and for expenditures. Only expenditures for the fiscal year should be reported. All expenditures reported must reconcile by PCS (Program Classification Structure) to the financial audits. PCS 5 data will not reconcile because the Commission has requested exclusions of PCS 5.5, 5.6, and 5.7 in PCS 5 cost allocation.

Direct Instructional Costs – PCS – 1 by CIP:

- All direct instructional costs for a specific CIP code include personal services, operating, travel, and equipment. Only costs for the identified CIP code should be included.
- The FTE and instruction costs for students taking courses such as general education courses should be included in the CIP codes associated with those courses.
- If an institution's accounting system includes costs for more than one CIP code in a single cost center, the costs must be equitably divided between CIP codes. (Ted Suhr, Southeast Community College, has provided the following example.)

Example: Costs for the agriculture program may include costs for CIP codes 01.0101 Agricultural Business and Management and for CIP code 01.0601 Agriculture. The equitable distribution of costs should be based on the number of FTEs in each CIP code and the percentage this represents of the total FTEs for the cost center.

The FTE by CIP code:

01.0101	198.33	91.65%
01.0601	18.06	8.35%
Total	216.39	100.00%

Appendix 4.2 cont'd

All costs should then be allocated to the specific CIP code by FTE percentage.
(Including indirect costs)

Indirect costs:

Indirect costs are those expenditures that contribute to the support of instruction. For this study, those indirect costs are represented in PCS 4, PCS 5 (as modified), PCS 6, and PCS 7.

Other costs:

Facility Costs – All colleges have a significant investment in land and buildings necessary to accomplish their mission of instruction. Some facility costs are general to all or many instructional programs, such as the cost of a general-use classroom. Other programs include laboratory costs, which may reflect separate facilities or a combination of laboratory and classroom held in the same location. There are also facility costs specific to a particular program such as horticulture, where a greenhouse is used for instruction, or Licensed Practical Nursing (LPN) where a specific area is designated as a hospital setting used only for nursing education.

General Facility Cost – For CIPs with general-use classroom and/or class laboratory instruction, the college should develop a cost for general purpose facility as follows:

- $(\text{Annual Building depreciation cost of all college-owned buildings}) / (\text{Total square feet of all college-owned buildings}) = \text{Annual building depreciation cost per square foot}$
- $(\text{Annual depreciation cost per sq. ft.}) \times (\text{Average sq. ft. per general-use classroom}) = \text{Average annual depreciation cost per general-use classroom}$
- $(\text{Average annual depreciation cost per general-use classroom}) \times (\text{Total number of college-owned general-use classrooms}) = \text{Total annual depreciation cost for all college-owned general-use classrooms}$
- $(\text{Number of general-use class sections offered by a CIP}) / (\text{Total number of general-use class sections offered by college}) = \text{CIP's \% of general-use class sections}$
- $(\text{CIP's \% of general-use class sections}) \times (\text{Total annual depreciation cost for all college-owned general-use classrooms}) = \text{CIP's general-use classroom cost}$

For CIPs with general-use laboratory or classroom/laboratory instruction, colleges should use the same method as for general-use classrooms with the exception that each college will need to determine its average square feet per general-use class laboratory based on the total square feet of its general-use class laboratories divided by the number of its general-use class laboratories.

Appendix 4.2 cont'd

Special Facility Cost – For CIPs with special facility requirements, the colleges should identify those specific annual costs and report those costs in the Special Facility Cost Category.

Those specific annual facility (or land) costs—such as the farm land lease cost at Southeast Community College or the aviation facility lease at Western Nebraska Community College—would be recorded as the actual yearly cost in the Special Facility Cost column by appropriate CIP. For colleges that own farm land for the Ag CIP – 01.0101, the college should determine an annual lease cost for the land or some other generally accepted annual cost and use that figure as the annual cost of Ag land for the Ag CIP. Buildings used for the Ag CIP should be recorded by an annual depreciation allowance based on the depreciation definition provided in the definition section of this document.

Other space specific to a CIP—such as auto body, welding, utility line training, and others—should be analyzed to determine an annual cost, which should be recorded in the Special Facility Cost category by CIP. The annual cost is determined by the annual depreciation allowance of the CIP's space used for dedicated classrooms, laboratories, offices, etc. or the annual lease cost associated with the specific CIP's space.

Some programs or CIPs will have only the general facility costs; some may have only special facility costs; others may have both general and special facility costs.

Additional Guidelines:

- The study is based on semester hours. Any college on the quarter calendar system must convert quarter hours to semester hours. One quarter hour equals 0.667 semester hours.
- Some expenditures are excluded from the study, generally because they are not related to instructional activities or because their funding base is not supported by state dollars, local property tax, or tuition and mandatory fees. Excluded costs include:
 - Capital outlay for new facilities, site acquisition and improvements, and bond indebtedness.
 - Food service
 - Bookstore
 - Child care centers*
 - Intercollegiate athletics
 - Student organization/clubs
 - Administration of auxiliary programs

Appendix 4.2 cont'd

- Financial aid

* Expenditures incurred as part of an instructional program or lab should be reported as direct instructional/department cost data.

- Determination of equipment costs by CIP code should be done as outlined by Ted Suhr, Southeast Community College. Following is Ted's example for a three-year average. The study will use a five-year average, so Ted's example should be expanded to include five years.

The direct instructional costs for CIP 48.0508 are \$966,785. The *total equipment costs* for the last three years are as follows:

6-30-06	55,036
6-30-07	2,638
6-30-08	22,710
Average	26,810
Add to 6-30-08	4,100

Thus the total direct instructional costs for CIP code 48.0508 are \$970,885 (966,785+4,100).

Definitions

Academic transfer – Courses in this category are “academic” in nature. They:

- A) generally fall within the categories of languages, arts and humanities, social sciences, mathematics, and science,
 - B) are transferable to a four-year institution,
 - C) can be counted toward an AA or AS degree, and
 - D) are *not* vocational or technical courses that may transfer to a four-year institution on the basis of a programmatic articulation agreement (e.g., AAS agriculture programs that articulate to UNL).
- All courses that have been identified as part of the Nebraska Transfer Initiative, with the *exception* of business courses, are considered academic transfer courses.
 - Other courses that meet the above requirements may also be counted as academic transfer, such as courses in education, physical education, and journalism.
 - Although science and engineering courses fall within academic transfer, science and engineering courses should be counted together as a separate academic transfer category for the purposes of cost analysis.

Appendix 4.2 cont'd

Annual Building Depreciation Cost – FY2007-08 replacement value of a building provided for insurance purposes divided by 40 year straight-line depreciation.

CIP code – Classification of Instructional Programs code. This is a federal classification system that assigns a six-digit number to individual courses (e.g. applied mathematics, statistics) that are then aggregated into two- and four-digit discipline designations (e.g. mathematics).

Direct costs – Direct costs include salaries and benefits of instructional faculty and staff, personnel who directly support the faculty, and supplies and equipment.

Foundations Education – Courses in this category assist students in reaching college-level performance in:

Mathematics,
English usage (reading, writing) for native speakers of the language,
English usage for non-native speakers of the language (ESL),
Science remediation courses.

FTE – Full-time equivalent students, calculated by counting student credit hours generated from July 1 to June 30 (fiscal year), divided by 30. The total number of FTEs for the institution should reconcile back to the REU audits for the 2007-08 fiscal year.

FTE Faculty – Full-time equivalent faculty is calculated by counting session credit hours generated from July 1 to June 20 (fiscal year), divided by 30.

Example: Fiscal year 2007-08

Faculty #1: 6 – 3 credit hour session = 18
credit hours

Faculty #2: 5 – 3 credit hour session = 15
credit hours

Faculty #3: 5 – 3 credit hour session = 15
credit hours

Faculty #4: 4 – 3 credit hour session = 12
credit hours

Total faculty credit hours generated = 60

60 credit hours generated divided by 30 credit hours = 2 FTE faculty

Indirect costs – Indirect costs are those expenditures that contribute to the support of the instructional mission and are not directly assignable to any one discipline. Indirect costs could include a share of the student services, library, campus administration, facilities, and maintenance of the campus.

Appendix 4.2 cont'd

SCH – Student credit hour.

Section – A regularly scheduled class (or class laboratory) with the same instructor offered face-to-face, by two-way audio/video, or hybrid method (excludes “online only” format) offered during the FY2007-08 fall, winter (if applicable), spring, or summer term.

Instructions for Reporting Cost Data on the Cost Study Spreadsheet

CIP Classification (Column A) – All courses offered are to be converted to disciplines as defined in the Community College Master Course list. Six-digit CIP codes to be studied are listed on the spreadsheet provided for the study. Course enrollments and expenditures are to be grouped together by CIP category, which is the smallest instructional designation used for this cost study. All courses within a CIP must be evaluated for costs and then added together to arrive at a discipline cost. Only one total should be submitted for each CIP code.

Due to concerns about the relative weighting of academic transfer and foundations courses, the Commission has separated parts of programs in CIP 24 and 32 (and certain other CIPs) into two new “CIPs” for the purpose of identifying specific costs for foundations education and academic transfer (see instructions on page 15).

Number of courses offered (Column C) – Total number of credit and non-credit reimbursable courses offered in the identified CIP code. (Do not count duplicate offerings of courses, e.g., if English 1010 is offered 12 times during the year, it is counted as one course.)

Number of FTE faculty (Column D) – Total number of faculty teaching in the identified CIP code determined by full-time equivalency. To determine the number of FTE faculty for a particular CIP, accumulate the total credit hours generated for each session (not student credit hours) for the CIP and divide the course credit hours generated by 30. Include FTE faculty for non-credit reimbursable courses using the method generally accepted by the community colleges to determine the number. This will provide an estimate of the number of FTE faculty per CIP.

Direct Instructional Costs:

PCS – 1 (Instruction) (Column E) – This column by CIP code should include the costs of:

- A) Personnel including all faculty salaries and benefits for all FTE faculty: full-time, part-time, 9 month, 12 month, adjunct, overload, separate contracts, etc.

Appendix 4.2 cont'd

- B) Expenditures for operating and supplies
- C) Travel
- D) Instructional equipment based on a 5-year rolling average (see example)
- E) Expenses for non-credit reimbursable instruction (only for institutions that maintain separate cost centers for non-credit courses).

This expense is calculated by using the percentage of the total non-credit reimbursable classes represented by the non-credit reimbursable classes in each CIP code. The percentage is multiplied by the total cost for non-credit reimbursable classes, resulting in a cost for non-credit reimbursable courses for each CIP. This is reported as a direct instructional cost along with the other costs reported in PCS – 1.

Indirect Instructional Costs:

PCS – 4 (Academic Support) (Column F) – All costs that are assignable to instruction at the discipline level should be reported in this category. Examples are: instructional materials and supplies, library services, academic administration, course and curriculum development, conference and meeting expenses, academic computing, and educational media services. Clerical staff salaries or student worker salaries that can be specifically attributed to the instructional support of the specific discipline should be included in this category.

PCS – 5 (Student Services) (Column G) – Expenditures for student services should be reported in this category. Costs for the following should be reported: (1) Student service administration, (2) Social or cultural development, (3) Counseling and career guidance, and (4) Financial aid administration.

PCS – 6 (Institutional Administration) (Column H) – Expenditures for institutional administration consists of costs for activities carried out to provide for both the day-to-day functioning and the long-range viability of the institution allocated to the various cost centers. Examples of costs to include would be: Executive Management, Financial Management and Operations, Administrative Computing Support, Public Relations and Development, Student Recruitment and Student Records.

PCS – 7 (Physical Plant Operations) (Column I) - Expenditures for the operation and maintenance of the physical plant after subtracting amounts charged to auxiliary enterprises. Expenditures are for housekeeping and maintenance activities necessary to keep the physical plant open and ready to use. Types of expenditures

Appendix 4.2 cont'd

are: maintenance, custodial, grounds, security, transportation, utilities, rents, physical plant administration, and landscaping.

When allocating the O&M costs per CIP code, non-state-funded intercollegiate athletics and auxiliary enterprises must be identified along with their associated costs and removed from the total costs prior to allocation of costs to the CIP code.

Other Costs:

General Facility Costs (Column J) – After establishing a general classroom cost and a general laboratory or laboratory/classroom cost, multiply the average classroom or laboratory cost times the number of classrooms or laboratories required to provide instruction for the associated CIP.

The average cost for facilities, as identified above, is applied to each CIP code.

Special Facility Costs (Column K) – The annual cost of buildings and land designated specifically for particular courses, disciplines, or CIP codes should be reported in this category. Land should be included as an annual cost—lease or other method. Special buildings for welding, auto body, Ag, truck driving, nursing, construction, diesel, utility line training, and others are to be evaluated to determine an annual cost for the special facility, as it is applicable to each CIP code. The cost of any building or portion of a building specifically designed for a particular program should be placed in the special facility cost column.

Total Cost for CIP (Column L) – Add columns E thru K for each CIP code.

Student FTEs (Column M) – Total number of full-time equivalent students for the CIP, calculated by dividing the total student credit hours generated by 30 plus the number determined according to statute for non-credit students. The total FTEs for all the CIPs should match the FTEs in the REU audits.

Cost per FTE (Column N) – Total cost for the CIP (column L) divided by the total student FTEs (column M) will result in the cost per FTE.

Student Credit and Contact Hours (Column O) – All student course credit hours generated by courses approved for credit and all contact hours generated by non-credit courses designated as reimbursable. The total student credit hours should be the sum of the student course credit hours generated for all courses and sections offered within the CIP code plus all reimbursable non-credit con-

Appendix 4.2 cont'd

tact hours. The sum of the student credit hours on the spreadsheet should match the total student credit hours reported in the REU audits.

Headcount (Column P) – The total number of students enrolled in all credit and reimbursable non-credit courses in the CIP (duplicated headcount).

Totals – The spreadsheet columns should be totaled at the bottom of the spreadsheet.

- The totals for PCS 1, 4, 6 and 7 should reconcile to the PCS designations in each college's financial audits.
- The totals for student FTE should reconcile to the REU audits.
- The totals for student credit and non-credit reimbursable hours should reconcile to the REU audits.

Provide a reconciliation report of any variances and submit the report with the completed spreadsheet.

Additional CIP Code Instructions

Basic skills – “CIP” 32.0101

Include within this CIP courses such as interviewing strategies, study skills, Adult Basic Education, and GED.

Foundations (remedial) courses – “CIP” 75.0001

Identify courses that are pre-college and intended for students with below college-level skills. The courses do not count toward a degree, diploma, or certificate, and are not awarded transferrable credit. Typically, the foundations courses are numbered below 1000 and are found in CIPs 24 and 32. If the college has foundations courses designated above 1000, but that are really foundation courses or located in another CIP, include those courses in the foundations “CIP”. Remove all foundations courses from their original CIP, so that they are not counted twice.

Subsets of CIP 75.0001 – Foundations Education

Foundations Education CIP 75.001 is further divided into CIPs 75.1001 Math, 75.2001 English/Reading, 75.3001 ESL, and 75.4001 Science remediation. The costs for these subsets are included in the general CIP 75.0001 (Foundations Education). The only information gathered separately for these subsets will be (1) number of courses offered, (2) number of FTE faculty, (3) student credit hours, and (4) headcount.