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AUTHOR Cordes, David C.
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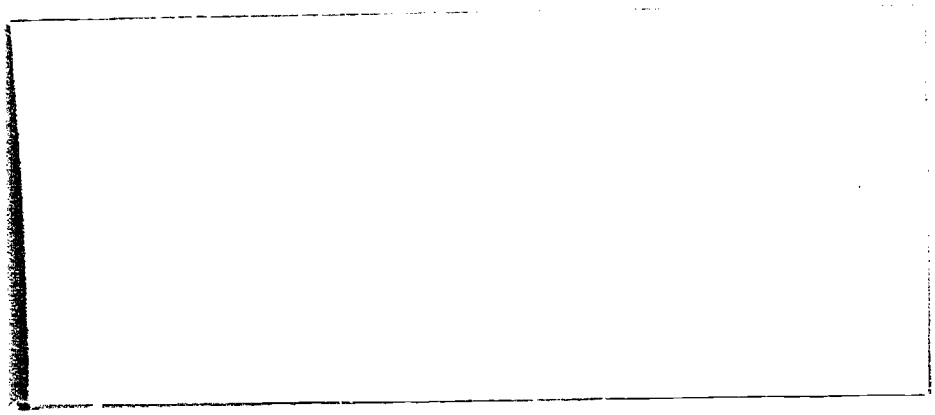
ABSTRACT

PRIME is an acronym for Planning Resources in Minnesota Education. The project's primary objective is to test the implementation of CAMPUS (Comprehensive Analytical Methods for Planning University Systems) in one State College, one Junior College, and in one school at the University of Minnesota. The CAMPUS model was developed by the Institute for Policy Analysis in the University of Toronto and through a Ford Foundation grant made available to the public. The latest model, CAMPUS-V, was programmed on an IBM 360/85 computer. CAMPUS-MINNESOTA (CAMPUS-M) is identical to CAMPUS-V except it is operational on the University of Minnesota's CDC 6600 Computer. CAMPUS-M is a resource simulation model with the ability to represent "reality" in considerable detail. This report discusses: (1) the inputs needed for a single course or activity; (2) the process in terms of (a) instruction programs; (b) support programs; and (c) research and public service programs; (3) the 3 major groupings of output: input data reports, cost center reports, and overtime reports; (4) some areas where the model may be a valuable tool for analysis; and (5) the research in progress, including program costing, resource analysis models in higher education, analysis of faculty activities, faculty activity information system, and curriculum cost benefit analysis. Exhibits and input data sheets are included in the report. (AF)



PROJECT PRIME

Planning Resources In Minnesota Education

Project PRIME Report No. 2

An Introduction to Project PRIME and CAMPUS MINNESOTA

David C. Cordes

November 1970

Project PRIME Research Coordinated by the
Minnesota Higher Education Coordinating Commission

An Introduction to Project PRIME and CAMPUS MINNESOTA

I. BACKGROUND

PRIME is an acronym for Planning Resources in Minnesota Education. Project PRIME is a one year project jointly funded by the Minnesota State College System, Minnesota Junior College System, the University of Minnesota, the Hill Family Foundation, and the Minnesota Higher Education Coordinating Commission. The project's primary objective is the test implementation of CAMPUS (Comprehensive Analytical Methods for Planning University Systems) in one State College (Bemidji - Behavioral Science Division), in one Junior College (Lakewood) and in one school at the University of Minnesota (School of Business Administration).[1/]

The CAMPUS model was developed under a Ford Foundation Grant by the Institute for Policy Analysis in the University of Toronto. The Institute has an extensive research program entitled "Systems Analysis for Efficient Resource Allocation in Higher Education." The program consists of six integrated projects: (1) Program Planning and Budgeting in Universities, (2) Planning and Financing Higher Education, (3) Models for University Planning (CAMPUS), (4) Integrated University Information Systems, (5) Models for planning and use of physical facilities, and (6) Planning and Management Systems for University Information Resource Centers.[2/]

Because of the Ford Foundation Funding, the CAMPUS model is available to the public. The latest version available to the public is known as CAMPUS-V.[3/] CAMPUS V was programmed on an IBM 360/85 computer. CAMPUS-MINNESOTA, hereafter called "CAMPUS-M", is identical to CAMPUS V except that it is operational on the University of Minnesota's CDC 6600 Computer.[4/]

[1/] For further information on the Project see "Test Implementation of CAMPUS (A Computer Based Simulation Model) for Higher Education Administration and Planning in Minnesota", February 1970. Project PRIME Report No. 1 March 1970.

[2/] For a description of each project, their objectives, and their status at the end of 1969 see Judy, Richard W. "A research progress report on Systems Analysis for efficient resource allocation in higher educations", University of Toronto, January 1, 1970, 24 pp.

[3/] Another version of CAMPUS, labelled either CAMPUS VI or CAMPUS-CONNECT is available from the Systems Research Group (SRG). SRG is a corporation whose principles are former associates of the Institute for Policy Analysis. CAMPUS VI is available in an interactive mode, and costs approximately $50,000 per installation.

[4/] For futher details see Milton S. Fisher and Patrick Davitt, "Converting CAMPUS V to CAMPUS-MINNESOTA", (Project PRIME report No. 11)

II. INPUTS

CAMPUS-M is a resource simulation model with an ability to "represent reality" in considerable detail. As an indication of the level of detail, let's examine the data needed for a single course (or activity):

(1) Staff - academic e.g. professor and academic support e.g. teaching assistant.
(2) Space - classroom, instruction lab, or special lab.
(3) Teaching equipment - projectors, bunson burners, computers, etc.
(4) Type of course - lecture, lab.
(5) Staff Specialization - accounting, philosophy, art, etc.
(6) Schedule time - hours per session and sessions per week.
(7) Success factor - probability of completing courses with a passing grade.

Exhibit 1 provides a listing of the types of input required by CAMPUS-M. These sections are examined briefly below.

DEFINE: This section "defines" or structures the institution's programs and cost centers (departments). Exhibit 2 is a program structure for a typical School of Business Administration and Exhibit 3 is a corresponding cost center structure.

ACTIVITY: Activities are primarily courses. Resources required for each course were discussed above.

PROGRAM: Activities (courses) are related to programs (degrees), through the use of participation rates. Also established are the length of the degree programs - 2 years, 4 years, etc.; and the number of credits needed for graduation.

STUDENT: Actual entering students both freshmen and advanced standing students are input in this section. Drop-outs and transfers from major to major are also entered in this section.

STAFF AND XSTAFF: Staffing units required for each teaching and non-teaching duty are entered here; plus salary and office space. Hiring and promotion policy variables are also part of this input.

SPACE AND AVLSPACE: There are four types of space in this section: classroom, instructional labs, special labs, and service department space. Operating costs, construction costs and service characteristics (e.g. air-conditioning) are also needed.

SERVICE: Inputs are needed for staff, space, cost, and equipment associated with service departments.

EQUIPMENT: Cost and type of teaching equipment

REVENUE: By source and use

MISCELLA: Forms for developing miscellaneous resources, e.g. benefits, travel expenses.

III. PROCESS

(A) INSTRUCTION PROGRAM: A schematic of the use CAMPUS-M makes of the input data for the instructional programs is shown on Exhibit 4. The process begins with students entering the system as shown on the left.[5/] They enter, either as freshmen or advanced standing students and select a program (or major). Each program in CAMPUS has a curriculum. A curriculum is defined for each quarter, and for each study level (Junior, Senior) as: "a set of activities (courses) and a set of participation rates". The participation rates for an activity represent the probability that students in this program and in this quarter will select this activity. The combination of curriculum, program, and students determines a demand on activities. The resources required to "teach" these activities (e.g. staff, equipment space) are drawn from the cost centers or departments.

(B) SUPPORT PROGRAMS: Developing resources for the support programs involves using the concept of a service department. A typical example of a service department is the computer center. To determine the "supplies" (one resource type) needed for this department, CAMPUS-M can use a relationship of the following type:

$$\begin{aligned}\text{Computer Center Supplies} &= \$20{,}000 + \$100 \text{ per student} \\ &\quad + \$500 \text{ per faculty member} \\ &= \$20{,}000 + \$100(100) + \$10(500) \\ &= \$35{,}000\end{aligned}$$

The number of students and faculty "drawing" supplies from the computer center for any quarter would be determined from the instruction process, as explained above. CAMPUS-M refers to the "per student" and the "per faculty member in the above equation as the "functional basis". The 49 functional bases available in the model are shown on exhibit 5. Note from the exhibit that one basis is "(1)" or the absolute amount (the $20,000 in the example). A maximum of three functional bases can be used for each resource at each cost center (or program). The use of functional bases gives the model-builder a very flexible vehicle for determining resources in support programs.

(C) RESEARCH AND PUBLIC SERVICE PROGRAMS: If the research or public service activity is carried on by a specified organization e.g. MISRC or department, e.g. single quarter leave; determination of required resources can be handled analogously to those for support programs. If the research or public service is a "faculty activity", CAMPUS-M develops the required resources using a non-teaching duty category. Two possibilities are available: (1) Using a fixed % of faculty time or (2) using the "functional basis" on a resource called "staffing units".

[5/] An inventory of students in the system at start-up is a required input.

IV. OUTPUT

There are three major groupings of output reports available in the present version of CAMPUS-M: (1) Input Data reports, (2) Cost Center reports and (3) Over-Time reports. The first group of reports are provided to collate the input information and develop it in a logical report format, thus facilitating an examination of the input data. There are 44 report formats (exhibit 6) available in 9 major categories as follows:

INPUT DATA REPORTS

Report Category	Description	Number of Report Formats
1	Program Structures and Departments	4
2	Activities	6
3	Programs and Students	4
4	Staff	7
5	Space	7
6	Space	6
7	Service Departments	4
8	Revenue	4
9	Miscellaneous Resources	2
		44

The second group of reports, the "COST CENTER Reports", are provided to aid the institution's managers e.g. department heads, deans, etc. The present version of CAMPUS-M has seven major report types and 48 report formats (Exhibit 7) as follows:

COST CENTER OUTPUT REPORTS

Report Category	Description	Number of Report Formats
1	Students and enrollees	2
2	Staff	5
3	Equipment	2
4	Service	2
5	Space	19
6	Space	8
7	Summary	10
		48

A third group of available reports are called "OVERTIME Reports". These reports are for a session (year) as contrasted with the preceeding two groups which are "Single period (Quarter)" reports. Up to 10 sessions are possible. Five categories of reports are available (Exhibit 8):

OVERTIME REPORTS

Report Category	Description	Number of Report Formats
1.1	Student and Enrollee Load	1
1.2	Staff Costs	1
1.3	Space Requirements	1
1.4	Operating Costs	1
1.5	Summary Report	1
		5

V. ANALYSIS WITH CAMPUS-MINNESOTA

As with all simulation models, "its real value depends on the ability of the user to recognize situations in which the model can be used and to devise alternatives for investigation."[6] The developers of CAMPUS suggest five different problem areas where the model may be a valuable tool for analysis:[7]

1. SCALE OF OPERATIONS - Problems in this area are mainly concerned with the impact of altering the levels at which various programs are carried out. Typical investigations would assess the impact of changing student enrollment or student graduation goals.

2. GENERAL STRUCTURAL DECISIONS - Structural decisions occur on two levels. The first of these concerns the composition of the institution itself in terms of the educational and research programs that are pursued by the university. The second level of structural decisions occurs within the program level and is concerned with the activity composition of the program. Alterations of this kind involve adding or deleting particular activities.

3. PEDAGOGICAL DECISIONS - A number of decisions relating to activities have to be made with respect to the way in which they are going

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[6] Systems Research Group, Seminar on University Administration, March 17 and 18, 1969.

[7] Ibid.

to be carried out. For instructional activities these might include class sizes, the type, qualifications and mixture of staffing to be used, and teaching equipment (ETV, CAE) requirements.

4. ADMINISTRATIVE DECISIONS - The various activities place loads on the cost centers or departments and these departments have a number of administrative decisions that must be made. Such matters as professional staffing policy, use of support staff, renumeration and tenure policy and various other financial and administrative questions need to be assessed.

5. GENERAL POLICY - General policy decisions can be characterized as university level administrative decisions. Such matters as a change in the semester system, addition of new schools and faculties, and the introduction of new scheduling techniques are representative of the kinds of decisions faced at this level.

VI. RESEARCH IN PROGRESS[8/]

(A) PROGRAM COSTING: Although impressive, the output reporting capability of CAMPUS-M suffers from a major weakness - the available reports are for cost centers only and not programs (exhibit 2). The essence of program budgeting is to report resources (and of course, effectiveness) by "programs". Exhibit 10 is one example of a desirable program report. It shows "total" resource requirements for a typical program element e.g. Ph.D. degree in MIS. Other reports providing "unit" cost, e.g. per degree, per credit hour, etc., are also planned. Fortunately, most of the basic data needed for "program costing" is generated and available in the model. Two reports are in progress explaining Project PRIME's efforts in this area.[9/]

(B) RESOURCE ANALYSIS MODELS IN HIGHER EDUCATION:[10/] The research being conducted in this area involves a synthesis and analysis of four resource analysis models: (1) CAMPUS; (2) Program Budgeting; (3) Leontief's input-output analysis; and (4) Linear programming. Each model will first be individually explained, followed by a theoretical synthesis using the input/output framework as the key integrating structure.

To ascertain the value of structuring the data as proposed above,

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[8/] Exhibit 9 is a bibliography of Project PRIME reports.

[9/] Davitt, Patrick Program Accounting with CAMPUS-M, unpublished master's thesis (Also available as Project PRIME report Number 8) and Gary M. Andrew and David C. Cordes, Program Costing and Resource Analysis with CAMPUS-MINNESOTA: A Philosophic note, Project PRIME report Number 5 in progress.

[10/] David C. Cordes Resource Analysis Models in Higher Education, Project PRIME report No. 10 in progress.

an analysis will be conducted using test data from the three institutions involved in Project PRIME. To facilitate this analysis we have a computer program known as "EL FYD". The model's peculiar name stems from its association with the Department of Defense's Five Year Defense Program (FYDP).[11] Physically the model consists of two groups of computer codes - one a "generalized cost model" in input/output format and the second a "report generator" that provides flexibility in writing tables; both for staff analysis, and management reporting.

An analysis of the usefulness of the proposed synthesis for improving and integrating planning for various levels of a statewide education system e.g. departments within colleges, is planned.

(C) ANALYSIS OF FACULTY ACTIVITIES:[12] Faculty resources represent a major portion (77% in SBA, University of Minnesota 69-70) of the total variable input in higher education. Of this amount only a small percentage (class time) is easily measured. The remaining amount is difficult to measure due to the large range of activities, the number of activities involved with at any one time, and the varied working schedule of the faculty. Current attempts to measure these activities using questionnaires do not appear to be sufficiently accurate. Research will be done to explore the accuracy of the questionnaire, and the feasibility of using activity self sampling to improve current methods of data collection. Activity self sampling is a process of recording activity engaged in at random points over a period of time. This is done with the aid of a small random alarm device carried by the individual to signal the points.

If the data collected via a questionnaire proves to be too inaccurate for use in resource allocation models, then further work will be necessary to develop systems that will provide the desired accuracy.

(D) FACULTY ACTIVITY INFORMATION SYSTEM:[13] Information systems and resource allocation models in higher education require coordinated subsystems. These subsystems include (see exhibit 12): (1) input subsystems, (2) the data base management subsystem, and (3) analysis and reporting subsystems. Work must be done on defining the various subsystems so that

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[11] The FYDP is the "programming" system associated with the Department of Defense's Planning, Programming, and Budgeting System (PPBS). For a detailed explanation of PPBS see Cordes, David C. Planning, Programming, and Budgeting Systems in Education: Concept, Operation, Status, and a School of Business Administration Example, Research Monograph No. 1, Management Information Systems Research Center, May 1970, 68 pp. (Also available as Project PRIME Report No. 4)

[12] For further information on this research see Lorents, Alden C. Analysis of Faculty Activities for Resource Allocation Models, Project PRIME Report No. 6, in progress.

[13] For further information on this research see Lorents, Alden C. A Faculty Activity Information Subsystem and CAMPUS-MINNESOTA, Project PRIME Report No. 7

there is compatibility:

(1) with the WICHE[14] data element definitions
(2) with the Resource Analysis Model
(3) with the Data Processing Systems.

The proposed faculty activity information system to be designed in this research project will consider the campatibility as noted above. The design will include definitions of the input system, data elements, file design and outputs. It will also include definitions to interface the data elements in the subsystem with CAMPUS.

(E) CURRICULUM COST/BENEFIT ANALYSIS[15] Research is needed on a methodology for performing a cost benefit analysis on an academic curricula. The CAMPUS model is ideally suited for the costing side. However, little work has been done in the area of educational outputs. In a recent paper presented before the WICHE-MIS conference on educational outputs, David Brown sketched out a framework for an educational output index.[16] At the present time it appears that placing a dollar value on an educational output is infeasible, however Brown's index approach is very promising. The index approach will not tell administrators how well they are doing in absolute terms but it will allow them to see how they are doing with respect to the past and it will allow them to compare expenditures with a quantifiable measure of output.

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[14] WICHE is Western Interstate Commission in Higher Education. The MIS section is working on defining information systems in higher education.

[15] For further information see Fisher, Milton S. "A Curriculum Cost-Benefit Analysis," Project PRIME Report No. 9, in progress.

[16] Brown, David G. "A Scheme for Measuring the Output of Higher Education," Outputs of Higher Education: Their Identification, Measurement, and Evaluation, Papers from a seminar held at Washington, D.C., May 3-5, 1970, conducted by the Western Interstate Commission for Higher Education in cooperation with the American Council on Education and the Center for Research and Development in Higher Education at Berkeley, Edited by Ben Lawrence, George Weathersby, and Virginia W. Patterson, July 1970.

Exhibits Index

Exhibit 1

Level 1 Command INPUT

Index of Level 2 and Level 3 Command INPUT Documents

LEVEL 2	LEVEL 3	
DEFINE	01	Institution Name and Simulation Time Factors
	02	Cost Center Levels
	03	Cost Centers
	04	Program Levels
	05	Programs
	06	Program to Cost Center Affiliation
ACTIVITY	01	Activity Type
	02	Specialty Type
	03	Schedule Range
	04	Section Size Range
	05	Resource Combinations
	06	Activities
	07	Exception Activities
	08	Exception Resources
PROGRAM	01	Program Curricula
	02	Curricula Activities and Participation Rates
	03	Program Duration and Enrolment Update
	04	Credits Per Credit Range by Program
STUDENT	01	New Entrants to Institution with NO Academic Credit
	02	Distribution of New Entrants with NO Academic Credit
	03	New Entrants with Academic Standing
	04	Student Transitions
	05	Student Credit Load
STAFF	01	Academic Staff Ranks
	02	Academic Staff Activity Teaching Duties
	03	Academic Staff Activity Non-teaching Duties
	04	Academic Support Staff
	05	Non-academic staff
XSTAFF	01	Detailed Academic Staff Ranks
	02	Detailed Academic Staff Activity Teaching Duties
	03	Detailed Academic Staff Activity Non-teaching Duties
	04	Detailed Academic Staff Inventory, Transition and Hiring Criteria
	05	Detailed Academic Staff Optimization and Update Policies
SPACE	01	Classroom Sizes (stations)
	02	Laboratory Sizes (stations)
	03	Classroom Space Planning Factors
	04	Classroom Type Characteristics
	05	Instructional Lab. Space Planning Factors
	06	Instructional Lab. Type Characteristics
	07	Special Lab. Space Planning Factors
	08	Special Lab. Type Characteristics
	09	Service Space Characteristics by Type
	10	Cost Center Space Characteristics
	11	Service Code Specifications
	12	Space Category Codes, Names, Construction, and Maintenance Costs

	13	Miscellaneous Space Specifications
	14	Teaching Space Control Centers
AVLSPACE	01	Available Classroom Space
	02	Available Instructional Laboratory Space
	03	Available Instructional Special Laboratory Space
	04	Available Space by Category
SERVICE	01	Service Departments and Affiliations
	02	Service Staff
	03	Service Space
	04	Service Equipment
EQUIPMEN	01	Equipment Resource Characteristics
REVENUE	01	Characteristics of Revenue
	02	Revenue at Cost Centers
	03	Revenue at Programs
	04	Revenue of Service Departments
MISCELLA	01	Miscellaneous Resource Characteristics
	02	Miscellaneous Resource by Cost Center
RESEARCH *		
INREPRT	01	Input Report Controls
	02	Comments
UTREPR	01	Output Report Control-Cost Centers
	02	Output Report Control-Program

General Experiment Coding Sheet

* To be available

Exhibit 2

A Program Structure
for a
School of Business Administration

PRIMARY

1.0 INSTRUCTION
- 1.1 Undergraduate
  - BSB Accting
  - BSB Regular
- 1.2 Graduate
  - Master of Business Administration (Day)
  - Executive Master of Business Administration (Evening)
  - Master of Arts - Industrial Relations
  - Ph.D. - (10 program elements)[1/]
  - Master of Science - (10 program elements)[1/]

2.0 RESEARCH
- 2.1 Organized Research
  - Center for Experimental Study of Business (CESB)
  - Industrial Relations Center (IRC)
  - Management Information Systems Research Center (MISRC)
- 2.2 Department Research
  - Summer Research
  - Department Research

3.0 PUBLIC SERVICE
- Continuing Business Education
- Bureau of Business Research
- Faculty Public Service

SUPPORT

4.0 ACADEMIC SUPPORT
- Computer Center
- Industrial Relations Library
- Business Reference Library
- Department Administration and Committees
- Professional Development

5.0 STUDENT SUPPORT
- Pre-Business Counseling
- Graduate Studies
- Placement
- Student Support - Faculty

6.0 INSTITUTION SUPPORT
- College Administration
- Administrative Services
- Committees - College Wide

[1/] Each element is a degree major: Accounting, Finance, Industrial Relations, Management, Management Information Systems, Marketing, Production, Quantitative Analysis, Insurance, and Transportation.

Exhibit 3

Cost Center Structure for a School of Business Administration

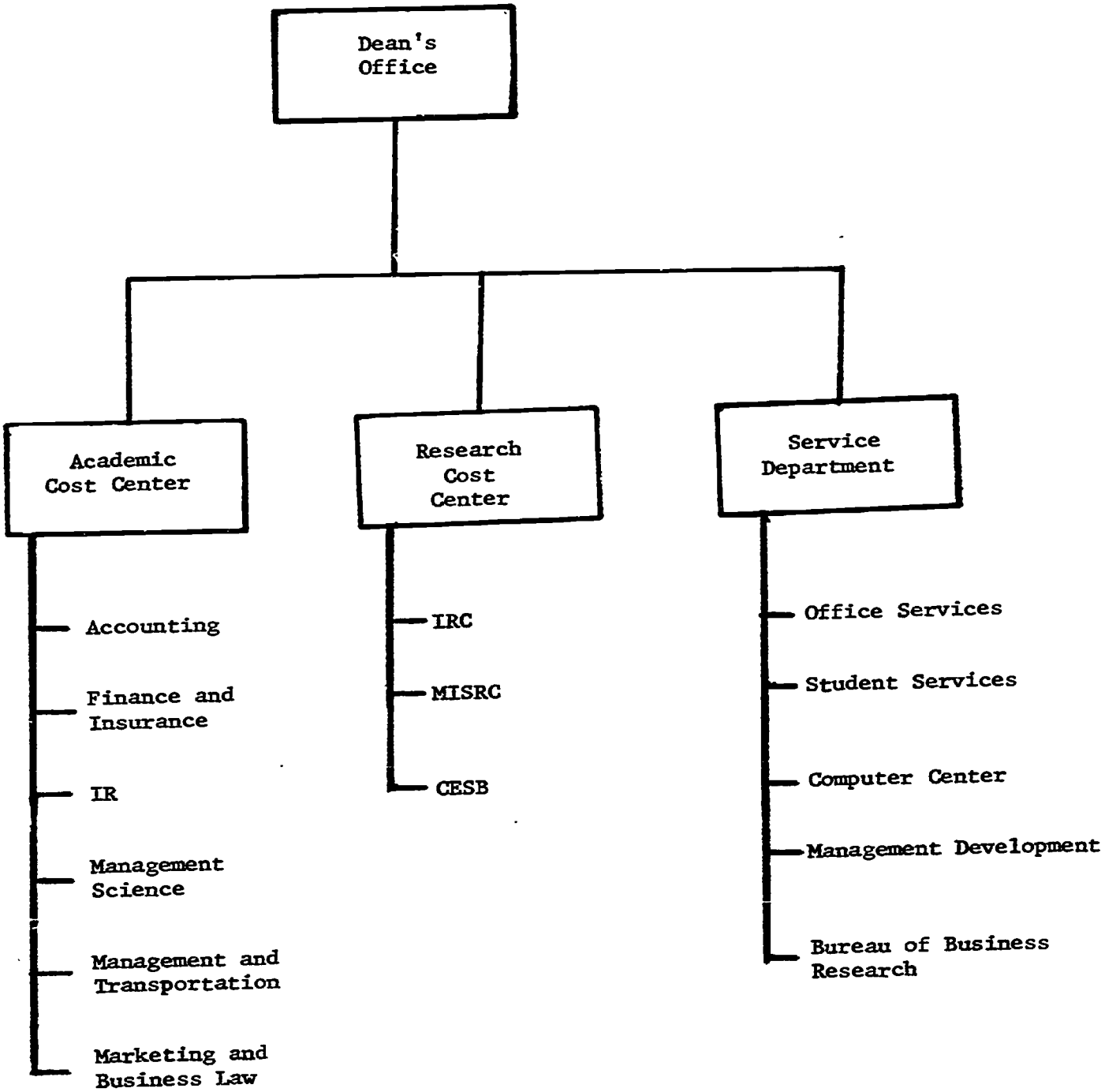

Exhibit 4

STUDENT FLOW/ACTIVITY/RESOURCE DEMAND PROCESS

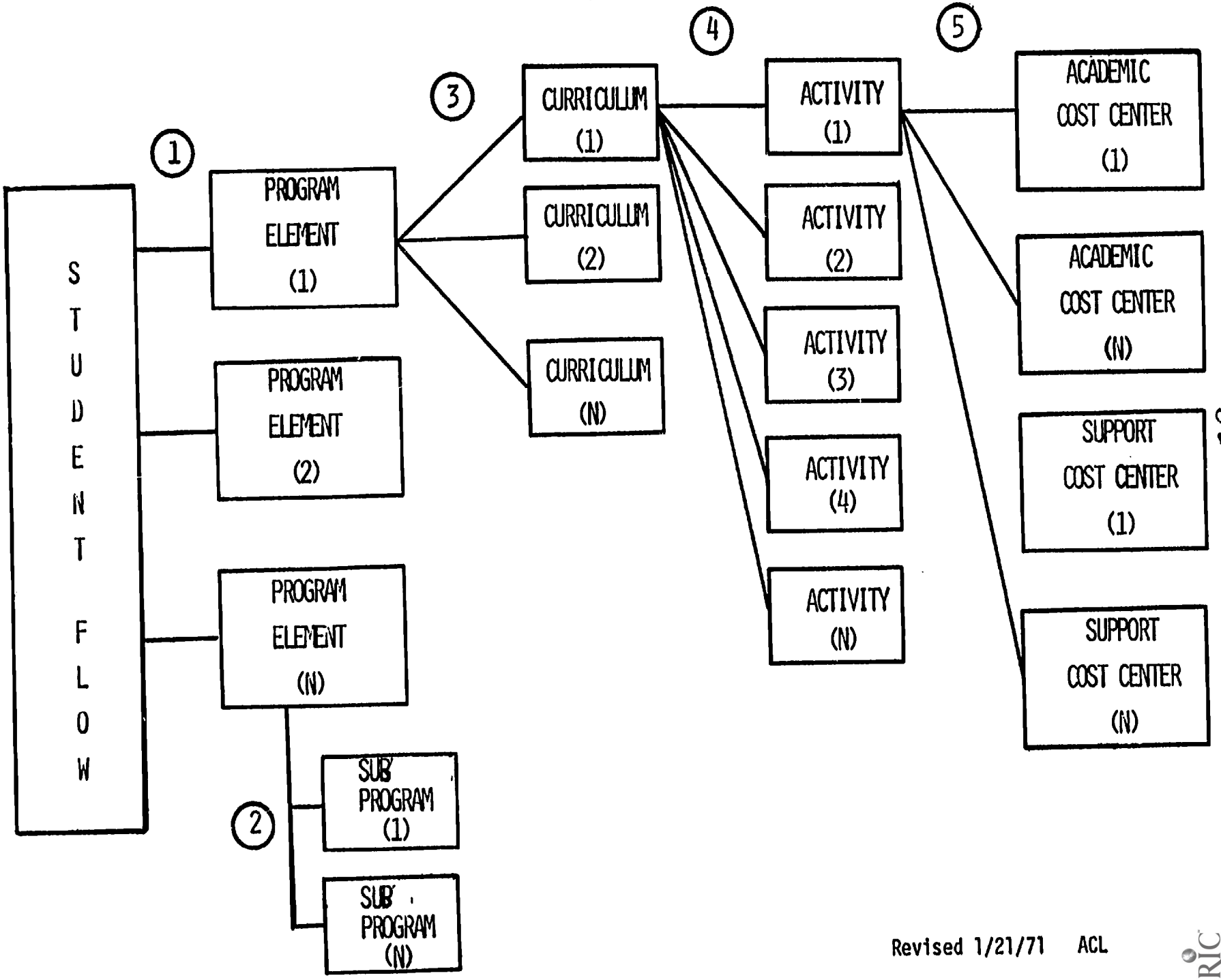

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Exhibit 4 (Cont.)

STUDENT FLOW/ACTIVITY/RESOURCE DEMAND PROCESS

(1) STUDENT DISTRIBUTION TO PROGRAM ELEMENTS (DEGREES)

(2) PROGRAM DISTRIBUTION TO SUBPROGRAMS (MINORS)

(3) PROGRAM TO CURRICULUM ASSOCIATION (GROUPS OF COURSES)

(4) PARTICIPATION RATES ON ACTIVITIES (COURSES)

(5) DRAW ON RESOURCES FROM COST CENTERS (STAFF, EQUIPMENT, SPACE)

Exhibit 5

FUNCTIONAL BASES FOR THE CALCULATION OF INDIRECT RESOURCES AT A COST CENTER 1/

Code Number	Description
1.	Absolute - value 1.0
2.	Affiliated students
3.	Affiliated enrollees
4.	Enrollee load
5.	Aggregate affiliated students
6.	Aggregate affiliated enrollees
7.	Aggregate enrollee load
8.	Number of academic staff
9.	Number of academic support staff
10.	Number of non-academic staff
11.	Total staff at the cost center
12.	Aggregate number of academic staff
13.	Aggregate number of academic support staff
14.	Aggregate number of non-academic staff
15.	Aggregate total staff
16.	Number of affiliated programs
17.	Aggregate number of affiliated programs
18.	Classroom space
19.	Laboratory space
20.	Total space
21.	Aggregate classroom space
22.	Aggregate laboratory space
23.	Aggregate total space

Exhibit 5 (continued)

Code Number	Description
24.	Operating costs
25.	Aggregate operating costs
26.	Number of directly affiliated cost centers
27.	Absolute - Value 0.1
28.	Absolute - Value 0.01
29.	Absolute - Value 10.0
30.	Absolute - Value 100.0
31.	Absolute - Value 1000.0
32.	Total academic staff salaries
33.	Total academic support staff salaries
34.	Total non-academic staff salaries
35.	Total full time academic staff hired
36.	Total staff salaries
37.	Aggregate academic staff salaries
38.	Aggregate academic support staff salaries
39.	Aggregate non-academic staff salaries
40.	Aggregate total salaries
41.	
42.	Affiliated students in 100's
43.	Affiliated enrollees in 100's
44.	Enrollee load in 100's
45.	Aggregate affiliated students in 100's
46.	Aggregate affiliated enrollees in 100's
47.	Aggregate enrollee load in 100's
48.	Number of stations in a room
49.	Number of square feet in a room

1/ Aggregate = Total at a cost center considering all the affiliated cost centers below the referenced cost center.

Exhibit 6

Input Data Reports

Report No.	Title and Contents
1.0	PROGRAM STRUCTURES AND DEPARTMENTS
1.1	SIMULATION CHARACTERISTICS: Institution name, Simulation periods per session, Length of simulation period, and Comments on this run.
1.2	COST CENTERS - LEVEL/NODE STRUCTURE: The levels, nodes and nodes of affiliation of the cost centers reflecting the flow of funds and resources.
1.3	PROGRAMS - LEVEL/NODE STRUCTURE: The levels, nodes and nodes of affiliation of the programs, reflecting the flow of teaching resources.
1.4	AFFILIATION OF PROGRAM NODES TO COST CENTER NODES: Program nodes affiliated to cost center nodes reflecting the flow of funds and resources to the programs.
2.0	ACTIVITIES
2.1	ACTIVITY CHARACTERISTICS: Activity and specialty types.
2.2	ACTIVITY CHARACTERISTICS-SCHEDULE AND SECTION SIZE RANGES: Schedule range codes - day or night classes, hours per meeting, meetings per week, duration in weeks; section size range codes - minimum, desired, and maximum section sizes.
2.3	ACTIVITY CHARACTERISTICS-RESOURCE COMBINATION Resource combination codes, and three possible resources, types and categories.
2.4	ACTIVITIES: Activity numbers, names, cost center node of affiliation, specialty and activity type codes, success factors, credit values, schedule and section size range codes, and resource combination codes.
2.5	EXCEPTION ACTIVITIES: Similar to 2.4 except dealing with exception activities. Schedule and section size range codes and resource combination codes are not present. Day or night code, hours per meeting, meetings per week, durations and section sizes (minimum, desired, maximum) are added.
2.6	EXCEPTION ACTIVITY RESOURCES: Exception activities, names, resource requirements (types and categories), cost centers of affiliation, functional codes, quantitites in proportion an day-night codes, hours per meeting, meetings per week and durations for the resource schedule.
3.0	PROGRAMS AND STUDENTS
3.1	PROGRAM CURRICULA AND ACTIVITY PARTICIPATION: Program nodes, names, credit ranges (academic years), credits per credit ranges; program curriculum codes and activity number codes and participation rates that constitute each curriculum.
3.2	INITIAL DISTRIBUTION OF STUDENTS INTO PROGRAMS: For each simulation period there is the total number of new entrants with no academic credit entering all programs, folloed by a breakdown by program node and credit range (academic year) of the number of new students entering without and with academic credit.
3.3	STUDENT TRANSITIONS: For each program node and academic year,

possible destinations (other program nodes and credit ranges) and the transition rates; also a test if enrolment was updated prior to simulation period.

3.4 STUDENT CREDIT LOAD: Student credit loads and percent of students taking each credit load by program node and simulation period.

4.0 STAFF

4.1 ACADEMIC STAFF CHARACTERISTICS: Academic staff ranks, salaries, staffing units, office space, and time profiles for all cost centers ('COMMON'), and for particular cost centers ('EXCEPTIONS').

4.2 ACADEMIC STAFF ACTIVITY DUTIES: Activity type names and staffing units credit per contact hour for all cost centers ('COMMON') and particular ('EXCEPTION') cost centers.

4.3 ACADEMIC STAFF NON-ACTIVITY DUTIES: Non-teaching duties rank codes and names required, staffing units, functional bases and quantities in proportion for all cost centers ('COMMON') and for particular ('EXCEPTION') cost centers.

4.4 ACADEMIC STAFF INVENTORY, TRANSITIONS, AND HIRING CRITERIA: Staff rank codes, names, initial inventory, transitions, hiring criteria and per cent distribution by cost center node.

4.5 ACADEMIC STAFF OPTIMIZATION AND UPDATE POLICIES: General staffing and optimization policies, and transition policy by simulation period and by cost center.

4.6 ACADEMIC SUPPORT STAFF: Support staff codes, names, average salary, contact hours available, and office space.

4.7 NON-ACADEMIC STAFF: Non-academic staff type codes, names, average salaries, office space, functional bases and quantities in proportion by cost center level and node.

5.0 SPACE

5.1 AVAILABLE CLASSROOM SPACE BY COST CENTER: Classroom types available by size (stations) by cost center node.

5.2 AVAILABLE INSTRUCTIONAL LABORATORY SPACE BY COST CENTER: Instructional laboratory types available by size (stations), by cost center nodes.

5.3 AVAILABLE INSTRUCTIONAL SPECIAL LABORATORY SPACE BY COST CENTER: Special laboratory types available by size (stations) by cost center nodes.

5.4 AVAILABLE COST CENTER SPACE BY SPACE CATEGORY: Space category numbers and square feet and stations available, by cost center node.

5.5 ROOM SIZES AND PLANNING FACTORS (SQUARE FEET PER STATION): Station sizes for classrooms and instructional laboratories with the type and number of each. Equipment size codes and number of each size for instructional special laboratories.

5.6 CLASSROOM AND INSTRUCTIONAL LABORATORY CHARACTERISTICS BY TYPE: Classroom and instructional laboratory inventory room type codes, names, maintenance costs, and service characteristic codes.

5.7 INSTRUCTIONAL SPECIAL LABORATORY CHARACTERISTICS BY TYPE: Inventory room type codes, numbers, names, maintenance costs per square foot, service characteristic codes and equipment size codes for instructional special laboratories.

Exhibit 6 (Cont.)

6.0 SPACE
- 6.1 SERVICE SPACE CHARACTERISTICS BY TYPE: Inventory codes, names, type numbers, maintenance cost per square foot and service characteristic codes for service space.
- 6.2 COST CENTER TEACHING WEEKS AND SPACE UTILIZATIONS: Laboratory and classroom teaching hours per week and utilization by cost center level and node.
- 6.3 SERVICE CHARACTERISTIC CODES: Names and codes of service resources.
- 6.4 CONSTRUCTION AND MAINTENANCE COSTS BY SPACE CATEGORY: Inventory space category numbers, codes, names, and costs per square foot for construction and maintenance.
- 6.5 MISCELLANEOUS SPACE INPUT: Classroom manipulation required by type and size. Instructional laboratory manipulation required by type and size (both yes or no). Net/gross space percentage, net to gross construction cost ($/sq. ft.), Office Maintenance cost ($sq. ft.) and office service characteristic codes.
- 6.6 TEACHING SPACE CONTROL CENTERS: Cost center code and name, space control center for classrooms, instructional laboratories and special laboratories.

7.0 SERVICE DEPARTMENTS
- 7.1 SERVICE DEPARTMENTS: Service department codes, names, and cost center nodes of affiliation.
- 7.2 SERVICE STAFF: Service staff codes, names, salaries, space planning factors, functional bases, and quantities in proportion, by service department.
- 7.3 SERVICE SPACE: Service space type codes, names, functional bases and quantities in proportion, by service department.
- 7.4 SERVICE EQUIPMENT: Service equipment codes, names, operating costs per unit, functional bases and quantities in proportion, by service department.

8.0 REVENUE
- 8.1 CHARACTERISTICS OF REVENUE: Revenue types and sources and functional bases; unrestricted or restricted.
- 8.2 REVENUE AT COST CENTERS: Revenue types, names, functional bases, value (restricted or not) by cost center nodes and levels.
- 8.3 REVENUE AT PROGRAMS: Same as 8.2, except by program nodes and levels.
- 8.4 REVENUE AT SERVICE DEPARTMENTS: Same as 8.2 and 8.3, except by service departments.

9.0 MISCELL RESOURCES
- 9.1 EQUIPMENT RESOURCE CHARACTERISTICS: Equipment type codes, names, hours available per week and annual operating costs.
- 9.2 MISCELLANEOUS RESOURCE CHARACTERISTICS: Miscellaneous resource type codes, names, and functional bases.
- 9.3 MISCELLANEOUS RESOURCES BY COST CENTER: Miscellaneous resource type codes, names, and quantities in proportion by cost center nodes and levels.

Exhibit 7

Cost Center Output Reports

Report No.	Title and Contents
1.0	STUDENTS AND ENROLLEES
1.1	DIRECT ENROLLEE LOADS BY PROGRAM: A breakdown of student and enrollee loads in programs affiliated to the cost center.
1.2	SUMMARY AND AGGREGATION OF ENROLLEE LOADS FROM LOWER LEVELS: Gives aggregate enrollee loads from directly affiliated cost centers and total accumulated enrollee load at the cost center.
2.0	STAFF
2.1	STAFF REPORT ON ACTIVITY CONTACT HOURS PER WEEK: Number and type of contact hours required by activity.
2.2	ACADEMIC STAFF INVENTORY BY RANK: Shows the number of staff before and after promotion and the number of staff hired to meet requirements.
2.3	DETAILED BREAKDOWN OF DIRECT ACTIVITY AND NON-ACTIVITY LOAD AMONGST ACADEMIC STAFF: Gives type of load, and the number and cost of staff required to meet demand.
2.4	ACADEMIC SUPPORT STAFF NON-ACADEMIC SUPPORT STAFF: States number and cost of staff requirements.
2.5	SUMMARY STAFF REPORT: Gives staff requirements and costs for affiliated cost centers and aggregate totals at this cost center.
3.0	EQUIPMENT
3.1	EQUIPMENT REPORT: Types and cost of equipment required for this cost center.
3.2	SUMMARY OF EQUIPMENT OPERATING COSTS: Equipment costs aggregated at this cost center.
4.0	SERVICE
4.1	SERVICE DEPARTMENT REPORT: One report for each service department used by the cost center. Gives: number and cost of service staff, space required in square feet and cost, number and operating cost of equipment.
4.2	COST CENTER SERVICE DEPARTMENT SUMMARY REPORT: Gives all service departments used by the cost center.
5.0	SPACE
5.1	SPACE - NIGHT
5.1.1	CONTACT HOUR SUMMARY FOR NIGHT CLASSROOM ACTIVITIES: This report shows the contact hours required for each size and type of classroom by night activities.
5.1.2	CONTACT HOUR SUMMARY FOR NIGHT INSTRUCTIONAL LABORATORY ACTIVITIES: This report shows the contact hours required for instructional laboratories of each size and type by night activities.

5.1.3 CONTACT HOUR SUMMARY FOR NIGHT INSTRUCTIONAL SPECIAL LABORATORY ACTIVITIES: This report gives the contact hours required by night activities for instructional special laboratories by each size and type of laboratory.

5.2 SPACE - DAY

5.2.1 ACTUAL SPACE REQUIRED FOR DAY CLASSROOM ACTIVITIES: This report shows the actual space required for day classroom activities.

-The activity number is the internal CAMPUS model code.

-The sections expected represents the number of sections for that activity based on the enrolment and desired section sizes.

-It also reports on the type of classroom required, the number of classrooms of that type, and the size of classroom required.

-The station occupancy represents the percentage of seats occupied in the size of the room chosen when a section of the size indicated is scheduled in that room.

-The number of hours per week the rooms are required represents the total number of hours per week in that size and type of room for all sections for this particular activity.

-The number of equivalent square feet represents the theoretical amount of space required by that activity based on the length of the teaching week at the institution and the utilization of rooms experienced with the institution's scheduling system.

-The actual square feet required by an activity is computed after analyzing all the requirements for a similar type and size of classroom from all other activities. For example, if no other activity required that type and size of classroom, then the physical size of the room in square feet would be charged completely to that activity.

-The square foot difference is the equivalent square feet subtracted from the actual square feet. Where this difference is very small the activity utilizes space efficiently: i.e. many other activities require a similar size and type of room during the week.

5.2.2 DAY CLASSROOM ACTIVITIES - CONTACT HOUR SUMMARY: This report shows the contact hours required for each type and size of classroom for day time activities requiring classroom space.

5.2.3 DAY CLASSROOM ACTIVITIES - ROOMS REQUIRED: This report is the number of classrooms required of each size and type.

-The number of classrooms required is computed by dividing the total contact hours by the length of a teaching week in hours and multiplying by the reciprocal of the room utilization of the institution.

5.2.4 DAY CLASSROOM ACTIVITIES - STATION OCCUPANCY: This report shows the average station occupancy that would be experienced by loading the particular section sizes of all day activities requiring classroom space into each size and type of classroom.

5.2.5 DAY CLASSROOM ACTIVITIES - SQUARE FEET REQUIRED: This report indicates the number of square feet of each type and size of classroom required by the cost center.

-This figure is computed by multiplying the number of rooms required of each type and size times the space planning factor in terms of the number of square feet per station.

Exhibit 7 (Cont.)

5.3 INSTRUCTIONAL LAB SPACE - DAY

5.3.1 ACTUAL SPACE REQUIRED FOR DAY INSTRUCTIONAL LABORATORY ACTIVITIES: This report shows the space requirements for day activities requiring instructional laboratory space.
-The description of each column on the report is the same as that described for the identical report on day classroom activities. The report number is 5.2.

5.3.2 DAY INSTRUCTIONAL LABORATORY ACTIVITIES - CONTACT HOUR SUMMARY: This report gives the number of contact hours required for each type and size of instructional laboratory for day activities requiring this type of space.

5.3.3 DAY INSTRUCTIONAL LABORATORY ACTIVITIES - ROOMS REQUIRED: This report shows the number of instructional laboratories of each type and size required by this cost center for the day activities it supports requiring this type of space.

5.3.4 DAY INSTRUCTIONAL LABORATORY ACTIVITIES - STATION OCCUPANCY: This report shows the average station occupancy in instructional laboratories of each type and size for day time activities that will be scheduled into this particular type of space.
-The average station occupancy is computed by examining the station occupancy for all the individual activities requiring different sizes and types of instructional laboratories.

5.3.5 DAY INSTRUCTIONAL LABORATORY ACTIVITIES - SQUARE FEET REQUIRED: This report indicates the number of square feet required for each type and size of instructional laboratory for the day time activities that this cost center supports.
-The number of square feet required is computed from the number of rooms required multiplied by the number of square feet per station required for each size and type of laboratory.

5.4 SPECIAL LABORATORY SPACE - DAY

5.4.1 ACTUAL SPACE REQUIRED FOR DAY INSTRUCTIONAL SPECIAL LABORATORY ACTIVITIES: This report shows the space requirements for each activity requiring instructional special laboratory space.
-A description of each column on the report can be found on the description of the identical report used for day activities requiring classroom space.

5.4.2 DAY SPECIAL LABORATORY ACTIVITIES - CONTACT HOUR SUMMARY: This report shows the number of contact hours required for each size and type of laboratory for all activities supported by this cost center that require instructional special laboratory space.

5.4.3 DAY SPECIAL LABORATORY ACTIVITIES - ROOMS REQUIRED: This report shows the number of instructional special laboratories required of each type and size.
-The number of rooms required is computed by dividing the number of contact hours for each size and type of laboratory by the length of the teaching week in hours and multiplying by the reciprocal of the room utilization experienced through the institution's scheduling system.

5.4.4 DAY SPECIAL LABORATORY ACTIVITIES -STATION OCCUPANCY: This report shows the average station occupancy expected for each type and size of special laboratory.

5.4.5 DAY SPECIAL LABORATORY ACTIVITIES - SQUARE FEET REQUIRED: This report shows the number of square feet required for each type and size of instructional special laboratory.
-The total number of square feet of instructinnal special laboratory space required by a cost center is computed by adding all the elements of this matrix.

5.5 OFFICE SPACE REQUIREMENTS: This report indicates the number of square feet of office space required by a cost center broken out by each type of rank of staff.
-A subtotal is given for academic staff, academic support staff, non-academic staff, and service department staff. These four subtotals are added to get the total office space requirements for the cost center.
-On the lower part of the report the office space requirements for directly affiliated cost centers at all levels are shown and added in to get the aggregate office space requirements for this cost center.

6.0 SPACE

6.1 COST CENTER SPACE REQUIREMENTS

6.1.1 COST CENTER SPACE REQUIREMENTS: This report shows the square foot requirements for classroom, instructional laboratory, instructional special laboratory, office, and service space.
-The maintenance cost for each category of space is also reported in dollars.
-The total space requirements and maintenance budget for the cost center are shown.

6.1.2 COST CENTER SPACE REQUIREMENTS AND MAINTENANCE COST SUMMARY: This report shows the space requirements and maintenance cost for the particular cost center being considered, and for directly affiliated cost centers.
-The aggregate requirements for cost centers up to and including this particular cost center are shown.
-The total maintenance cost and the subtotal for each affiliated cost center are rounded to the nearest thousand dollars.

6.2 COST CENTER SPACE REQUIREMENTS

6.2.1 COST CENTER SPACE REQUIREMENTS BY SERVICE CODE

6.2.2 TOTAL SPACE REQUIREMENTS BY SERVICE CODE FOR ALL COST CENTERS: This report shows the total space required by a cost center broken out by various services or utilities that would have to be provided for the space.
-This information is assembled by examining the total characteristic codes attached to each type of space.
-We can thus see the number of square feet and the percentage of the total square feet required that must be air-conditioned, carpeted, have a heavy duty floor, etc.

6.3 REQUIRED VERSUS AVAILABLE SPACE BY SPACE CATEGORY: This report groups the total space requirements of a cost center into various space categories and matches the required space to that available to that cost center.
-The maintenance cost is also given for each space category in dollars.
-A square foot shortage or surplus is computed and printed when the required space is compared to the available space.

6.4 SPACE MATCHING

6.4.1 SPACE MATCHING REPORT FOR CLASSROOMS AND INSTRUCTIONAL LABORATORIES: This report indicates the results of matching requirements for classrooms and instructional laboratories to the number of rooms available.
-The shortage or surplus of rooms for each type and size of classroom and instructional laboratory is printed.
-Information is given on a report which indicates if a classroom or laboratory manipulation is performed across type or size of room. For example, a shortage of a small size room could be fulfilled by an extra room of some larger size. There would be a marked drop in station occupancy, but this may be tolerated instead of building an extra small size room. However, currently these manipulations are not programmed in the model.

6.4.2 SPACE MATCHING REPORT FOR INSTRUCTIONAL SPECIAL LABORATORIES: This report shows the results of matching requirements for instructional special laboratories to the available laboratories.
-The shortage or surplus of special laboratories for each size and type of laboratory is given.
-Because of the highly specialized nature of instructional special laboratories, no manipulation by size or type is performed.

6.5 SPACE CAPITAL COST REPORT: This report indicates the capital required to construct any shortage of space.
-The space shortage in square feet is multiplied by a dollar per square foot construction cost to give the capital required.
-The space shortage by space category is an accumulative array. The space shortages are accumulated over time if no construction takes place during the particular session. The message at the bottom of the report indicates that that policy has been simulated.
-The net to gross space is an added amount of space reflecting wall thickness, etc.

7.0 SUMMARY

7.1 DIRECT LOAD GENERATED BY ACTIVITIES (CONTACT HOURS): Resource requirements of each activity in contact hours.

7.2 DIRECT LOAD GENERATED BY ACTIVITIES - SUMMARY (DOLLARS AND SQ. FT.)

7.3 DIRECT LOAD GENERATED BY ACTIVITIES

7.3.1 DAY CLASSROOM ACTIVITIES SPACE REPORT

7.3.2 NIGHT CLASSROOM ACTIVITIES SPACE REPORT

7.3.3 DAY INSTRUCTIONAL LABORATORY ACTIVITIES SPACE REPORT

7.3.4 NIGHT INSTRUCTIONAL LABORATORY ACTIVITIES SPACE REPORT
7.3.5 DAY SPECIAL LABORATORY ACTIVITIES SPACE REPORT
7.3.6 NIGHT SPECIAL LABORATORY ACTIVITIES SPACE REPORT: This report is produced for day and night classroom, instructional laboratory, and instructional special laboratory activities.
- -The report is produced as each cost center is processed and shows the number of equivalent square feet required for each activity supported by that cost center.
- -The activity number is the internal CAMPUS model code.
- -The enrolment is the number of students taking that course.
- -The desired section size is the number of students desired in each section of that activity.
- -The section sizes show the actual number of students in each section of the activity.
- -The number of the particular type and size of classroom required is shown.
- -The station occupancy represents the percentage of stations in the classroom that would be filled by the particular section size.
- -The hours per week that the rooms are required is the total hours for all sections.
- -The total square feet represents the number of square feet required by this activity based on the current room utilization and the length of the teaching week.

7.4 SUMMARY OPERATING REPORT (FOR THIS COST CENTER ONLY): Summary of student loads, space requirements and operating costs for this cost center.

7.5 SUMMARY OPERATING REPORT (AGGREGATE REPORT): as 7.4 with totals including all affiliated cost centers.

Exhibit 8

Overtime Reports

1.1 STUDENT AND ENROLLEE LOAD: Included in it are the arrays summed over each period and averaged for the period, for a maximum of ten periods. They are written out with values for the particular cost center, the cost centers affiliated to it, if any, and totals where necessary.

1.2 STAFF COSTS: It indicates staff costs, a breakdown of academic staff number and aggregate staff cost. Each of these sections are broken down even further. Totals and subtotals are also included. This report is written for each cost center requiring it.

1.3 SPACE REQUIREMENTS: Data is broken down into the space categories of office, classroom, instructional laboratory, special laboratory and service department with a total. This report is written out for any cost center requiring it.

1.4 OPERATING COSTS: Included in this report are staff, equipment, maintenance, miscellaneous, space and service costs. The actual numbers are printed out with total staff cost, total equipment cost as subtotals, and total operating cost as the grand total. In the same report, there is a section for total aggregate cost.

1.5 SUMMARY REPORT: This section summarizes data in report 1.1 to report 1.4 inclusive. It illustrates staff costs in some detail. However only totals are given for equipment, miscellaneous, and maintenance costs. The total aggregate cost is also included. The space (in square feet) is shown in some detail: that is, shown by space type category. The affiliated students are also shown in this report as they appeared in report 1.1. The revenue is written for each cost center requiring it. A section of indicators occurs at the end of this report, including such itens as 'cost per student ($)', 'space per student (sq. ft.)' etc.

Exhibit 9

Project PRIME Reports

Project PRIME Report No.	Description	Author
1.	Test Implementation of CAMPUS (A Computer Based Simulation Model) for Higher Education Administration and Planning in Minnesota, March 1970.	Andrew, Cordes, Lorents
2.	An Introduction to Project PRIME and CAMPUS-MINNESOTA, November 17, 1970.	Cordes
3.	Planning, Programming, and Budgeting Systems in Higher Education: An Annotated Bibliography (in progress).	Cordes
4.	Planning, Programming, and Budgeting Systems in Education: Concept, Operation, Status, and a School of Business Administration Example, May 1970 (Also available from Management Information Systems Research Center as Research Monograph No. 1).	Cordes
5.	Program Costing with CAMPUS-MINNESOTA: A Philosophic Note, (in progress).	Cordes
6.	Analysis of Faculty Activities for Resource Allocation Models, (in progress).	Lorents
7.	A Faculty Activity Information Subsystem and CAMPUS-MINNESOTA, (in progress).	Lorents
8.	Program Accounting with CAMPUS-MINNESOTA, (in progress).	Davitt
9.	A Curriculum Cost-Benefit Analysis, (in progress).	Fisher
10.	Resource Analysis Models in Higher Education: A Synthesis (in progress).	Cordes
11.	Converting CAMPUS V to CAMPUS-MINNESOTA (in progress).	Davitt
12.	INPUT COMMAND: Draft Documentation November 1970.	Cordes
13.	Applying Input/Output Analysis and the EL FYD Model to Higher Education (in progress).	Cordes
14.	Mid-Year Progress Report, January 1971.	Andrew, Cordes, Lorents

Exhibit 10

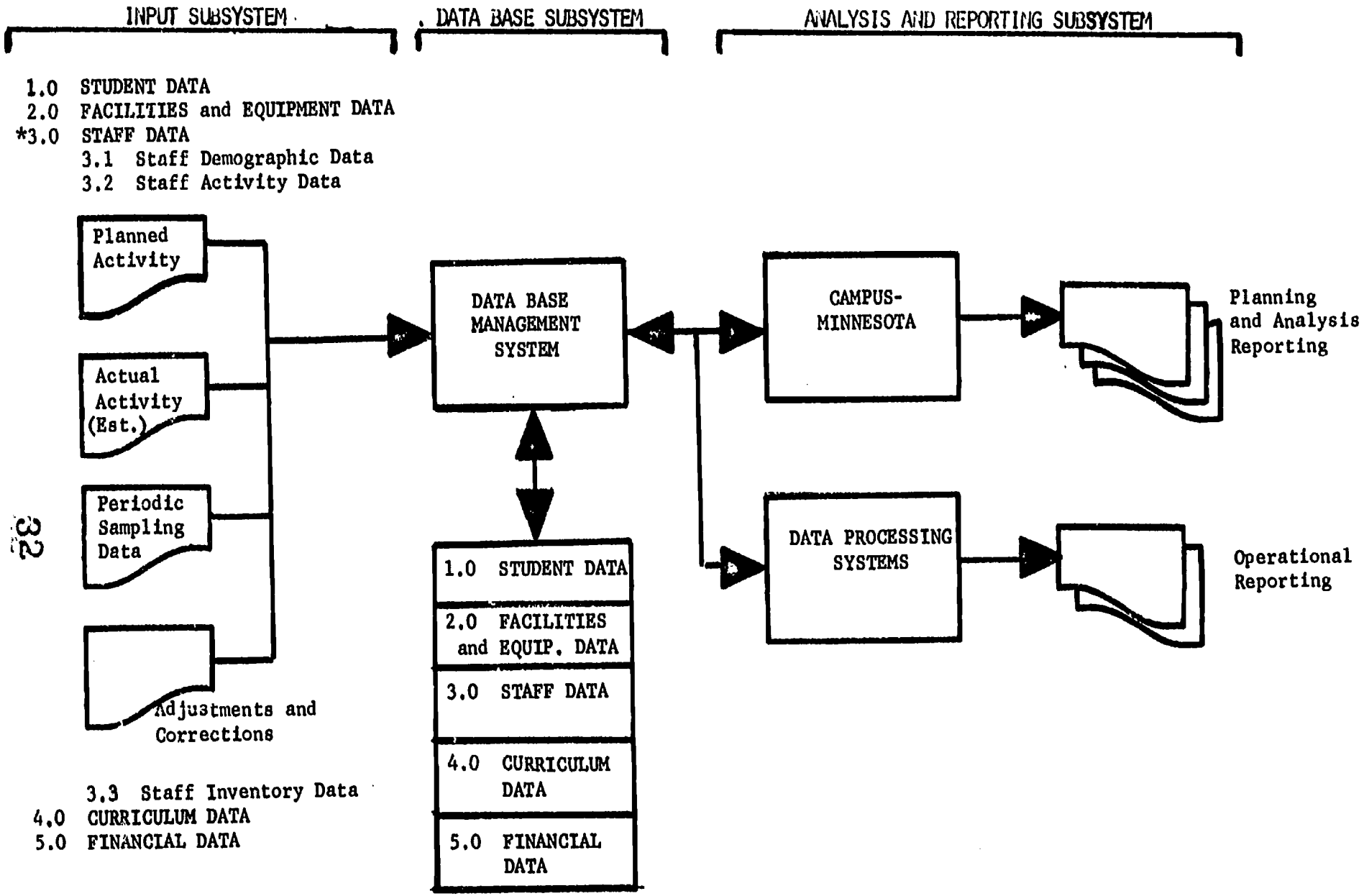
Resource Information
for
A Typical Program Element[1/]

	School Year				
	68/69	69/70	70/71	71/72	72/73
OPERATING COST					
Staff					
Academic (Professors, Assciate, Etc.)					
Academic Support (Teaching Assistants, Etc.)					
Non-Academic Support (Secretaries, Tutors)					
Service (Civil Service Personnel)					
Equipment Cost $					
Instructional Labs					
Special Labs					
Service Department					
Maintenance					
Office					
Classroom					
Instructional Labs					
Special Labs					
Service Department					
Miscellaneous					
Benefits					
Travel					
Conferences					
Supplies					
Telephone					
Recruitment					
Computer Cost					
Total Operating Cost					
INVESTMENT COST					
Equipment					
Construction					
SPACE					
Classroom (By Type, Size, and Stations)					
Instructional Labs (By Type, Size, and Stations)					
Special Labs (By Type, Size and Stations)					
Office (By Size)					
Service Department (By Type and Size)					
EQUIPMENT REQUIRED (No. by Type)					
STAFF REQUIRED					
Academic (By Rank)					
Academic Support (By Rank)					
Non-Academic Support (By Rank)					
Service Department (By Type)					

[1/] Additional "backup" information would be avilable for all resource categories. Categories primarily based on those available from CAMPUS Simulation Model.

Exhibit II

CAMPUS-MINNESOTA AND A UNIVERSITY INFORMATION SYSTEM



*Staff data has been shown in more detail as an example

ACL
11-17-70

Exhibit 12

Project PRIME Staff

DIRECTOR:	Gary M. Andrew
ASSOCIATE DIRECTORS:	David C. Cordes Alden C. Lorents
PROGRAM ANALYSTS:	Patrick Davitt Hilton S. Fisher Edward Hwang Raymond Pinson Charles Rogers (Left Project)
PROJECT CONSULTANTS:	William Harman David Sommer
SECRETARY:	Mary Wenker

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Card

Command Levels

1	2	3	4	5	6	7	8	9	10
D	E	F	I	NE				0	1

INSTITUTION CHARACTERISTICS

Institution Name

11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

First Calendar Year

43	44

Explanation: (a) The calendar year of the first session being simulated should

ESOTA Input Document

N-AT
+E

ng Lines/Card 1 Cards/Sheet 1 | Sheet ___ of ___
ctions:

Sys. Id.
77 78 79 80

NSTITUTION CHARACTERISTICS

36	37	38	39	40	41	42

First Calendar Year (43 44)

Number of Sim.Periods per Session (45 46)

Length of Sim. Periods in Weeks (47 48)

session being simulated should be indicated by the last two digits.

CAMPUS-MINNESOTA Input Document

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1

Command Levels

1	2	3	4	5	6	7	8	9	10
D	E	F	I	N	E			0	2

COST CENTER LEVELS

Level Number	Level Name	Level Number	Level Name
11	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	28	29 30 31 32 33 34 35 36 37 38 39 40 41 42
11	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	28	29 30 31 32 33 34 35 36 37 38 39 40 41 42

NESOTA Input Document

Lines/Card 1 Cards/Sheet 2

Sheet ___ of ___

Sys. Id.

77	78	79	80

NTER LEVELS

Level Name

3	34	35	36	37	38	39	40	41	42	43	44

Level Number

45

Level Name

46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61

3	34	35	36	37	38	39	40	41	42	43	44

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1

Command Levels

1	2	3	4	5	6	7	8	9	10
D	E	F	I	N	E			0	3

C O S T C E N T E R S

Cost. Ctr. Level Number	Cost Ctr. Code	Cost Center Name	Cost Ctr. Code of Affil.	Cost Ctr. Level Number
11	12 13 14	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33	34

Explanation:

(a) Code across the page, two cost centers per line.
(b) If there is no cost center of affiliation, leave blank.
(c) Use additional coding sheets of this type, as needed, te

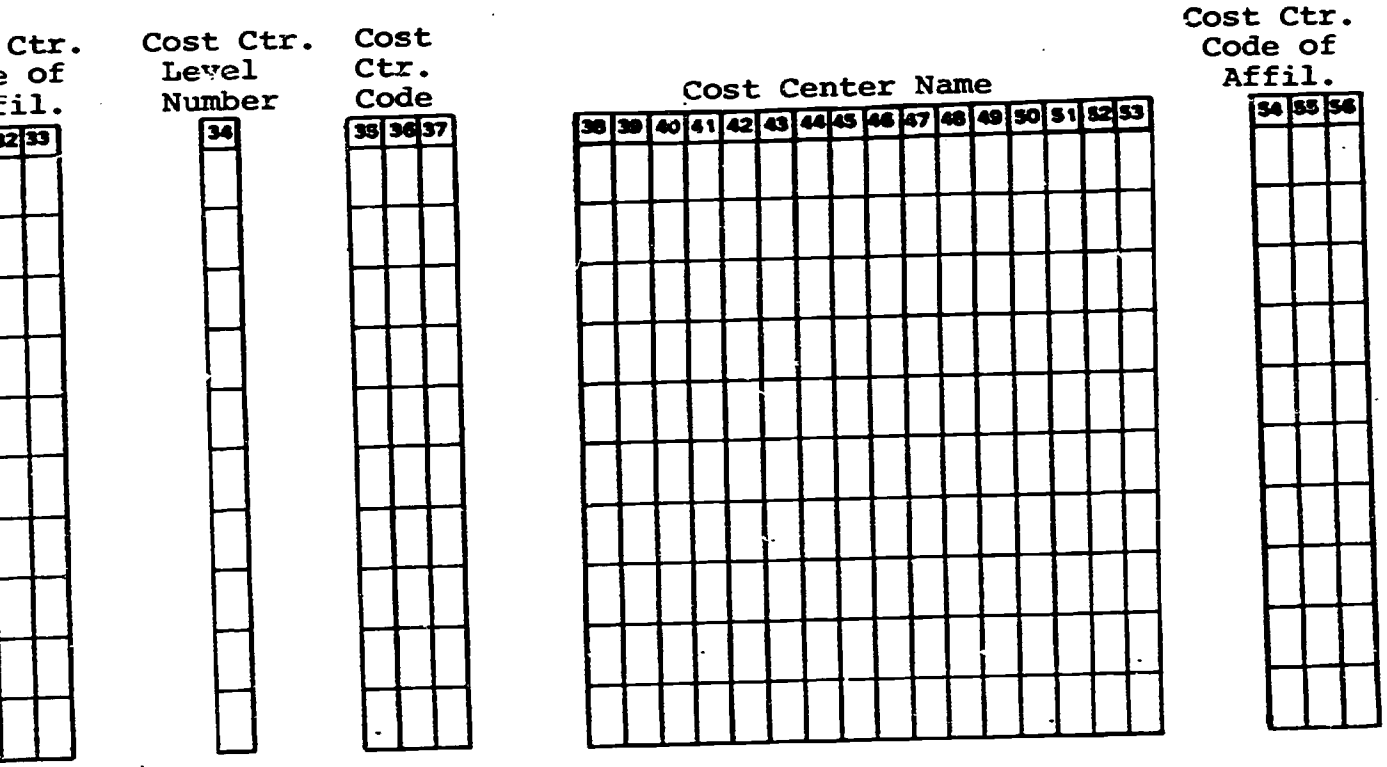
ESOTA Input Document

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

Sys. Id.

77	78	79	80

C E N T E R S



per line.
tion, leave blank.
type, as needed, to code all cost centers.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card ___

Command Levels

1	2	3	4	5	6	7	8	9	10
D	E	F	I	N	E			0	4

PROGRAM LEVELS

Level Number	Level Name	Level Number	Level Name
11	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	28	29 30 31 32 33 34 35 36 37 38 39 40 41 42
11	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27		

ions: Lines/Card___ Cards/Sheet___	Sheet___of___

Sys. Id.

77	78	79	80

PROGRAM LEVELS

Level Name															Level Number	(Level Name															
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 C

Command Levels

1	2	3	4	5	6	7	8	9	10
D	E	F	I	N	E			0	5

P R O G R A M S

Prog. Level Number	Prog. Code	Program Name	Prog. Code of Affil.	Prog. Level Number	Prog. Cod
11	12 13 14	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32 33	34	35 3

Explanation:

(a) Code across the page, two programs per line.
(b) If there is no program of affiliation, leave blank.
(c) Use additional coding sheets of this type, as needed, to code

-MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 10

Sheet ___ of ___

ons: _____

Sys. Id.

77	78	79	80

P R O G R A M S

Prog. Code of Affil.	Prog. Level Number	Prog. Code	Program Name	Prog. Code of Affil.
31 32 33	34	35 36 37	38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	54 55 56

er line.
n, leave blank.
type, as needed, to code all programs.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 1

Command Levels

1	2	3	4	5	6	7	8	9	10
D	E	FI	N	E				0	6

PROGRAM TO COST CENTER AFFIL

Prog. Code			Cost Ctr Code			Prog. Code			Cost Ctr Code			Prog. Code			Cost Ctr Code			Prog. Code			Cost Ctr Code			Prog. Code			Cost Ctr Code			Prog. Code			Co Ct Co		
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44		

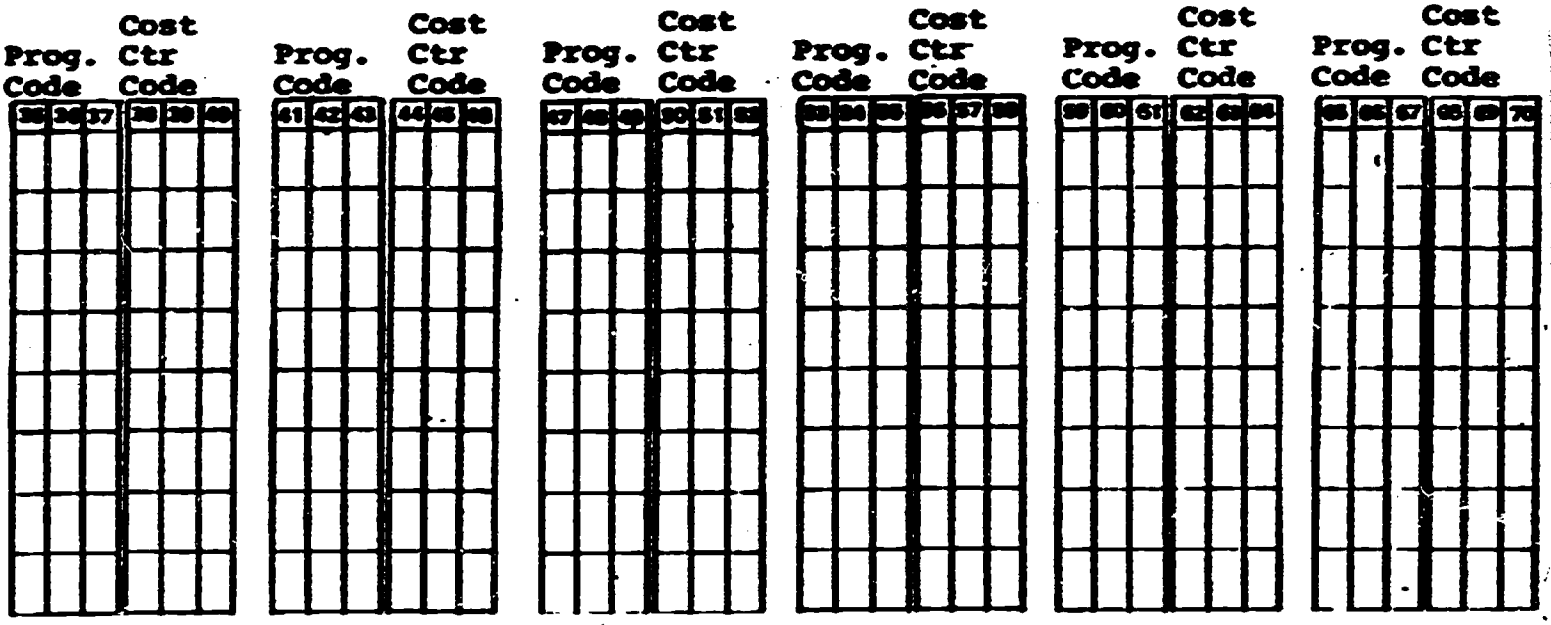
Explanation:

(a) Code across the page, ten program/cost center affiliations per line
(b) Only one Cost Center per program.

tions:	Lines/Card 1 Cards/Sheet 8	Sheet ___ of ___

Sys. Id. 77 78 79 80

RAM TO COST CENTER AFFILIATION



center affiliations per line.

Coder _____	Run Number ____	Punching Instructions: _____ Lines/Card 1

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	0	1

ACTIVITY TYPE

Activity Type Code	Activity Type Name	Activity Type Code	Activity Type Name	Activity Type Code	Activity Type Name	Activit Code
1 12	13 14 15 16 17 18 19 20	21 22	23 24 25 26 27 28 29 30	31 32	33 34 35 36 37 38 39 40	41 42 43

US-MINNESOTA Coding Sheets

g Lines/Card 1 Cards/Sheet 1 | Sheet ___ of ___
tions:

Sys. Id.

77	78	79	80

I V I T Y T Y P E

ty Type Name						
34	35	36	37	38	39	40

Activity Type Code		Activity Type Name							
41	42	43	44	45	46	47	48	49	50

Activity Type Code		Activity Type Name							
51	52	53	54	55	56	57	58	59	60

Order	Session / Run Number	Punching Instructions:	Lines/Card 1	Cards/S

Command Levels

1	2	3	4	5	6	7	8	9	10
				I	I	Y	0	2	

SPECIALTY TYPE

Specialty Type Code	Specialty Type Name	Specialty Type Code	Specialty Type Name	Specialty Type Code	Specialty Type Name
12	13 14 15 16 17 18 19 20	21 22	23 24 25 26 27 28 29 30	31 32	33 34 35 36 37 38 39 40	41 42	43 44 45 46 47 48

12	13 14 15 16 17 18 19 20	21 22	23 24 25 26 27 28 29 30	31 32	33 34 35 36 37 38 39 40	41 42	43 44 45 46 47 48

Explanation:

(a) Code across the page, six specialty types per line.

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Lines/Card 1 Cards/Sheet 1 | Sheet ___ of ___

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ECIALTY TYPE

	Specialty Type Code	Specialty Type Name	Specialty Type Code	Specialty Type Name	Specialty Type Code	Specialty Type Name
38 39 40	41 42	43 44 45 46 47 48 49 50	51 52	53 54 55 56 57 58 59 60	61 62	63 64 65 66 67 68 69 70
38 39 40	41 42	43 44 45 46 47 48 49 50	51 52	53 54 55 56 57 58 59 60	61 62	63 64 65 66 67 68 69 70

pes per line.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 4

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	0	3

SCHEDULE RANGE

Schedule Range Code	Day or Night Code	Hrs. per Mtg.	Mtgs. per Wk.	Duration in Wks.	Schedule Range Code
11 12	13	14	15	16 17	18 19
25 26	27	28	29	30 31	32 33
39 40	41	42	43	44 45	46 47
53 54	55	56	57	58 59	60 61

Explanation:

(a) Code across the page, two schedule ranges per line.
(b) Day - 0; Night - 1
(c) Use additional coding sheets of this type, as needed, to code

ing uctions: Lines/Card 4 Cards/Sheet 1 | Sheet ___ of ___

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SCHEDULE RANGE

ration n Wks. 16 17	Schedule Range Code 18 19	Day or Night Code 20	Hrs. per Mtg. 21	Mtgs. per Wk. 22	Duration in Wks. 23 24
30 31	32 33	34	35	36	37 38
44 45	46 47	48	49	50	51 52
58 59	60 61	62	63	64	65 66

e ranges per line.

his type, as needed, to code all schedule ranges.

Coder _____	Session ____ Run Number ____	Punching Instructions:	Lines/Card 3 Card

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	0	1

SECTION SIZE RANGE

Section Size Code	Minimum	Desired	Maximum	Section Size Code
11 12	13 14 15	16 17 18	19 20 21	22 23
33 34	35 36 37	38 39 40	41 42 43	44 45
55 56	57 58 59	60 61 62	63 64 65	

Explanation:

(a) Code across the page, two section size ranges per line.
(b) Use additional coding sheets of this type, as needed, to code a

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SECTION SIZE RANGE

	Section Size Code	Minimum	Desired	Maximum
	22 23	24 25 26	27 28 29	30 31 32
	44 45	46 47 48	49 50 51	52 53 54

ize ranges per line.
s type, as needed, to code all section size ranges.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 3

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	0	5

RESOURCE COMBINATIONS

Resource Combination Code	Resource Type	One Subtype	Resource Type	Two Subtype	Resource Type	Three Subtype	Resource Combination Code
11 12	13	14 15	16	17 18	19	20 21	22 23
33 34	35	36 37	38	39 40	41	42 43	44 45
55 56	57	58 59	60	61 62	63	64 65	

Explanation:

(a) Code across the page, two resource combinations per line.
(b) Use additional coding sheets of this type, as needed, to code a

ons: Lines/Card 3 Cards/Sheet 1 | Sheet ___ of ___

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URCE COMBINATIONS

rce Three Subtype	Resource Combination Code	Resource One Type	Resource One Subtype	Resource Two Type	Resource Two Subtype	Resource Three Type	Resource Three Subtype
20 21	22 23	24	25 26	27	28 29	30	31 32
42 43	44 45	46	47 48	49	50 51	52	53 54
64 65							

inations per line.
pe, as needed, to code all resource combinations.

Coder ______________	Session ______ Run Number ______	Punching Instructions: Lines/Card 2 C Activity name is n

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	C	6

A C T I V I T I E S

Activity Name	Activity Number Code	Activity Calendar Code	Cost Ctr. Code of Affil.	Activity Type Code	Specialty Type Code	Succe Facto
______________	11 12 13 14	15 16 17 18	19 20 21	22 23	24 25	26 27
______________	39 40 41 42	43 44 45 46	47 48 49	50 51	52 53	54 55
______________	11 12 13 14	15 16 17 18	19 20 21	22 23	24 25	26 27
______________	39 40 41 42	43 44 45 46	47 48 49	50 51	52 53	54 55
______________	11 12 13 14	15 16 17 18	19 20 21	22 23	24 25	26 27
______________	39 40 41 42	43 44 45 46	47 48 49	50 51	52 53	54 55
______________	11 12 13 14	15 16 17 18	19 20 21	22 23	24 25	26 27
______________	39 40 41 42	44 45 46	47 48 49	50 51	52 53	54 55

Explanation:

( ) Code across the page, one activity per line.
(b) Exception activities, as defined in the coding manual, are not cod
(c) The full activity name should be written in for the coder's refere
(d) If success factor and activity credits do not apply, leave blank.
(e) If activity type groups are not used, put a one in number of activ
(f) Use additional coding sheets of this type, as needed, to code all a

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Lines/Card 2 Cards/Sheet 4

Activity name is not to be keypunched

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IVITIES

vity pe de	Specialty Type Code	Success Factor	Activity Credits	Schedule Range Code	Section Size Range Code	Resource Comb. Code	No. of Activities
3	24 25	26 27 28	29 30	31 32	33 34	35 36	37 38
51	52 53	54 55 56	57 58	59 60	61 62	63 64	65 66
23	24 25	26 27 28	29 30	31 32	33 34	35 36	37 38
51	52 53	54 55 56	57 58	59 60	61 62	63 64	65 66
23	24 25	26 27 28	29 30	31 32	33 34	35 36	37 38
51	52 53	54 55 56	57 58	59 60	61 62	63 64	65 66
23	24 25	26 27 28	29 30	31 32	33 34	35 36	37 38
51	52 53	54 55 56	57 58	59 60	61 62	63 64	65 66

e.
ding manual, are not coded on this sheet.
n for the coder's reference.
not y, leave blank.
a number of activities.
as needed, to code all activities.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Card Activity names are no

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	0	7

EXCEPTION ACTIVITIES

Activity Name	Activity Number Code 11 12 13 14	Activity Calendar Code 15 16 17 18	Cost Ctr. Node of Affil. 19 20 21	Activity Type Code 22 23	Specialty Type Code 24 25	Success Factor 26 27 28	Activ Credi 29 30

Explanation:

(a) Code across the page, one exception activity per line.
(b) The full activity name should be written in for the coder's refe
(c) Day -0; Night - 1.
(d) Use additional coding sheets of this type, as needed, to code al

Lines/Card 1 Cards/Sheet 10
Activity names are not to be keypunched

Sheet ___ of ___

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PTION ACTIVITIES

Activity Schedule

Activity Section Size

Specialty Type Code 24 25

Success Factor 26 27 28

Activity Credits 29 30

Day or Night 31

Hrs./Mtgs. Mtg./Wk. 32

Dur'n in Wks 33 34 35

Minimum 36 37 38

Desired 39 40 41

Maximum 42 43 44

vity per line.
in for the coder's reference.

e, as needed, to code all exception activities.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 3 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
A	C	T	I	V	I	T	Y	0	8

EXCEPTION ACTIVITY RESOURCES

Activity Number Code	Resource Type	Resource Subtype	Cost Ctr. Code of Affil.	Proportional Basis	Quantity	L Nic
11 12 13 14	15	16 17	18 19 20	21	22 23 24 25 26	
	32	33 34	35 36 37	38	39 40 41 42 43	
	49	50 51	52 53 54	55	56 57 58 59 60	
11 12 13 14	15	16 17	18 19 20	21	22 23 24 25 26	
	32	33 34	35 36 37	38	39 40 41 42 43	
	49	50 51	52 53 54	55	56 57 58 59 60	

Explanation:

(a) Code across the page, one resource per line, with a maximu
(b) If the number of resources for an activity exceeds thr , the need for those excess resources.
(c) The first resource for each activity must be coded on a li (beginning with column 11). If the number of resources f two or one line blank.
(d) Quantity must be expressed to two decimal places. (e
(f) Use additional coding sheets of this type, as needed, to c

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nching structions:	Lines/Card 3 Cards/Sheet 2	Sheet___of___

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EXCEPTION ACTIVITY RESOURCES

Resource Schedule

Proportional Basis	Quantity	Day or Night Code	Hrs. per Mtg.	Mtgs. per Wk.	Duration in Wks.
21	22 23 24 25 26	27	28	29	30 31
38	39 40 41 42 43	44	45	46	47 48
55	56 57 58 59 60	61	62	63	64 65
21	22 23 24 25 26	27	28	29	30 31
38	39 40 41 42 43	44	45	46	47 48
55	56 57 58 59 60	61	62	63	64 65

e resource per line, with a maximum of three resources per activity.
es for an activity exceeds three, a new activity must be defined, which generates
s resources.
ach activity must be coded on a line that provides for the Activity Number code
11). If the number of resources for an activity is one or two, leave respectively,

ed two decimal places. (e) Day - 0; Night - 1.
ees of this type, as needed, to code all exception activity resources.

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Coder ______________	Session ______ Run Number ______	Punching Instructions: Lines/Card 2

Command Levels

1	2	3	4	5	6	7	8	9	10
P	R	O	G	R	A	M		0	1

PROGRAM CURRICULA

Program Code	Cr.Rg./ Ac.Yr.	Sim. Prd.	Curriculum Number	Cr.Rg./ Ac.Yr.	Sim. Prd.	Curriculum Number
11 12 13	14 15	16	17 18 19 20	21 22	23	24 25 26 27
	42 43	44	45 46 47 48	49 50	51	52 53 54 55
11 12 13	14 15	16	17 18 19 20	21 22	23	24 25 26 27
	42 43	44	45 46 47 48	49 50	51	52 53 54 55
11 12 13	14 15	16	17 18 19 20	21 22	23	24 25 26 27
	42 43	44	45 46 47 48	49 50	51	52 53 54 55
11 12 13	14 15	16	17 18 19 20	21 22	23	24 25 26 27
	42 43	44	45 46 47 48	49 50	51	52 53 54 55

Explanation:

(a) Code across the page, four curriculum numbers per li
(b) Where more than two lines are necessary to code curr
number at the beginning of the third line used.
(c) Begin each program on a new line that provides for t
curriculum numbers for a program can be coded in one
(d) Use additional coding sheets of this type, as needed

CAMPUS-MINNESOTA Input Document

ing Lines/Card 2 Cards/Sheet 4
uctions:

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PROGRAM CURRICULA

Cr.Rg./ Ac.Yr.	Sim. Prd.	Curriculum Number	Cr.Rg./ Ac.Yr.	Sim. Prd.	Curriculum Number	Cr.Rg./ Ac.Yr.	Sim. Prd.	Curriculum Number
21 22	23	24 25 26 27	28 29	30	31 32 33 34	35 36	37	38 39 40 41
49 50	51	52 53 54 55	56 57	58	59 60 61 62	63 64	65	66 67 68 69
21 22	23	24 25 26 27	28 29	30	31 32 33 34	35 36	37	38 39 40 41
49 50	51	52 53 54 55	56 57	58	59 60 61 62	63 64	65	66 67 68 69
21 22	23	24 25 26 27	28 29	30	31 32 33 34	35 36	37	38 39 40 41
49 50	51	52 53 54 55	56 57	58	59 60 61 62	63 64	65	66 67 68 69
21 22	23	24 25 26 27	28 29	30	31 32 33 34	35 36	37	38 39 40 41
49 50	51	52 53 54 55	56 57	58	59 60 61 62	63 64	65	66 67 68 69

ur curriculum numbers per line.
s are necessary to code curriculum numbers for a program, repeat the program code
of the third line used.
new line that provides for the program code (beginning in column 11) i.e. if
p m can be coded in one line or three lines, leave the following line blank.
ee this type, as needed, to code curriculum numbers for all programs.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Cards

Command Levels

1	2	3	4	5	6	7	8	9	10
P	R	O	G	R	A	M		0	2

Curriculums, Activities and Participation Rates

Curriculum Number	Activity No.Code	Part'n Rate	Acty. No.Code	Part'n Rate	Acty. Nc.Code	Part'n Rate	Acty. No.Code	Part'n Rate	Acty. No.Code
11 12 13 14	15 16 17 18	19 20 21	22 23 24 25	26 27 28	29 30 31 32	33 34 35	36 37 38 39	40 41 42	43 44 45 46

Explanation:

(a) Code across the page, eight activities per line.
(b) Where more than one line is necessary to enumerate the activities c
lum number at the beginning of each line used.
(c) Each curriculum must begin on a new line.
(d) Participation rate must be expressed as a percentage with no decima
(e) Use additional coding sheets of this type, as needed, to code all c

INNESOTA Input Document

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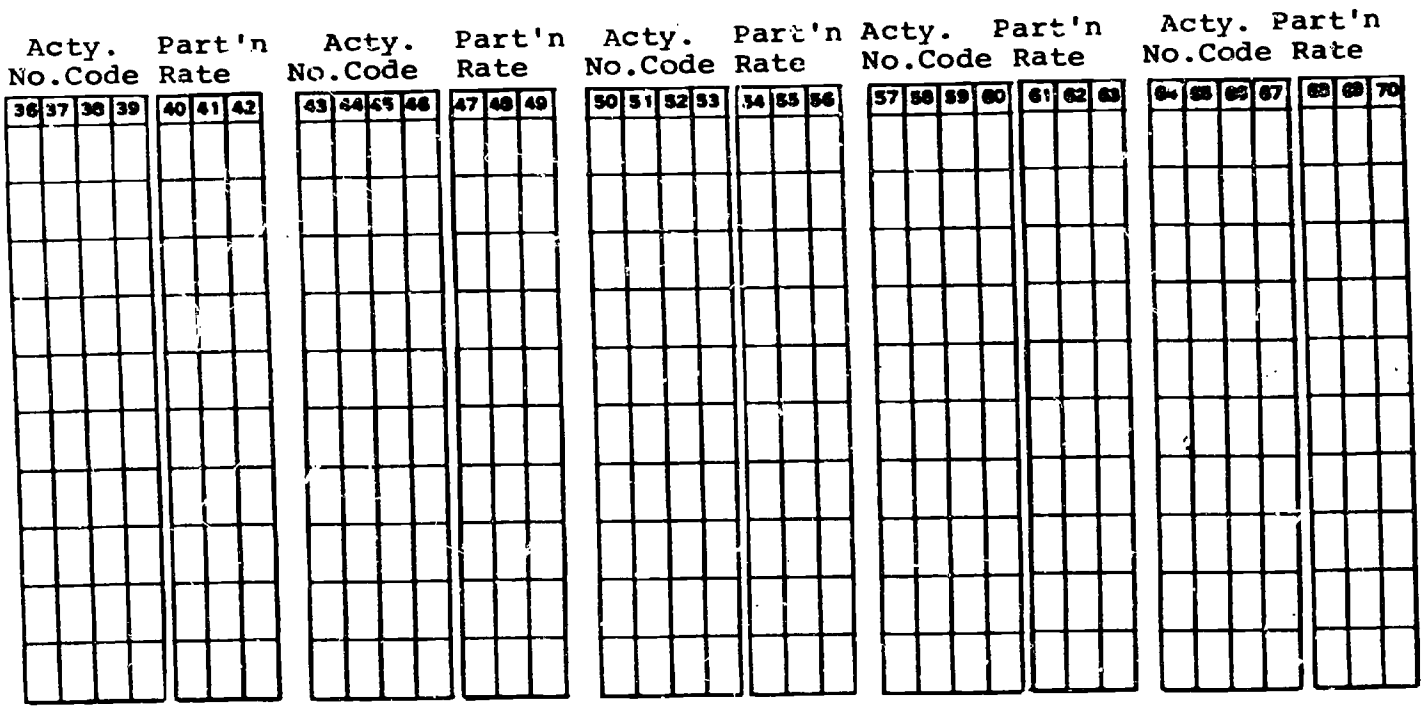
ies and Participation Rates



r line.
enumerate the activities constituting a curriculum, repeat the curricu-
ased.

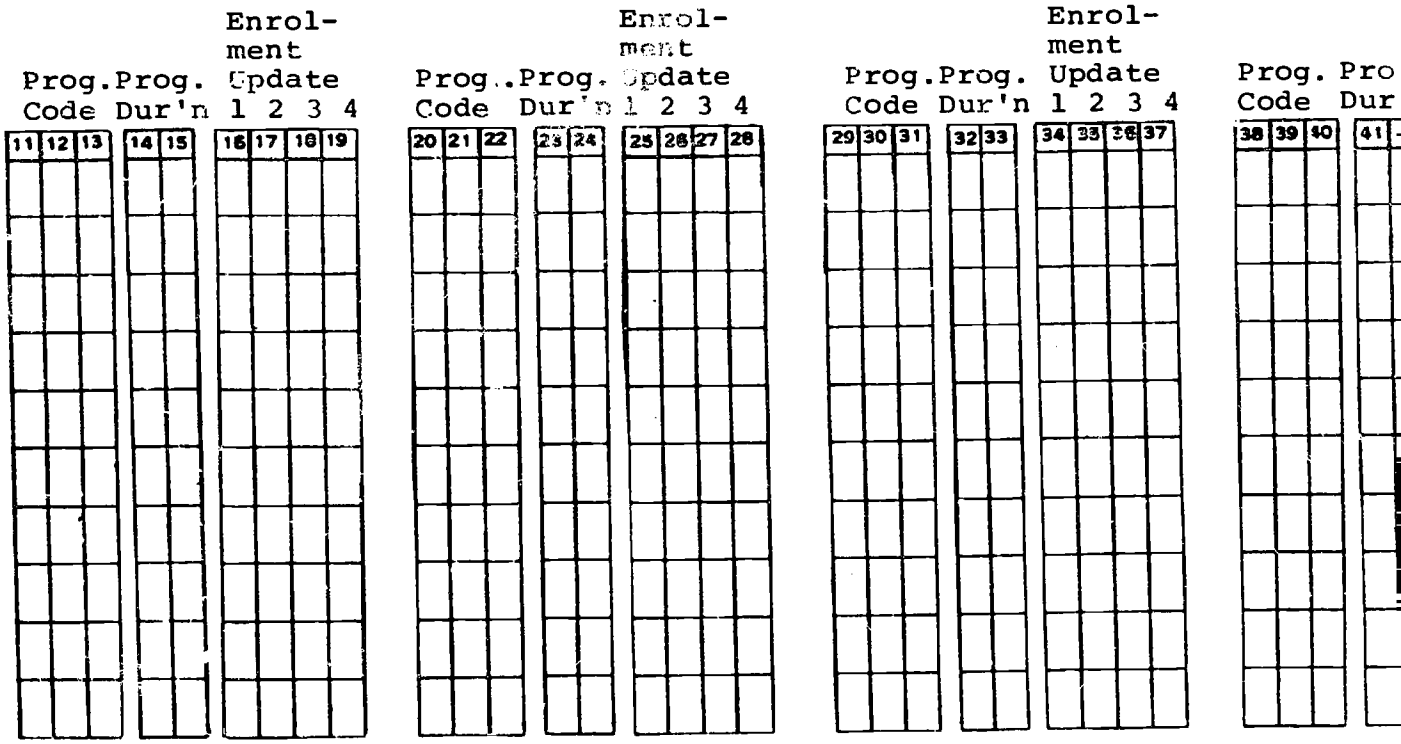
percentage with no decimal place.
, as needed, to code all curricula.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 C

Command Levels

1	2	3	4	5	6	7	8	9	10
P	R	O	G	R	A	M		0	3

PROGRAM ENROLMENT UPDATE BY SIMULATION



Explanation:

(a) Code across the page, six programs per line.
(b) Prog. Dur'n refers to the duration of a program in number
(c) Enrolment update is processed prior to simulation period 1
(d) Use additional coding sheets of this type, as needed, to c

AMPUS-MINNESOTA Input Document

g Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___
tions:

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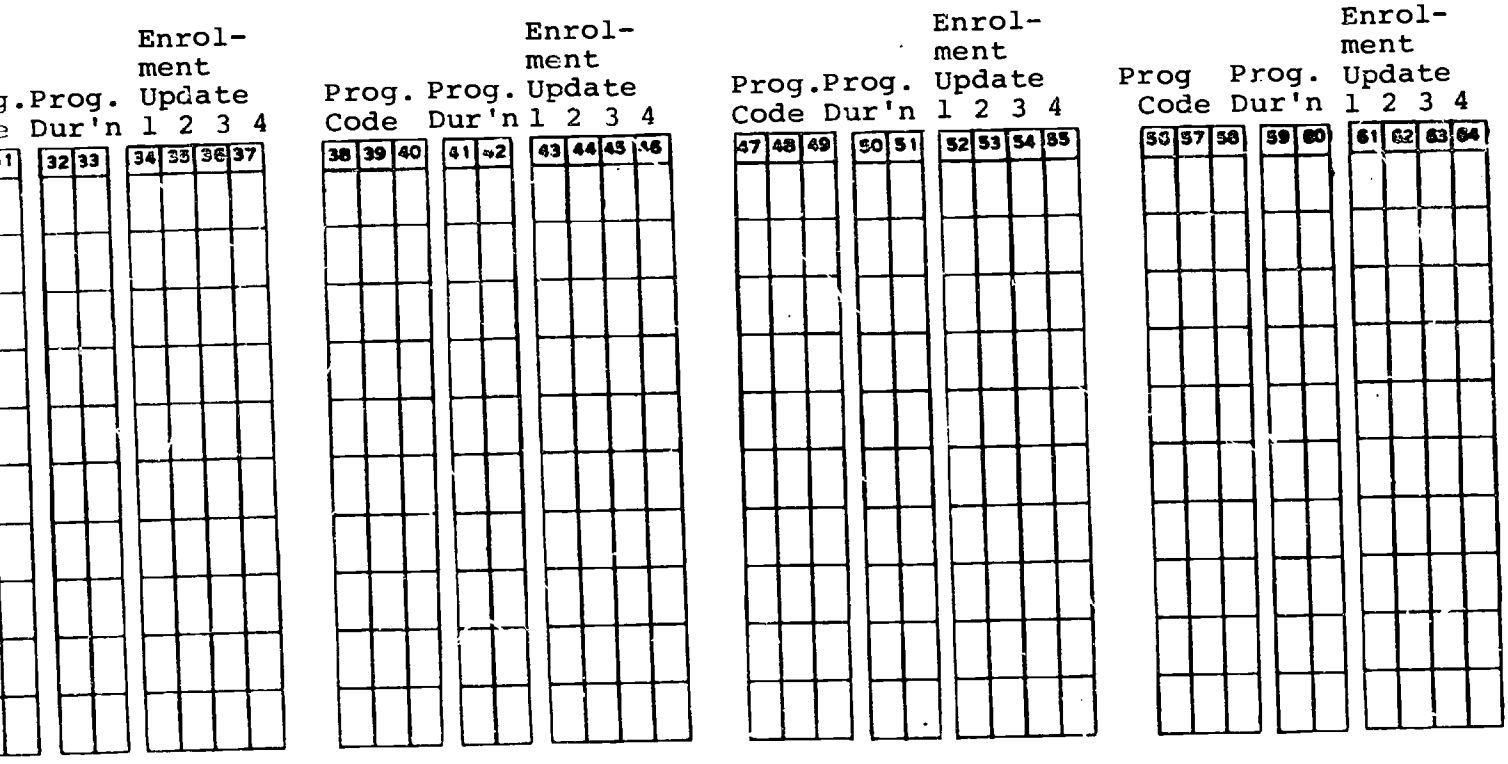
MENT UPDATE BY SIMULATION PERIOD



ams per line.
ion of a program in number of academic years or credit ranges.
rior to simulation period 1,2,3 and/or 4 as indicated by: Yes -1; No - 0.
this type, as needed, to code update information for all programs.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
P	R	O	G	R	A	M		0	4

CREDITS PER CREDIT RANGE BY PROGR

Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits Cr. Rg
11 12 13	14 15	16 17 18	19 20	21 22 23	24 25	26 27 28	29 30	31 32 33	34 35

(a) Code across the page eight programs per line.
(b) If one "credits per credit range" figure applies ac code that figure in columns 14 and 15, leaving the figure can be overridden for exceptions, by coding their program codes in the columns that follow.

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ning Lines/Card 1 Cards/Sheet 10	Sheet ___ of ___
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EDITS PER CREDIT RANGE BY PROGRAM

/ Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.	Prog. Code	Credits/ Cr. Rg.
26 27 28	29 30	31 32 33	34 35	36 37 38	39 40	41 42 43	44 45	46 47 48	49 50						

eight programs per line.
credit range" figure applies across the institution,
columns 14 and 15, leaving the program code blank. This
dden for exceptions, by coding these exceptions with
in the columns that follow.

Coder _____	Run Number ____	Punching Instructions:	Lines/Card 1 Cards

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	U	D	E	N	T		0	1

NEW ENTRANTS TO THE INSTITUTION WITH NO AC

Simulation Period One	Simulation Period Two	Simulation P- Three
11 12 13 14 15	16 17 18 19 20	21 22 23 24 25

Explanation: (a) Code across the page, only for applicable simulat

* The term, Freshmen will be used hereafter synonymously with New with no Academic Credit.

POS-MINNESOTA Coding Sheets

Lines/Card 1 Cards/Sheet 1 | Sheet ___ of ___

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THE INSTITUTION WITH NO ACADEMIC CREDIT*

riod

Simulation Period
Three

20

21	22	23	24	25

only for applicable simulation periods.

eafter synonymously with New Entrants to the Institution

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 C Decimal points are

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	U	D	E	N	T		0	2

DISTRIBUTION OF FRESHMEN BY

Prog. Code	% of Freshmen	Prog. Code	% of Freshmen	Prog. Code	% of Freshmen	Prog. Code	% of Freshmen	Prog. Code	% of Freshmen	Prog Code
11 12 13	14 15 16 17	18 19 20	21 22 23 24	25 26 27	28 29 30 31	32 33 34	35 36 37 38	39 40 41	42 43 44 45	46 47

Explanation:

(a) Code across the page, nine programs per line.
(b) Percentage of total freshmen entrants in each progra

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Lines/Card 1 Cards/Sheet 10 ns: Decimal points are not to be keypunched	Sheet ___ of ___

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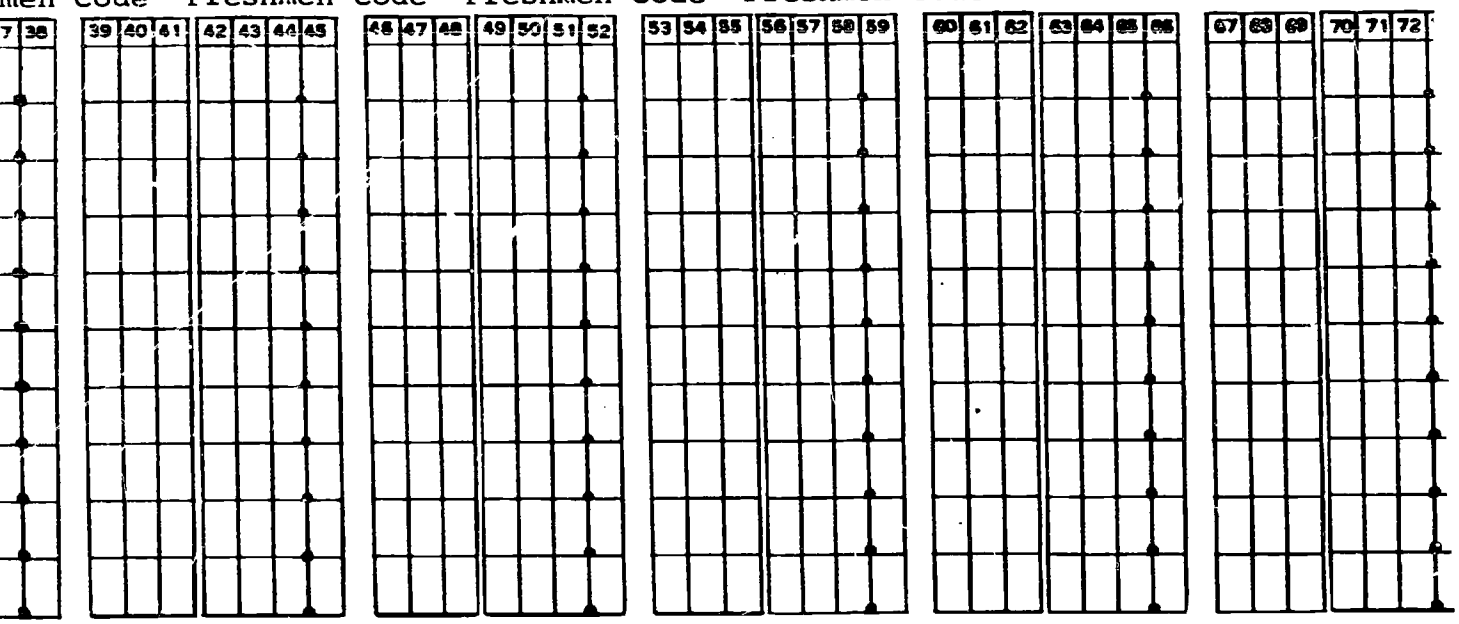
TRIBUTION OF FRESHMEN BY PROGRAM



rograms per line.
entrants in each program must be expressed to one decimal place.

Coder _____ | Session _____ Run Number _____ | Punching Instructions: _____ | Lines/Card 2 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	U	D	E	N	T		0	3

NEW ENTRANTS WITH ADVANCED ACADEMIC STAND

Program Code	Cr.Rg./ Ac.Yr.	Sim. Prd.	New Entrants	Cr.Rg./ Ac.Yr.	Sim. Prd.	New Entrants
11 12 13	14 15	15	17 18 19	20 21	22	23 24 25
	38 39	40	41 42 43	44 45	46	47 48 49
11 12 13	14 15	16	17 18 19	20 21	22	23 24 25
	38 39	40	41 42 43	44 45	46	47 48 49
11 12 13	14 15	16	17 18 19	20 21	22	23 24 25
	38 39	40	41 42 43	44 45	46	47 48 49
11 12 13	14 15	16	17 18 19	20 21	22	23 24 25
	38 39	40	41 42 43	44 45	46	47 48 49

Explanation:

(a) Code across the page, four simulation periods per line.
(b) If more than two lines are needed to code new entrants in lation periods of a program, repeat the program code when
(c) Begin each program on a line that provides for the progra line is necessary to code new entrants into a program, le
(d) Use additional coding sheets of this type, as needed, to

Lines/Card 2 Cards/Sheet 4

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ns: ____________

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H ADVANCED ACADEMIC STANDING

Rg./ Yr.	Sim. Prd.	New Entrants	Cr.Rg./ Ac.Yr.	Sim. Prd.	New Entrants	Cr.Rg./ Ac.Yr.	Sim. Prd.	New Entrants
21	22	23 24 25	26 27	28	29 30 31	32 33	34	35 36 37
45	46	47 48 49	50 51	52	53 54 55	56 57	58	59 60 61
21	22	23 24 25	26 27	28	29 30 31	32 33	34	35 36 37
45	46	47 48 49	50 51	52	53 54 55	56 57	58	59 60 61
21	22	23 24 25	26 27	28	29 30 31	32 33	34	35 36 37
45	46	47 48 49	50 51	52	53 54 55	56 57	58	59 60 61
21	22	23 24 25	26 27	28	29 30 31	32 33	34	35 36 37
4 45	46	47 48 49	50 51	52	53 54 55	56 57	58	59 60 61

ation periods per line.
ed to code new entrants into all relevant academic years/credit ranges and simu-
peat the program code wherever allowed for.
at [illegible]des for the program code in the first three columns; i.e. if only one
nt[illegible] into a program, leave the following line blank.
th[illegible]ype, as needed, to code new entrants into all applicable programs.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 1 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	U	D	E	N	T		0	4

STUDENT TRANSITIONS

Origin		Destination I			Destination II			Destination III			Dest
Prog. Code	Cr.Rg/ Ac.Yr.	Prog. Code	Cr.Rg/ Ac.Yr.	Trans Rate	Prog. Code	Cr.Rg/ Ac.Yr.	Trans Rate	Prog. Code	Cr.Rg/ Ac.Yr.	Trans Rate	Prog Code
11 12 13	14 15	16 17 18	19 20	21 22 23	24 25 26	27 28	29 30 31	32 33 34	35 36	37 38 39	40 41

EXPLANATION:

(a) Code across the page, six transitions per line.
(b) New origin academic years/credit ranges within a program a
(c) Transition rate must be expressed as a percentage with no
(d) Use additional coding sheets of this type, as needed, to c

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STUDENT TRANSITIONS

Destination III
Prog. Cr.Rg/Trans
Code Ac.Yr.Rate

32	33	34	35	36	37	38	39

Destination IV
ProgCr.Rg/ Trans
Code Ac.Yr.Rate

40	41	42	43	44	45	46	47

Destination V
Prog.Cr.Rg./Trans.
Code Ac.Yr Rate

48	49	50	51	52	53	54	55

Destination VI
Prog.Cr.Rg./Trans
Code Ac.Yr.Rate

56	57	58	59	60	61	62	63

ansitions per line.
edit ranges within a program and new programs must begin on a new line.
essed as a percentage with no decimal place.
of this type, as needed, to code all transitions within and between programs.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Card:

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	U	D	E	N	T		0	5

STUDENT CREDIT LOAD

Prog. Code	Sim. Period	Credit Load	Student Part'n(%)	Sim. Period	Credit Load	Student Part'n(%)	Sim. Period	Credit Load
11 12 13	14	15 16	17 18 19	20	21 22	23 24 25	26	27 28

Explanation:

(a) Code across the page, four credit loads per line, in ascending
(b) Where the number of credit loads in a given simulation period
tion period may begin in mid-line. A new program however, mus
(c) Student participation must be expressed as a percentage with r
(d) Use additional coding sheets of this type, as needed, to code
of all programs.

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Lines/Card 1 Cards/Sheet 10 tions:	Sheet___of___

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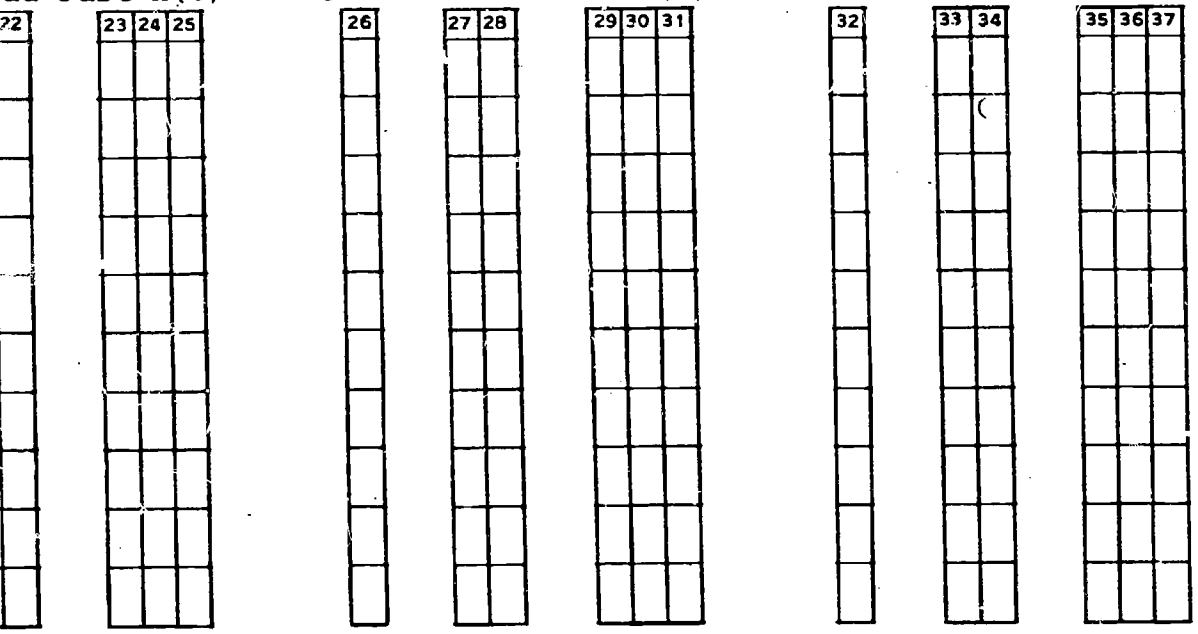
ENT CREDIT LOAD



t loads per line, in ascending order of number of credits in a credit load.
in a given simulation period of a program is less than four, a new simula-
e. A new program however, must begin on a new line.
pressed as a percentage with no decimal place.
this type, as needed, to code credit loads for applicable simulation periods

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 1 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	A	F	F				0	1

ACADEMIC STAFF RANKS COMMON
ALL COST CENTERS

Rank Code	Rank Name	Average Annual Salary	Weekly Staffing Units	Off Spa-
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30 31	32 33	34

Explanation:
(a) Code across the page, one academic staff rank per line.
(b) Salary must be expressed in hundreds of dollars; office spac

PUS-MINNESOTA Input Document

ng Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___
ctions:

Sys. Id.

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C STAFF RANKS COMMON TO
ALL COST CENTERS

Average Annual Salary	Weekly Staffing Units	Office Space
29 30 31	32 33	34 35 36

mic staff rank per line.
dreds of dollars; office space, in square feet.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 4 Card

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	A	F	F				0	2

ACADEMIC STAFF TEACHING DUTIES C
COST CENTERS

Activity Type Code		No. of Staffing Units Credit Per Contact Hour		Activity Type Code	
11	12	13	14 15 16	17	18
23	24	25	26 27 28	29	30
35	36	37	38 39 40	41	42

Explanation:

(a) Code across the page, two activity types per line.
(b) Number of staffing units credit per contact hour mus

-MINNESOTA Input Document

Lines/Card 4 Cards/Sheet 1 | Sheet ___ of ___

ns:

Sys. Id. 77 78 79 80

STAFF TEACHING DUTIES COMMON TO ALL COST CENTERS

ing Per r

Activity Type Code 17 18 | 29 30 | 41 42

No. of Staffing Units Credit Per Contact Hour 19 20 21 22 | 31 32 33 34 | 43 44 45 46

activity types per line.
credit per contact hour must be expressed to two decimal places.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	A	F	F				0	3

ACADEMIC STAFF NON-TEACHING DUTIES COM

ALL COST CENTERS

Non-teaching Duty Code	Duty Name	Rank Req'd	Weekly Credit of Staffing Units	Prop'l Basis	C
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30	31 32 33 34	35 36	

Explanation:

(a) Code across the page, one non-teaching duty per line.
(b) Where a duty is not rank specific, code a 99 in column 30. Other appropriate rank code.
(c) Quantity must be expressed to two decimal places.

Lines/Card 1 Cards/Sheet 5 | Sheet ___ of ___

ns:

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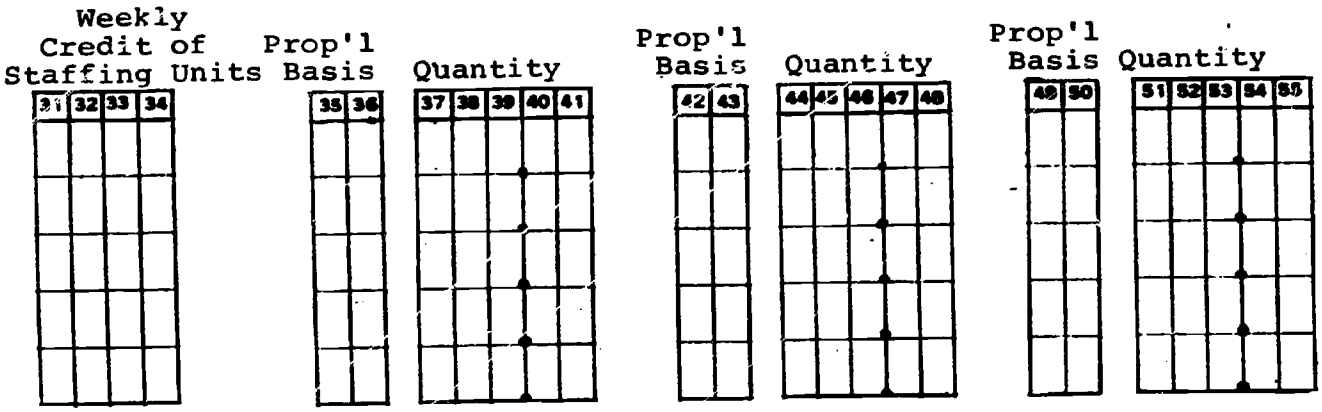
F NON-TEACHING DUTIES COMMON TO

ALL COST CENTERS



ng duty per line.
ode a 99 in column 30. Otherwise, fill in rank required with the

cimal places.

CAMPUS-MINNESOTA Input Document

Coder ________________	Session ______ Run Number ______	Punching Instructions: Lines/Card 2 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
S	T	A	F	F				0	4

ACADEMIC SUPPORT STAFF COMMON TO ALL COS

Type Code		Type Name																Average Annual Salary		
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57

Explanation:

(a) Code across the page, one academic support staff type per

(b) Salary must be expressed in hundreds of dollars.

(c) Number of contact hours is expressed with no decimal place

(d) Office space is expressed in square feet.

NESOTA Input Document

Lines/Card 2 Cards/Sheet 3

s: _____

Sheet___of___

Sys. Id.

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STAFF COMMON TO ALL COST CENTERS

	Average Annual Salary	No. of Contact Hrs. Available per Wk.	Office Space
27 28 / 53 54	29 30 31 / 55 56 57	32 33 / 58 59	34 35 36 / 60 61 62
27 28 / 53 54	29 30 31 / 55 56 57	32 33 / 58 59	34 35 36 / 60 61 62
27 28 / 53 54	29 30 31 / 55 56 57	32 33 / 58 59	34 35 36 / 60 61 62

c support staff type per line.
eds of dollars.
sed with no decimal place.
re feet.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
S	C	F	F					0	5

NON-ACADEMIC STAFF

Cost Ctr. Level	Cost Ctr. Code	Non-Ac.Staff Type Code	Non-Academic Staff Type Name	Average Annual Salary	Office Space	Pr Ba
11	12 13 14	15 16	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	33 34 35	36 37 38	

Explanation:

(a) Code across the page, one non-academic staff type per li
(b) Salary must be expressed in hundreds of dollars; office s
(c) Quantity must be expressed to two decimal places.
(d) Use additional coding sheets of this type, as needed, to all cost centers at one cost center level.

NNESOTA Input Document

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

s:

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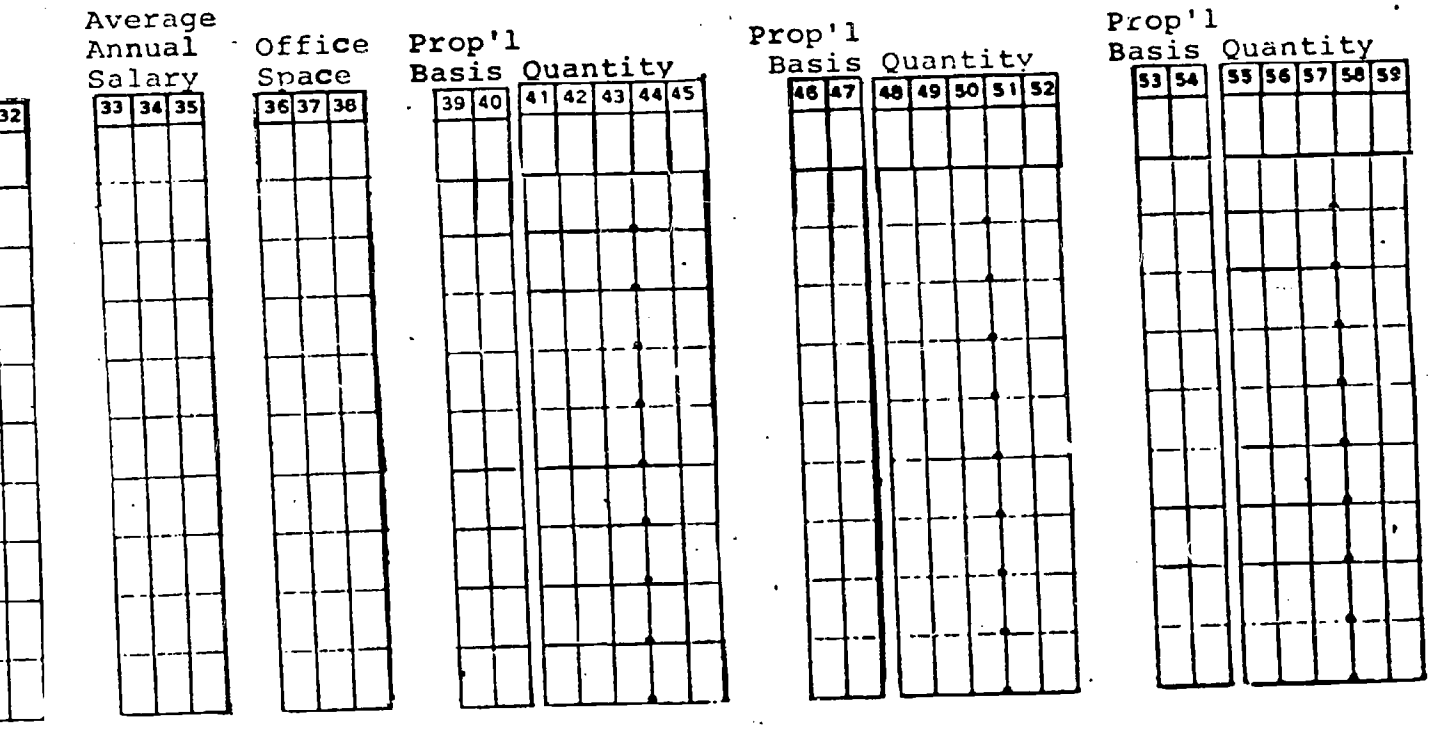
ACADEMIC STAFF



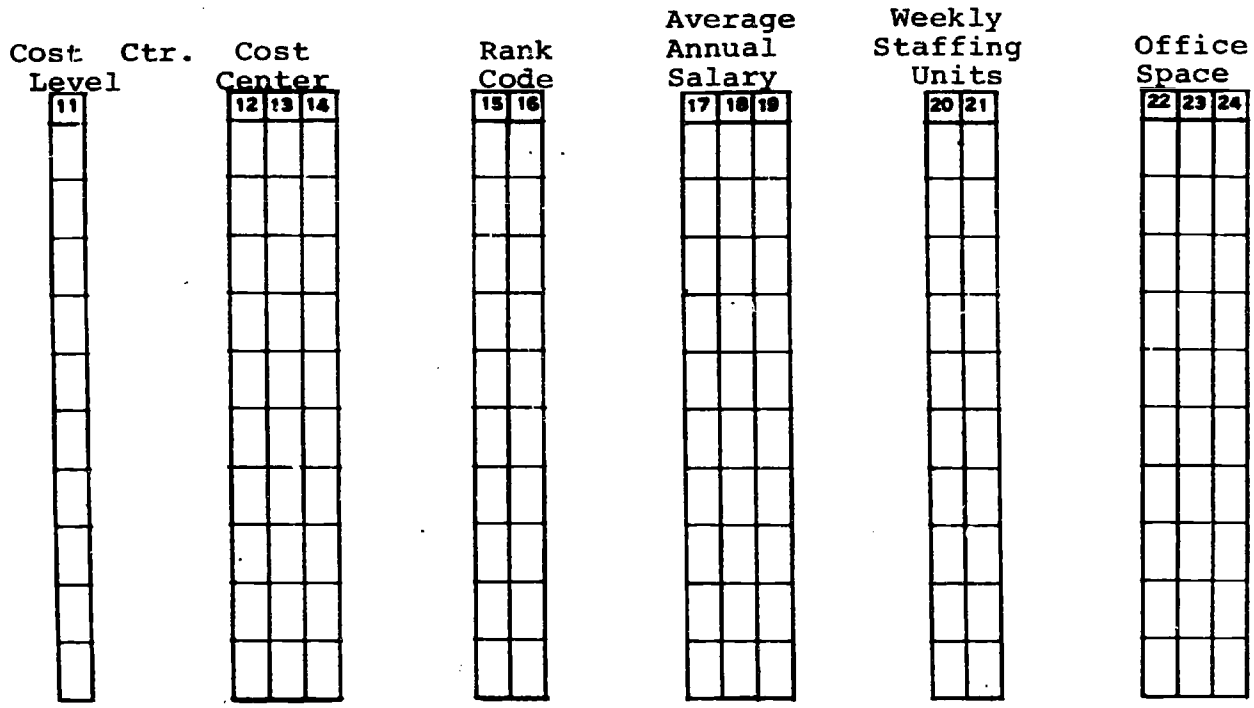
cademic staff type per line.
reds of dollars; office space, in square feet.
o decimal places.
this type, as needed, to code all non-academic staff types common to
ter level.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1

Command Levels

1	2	3	4	5	6	7	8	9	10
X	S	T	A	F	F			0	1

ACADEMIC STAFF RANKS SPECIFIED BY COST CE



Explanation:

(a) Code across the page one staff rank per line.
(b) Salary must be expressed in hundreds of dollars; office space in square
(c) Use additional coding sheets of this type, as needed, to code all cost

ching Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___
tructions:

Sys. Id.

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AFF RANKS SPECIFIED BY COST CENTER

Weekly Staffing Units		Office Space		
20	21	22	23	24

er line.
of dollars; office space in square feet.
type, as needed, to code all cost center specific ranks of academic staff.

Coder _____	Session ____ Run Number ____	Punching Instructions:	Lines/Card 4 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
X	S	T	A	F	F			0	2

ACADEMIC STAFF TEACHING ACTIVITIES SPECIFIE

Cost Center Level	Cost Center Code	Activity Type Code
11	12 13 14	15 16
21	22 23 24	25 26
31	32 33 34	35 36
41	42 43 44	45 46
51	52 53 54	55 56
61	62 63 64	65 66

Explanation:

(a) Code across the page, one activity type per line.
(b) Leave the cost center code blank where the information is
center level.
(c) Staffing units must be coded to two decimal places.
(d) Use additional coding sheets of this type, as needed to c
activities.

-MINNESOTA Input Document

Lines/Card 4 Cards/Sheet 1 | Sheet ___ of ___

ns:

Sys. Id.

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ACHING ACTIVITIES SPECIFIED BY COST CENTER

Activity Type Code		No. of Staffing Units Credit Per Contact Hour			
15	16	17	18	19	20
25	26	27	28	29	30
35	36	37	38	39	40
45	46	47	48	49	50
55	56	57	58	59	60
65	66	67	68	69	70

tivity type per line.
lank where the information is common to all cost centers at a cost

to two decimal places.
of this type, as needed to code all cost center specified teaching

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Card Decimal points are n

Command Levels

1	2	3	4	5	6	7	8	9	10
X	S	T	AF	F				0	3

ACADEMIC STAFF NON-TEACHING DUTIES SPECIFIED

Cost Center Level	Cost Center Code	Non-Teaching Duty Code	Rank Req'd	Weekly Credit of Staffing Units	Prop'l Basis	Quantity
11	12 13 14	15 16	17 18	19 20 21 22	23 24	25 26 27 28 29

Explanation:

(a) Code across the page, one non-teaching duty per line.
(b) Where information on a duty applies to all cost centers at one level, E
(c) If the duty is not rank specific, code a 99 in column 17-18. Otherwise rank code.
(d) Quantity must be expressed to two decimal places. At least one proport each duty.
(e) Use additional coding sheets of this type, as needed, to code all cost

CAMPUS-MINNESOTA Input Document

g tions:	Lines/Card 1 Cards/Sheet 10 Decimal points are not to be keypunched	Sheet___of___

Sys. Id.

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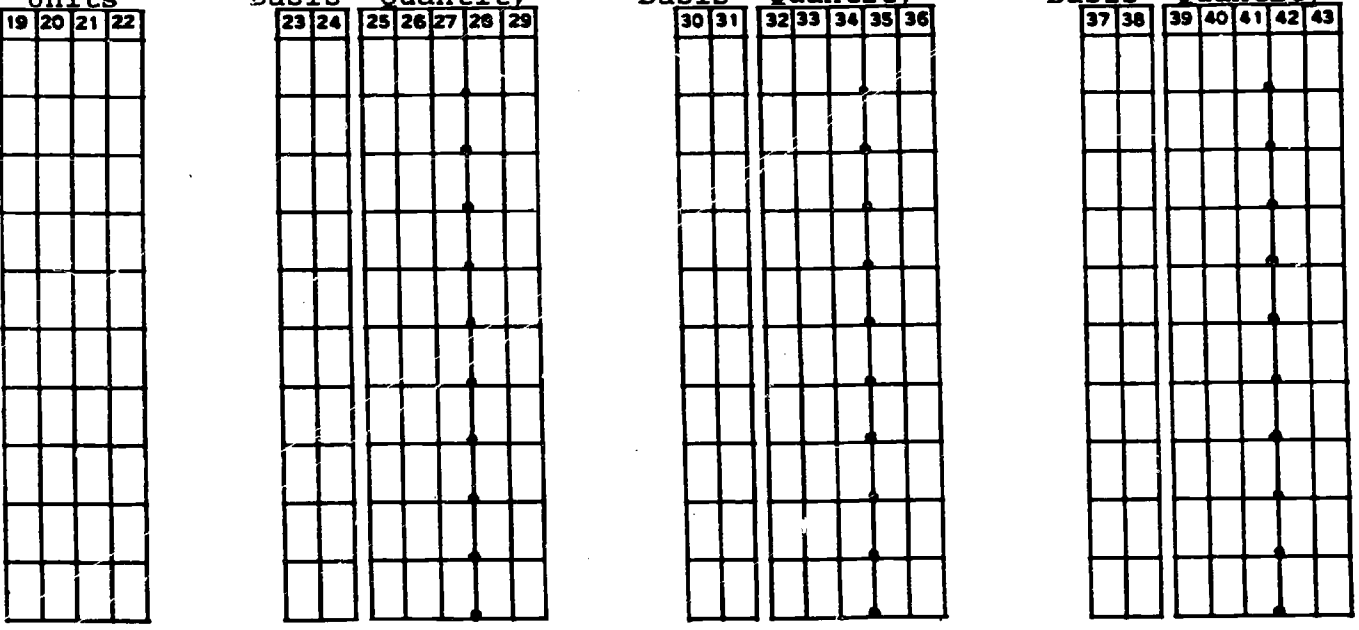
ON-TEACHING DUTIES SPECIFIED BY COST CENTER



g duty per line.
o all cost centers at one level, leave the cost center code blank.
le a 99 in column 17-18. Otherwise, code rank required with the appropriate

imal places. At least one proportional basis and quantity must be specified for

type, as needed, to code all cost center specified non-teaching duties.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card_

Command Levels

1	2	3	4	5	6	7	8	9	10
X	S	TA	F	F				0	4

ACADEMIC STAFF INVENTORY, TRANSITIO

BY COST CE

Transitions

Cost Ctr. Code	Rank Code	Hiring Code	Initial Inventory	Same	Promo
11 12 13 / 32 33 34	14 15 / 35 36	16 / 37	17 18 19 / 38 39 40	20 21 / 41 42	22 23 / 43 4
11 12 13 / 32 33 34	14 15 / 35 36	16 / 37	17 18 19 / 38 39 40	20 21 / 41 42	22 23 / 43 4
11 12 13 / 32 33 34	14 15 / 35 36	16 / 37	17 18 19 / 38 39 40	20 21 / 41 42	22 2 / 43 4
11 12 13 / 32 33 34	14 15 / 35 36	16 / 37	17 18 19 / 38 39 40	20 21 / 41 42	22 2 / 43 4

Explanation:

(a) Code across the page, one rank per line.
(b) Hiring code: Yes - 1; No - 0.
(c) Transition must be coded as a percentage with no decir
(d) Use additional coding sheets of this type, as needed,
staff.

ESOTA Input Document

Lines/Card 2 Cards/Sheet 4 | Sheet ___ of ___

:

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ENTORY, TRANSITION AND HIRING CRITERIA SPECIFIED

BY COST CENTER

Transitions		Hiring Criteria		Percent Distribution	
		Min. Desired	Max. Fixed	Minimum Desired	Maximum Desired
Same	Promote				
20 21 / 41 42	22 23 / 43 44	24 25 / 45 46	26 27 / 47 48	28 29 / 49 50	30 31 / 51 52
20 21 / 41 42	22 23 / 43 44	24 25 / 45 46	26 27 / 47 48	28 29 / 49 50	30 31 / 51 52
20 21 / 41 42	22 23 / 43 44	24 25 / 45 46	26 27 / 47 48	28 29 / 49 50	30 31 / 51 52
20 21 / 41 42	22 23 / 43 44	24 25 / 45 46	26 27 / 47 48	28 29 / 49 50	30 31 / 51 52

ine.

tage with no decimal place.
type, as needed, to code all ranks of cost center specific academic

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
X	S	T	A	F	F			0	5

ACADEMIC STAFF OPTIMIZATION AND UPDATE

COST CENTER

Cost Center Level	Cost Center Code	Staffing Optimization I	II	III	I
11	12 13 14	15	16	17	1

Explanation:

(a) Code across the page, one cost center per line.
(b) Cost center level must always be coded. Leave the cost ce
information is common to all cost centers at this level.
(c) See manual for Optimization Policies.
(d) Staff update is processed prior to simulation period 1, 2
(e) Use additional coding sheets of this type, as needed, to

g tions:	Lines/Card 1 Cards/Sheet 10	Sheet ___ of ___

Sys. Id.

77	78	79	80

FF OPTIMIZATION AND UPDATE POLICIES SPECIFIED BY

COST CENTER

Staffing Optimization Policies

I	II	III	IV	V
15	16	17	18	19

Staffing Update

1	2	3
20	21	22

cost center per line.
ays be coded. Leave the cost center code blank to indicate that this
ll cost centers at this level.
n Policies.
prior to simulation period 1, 2, 3 as indicated by Yes - 1; No - 0.
ts of this type, as needed, to code staff policy for all cost centers.

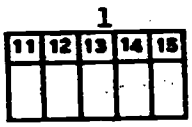
Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 2 Ca

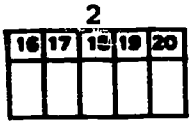
Command Levels

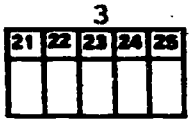
1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	1

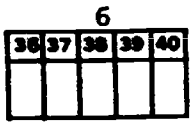
C L A S S R O O M

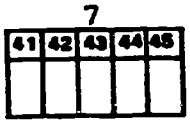
S I Z E S

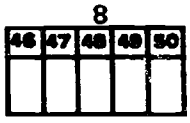












Explanation:

(a) Code across the page, five classroom sizes per li
(b) Classroom size must be defined in terms of the nu

ching tructions:	Lines/Card 2 Cards/Sheet 1	Sheet ___ of ___

Sys. Id. 77 78 79 80

C L A S S R O O M

S I Z E S

3: 21 22 23 24 25

4: 26 27 28 29 30

5: 31 32 33 34 35

8: 46 47 48 49 50

9: 51 52 53 54 55

10: 56 57 58 59 60

ıge, five classroom sizes per line.
st be defined in terms of the number of stations.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Card

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	2

L A B O R A T O R Y S I Z E S
(Instructional and Special)

1				
11	12	13	14	15

2				
16	17	18	19	20

3				
21	22	23	24	25

4				
26	27	28	29	30

Explanation:
(a) Code across the page, six laboratory sizes per sheet.
(b) Laboratory sizes must be defined in terms of number of s

NNESOTA Input Document

Lines/Card 1 Cards/Sheet 1

ns:

Sheet ___ of ___

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R A T O R Y S I Z E S

ctional and Special)

3			4				5				6				
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

oratory sizes per sheet.
ned in terms of number of stations.

Coder _____	Session ___ ___ Run Number _____	Punching Instructions: _____ Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	3

CLASSROOM SPACE PLANNING FACTORS

Clsrm. Type No.	Clsrm. Size No.	Clsrm. Sq.ft./ Station	Clsrm. Size No.	Clsrm. sq.ft./Station	Clsrm. Size No.	Clsrm. sq.ft./Station	Clsrm. Size No.	Clsrm. sq.ft./Station	Clsrm. Size No.	Clsrm. sq. Sta
11 12	13 14	15 16 17	18 19	20 21 22	23 24	25 26 27	28 29	30 31 32	33 34	35 36 37	38 39	40 41
11 12	13 14	15 16 17	18 19	20 21 22	23 24	25 26 27	28 29	30 31 32	33 34	35 36 37	38 39	40 4
11 12	13 14	15 16 17	18 19	20 21 22	23 24	25 26 27	28 29	30 31 32	33 34	35 36 37	38 39	40

CAMPUS-MINNESOTA Input Document

ing Lines/Card 1 Cards/Sheet 3 | Sheet ___ of ___
uctions:

Sys. Id.
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M SPACE PLANNING FACTORS

m. Clsrm. Clsrm. Clsrm. Clsrm. Clsrm. Clsrm Clsrm
sq.ft./Size sq.ft./Size sq.ft./Size sq.ft./ Size Sq.ft./Size sq.ft./Size sq.ft.
Station No. Station No. Station No. Station No. Station No. Station No. Station

30 31 32 | 33 34 | 35 36 37 | 38 39 | 40 41 42 | 43 44 | 45 46 47 | 48 49 | 50 51 52 | 53 54 | 55 56 57 | 58 59 | 60 61 62

30 31 32 | 33 34 | 35 36 37 | 38 39 | 40 41 42 | 43 44 | 45 46 47 | 48 49 | 50 51 52 | 53 54 | 55 56 57 | 58 59 | 60 61 62

30 31 32 | 33 34 | 35 36 37 | 38 39 | 40 41 42 | 43 44 | 45 46 47 | 48 49 | 50 51 52 | 53 54 | 55 56 57 | 58 59 | 60 61 62

Coder _____	Run Number ____	Punching Instructions:	Lines/Card 1 Card Decimal points are

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	4

CLASSROOM CHARACTERISTICS B

Classroom Type No.	Classroom Type Name	Maintenance Cost	Service Ch 1	2
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30 31 32	33 34	35 36

Explanation: a) Code across the page, one classroom type per l

b) Maintenance cost must be expressed in dollars

c) Equipment capital cost quantity is expressed i

MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 3
: Decimal points are not to be keypunched

Sheet ___ of ___

Sys. Id.

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SSROOM CHARACTERISTICS BY TYPE

nance
t

31	32

Service Characteristics Codes

1		2		3		4		5	
33	34	35	36	37	38	39	40	41	42

Equipment Capital Cost

Basis		Quantity	
43	44	45	46

one classroom type per line

be expressed in dollars per square foot to two decimal places.

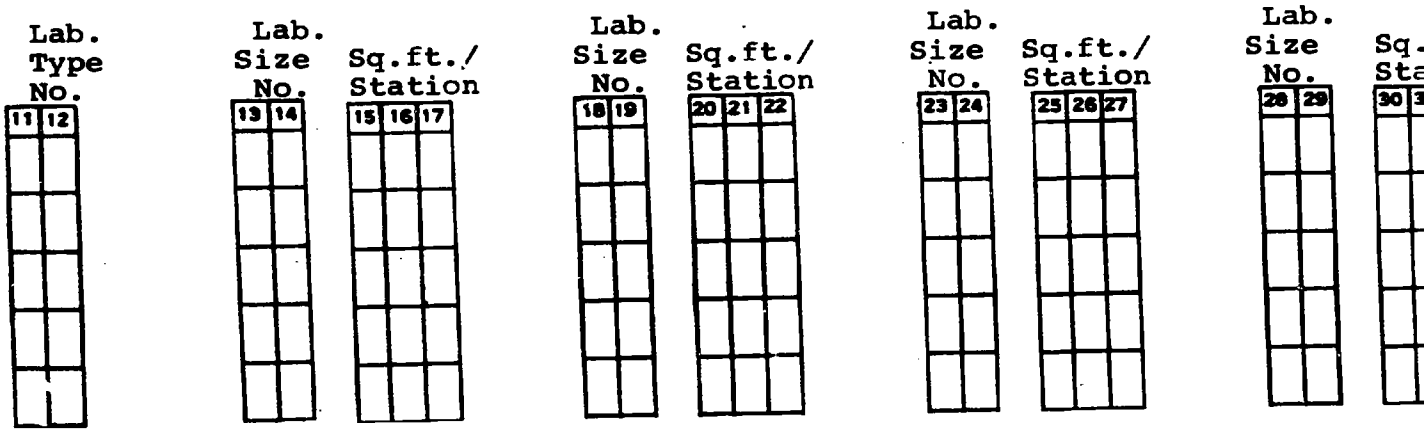
qERIC ty is expressed in hundreds of dollars.

Coder _____ | Session _____ Run Number _____ | Punching Instructions: _____ Lines/Card 1 Card:

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	5

INSTRUCTIONAL LABORATORY SPACE PL



] Explanation:
(a) Code across the page, six laboratory sizes per line.
(b) Instructional special laboratories, as defined in the coding

PUS-MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 5 | Sheet ___ of ___

ns:

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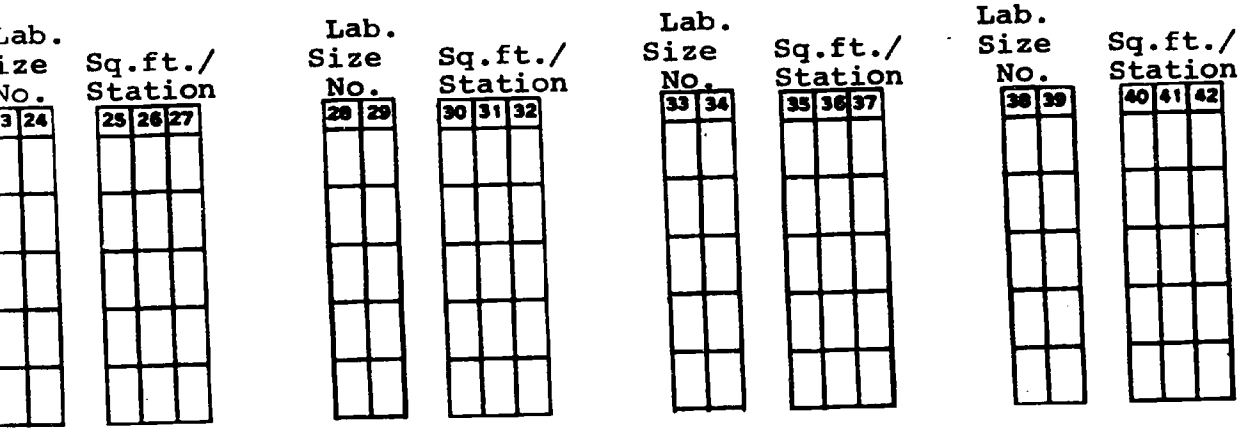
TIONAL LABORATORY SPACE PLANNING FACTORS



ory sizes per line.
s, as defined in the coding manual, are not coded on this sheet.

Coder _____ | Run Number _____ | Punching Instructions: Lines/Card 1 Ca
Decimal points are

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	6

INSTRUCTIONAL LABORATORY CHARACTERISTI

Lab. Type No.	Instructional Laboratory Type Name	Maintenance Cost	Service Ch 1	Service Ch 2
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30 31 32	33 34	35 36

Explanation: a) Code across the page, one instructional laboratory ty
b) Maintenance cost must be expressed in dollars per squ.
c) Equipment capital cost quantity is expressed in hundr

CAMPUS-MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 5 | Sheet ___ of ___

ns: Decimal points are not to be keypunched

Sys. Id. 77 78 79 80

LABORATORY CHARACTERISTICS BY TYPE

ance st 30 31 32

Service Characteristic Codes

1 33 34 | 2 35 36 | 3 37 38 | 4 39 40 | 5 41 42

Equipment Basis 43 44 | Capital Cost Quantity 45 46

structional laboratory type per line.
ressed in dollars per square foot, to two decimal places.
ity is expressed in hundreds of dollars.

Coder _____ | Session _____ Run Number _____ | Punching Instructions: _____ | Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	7

INSTRUCTIONAL SPECIAL LABORATORY S

Equipment Size Code	Lab. Size No.	Sq.ft./ Station	Lab. Size No.	Sq.ft./ Station	Lab. Size No.	sq.ft./ Station	Lab. Size No.
11 12	13 14	15 16 17	18 19	20 21 22	23 24	25 26 27	28 29

Explanation:
(a) Code across the page, six laboratory sizes per line.

CAMPUS-MINNESOTA Input Document

ng Lines/Card 1 Cards/Sheet 10 | Sheet___of___
ctions:

Sys. Id. 77 78 79 80

CTIONAL SPECIAL LABORATORY SPACE PLANNING FACTORS

Lab. Size No.	sq.ft./ Station	Lab. Size No.	Sq.ft./ Station	Lab. Size No.	Sq.ft./ Station	Lab. Size No.	Sq.ft./ Station
23 24	25 26 27	28 29	30 31 32	33 34	35 36 37	38 39	40 41 42

oratory sizes per line.

Coder _____ | Run Number _____ | Punching Instructions: Lines/Card 1 C
Do not keypunch d

Command Levels

1	2	3	4	5	6	7	8	9	10
S.	P	A	C	E					08

INSTRUCTIONAL SPECIAL LABORATORY CHARACTER

Type No.	Special Laboratory Type Name	Equipment Size Code	Maintenance Cost	Construction Cost	Equipment Capital Cost Basis	Equipment Capital Cost Quantity	B
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30	31 32 33 34	35 36 37	38 39	40 41 42 43	

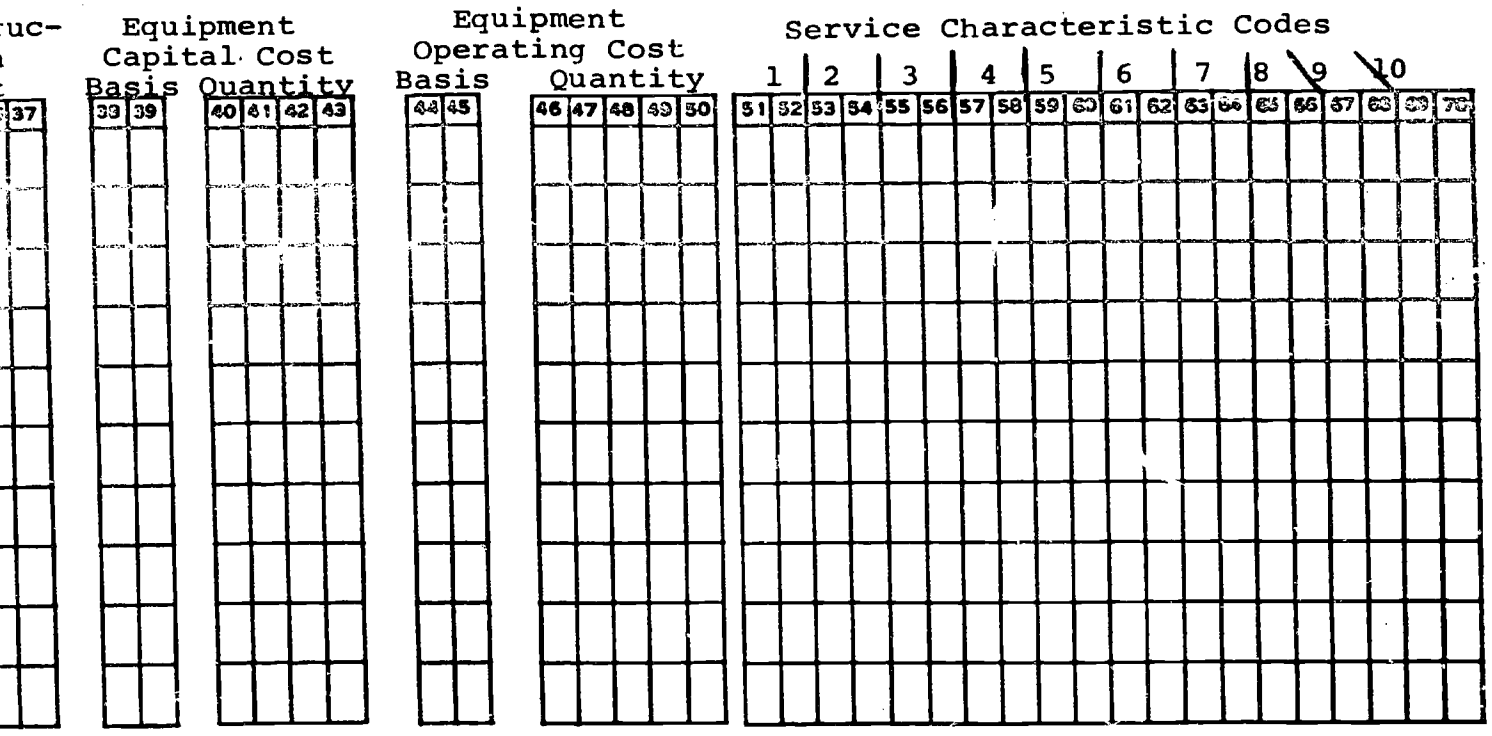
Explanation:
a) Code across the page, one instructional special lab
b) Maintenance cost must be expressed in dollars per s
c) Construction cost must be expressed in dollars per
d) Equipment capital cost quantity is in hundreds of d
e) Equipment operating cost quantity is in dollars.
f) Use additional coding sheets of this type, as need

Lines/Card 1 Cards/Sheet 10
Do not keypunch decimal points.

Sheet ___ of ___

Sys. Id. 77 78 79 80

L LABORATORY CHARACTERISTICS BY TYPE



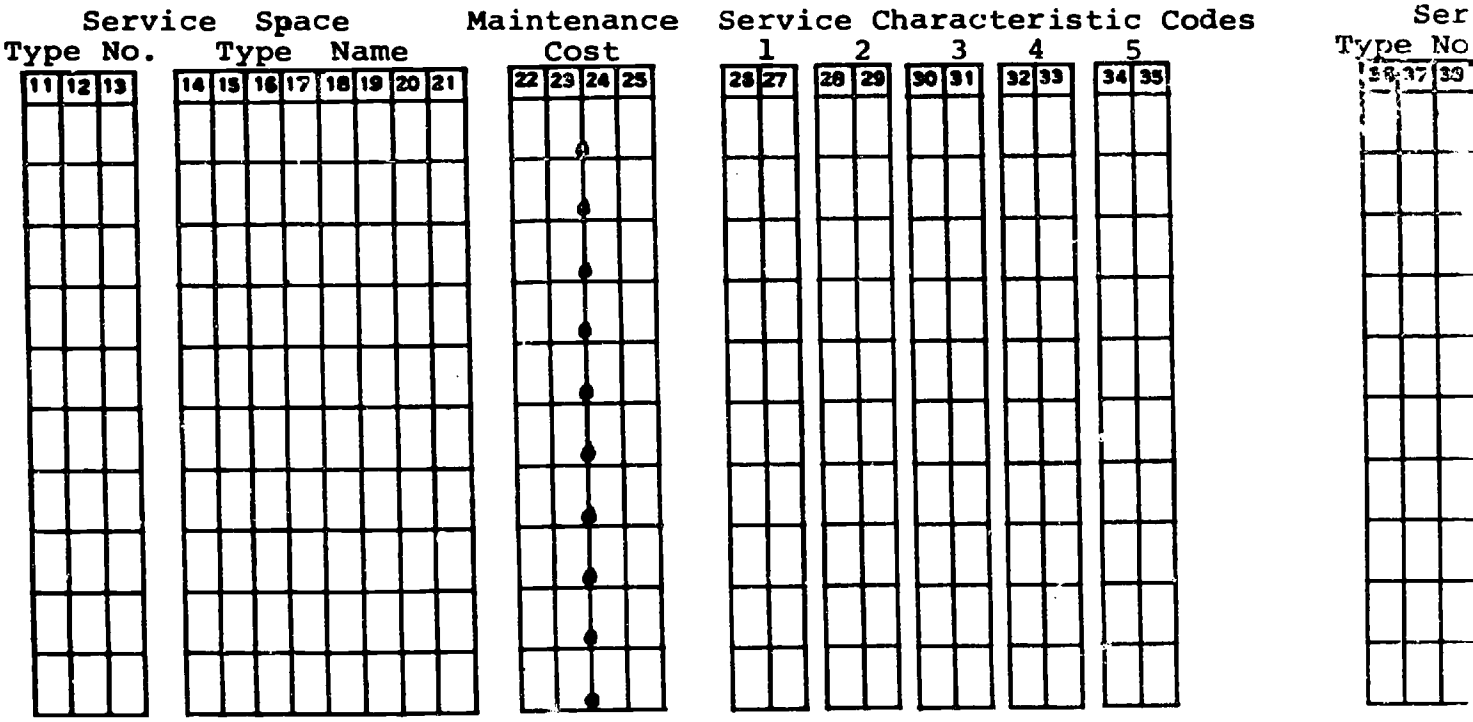
tructional special laboratory type per line.
essed in dollars per square foot, to two decimal places.
pressed in dollars per square foot.
ty is in hundreds of dollars.
ntity is in dollars.
of this type, as needed, to code all special laboratory types.

Coder _____	Run Number ____	Punching Instructions:	Lines/Card 1 Do not keypunch

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				0	9

SERVICE SPACE CHARACTERISTICS BY TYPE



Explanation:
a) Code across the page, two service space types per
b) Maintenance cost must be expressed in dollars per
c) Use additional coding sheets of this type, as nee

CAMPUS-MINNESOTA Input Document

g Lines/Card 1 Cards/Sheet 10 | Sheet___of___
tions: Do not keypunch decimal points

Sys. Id.
77 78 79 80

E CHARACTERISTICS BY TYPE

teristic Codes
4 5
32 33 | 34 35

Service Space Type No.
36 37 38

Service Space Type Name
39 40 41 42 43 44 45 46

Maintenance Cost
47 48 49 50

Service Characteristic Codes
1 2 3 4 5
51 52 | 53 54 | 55 56 | 57 58 | 59 60

wo service space types per line.
e expressed in dollars per square foot, to two decimal places.
neets of this type, as needed, to code all types of service space.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 2 C

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				1	0

COST CENTER SPACE CHARACTERISTICS

Cost Center Level No.	Cost Center Code	Clsrm. Teaching Wk (Hrs.)	Clsrm. Util.	Lab. Teaching Wk (Hrs.)	Lab. Util.	Cost Center Level No.	Cost Center Code	Clsrm. Teaching Wk (Hrs.)	Clsrm. Util.	Lab. Tchn Wk (Hr
11	12 13 14	15 16	17 18	19 20	21 22	23	24 25 26	27 28	29 30	31
47	48 49 50	51 52	53 54	55 56	57 58	59	60 61 62	63 64	65 66	67
11	12 13 14	15 16	17 18	19 20	21 22	23	24 25 26	27 28	29 30	31
47	48 49 50	51 52	53 54	55 56	57 58	59	60 61 62	63 64	65 66	67

Explanation:

(a) Code across the page, three cost centers per line.
(b) Where characteristics apply for all cost centers at one l
(c) Classroom and laboratory utilization is expressed as a pe
(d) Use additional sheets of this type, as needed, to code sp

INNESOTA Input Document

Lines/Card 2 Cards/Sheet 2 | Sheet ___ of ___

s:

Sys. Id. 77 78 79 80

SPACE CHARACTERISTICS

r	Clsrm. Teaching Wk (Hrs.)	Clsrm. Util.	Lab. Tchng. Wk (Hrs.)	Lab. Util.	Cost Level No.	Center Code	Clsrm. Teaching Wk (Hrs.)	Clsrm. Util.	Lab. Teaching Wk (Hrs.)	Lab. Util.
26	27 28	29 30	31 32	33 34	35	36 37 38	39 40	41 42	43 44	45 46
62	63 64	65 66	67 68	69 70						
26	27 28	29 30	31 32	33 34	35	36 37 38	39 40	41 42	43 44	45 46
62	63 64	65 66	67 68	69 70						

enters per line.
l cost centers at one level, code only the level number.
on is expressed as a percentage with no decimal place.
, as needed, to code space characteristics for all cost centers.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				1	1

SERVICE CHARACTERISTICS

Service Code	Service Name	Service Code	Service Name
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30	31 32 33 34 35 36 37 38 39 40 41 42 4

Explanation:
(a) Code across the page, three services per line.
(b) Use additional coding sheets of this type, as neede

ng Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___
ctions:

Sys. Id.

77	78	79	80

CE CHARACTERISTICS

e

Service Name

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46

Service Code

47	48

Service Name

49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

hree services per line.
heets of this type, as needed, to code all services.

Coder _____	Run Number ____	Punching Instructions:	Lines/Card 1 C. Do not keypunch

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				1	2

COST INFORMATION BY SPACE CATEG

Space Category Code	Space Category Name	Construction Cost	Maintenance Cost	Space Category Code	
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30 31	32 33 34 35	36 37	38

Explanation:
a) Code across the page, two space categories per li
b) Construction cost must be expressed in dollars pe
c) Maintenance cost must be expressed as the dollar
d) Use additional coding sheets of this type, as nee

CAMPUS-MINNESOTA Input Document

ng Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___
ctions: Do not keypunch decimal points

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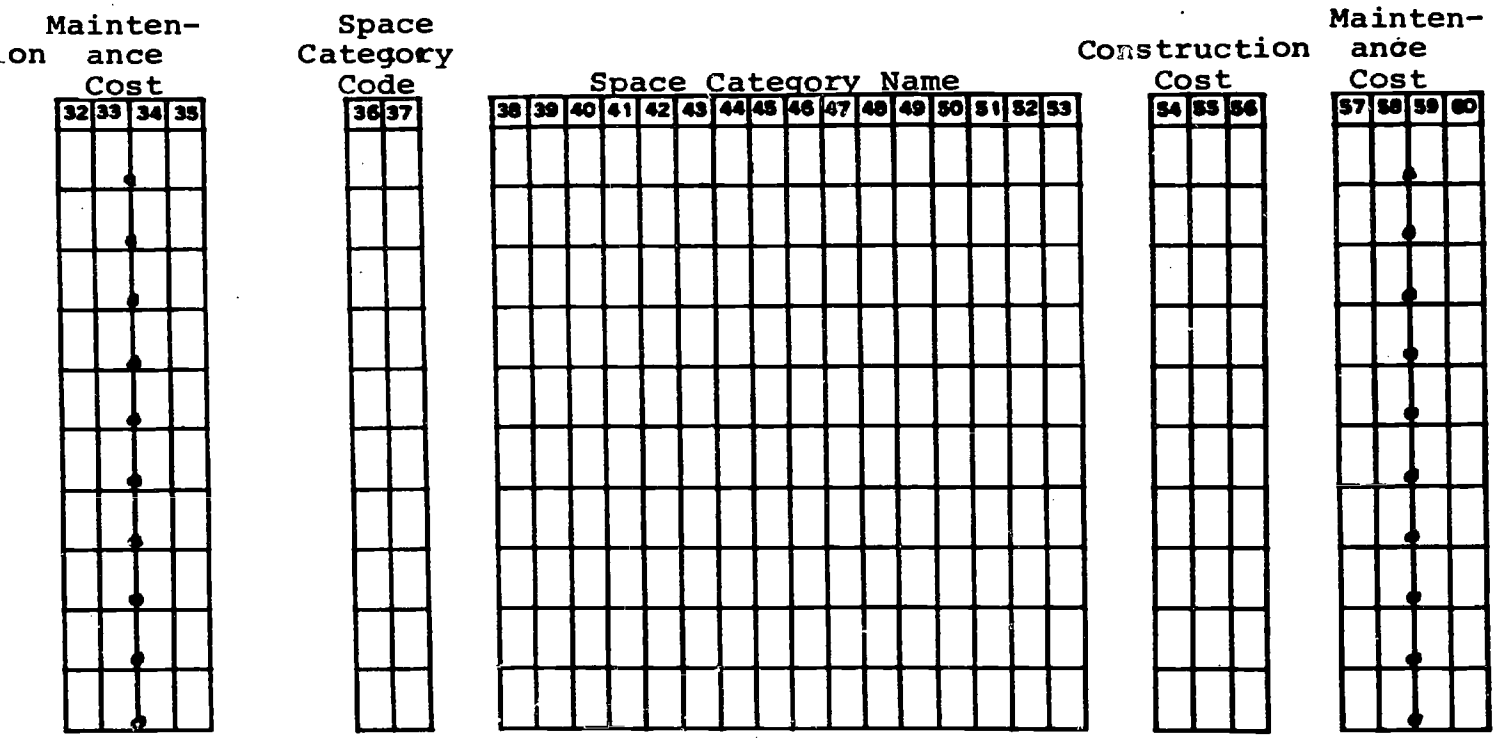
INFORMATION BY SPACE CATEGORY



two space categories per line.
be expressed in dollars per square foot.
be expressed as the dollar cost, to two decimal places, per square foot.
sheets of this type, as needed, to code all space categories.

Coder _____	Run Number _____	Punching Instructions: _____ Lines/Card 1 C

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				1	3

MISCELLANEOUS SPACE SPEC

Classroom Manipulation Desired		Instructional Laboratory Manipulation Desired		Net/Gross Space Percentage	Net to Gross Construction Cost	Office Space Maintenance Cost
By Type?	By Size?	By Type?	By Size?			
11	12	13	14	15 16	17 18 19	20 21 22 23

Explanation:
a) Refer to coding manual.
b) Maintenance cost must be expressed as dollars per sq
c) The net/gross space percentage is a zero decimal pla
d) The net to gross construction cost is expressed as c

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Lines/Card 1 Cards/Sheet 1 | Sheet ___ of ___

Sys. Id. 77 78 79 80

ELLANEOUS SPACE SPECIFICATIONS

on Office Space Maintenance Cost 20 21 22 23

Office Space Service Characteristic Codes

1 24 25 | 2 26 27 | 3 28 29 | 4 30 31 | 5 32 33

Space Policy 34

ed as dollars per square foot, to two decimal places.
s a zero decimal place percentage.
st is expressed as dollars per square foot.

Coder _____	Run Number ____	Punching Instructions:	Lines/Card 1 C

Command Levels

1	2	3	4	5	6	7	8	9	10
S	P	A	C	E				1	4

TEACHING SPACE CONTROL CENTE

Cost Centre			Control Cl.	Control Lab.	over Sp. Lab.
11	12	13	14	16	15

Cost Centre			Control Cl.	Control Lab.	over Sp. Lab.
17	18	19	20	21	22

Cost Centre			Control Cl.	Control Lab.	over Sp. Lab.
23	24	25	26	27	28

Explanation: a) Code across the page, five cost centers per line.
b) Where a cost center controls classroom space and/or l
code a 1. Otherwise code 0.

Lines/Card 1 Cards/Sheet 5 | Sheet ___ of ___

:

Sys. Id.

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NG SPACE CONTROL CENTERS

Cost Centre			Control over Cl.	Lab.	Sp. Lab.
23	24	25	26	27	28

Cost Centre			Control over Cl.	Lab.	Sp. Lab.
29	30	31	32	33	34

Cost Centre			Control over Cl.	Lab.	Sp. Lab.
35	36	37	38	39	40

centers per line.
assroom space and/or laboratories and/or special laboratories

Coder _____ | Session _____ Run Number _____ | Punching Instructions: _____ | Lines/Card 1 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
A	V	L	S	P	A	C	E	0	1

AVAILABLE CLASSROOM SPACE

Cost Ctr. Code (11 12 13)

Clsrm. Type No. (18 19)

No. of Classrooms Available by Size

1	2	3	4	5	6	7	8	9	10
20 21	22 23	24 25	26 27	28 29	30 31	32 33	34 35	36 37	38 39

Explanation:

(a) Code across the page, two classroom types per line and sizes per type.

(b) Where the number of classroom types at a cost center e card information on all lines used.

(c) Columns 14-17 are not used.

PUS-MINNESOTA Input Document

g Lines/Ca 1 1 Cards/Sheet 10 | Sheet ___ of ___
tions:

Sys. Id.
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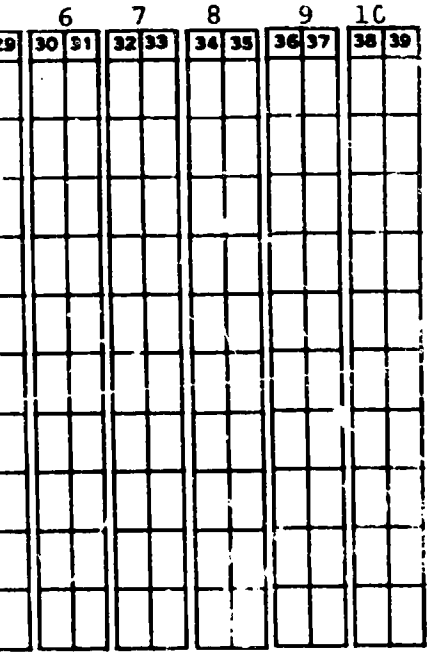
CLASSROOM SPACE

s Available by Size

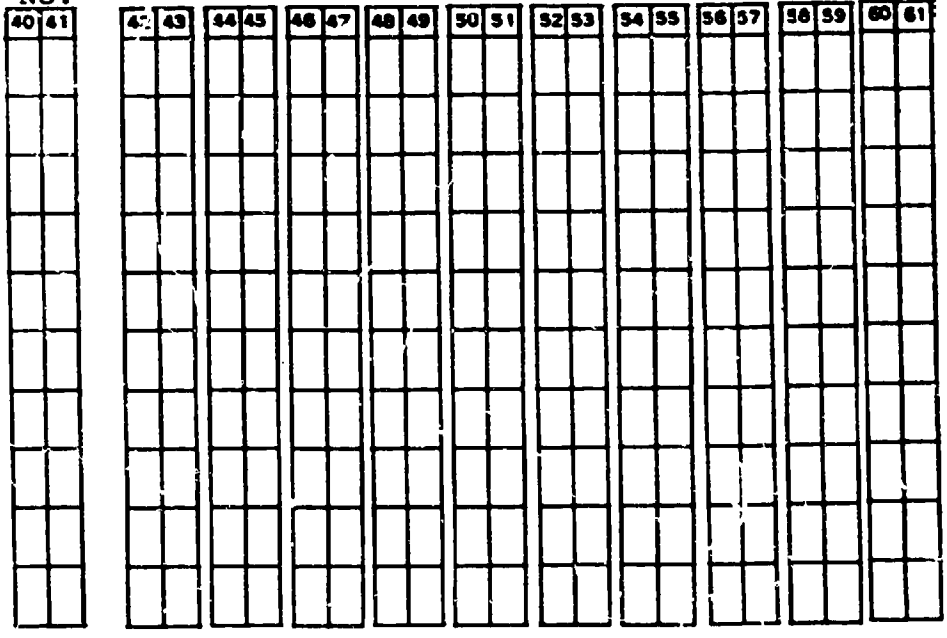
6 7 8 9 10
29 30 31 32 33 34 35 36 37 38 39



Clsrm. Type No. 40 41

No. of Classrooms Available by Size

1 2 3 4 5 6 7 8 9 10
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61



classroom types per line and the inventory of available classrooms of up to ten

room types at a cost center exceeds two, repeat the cost center code and data
nes used.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 3 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
A	V	I	S	P	A	C	E	0	2

AVAILABLE INSTRUCTIONAL LABORATORY S

Cost Ctr. Code	Lab. Type No.	No.
11 12 13	18 19	20 21
	32 33	34 35
	46 47	48 49
11 12 13	18 19	20 21
	32 33	34 35
	46 47	48 49

Explanation:

(a) Code across the page one laboratory type per line, with the six sizes per type.
(b) Special laboratories, as defined in the coding manual, are
(c) Where the number of laboratory types at a cost center excee cost center code card data card information, where called i line that starts in column eleven.
(d) Use additional coding sheets of this type, as needed, to co centers.
(e) Columns 14-17 are not used.

Lines/Card 3 Cards/Sheet 2 | Sheet ___ of ___

ions:

Sys. Id. 77 78 79 80

INSTRUCTIONAL LABORATORY SPACE

Lab. Type No.	No. of Laboratories Available by Size					
	1	2	3	4	5	6
18 19	20 21	22 23	24 25	26 27	28 29	30 31
32 33	34 35	36 37	38 39	40 41	42 43	44 45
46 47	48 49	50 51	52 53	54 55	56 57	58 59
18 19	20 21	22 23	24 25	26 27	28 29	30 31
32 33	34 35	36 37	38 39	40 41	42 43	44 45
46 47	48 49	50 51	52 53	54 55	56 57	58 59

ory type per line, with the inventory of available laboratories of up to

in the coding manual, are not coded on this sheet.
ypes at a cost center exceeds three, use additional lines, repeating the
information, where called for. Begin each cost center inventory on a
n.
th e, as needed, to code the laboratory inventory at all cost

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 3 Cards

Command Levels

1	2	3	4	5	6	7	8	9	10
A	V	L	SP	A	C	E	0	3	

AVAILABLE INSTRUCTIONAL SPECIAL LAB

Cost Ctr. Code	Special Lab. Type No.	No. of 1
11 12 13	18 19	20 21
	32 33	34 35
	46 47	48 49
11 12 13	18 19	20 21
	32 33	34 35
	46 47	48 49

Explanation:

(a) Code across the page, one special laboratory type per line, w of up to six sizes per type.

(b) Where the number of special laboratory types at a cost center repeating the cost center code and data card information when inventory on a line that starts in column eleven.

(c) Use additional coding sheets of this type, as needed, to code at all cost centers.

(d) Columns 14-17 are not used.

-MINNESOTA Input Document

Lines/Card 3 Cards/Sheet 2 | Sheet ___ of ___

Sys. Id. 77 78 79 80

INSTRUCTIONAL SPECIAL LABORATORY SPACE

Special Lab. Type No.	No. of Special Labs. Available by Size					
	1	2	3	4	5	6
18 19	20 21	22 23	24 25	26 27	28 29	30 31
32 33	34 35	36 37	38 39	40 41	42 43	44 45
46 47	48 49	50 51	52 53	54 55	56 57	58 59
18 19	20 21	22 23	24 25	26 27	28 29	30 31
32 33	34 35	36 37	38 39	40 41	42 43	44 45
46 47	48 49	50 51	52 53	54 55	56 57	58 59

boratory type per line, with the inventory of available laboratories

ry types at a cost center exceeds three, use additional lines
ata card information where called for. Begin each cost center
olumn eleven.
type, as needed, to code the inventory of special laboratories

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 2

Command Levels

1	2	3	4	5	6	7	8	9	10
A	V	S	P	A	C	E	0	4	

AVAILABLE SPACE BY CATEGOR

Cost Ctr. Code	Category Number	No. of Sq.ft. Available
11 12 13	18 19 20	21 22 23 24 25 26
	42 43 44	45 46 47 48 49 50
11 12 13	18 19 20	21 22 23 24 25 26
	42 43 44	45 46 47 48 49 50

Explanation:

(a) Code across the page, two space categories per line.
(b) Where the number of space categories at one cost center e
cost center codes and data card information, where called
(c) Use additional coding sheets of this type, as needed, to
centers.
(d) Columns 14-17, 27-29, 39-41 and 51-53 are not used.

US-MINNESOTA Input Document

Lines/Card 2 Cards/Sheet 2 | Sheet ___ of ___

ns: _____

Sys. Id. 77 78 79 80

ILABLE SPACE BY CATEGORY

No. of Sq.ft. Available	Category Number	No. of Sq.ft. Available
21 22 23 24 25 26	30 31 32	33 34 35 36 37 38
45 46 47 48 49 50	54 55 56	57 58 59 60 61 62
21 22 23 24 25 26	30 31 32	33 34 35 36 37 38
45 46 47 48 49 50	54 55 56	57 58 59 60 61 62

tegories per line.
es at one cost center exceeds four, use additional lines repeating the
formation, where called for.
is type, as needed, to code the inventory of space categories at all cost

re not used.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 1

Command Levels

1	2	3	4	5	6	7	8	9	10
S	E	R	V	I	C	E		0	1

SERVICE DEPARTMENT CHARAC

Service Dept. Code

11	12

Service Department Name

13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

Cost Ctr. Level of Affil.

29

I

30	31	32

Cost C

33

Explanation:

(a) Code across the page, one service department per line
(b) Where service department is affiliated at more than o separate department at each level.
(c) Where service department is affiliated with all cost cost centers of affiliation blank.
(d) Use additional coding sheets of this type, as needed,

CAMPUS-MINNESOTA Input Document

ching Lines/Card 1 Cards/Sheet 10 tructions:	Sheet ___ of ___

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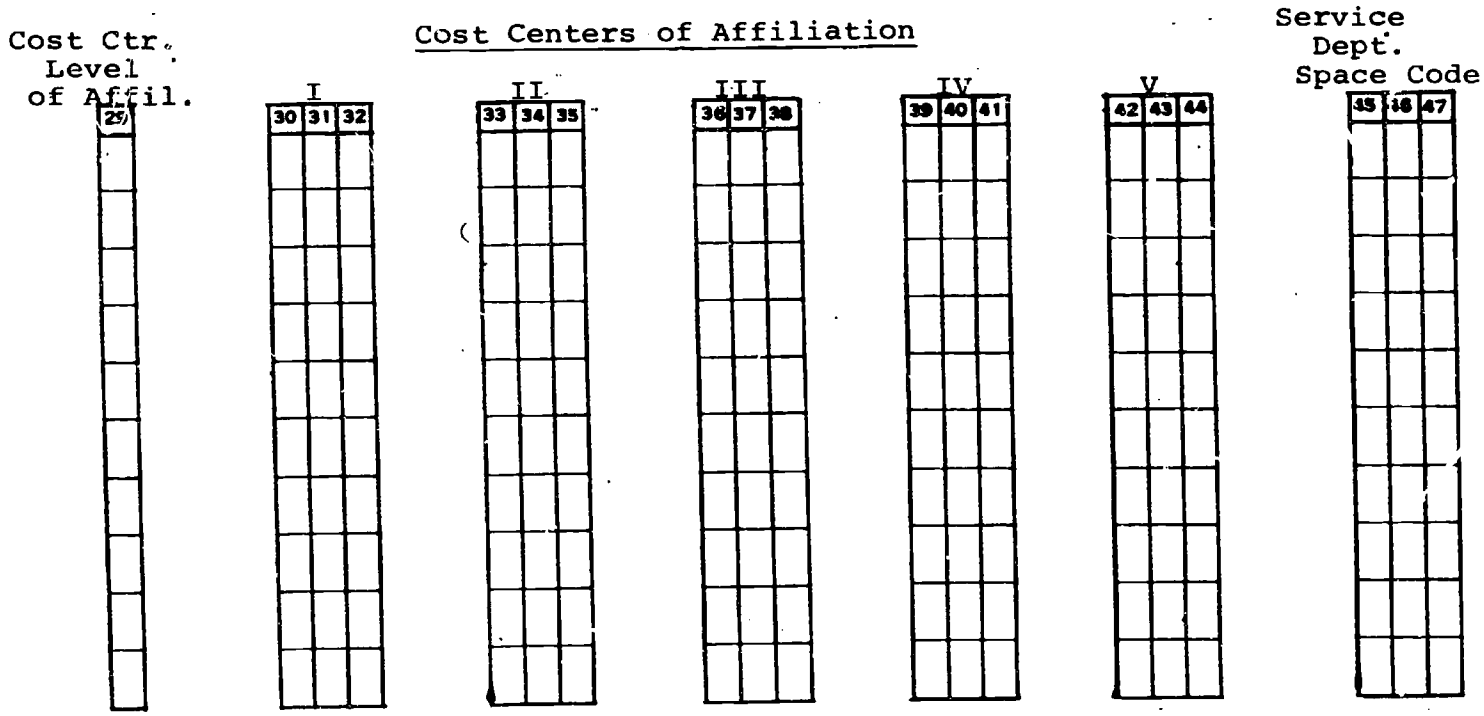
ERVICE DEPARTMENT CHARACTERISTICS



service department per line.
is affiliated at more than one cost center level it must be redefined as a
ch level.
is affiliated with all cost centers at one level, code only the level; leave
on blank.
eets of this type, as needed, to code all service departments.

Coder _____	Session _____ Run Number ____	Punching Instructions:	Lines/Card 1 Card Decimal points are n

Command Levels

1	2	3	4	5	6	7	8	9	10
S	E	R	V	I	C	E		0	2

SERVICE DEPARTMENT STAFF CHARACTERISTICS

Service Dept. Code	Staff Code	Staff Name	Staff Salary	Staff Office Planning Factor	Prop'l Basis	Quantity
11 12	13 14	15 16 17 18 19 20 21 22	23 24 25	26 27 28	29 30	31 32 33 34 35

Explanation:

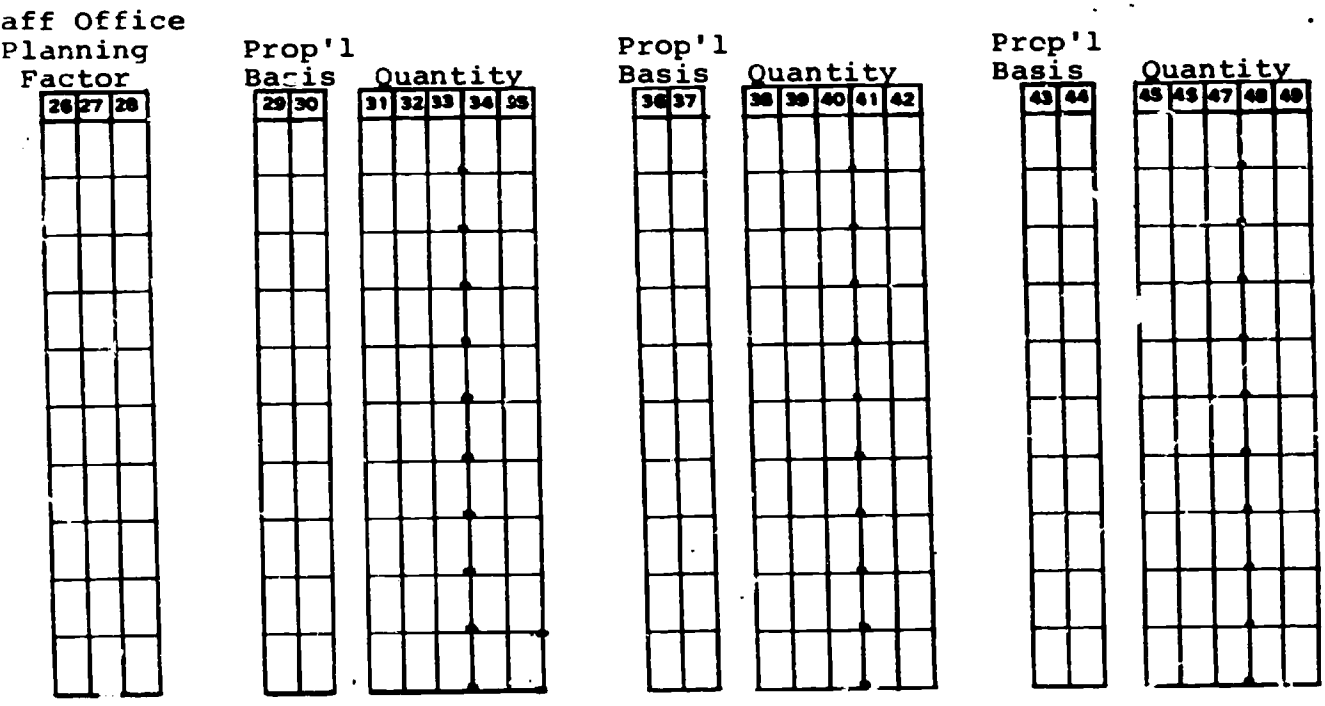
(a) Code across the page, one staff type per line
(b) Staff salary must be expressed in hundreds of dollars; of
(c) Quantity must be expressed to two decimal places. At leas
specified for each staff type.
(d) Use additional coding sheets of this type, as needed, to

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

ions: Decimal points are not to be keypunched

Sys. Id. 77 78 79 80

TMENT STAFF CHARACTERISTICS



aff type per line
d in hundreds of dollars; office planning factor, in square feet.
two decimal places. At least one proportional basis and quantity must be

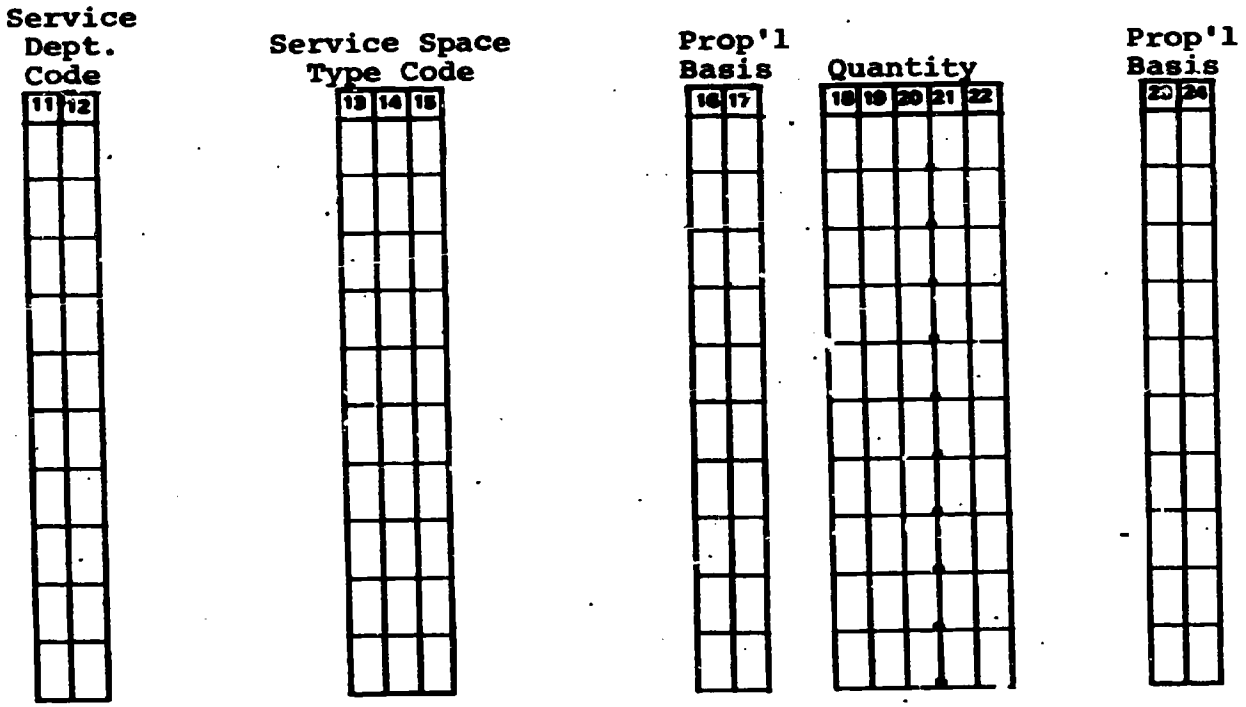
of this type, as needed, to code all types of service department staff.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Ca Decimal points are

Command Levels

1	2	3	4	5	6	7	8	9	10
S	E	R	V	I	C	E		0	3

SERVICE DEPARTMENT SPACE CHARACTERISTI



Explanation:

(a) Code across the page, one space type per line.
(b) Quantity must be expressed to two decimal places. At least one propor be specified for each space type. Quantity is in square feet.
(c) Use additional coding sheets of this type, as needed, to code all serv

S-MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 10
: Decimal points are not to be keypunched

Sheet ___ of ___

Sys. Id.
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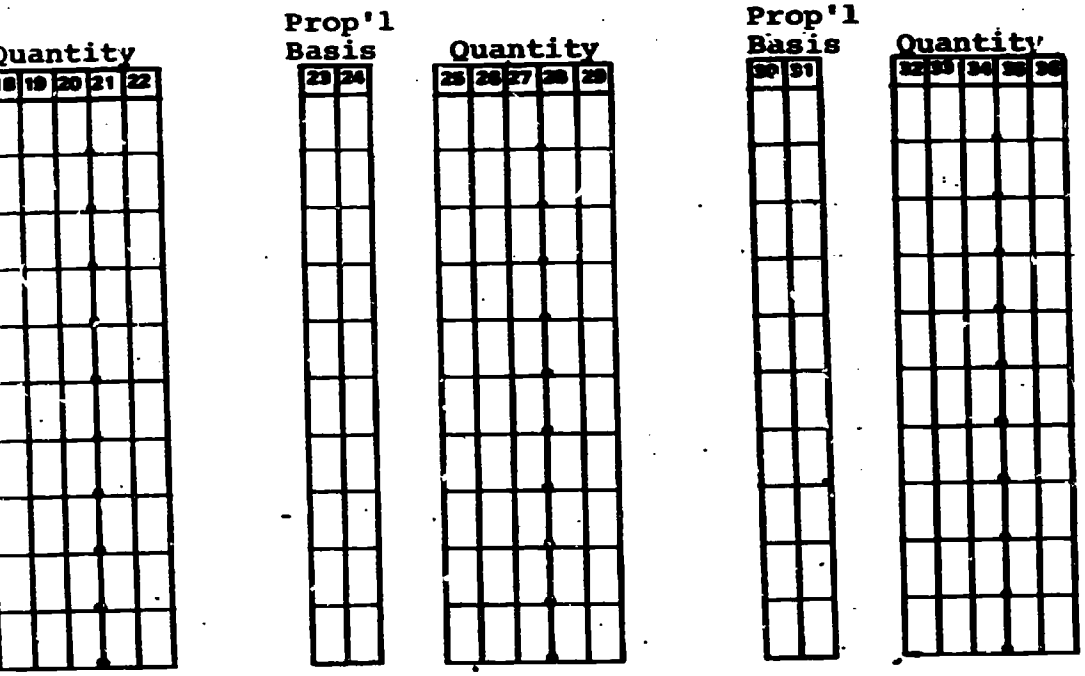
T SPACE CHARACTERISTICS



e.
aces. At least one proportional basis and quantity must
is in square feet.
s needed, to code all service department types of space.

Coder _____	Session _____ Run Number _____	Punching Instructions: Lines/Card 1 Cards Decimal points are not

Command Levels

1	2	3	4	5	6	7	8	9	10
S	E	R	V	I	C	E		0	4

SERVICE DEPARTMENT EQUIPMENT CHARACTERI

Service Dept. Code	Equipment Type Code	Equipment Name	Annual Operating Cost	Prop'l Basis	Quantity
11 12	13 14	15 16 17 18 19 20 21 22	23 24 25 26 27	28 29	30 31 32 33 34

Explanation:

(a) Code across the page, one equipment type per line.
(b) Annual operating cost is the real dollar cost of operating one
(c) Quantity must be expressed to two decimal places. At least one specified for each equipment type.
(d) Use additional coding sheets of this type, as needed, to code a

US-MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

ons: Decimal points are not to be keypunched

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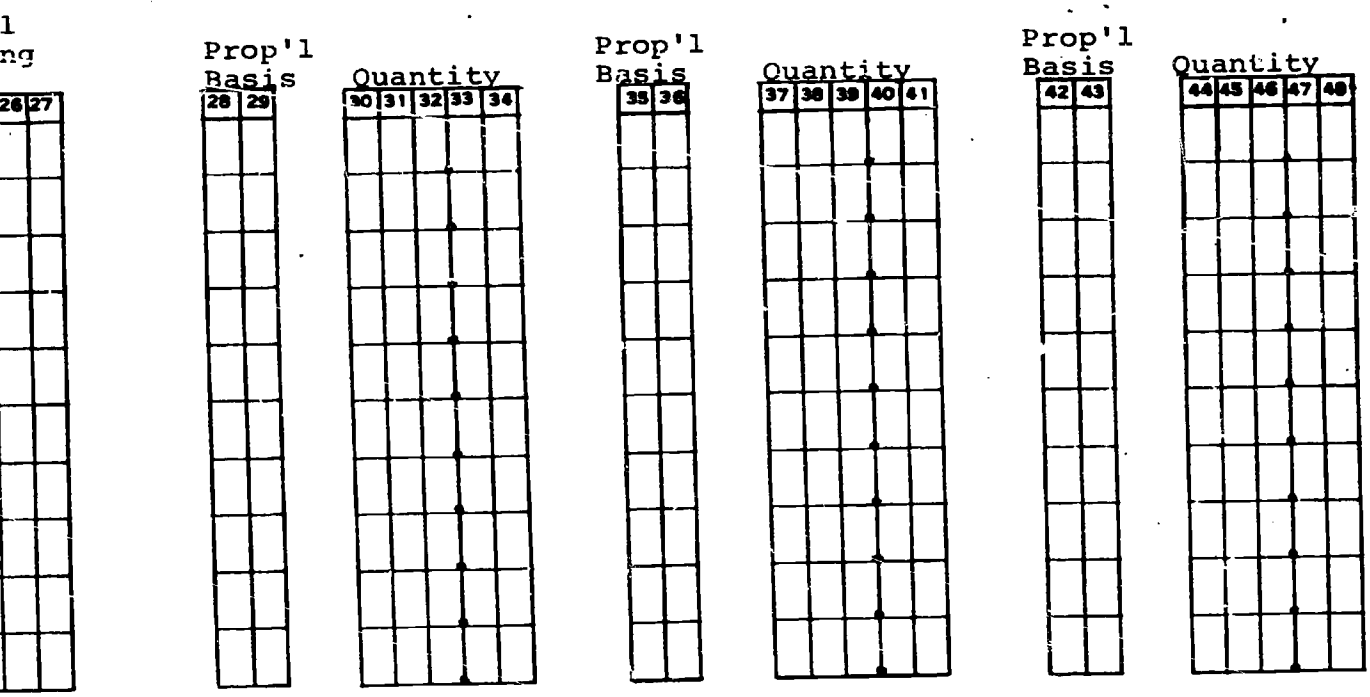
TMENT EQUIPMENT CHARACTERISTICS



type per line.
ollar cost of operating one unit of the specified equipment for one year.
ecimal places. At least one proportional basis and quantity must be

s type, as needed, to code all types of service department equipment.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____ Lines/Card 1 Cards

Command Levels

1	2	3	4	5	6	7	8	9	10
E	Q	U	I	P	M	E	N	T	1

TEACHING EQUIPMENT RESOURCE CHARACTERISTICS

Equip. Type Code	Equipment Type Name	Avail-ability	Operating Cost	Equip. Type Code
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30	31 32 33 34 35	36 37 38 39

Explanation:

(a) Code across the page, two equipment types per line.
(b) Availability is expressed in hours per week per equipmer
(c) Operating cost is expressed in terms of the annual opera

PUS-MINNESOTA Input Document

Lines/Card 1 Cards/Sheet 8

Sheet___of___

Sys. Id.

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PMENT RESOURCE CHARACTERISTICS

ating ost 33 34 35	Equip. Type Code 36 37	Equipment Type Name 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	Avail- ability 54 55	Operating Cost 56 57 58 59 60

ipment types per line.
hours per week per equipment unit.
n terms of the annual operating cost per equipment unit,

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 1 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
R	E	V	E	N	U	E		C	1

CHARACTERISTICS OF REVENUE

Revenue Type	Revenue Name			Restricted or Unrestricted	Prop'l Basis	Revenue Type
11 12	13 14 15 16 17 18 19 20	21 22 23 24 25 26 27 28		29	30 31	32 33

Explanation:

(a) Code across the page, two revenue types per line.
(b) Restricted is indicated by 1, unrestricted by 0.

CAMPUS-MINNESOTA Input Document

ing uctions: Lines/Card 1 Cards/Sheet 5	Sheet ___ of ___

Sys. Id. 77 78 79 80

ACTERISTICS OF REVENUE

icted r res- icted 29	Prop'l Basis 30 31	Revenue Type 32 33	Revenue Name 34 35 36 37 38 39 40 41	42 43 44 45 46 47 48 49	Restricted or Unres- tricted 50	Prop'l Basis 51 52

enue types per line.
unrestricted by 0.

Coder _____ | Session _____ Run Number _____ | Punching Instructions: _____ Lines/Card

Command Levels

1	2	3	4	5	6	7	8	9	10
R	E	VE	N	U	E			0	2

REVENUE AT COST CENTERS

Cost Ctr. Level	Cost Ctr. Code	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Ty
11	12 13 14	15 16	17 18 19 20 21	22 23	24 25 26 27 28	29 30	31 32 33 34 35	36 37	38 39 40 41 42	43

Explanation:

(a) Code across the page, eight revenue types per line
(b) Where revenue information applies to all cost cent
(c) Where the number of revenue types for one cost cen code on all lines used.
(d) If the revenue type proportional basis is absolute otherwise, in tens of dollars.
(e) Use additional coding sheets of this type, as need

Lines/Card 1 Cards/Sheet 10

ons:

Sheet ___ of ___

Sys. Id.

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NUE AT COST CENTERS

Revenue Type		Revenue Value				
36	37	38	39	40	41	42

Revenue Type		Revenue Value				
43	44	45	46	47	48	49

Revenue Type		Revenue Value				
50	51	52	53	54	55	56

Revenue Type		Revenue Value				
57	58	59	60	61	62	63

Revenue Type		Revenue Value				
64	65	66	67	68	69	70

evenue types per line.
lies to all cost centers at one level, leave the cost center code blank.
ypes for one cost center exceeds eight, repeat the cost center level and

nal basis is absolute, the value must be expressed in thousands of dollars;

of this type, as needed, to code revenue at all cost centers.

Coder _____ | Session _____ Run Number _____ | Punching Instructions: _____ Lines/Card 1 Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
R	E	V	E	N	U	E		0	3

REVENUE AT PROGRAMS

Program Level	Program Code	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Reve
11	12 13 14	15 16	17 18 19 20 21	22 23	24 25 26 27 28	29 30	31 32 33 34 35	36 37	38 39 40 41 42	43 44	45

Explanation:

(a) Code across the page, eight revenue types per line.
(b) Where revenue information applies to all programs at
(c) Where the number of revenue types for one program ex
on all lines used.
(d) If the revenue type proportional basis is absolute,
dollars; otherwise, in tens of dollars.
(e) Use additional coding sheets of this type, as needed

CAMPUS-MINNESOTA Input Document

ng Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___
ctions: _____

Sys. Id.

77	78	79	80

REVENUE AT PROGRAMS

lue		Revenue Type	Value					Revenue Type	Value					Revenue Type	Value					Revenue Type	Value					Revenue Type	Value				
34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70

ght revenue types per line.
n applies to all programs at one level, leave the program code blank.
enue types for one program exceeds eight, repeat the program level and code

portional basis is absolute, the value must be expressed in thousands of
tens of dollars.
heets of this type, as needed, to code revenue for all programs.

Coder _____	Session _____ Run Number _____	Punching Instructions: _____	Lines/Card 1 Card

Command Levels

1	2	3	4	5	6	7	8	9	10
R	E	V	E	N	U	E		0	4

REVENUE AT THE SERVICE DEPARTMENTS

Service Dept. Code	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Value	Revenue Type	Revenue Va
11 12	13 14	15 16 17 18 19	20 21	22 23 24 25 26	27 28	29 30 31 32 33	34 35	36 37 38 39 40	41 42	43 44

Explanation:

(a) Code across the page, eight revenue types per line.
(b) Where the number of revenue type for one service depar
code on all lines used.
(c) If the revenue type proportional basis is absolute, th
otherwise, in tens of dollars.
(d) Use additional coding sheets of this type,as needed, t

NESOTA Input Document

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

s:

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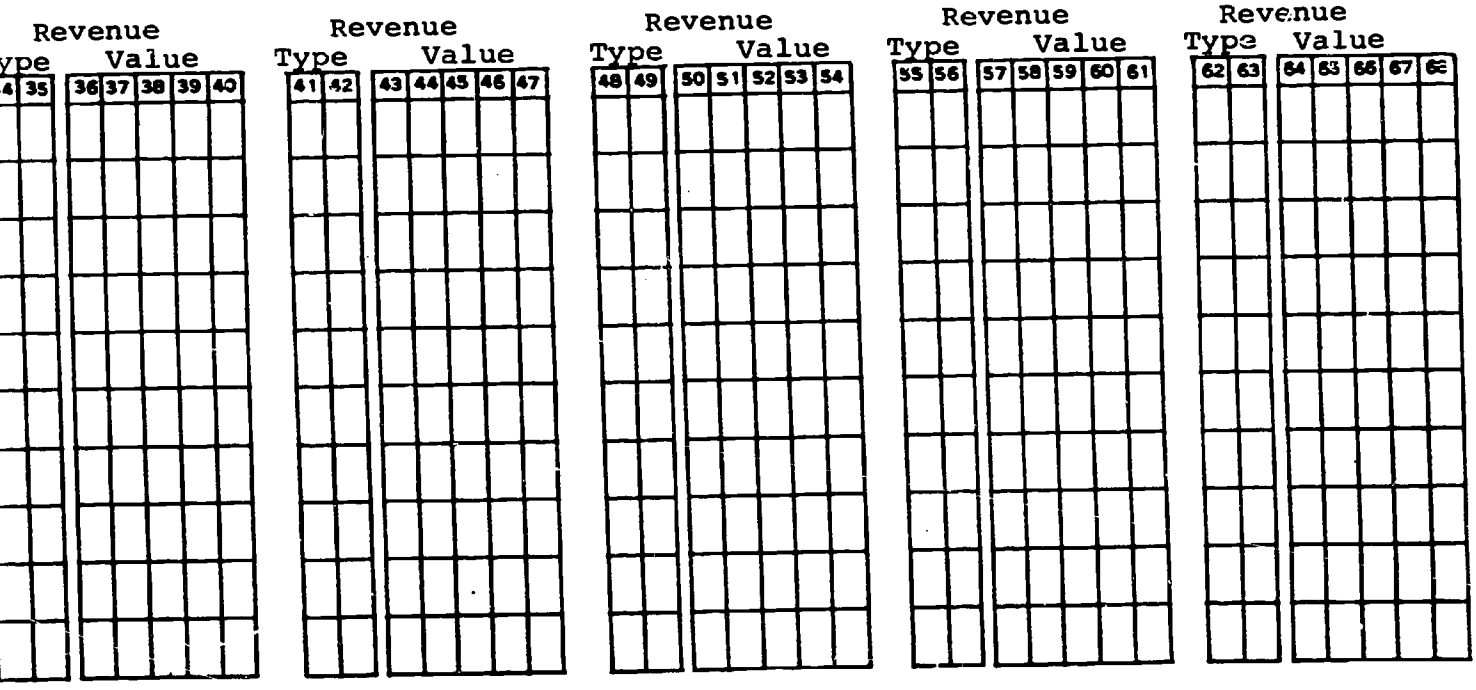
THE SERVICE DEPARTMENTS



evenue types per line.
ype for one service department exceeds eight, repeat the service department

nal basis is absolute, the value must be expressed in thousands of dollars;

of this type,as needed, to code revenue for all service departments.

Coder _____	Session _____ Run Number _____	Punching Instructions:	Lines/Card 1 Car

Command Levels

1	2	3	4	5	6	7	8	9	10
M	I	S	C	E	L	L	A	0	1

MISCELLANEOUS RESOURCE CHARACTERI

Misc. Type Code	Type Name	Proportional Basis	Misc. Type Code
11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30	11 12

Explanation:

(a) Code across the page, two types per sheet of miscellaneou
not activities.

(b) Use additional sheets of this type, as needed, to code al

I.NNESOTA Input Document

Lines/Card 1 Cards/Sheet 2 | Sheet ___ of ___

s:

Sys. Id.

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EOUS RESOURCE CHARACTERISTICS

tional is	Misc. Type Code	Type Name	Proportional Basis
30	11 12	13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	29 30

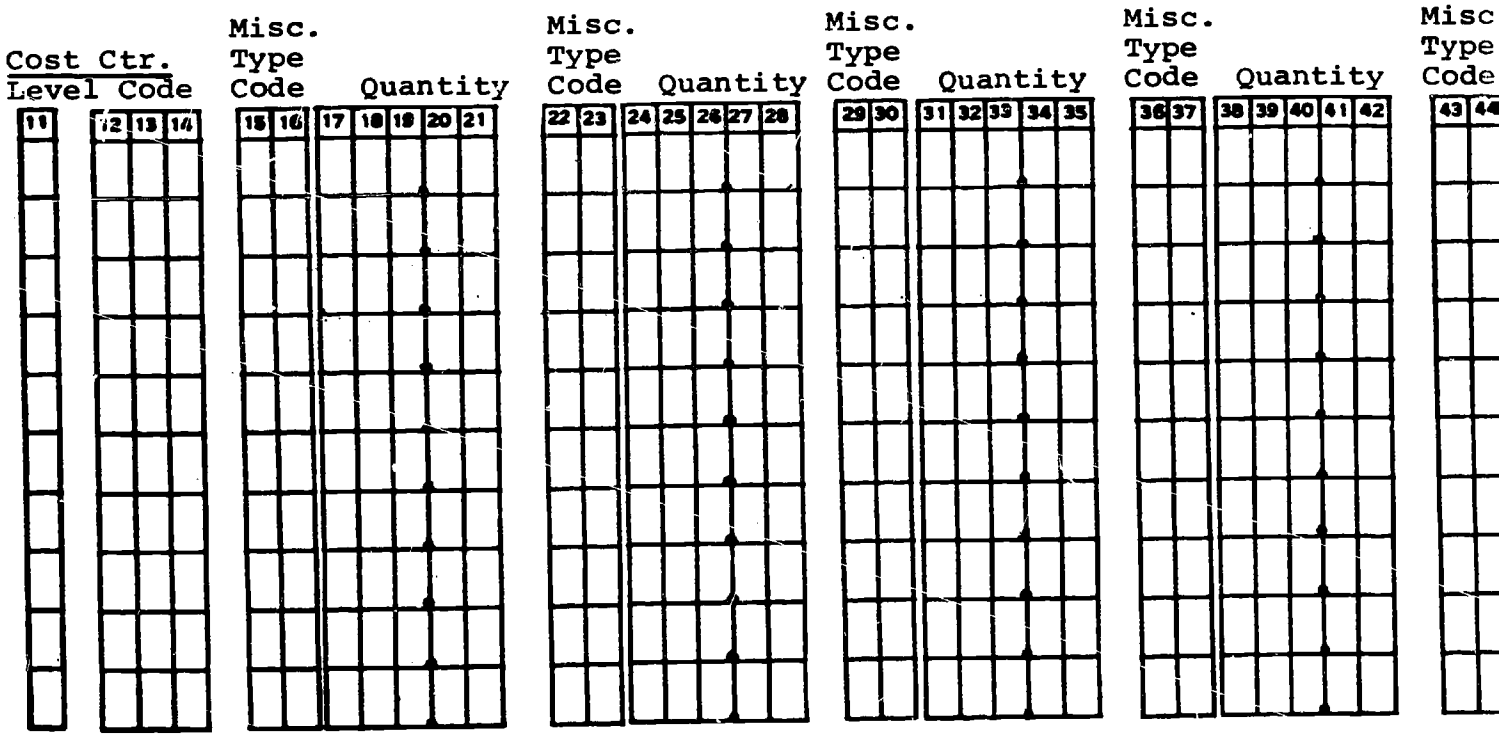
per sheet of miscellaneous resources that are attached to cost centers;
pe, as needed, to code all miscellaneous resource types.

Coder _____ | Session _____ Run Number _____ | Punching Instructions: Lines/Card 1 Decimal points a

Command Levels

1	2	3	4	5	6	7	8	9	10
M	I	S	C	E	L	L	A	0	2

MISCELLANEOUS RESOURCES BY



Explanation:

(a) Code across the page, eight miscellaneous resources per
(b) If the number of resources at each cost center exceeds beginning of each line used.
(c) Where miscellaneous resources apply to all cost centers
(d) Quantity must be expressed to two decimal places.
(e) Use additional coding sheets of this type, as needed, t

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

ons: Decimal points are not to be keypunched

Sys. Id. 77 78 79 80

ELLANEOUS RESOURCES BY COST CENTER

Misc. Type Code	Quantity	Misc. Type Code	Quantity	Misc. Type Code	Quantity	Misc. Type Code	Quantity	Misc. Type Code	Quantity
36 37	38 39 40 41 42	43 44	45 46 47 48 49	50 51	52 53 54 55 56	57 58	59 60 61 62 63	64 65	66 67 68 69 70

ellaneous resources per line.
ch cost center exceeds eight, repeat the cost center level and code at the

ply to all cost centers at one level, code only the cost center level.

o decimal places.
this type, as needed, to code miscellaneous resources at all cost centers.

CAMPUS-MINNESOTA Reporting Control

Coder _____	Run Number ____	Punching Instructions:	Lines/Card_

Command Levels

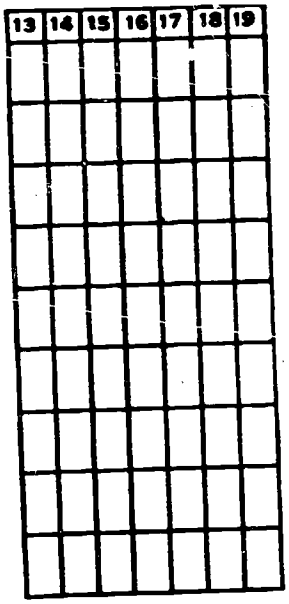
1	2	3	4	5	6	7	8	9	10
I	N	R	E	P	O	R	T	0	1

INPUT REPORT CONTROL

Input Type of Report

Report Frequency Control

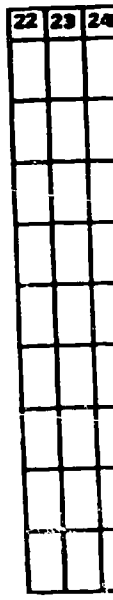
Report Sub-Type Control



Input Type of Report

Report Frequency Control

Re Sub Co



CAMPUS-MINNESOTA Report Control Document

Lines/Card 1 Cards/Sheet 9 | Sheet ___ of ___

ns: _____

Sys. Id.

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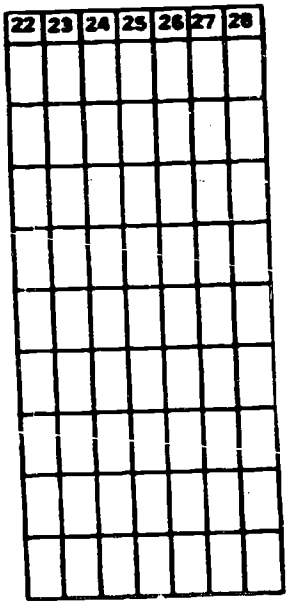
UT REPORT CONTROL

Report Frequency Control

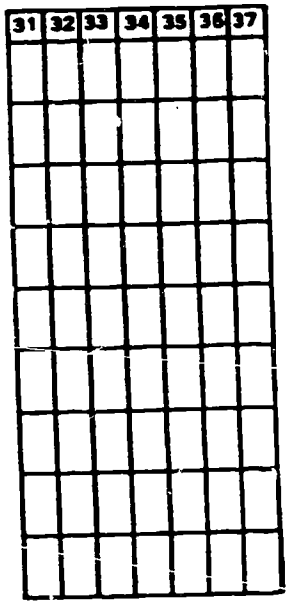
Report Sub-Type Control



Input Type of Report

Report Frequency Control

Report Sub-Type Control



Coder _____	Run Number ____	Punching Instructions:	Lines/Ca

Command Levels

1	2	3	4	5	6	7	8	9	10
I	N	R	E	P	O	R	T	0	2

I N P U T C O M M E N

Experiment Descriptio

11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

CAMPUS-MINNESOTA Report Control Document

ons:	Lines/Card 1 Cards/Sheet 3	Sheet ___ of ___

Sys. Id.

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COMMENT

nt Description

Sequence Check

37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71

Coder _____	Run Number _____	Punching Instructions: _____ Lines/Card 2 C.

Command Levels

1	2	3	4	5	6	7	8	9	10
O	U	T	R	E	P	O	R	0	1

OUTPUT REPORT CONTROL

Cost Ctr. Level Code | Output Report Type | Output Report Sub-type

11	12 13 14	15	16	17	18	19	20
41	42 43 44	45	46	47	48	49	50
11	12 13 14	15	16	17	18	19	20
41	42 43 44	45	46	47	48	49	50
11	12 13 14	15	16	17	18	19	20
41	42 43 44	45	46	47	48	49	50

Cost Ctr. Level Code | Output Report Type | Output Repor

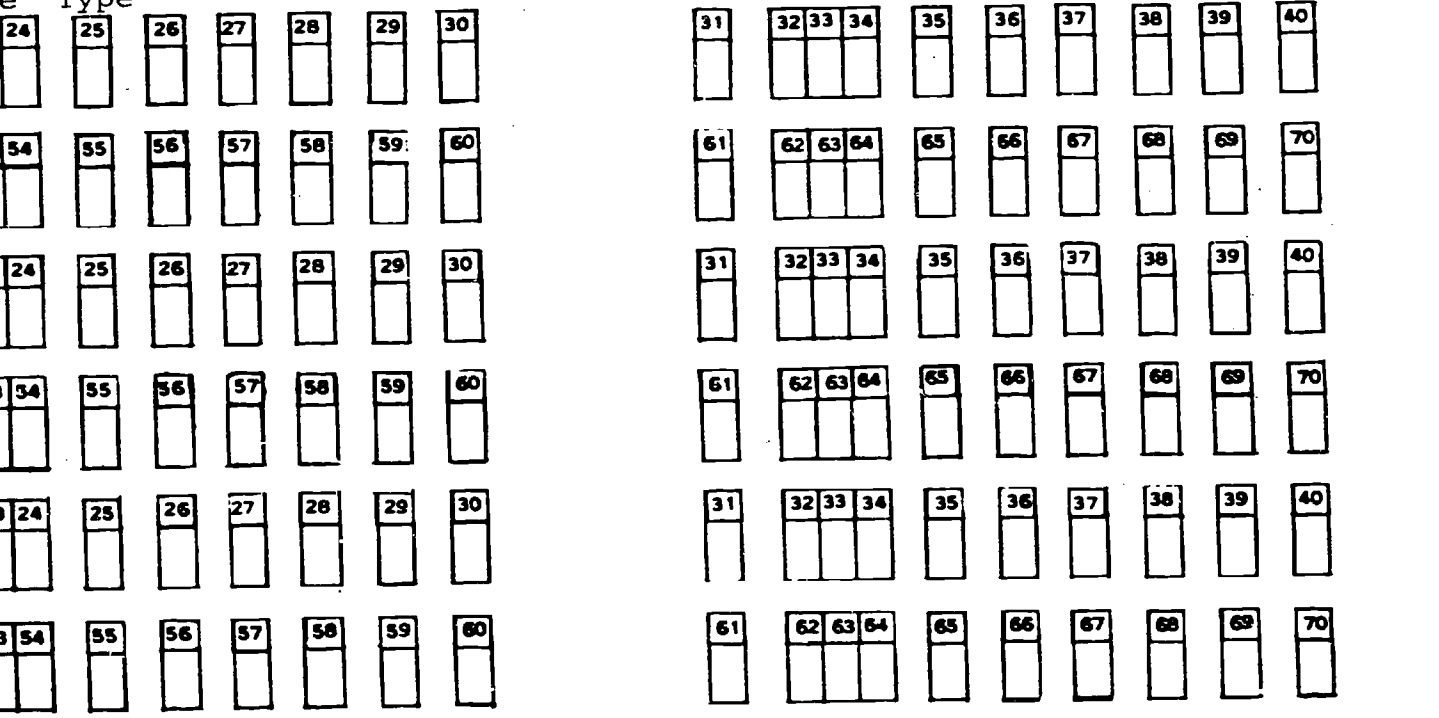
21	22 23 24	25	26	27	28	29
51	52 53 54	55	56	57	58	59
21	22 23 24	25	26	27	28	29
51	52 53 54	55	56	57	58	59
21	22 23 24	25	26	27	28	29
51	52 53 54	55	56	57	58	59

MPUS-MINNESOTA Report Control Document

Lines/Card 2 Cards/Sheet 3 | Sheet ___ of ___

Sys. Id. 77 78 79 80

OUTPUT REPORT CONTROL



Coder _____	Run Number ____	Punching Instructions:	Lines/Card 2

Command Levels

1	2	3	4	5	6	7	8	9	10
O	U	T	R	E	P	O	R	0	2

OUTPUT REPORT

Program Level	Program Code	Output Report Type	Output Report Subtype					
11	12 13 14	15	16	17	18	19	20	
41	42 43 44	45	46	47	48	49	50	
11	12 13 14	15	16	17	18	19	20	
41	42 43 44	45	46	47	48	49	50	
11	12 13 14	15	16	17	18	19	20	
41	42 43 44	45	46	47	48	49	50	

Program Level	Program Code	Output Report Type	Output Report Subtyp					
21	22 23 24	25	26	27	28			
51	52 53 54	55	56	57	58			
21	22 23 24	25	26	27	28			
51	52 53 54	55	56	57	58			
21	22 23 24	25	26	27	28			
51	52 53 54	55	56	57	58			

US-MINNESOTA Report Control Document

Lines/Card 2 Cards/Sheet 1 | Sheet ___ of ___

ns:

Sys. Id.

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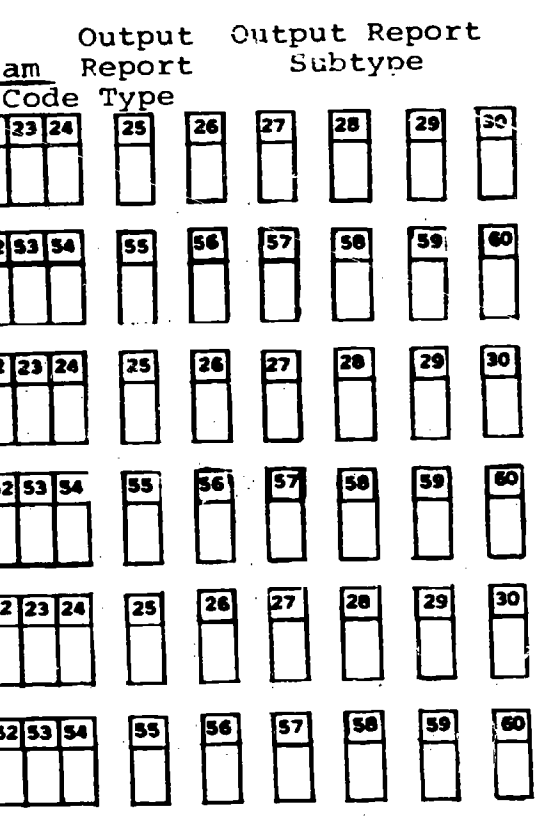
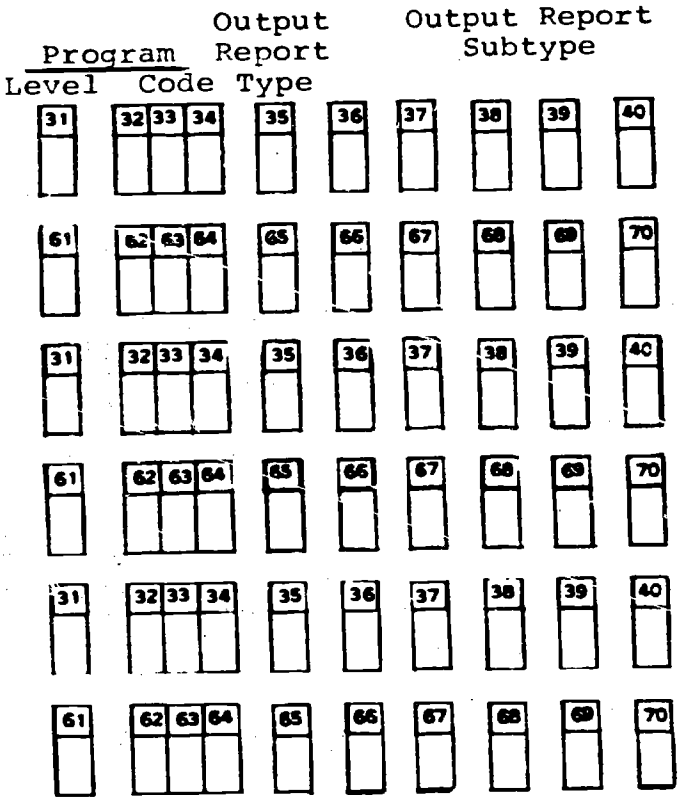
OUTPUT REPORT CONTROL

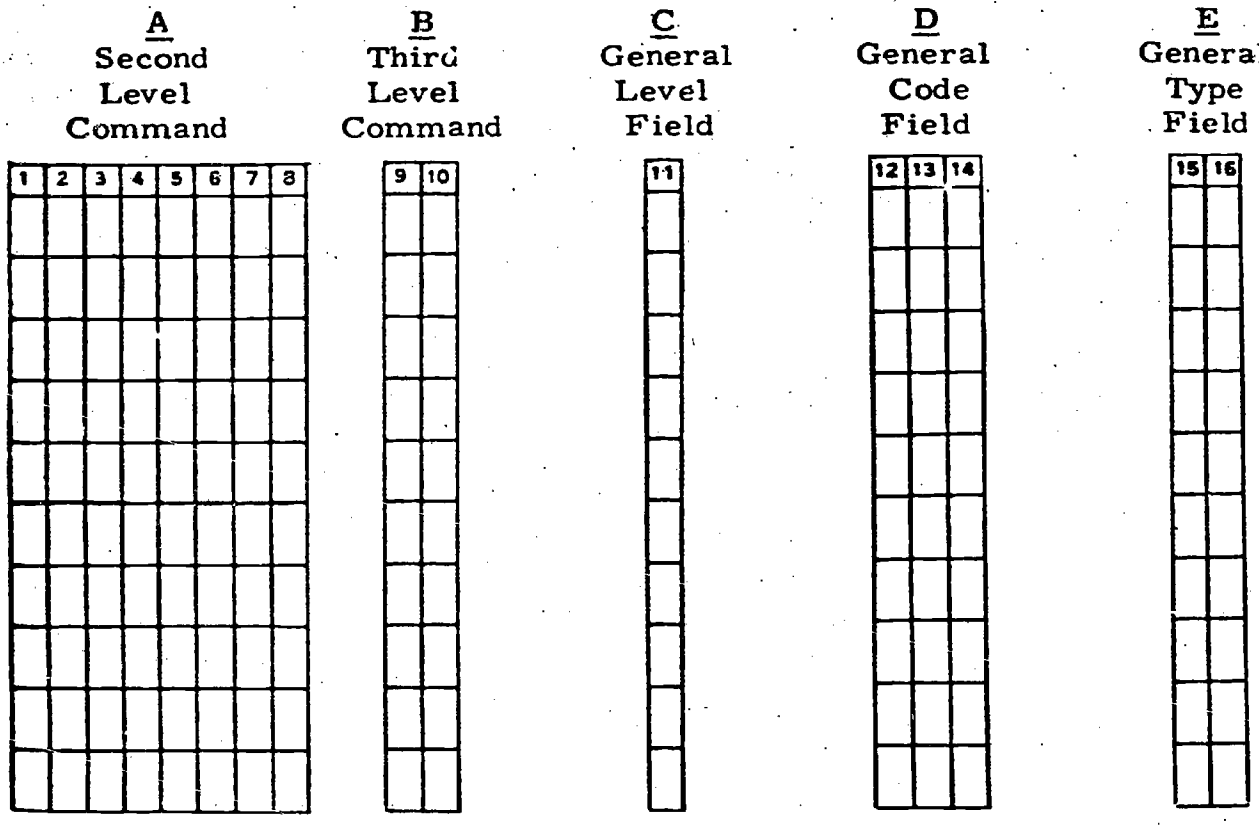




CAMPUS-MINNESOTA Experiment Documents

Coder ____ _____	Run Number ____	Punching Instructions:	Lines/

GENERAL EXPERIMENT



Explanation

(a) Code across the page, one experiment per line.

(b) The fields are labelled A to H. For the correct inform combination of fields, to design an unique experiment,

(c) Use additional coding sheets of this type, as needed, tc

xument

Card___ Cards/Sheet___ | Sheet___of___

Sys. Id.

77	78	79	80

CODING SHEET

F
Percentage Increment Change

17	18	19	20	21

G
Absolute Increment Change

22	23	24	25	26

H
Change to Value

27	28	29	30	31

ıation that should be coded in the right
please consult the coding manual.
› code additional experiments.

CAMPUS-MINNESOTA

Coder_____	Session _____ Run Number_____	Punching Instructions:_____

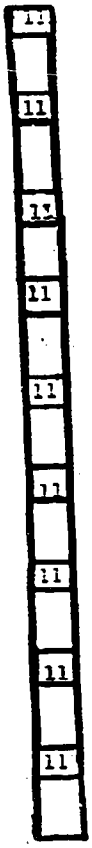
Command Levels

1	2	3	4	5	6	7	8	9	10
0	T	I	M	E				0	1

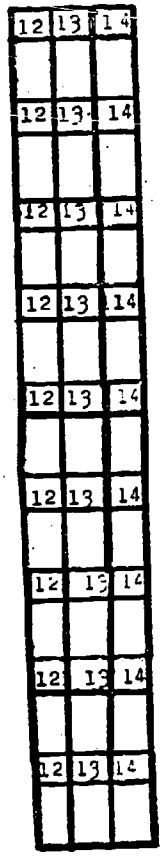
COST CENTER

Cost Center

Level



Code



INPUT DOCUMENT

Lines/Card 1 Cards/Sheet 10 | Sheet ___ of ___

Sys. Id.

OUTPUT REPORTS OVER TIME

Over Time Report Types