

HIGHER EDUCATION FACILITIES IN ALASKA 1971 - 1972

INTRODUCTION

Under the Comprehensive Planning Program of the Alaska Higher Education Facilities Commission, ISEGR conducts a periodic inventory of higher education facilities in Alaska. The initial inventory for the academic years 1967-1969 was reported November, 1969.¹ Supplements for the years 1969-1970 and 1970-1971 report increases in available facilities.^{2,3} While ISEGR has been responsible for the implementation and reporting of inventories, the Office of Planning and Institutional Studies of the University of Alaska, which routinely gathers much of the information needed, has played a substantial role in data collection for the inventory supplements.

During the 1972-1973 academic year it is anticipated that ISEGR and the Office of Planning and Institutional Studies will coordinate efforts to replicate the initial inventory. Among other advantages, it is hoped that this coordination will facilitate a more sophisticated level of utilization of computer technology than was available at the time of the initial inventory.

¹Janice Morrow, Higher Education Facilities in Alaska, ISEGR, College, Alaska. (November, 1969), unpublished report.

²Thomas Woodruff and Rosemary Hobson, Higher Education Facilities in Alaska 1969 - 1970, ISEGR, College, Alaska (September, 1970) unpublished report.

³Joseph E. Hoffman, Higher Education Facilities in Alaska 1970 - 1971, ISEGR, College, Alaska (June 1, 1971), unpublished report.

SPACE INCREASE AT UNIVERSITY OF ALASKA, FAIRBANKS, 1970

TABLE 1

INVENTORY OF PHYSICAL FACILITIES

Organizational Unit and Subject Field	Total Net Assignable Sq. Ft. (2)	TYPE OF ROOM				
		100 Classroom (including teaching Auditoriums) (3)	200 Laboratory (4)	300 Office (5)	400 Study (6)	500 Special Use (7)
(1) 1000 DEPTS. OF INSTRUC. & RESEARCH - TOTAL	0	0	0	0	0	0
1100 General or Unclassified	0	0	0	0	0	0
1200 Life Sciences	0	0	0	0	0	0
1300 Math., Computer, Phys., Enginr., Sci.	0	0	0	0	0	0
1400 Behavioral Sciences	0	0	0	0	0	0
1500 Humanities	0	0	0	0	0	0
1600 Professions	0	0	0	0	0	0
1700 Technical-Vocational	0	0	0	0	0	0
1800 Phys. Education & Military Sci.	0	0	0	0	0	0
2000 ORGANIZED ACTIVITY UNITS	0	0	0	0	0	0
3000 ORGANIZED RESEARCH UNITS - TOTAL	0	0	0	0	0	0
1100 General or Unclassified	0	0	0	0	0	0
1200 Life Sciences	0	0	0	0	0	0
3300 Math., Computer, Phys., Engr., Sci.	0	0	0	0	0	0
3400 Behavioral Sciences	0	0	0	0	0	0
3500 Humanities	0	0	0	0	0	0
3600 Professions	0	0	0	0	0	0
3700 Technical-Vocational	0	0	0	0	0	0
3800 Phys. Education & Military Sci.	0	0	0	0	0	0
4000 PUBLIC SERVICE UNITS	0	0	0	0	0	0
5000 LIBRARY	0	0	0	0	0	0
6000 GEN. ADMIN. & INSTITUTIONAL SERVICES	62,000	0	0	0	0	0
7000 AUXILIARY SERVICES	88,704	0	0	0	0	0
8000 NON-INSTITUTIONAL AGENCIES	0	0	0	0	0	0
9000 UNASSIGNED	0	0	0	0	0	0
GRAND TOTAL ASSIGNABLE	150,704	0	0	0	0	0

UNIVERSITY OF ALASKA, FAIRBANKS

TABLE 1 (Continued)

		TYPE OF ROOM						
		600 General-Use			700	800	900 Residential	
630-635	640-645	650-670	Other	Supporting	Medical	910	920-930	
Food (8)	Health (9)	Lounge and Recreation (10)	(11)	(12)	Care (13)	Single Person (14)	Family Units (15)	
0	0	0	0	0	0	0	0	1000
0	0	0	0	0	0	0	0	1100
0	0	0	0	0	0	0	0	1200
0	0	0	0	0	0	0	0	1300
0	0	0	0	0	0	0	0	1400
0	0	0	0	0	0	0	0	1500
0	0	0	0	0	0	0	0	1600
0	0	0	0	0	0	0	0	1700
0	0	0	0	0	0	0	0	1800
0	0	0	0	0	0	0	0	2000
0	0	0	0	0	0	0	0	3000
0	0	0	0	0	0	0	0	3100
0	0	0	0	0	0	0	0	3200
0	0	0	0	0	0	0	0	3300
0	0	0	0	0	0	0	0	3400
0	0	0	0	0	0	0	0	3500
0	0	0	0	0	0	0	0	3600
0	0	0	0	0	0	0	0	3700
0	0	0	0	0	0	0	0	3800
0	0	0	0	0	0	0	0	4000
7,200	0	54,800	0	0	0	0	0	5000
0	0	0	0	0	0	0	0	6000
0	0	0	0	0	0	0	88,704	7000
0	0	0	0	0	0	0	0	8000
0	0	0	0	0	0	0	0	9000
7,200	0	54,800	0	0	0	0	0	88,704

SPACE INCREASE AT UNIVERSITY OF ALASKA, ANCHORAGE, 1970

TABLE 2

INVENTORY OF PHYSICAL FACILITIES

Organizational Unit and Subject Field	Total Net Assignable Sq. Ft.	TYPE OF ROOM				
		100 Classroom (including teaching Auditoriums)	200 Laboratory	300 Office	400 Study	500 Special Use
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1000 DEPTS. OF INSTRUC. & RESEARCH - TOTAL	0	0	0	0	0	0
1100 General or Unclassified	0	0	0	0	0	0
1200 Life Sciences	0	0	0	0	0	0
1300 Math., Computer, Phys., Engr., Sci.	0	0	0	0	0	0
1400 Behavioral Sciences	0	0	0	0	0	0
1500 Humanities	0	0	0	0	0	0
1600 Professions	0	0	0	0	0	0
1700 Technical-Vocational	0	0	0	0	0	0
1800 Phys. Education & Military Sci.	0	0	0	0	0	0
2000 ORGANIZED ACTIVITY UNITS	0	0	0	0	0	0
3000 ORGANIZED RESEARCH UNITS - TOTAL	0	0	0	0	0	0
3100 General or Unclassified	0	0	0	0	0	0
3200 Life Sciences	0	0	0	0	0	0
3300 Math., Computer, Phys., Engr., Sci.	0	0	0	0	0	0
3400 Behavioral Sciences	0	0	0	0	0	0
3500 Humanities	0	0	0	0	0	0
3600 Professions	0	0	0	0	0	0
3700 Technical-Vocational	0	0	0	0	0	0
3800 Phys. Education & Military Sci.	0	0	0	0	0	0
4000 PUBLIC SERVICE UNITS	0	0	0	0	0	0
5000 LIBRARY	0	0	0	0	0	0
6000 GEN. ADMIN. & INSTITUTIONAL SERVICES	15,300	0	0	15,300	0	0
7000 AUXILIARY SERVICES	0	0	0	0	0	0
8000 NON-INSTITUTIONAL AGENCIES	0	0	0	0	0	0
9000 UNASSIGNED	0	0	0	0	0	0
GRAND TOTAL ASSIGNABLE	15,300	0	0	15,300	0	0

SPACE INCREASE AT UNIVERSITY OF ALASKA, 1970
Seward Research Facility
TABLE 3

INVENTORY OF PHYSICAL FACILITIES

Organizational Unit and Subject Field	Total Net Assignable Sq. Ft.	TYPE OF ROOM				
		100 Classroom (including teaching Auditoriums)	200 Laboratory	300 Office	400 Study	500 Special Use
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1000 DEPTS. OF INSTRUC. & RESEARCH - TOTAL	0	0	0	0	0	0
1100 General or Unclassified	0	0	0	0	0	0
1200 Life Sciences	0	0	0	0	0	0
1300 Math., Computer, Phys., Engr., Sci.	0	0	0	0	0	0
1400 Behavioral Sciences	0	0	0	0	0	0
1500 Humanities	0	0	0	0	0	0
1600 Professions	0	0	0	0	0	0
1700 Technical-Vocational	0	0	0	0	0	0
1800 Phys. Education & Military Sci.	0	0	0	0	0	0
2000 ORGANIZED ACTIVITY UNITS	0	0	0	0	0	0
3000 ORGANIZED RESEARCH UNITS - TOTAL	1,450	0	1,450	0	0	0
1100 General or Unclassified	0	0	0	0	0	0
1200 Life Sciences	1,450	0	1,450	0	0	0
3300 Math., Computer, Phys., Engr., Sci.	0	0	0	0	0	0
3400 Behavioral Sciences	0	0	0	0	0	0
3500 Humanities	0	0	0	0	0	0
3600 Professions	0	0	0	0	0	0
3700 Technical-Vocational	0	0	0	0	0	0
3800 Phys. Education & Military Sci.	0	0	0	0	0	0
4000 PUBLIC SERVICE UNITS	0	0	0	0	0	0
5000 LIBRARY	0	0	0	0	0	0
6000 GEN. ADMIN. & INSTITUTIONAL SERVICES	0	0	0	0	0	0
7000 AUXILIARY SERVICES	0	0	0	0	0	0
8000 NON-INSTITUTIONAL AGENCIES	0	0	0	0	0	0
9000 UNASSIGNED	0	0	0	0	0	0
GRAND TOTAL ASSIGNABLE	1,450	0	1,450	0	0	0

UNIVERSITY OF ALASKA
Seward Research Facility
TABLE 3 (Continued)

		TYPE OF ROOM						
		600 General-Use			700	800	900 Residential	
		640-645 Health (9)	650-670 Lounge and Recreation (10)	Other (11)	Supporting (12)	Medical Care (13)	910 Single Person (14)	920-930 Family Units (15)
630-635	Food (8)	0	0	0	0	0	0	0
		0	0	0	0	0	0	1000
		0	0	0	0	0	0	1100
		0	0	0	0	0	0	1200
		0	0	0	0	0	0	1300
		0	0	0	0	0	0	1400
		0	0	0	0	0	0	1500
		0	0	0	0	0	0	1600
		0	0	0	0	0	0	1700
		0	0	0	0	0	0	1800
		0	0	0	0	0	0	2000
		0	0	0	0	0	0	3000
		0	0	0	0	0	0	3100
		0	0	0	0	0	0	3200
		0	0	0	0	0	0	3300
		0	0	0	0	0	0	3400
		0	0	0	0	0	0	3500
		0	0	0	0	0	0	3600
		0	0	0	0	0	0	3700
		0	0	0	0	0	0	3800
		0	0	0	0	0	0	4000
		0	0	0	0	0	0	5000
		0	0	0	0	0	0	6000
		0	0	0	0	0	0	7000
		0	0	0	0	0	0	8000
		0	0	0	0	0	0	9000
		0	0	0	0	0	0	0

In the 1971-1972 supplement, the reporting of space increases in higher education facilities over last year occupies a reduced role. These increases have been limited and involve no new instructional space. Anticipating the 1972-1973 replication of the inventory, this year's supplement includes an evaluation of the design and reporting of both the initial study and the supplements for subsequent years. The evaluation examines the utility of the inventory as conducted and reported since 1967 and recommends ways of improving that utility.

1971 - 1972 ALASKA HIGHER EDUCATION FACILITIES SPACE INCREASE

New space added during the past academic year and not previously reported is presented in Tables 1-3. All new space is assigned to functions other than instruction. This includes the Wood Student Center and the Yak Estates residential facilities at Fairbanks, the 3-building Provost Relocatable office complex at Anchorage, and the Marine Biology Research Laboratory at Seward. All of these are within the University of Alaska system. No new facilities are reported for Sheldon Jackson College at Sitka or Alaska Methodist University, Anchorage. Since all new space reported is assigned to non-instructional functions, no space utilization study was conducted for this year's report.

EVALUATION

1967 - 1969 Inventory and Report

The intent of the initial study was to "provide a picture of what facilities are available and of how they are being used at each college and university campus in Alaska." This information was expected to "be

useful for comprehensive facilities planning at the institutional and state level." It was also anticipated that "b[y] updating this data periodically, agencies and individuals concerned with staff[ing], financing, and providing facilities may be informed in advance of the needs of various institutions."⁴

This "picture" of available facilities and their utilization includes: (1) enrollment statistics; (2) an inventory of space assignable to both instructional and auxilliary functions within each school; (3) analysis of the actual utilization of space assigned to instruction and auxilliary functions within each school; and (4) enrollment projections through 1978 based on Alaska elementary and secondary school enrollments. Descriptive and explanatory material relating the tabulated statistics to facilities availability and needs appear where appropriate. The methods used to obtain and compile the data are documented both in the report itself and in a procedures manual utilized in the data collection process.⁵

The major criticism of this evaluation is directed not to the objectives, content, nor reporting format of the initial study, but to a failure to design for the routine periodic updating of information by which it is suggested that "agencies and individuals. . . may be informed in advance of the needs of the various institutions." The

⁴Morrow, op. cit., p. 2.

⁵ISEGR, Higher Education Facilities Inventory Manual for Alaska, College, Alaska (November, 1967), unpublished manual.

failure to build in a means for updating a facilities inventory of a large, widely dispersed system for which the pertinent data changes several times a year has serious implications for the continued utility of the inventory.

A useful higher education facilities inventory accounts for the status of available space, enrollment, and space utilization⁶ at a given point in time. The initial inventory meets this criterion. Continued utility depends on periodic updating which monitors and measures changes in all three variables. Space available for higher education is gained and lost at a rate sufficiently slow that periodic updating of this information is a reasonable task. This is not true for enrollment, which undergoes regularly scheduled changes at least twice yearly on all campuses. Actual utilization of instructional space may change with fluctuations in available space, in enrollment, and/or in types of enrollment. Both enrollment and space utilization can be expected to change at least twice yearly.⁷

The initial study acknowledges the need for a periodic updating of the inventory, but fails to anticipate the methodological needs of monitoring and re-measuring these variables at later points in time. The data collection and compilation required to produce an accurate inventory the first time was an arduous task that took two years to complete. While computer resources were employed to produce tables

⁶Space utilization is a composite variable, a function of the interaction of available space, enrollment, etc.

⁷For all practical purposes the significant changes in these variables occur at the beginning of the academic year in the fall. Thus, an inventory update need not occur more than once a year.

and the data was stored on magnetic tapes, this use of computer technology falls short of the needs of a large-scale system-wide inventory involving the monitoring of events which alter the total picture of higher education facilities in Alaska several times each year. Given this level of utilization of computer resources, no method, short of complete replication of the initial inventory, could be expected to produce a useful update to this study.

The minimum level of utilization of computer resources required to usefully update the initial inventory on a yearly basis includes: (1) access to computer; (2) data collected in computer accessible form; and (3) personnel able to conceive programs for handling changes in enrollment, space available, and space utilization and to produce not only statements of new information, but summaries of how the new data affects the previously reported status of higher education facilities. Of these, the third is a critical factor without which a periodic update of this inventory is largely meaningless to the objectives set for it. The specific points at which these resources are required to affect the utility of the yearly update supplements will be suggested in the following sections.

Yearly Supplements

Continued utility of this inventory requires periodic updates which:

1. re-measure the same variables measured in the initial inventory using comparable, if not the same, data sources and measurement techniques;
2. report changes in these variable, i.e., space availability, enrollment, and space utilization; and

3. relate these changes to the intent of the initial inventory to present an overall view of higher education facilities in Alaska that is useful for statewide and institutional facilities planning and which informs key people in higher education of facilities needs.

The supplements for each year subsequent to the initial report limit the factors for which updating occurs to two: amount of new space available and the utilization of new space by numbers of students, days of the week, hours of the day, etc. These appear in the supplements, respectively, in sections titled, "Room Inventory" and "Room Utilization."

It appears that the sources of figures for amount of new space available in the room inventory are comparable to those of the initial inventory. These figures are reported in tables designating total net assignable square feet of new space by function and by type of room for each campus with new space. These tables are not accompanied by a narrative which might explain the omission of information on other campuses, the omission of figures reflecting decreases or other changes in available space, and the time reference of the increase in space represented by the figures that are included.

Space utilization is assessed by a room utilization study which reports the utilization of new space by numbers of students, hours of the day, days of the week, etc. Actual utilization is compared to potential utilization to arrive at percent utilization figures for the new space. The room utilization study does not, for any year, assess changes in the use of existing space.

Insufficient documentation of the manner in which the room utilization study was conducted for the 1969-1970 update necessitated the development of an extremely tedious method of data collection and hand

analysis for the following year's supplement. This portion of the 1970-1971 report is, consequently, well-documented by files kept during its preparation.

Though the room inventory for the following update period is well-documented and intelligibly reported, its utility is reduced insofar as the supplements are not reported so as to stand by themselves and there is a gap created in the continuity of reporting by the unintelligibility of the 1969-1970 update.

In sum, the supplementary update process has proved inadequate to the re-measurement and change-reporting functions it should be expected to perform. The supplements re-measure some, not all, of the critical factors affecting facilities availability that were covered by the initial inventory. Scant documentation suggests that comparable data sources and measurement techniques may not always have been used. Changes in higher education enrollments are not reflected in the supplements. Nor are space availability and utilization reported in such a way that changes from the initial inventory status of these variables are clear.

Relating Changes to the Initial Inventory

In assessing change it is necessary to follow the answer to the question, "What's new?" with another question, "So what?" While the interpretive responsibilities of an inventory are limited, the failure to report how increases in space available affect the facilities status of higher education in Alaska limits the utility of the inventory. To find out, for example, how much instructional space is now available on the Anchorage campus of the University of Alaska, the user is himself required to add the amount of space existing in 1969 to any that may have

been added and reported in up to three supplements.

Aside from the problems outlined above for the room utilization studies, these also fail to relate measurements such as "percent utilization" of new instructional space to any portion of the initial inventory.

The inventory was not initially set up to machine-collect, -store, and -analyze, on a continuing schedule, enrollment, space, and space utilization information. This alone meant that, short of replicating the entire inventory each year, updating would necessarily be limited in scope and the information reported of limited comparability to that first reported.

As suggested in the previous section of this evaluation, the single most critical factor affecting the utility of the inventory as a whole is the inadequate utilization of computer resources. Among these resources, the hardware and computer accessibility of the data are relatively minor concerns. Continuing inventories of higher educational facilities resources have been developed and do work elsewhere. Systems for handling the large volume of data, the ever-changing character of information, and the analyses which are more time-consuming than complex--all of which characterize any higher education facilities inventory anywhere--are available. The accessibility of these systems is largely dependent, however, on the knowledge and skills of the personnel responsible for the inventory design.

RECOMMENDATIONS FOR THE 1972 - 1973 INVENTORY AND SUBSEQUENT UPDATING Objectives, Content, and Reporting Format

Utility for statewide and institutional planning is an appropriate objective. It requires, however, that the inventory be both useful and

used. Assuming it is possible to produce a useful inventory, it may be advisable to reassess its limited publication and distribution. An assessment of the informational needs of agencies and individuals involved in higher education facilities planning on an institutional as well as a statewide level might well constitute an initial task within a revised plan for conducting the 1972-1973 inventory. Such an assessment would then inform both the content and reporting format of the inventory. As indicated previously, there is a more or less standard minimum content implied for "higher education facilities inventories," i.e., information on the status of enrollment, available space, and space utilization. The advisability of including additional information such as the enrollment projections reported in the 1969 report should be related to the informational needs of potential users.

The assessment of user needs may also consider whether the reporting format of the inventory is still in line with current trends in facilities reporting. Among the advantages of utilizing a modified version of one of the recently developed standard systems for conducting and reporting higher education facilities inventories is the comparability of information with other areas of the country.⁸

Methods

The primary recommendation for the conduct of the 1972-1973 facilities inventory is close coordination with the Office of Planning and

⁸See: Bareither, Harland, and Schillinger, Jerry L., University Space Planning, University of Illinois Press, 1968, and Western Interstate Commission for Higher Education, Higher Education Facilities Planning and Management Manuals, May 1971.

Institutional Studies. This office and ISEGR share an interest in the production of a periodic inventory of higher educational facilities in Alaska: ISEGR for its part in informing the broad spectrum of higher education facilities planning in the state; the Office of Planning and Institutional Studies, as a principal institutional level user of the type of information the inventory is intended to produce. In addition to providing direct user participation in the production of the inventory, the coordination of these two offices will take maximum advantage of the differential resources of a research-oriented staff and a operation-planning-oriented staff. Thirdly, this coordination will avoid the duplication of effort which will occur if each office pursues an independent inventory.

The two most important resources available to the inventory from the Office of Planning and Institutional Studies are: (1) data on enrollment and space which is collected in computer accessible form for all of the campuses of the University of Alaska; and (2) personnel possessing interest, knowledge, and skills in the utilization of computer resources for producing a facilities inventory. Enrollment statistics by semester for each campus of the university and a current inventory of space available on each campus are now available in computer accessible form. A program for utilizing this data to produce a space utilization study is scheduled for completion during the summer of 1972. It is anticipated that a computer-produced facilities inventory will be available for Fall semester, 1972-73 in November, 1972. A principal benefit of a computer-produced inventory is the capacity it offers for input of new information and update. Properly designed and executed, a major inven-

tory need only be conducted once. Thereafter, updates would occur each fall which would produce not only new inventory figures but which would reflect the changes in the overall facilities situation resulting from changes in enrollment, space availability and space utilization.

It is recommended that ISEGR contract with the Planning Office to conduct the data collection and data analysis required for the yearly facilities inventory. A close working relationship with the Planning Office for the period during which the inventory is designed will assure that any information needs peculiar to ISEGR's inventory reporting responsibility are met.

The role of ISEGR and its staff may then shift to the tasks requiring its unique resources. One of these tasks would be to negotiate with the private schools to provide the enrollment and facilities information needed to include these schools in the inventory. The Office of Planning and Institutional Studies cannot require the reporting of this information for schools not within the University of Alaska system. Yet the information is necessary for a complete inventory of higher educational facilities in Alaska. It is also important that the information from these schools be reported in the same form as it is reported for University of Alaska campuses. ISEGR, as a research organization rather than an administrative office of the University, has a peculiar advantage in negotiating the participation of the private schools in research activities. Recently, both Sheldon Jackson College and Alaska Methodist University contracted to collect and share data on students for another study sponsored by the higher education grant. In this case, ISEGR was

viewed by the administrators involved as an appropriate agency for conducting higher education research that has meaning for, but is beyond the scope of the smaller private schools.

Finally, the responsibility for preparation of a final report of each year's inventory would remain with ISEGR. If the level of distribution of information included in the inventory remains as it has been during the past three years, this preparation should consist of reviewing the computer produced report of the Planning Office and adding any explanatory comments required. If an assessment of the informational needs of agencies and individuals involved in higher education facilities planning (as suggested on page 10) is conducted and reveals areas of needs, then the interpretive and editorial resources of ISEGR would be employed to produce the necessary embellishments for wider distribution of the inventory.