

ANNUAL SALARY SURVEY

As has been the practice for several years, questionnaires were sent again this year to departments in the mathematical sciences asking for information on salaries. The two-year colleges were sent a new form this year which allowed them to report salaries without regard to academic rank, because many of the junior colleges do not rank their teaching staffs. These results have been included in a listing under "two-year colleges." In past years the nondegree granting institutions were mainly two-year colleges so the new category covers practically the same institutions. The starting salary survey results have been given separately for men and women in this year's compilation. Except for the starting salary survey, the institutions are divided into groups according to the highest degree offered in the mathematical sciences.

Ph.D. Granting Institutions

Group I and Group II include the universities with leading departments of mathematics according to the findings of a survey made by the American Council of Education in 1969* in which departments were ranked according to the quality of their graduate faculty. Group I is composed of the twenty-seven institutions in which the departments of mathematics were ranked highest, and Group II is made of the thirty-eight institutions which were also listed in that report as having leading departments. It should be noted that most of these institutions have several departments in the mathematical sciences (see figures below) but that the rating was on the strength of the department of mathematics. It is to be noted also that the institu-

tions are different from those shown last year, because this present report is based on the latest survey of the American Council of Education.

Group III includes those universities that have granted three or more doctorates during the last three years according to the list of doctorates which is published in these *Notices*.

Group IV consists of institutions that have granted two or less doctorates during the past three years.

All Canadian universities maintaining Ph.D. granting programs are included in Groups III and IV.

Master's Degree Granting Institutions.

Bachelor's Degree Granting Institutions.

Two-year Colleges.

The total number of institutions and of departments in the mathematical sciences in the various groups are as follows.

<u>Type of institution</u>	<u>Number of</u>	
	<u>Institutions</u>	<u>Departments</u>
Ph.D. granting		
Group I	27	81
Group II	38	89
Group III	74	140
Group IV	36	49
Master's granting	246	281
Bachelor's granting	838	868
Two-year colleges	575	575
	1834	2083

Faculty Salaries

This survey is the fifteenth in an annual series begun in 1957 by the Society's Committee on the Economic Status of Teachers. The 1971 survey is based on returns from 816 departments in the mathematical sciences. The institutions include 63 two-year colleges which do not classify staff according to academic rank, a group not included in previous surveys. The number of returns was smaller than it might have been because no returns were included which were returned after August 15. It should, therefore, be kept in mind that none of this information reflects changes due to the wage freeze.

The 816 departments in the survey cover 11,443 academic positions held in 1970-1971 and 11,592 positions in 1971-1972. Institutions submitted a minimum, median, and maximum salary

figure for each of four academic ranks, both for staff members with master's degrees and for those with doctorates, creating forty-eight categories of salary figures. In some instances, relatively few universities or colleges reported, and inasmuch as there were no significant figures available, salaries could not be listed.

In the following two pages the data in the parentheses give the range of the middle fifty percent of salaries reported. The figures outside the parentheses represent the minimum and maximum salary listed by any reporting institution. Salaries are given in "hundreds of dollars."

All salaries refer to an academic year of nine or ten months. Grants and contracts are included but sabbatical payments and other part-time salaries are not.

*The findings were published in "A Rating of Graduate Programs" by Kenneth D. Roose and Charles J. Anderson, American Council of Education, Washington, D.C., 1969, 115 pp. The information on mathematics was reprinted by the Society and can be found on pages 338-340 of the February 1971 issue of these *Notices*.

Starting Salary Survey for New Recipients of the Doctorate

The latest figures in this Survey were compiled from questionnaires sent to individuals who received a doctorate in the mathematical sciences during the academic year 1970-1971 from universities in the United States and Canada. Of 1,362 distributed, there were 605 returns considered usable, i.e. compatible with the Survey categories, 576 representing men and 29 representing women. Among the unusable returns, 4 representing males and 6 representing females reported part-time jobs only and were for that reason not used in the compilation of salary information.

In parentheses after each category below are listed the number of returns that represent men and women respectively. Men and women are also treated separately, as well as together, in the 1971 figures, 1971M referring to male replies and 1971F to female.

Most Ph.D.'s, 85%, have accepted academic positions. Of the remainder, 7% are in industry, 3% in research institutions, and 4% in government. The 29 women respondents, reported 25 academic, 2 industrial, and 2 governmental po-

sitions.

Geographically, the Survey indicates that 89% have accepted jobs in the United States, 85% men and 4% women; 7%, all men, in Canada; and 4%, again all men, in other locations. There were 25 returns, considered unusable as far as compatibility of salary was concerned, that indicated positions accepted in foreign countries. They include four in England, three each in Australia and Mexico, two each in Ireland and New Zealand, and one each in Brazil, Colombia, Denmark, East Pakistan, Federal Republic of Germany, Hong Kong, India, Iran, Israel, Korea, and Taiwan.

It is interesting to note that 56% of all returns were in the category of teaching, nine-month salary, and that, of all the academic positions, 68% were held in master's or Ph.D. granting institutions, 30% in institutions granting the bachelor's as its highest degree, and 2% in junior colleges. Quartiles are indicated for teaching, nine-month salary.

Salaries are listed in hundreds of dollars. Dashes indicate that not enough returns were received to warrant including the figures here.

TEACHING (328 + 19) (Nine-Month Salary)

Year*	Min.	Q ₁	Median	Q ₃	Max.
1967	65		96		140
1968	72		102		170
1969	80		105		165
1970	85		110		195
1971	70	105	110	120	178
1971M	75	105	110	120	178
1971F	70	95	105	108	148

TEACHING (41 + 1) (Twelve-Month Salary)

Year*	Min.	Median	Max.
1967	83	122	200
1968	95	120	180
1969	75	128	168
1970	95	128	200
1971	80	126	190
1971M	80	127	190
1971F	--	110	---

TEACHING AND RESEARCH (45 + 0) (Nine-Month Salary)

Year*	Min.	Median	Max.
1967	--	--	---
1968	78	100	130
1969	95	110	138
1970	90	106	120
1971	88	110	156

RESEARCH (35 + 2) (Nine-Month Salary)

Year*	Min.	Median	Max.
1967	70	93	103
1968	78	100	115
1969	63	105	125
1970	78	105	160
1971	90	110	153
1971M	90	110	153
1971F	105	---	120

RESEARCH (33 + 2) (Twelve-Month Salary)

Year*	Min.	Median	Max.
1967	80	105	132
1968	80	100	134
1969	78	149	180
1970	90	120	205
1971	60	120	181
1971M	60	120	181
1971F	60	---	60

TEACHING AND RESEARCH (9 + 1) (Twelve-Month Salary)

Year*	Min.	Median	Max.
1971	100	137	165
1971M	100	150	165
1971F	---	120	---

INDUSTRY (44 + 2) (Twelve-Month Salary)

Year*	Min.	Median	Max.
1967	97	151	204
1968	110	156	248
1969	125	168	250
1970	96	170	235
1971	99	170	252
1971M	99	167	252
1971F	192	---	240

GOVERNMENT (27 + 2) (Twelve-Month Salary)

Year*	Min.	Median	Max.
1967	--	---	---
1968	85	134	170
1969	82	138	192
1970	100	150	223
1971	117	151	290
1971M	117	160	290
1971F	140	---	150

RESEARCH INSTITUTES (14 + 0) (Twelve-Month Salary)

Year*	Min.	Median	Max.
1967	60	135	215
1968	120	157	192
1969	75	156	235
1970	70	170	200
1971	65	160	190

*Figures cover degrees conferred in the academic year ending in June of the stated year. 1967 figures cover only degrees conferred during the first six months of 1967.

Graduate Student Support

The figures below represent the major sources of support (excluding tuition) of full-time graduate students enrolled for advanced degrees in 1970-1971 and estimates for 1971-1972. The figures have

been converted into percentages by type of support, with the total number of students represented by the sample being given in the last column.

SUPPORT SOURCES	STUDENTS PRIMARILY SUPPORTED BY				Total Number of Students in Sample
	Fellowships and Traineeships	Graduate Research Assistantships	Graduate Teaching Assistantships	Other types of support	
Ph.D. GRANTING INSTITUTIONS Group I (44 returns)					
1970-1971					3022
United States Government	22%	13%	1%	1%	
Other Sources	9%	2%	36%	16%	
1971-1972					2939
United States Government	17.5%	13%	3%	.5%	
Other Sources	10%	2%	36%	18%	
Ph.D. GRANTING INSTITUTIONS Group II (55 returns)					
1970-1971					2936
United States Government	14%	7%	12%	1%	
Other Sources	4%	5%	43%	14%	
1971-1972					2853
United States Government	13%	7%	11%	.5%	
Other Sources	4.5%	4%	44%	16%	
Ph.D. GRANTING INSTITUTIONS Group III (90 returns)					
1970-1971					3147
United States Government	14%	3%	9%	3%	
Other Sources	8%	7%	46%	10%	
1971-1972					3153
United States Government	10%	3%	10%	3%	
Other Sources	8%	8%	47%	11%	
Ph.D. GRANTING INSTITUTIONS Group IV (25 returns)					
1970-1971					627
United States Government	7%	2%	.5%	2.5%	
Other Sources	7%	4%	67%	10%	
1971-1972					665
United States Government	6%	1%	1.5%	5%	
Other Sources	9%	5%	66%	11%	
MASTER'S DEGREE GRANTING INSTITUTIONS (128 returns)					
1970-1971					998
United States Government	4%	5%	4%	10%	
Other Sources	3%	5%	70%	8%	
1971-1972					1036
United States Government	3.5%	5%	5%	5%	
Other Sources	4.5%	1%	72%	8.5%	