The Annual Salary Survey, 1969

### ANNUAL SALARY SURVEY

This fall an additional questionnaire was sent to departments of the mathematical sciences and the 1970 salary survey has been expanded to include Projected Faculty Growth and Graduate Student Support as well as Faculty Salaries and Starting Salaries for Ph.D.'s which have been included in recent years. In all except the Starting Salary Survey institutions are divided into groups according to the highest degree offered in the mathematical sciences as follows:

#### Ph.D. Granting Institutions.

Group I and Group II include the universities with leading mathematics departments according to the findings of a survey made by the American Council of Education in 1964\* in which departments were rated according to the quality of their graduate facility. Group I is composed of institutions that were considered "Distinguished" and "Strong"; Group II

are those considered "Good" and "Adequate Plus".

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 (Nolura).

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.

Nondegree Granting Institutions. These include junior colleges and other institutions offering courses but not degrees in mathematics.

## **Faculty Salaries**

This survey is the fourteenth in an annual series begun in 1957 by the Society's Committee on the Economic Status of Teachers.

The 1970 survey is based on returns from 727 departments in mathematics, a substantially higher number than the 478 returns recorded last year. These departments included 10,726 academic positions held in 1969-1970 and 11,062 positions in 1970-1971.

Each institution 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 48 categories of salary figures.

In some instances relatively few universities or colleges reported, and in as much 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 50% 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 9 or 10 months. Grants and contracts are included but sabbatical payments and other part-time salaries are not.

<sup>\*</sup>The findings were published in a book by Allan Cartter entitled "An Assessment of Quality in Graduate Education." The information on mathematics was reprinted by the Society and can be found on pages 978-980 of the December 1966 issue of these  $c^{\Lambda_{olucu}}$ .

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Notices of the American Mathematical Society

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# Notices of the American Mathematical Society Projection Frame Lyo Cropow 270

The Annual Salary Survey, 1969

In the 1970 questionnaire chairmen of departments were asked to predict the size of their staffs for each of the five academic years 1970-1971,...., 1974-1975. The figures given below for 1969-1970 were drawn from two sources: The MAA Guidebook (1970) and the Annual Salary Survey. Both of these surveys were based on the same mailing list which contains 1,367 departments of mathematical sciences in four year colleges and universities of the United States; a total of 1,234 departments responded to one or both of these questionnaires. The response rates are indicated for each of the categories I, II, III, IV, Master's and Bachelor's in the column headed 1969-1970 of Table I below; the remaining columns indicate the percentage responses for predictions covering the years 1970-1971,..., 1974-1975.

The figures in Table II are extrapolations, based on the predictions made by those chairmen who were willing to make predictions; they were obtained by dividing the total number of positions predicted for each year by the ratio of the number of departments reporting to the total number of departments in that category. Within each category, the figures were weighted by a factor proportional to the size of the departments reporting. These results are rough at best. As indicated in Table I, the percentage of chairmen willing to predict even one year ahead varied between 21% and 61%, and those willing to predict as many as five years ahead varied between 19% and 52%.

The entries in the last column of Table II give the average annual growth rate predicted for each category: This varies from 3% for group I to over 7% for IV, Master's and Bachelor's. The entries in the last row give the annual increment predicted for each of these five years.

L. K. Durst

TABLE I. PERCENTAGE OF DEPARTMENTS RESPONDING

	Total No. of Depts.	Percentage 1969-1970	Response: 1970-1971	1071 1070		2127240 - 72707070		
	or Depts.	1303-1310	1370-1971	1971-1972	1972-1973	1973-1974	1974-1975	
I	62	79	50	37	35	34	34	
П	44	89	61	57	55	52	52	
111	151	99	50	48	48	47	47	
IV	64	66	45	45	45	44	44	
Mast.	233	99	54	52	51	50	50	
Bach.	813	89	21	20	19	19	19	

TABLE II. PROJECTED NUMBER OF FACULTY MEMBERS

	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	Growth Rate
I	2270	2260	2360	2510	2590	2650	3.2%
II	1220	1290	1340	1450	1560	1640	6.1%
111	5380	5650	6130	6510	6990	7370	6.5%
IV	1380	1470	1600	1720	1840	1980	7.5%
Mast.	4200	4460	4880	5250	5550	6010	7.4%
Bach.	2850	2960	3190	3420	3670	4020	7.1%
TOTALS	17300	18450	19880	21270	22640	24150	6.9%
Annual					· ·		
Incremen	nt -	1150	1430	1390	1370	1510	-

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# Graduate Staventes 1969 ort

291 departments out of a possible 554 responded to the questionnaire concerning the number of graduate students enrolled in 1969-1970 and the number expected in 1970-1971. These figures have been converted into percentages according to type of support.

The number in parentheses after each group title below indicates the number of usable responses involved. The possible numbers would have been 62 in Group I, 44 in Group II, 151 in Group III, 64 in Group IV, and 233 in Master's degree granting institutions.

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Ph. D. GRANTING INSTITUTIONS	6		1		
Group I (33)		1	1		
1969-1970	Nonestary.			1	
All Students	31%	9%	21%	397,	4175
New Students	29%	3%	25%	43%	1355
1970-1971	000	100	01		
All Students	32%	10%	21%	37%	3988
New Students	28%	3%	27%	42%	1267
Ph. D. GRANTING INSTITUTIONS	1				
Group II (30)	1	393			
1969-1970		1			
All Students	38%	6%	12%	44%	2815
New Students 1970-1971	42%	4%	15%	39%	869
All Students	38%	6%	110	45(8	0.700
New Students	35%	6%	11% 13%	45%	2720 962
	3070	1 0 %	13%	40 %	302
Ph. D. GRANTING INSTITUTIONS					
Group III (82) 1969-1970					
All Students	34%	9%	18%	36%	4811
New Students	38%	8%	19%	35%	1659
1970-1971	0 - 70	0,0	15%	3376	1003
All Students	36%	8%	16%	40%	5144
New Students	40%	11%	18%	31%	1714
DE D. CRANTING INCOMPRISE	,	10	10%	01.0	****
Ph. D. GRANTING INSTITUTIONS Group IV (29)		1	H 30		
1969-1970					
All Students	34%	2%	110	500	0.40
New Students	45%	2%	11% 9%	53% 44%	942
1970-1971	10,0	2 10	3 10	44 /0	385
All Students	34%	4%	9%	53%	892
New Students	33%	6%	12%	49%	363
MACTERIS PROPER OF AUTHOR				353500	
MASTER'S DEGREE GRANTING					
INSTITUTIONS (117) 1969-1970					
All Students	17%	1%	5%	77%	0000
New Students	33%	1%	7%	59%	3663 1144
1970-1971	0070	- 70	. 70	33.10	1111
All Students	20%	1%	6%	73%	3526
New Students	33%	1%	7%	59%	1345
			- "	0 1	

# The Annual Salary Survey, 1969 Starting Salary for Mathematicians with a Ph. D.

This 1970 Survey was compiled from questionnaires sent to 1,322 individuals who received a Ph.D. in the Mathematical Sciences during the academic year 1969-1970. There were 611 usable returns.

Of those reporting 84% accepted positions in academic life, 10% went into industry, 2% were connected with research institutions and 4% went into government. The number in parentheses after each category represents the number of usable returns for that category. Geographically, 34% accepted jobs in the northeast, 22% in the southeast, 21% in the midwest, 5% in the mountain states, 13% in the far west and 5% in Canada.

57% of the new Ph.D.'s had more than a year of experience in their field prior to receiving their doctorate, 13% had between one-half year and one year of experience, and 28% had less than one-half year of experience.

It should be noted that the first category listed below (teaching, 9-month salary) represents 60% of all positions reported in the Survey. Of those accepting academic positions, 73% were in master's or Ph.D. granting institutions, 26% in bachelor's degree granting institutions, and less then 1% in junior colleges.

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

	CIIING (3 -Month	100000000000000000000000000000000000000			CHING (S	66) th Salary	)		CHING A	ND RESI Salary)	EARCH			
Year	Min.	Median	Max.	Year	Min.	Median	Max.	Year	Min.	Median	Max.			
1967	70	93	120	*1967	85	112	150	*1967	75	90	105			
**1967	65	96	140	**1967	83	122	200	**1967						
1968	72	102	170	1968	95	120	180	1968	78	100	130			
1969	80	105	165	1969	75	128	168	1969	95	110	138			
1970	85	110	195	1970	95	128	200	1970	90	106	120			
RESEARCH (33)				RESE	RESEARCH (27)					FELLOWSHIP (18)				
(Nine-	-Month S	Salary)		(Twel	(Twelve-Month Salary)					(Yearly Stipend)				
Year	Min.	Median	Max.	Year	Min.	Median	Max.	Year	Min.	Median	Max.			
*1967	78	93	108	*1967	80	101	130	*1967	40	80	120			
**1967	70	93	103	**1967	80	105	132	**1967	60	85	100			
1968	78	100	115	1968	80	100	134	1968						
1969	63	105	125	1969	78	149	180	1969						
1970	78	105	160	1970	90	120	205	1970	60	86	120			
RESEA	ARCH IN	STITUTI	ES (15)	INDUS	TRY (58	)		GOVE	RNMEN'	Т (22)				
(Twelv	e-Month	Salary)		(Twelv	e-Month	Salary)		(Twelve-Month Salary)						
<u>Year</u>	Min.	Median	Max.	Year	Min.	Median	Max.	Year	Min.	Median	Max.			
1967	60	120	150	1967	125	145	200	*1967	84	111	161			
**1967	60	135	215	** 1967	97	151	204	**1967			101			
1968	120	157	192	1968	110	156	248	1968	85	134	170			
1969	75	156	235	1969	125	168	250	1969	82	134	192			
1970	70	170	200	1970	96	170	235	1970	100	150	223			

<sup>\*</sup>These figures represent the survey compiled from returns sent in by individuals who received their doctorates in 1966.

<sup>\*\*</sup>These figures represent the survey compiled from returns sent in by individuals who received their doctorates during the first six months of 1967.

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The Annual Salary Survey, 1969

### **ERRATUM**

#### ANNUAL SALARY SURVEY (PROJECTED FACULTY GROWTII)

The last three lines of Table II, page 882, of the October issue of these NOTICES contain several errors. The table should appear as follows:

TABLE II. PROJECTED NUMBER OF FACULTY MEMBERS

	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	Growth Rate
I	2270	2260	2360	2510	2590	2650	3.2%
H	1220	1290	1340	1450	1560	1640	6.1%
111	5380	5650	6130	6510	6990	7370	6.5%
IV	1380	1470	1600	1720	1840	1980	7.5%
Mast.	4200	4460	4880	5250	5550	6010	7.4%
Bach.	3100	3320	3570	3830	4110	4500	7.7%
TOTAL	S 17550	18450	19880	21270	22640	24150	6.6%
Annual							
Increme	ent -	900	1430	1390	1370	1510	-