

2019–2020 Faculty Salaries Report

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This salary report is one part of the Annual Survey of the Mathematical and Statistical Sciences, a nation-wide survey administered by the AMS on behalf of the American Statistical Association (ASA), the Institute for Mathematical Statistics (IMS), the Mathematical Association of America (MAA), the Society for Industrial and Applied Mathematics (SIAM), the Association for Women in Mathematics (AWM), the Caucus for Women in Statistics (CWS), and the National Association of Mathematics (NAM). It provides a look at the salaries of faculty in the Mathematical Sciences in the US by rank in several different department groupings based on discipline, highest degree offered, and graduate counts. The graphs here are identified by those group names, and the group definitions are given at the end of the report.

Departments were asked to report for each rank the number of tenured and tenure-track, non-tenure-track, and part-time faculty whose 2019–20 academic-year salaries fell within given salary intervals. Reporting salary data in this fashion ensures confidentiality of individual responses, though it does mean that the quartiles reported in the tables are approximations. The quartiles reported have been

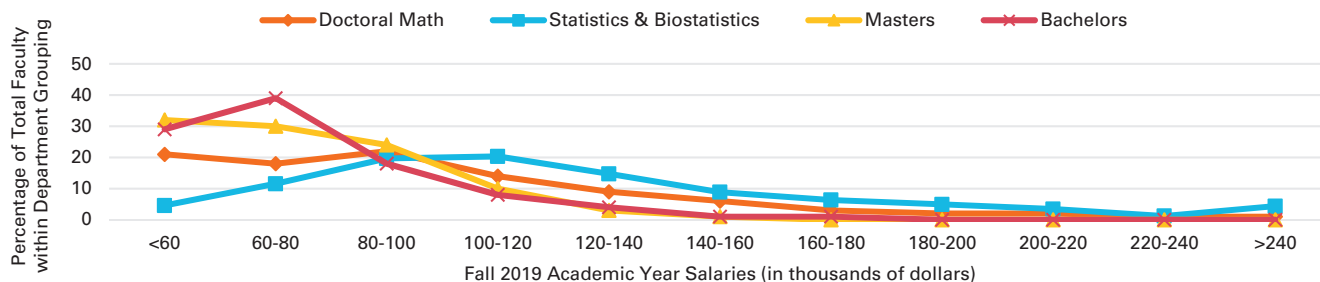
estimated to the nearest \$100 assuming that the density over each interval is uniform.

Note: In the graph for all faculty salaries on this page, the percentage scale ranges from 0 to 50, while the scale for all other graphs is 0 to 100. The non-tenure-track faculty are reported in this report alongside the other full-time faculty; and part-time faculty and pay by the course are summarized in the last two tables in this report.

Faculty Salary Reports from prior years are at <https://www.ams.org/annual-survey/salaries>. Interpretation of historical trends should be made with care. For instance, one factor influencing year to year changes in the mean reported salaries may be differences in the sets of responding departments within the groups. Response rates are noted on the tables.

Figure 1 provides a comparative view of faculty salaries among four broad groups: departments whose highest degree is a (1) PhD in mathematics (including applied mathematics departments), (2) PhD in statistics or biostatistics, (3) masters degree in mathematics, and (4) bachelors degree in mathematics. In the remainder of this report, salary distributions are broken down within finer departmental categories and by faculty rank.

Figure 1. Full-time Faculty Salaries by Department Grouping, Fall 2019 (Tenured, Tenure-track, and Non-tenured)



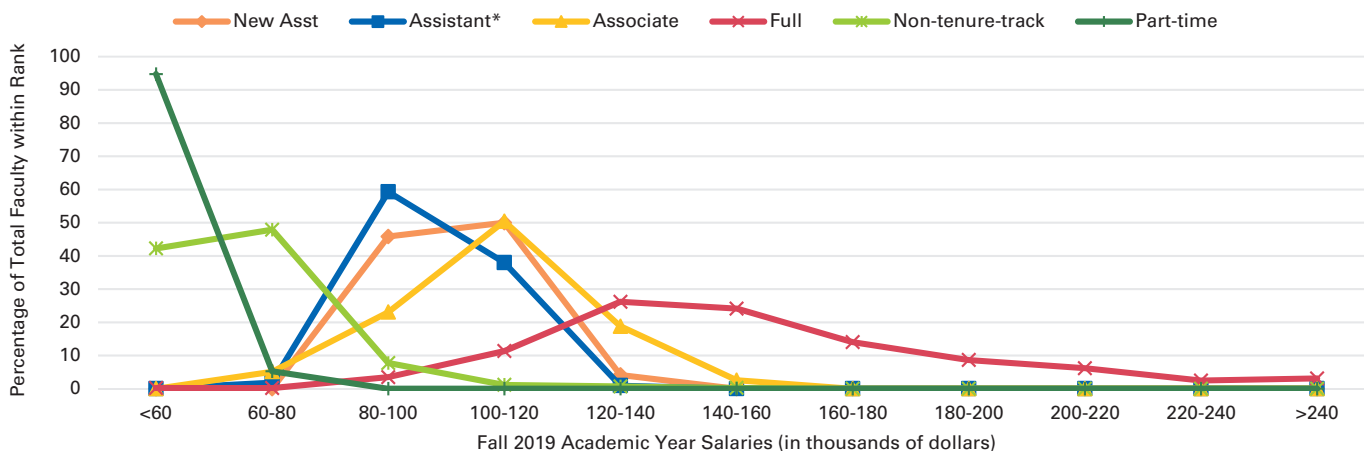
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ANNUAL SURVEY

Math Public Large Group Faculty Salaries							
15 responses out of 26 departments (58%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All	24	93,100	101,400	106,800	99,753	95,340
	Men	19	93,600	101,100	103,900	101,214	95,720
	Women	5	-	-	-	94,203	94,560
Assistant Professor ¹	All	108	92,800	97,800	104,600	97,884	94,470
	Men	85	93,200	98,300	104,800	98,120	94,960
	Women	23	91,700	95,800	104,000	97,009	92,960
Associate Professor	All	117	97,700	108,700	118,500	108,074	102,910
	Men	86	96,200	106,600	116,700	106,067	102,540
	Women	31	103,300	116,700	123,000	113,643	104,030
Full Professor	All	485	127,100	146,800	172,500	152,930	149,280
	Men	428	127,700	146,600	172,200	153,353	150,130
	Women	57	123,500	148,300	174,200	149,752	142,620
Non-tenure-track faculty	All	426	56,000	62,100	70,100	66,173	61,160
	Men	277	56,000	61,400	70,400	66,776	61,260
	Women	149	56,000	63,300	69,700	65,051	60,930

¹Includes newly hired assistant professors.

Figure 2. Math Public Large Group—Percentage of Faculty Salaries within each Salary Range by Category

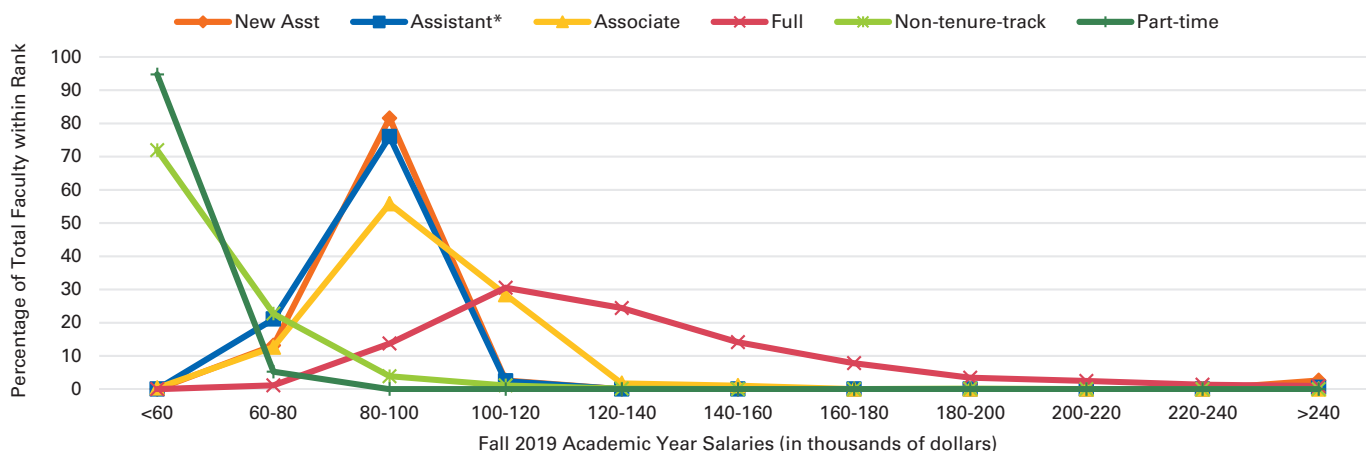


* Includes newly hired assistant professors.

Math Public Medium Group Faculty Salaries							
32 responses out of 40 departments (80%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All	38	81,600	84,500	90,800	90,418	82,780
	Men	21	80,400	84,300	88,900	92,376	83,250
	Women	17	82,200	84,500	95,600	88,000	81,280
Assistant Professor ¹	All	204	80,800	85,600	90,600	86,445	82,540
	Men	140	80,700	85,500	89,700	86,601	83,500
	Women	64	81,000	86,000	92,500	86,104	79,900
Associate Professor	All	285	86,000	93,700	103,300	94,512	92,380
	Men	223	86,900	93,500	103,000	94,280	92,100
	Women	62	87,200	94,400	104,100	95,348	93,450
Full Professor	All	523	106,600	123,100	146,400	130,080	126,450
	Men	465	107,000	124,000	146,900	130,558	126,860
	Women	58	103,800	116,200	137,500	126,309	123,070
Non-tenure-track faculty	All	616	46,500	54,200	61,900	53,812	54,940
	Men	356	46,600	53,700	61,500	53,769	54,850
	Women	260	46,500	55,000	62,400	53,871	55,060

¹Includes newly hired assistant professors.

Figure 3. Math Public Medium Group—Percentage of Faculty Salaries within each Salary Range by Category



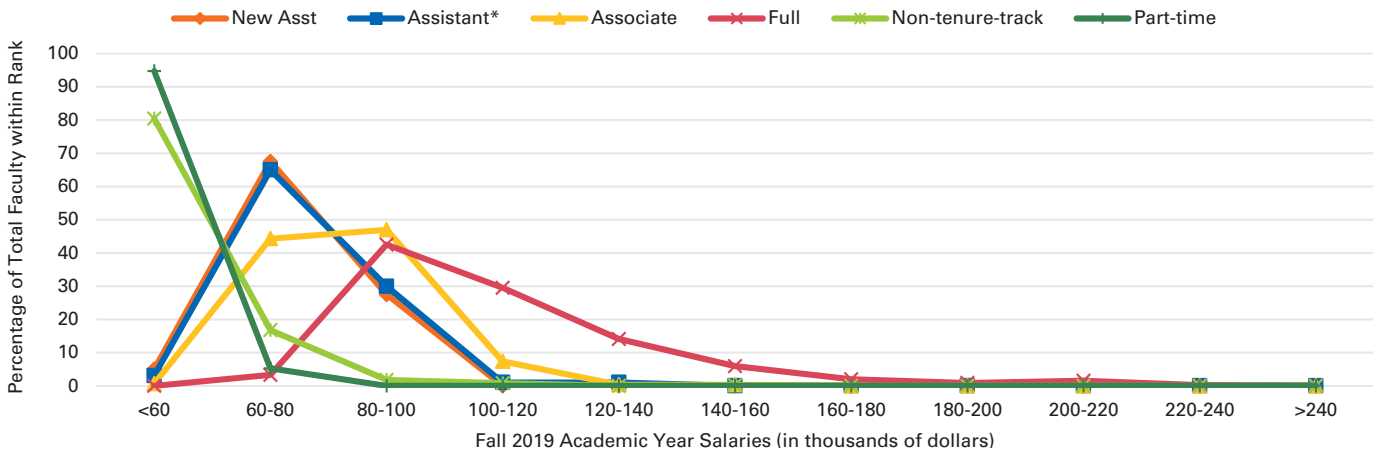
* Includes newly hired assistant professors.

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Math Public Small Group Faculty Salaries							
40 responses out of 73 departments (55%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All	40	71,800	75,700	83,700	74,771	74,330
	Men	32	71,900	75,800	80,900	74,511	76,490
	Women	8	71,900	75,800	81,200	75,813	69,510
Assistant Professor ¹	All	197	72,100	76,200	81,800	76,283	74,170
	Men	139	71,400	76,700	81,900	76,365	74,720
	Women	58	70,800	74,600	81,200	76,088	72,870
Associate Professor	All	298	74,800	81,300	88,900	82,785	82,590
	Men	217	74,200	81,200	89,400	82,894	82,950
	Women	81	76,200	81,700	88,000	82,492	81,650
Full Professor	All	454	91,600	102,700	119,700	108,584	109,570
	Men	382	91,700	103,300	121,300	109,366	111,040
	Women	72	90,900	100,300	114,100	104,439	102,760
Non-tenure-track faculty	All	501	44,600	52,100	58,600	52,746	52,640
	Men	248	45,700	52,200	63,300	52,941	52,240
	Women	253	43,800	51,900	58,700	52,555	53,030

¹Includes newly hired assistant professors.

Figure 4. Math Public Small Group—Percentage of Faculty Salaries within each Salary Range by Category



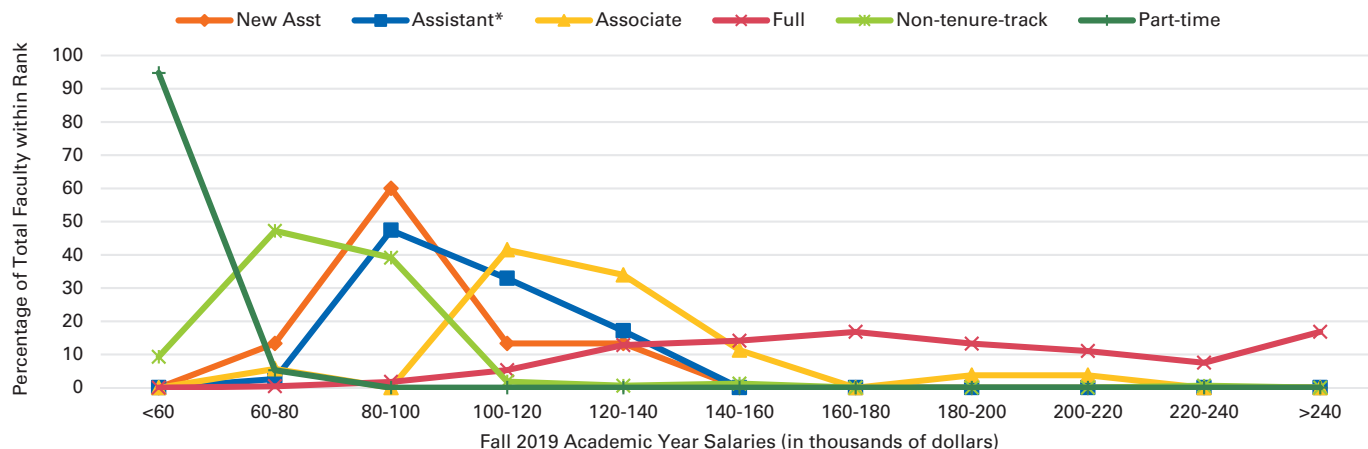
* Includes newly hired assistant professors.

Math Private Large Group Faculty Salaries							
15 responses out of 24 departments (63%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All	15	81,700	92,500	105,000	93,792	93,390
	Men	12	82,500	95,600	111,200	95,586	90,620
	Women ²	3	-	-	-	86,614	98,940
Assistant Professor ¹	All	76	84,600	100,200	110,700	100,817	93,770
	Men	60	84,300	100,300	111,000	100,452	92,000
	Women	16	96,200	101,000	111,700	102,183	99,460
Associate Professor	All	53	112,600	122,200	136,800	126,095	118,400
	Men	46	112,100	121,700	135,000	123,078	115,640
	Women ²	7	-	-	-	145,918	131,380
Full Professor	All	226	150,400	177,900	218,000	186,756	182,160
	Men	201	151,100	178,100	220,500	187,281	182,160
	Women	25	141,700	175,000	212,500	182,531	182,170
Non-tenure-track faculty	All	161	63,600	72,800	83,200	75,770	71,400
	Men	125	64,500	73,700	83,400	77,083	71,480
	Women	36	62,100	67,100	82,500	71,212	71,090

¹Includes newly hired assistant professors.

²Too few to report.

Figure 5. Math Private Large Group—Percentage of Faculty Salaries within each Salary Range by Category



* Includes newly hired assistant professors.

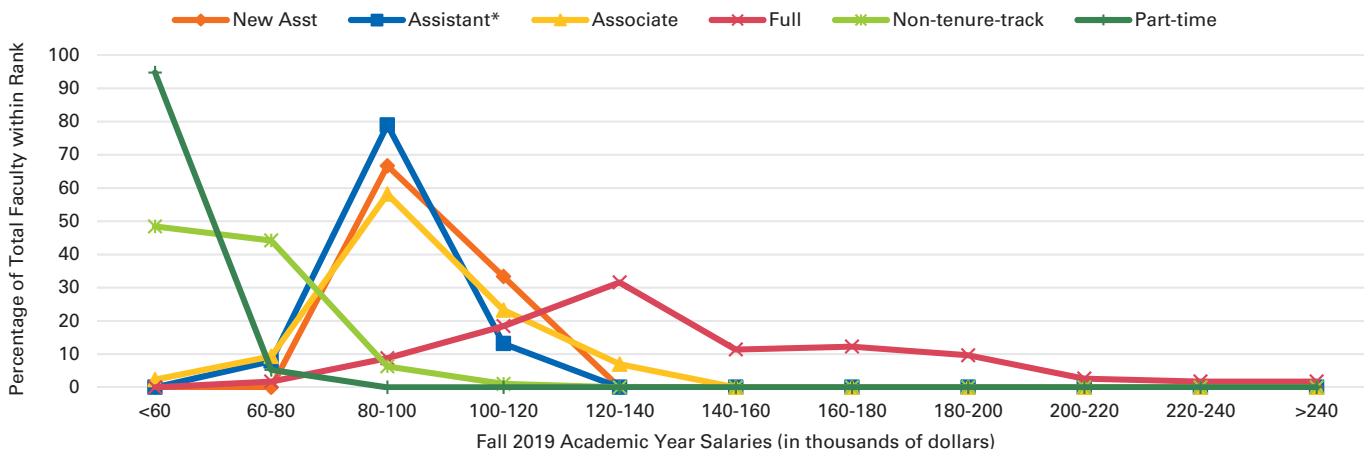
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Math Private Small Group Faculty Salaries ¹							
13 responses out of 28 departments (46%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All²	3	-	-	-	91,833	86,420
	Men ²	3	-	-	-	91,833	85,060
	Women ²	0	-	-	-	-	89,500
Assistant Professor ¹	All	38	83,200	89,100	95,800	89,924	89,250
	Men	27	83,700	90,700	96,700	90,444	89,850
	Women	11	81,200	86,700	93,300	88,647	87,730
Associate Professor	All	86	88,500	94,400	103,100	94,886	97,690
	Men	70	88,600	95,200	103,800	95,202	97,530
	Women	16	88,100	92,900	101,200	93,506	98,440
Full Professor	All	114	117,100	133,700	163,300	140,929	141,240
	Men	102	117,100	133,900	163,000	141,508	141,800
	Women	12	121,200	132,500	165,000	136,002	135,540
Non-tenure-track faculty	All	95	53,300	60,800	68,700	61,731	63,860
	Men	64	53,700	60,900	68,500	61,092	64,950
	Women	31	52,700	60,800	69,000	63,049	62,190

¹Includes newly hired assistant professors.

²Too few to report.

Figure 6. Math Private Small Group—Percentage of Faculty Salaries within each Salary Range by Category



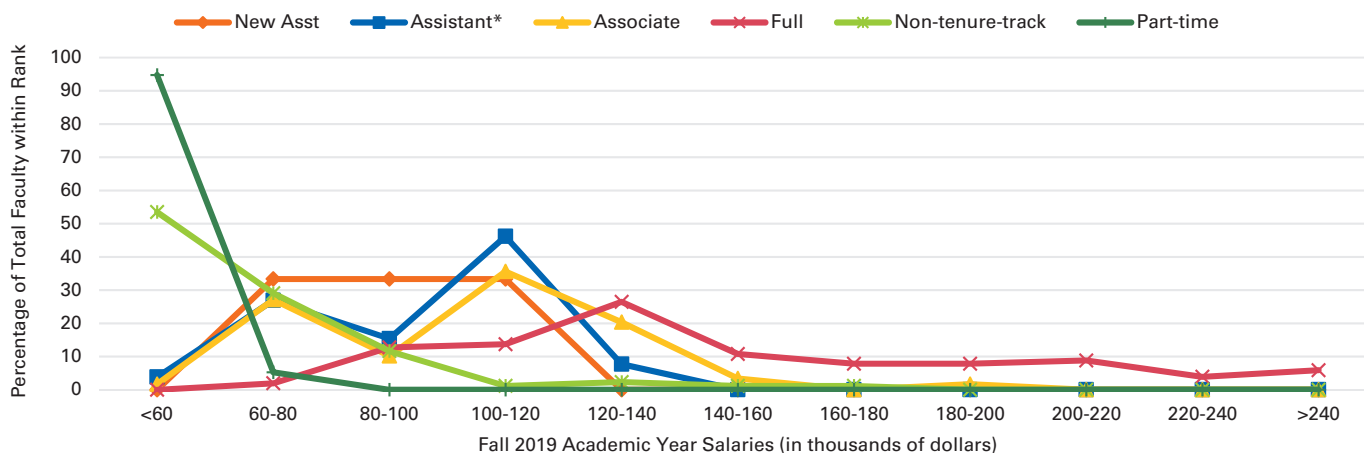
* Includes newly hired assistant professors.

Applied Math Group Faculty Salaries							
11 responses out of 23 departments (48%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All²	3	-	-	-	93,167	111,000
	Men ²	2	-	-	-	100,500	118,000
	Women ²	1	-	-	-	78,500	104,000
Assistant Professor ¹	All	26	76,700	101,400	107,300	94,417	98,580
	Men	21	72,500	98,700	106,100	92,128	97,710
	Women ²	5	-	-	-	104,032	100,980
Associate Professor	All	59	78,500	105,000	122,500	103,555	153,080
	Men	41	78,700	107,000	126,200	106,291	99,670
	Women	18	78,000	101,000	123,300	97,325	102,490
Full Professor	All	102	115,000	136,900	185,000	154,741	153,080
	Men	84	121,900	140,800	192,500	159,737	154,030
	Women	18	96,700	111,200	136,700	131,422	145,450
Non-tenure-track faculty	All	86	48,500	58,200	73,800	64,493	66,720
	Men	51	48,000	56,700	74,000	66,110	70,310
	Women	35	50,800	61,700	73,900	62,137	61,150

¹Includes newly hired assistant professors.

²Too few to report.

Figure 7. Applied Math Group—Percentage of Faculty Salaries within each Salary Range by Category



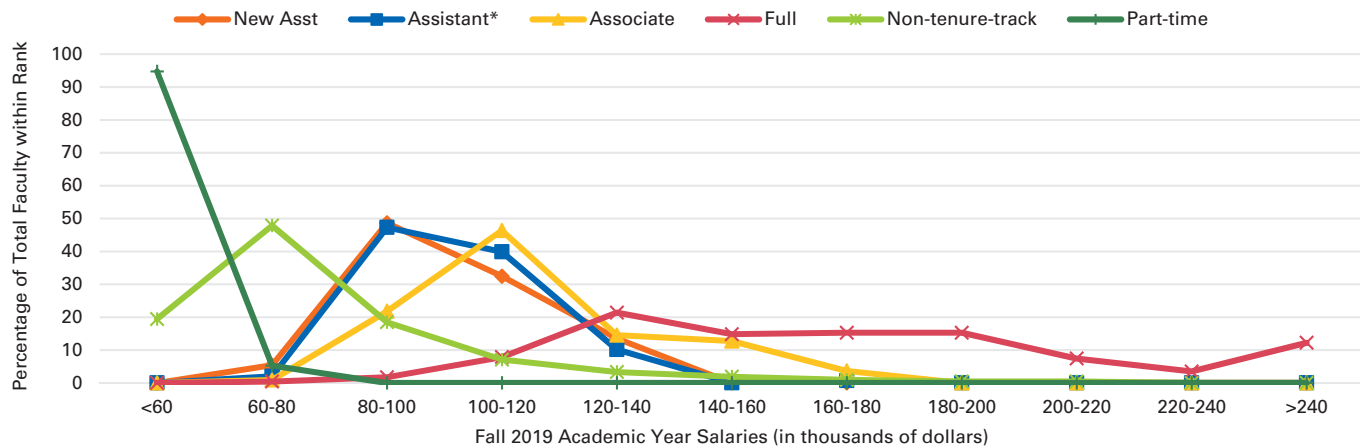
* Includes newly hired assistant professors.

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Statistics Group Faculty Salaries							
24 responses out of 59 departments (41%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All	37	87,500	98,600	107,100	99,620	98,500
	Men	25	90,800	98,600	105,500	97,640	98,330
	Women	12	85,800	101,700	128,300	103,740	98,750
Assistant Professor ¹	All	148	93,300	100,400	109,600	102,340	97,310
	Men	110	94,600	101,400	109,700	102,860	97,620
	Women	38	89,300	97,800	108,700	100,850	96,570
Associate Professor	All	110	101,000	111,000	127,000	115,704	105,860
	Men	66	101,900	112,600	132,000	117,437	107,820
	Women	44	100,400	108,200	124,200	113,106	102,210
Full Professor	All	229	134,700	163,700	196,800	167,705	164,340
	Men	185	136,100	164,500	195,900	167,644	164,130
	Women	44	132,300	155,000	201,200	167,957	165,150
Non-tenure-track faculty	All	211	62,400	71,200	88,200	78,296	77,820
	Men	119	65,400	73,600	88,500	79,569	79,170
	Women	92	58,100	68,400	87,500	76,649	76,280

¹Includes newly hired assistant professors.

Figure 8. Statistics Group—Percentage of Faculty Salaries within each Salary Range by Category



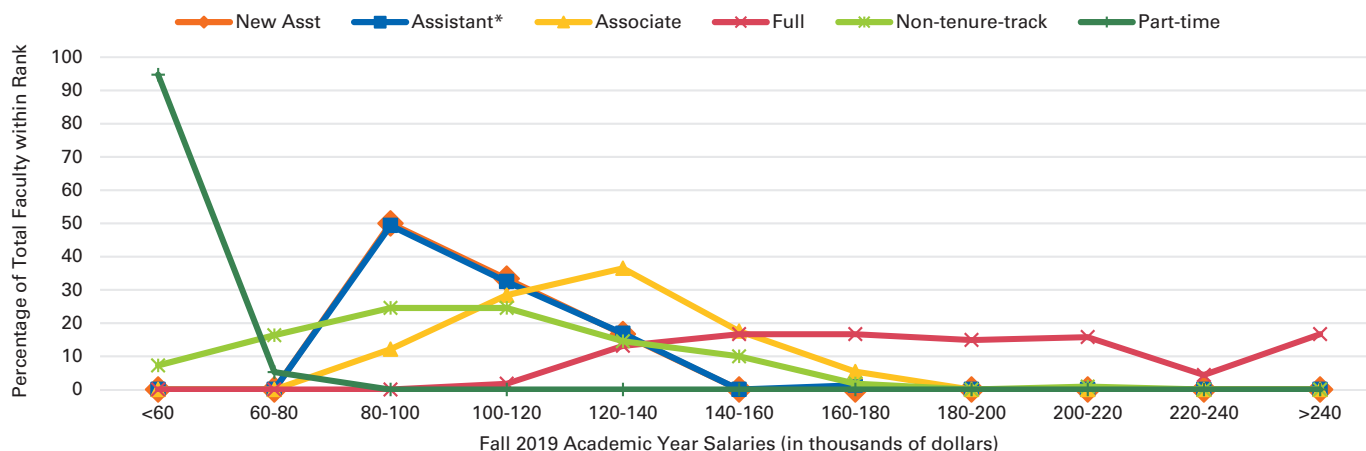
* Includes newly hired assistant professors.

Biostatistics Group Faculty Salaries							
14 responses out of 49 departments (29%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	All	17	90,400	93,600	106,200	98,050	90,060
	Men	13	87,500	92,500	102,500	96,360	91,688
	Women ²	4	-	-	-	103,570	86,800
Assistant Professor ¹	All	84	89,200	94,200	103,700	97,260	92,060
	Men	56	87,900	92,300	98,400	95,770	90,480
	Women	28	93,100	100,500	106,800	100,240	95,120
Associate Professor	All	87	110,400	118,200	127,800	119,850	118,540
	Men	59	111,000	118,500	127,600	120,290	118,330
	Women	28	107,000	117,200	127,900	118,920	119,130
Full Professor	All	150	148,700	167,600	204,300	180,310	179,920
	Men	104	146,500	167,800	203,000	180,120	180,400
	Women	46	153,300	166,900	206,700	180,740	178,150
Non-tenure-track faculty	All	110	89,500	102,700	122,000	109,430	141,040
	Men	52	92,900	103,700	132,500	114,310	180,650
	Women	58	86,000	101,200	126,200	105,060	115,920

¹Includes newly hired assistant professors.

²Too few to report.

Figure 9. Biostatistics Group—Percentage of Faculty Salaries within each Salary Range by Category



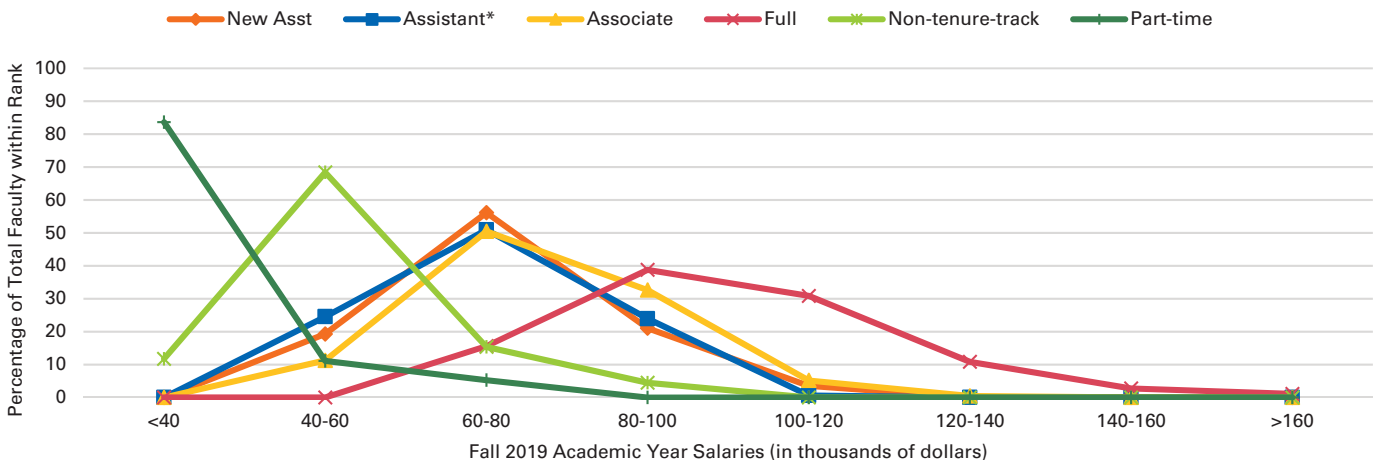
* Includes newly hired assistant professors.

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Masters Group Faculty Salaries							
90 responses out of 163 departments (55%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	ALL	57	61,600	69,000	80,600	71,419	68,990
	Men	33	60,400	67,500	77,500	68,267	69,450
	Women	24	63,500	75,600	88,500	75,754	67,990
Assistant Professor ¹	ALL	322	60,200	68,200	79,700	69,602	67,640
	Men	200	59,800	68,100	78,600	69,105	67,570
	Women	122	60,700	68,400	82,300	70,417	67,780
Associate Professor	ALL	426	64,300	75,700	84,900	76,037	75,850
	Men	276	63,600	74,300	84,500	75,405	76,210
	Women	150	66,600	77,300	86,200	77,200	75,130
Full Professor	ALL	544	83,900	97,400	110,300	99,807	95,410
	Men	412	84,200	97,600	111,300	100,357	150,130
	Women	132	83,000	96,700	108,600	98,090	92,930
Non-tenure-track faculty	ALL	579	43,400	48,400	56,900	51,097	47,380
	Men	294	43,400	49,000	58,800	51,813	47,790
	Women	285	43,400	47,900	54,800	50,357	47,000

¹Includes newly hired assistant professors.

Figure 10. Masters Group—Percentage of Faculty Salaries within each Salary Range by Category

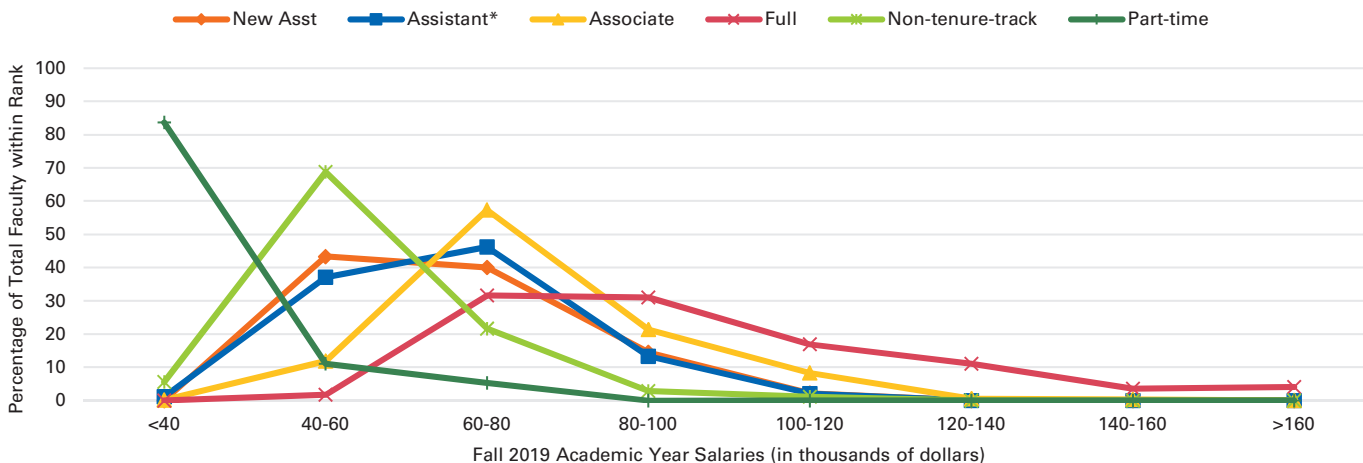


* Includes newly hired assistant professors.

Bachelors Group Faculty Salaries							
227 responses out of 1018 departments (22%)							
Rank	2019-20						2018-19
	Gender	No. Reported	Q1	Median	Q3	Mean	Mean
New Asst Professor	ALL	90	54,100	61,700	73,100	64,592	63,330
	Men	57	53,300	60,800	75,400	64,079	62,110
	Women	33	56,200	63,100	71,900	65,478	66,040
Assistant Professor ¹	ALL	420	56,000	63,200	73,900	65,642	65,170
	Men	260	54,800	62,200	73,100	64,460	64,540
	Women	160	57,700	65,700	74,600	67,561	66,270
Associate Professor	ALL	556	65,200	72,400	83,500	75,324	76,850
	Men	381	65,500	72,400	83,000	75,292	77,110
	Women	175	64,000	72,200	85,500	75,395	76,380
Full Professor	ALL	693	76,000	89,300	111,600	96,874	96,080
	Men	508	76,600	91,000	112,000	97,743	96,420
	Women	185	74,400	86,000	110,500	94,488	95,080
Non-tenure-track faculty	ALL	522	45,200	51,600	60,400	53,869	56,580
	Men	265	44,900	53,900	63,700	55,636	61,410
	Women	257	45,300	50,400	57,100	52,047	51,250

¹Includes newly hired assistant professors.

Figure 11. Bachelors Group—Percentage of Faculty Salaries within each Salary Range by Category



* Includes newly hired assistant professors.

ANNUAL SURVEY
Distribution of Part-time Faculty Salaries for Academic Year 2019-2020

Department Grouping	Gender	No. Reported	Q1	Median	Q3	Mean
Math Public Large 15 Responses out of 26 (58%)	All	83	10,700	14,600	21,700	22,655
	Men	51	11,100	16,000	27,500	25,991
	Women	32	10,500	13,400	18,700	17,338
Math Public Medium 32 Responses out of 40 (80%)	All	172	16,600	18,700	40,700	29,797
	Men	100	16,900	19,400	41,200	30,697
	Women	72	19,100	25,500	39,100	28,547
Math Public Small 40 responses out of 73 (55%)	All	73	13,100	23,300	38,200	29,158
	Men	46	12,500	24,200	38,300	30,596
	Women	27	13,600	22,100	38,000	26,709
Math Private Large 15 Responses out of 24 (63%)	All¹	5	-	-	-	72,756
	Men ¹	4	-	-	-	80,388
	Women ¹	1	-	-	-	42,226
Math Private Small 13 Responses out of 28 (46%)	All	26	66,700	91,200	125,000	100,275
	Men	24	65,800	91,200	122,500	98,068
	Women	2	-	-	-	126,762
Applied Math 11 Responses out of 23 (48%)	All¹	2	-	-	-	16,298
	Men ¹	2	-	-	-	16,298
	Women ¹	0	-	-	-	-
Statistics 24 Responses out of 59 (41%)	All	49	15,600	31,700	76,500	46,292
	Men	33	13,600	31,200	75,800	47,350
	Women	16	20,600	32,500	77,500	44,110
Biostatistics 14 Responses out of 49 (29%)	All	5	26,200	72,500	132,500	82,880
	Men	5	26,200	72,500	132,500	82,880
	Women ¹	0	-	-	-	-
Masters 90 Responses out of 163 (55%)	All	259	12,300	42,100	53,700	36,882
	Men	145	11,000	28,600	52,400	32,520
	Women	114	16,200	48,200	54,600	42,431
Bachelors 227 Responses out of 1,492 (15%)	All	171	7,200	17,100	35,600	21,319
	Men	103	6,500	14,600	32,000	19,964
	Women	68	8,300	22,500	38,200	23,372

¹Too few to report.

Distribution of Instructional Staff Pay per Course for Academic Year 2019-2020

Department Grouping	Gender	No. Courses Taught	Q1	Median	Q3	Mean
Math Public Large 15 Responses out of 26 (58%)	All	121	5,100	8,100*	8,600*	8,062
	Men	87	5,200	8,200*	8,600*	8,396
	Women	34	5,100	7,500	8,400*	7,209
Math Public Medium 32 Responses out of 40 (80%)	All	624	4,800	6,100	8,200*	7,096
	Men	398	4,800	6,100	8,200*	7,057
	Women	226	5,000	6,000	8,100*	7,164
Math Public Small 40 responses out of 73 (55%)	All	474	2,800	4,500	5,700	5,930
	Men	290	2,800	4,500	5,800	5,021
	Women	184	2,700	4,400	5,600	7,362
Math Private Large 15 Responses out of 24 (63%)	All	24	8,100*	8,400*	8,700*	9,253
	Men	17	8100*	8,400*	8,700*	8,768
	Women	7	7,500	8,300*	8,700*	10,431
Math Private Small 13 Responses out of 28 (46%)	All	80	3,500	4,100	4,900	4,064
	Men	47	3,400	4,100	4,900	4,068
	Women	33	3,500	4,200	4,900	4,058
Applied Math 11 Responses out of 23 (48%)	All	55	6,700	7,500	8,200*	7,120
	Men	43	4,900	7,500	8,300*	7,037
	Women	12	7,300	7,500	7,800	7,417
Statistics 24 Responses out of 59 (41%)	All	39	5,600	8,200*	8,700*	11,496
	Men	29	5,800	8,200*	8,800*	12,576
	Women	10	4,700	7,500	8,300*	8,365
Biostatistics 14 Responses out of 49 (29%)	All	22	5,300	5,700	6,500	7,021
	Men	13	5,400	5,900	8,600*	8,192
	Women	9	5,200	5,400	5,700	5,329
Masters 90 Responses out of 163 (55%)	All	1,395	3,200	4,200	5,500	4,356
	Men	832	3,100	4,200	5,500	4,355
	Women	563	3,300	4,300	5,500	4,357
Bachelors 227 Responses out of 1,492 (15%)	All	1,361	2,100	2,900	4,300	3,395
	Men	710	2,200	3,000	4,500	3,659
	Women	651	2,000	2,700	3,900	3,108

*These are part of the largest bin "\$8,000 and above". The given values were extrapolated from a bin width of \$8,000

ANNUAL SURVEY

Departmental Groupings

In this report, *Mathematical and Statistical Sciences* departments are those in four-year institutions in the US that refer to themselves with a name that incorporates (with a few exceptions) “Mathematics” or “Statistics” in some form. For instance, the term includes, but is not limited to, departments of “Mathematics,” “Mathematical Sciences,” “Mathematics and Statistics,” “Mathematics and Computer Science,” “Applied Mathematics,” “Statistics,” and “Biostatistics.” Also, *Mathematics (Math)* refers to departments that (with exceptions) have “mathematics” in the name; *Stat/Biostat (Stats)* refers to departments that incorporate (again, with exceptions) “statistics” or “biostatistics” in the name but do not use “mathematics.”

Listings of the actual departments that comprise these groups are available on the AMS website at <https://www.ams.org/annual-survey/groupings>.

A department is in Group...	...when its subject area, highest degree offered, and PhD production rate* p
Math Public Large	Math PhD, $7.0 \leq p$
Math Public Medium	Math PhD, $3.9 \leq p < 7.0$
Math Public Small	Math PhD, $p < 3.9$
Math Private Large	Math PhD, $3.9 \leq p$
Math Private Small	Math PhD, $p < 3.9$
Applied Math	Applied mathematics, PhD
Statistics	Statistics, PhD
Biostatistics	Biostatistics, PhD
Masters	Math, master's
Bachelors	Math, bachelor's
Doctoral Math	Math Public, Math Private, & Applied Math
Stat/Biostat or Stats	Statistics & Biostatistics
Math	All groups except Statistics & Biostatistics

*The doctorate-granting departments of mathematics PhD production rates are based on the size of the PhD program as reflected in the number of PhDs awarded (as reported by departments to the Annual Survey) during the ten years from July 1, 2000, through June 30, 2010. Since there are some departments that did not report their PhDs for every Annual Survey during this time, the average of their reported annual number of PhDs awarded was used to compare the departments.

Obtain a Special Faculty Salaries Analysis

Each year the AMS provides a limited number of special faculty salary analyses to departments requesting them. These reports are based on data gathered through the Survey and provide more nuanced comparisons with similar institutions than is possible with the Faculty Salaries Report. In order to receive a special analysis, your department must have responded to the most recent Faculty Survey.

Send a list of your peer institutions (a minimum of 12 institutions is required) to ams-survey@ams.org along with the date by which the analysis is needed. (If not enough of your peer group have responded to the salary survey, you will be asked to provide additional institutions.) A minimum of two weeks is needed to complete a special analysis.

The analysis produced includes a listing of your peer group institutions along with their salary survey response status; a summary table including the rank (assistant, associate, and full professor); the number reported in each rank; the 1st quartile, median, 3rd quartile, and mean salaries for each along with bar graphs.

Acknowledgments

The Annual Survey attempts to provide an accurate appraisal and analysis of various aspects of the academic mathematical sciences scene for the use and benefit of the professional organizations. Every year, college and university departments in the United States are invited to respond. The Annual Survey relies heavily on the conscientious efforts of the dedicated staff members of these departments for the quality of its information. On behalf of the Joint Data Committee and the Annual Survey Staff, we thank the many secretarial and administrative staff members in the mathematical sciences departments for their cooperation and assistance in responding to the survey questionnaires.