

MASTER OF SCIENCE IN ANALYTICS

**2021 EMPLOYMENT REPORT**

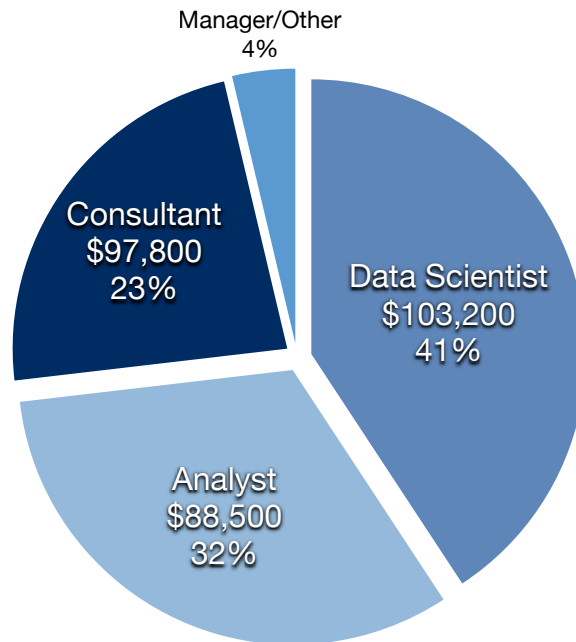
Number of graduates:	118
Number of graduates seeking new employment:	116
Candidates employed at graduation:	108
Placement rate at graduation:	92%
Average base salary:	\$97,200
Median base salary:	\$98,500
Number of employers interviewing:	148
Number of employers hiring one or more candidates:	39
Total number of reported job offers:	165
Job placements facilitated by the Institute:	85%
Median net increase in earnings:	70%
Median ROI payback period (in months):	25
Job placements based in North Carolina:	48%
Job placements based in U.S.:	100%
Candidates reporting salary data:	100%

Placement results for Class of 2021 reported upon graduation, May 17, 2021.

## POSITIONS FILLED

Analyst (2)	Principal Data Scientist
Associate Data Scientist (3)	Product Management Specialist
Bioinformatician	Quant Analytics Senior Associate (2)
Business Analyst (2)	Quantitative Analytics Senior Associate
Business Analytics Advisor	Senior Analyst (3)
Consultant (11)	Senior Associate Analytical Consultant (2)
Data Analyst (5)	Marketing Analytics Specialist
Data Scientist (22)	Quantitative Analytics Specialist
Data Scientist Consultant (9)	Senior Analyst (3)
Data Scientist Senior Consultant (5)	Senior Associate Analytical Consultant
Data Specialist	Senior Associate Consultant
Informaticist	Senior Associate, Data Science (3)
Manager, Data Analytics and Insights	Senior Associate Data Scientist
Marketing Analytics Lead (2)	Senior Consultant (8)
Marketing Analytics Specialist (2)	Statistician (2)

## MAJOR TYPES OF POSITIONS AND AVERAGE BASE SALARIES



## COMPENSATION BY EXPERIENCE LEVEL

	ANNUAL BASE SALARY				SIGNING BONUS
	Total	Prior Work Experience			
		None	1-2 Years	3+ Years	
Mean	\$97,200	\$91,000	\$99,200	\$105,300	\$10,250
Maximum	\$125,000	\$118,000	\$125,000	\$125,000	\$25,000
75th Percentile	\$105,000	\$100,000	\$110,000	\$115,000	\$13,200
Median	\$98,500	\$90,000	\$100,000	\$105,000	\$10,000
25th Percentile	\$85,000	\$85,000	\$90,000	\$100,000	\$7,250
Minimum	\$65,000	\$65,000	\$77,500	\$84,000	\$3,000
N	106	49	25	32	71
% Reporting	100%	46%	24%	30%	67%

Notes: Data with respect to salaries and bonuses are self-reported by graduates (without anonymity) and whenever possible verified by employers in cases where placement is arranged by the Institute (i.e., most candidates). Two graduates returned to a previous employers. Two graduates will enter a paid, employer-sponsored training program for one year before entering regular full-time employment. All other job placements are full-time paid positions. Data are made public here to guide prospective students and employers. Annual base salary figures do not include signing bonuses, annual bonuses, equity or options, relocation allowances, or other forms of one-time compensation guaranteed upon signing. Conditional job offers (i.e., those requiring security clearance prior to employment) are not included in salary data. As a STEM-qualified degree, international MSA graduates are eligible for Optional Practical Training (OPT). Commencement is typically held on the first Saturday in May, and data are reported each year on or about May 15 for consistency.

**DISCLAIMER:** The Institute has a proven track record for placing graduates in the analytics profession, but it does not under any circumstance offer a guarantee of employment upon completion of the degree.

## EMPLOYERS

(n = 55; with 39 employers succeeding in hiring one or more candidates)

### **Accenture AI**

Agoda

### **Align Technology**

Ally

### **American Express**

### **Ankura**

### **Bain & Company\***

Banking Policy Institute

Beghou Consulting

### **Cherry Bekaert**

### **Cigna**

### **Cisco Systems**

### **Coastal Cloud**

### **Deloitte\***

### **DISH Network\***

Dividend Finance

### **Duke Clinical Research Institute\***

### **Duke University**

Elder Research

### **Elevate Credit\***

### **EY\***

### **Fidelity Investments\***

### **Fifth Third Bank\***

### **Food Bank of Eastern & Central NC**

### **General Motors**

### **GoDaddy**

### **Guidehouse\***

### **Hazen and Sawyer**

### **IBM**

John Deere

### **JPMorgan Chase\***

KPMG

### **LendingTree\***

### **Locus Biosciences**

### **Martin Marietta**

Mission Services, LLC

### **Ocean Media**

### **Pendo\***

### **Peraton**

PwC

Q2 (PrecisionLender)

### **Red Hat**

### **SAS\***

Siemens Healthineers

### **State Farm**

### **Target RWE/NoviSci**

### **The Financial Risk Group\***

### **The Home Depot\***

### **TruDataRx**

### **Truist\***

UC San Francisco

VitalFlo

### **Wake Forest Baptist Health**

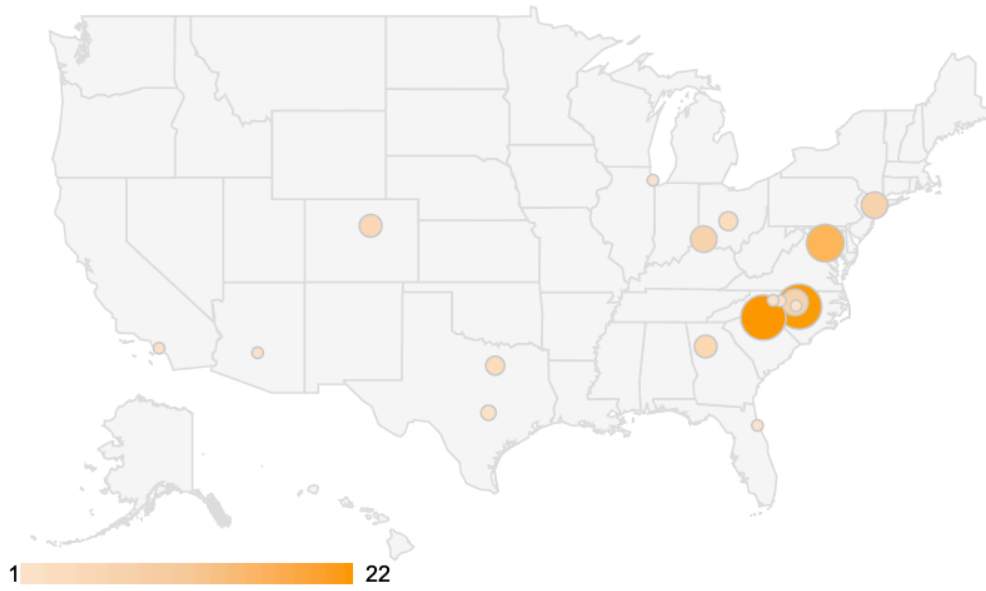
Wellnecity

Wells Fargo

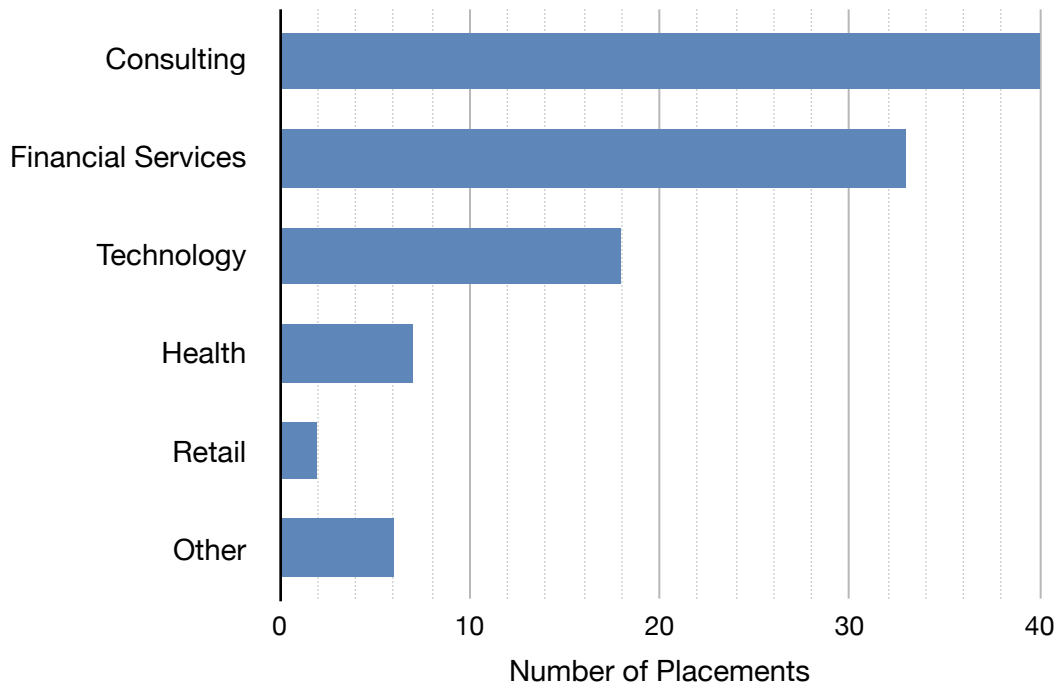
**Bold** = employers that succeeded in hiring one or more candidates.

\* = employers that hired more than one candidate.

## EMPLOYMENT BY GEOGRAPHIC LOCATION



## DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SECTOR



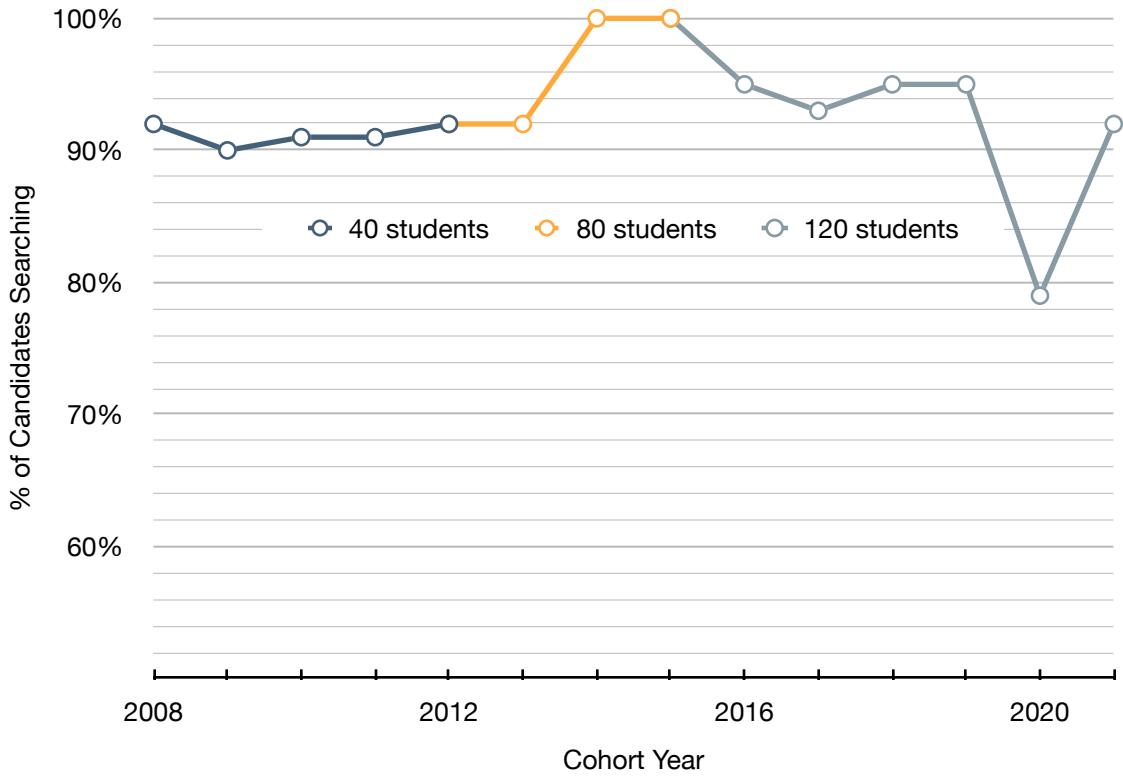
## COMPENSATION BY MAJOR POSITION CATEGORIES

	ANNUAL BASE SALARY				
	All	Data Scientist	Analyst	Consultant	Other
Mean	\$97,200	\$103,200	\$88,500	\$97,800	*
Maximum	\$125,000	\$125,000	\$115,000	\$125,000	*
75th Percentile	\$105,000	\$115,000	\$100,000	\$105,000	*
Median	\$98,500	\$103,750	\$85,000	\$95,000	*
25th Percentile	\$85,000	\$93,000	\$80,000	\$90,000	*
Minimum	\$65,000	\$70,000	\$65,000	\$85,000	*
N	106	44	35	25	4
% of Total	100%	41%	32%	23%	4%

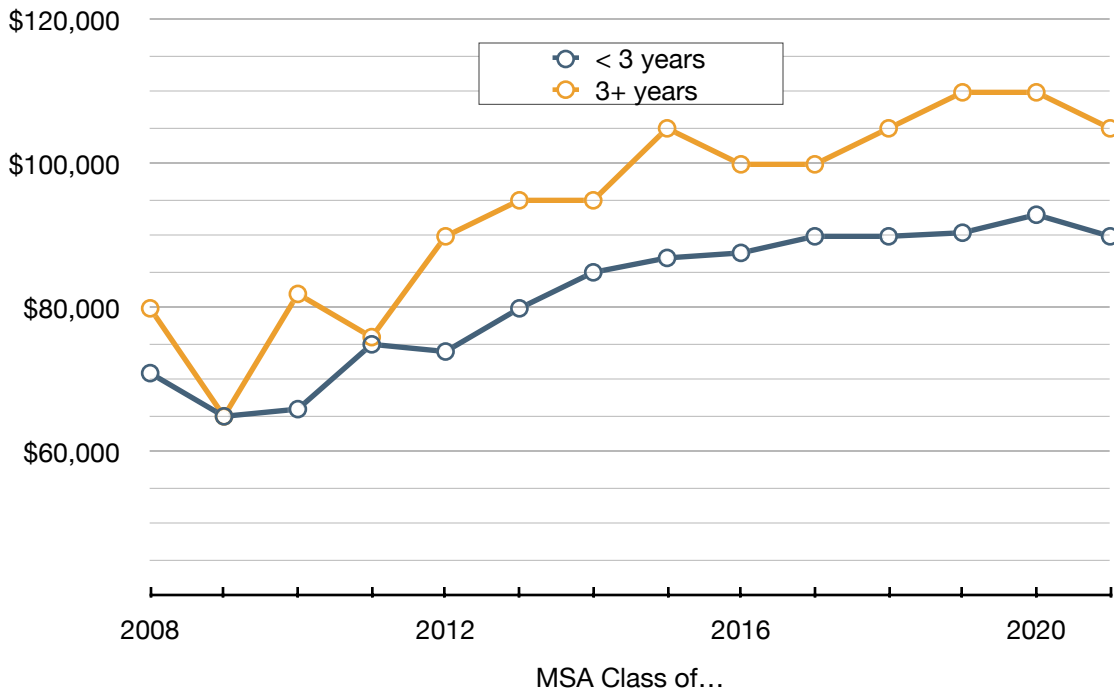
## COMPENSATION BY AGE AND GENDER

	ANNUAL BASE SALARY					
	All	Age Brackets			Gender	
		20-24	25-29	30+	Men	Women
Mean	\$97,200	\$90,900	\$103,000	\$103,300	\$96,400	\$98,400
Maximum	\$125,000	\$115,000	\$125,000	\$125,000	\$125,000	\$125,000
75th Percentile	\$105,000	\$100,000	\$115,000	\$105,000	\$105,000	\$110,000
Median	\$98,500	\$90,000	\$101,250	\$105,000	\$97,000	\$100,000
25th Percentile	\$85,000	\$85,000	\$93,000	\$97,500	\$85,000	\$88,500
Minimum	\$65,000	\$65,000	\$84,000	\$85,000	\$71,500	\$65,000
N	106	51	40	15	64	42
% of Total	100%	48%	38%	14%	60%	40%

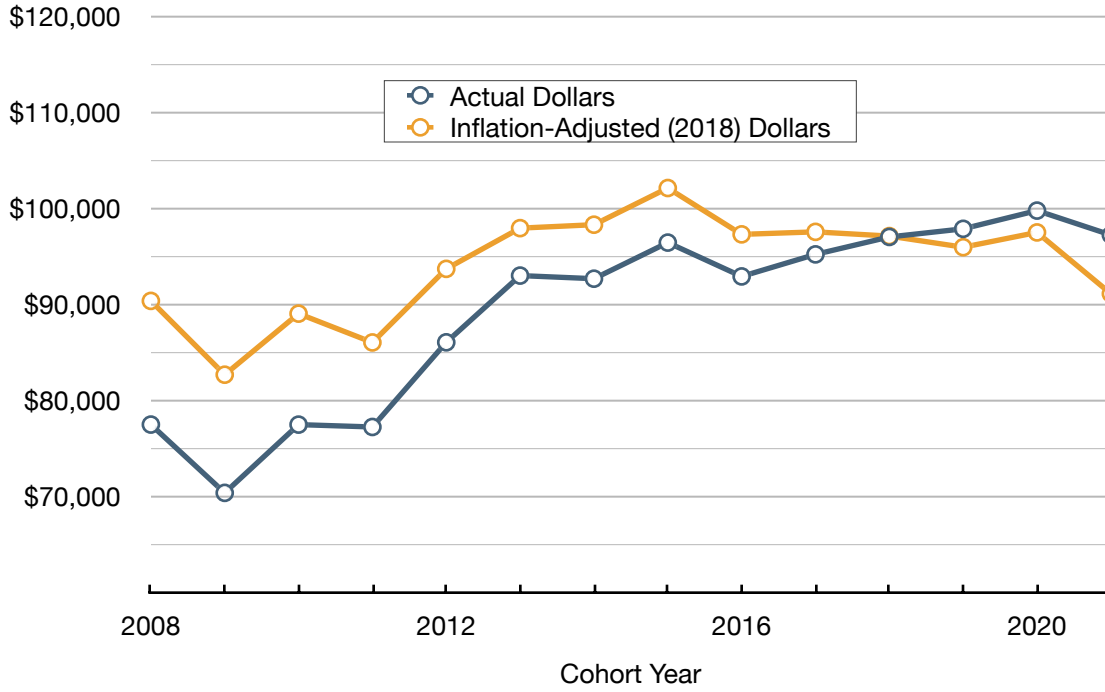
### Employment at Graduation



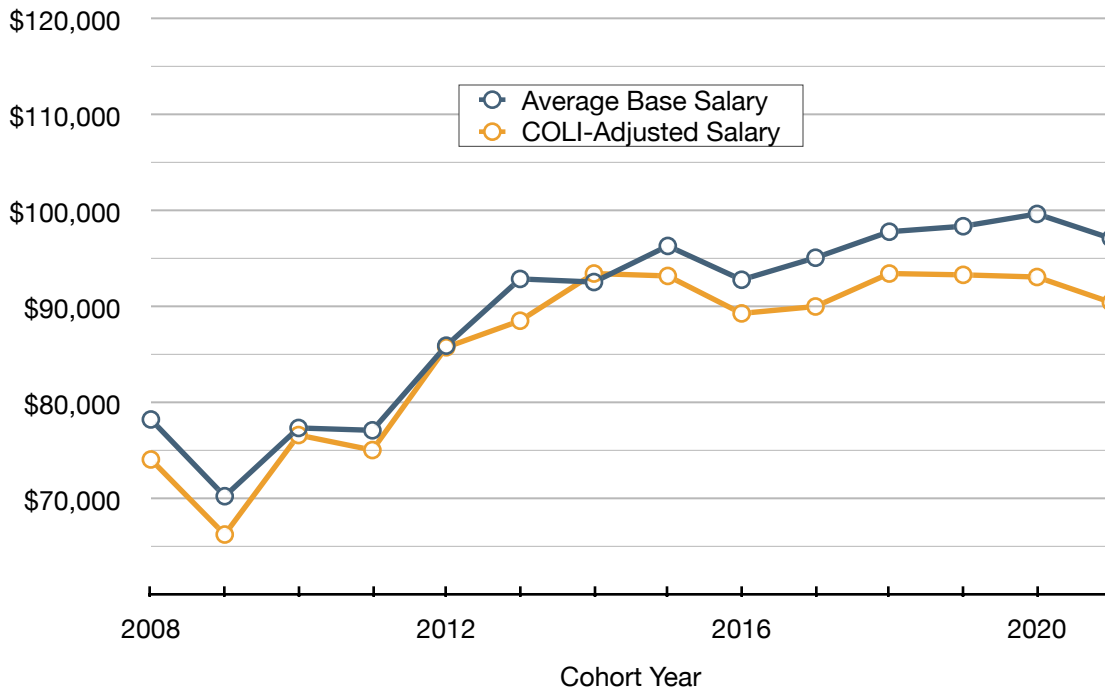
### HISTORICAL TREND IN MEDIAN BASE STARTING SALARY BY LEVEL OF PRIOR WORK EXPERIENCE



### INFLATION-ADJUSTED AVERAGE BASE SALARY BY COHORT YEAR



### COST OF LIVING INDEX (COLI) ADJUSTED AVERAGE BASE SALARY BY LOCATION OF EMPLOYMENT





## STUDENT RETURN ON INVESTMENT

	NC Resident	Non-Resident
Number of Respondents	39	19
Pre-MSA Salary Median*	\$55,000	\$53,700
(+) Tuition & Fees	\$27,600	\$50,200
(-) Signing Bonus	\$10,000	\$10,000
Total Investment	\$72,600	\$93,900
Post MSA Salary Median	\$105,000	\$100,000
(-) Pre-MSA Salary	\$55,000	\$53,700
Net Salary Increase	\$50,000	\$46,300
Payback Period (months)	17	24
Net Increase in Earnings	91%	86%
Based on graduates with full-time employment prior to program entry. The median net increase in salary for the 58 graduates was \$43,500.		

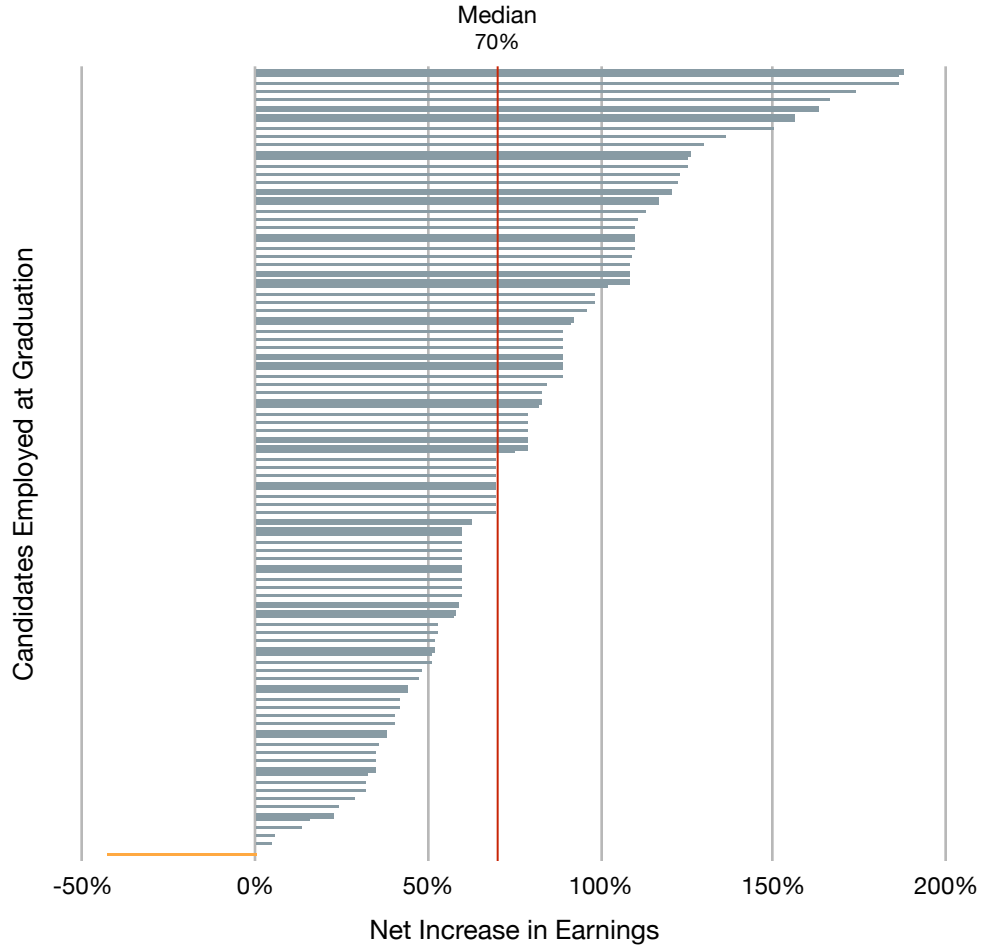
## PAYBACK PERIOD CALCULATION

$$\text{Payback Period (in months)} = \frac{(\text{Pre-MSA Salary} + \text{Tuition}) - \text{Signing Bonus}}{\text{Post-MSA Salary} - \text{Pre-MSA Salary}} \times 12$$

Notes: Respondents provided information about their pre- and post-MSA annual base salaries, signing bonuses, and residency status (which determines tuition payments). The median salary increase was \$42,500; all but one respondent reported an increase in salary. The ROI payback period is calculated for each candidate employed by graduation, based on their individual circumstances (residency, tuition, pre- and post-salaries, and signing bonuses)..

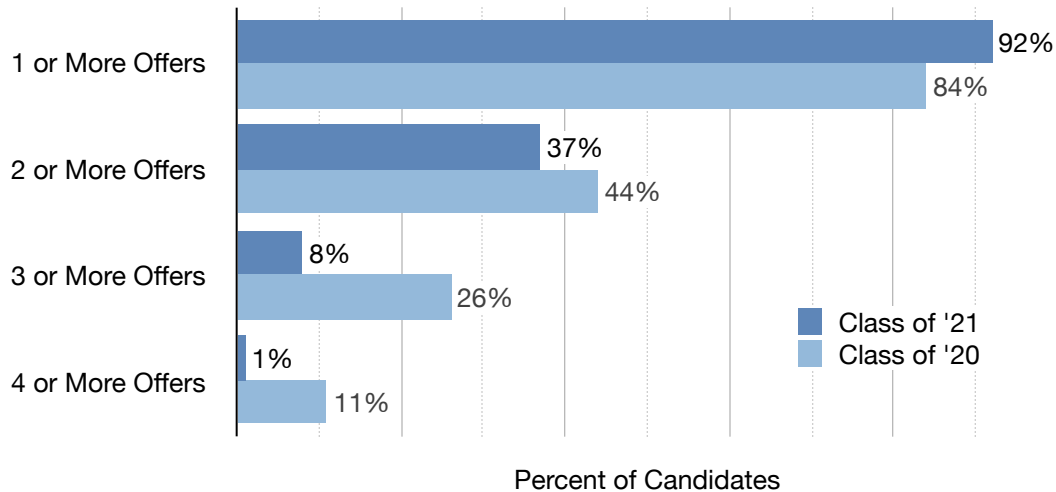
Students are assumed to forgo one-year of earning, even though the MSA program is only 10-months in duration. Pre-MSA salary interquartile range was from \$42,000 to \$71,500. The payback calculation does not take into consideration interest incurred by students who borrow to finance their education.

## NET INCREASE IN EARNINGS FOR CANDIDATES EMPLOYED AT GRADUATION, RANK ORDERED



Note: The net increase in earnings calculation for candidates with no prior work experience is inputted based on the median earnings of candidates with 1-2 years of work experience (\$53,000).

## NUMBER OF JOB OFFERS RECEIVED BY GRADUATION



## COMPENSATION BY INDUSTRY SECTOR

	ANNUAL BASE SALARY				
	All Sectors	Consulting	Financial	Technology	Other
Mean	\$97,200	\$99,800	\$102,400	\$95,600	\$80,800
Maximum	\$125,000	\$125,000	\$125,000	\$125,000	\$105,000
75th Percentile	\$105,000	\$110,000	\$115,000	\$100,000	\$86,500
Median	\$98,500	\$102,500	\$100,000	\$95,000	\$77,500
25th Percentile	\$85,000	\$90,000	\$95,000	\$90,000	\$72,500
Minimum	\$65,000	\$65,000	\$84,500	\$80,000	\$70,000
N	106	40	33	18	15
% of Total	100%	38%	31%	17%	14%

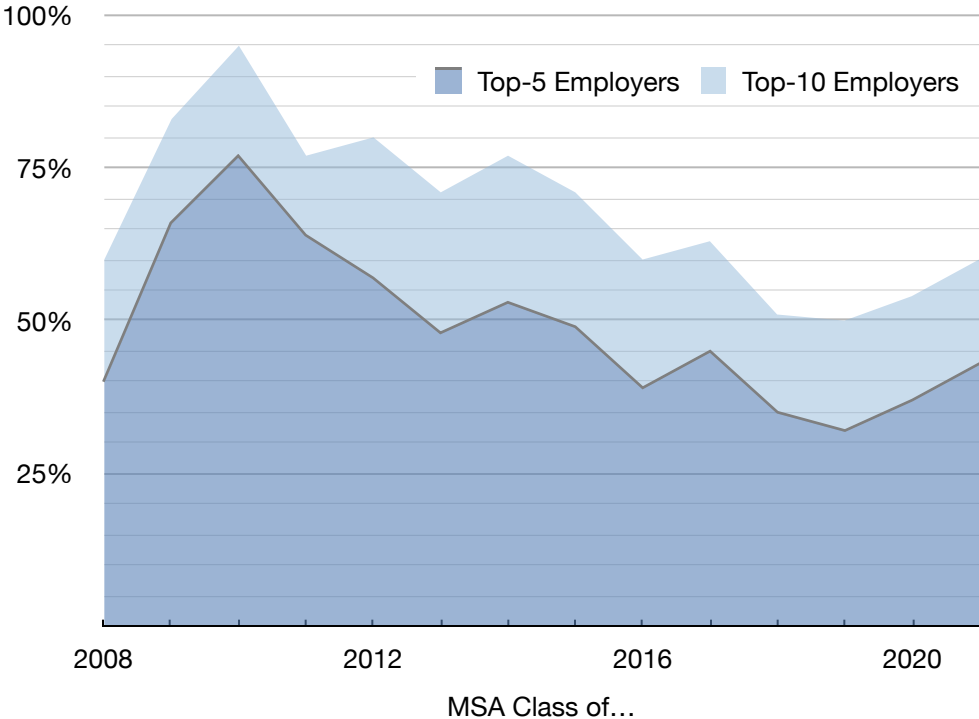
## COMPENSATION BY GEOGRAPHIC REGION

	ANNUAL BASE SALARY				
	North Carolina	U.S. Census Regions Outside North Carolina			
		South	Northeast	Midwest	West
Mean	\$92,900	\$99,400	\$105,800	\$110,400	\$89,300
Maximum	\$125,000	\$120,000	\$125,000	\$115,000	\$100,000
75th Percentile	\$103,750	\$110,000	\$113,750	\$115,000	\$100,000
Median	\$90,000	\$96,000	\$107,500	\$115,000	\$90,000
25th Percentile	\$85,000	\$90,000	\$93,750	\$103,750	\$80,000
Minimum	\$65,000	\$70,000	\$90,000	\$100,000	\$75,000
N	51	30	6	12	7
% of Total	48%	28%	6%	13%	7%

**EMPLOYMENT BY RESIDENCY STATUS  
PRIOR TO ADMISSION**

	Number of Candidates Employed		Subtotal
	Inside North Carolina	Outside North Carolina	
Non-Resident	16%	18%	33%
NC Resident	32%	34%	67%
Subtotal	48%	52%	100%

**PLACEMENT CONCENTRATION AMONG THE TOP-5  
AND TOP-10 EMPLOYERS**



RECRUITING TIMETABLE	
New cohort arrives:	June
<b>Admissions Report</b> with class demographics published:	July 1
Student roster available on Institute web site:	July 15
Employer information sessions begin in:	September
<b>Student Profile Book</b> published:	October 1
<b>Student Resume Book</b> sent to employers:	December 1
Job interviews begin in:	January
Student job decision date:	March 1
Graduation in the first week of:	May
<b>Employment Report</b> published:	May 15
Candidates typically begin employment by the first week of:	June
Open job positions can be circulated to MSA alumni:	Upon receipt
MSA recruitment is managed entirely by the Institute as a service provided free of charge as a courtesy to employers.	

### DISCLAIMER

The Institute has a proven track record for placing graduates in the analytics profession, but it does not under any circumstance offer a guarantee of employment upon degree completion.

### DIRECTOR'S CERTIFICATION

The report of employment outcomes referred to above present fairly, in all material respects, the employment of the Institute's students at graduation as of May 17, 2021 in conformity with principles generally accepted among universities in the United States of America.

May 17, 2021

\_\_\_\_\_  
Date



\_\_\_\_\_  
Dr. Michael Rappa  
Institute Director

Source URL: <http://analytics.ncsu.edu/reports/employment/MSA2021.pdf>

NC STATE UNIVERSITY