

## MASTER OF SCIENCE IN ANALYTICS

# 2024 EMPLOYMENT REPORT

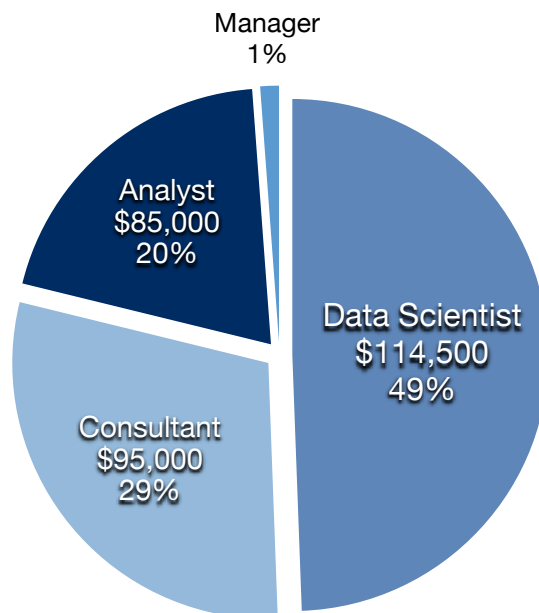
|                                                    |           |
|----------------------------------------------------|-----------|
| Number of graduates (97% completion rate):         | 95        |
| Number of graduates seeking new employment:        | 94        |
| Candidates employed at 180 days post graduation:   | 86        |
| Placement rate:                                    | 91%       |
| Average base salary:                               | \$102,500 |
| Median base salary:                                | \$105,000 |
| Number of employers interviewing:                  | 174       |
| Number of employers hiring one or more candidates: | 47        |
| Total number of reported job offers:               | 110       |
| Job placements facilitated by the Institute:       | 72%       |
| Median net increase in earnings:                   | 60%       |
| Median ROI payback period (in months):             | 27        |
| Job placements based in North Carolina:            | 60%       |
| Job placements based in U.S.:                      | 99%       |
| Candidates reporting salary data:                  | 99%       |

Placement results for Class of '24 reported 180-days post graduation, November 1, 2024.

## SELECTED POSITIONS FILLED

|                                   |                                           |
|-----------------------------------|-------------------------------------------|
| Analyst, Business Analytics       | Python Programmer/Analyst                 |
| Analyst, People Analytics         | Quantitative Analytics Associate          |
| Assistant Manager, Strategy & Ops | Quantitative Associate Strategic Modeling |
| Associate                         | and Analytics                             |
| Associate, Data Analytics         | Regional Director of Decision Support     |
| Associate Data Scientist          | and Predictive Analytics                  |
| Business Analyst                  | Research Data Scientist                   |
| Consultant                        | Research Scientist                        |
| Data Analyst                      | Senior Analytics Consultant               |
| Data and Analytics Specialist     | Senior Associate                          |
| Data Insights Analyst             | Senior Associate Data Scientist           |
| Data Science Consultant           | Senior Business Analyst                   |
| Data Scientist                    | Senior Consultant                         |
| Decision Scientist                | Senior Data Scientist                     |
| Fire Data & Strategic Analyst     | Senior Model Validation Analyst           |
| Linehaul Analytics                | Senior Risk Analytics Consultant          |
| Machine Learning and AI Learning  | Senior Software Engineer, Cybersecurity   |
| Consultant                        | Staff Biostatistician                     |
| Marketing Analyst                 | Student Success Data Support Analyst      |
| Operations Analyst                | VP, Client Quantitative Analyst           |
| Product Analyst                   |                                           |

## MAJOR TYPES OF POSITIONS AND MEDIAN BASE SALARIES



## COMPENSATION BY EXPERIENCE LEVEL

|                 | ANNUAL BASE SALARY |                       |           |           | SIGNING BONUS |
|-----------------|--------------------|-----------------------|-----------|-----------|---------------|
|                 | Total              | Prior Work Experience |           |           |               |
|                 |                    | None                  | 1-2 Years | 3+ Years  |               |
| Mean            | \$102,500          | \$96,100              | \$105,600 | \$111,800 | \$7,257       |
| Maximum         | \$150,000          | \$122,000             | \$122,000 | \$150,000 | \$16,079      |
| 75th Percentile | \$118,500          | \$110,000             | \$122,000 | \$121,000 | \$10,000      |
| Median          | \$106,096          | \$95,000              | \$110,000 | \$115,000 | \$5,300       |
| 25th Percentile | \$90,000           | \$84,500              | \$95,000  | \$105,000 | \$5,000       |
| Minimum         | \$60,000           | \$60,000              | \$80,000  | \$80,000  | \$2,000       |
| N               | 85                 | 40                    | 25        | 20        | 47            |
| % Reporting     | 98%                | 47%                   | 29%       | 24%       | 55%           |
|                 |                    |                       |           |           |               |

Notes: Data with respect to salaries and bonuses are self-reported by graduates (without anonymity) and whenever possible verified by the employer in cases where placement is arranged by the Institute (i.e., most candidates). All 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. One job is a contract position. One job is based outside the U.S. (Compensation data exclude jobs paid in a currency other than U.S. dollars.) The MSA is a STEM-qualified degree. International graduates are eligible for Optional Practical Training (OPT).

**DISCLAIMER:** Over its 17-year history, the Institute has placed over 98% of its graduates in full-time professional positions within 90-days of graduation. But it does not under any circumstance offer a guarantee of employment upon completion of the degree.

## EMPLOYERS

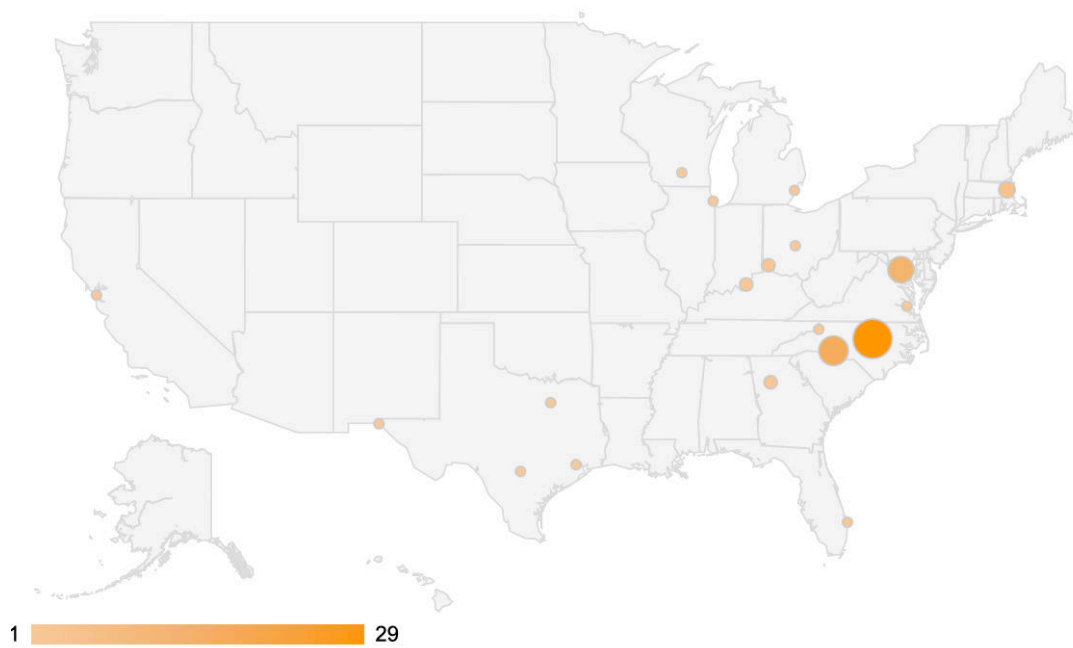
(51 made offers; 47 succeeded in hiring one or more candidates)

|                                          |                                        |
|------------------------------------------|----------------------------------------|
| <b>Academic Programs International</b>   | <b>Humana</b>                          |
| <b>Align Technology</b>                  | <b>LatentView*</b>                     |
| <b>Ally Financial</b>                    | <b>LendingTree*</b>                    |
| <b>Ankura*</b>                           | <b>LexisNexis</b>                      |
| <b>Appalachian State University</b>      | <b>Little Caesars Enterprises</b>      |
| <b>Bank of America</b>                   | <b>Metric5</b>                         |
| BlueFoot AI                              | <b>McDowell Technical CC</b>           |
| <b>Capgemini</b>                         | <b>NextEra Energy</b>                  |
| <b>CenterWell Humana</b>                 | <b>Nutanix</b>                         |
| Charles Schwab                           | <b>OneMain Financial</b>               |
| <b>City of Raleigh (Fire Department)</b> | <b>Red Ventures</b>                    |
| <b>Civic Federal Credit Union</b>        | <b>RTI International*</b>              |
| <b>Cymantix</b>                          | <b>SAS</b>                             |
| <b>D.C. United Football Club</b>         | <b>U.S. Government (3 agencies)*</b>   |
| Deutsche Bank                            | <b>UBS</b>                             |
| <b>Durham VA Medical Center*</b>         | <b>University of Wisconsin Madison</b> |
| Eastwood Homes                           | <b>Verisk Analytics</b>                |
| <b>Elevate*</b>                          | <b>Verizon*</b>                        |
| <b>EY*</b>                               | <b>Volvo Group</b>                     |
| <b>Fifth Third Bank*</b>                 | <b>Waste Management (WM)</b>           |
| <b>First Citizens Bank</b>               | <b>Wells Fargo*</b>                    |
| <b>Financial Risk Group (FRG)</b>        | <b>William &amp; Mary</b>              |
| GEICO                                    | <b>XPO</b>                             |
| <b>Guidehouse*</b>                       |                                        |

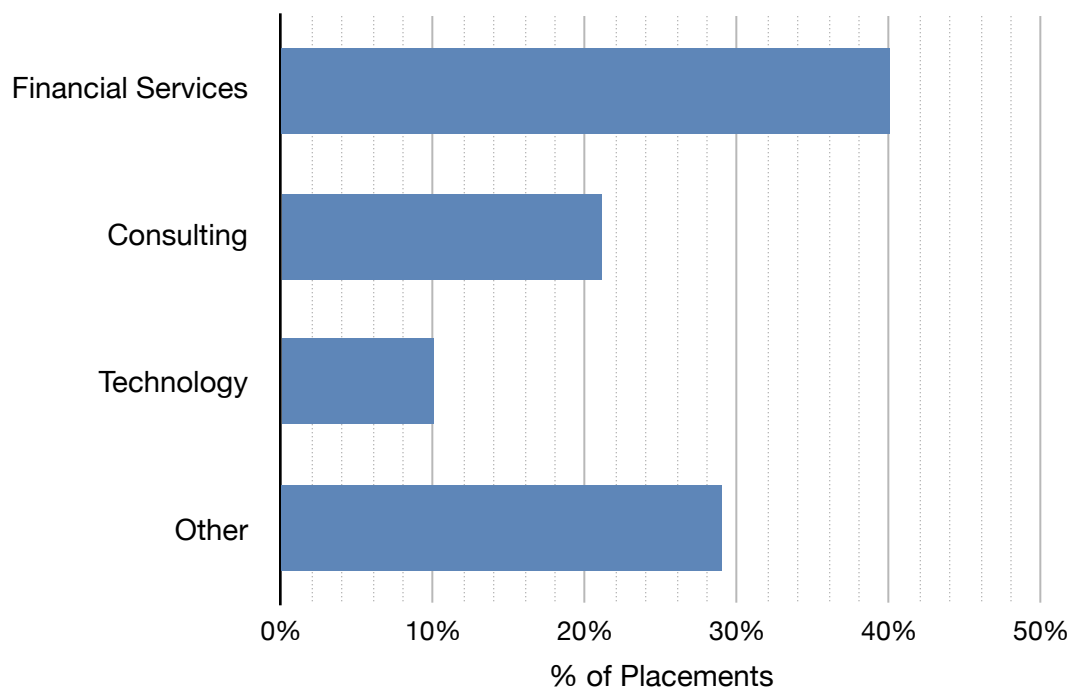
**Bold** = employers that succeeded in hiring one or more candidates.

\* = employers that hired more than one candidate.

## EMPLOYMENT BY GEOGRAPHIC LOCATION



## DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SECTOR



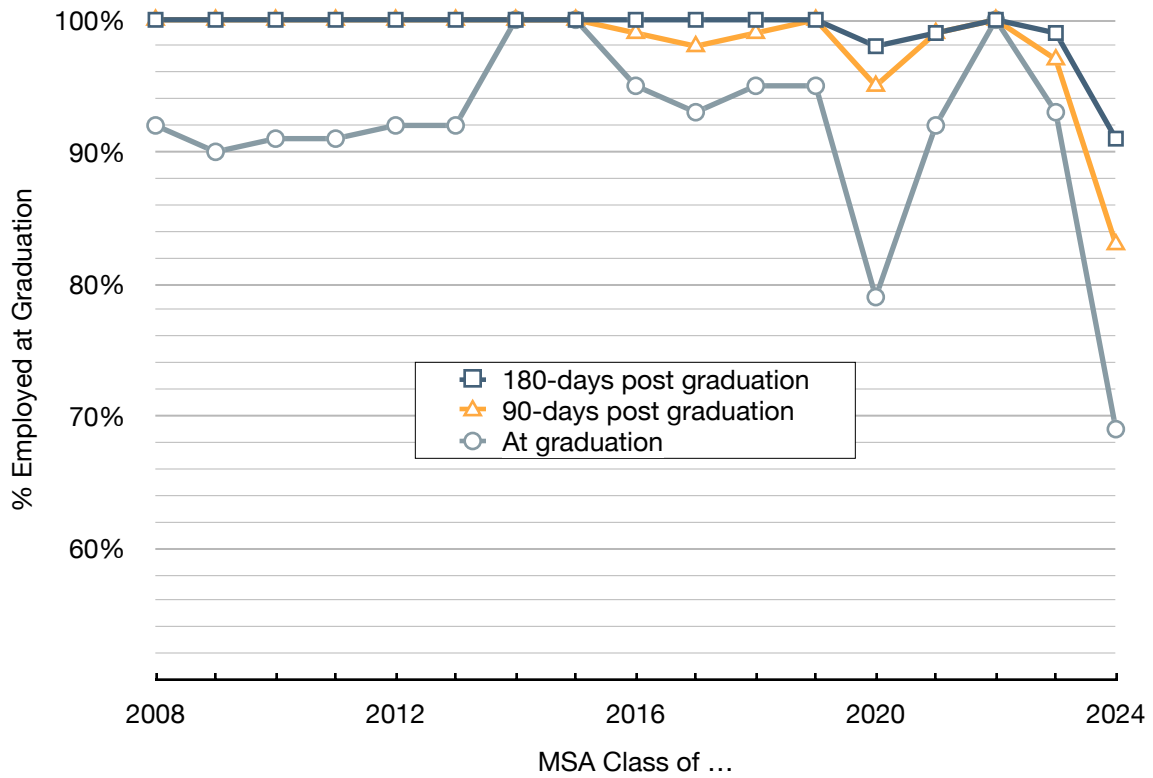
## COMPENSATION BY MAJOR POSITION CATEGORIES

|                 | ANNUAL BASE SALARY |                |           |            |       |
|-----------------|--------------------|----------------|-----------|------------|-------|
|                 | All                | Data Scientist | Analyst   | Consultant | Other |
| Mean            | \$102,500          | \$110,972      | \$87,855  | \$103,059  | *     |
| Maximum         | \$150,000          | \$150,000      | \$120,000 | \$125,000  | *     |
| 75th Percentile | \$118,500          | \$122,000      | \$95,000  | \$115,000  | *     |
| Median          | \$106,096          | \$114,000      | \$86,000  | \$95,000   | *     |
| 25th Percentile | \$90,000           | \$105,548      | \$80,000  | \$90,000   | *     |
| Minimum         | \$60,000           | \$60,000       | \$60,000  | \$80,000   | *     |
| N               | 85                 | 42             | 25        | 17         | 1     |
| % of Total      | 100%               | 49%            | 29%       | 20%        | 1%    |

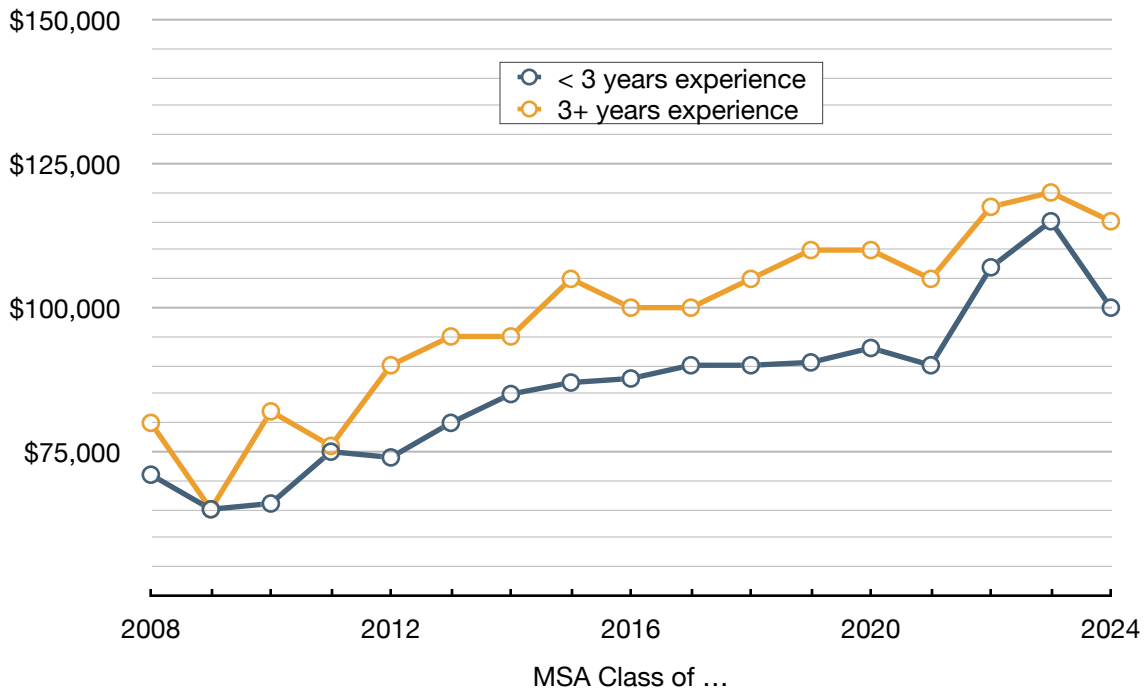
## COMPENSATION BY AGE AND GENDER

|                 | ANNUAL BASE SALARY |              |           |           |                 |           |
|-----------------|--------------------|--------------|-----------|-----------|-----------------|-----------|
|                 | All                | Age Brackets |           |           | Gender Identity |           |
|                 |                    | 20–24        | 25–29     | 30+       | Men             | Women     |
| Mean            | \$102,500          | \$98,200     | \$105,100 | \$119,000 | \$104,900       | \$99,500  |
| Maximum         | \$150,000          | \$122,000    | \$125,000 | \$150,000 | \$125,000       | \$150,000 |
| 75th Percentile | \$118,500          | \$110,000    | \$120,000 | \$123,500 | \$121,500       | \$113,000 |
| Median          | \$106,096          | \$95,000     | \$110,000 | \$118,000 | \$110,000       | \$100,000 |
| 25th Percentile | \$90,000           | \$87,500     | \$92,500  | \$114,500 | \$95,000        | \$88,500  |
| Minimum         | \$60,000           | \$60,000     | \$80,000  | \$95,000  | \$60,000        | \$60,000  |
| N               | 85                 | 57           | 17        | 11        | 47              | 38        |
| % of Total      | 100%               | 67%          | 20%       | 13%       | 55%             | 45%       |

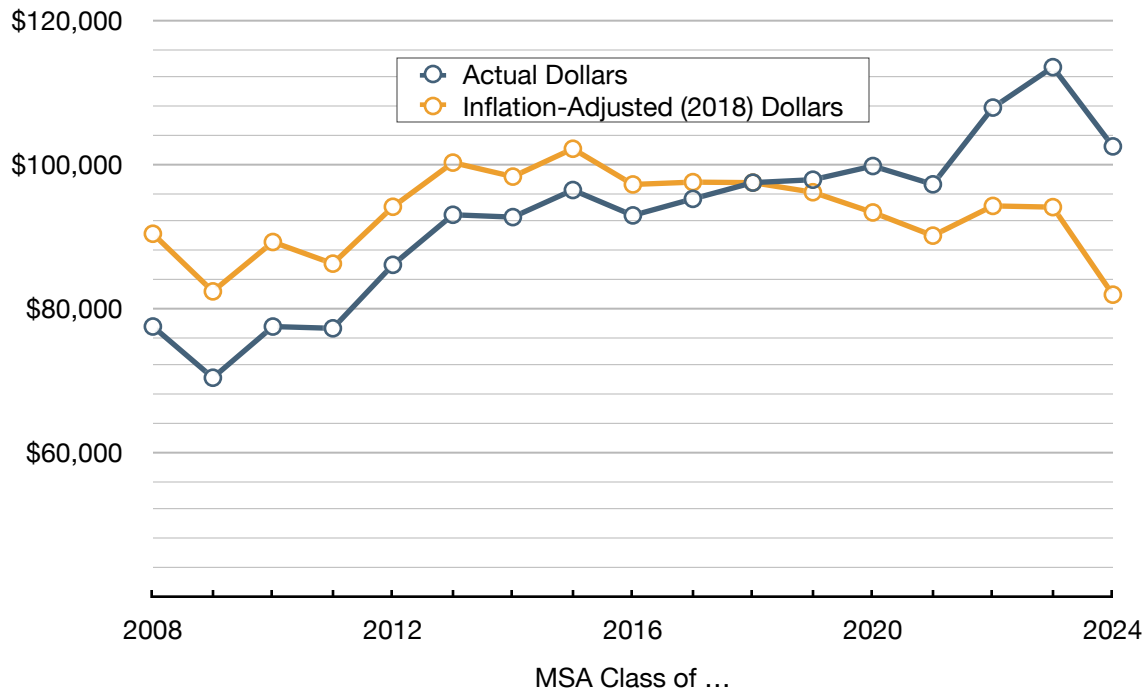
### Employment at Graduation, 90-days and 180-days Post-Graduation



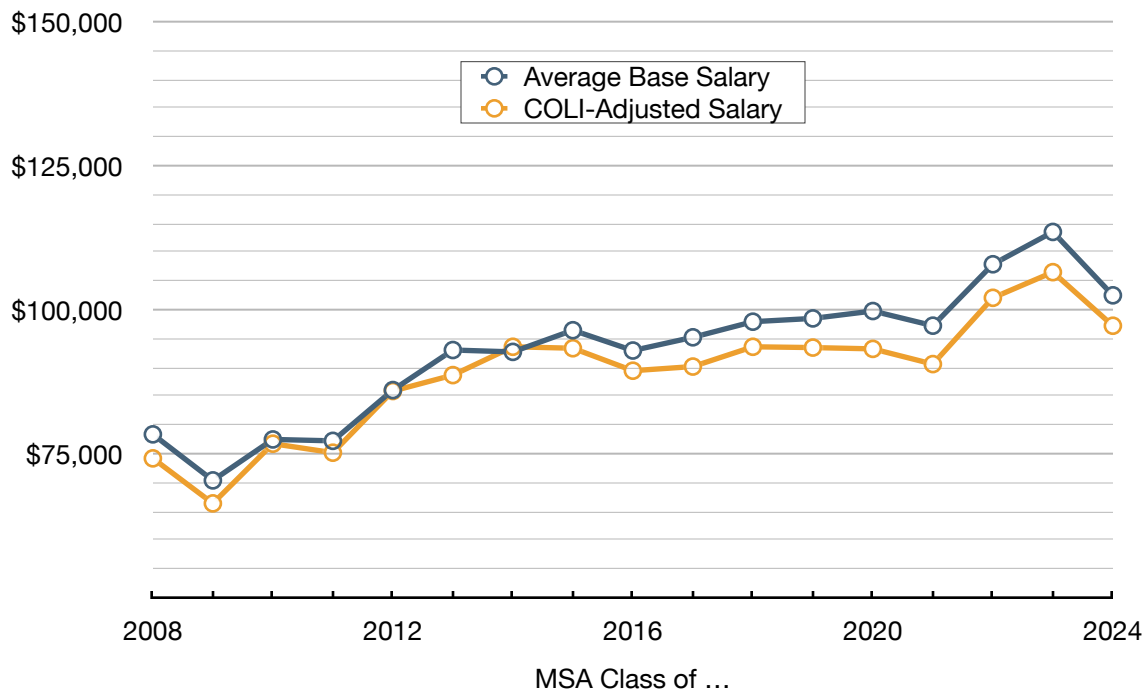
### MEDIAN BASE STARTING SALARY BY LEVEL OF PRIOR WORK EXPERIENCE



### 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                                                                                                                                                                   | 30          | 7            |
| Pre-MSA Salary Median                                                                                                                                                                   | \$70,000    | \$78,000     |
| (+) Tuition & Fees                                                                                                                                                                      | \$29,275    | \$55,650     |
| (-) Signing Bonus                                                                                                                                                                       | \$5,300     | \$5,300      |
| Total Investment                                                                                                                                                                        | \$93,975    | \$128,350    |
| Post MSA Salary Median                                                                                                                                                                  | \$114,500   | \$120,000    |
| (-) Pre-MSA Salary                                                                                                                                                                      | \$70,000    | \$78,000     |
| Net Salary Increase                                                                                                                                                                     | \$44,500    | \$42,000     |
| Payback Period (months)                                                                                                                                                                 | 25          | 37           |
| Net Increase in Earnings                                                                                                                                                                | 64%         | 54%          |
| Based on graduates with full-time domestic employment prior to program entry. Graduates with prior employment outside of the U.S. (with earnings in other currencies) are not included. |             |              |

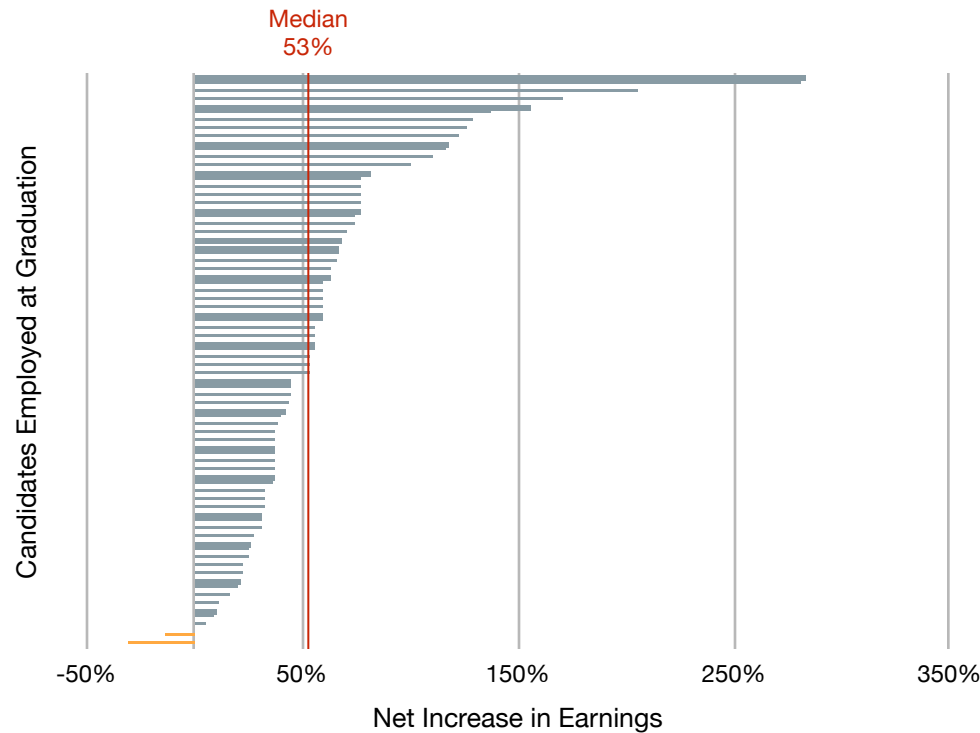
## PAYBACK PERIOD CALCULATION

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

Notes: Respondents provided information about their pre- and post-MSA annual base salaries, signing bonuses, and residency status (which determines tuition payments). The 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)..

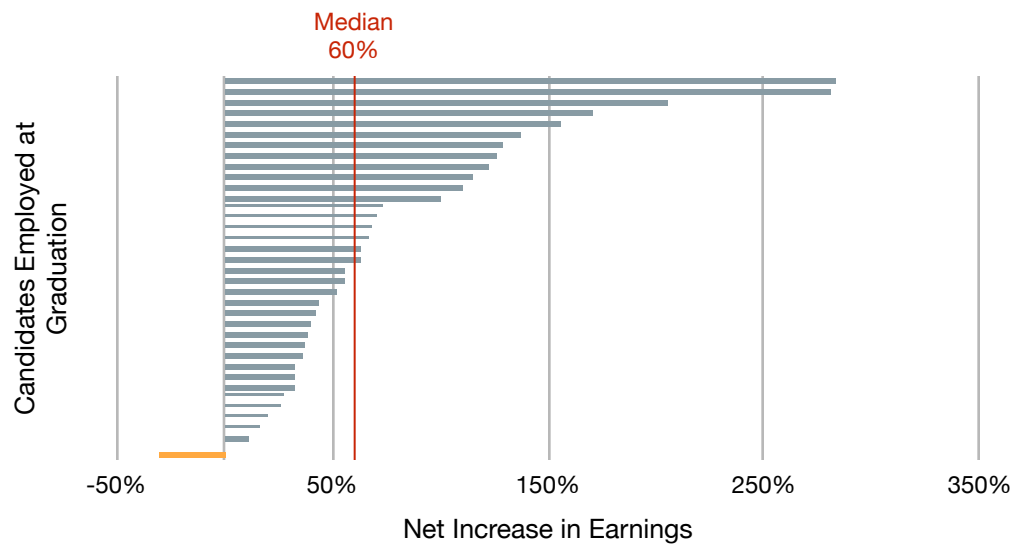
Students are assumed to forgo one-year of earning, even though the MSA program is 10-months in duration. The payback calculation does not take into consideration interest incurred by students who borrow to finance their education.

**ESTIMATED NET INCREASE IN EARNINGS FOR ALL CANDIDATES, RANK ORDERED**



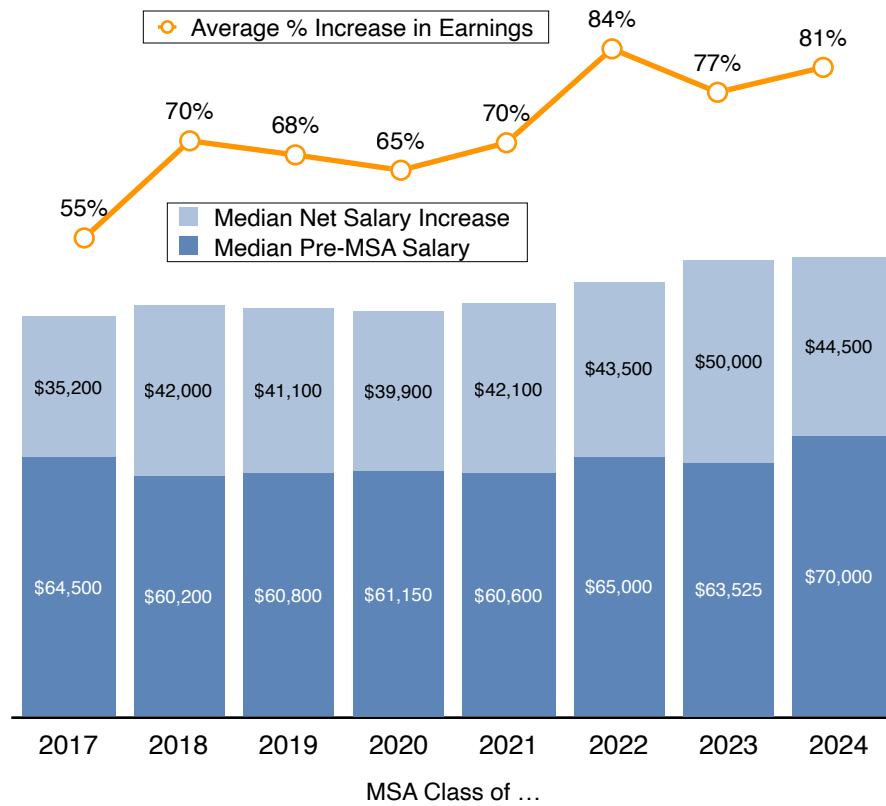
Note: The net increase in earnings is calculated for candidates with no prior work experience using inputted data for the median earnings reported by university graduates in May 2023 (\$68,750). Source: Institutional Strategy and Analysis, May 2023 Undergraduate Future Plans Survey: All Respondents Overview, NC State University.

**ACTUAL NET INCREASE IN EARNINGS FOR CANDIDATES WITH PRIOR EMPLOYMENT, RANK ORDERED**

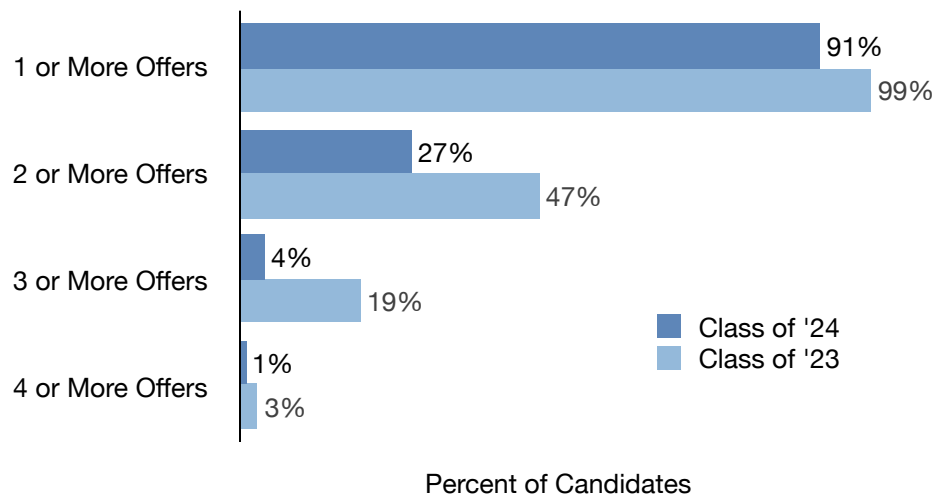


## NET INCREASE IN EARNINGS FOR PREVIOUSLY EMPLOYED CANDIDATES

(domestic employment only)



## NUMBER OF JOB OFFERS RECEIVED BY GRADUATION



## COMPENSATION BY INDUSTRY SECTOR

|                 | ANNUAL BASE SALARY |            |           |            |           |
|-----------------|--------------------|------------|-----------|------------|-----------|
|                 | All Sectors        | Consulting | Financial | Technology | Other     |
| Mean            | \$102,500          | \$101,950  | \$110,500 | \$103,200  | \$91,300  |
| Maximum         | \$150,000          | \$125,000  | \$122,000 | \$120,000  | \$150,000 |
| 75th Percentile | \$118,500          | \$115,000  | \$122,000 | \$114,000  | \$102,000 |
| Median          | \$106,096          | \$95,000   | \$112,500 | \$102,500  | \$93,000  |
| 25th Percentile | \$90,000           | \$91,250   | \$110,000 | \$98,125   | \$75,500  |
| Minimum         | \$60,000           | \$65,000   | \$80,000  | \$80,000   | \$60,000  |
| N               | 85                 | 18         | 34        | 8          | 24        |
| % of Total      | 100%               | 21%        | 40%       | 9%         | 28%       |

## COMPENSATION BY GEOGRAPHIC REGION

|                 | ANNUAL BASE SALARY |                                            |           |           |      |
|-----------------|--------------------|--------------------------------------------|-----------|-----------|------|
|                 | North Carolina     | U.S. Census Regions Outside North Carolina |           |           |      |
|                 |                    | South                                      | Northeast | Midwest   | West |
| Mean            | \$104,300          | \$96,300                                   | \$102,600 | \$108,350 | *    |
| Maximum         | \$125,000          | \$150,000                                  | \$114,000 | \$122,000 | *    |
| 75th Percentile | \$120,500          | \$106,096                                  | \$114,000 | \$122,000 | *    |
| Median          | \$110,000          | \$95,000                                   | \$110,000 | \$122,000 | *    |
| 25th Percentile | \$92,061           | \$90,000                                   | \$100,000 | \$91,500  | *    |
| Minimum         | \$60,000           | \$60,000                                   | \$75,000  | \$87,500  | *    |
| N               | 48                 | 23                                         | 5         | 7         | 1    |
| % of Total      | 53%                | 27%                                        | 6%        | 8%        | 1%   |

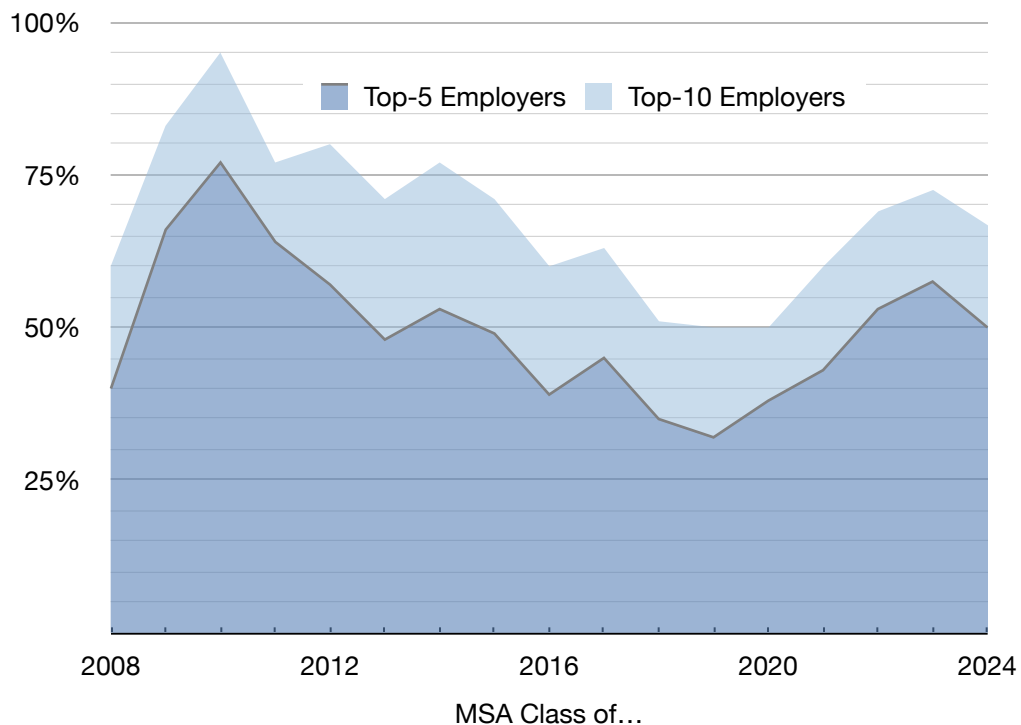
Geographic distribution is based on the location of the employer office, which may be different from the location of the candidate due to the increasing commonality of remote work.

### EMPLOYMENT BY RESIDENCY STATUS PRIOR TO ADMISSION

|              | Percent of Candidates Employed |                        | Subtotal |
|--------------|--------------------------------|------------------------|----------|
|              | Inside North Carolina          | Outside North Carolina |          |
| Non-Resident | 17%                            | 21%                    | 38%      |
| NC Resident  | 44%                            | 19%                    | 62%      |
| Subtotal     | 60%                            | 40%                    | 100%     |

Graduates with remote work arrangements are classified by their state of residence, not the employer location.

### 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 15 |
| <b>Student Profiles</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 28, 2024 in conformity with principles generally accepted among universities in the United States of America.

November 1, 2024

Date



Dr. Michael Rappa

Source URL: <http://analytics.ncsu.edu/reports/employment/MSA2024-1.pdf>

NC STATE UNIVERSITY