# PHYSICS MASTER'S INITIAL EMPLOYMENT

*ACADEMIC YEARS 2021–22, 2022–23, AND 2023–24*

A sampling of recent data collected by AIP Research

by Jack Pold and Patrick J. Mulvey

## Demographic Profile of Exiting Physics Masters, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24

| | | |
|---|---|---|
| Gender* | Men | 76% |
| | Women | 24% |
| Citizenship* | US | 69% |
| | Non-US | 31% |
| Age | Median | 26.5 |
| | Mean | 28.3 |

*Data from the AIP Enrollments and Degrees Survey
Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
According to data from the AIP Degree Recipient Follow-Up Survey, just over 1% of physics masters identified themselves as a category other than man or woman.

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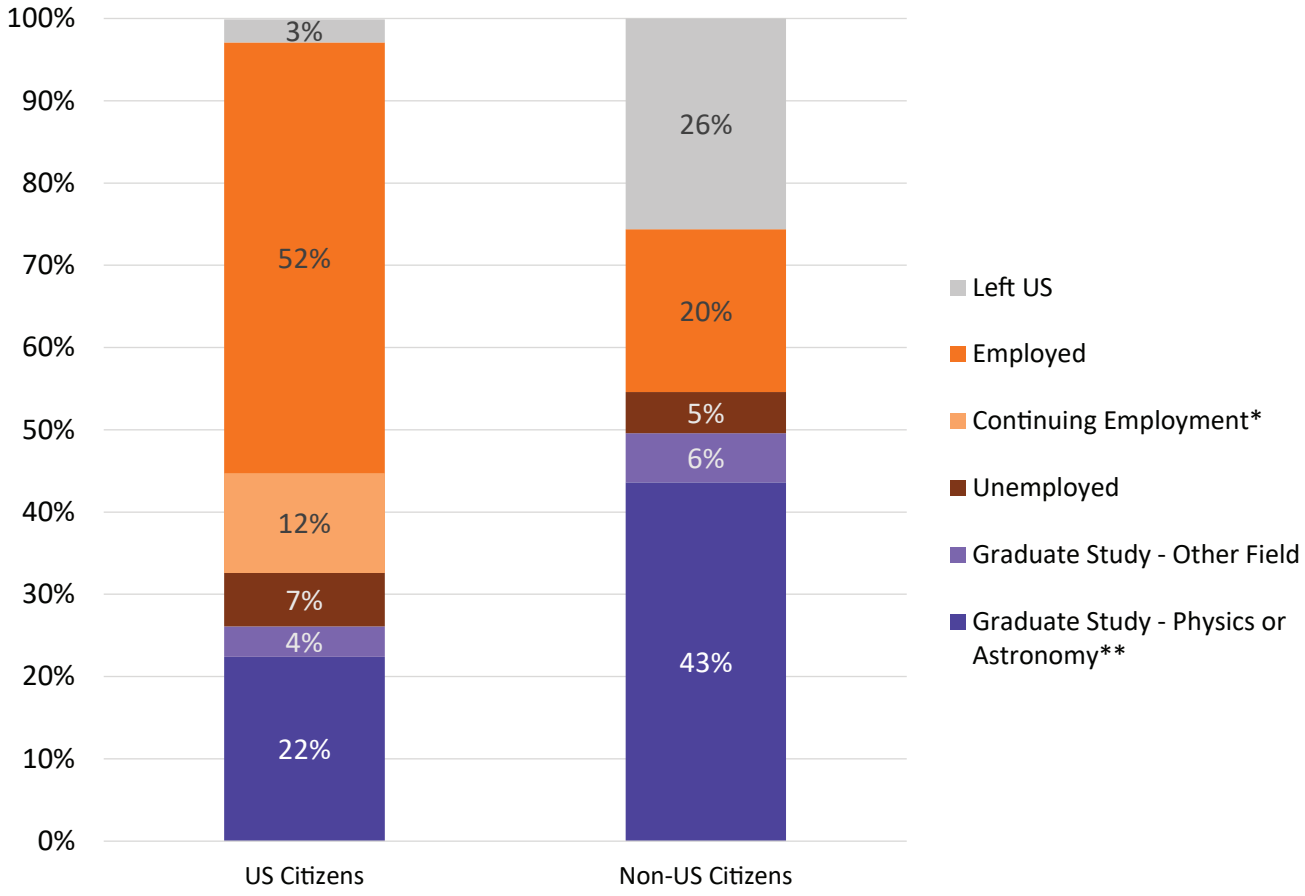
## Status of Exiting Physics Masters by Citizenship One Year After Degree, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
US citizens also includes permanent resident status individuals (Green Card holders)
*Continuing employment: individuals who were employed with the same employer for more than a year prior to earning their master's degrees.
**Graduate study - physics or astronomy: enrolled at a different institution than where master's degree was obtained.

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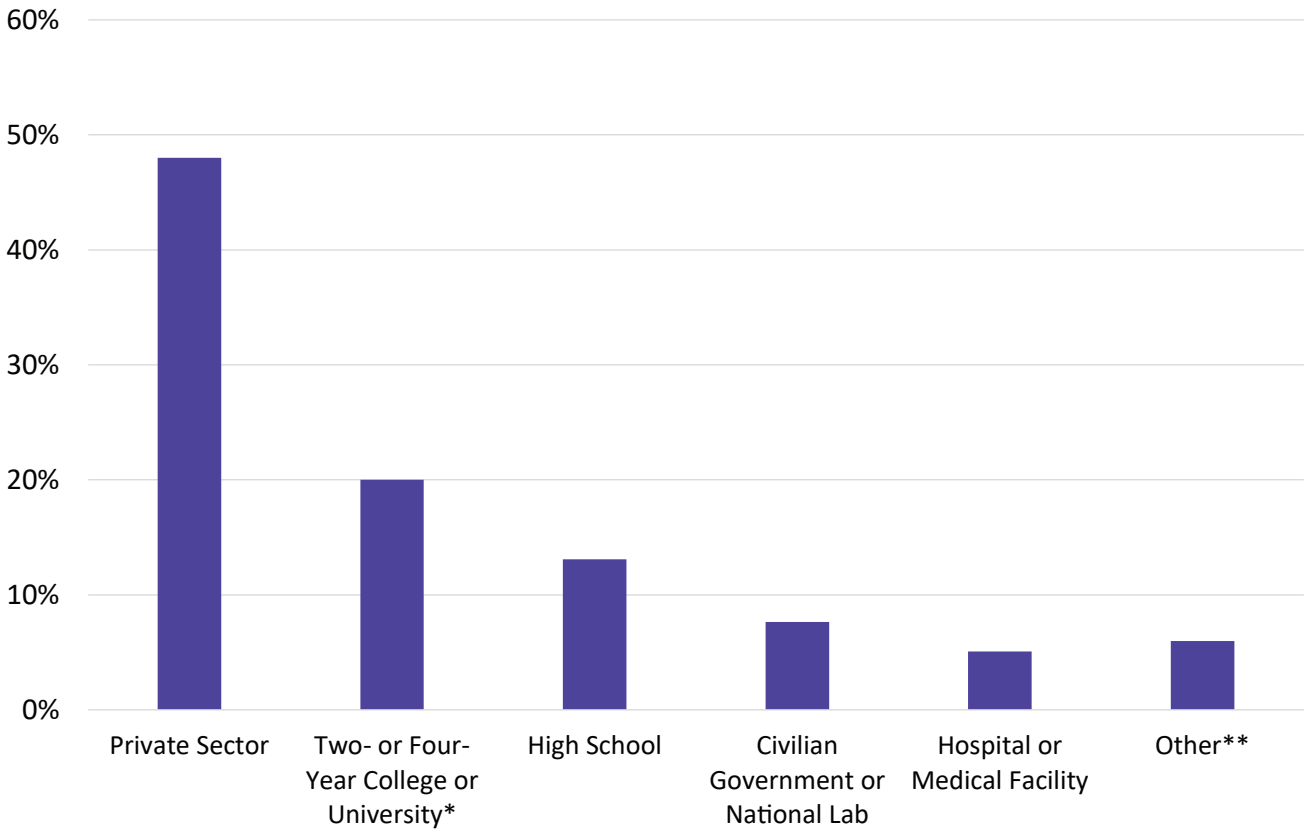
## Employment Distribution of Exiting Physics Masters One Year After Degree, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
Figure includes US employed physics masters, including those who were employed part-time and not enrolled in a degree program and masters continuing in positions they held while pursuing their degrees.
*Includes university-affiliated research institutes (UARI).
**Other includes elementary and middle schools, non-profit organizations, and active military service. Active military excludes those receiving their master's degrees from military academies.

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# Employment Sector Profiles

### *PRIVATE SECTOR*

Almost half of all employed exiting physics masters are working in the private sector. Employer types range considerably, from large multinational corporations, to small local businesses, to self-employment. The vast majority of these positions were in STEM fields, with engineering as the most common. Job titles in the private sector frequently included the terms “engineer”, “scientist”, or “analyst”.

### *COLLEGES, UNIVERSITIES, AND UNIVERSITY AFFILIATED RESEARCH INSTITUTES*

One in five exiting physics masters were employed in an academic setting. About half of these positions were part-time. Many of the part-time positions were “research assistant” type roles, while those working full-time were likely to be in more traditional teaching faculty positions.

### *HIGH SCHOOL*

Thirteen percent of employed physics masters were employed at high schools, the vast majority holding teaching positions, with the remainder in administrative roles. . In many cases, a master’s degree is required for high school teachers to maintain their teaching certification and were frequently pursuing their master’s degree while teaching full-time. . Almost all teachers indicated that they were teaching either physics or science.

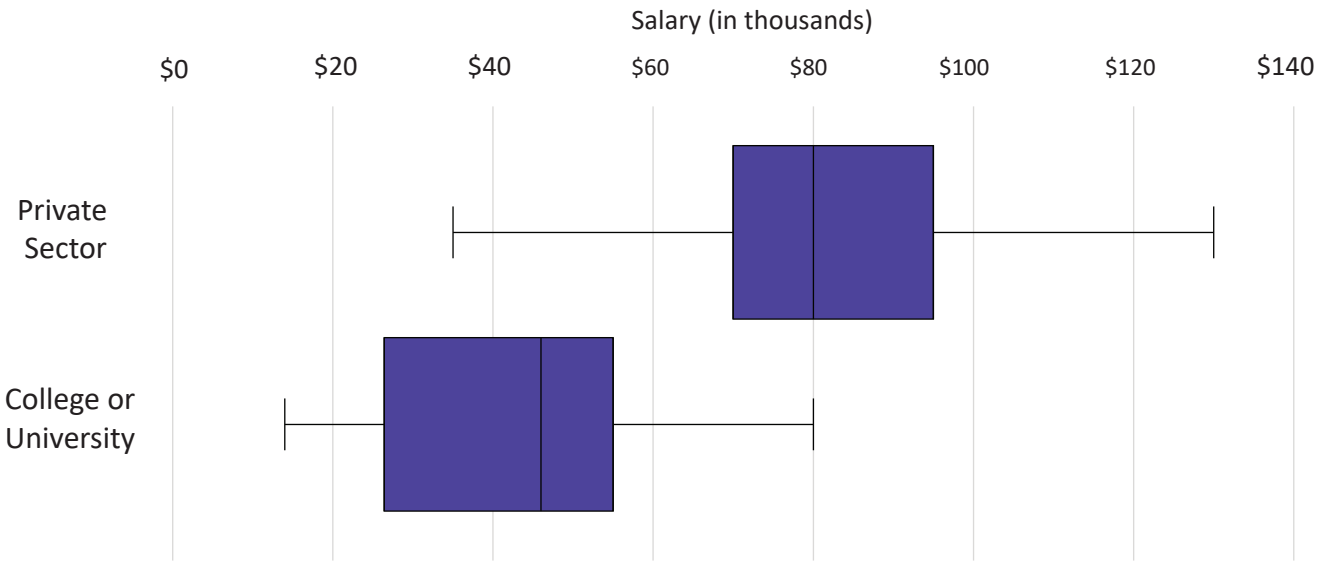
### *CIVILIAN GOVERNMENT*

About one in twelve exiting physics masters worked in government positions. These jobs were evenly split between national labs and government organizations. Most positions were in the fields of physics or engineering.

### *HOSPITAL OR MEDICAL FACILITY*

Five percent of exiting masters found employment at hospitals or medical facilities, in positions such as “medical physics resident”. Employers included both non-profit and for-profit medical facilities. All of these positions were full-time, and none were continuing a position they held prior to receiving their degree.

## Starting Salaries of Exiting Physics Masters One Year After Degree, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




The full starting salary range (excluding outliers) is represented by the lines extending to each side of the box. The box represents the middle 50% (25th to 75th percentile) of the salaries. The vertical line within the box represents the median starting salary for the sector. Figure does not include salaries for masters holding part-time positions or salaries for respondents who reported starting their employment more than a year prior to earning their master's degree. The College or University category includes two-year colleges, four-year colleges, universities, and university affiliated research institutes.

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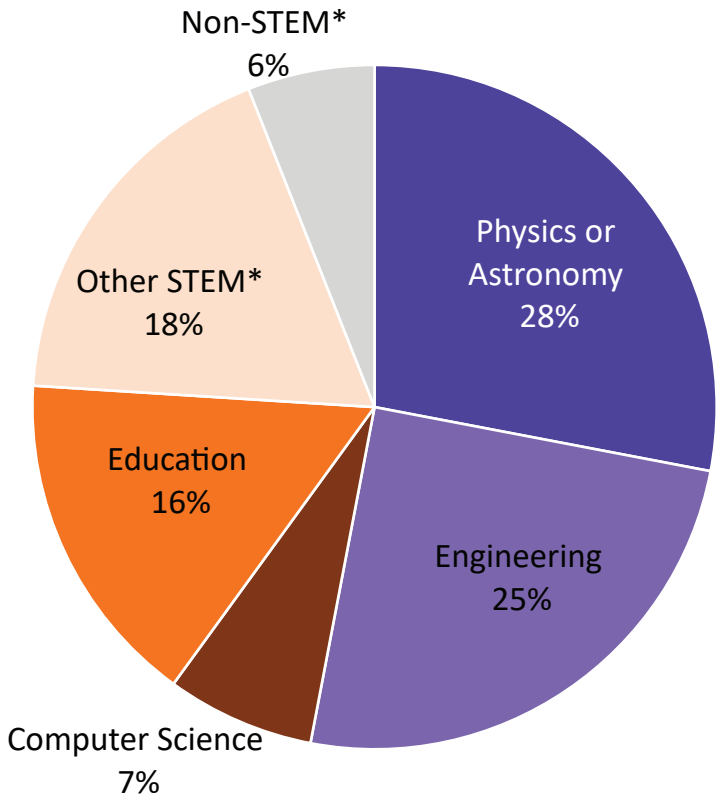
## Fields of Employment for Exiting Physics Masters One Year After Degree, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
Figure includes US-employed physics masters, including those who were employed part time and masters continuing in positions they held while pursuing their degrees.
*STEM refers to science, technology, engineering, and math.

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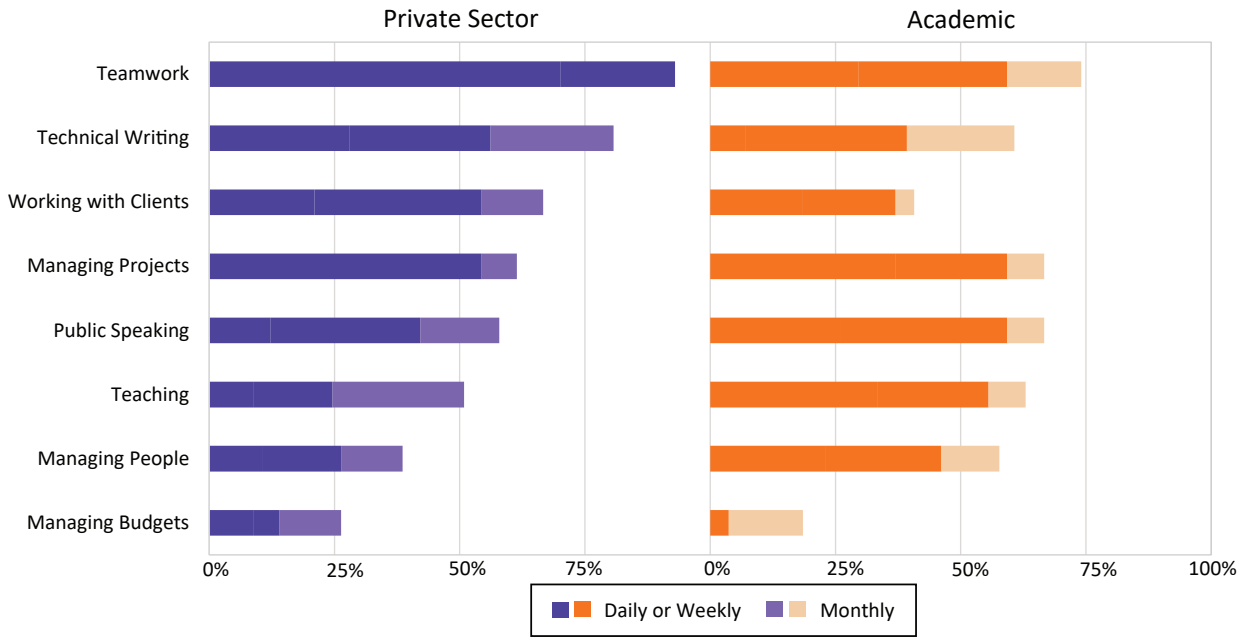
# Interpersonal and Management Skills Used by Exiting Physics Masters, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
Percentages represent the proportion of masters who chose "daily," "weekly," or "monthly" on a four-point scale that also included "never or rarely."

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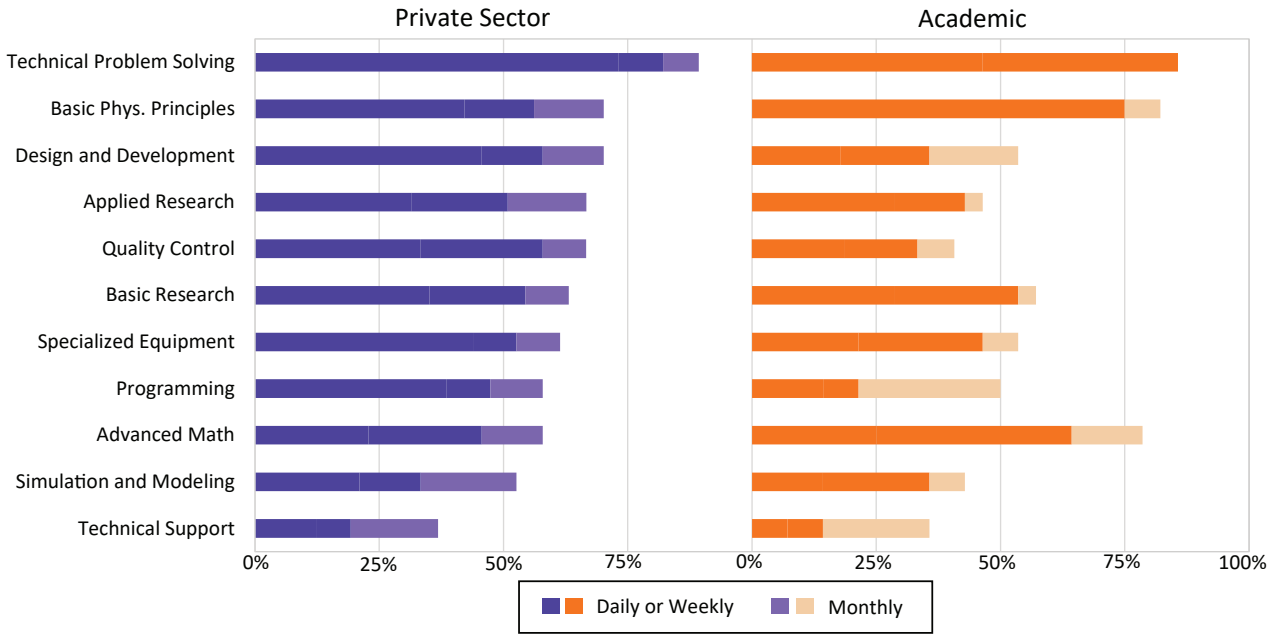
# Scientific and Technical Knowledge and Skills Used by Exiting Physics Masters, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
Percentages represent the proportion of masters who chose "daily," "weekly," or "monthly" on a four-point scale that also included "never or rarely."

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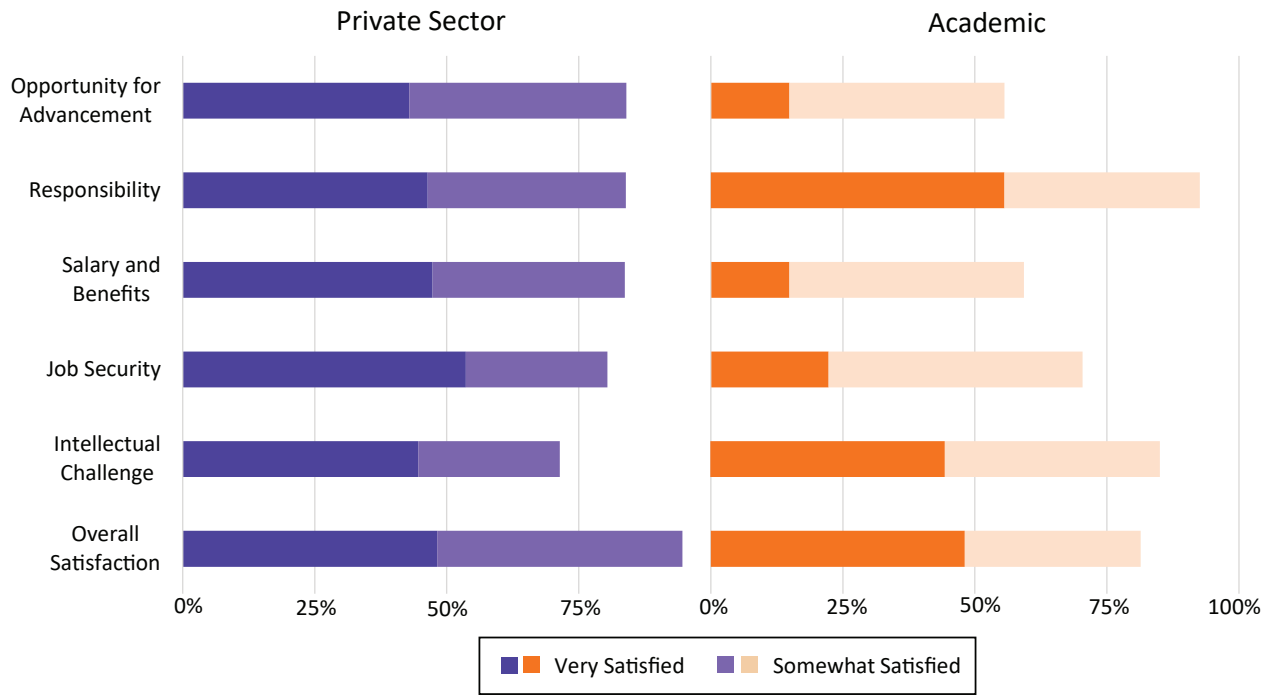
# Job Satisfaction of Exiting Physics Masters in Potentially Permanent Positions, Degree Recipients from Academic Years 2021-22, 2022-23, and 2023-24




Exiting masters are individuals who, upon receiving their master's degrees, leave their current physics departments.
Percentages represent the physics masters who chose "very satisfied" or "somewhat satisfied" on a four-point scale that also included "somewhat dissatisfied" and "very dissatisfied."

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## *DOWNLOAD GRAPHICS*

These and other graphics are available for download from www.aip.org/statistics

## *SURVEY METHODOLOGY*

Each fall, the Statistical Research Center conducts the Survey of Enrollments and Degrees. This survey asks physics and astronomy departments to provide information on the number of students enrolled and the number of recent degrees conferred the previous academic year. This survey also asks for the names and contact information of recent degree recipients. This information is used to conduct our master's follow-up survey in the winter following the academic year in which they received their degrees.

For the purposes of this report, we are only looking at responses from exiting physics masters. An exiting physics master is defined as one who leaves their degree granting department after receiving their masters degree, whether to enter the workforce or continue their graduate education. Masters who receive their degree and continue towards their PhD at the same department are not included.

Because of the relatively small number of individuals receiving physics master's each year and the difficulty in obtaining accurate contact information, we are reporting on three years of survey responses combined. The exiting physics master's from academic years of 2021-22, 2022-23, and 2023-24 consisted of 923, 965, and 927 degree recipients, respectively. For assistance in determining degree recipient outcomes and to help obtain updated contact information, we contact the advisors of nonresponding degree recipients. We received initial post-degree information on 21% of these degree recipients, with about half of the information coming directly from the degree recipients.

There are two military academies that have unique graduate physics programs: the Naval Postgraduate School (California) and the Air Force Institute of Technology (Ohio). The degree recipients from those programs typically stay in one of the branches of the armed services and by the nature of their positions are hard to reach with our follow-up survey. The post-degree outcome data for these individuals are not included in the tables and figures of this report.

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## *PHYSICS BACHELORS INITIAL EMPLOYMENT*

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